Government of the Philippines
Department of Health

Philippines COVID-19 Emergency Response Project (P173877) and Additional Financing Project (P175953)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

04 FEBRUARY 2021

Table of Contents

Executive Summary

The Project Development Objective of the COVID-19 Emergency Response Project is to strengthen the Philippines' capacity to prevent, detect, and respond to the threat posed by COVID-19 and to strengthen national systems for public health preparedness.

The Environmental and Social Management Framework (ESMF*).* The Project consists of a number of different activities and/or investments (subprojects) for which the risks and impacts cannot be determined until implementation. The ESMF describes the principles, processes, and technical guidance for the Project implementing agencies and their consultants to assess the environmental and social risks and impacts of the Project activities.

This ESMF assists the Department of Health (DOH) in identifying the type of environmental and social assessment that should be carried out for the project activities that involve the construction, expansion, rehabilitation and/or operation of healthcare facilities, and the deployment of a safe and effective vaccine in response to COVID-19, and in developing the environmental and social (E&S) management plans in accordance with the World Bank's Environmental and Social Framework (ESF).

The ESMF is applicable to all investments under the Project. It aims to (a) assess the potential environmental and social (E&S) risks and impacts of the Project and propose mitigation measures which will effectively address these risks/impacts; (b) establish clear 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 related to eligible 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 requirement for implementation of the ESMF.

Eligible Project Activities. The Project will be national in coverage and scope, and would finance a number of activities that focus on the (i) provision of medical supplies, including personal protective equipment for ICUs, medicines, and ambulance in existing hospitals at national, provincial and local government levels; (ii) provisions to address capacity building needs of the medical service providers and supporting staff training related to COVID-19 emergency preparedness, infection control and medical waste management; (iii) civil works that involve retrofitting existing hospital buildings to include isolation/negative pressure wards; (iv) establishment of point-of-entry quarantine and decontamination facilities; (v) strengthening laboratory capacity at national and sub-national levels; and (vi) procurement and administration of COVID-19 vaccines. The Project will include the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) and possibly, areas with indigenous peoples.[1]

Potential Environmental Impacts and Risks. Overall, the environmental risk is expected to be moderate due to the nature of associated activities and works and the duration of construction period (less than 12 months). The direct and indirect environmental impacts that may arise due to the project activities are:

[1] Approximately ten percent of the population in the Philippines is considered indigenous peoples.

(i) *Occupational safety and health risks (OSH).* The profiling and screening of patients prior to vaccination, the administration of the vaccine, and the operation of medical facilities and laboratories involved in COVID-19 response might expose the health care workers to a higher risk of contracting the virus, if infection prevention and control measures are not implemented, and cause unsafe environment. There are also OSH risks to the workers/laborers due to the possible exposure during the construction activities in the health facilities and laboratories. Occupational safety and health risks for cleaners and waste handlers in health facilities and the waste service providers are present due to the possible exposure to infectious health care wastes during the collection, storage, treatment, and disposal stages.

(ii) *Risks from infectious healthcare wastes.* The wastes generated from the COVID-19 testing, other diagnostic procedures, clinical management of patients, and vaccination activities, including waste collection from the health care facility by the facility's waste handlers and cleaners and by the contracted waste service providers, as well as community health and safety issues related to the handling, transport, treatment, and disposal of the healthcare wastes are present.

(iii) *Logistics and distribution risks of the vaccine.* The COVID-19 vaccines require specific temperatures during storage and distribution to maintain efficacy and safety. Hence, the contraindications and storage and transport condition requirements of the vaccine may pose risks. The availability of cold storage and refrigerated transportation suitable to the temperature needs of the vaccine and in the location of vaccine administration is a potential risk to the Project's implementation. Relatedly, the cold storage to be procured or rented may contain refrigerants which do not conform to the requirements of the Montreal Protocol, Kigali Agreement, and the chemical control order on ozone- depleting substances (ODS) and contribute to the generation of greenhouse gases (GHG). Other refrigerants are also toxic and flammable and can pose risk to people's health and safety. Cold storage systems also require huge amount of energy to operate that may have an impact on climate change. The compliance with biosafety protocols during the transport of the vaccines is also a risk, as breakage of the vials and spillage of the vaccine might occur. Similarly, natural disasters such as earthquake, landslide, flooding, storm surge and other climate change-related risks as well as unstable power supply resulting to power outages exist in some areas in the country which may affect the security of the delivery and distribution of the vaccines. The possible hot weather in the country may also have an effect on the efficacy of low temperature- requiring vaccines

(iv) The small construction activities which are part of the project components, such as the expansion or rehabilitation of existing buildings and facilities, pose occupational health and safety risks to the workers. The project will include limited civil works such as small retrofitting activities on existing premises and there will be no land acquisition and involuntary resettlement involved.

Potential Social Impacts and Risks. There are substantial risks related to the direct and indirect social impacts of the eligible activities. These risks can be mainly classified as (i) biosafety issues, (ii) case management of population for vaccination, (iii) regulatory measures, (iv) community health and safety, (v) affordability, social inequity, and risk of exclusion, (vi) stigma, discrimination, and vaccine acceptance; and (vii) misinformation, lack of information, and disinformation:

i. *Biosafety Issues of the vaccine.* Due to the novelty and relatively shorter timeframe of the development and clinical trials of the COVID-19 vaccine, the communities may have fear and apprehension on its scientific integrity, efficacy, and safety. The contraindications and storage and transport condition requirements of the vaccine may pose risk. Transparency on the vaccine information and manufacturer credibility are important considerations for the public. Misinformation on the adverse health effects of vaccine is also a risk which should be addressed through an effective risk communication strategy.

ii. *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 dose/shots due to the individual's apprehension and/or schedule mismanagement. The data management of the vaccination program, including the establishment of good surveillance system and schedule monitoring, are also risks. With the use of more than one vaccine during the immunization period, close monitoring of adverse events in vaccinated individuals using information technology, i.e., 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.

iii. *Regulatory measures.* Due to the global demand for the vaccine and the limited vaccine production, access to the COVID-19 vaccines is a risk. The conduct of strict regulatory measures should be ensured in view of the novelty of the vaccine. Regulation and access concerns should be equally taken into consideration. Moreover, the work of relevant bodies such as the Food and Drug Administration (FDA), the National Immunization Technical Advisory Group (NITAG), and the Health Technology Assessment Committee (HTAC) should be continually aligned and synchronized to ensure the expeditious national approval of the vaccines.

iv. *Community health and safety.* The vaccine administration may also lead to crowding and violation of physical distancing measures, increasing the risk of exposure of the health workers, the vaccinees, and the community, especially the residents within the vicinity of the immunization site. Thus, compliance to minimum public health standards is strongly advised. Infectious health care wastes generated from the vaccination and other COVID-19- related responses pose risk to community health and safety if not handled, transported, treated, and disposed of according to the proper health care waste management practices. Hospital visitors and other non- COVID-19 patients may also be exposed to the virus as well as the workers when establishing or upgrading health

facilities. There is also a risk of not completing the vaccine dose/shots due to the individual's apprehension and/or schedule mismanagement.

v. *Affordability, social inequity, and risk of exclusion.* The accessibility of COVID-19 vaccines due to its price is a risk. Due to the novelty and urgent need of the vaccine, there is a risk in price regulation and compliance with fair trade guidelines. Although the national government has already identified its eligible population to be immunized from 2021 – 2023, strict adherence to this list to ensure that the most-at-risk are the ones vaccinated first is a risk. 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, treatment, and vaccines, and also the sexual and gender minorities (especially transgender people) or refugees. The elderly, those with underlying medical conditions, and people living with disability, though included in the priority populations to be vaccinated as identified in the WHO SAGE Roadmap for Prioritizing Uses of COVID-19 Vaccines in the Context of Limited Supply[2], may have limited access to the vaccines due to reduced mobility. The vulnerable groups may also be excluded from coverage of the national program and local responses to COVID-19. 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.

vi. *Stigma, discrimination, and vaccine acceptance.* The fear and apprehension of individuals and communities on the scientific integrity, efficacy, and safety of the COVID-19 vaccines may lead to people refusing vaccination. The vaccine acceptance may also be affected by the country's previous experience with the Dengvaxia 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 in contracting the virus, frustrations over medical care, or misinformation.

vii. *Misinformation, lack of information, disinformation, information security, and data privacy.* Misinformation and disinformation on COVID-19 and the adverse health effects of vaccines and hearsays on the conspiracy theories and underlying political agenda on the vaccines are widespread. The information materials on COVID-19 and the vaccine to be developed could exclude the most vulnerable or be developed in a way that is not sensitive to the needs and access of these different groups. Messages on COVID-19 and the vaccine may also not be in the language appropriate and may not be readily accessible for communities, especially in geographically- isolated and disadvantaged areas (GIDAS). Moreover, since there will be collection of information of the vaccinees, and the data will be

[2] World Health Organization. (November 2020). WHO SAGE Roadmap for Prioritizing Uses Of COVID-19 Vaccines in The Context of Limited Supply. https://www.who.int/publications/m/item/who-sage-roadmap-for-prioritizing-uses-of-covid-19-vaccines-in-the-context-of-limited-supply.

subject to various processing and storage procedure, considering as well as the authorized access and the data users, information security and data privacy are risks.

Procedures to Address Environmental and Social Issues. The ESMF provides a screening tool for potential project activities to allow determination of potential environmental and social issues. The screening process identifies possible instruments, e.g., Environmental and Social Management Plan (ESMP), Environmental Codes of Practice (ECOP), to be applied during Project implementation, based on subproject typology. These issues will also be addressed through relevant capacity building activities, observance of the labor management procedures and environmental and social management plans for project sites, conduct of community consultations, and active observance of the Grievance Redress Mechanism. The Stakeholder Engagement Plan includes provisions for engaging affected and interested stakeholders throughout the project implementation. Measures to address concerns of vulnerable groups, including persons with disabilities and indigenous peoples, are included in the ESMF and SEP.

The National Health Care Waste Management Program in healthcare facilities (HCF) considers the HCF staff and waste management service providers and the community health and safety issues related to the handling, transport, and disposal of healthcare wastes, which are addressed through the ESMF. To ensure the safety of the vaccines to be procured, the vaccine regulatory approval of the Stringent Regulatory Authorities (SRAs)[3] identified by the World Health Organization will be required. Appropriate messages are being developed under the risk communication plan to address the vaccine safety and identification of priority population concerns of communities.

The DOH Health Promotion Bureau (HPB) has developed key messages on COVID-19 information, prevention, and treatment through its BIDA Solusyon Campaign. A Communications Campaign Plan will also be developed by the DOH-HPB for the COVID-19 immunization program. It will have a whole-of-government, whole-of-system, and whole-of-society approach which will encompass general information on (i) COVID-19 and the need for sanitation and hygiene practices, (ii) COVID-19 vaccine basic information, (iii) trials results and procurement, and (iv) vaccine program roll-out. The WHO Risk communication and community engagement readiness and response to coronavirus disease (COVID-19) released on 19 March 2020 will also be used as reference in the development of messages and planning of risk communication and community engagement (RCCE) activities.

Serial obtaining of informed consent from the identified vaccinees and counselling shall be conducted prior to the administration of the COVID-19 vaccine. The profiling and screening of candidate individuals to be vaccinated should be performed so as to avoid the risk of vaccine contraindications. A comprehensive data management system is also needed to support the profiling, screening, and scheduling to address the risk of individuals not completing the required shots/doses of the vaccine. Coordination with the local government units as well as the uniformed personnel will be done to assist in crowd management and for the successful conduct of the National Deployment and Vaccination Program.

[3] World Health Organization. (June 2020). Essential medicines and health products: List of stringent regulatory authorities (SRAs). https://www.who.int/medicines/regulation/sras/en/.

Institutional Arrangement for ESMF implementation. The Department of Health (DOH) shall be responsible for the coordination, management, and implementation of the project at the national and sub-national levels including financial management, procurement, and environmental and social management. The Project's implementation shall be mainstreamed in the DOH processes and shall involve a Project Management Unit headed by the Bureau of International Health Cooperation (BIHC) under the Office of the Undersecretary for Health Policy and Systems Development Team (HPSDT). This has been strengthened by the recruitment of additional staff responsible for environmental and social management.

The COVID-19 vaccination activities will also be implemented in accordance with the directives of the COVID-19 Vaccine Cluster Organizational Structure. The Inter-Agency Task Force on the Management of Emerging Diseases is Chaired by Secretary Francisco Duque IIII of the DOH while the National Task Force Against COVID-19 is Chaired by Secretary Delfin Lorenzana of the Department of Defense. Secretary Carlito Galvez, Jr., Presidential Adviser on the Peace Process, is the Chairperson of the National Incident Command and COVID-19 Vaccine Cluster (Philippine National Vaccine Roadmap or PNVR). Undersecretary Leopoldo Vega of the DOH is the Chairperson of the Response Cluster while the National Economic and Development Authority (NEDA) is the Chair of the Recovery Cluster. Task Groups and Sub-Task Groups were also created for the various aspects of the vaccination activities, as detailed in Chapters 7 and 8.

1 Introduction and Background

1.1 Purpose of this Document

This Environmental and Social Management Framework (ESMF) has been prepared to assess and manage the environmental and social risks and impacts of the Philippine COVID-19 Emergency Response Project. A framework approach is chosen as the specific locations and details of the sub-projects will not be known until implementation. The ESMF assists the DOH in identifying the type of environmental and social assessment that should be carried out for projects that involve the construction, expansion, rehabilitation and/or operation of healthcare facilities, and the deployment of a safe and effective vaccine in response to COVID-19, to the extent possible and based on existing information, the environmental and social management approach that should be taken at the subproject level and the E&S management plans to be developed, in accordance with the World Bank Environmental and Social Framework (ESF).

The purpose of the ESMF is to guide DOH and other proponents on the environmental and social screening, assessment, and management of specific project activities during implementation. The document also provides guidance on the preparation of location specific Environmental and Social Management Plans (ESMPs), when needed, in accordance with the ESF.

Additional financing will be provided to support the costs of expanding activities of the Philippines COVID-19 Emergency Response Project (P173877, the parent project)[4] to enable affordable and equitable access to COVID-19 vaccines and help ensure effective vaccine deployment in the country through enhanced vaccination system and to further strengthen preparedness and

[4] World Bank. 2020. Philippines - COVID-19 Emergency Response Project. Washington, D.C.: World Bank Group. https://hubs.worldbank.org/docs/imagebank/Pages/docProfile.aspx?nodeid=32002941

response activities under the parent project for additional US $ 300 million. The Parent Project ESMF have been updated to reflect the activities under the Additional Financing and the identified issues related to COVID-19 response based on guidance provided by the Bank.

1.2 COVID-19 World Bank Program

An outbreak of the coronavirus disease (COVID-19) caused by the 2019 novel coronavirus (SARS-CoV-2) has been spreading rapidly across the world since December 2019, following the diagnosis of the initial cases in Wuhan, Hubei Province, China. Since the beginning of March 2020, the number of cases outside China has increased thirteenfold and the number of affected countries has tripled. On March 11, 2020, the World Health Organization (WHO) declared a global pandemic as the coronavirus rapidly spreads across the world. As of March 26, 2020, the outbreak has resulted in an estimated 416,686 cases and 18,589 deaths in 197 countries and territories.[5] COVID-19 is one of several emerging infectious disease (EID) outbreaks in recent decades that have emerged from animals in contact with humans, resulting in major outbreaks with significant public health and economic impacts. The last moderately severe influenza pandemics were in 1957 and 1968; each killed more than a million people around the world. Although countries are now far more prepared than in the past, the world is also far more interconnected, and many more people today have behavior risk factors such as tobacco use[6] and pre-existing chronic health problems that make viral respiratory infections particularly dangerous[7].

With COVID-19, scientists are still trying to understand the full picture of the disease symptoms and severity. Reported symptoms in patients have varied from mild to severe, and can include fever, cough, and shortness of breath. In general, studies of hospitalized patients have found that about 83% to 98% of patients develop a fever, 76% to 82% develop a dry cough and 11% to 44% develop fatigue or muscle aches[8]. Other symptoms, including headache, sore throat, abdominal pain, and diarrhea, have been reported, but are less common. While 3.7% of the people worldwide confirmed as having been infected have died, WHO has been careful not to describe that as a mortality rate or death rate. This is because in an unfolding epidemic it can be misleading to look simply at the estimate of deaths divided by known cases so far. Hence, given that the actual prevalence of COVID-19 infection remains unknown in most countries, it poses unparalleled challenges with respect to global containment and mitigation. These issues reinforce the need to strengthen the response to COVID-19 across all IDA/IBRD countries to minimize the national and global risks and impacts posed by this disease.

The World Bank is providing support to Governments for preparedness planning to provide optimal medical care, maintain essential health services and to minimize risks for patients and health personnel (including training health facilities staff and front-line workers on risk mitigation measures and providing them with the appropriate protective equipment and hygiene materials). As COVID-19 places a substantial burden on inpatient and outpatient health care services, support will be provided for a number of different activities, all aimed at strengthening national health care systems, including systems for the deployment of safe and effective COVID-19 vaccine.

[5] https://www.who.int/emergencies/diseases/novel-coronavirus-2019
[6] Marquez, PV. 2020. "Does Tobacco Smoking Increases the Risk of Coronavirus Disease (Covid-19) Severity? The Case of China." http://www.pvmarquez.com/Covid-19
[7] Fauci, AS, Lane, C, and Redfield, RR. 2020. "Covid-19 — Navigating the Uncharted." New Eng J of Medicine, DOI: 10.1056/NEJMe2002387
[8] Del Rio, C. and Malani, PN. 2020. "COVID-19—New Insights on a Rapidly Changing Epidemic." JAMA, doi:10.1001/jama.2020.3072

1.3 World Bank Programming in the Country Health Sector

The project is aligned with the World Bank Group strategic priorities, particularly the WBG's mission to end extreme poverty and boost shared prosperity. The Program is focused on preparedness which is also critical to achieving Universal Health Coverage. It is also aligned with the World Bank's support to national plans and global commitments to strengthen pandemic preparedness through three key actions under Preparedness: (i) improving national preparedness plans including organizational structure of the government; (ii) promoting adherence to the International Health Regulations (IHR); and (iii) utilizing international framework for monitoring and evaluation of IHR.

The economic rationale for investing in the MPA interventions is strong, given that success can reduce the economic burden suffered both by individuals and countries. The project complements both WBG and development partner investments in health systems strengthening, disease control and surveillance, attention to changing individual and institutional behaviour, and citizen engagement. The project contributes to the implementation of IHR (2005), Integrated Disease Surveillance and Response (IDSR), and the World Organisation for Animal Health (OIE) international standards, the Global Health Security Agenda, the Paris Climate Agreement, the attainment of Universal Health Coverage and of the Sustainable Development Goals (SDG), and the promotion of a One Health approach.

The Project supports Specific Objective #4 in the Philippines' *National Objectives for Health 2017-2022* that strives to increase access to quality essential health products and services. This includes working toward a resilient health system that has the capacity to absorb, adapt, and transform when exposed to a shock such as pandemics, natural disasters or armed conflict and still retain the same control on its structure and functions. The objective is to enable local government units (LGUs) to mobilise communities to implement Disaster Risk Reduction and Management in Health (DRRM-H), which will be institutionalized in all levels of governance by: (1) developing and implementing DRRM-H plans, (2) organizing trained and equipped health emergency response teams, (3) ensuring availability and accessibility of health emergency commodities, and (4) ensuring functionality of Operation Centers (OPCEN).

2 Project Description

2.1 Development Objectives

The Project objectives are aligned with the results chain of the COVID-19 Strategic Preparedness and Response Program (SPRP). The project development objective (PDO) is to strengthen the Philippines' capacity to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness. Three PDO level indicators are proposed:

- Percentage of hospitals with personal protective equipment and infection control products and supplies according to DOH requirements, without stock-outs in preceding one month;
- Percentage of designated laboratories with COVID-19 diagnostic equipment, test kits, and reagents, without stock-outs in preceding one month;
- Number of acute healthcare facilities with isolation capacity according to DOH established standards;
- Percentage of health workers received COVID vaccine as per government's plan;
- Percentage of project- targeted population given full dose of COVID-19 vaccination;
- Percentage of hospitals designated as vaccination sites in project areas having adequate and functioning cold chain equipment (CCE) maintaining the temperature required for the COVID-19 vaccine assigned;
- Percentage of project-targeted vaccinated population who rated as satisfactory the COVID-19 vaccination services received;
- Percentage of project-targeted population reporting adverse event following immunization (AEFI) having received additional care and free treatment; and
- Eligibility for vaccination criteria include barangay health workers (BHWs) among priority group (yes/no).

The risk profiling for the vaccinees will include data collection and disaggregation based on sex, age, indigent status (per DSWD guidelines), indigenous group or community (IP), and presence of any disability.

Additional financing will be provided to support the costs of expanding activities of the Philippines COVID-19 Emergency Response Project (P173877, the parent project)[9] to enable affordable and equitable access to COVID-19 vaccines and help ensure effective vaccine deployment in the country through enhanced vaccination system and to further strengthen preparedness and response activities under the parent project for additional US $ 300 million.

2.2 COVID-19 Project Components and Activities

The Project will finance a broad range of both immediate and near-term priority health sector activities which will include the medical facilities refurbishment and procurement of health care

[9] World Bank. 2020. Philippines - COVID-19 Emergency Response Project, Washington, D.C.: World Bank Group. https://hubs.worldbank.org/docs/imagebank/Pages/docProfile.aspx?nodeid=32002941

equipment and ambulances, personal protective equipment (PPE), COVID-19 vaccines, and medical consumables that constitute priorities of the Government of the Philippines (GoP) national response to the COVID-19 pandemic. In particular, this will include establishing testing and quarantine facilities at six major international airports in Luzon, Visayas and Mindanao administrations, 21 first-line decontamination facilities at international airports, strengthening the national reference laboratories as well as sub-national and public health laboratories for COVID-19 analysis, refurbishing and establishing negative pressure isolation rooms in about 70 DoH and 30 UHC implementation site public hospitals, extensive provision and training on use of PPE, about 150 land and 10 sea ambulances, COVID-19 test kits, and an array of diagnostic and life support equipment (ventilators, oxygen machines, cardiac monitors, infusion pumps, portable x-ray machines, PCR equipment, dialysis machines).

The Project will be national in scope, supporting the existing network of the health care facilities and services in the Philippines, and providing support to immediate response, e.g., testing, quarantine, decontamination and treatment, and immunization, as well as mid-term activities such as completion of construction of the national reference laboratory complex. The Project will include the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) and possibly, areas with indigenous peoples. Approximately ten percent of the population in the Philippines is considered indigenous peoples. They live in several regions but are particularly concentrated in the mountains of Northern and Central Luzon as well as in the islands of Mindanao.

Refurbishment and civil works are expected to be of small scale, distributed throughout the health care network providing COVID-19 response, and will take place within the existing compounds of the health care facilities or as designated by the DOH or the National Task Force Against COVID-19.

Despite recent progress, the Philippines remains one of the countries most affected by the COVID-19 in East Asia and Pacific, rendering vaccine purchase and deployment a national priority. With the availability of vaccines, the Philippines has now an opportunity to add a significant new layer to its COVID-19 emergency response. Procuring and administering vaccines is critical to reducing mortality from COVID, opening the economy in earnest and arresting the decline in GDP, employment and incomes. Hence, Additional Financing (AF) was sought by the country.

The AF will form part of an expanded health sector response to the COVID-19 pandemic. AF is envisioned to enable affordable and equitable access to COVID-19 vaccines and help ensure effective vaccine deployment in the country through an enhanced vaccination system and to further strengthen preparedness and response activities under the parent project for additional US $ 500 million.

2.3 Subcomponent Typology

The project involves two distinct phases: a COVID-19 emergency response (Component 1); and a mid-term initiative to strengthen laboratory capacity to support emerging infectious diseases (EIDs) (Component 2). In addition, the project includes a Management/Monitoring and Evaluation component (Component 3), and Contingent Emergency Response Component or CERC (Component 4).

The environmental and social management approaches to Component 1 and 2 will be governed by the urgency of the interventions. Activities under Component 1 will be undertaken in an unpredictable environment determined by the extent of the COVID-19 outbreak in the

Philippines, the capacity of the health system and the duration of the pandemic. Environmental and social management measures for Component 1 will need to be adaptable to the circumstances, with the priority necessarily being the public health risks of the virus. Component 2 activities will be undertaken in an orderly and predictable manner, allowing environmental and social management measures to be better calibrated.

The proposed additional US$500 million IBRD loan will support the scale-up of activities for vaccination. The changes proposed for the AF entail expanding the scope and scale of activities under the PCERP, and there will be no changes to the overall design. However, there will be changes to sub-components under Component 1 to include activities on deployment of vaccines. The PDO will remain unchanged as the proposed activities to be funded under the AF are aligned with the original PDO. The closing date of the AF will remain aligned with the closing date of the parent project, i.e., December 29, 2023.

Component 1: Strengthening Emergency COVID-19 Health Care Response (Total US$ 581,000,000): The aim of this component is to strengthen essential health care service delivery system to be able to respond to a surge in demand as a result of anticipated rise in the number of COVID-19 cases in the coming months. As COVID-19 will place a substantial burden on inpatient and outpatient health care services, support will be provided to equip selected health facilities prioritized by DOH for the delivery of critical medical services and to cope with increased demand.

Health system strengthening efforts will therefore focus on provision of medical and laboratory equipment, PPE, medical supplies as well as essential inputs for treatment such as oxygen delivery systems and medicines to selected hospitals and health facilities. Local containment will be supported through the establishment of local temporary isolation units. The component will also finance requirements of infrastructure of quarantine facilities. It is anticipated that any construction involved under this component will be conducted at existing facilities; activities requiring land acquisition or involuntary resettlement are not eligible.

This component also supports the Department of Health in preparing a guidance note on standard design for hospital isolation and treatment centers to manage Severe Acute Respiratory Infections (SARI) patients that will be used in health facilities across the country to ensure standard and quality of COVID-19 health care services. The component has three sub-components. The scope of Component 1: Strengthening Emergency COVID-19 Health Care Response (current allocation: US$95.5 million; revised allocation: US$581 million) will be scaled up to support COVID-19 vaccines purchase. Component 1 will be revised as follows:

(a) **Sub-component 1.1. Provision of medical and laboratory equipment and reagents**[10] **(current allocation: US$34.3 million; revised allocation: US$ 34.5 million):** This sub-component will support selected DOH hospitals and provincial hospitals with laboratory equipment (e.g. Polymerase Chain Reaction machines), test kits, reagents, as well as to upgrade diagnostics and treatment of COVID-19 infection capacity through procurement of such intensive care unit equipment and devices as mechanical ventilators, cardiac monitors, portable x-ray, extracorporeal membrane oxygenation (ECMO) machine, portable oxygen generator machine, and continuous positive airway pressure (CPAP). The sub-component will also support provision of oxygen, emergency beds, laboratory

[10] Laboratory support under Sub-Component 1.1 is short-term and includes PCR machines and test kits for selected DOH hospitals and provincial hospitals. Component 2 supports strengthening of reference laboratories at both national and sub-national levels to address EIDs in the short and medium term.

reagents, and waste management facilities. This subcomponent will also support short trainings on the use of equipment, devices, and tests for health providers and technicians; and to support the necessary logistics and supply chain to ensure that the equipment will reach frontline health facilities without delays. No new additional activities are proposed but the amount has been revised to be aligned with updated costing of activities by the DOH.

(b) **Sub-component 1.2. Provision of medical supplies, including Personal Protective Equipment (PPE), COVID-19 vaccines, medicines, and ambulance (current allocation: US$46.6 million; revised allocation: US$521.3 million)** : This subcomponent will support the health system with supplies including PPE such as masks, goggles, gloves, gowns, etc. It will also support medical counter measures and medical supplies for case management and infection prevention, through the procurement of COVID-19 vaccines, drugs such as antivirals, antibiotics, and essential medicines for patients with co-morbidity and complications such as CVDs and diabetes, as well as assistance to support the Borrower's advance purchase mechanisms. This subcomponent will also support short trainings on the use of medical supplies for health providers and technicians as needed; and support to the necessary logistics and supply chain to ensure that the medical supplies and PPE will reach frontline health facilities without delays. Small part of this sub-component may also support ambulance vehicles to address COVID-19 response, as needed. The AF supports COVID-19 vaccines purchase through this sub-component.

(c) **Sub-component 1.3. Enhancing isolation/quarantine facilities (current allocation: US$14.5 million; revised allocation: US$25.2 million) :** This sub-component will support the establishment, construction, retrofitting/refurbishment of quarantine facilities in major points of entry, increase number of regular isolation rooms in DOH and provincial hospitals as well as establishment of negative pressure isolation rooms in DOH and provincial hospitals. It will also support setting up of first line decontamination facilities in international airports (holding areas) as well as establishing isolation tents for triaging in health facilities. The increased amount for the component restores financing which had been re-allocated to sub-component 1.2 to finance COVID-19 vaccines during the December 2020 restructuring.

(d) **Sub-component 1.4. Deployment of COVID-19 vaccines** (new sub-component, financed by counterpart funding from the GOP: US$155.5 million). The sub-component is financed primarily through the GOP's counterpart funding to support the deployment of World Bank-financed and eligible COVID-19 vaccines. The sub-component will finance planning and management of the COVID-19 vaccines procured by loan proceeds from the AF and deemed eligible by the World Bank, as part of the national COVID-19 vaccination campaign, through enhancing systems and capacity for planning, regulation, and M&E. In addition, the sub-component will finance safe and effective deployment of COVID-19 vaccines procured by loan proceeds from the AF and deemed eligible by the World Bank, including delivery, cold chain and logistics system, disposal of healthcare wastes, risk and communication, as well as surveillance and adverse events monitoring.

Component 2: Strengthening laboratory capacity at national and sub-national level to support Emerging Infectious Diseases (EIDs) Prevention, Preparedness, and Response (Total US$ 11,500,000): The component will support the establishment of national reference laboratories as well as selected subnational and public health laboratories. It will include improving, retrofitting, and refurbishing national reference laboratory – Research Institute for Tropical Medicine (RITM) as well as six sub-national and public health laboratories in Baguio, Cebu, Davao, Surigao City, and Manila.[11] The sub-component may also support constructing and expanding laboratory capacity in priority regions that currently do not have necessary laboratory capacity. The sub-component will also support necessary laboratory equipment, laboratory supplies, reagents, as well as capacity building for relevant laboratory staff. It is anticipated that any construction involved under this component will be conducted at existing facilities, and that no new land acquisition or involuntary resettlement are expected.

Component 3: Implementation Management and Monitoring and Evaluation (Total US$ 7,500,000):

Project Management. The component will support the Department of Health (DOH) as the implementing agency of the project. DOH will be responsible for the coordination, management, and implementation of the project at the national and sub-national levels, financial management and procurement. The project will be implemented through mainstream DOH processes and will not involve a parallel project implementation unit or secretariat. This will be strengthened by the recruitment of additional staff/consultants responsible for overall administration, procurement, and financial management under country specific projects. To this end, the Project would support costs associated with project coordination, management, and implementation. This component will also support costs related to the management of environmental and social risks under the Bank's ESF, including the implementation of this ESMF and Stakeholder Engagement Plan (SEP).

The implementation arrangements of the Parent Project will be adjusted to enhance the capacity of DOH for implementation related to vaccine procurement, cold chain strengthening, and vaccination delivery support, as well as human resource strengthening in risk communication and community mobilization and M&E. Additional expertise and capacity will also be added as required by the additional financing. Specifically, the COVID-19 vaccination initiatives will be strengthened by the development of the Vaccine Delivery and Distribution Manual and National Deployment and Vaccination Plan (NDVP) and the hiring of a (i) Vaccine Specialist, (ii) M&E Specialist, and a (iii) second Procurement Specialist.

Monitoring and Evaluation (M&E). This component would also support monitoring and evaluation of project implementation, prevention and preparedness, building capacity for clinical and public health research, and joint learning across and within countries. Furthermore, the M&E includes a mechanism to review the capacity of the national health systems to deploy vaccines universally and to reach isolated and marginalized communities and those difficult to reach. It will include the maintenance of daily records documenting who received the vaccine from which vial as well records of any adverse vaccination effects. The M&E system will include data and information disaggregated by gender, demography, race-ethnicity, location-residence, socioeconomic status, and disability. As may be needed, this component will also support third-party monitoring of progress and efficient utilization of project investments.

[11] Subnational and public health laboratories include (i) Lung Center of the Philippines (QC); (ii) San Lazaro Hospital (Manila); (iii) Baguio General Hospital (Baguio); (iv) Vicente Sotto Memorial Medical Center (Cebu); (v) Caraga Regional Hospital (Surigao City); (vi) Southern Philippines Medical Center (Davao).

Component 4: Contingent Emergency Response Component (CERC) (US$0): In the event of an Eligible Crisis or Emergency, the project will contribute to providing immediate and effective response to said crisis or emergency. A zero-value component has been included to ensure funds can be deployed through the project depending on the specific needs that may arise.

Project Activities: Table 1 lists the goods, services, and works that will be financed under the project which will be deployed variously to Department of Health (DOH) hospitals, provincial hospitals, and local government unit (LGU) hospitals as specified.

Table 1.1.List of Goods, Services and Works

Goods*
Intensive Care Unit (ICU) equipment - mechanical ventilator, cardiac monitor, closed-circuit apparatus, suction pump, portable x-ray, dialysis machine (70 DOH hospitals)
Polymerase Chain Reaction (PCR) Machines (70 DOH hospitals; 85 Provincial Hospitals)
Real Time (RT-PCR) Nucleic Acid Detection Kits
Personal protective equipment (300,000 sets)
Ambulances (approximately 180 vehicles plus 10 water ambulances)
COVID-19 vaccines
Cold storage and refrigerated transportation of the COVID-19 vaccines***
Services**
Community outreach
Training and capacity building for health care personnel and relevant workers
Support to project implementation and monitoring
Waste collection, treatment, and disposal of the health care wastes generated from the vaccination***
Rental of cold storage and refrigerated transportation of the COVID-19 vaccines***
Works*
Strengthen capacity of sub-national and public health laboratories (6 facilities)
Research Institute for Tropical Medicine (RITM) Biosafety Level (BSL) 3 Lab and National Reference Laboratory (NRL) Complex
Point-of-Entry Quarantine Facilities (Luzon (1), Visayas (2) and Mindanao (3))
First line decontamination facilities at International Airports (Manila (Pasay), Clark, Bicol, Cebu, Kalibo, Cagayan de Oro, Davao)
Regular isolation rooms in DOH and Provincial hospitals
Negative pressure isolation rooms in DOH and Provincial hospitals
Construction of warehouse facilities for the storage of the COVID-19 vaccines***

*Source: *Philippines COVID-19 Emergency Response Project Procurement Plan (May 2020)*
***Project Appraisal Document (April 23, 2020)*
**** For Discussion/Confirmation*

2.4 Prohibited/Negative List

The Project will not involve activities with high potential environmental and social risks. Such activities which 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, or unique natural values.
- 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.
- 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 aside from vaccination activities involving these personnel

3 Policy, Legal and Regulatory Framework

3.1 Philippines Legal Framework relevant to the ESF

3.1.1 Philippine Environmental Impact Assessment System of 1978

The Philippine Environmental Impact Assessment System of 1978 which was set forth by Presidential Decree (PD) 1586 is the primary law that establishes the Philippine Environmental Impact Statement (EIS) System. This is one of the series of decrees promulgated in the late 1970s to address emerging environmental issues and concerns. The Philippine EIS System was established to facilitate the attainment and maintenance of a rational and orderly balance between socio-economic growth and environmental protection. This policy provides that "no person, partnership, or corporation shall undertake or operate any such declared ECP or project within an ECA without first securing an Environmental Compliance Certificate (ECC)" which requires the submission of an Environmental Impact Statement. The latest implementing rules for this law is the DENR Administrative Order 30-2003 (DAO 30-2003) which provides criteria for and detailed lists of ECAs and ECPs.

The other related laws are PD 1151 — The Philippine Environmental Policy and PD 1152 — The Philippine Environment Code. The PD 1151 stressed the urgent need to formulate an intensive, integrated program of environmental protection through EIA, requiring all agencies and instrumentalities of the national government, the government-owned and -controlled corporations, the private corporations, firms, and entities, to prepare and submit an Environmental Impact Statement (EIS) for every action, project or undertaking which significantly affects the environment.

3.1.2 Republic Act (RA) 6969 —Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990

The Philippine Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 was enacted to regulate, restrict, or prohibit the importation, manufacture, processing, sale, distribution, use and disposal of chemical substances and mixtures that present unreasonable risk and/or injury to health or the environment; to prohibit the entry, even in transit, of hazardous and nuclear wastes and their disposal into the Philippine territorial limits for whatever purpose; and to provide advancement and facilitate research and studies on toxic chemicals.

3.1.3 DENR Administrative Order (DAO) 1992-29 established the Implementing Rules and Regulations (IRR) of Republic Act 6969 or Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990

The DENR DAO 1992-29 requires hazardous waste generators to register with the DENR-EMB, properly manage, and dispose of hazardous wastes generated in its facility. The hazardous wastes must be segregated, labelled, kept in proper storage facility, transported, treated/recycled and disposed of through DENR- accredited firms. In compliance with the Section 27 of the IRR, a transporter of health care wastes is required to register and obtain a Transport Permit from the DENR-EMB.

3.1.4 Republic Act (RA) 9003 – Ecological Waste Management Act and DENR AO 2001-34 (Implementing Rules and Regulations)

The law seeks to ensure the protection of public health and the environment through the utilization of environmentally sound methods for treating, handling, and disposing of solid wastes and encourages waste minimization and segregation at source.

Article 4, Section 27 of RA 9003 mandates the Department of Trade and Industry (DTI) to formulate and implement a coding system for packaging materials and products to facilitate waste recycling and reuse.

3.1.5 Joint DOH-DENR DAO Order No. 2005-02 – Policies and guidelines on effective and proper handling, collection, transport, treatment, storage and disposal of health care waste

The Joint DOH-DENR Administrative Order (JAO) 2005-02 dated August 24, 2005 provides definition and classification of health care wastes. The classification includes general waste, infectious waste, pathological waste, sharps, pharmaceutical wastes, genotoxic waste, chemical waste, waste with high heavy metals content, pressurized containers, and radioactive waste. The DENR-DOH JAO clarified the roles and responsibilities of DOH and DENR in regulating the activities of HCFs. All onsite activities are to be managed and supervised by the DOH while movement of hazardous healthcare wastes are required to comply with the requirements of the DENR in accordance with RA 6969 and its implementing rules and regulations.

3.1.6 DAO 2014-02 – Revised Guidelines for Pollution Control Officer Accreditation

The Revised Guidelines for Pollution Control Officer (PCO) Accreditation issued by DENR on February 3, 2014 requires industrial, commercial, and manufacturing establishments and private entities whose activities are potential and actual sources of pollution to designate a PCO. The PCO shall secure accreditation from the DENR in accordance with this DAO.

3.1.7 DAO 2013-22 – Revised Procedures and Standards for the Management of Hazardous Wastes

The DENR AO 2013-22 is a revision of the DAO 2004-36. This policy aims to further streamline the procedures for generation and compliance to the legal and technical requirements of hazardous waste management, including guidelines for waste generators, transporters, and treatment, storage, and disposal facilities.

Under this law, healthcare wastes from hospitals, medical centers, and clinics containing pathological, pathogenic, and infectious wastes, sharps and others are categorized as M501 or pathological or infectious wastes. Meanwhile, pharmaceuticals and drugs (M503) include expired pharmaceuticals and drugs stocked at producers and retailers' facilities which contain hazardous constituents harmful to the environment such as antibiotics, veterinary, and phytopharmaceutical and others.

The COVID-19 vaccine vials are categorized under pharmaceutical and drugs (M503) while the syringes, cottons, and other materials used in the vaccination which had contact to the patient will be considered as infectious wastes (M501).

The policy mandates waste generators to avail services of waste transporters and TSD facilities duly registered by the EMB Central Office and whose permits are valid within the period that the wastes are being transported and treated, stored, or disposed of.

3.1.8 DENR Memorandum Circular (MC) 2020-16 – Amendment of the Interim Guidelines on Issuance of Special Permit to Transport (SPTT) for the Transportation of Hazardous Wastes within the Community Quarantine Period

This policy covers registered transporters and registered TSD facilities which respectively haul, treat, and/or dispose healthcare wastes nationwide. The transporters with existing valid regular permit to transport (PTT) for M501 shall continue to collect/haul hazardous COVID-19 wastes and other pathological and infectious wastes from healthcare facilities and are allowed to pass through checkpoints for delivery at designated TSD facility during the community quarantine period. If the PTT will expire during the period, an SPTT is to be secured online. Similarly, TSD facilities with TSD Registration Certificates and transporters with Transporter Registration Certificate (TRC) handling M501 with certificates expiring during the Enhanced Community Quarantine are automatically extended for 60 days and the Application for Renewal shall be immediately processed within 5 days upon lifting of ECQ.

3.1.9 Memorandum Circular (MC) 2020-20 – Provisional Guidelines on the Hazardous Wastes Management within the Extended Enhanced Community Quarantine

DENR MC 2020-20 dated April 30, 2020 provides the guidelines that waste transporters and treatment, storage, and disposal (TSD) facilities need to comply during the extended enhanced community quarantine. It upholds the policy of the government to continuously monitor the transport, treatment, storage, and disposal of hazardous wastes in order to prevent or avoid the likelihood of environmental disaster and contamination and provide temporary protocols for waste handlers, transporters, treaters, local government units, law enforcement authorities, and other stakeholders in the smooth implementation of proper hazardous waste management. It describes the coverage and simplification of existing procedures for the issuance of the Permit to Transport to registered transporters and registered TSD facilities during the extended enhanced community quarantine period to enable them to haul, treat and dispose healthcare wastes and related hazardous wastes. The transporters and TSD facilities are required to follow safety protocols as outlined in the health, safety, and environmental (HSE) plan. The safety protocols should include the preparation and submission of reports such as the report of compliance and completion of transport or the manifest and the Certificate of Treatment (COT) after each completed transport and treatment of the transporter and TSD, respectively. The manifest of the registered transported waste shall be attested by the duly designated representative or PCO of the health care facility or hazardous waste generator and the TSD, within 24 hours for M501 wastes and 7 days for other hazardous wastes after delivery to the TSD facility. The TSD facility shall also submit a report of compliance and completion of treatment or the COT to be attested by their PCO within 7 days after M501 wastes and 21 days for other types of hazardous wastes, after completion of treatment.

3.1.10 Philippine Clean Air Act of 1999

The *Philippine Clean Air Act of 1999* (*Republic Act 8749*) provided for a comprehensive air pollution control policy and recognizes the rights of Philippine citizens to breathe clean air. RA 8749 applies to the project due to the potential for emissions from healthcare waste incineration. Section 20 of RA 8749 states:

> *Ban on Incineration - Incineration, hereby defined as the burning of municipal, bio-medical and hazardous wastes, which process emits poisonous and toxic fumes, is hereby prohibited: Provided, however, that the prohibition shall not apply to traditional small-scale method of community/neighborhood sanitation "siga", traditional, agricultural, cultural, health, and food preparation and crematoria: Provided, further, That existing incinerators dealing with bio-medical wastes shall be phased out within three (3) years after the effectivity of this Act: Provided, finally, That in the interim, such units shall be limited to the burning of pathological and infectious wastes, and subject to close monitoring by the Department.*
>
> *With due concern on the effects of climate change, the Department shall promote the use of state-of-the-art, environmentally- sound, and safe non-burn technologies for the handling, treatment, thermal destruction, utilization, and disposal of sorted, unrecycled, uncomposted municipal, bio-medical and hazardous wastes.*

These provisions of RA 8749 were clarified by a Department of Environment and Natural Resources Memorandum Circular (DMC-2002-05), which:

- states that RA 8749 does not prohibit incineration of wastes except those burning processes which emit poisonous and toxic fumes;
- recognises that appropriate disposal techniques for medical and bio-medical wastes are limited; and
- incineration of these wastes is only permitted in state-of-the-art facilities which are proven to emit minimal air pollutants with concentrations meeting RA 8749 criteria.

The phasing out of bio-medical incinerators contemplated under RA 8749 was deemed impracticable due to lack of affordable best available technology (BAT).

3.1.11 Chemical Control Order on Ozone-Depleting Substances

The Philippines ratified the Montreal Protocol on Substances that Deplete the Ozone Layer on March 21, 1991. The country agreed to phase-out its consumption of all ODS, based on the agreed timetable for Article 5 developing countries. Since the Philippines is neither a producer nor an exporter of ODS, the phaseout involves the reduction of importation and consumption of ODS following the schedule for Article 5 countries. The Montreal Protocol was amended during the 28th Meeting of the Parties through the implementation of the Kigali Agreement that also established the phase-down of hydrofluorocarbon (HFC) with developed countries taking the lead on phasing down HFCs, starting with a 10% reduction in 2019 and delivering am 85% cut in 2036 (compared to the 2011-2013 baseline).

The DENR issued DENR Administrative Order No. 2013-05, also known as the "Revised Regulations on the Chemical Control Order (CCO) for Ozone Depleting Substances" which is the legal basis of the country for the phaseout of ODS. This second revision of the CCO updates the phase-out status of controlled substances covered by the Montreal Protocol and reflects the accelerated phase-out schedule for hydrochlorofluorocarbons (HCFCs) in accordance with the Decision XIX/6 of the 19th meeting of the parties to the Montreal Protocol.

In accordance with the CCO, any importer of ODS must register with the Environmental Management Bureau (EMB) of the DENR. An importer of ODS must secure annually a certificate of registration from EMB and a Pre-Shipment Importation Clearance (PSIC) prior to the entry of each ODS shipment and that importers must follow the updated phase-out schedule for HCFCs[12]. There is a quota allocation for HCFCs that should conform to the "one-shipment, one clearance" policy.

The dealers, resellers, and retailers of ODS that are registered with the EMB and accredited by the Department of Trade and Industry (DTI) are allowed to purchase, re-sell, distribute, and utilize allowable uses of ODS. The dealers and retailers should adhere to the Code of Practice for Refrigeration and Airconditioning (2013 update). Servicing of ODS-using equipment such as air-conditioners and refrigeration equipment must secure a certificate of registration from the DENR to assess their capability to take measures in the handling of ODS to control and minimize

[12] Only HCFCs are allowed to be imported until January 2040 among the ODS. From 2030-204, an annual HCFC importation of 2.5% of the baseline consumption shall be allowed for use in the servicing sector. Other ODS, including chlorofluorocarbon (CFC), halons, and carbon tetrachloride (CTCs) have been banned for importation since January 1, 2010.

emissions and ultimately, phasing out their use by replacing with substitutes or alternatives recognized and certified by the DENR-EMB.

All importation of HCFC-22 for the manufacture of refrigeration and air-conditioning has been prohibited since January 1, 2020 to encourage companies to shift to alternative technologies. Importation of HCFC-123 for as cooling agent for chillers (also as fire-extinguishing agent) will be prohibited by January 1, 2025. Importation of HCFC blends for all sectors will be prohibited by January 1, 2030 to reduce HCFC imports by 97.5% in 2030 based in recorded baseline consumption. The Philippines, as an Article 5 country, has to reduce HFC consumption to 50% of baseline consumption in 2040-2044 based on the Kigali Agreement.

3.1.12 Department of Energy Administrative Order 110 – Procurement of Energy-Consuming Equipment

The order aims to reduce the monthly consumption of electricity and petroleum products by at least 10% through the implementation of the Government Energy Management Program.

3.1.13 Department of Energy Circular 2016-04-0005 – Minimum Energy Performance Standards (MEPS)

The circular prohibits the selling of energy-inefficient products and provides incentives for the judicious and efficient use of energy. For chillers and air-conditioning units and other energy consuming devices and equipment, the DOE circular applies the highest Minimum Energy Performance Standards (MEPS).

3.1.14 Climate Change Act of 2009 and Relevant DOH Policy Issuances

National Framework Strategy on Climate Change (NFSCC) is the roadmap for addressing climate change. It identified adaptation as the anchor strategy and considered mitigation as a function of adaptation. The DOH is one of the first government agency in the country to prepare its sector strategy for climate change adaptation pursuant to the NFSCC 2010-2022. The Health Sector Strategy for Climate Change Adaptation (Department Circular No. 2010-0187) became part of the Philippine Strategy on Climate Change Adaptation. The National Climate Change Action Plan similarly identified health as one of the thematic priorities under Human Security with the intended outcome of health and social protection delivery systems that are responsive to climate change risks. Targets include health personnel and community's capacity on climate change health adaptation and risk reduction developed; public health surveillance system is developed and implemented in all provinces; and health emergency response, preparedness and post-disaster management implemented at the national and local levels.

The DOH issued Administrative Order No. 2012-005 "National Policy on Climate Change Adaptation for the Health Sector" to set the overall policy directions on addressing the impact of climate change on health and to create an enabling environment for capacity strengthening of health systems, engagement of key partners in supporting comprehensive actions, and in protecting the health of all Filipinos from the impact of climate change. The scope of the order includes all units and instrumentalities of the Department, including its attached agencies, local government units, NGO, professional organizations, private sector and other relevant partners involved in the implementation of climate change adaptation for health programs. Administrative Order No. 2012-0018 was issued as its operational guidelines for strategies on policy, plans and partnerships;

service provision, capacity and infrastructure enhancement; health promotion, research, surveillance and monitoring; strengthening organizational structure for climate change at different levels of governance. The AO similarly outlines the organizational structure, roles and responsibilities, and budget and funding for its implementation.

In 2015, DPO No. 2015-5342 created the DOH Climate Change Executive Committee. Since then, the DOH has conducted 5 trainings on Health Vulnerability and Capacity Assessment (HVACA) nationwide with priority to the top 20 provinces identified to be most vulnerable and at risk to climate change. The objectives of the training are to provide LGUs and Centers for Health and Development (CHDs) a clearer view of climate change and health so that better assessment, planning and programming of health interventions toward climate change risk reduction can be accomplished; and to improve the capacity of the CHDs and LGUs on the use of the Climate Change Adaptation Tools (CCAT) for Health. The HVAVA and M&E tools were developed in partnership with the National Economic and Development Authority. Various trainings were also conducted on the use of Climate Change Adaptation Tools for Health from 2013 to 2015.

The DOH continues with its actions to increase the adaptive capacity of the Philippine health sector. Some of the ongoing activities relevant to the ESMF include: Finalization of the standards for green health care facilities and promote green hospitals (DC No. 2019-0059 dated 14 Feb 2019 - Green Certification of Government Healthcare Facility Projects); Implementation of the safe hospitals initiative; Promotion of the greening of hospitals and health facilities through improving energy and water efficiency and conservation, sustainable cooling system and sustainable healthcare waste management in hospitals (Section 37 of the GAA for 2019 General Provisions - RA No. 11260); Assessment of HVACA trained provinces and status of their Local Climate Change Action Plans (LCCAPs); Coordination meeting with Health Promotion and Communication Services (HPCS) for advocacy and health promotion (in line with Climate Sensitive Diseases, Water and Sanitation Related Diseases, Food and Waterborne Diseases and Emerging and Re¬emerging Infectious Disease Program Communication Plan); and Technical Assistance to the HVACA trained provinces.

3.1.15 Disaster Risk Reduction and Management and Relevant DOH Policies

The Republic Act 10121 or Philippine Disaster Risk Reduction and Management Act of 2010 provides guidelines on the development of policies and plans and the implementation of actions and measures pertaining to all aspects of disaster risk reduction and management, including governance, risk assessment and early warning, knowledge building and awareness raising, reducing underlying risk factors, and preparedness for effective response and early recovery. Through this policy, the National Disaster Risk Reduction and Management Council (NDRRMC) was institutionalized.

The National Disaster Risk Reduction and Management Council, headed by the Secretary of the Department of the National Defense (DND) as the Chairperson, is the overall responsible Office for disaster response and management, with the Secretary of Department of the Interior and Local Government (DILG) as Vice- Chairperson for Disaster Preparedness, the Secretary of Department of Social Welfare and Development (DSWD) as Vice- Chairperson for Disaster Response, the Secretary of the Department of Science and Technology (DOST) as Vice- Chairperson for Disaster Prevention and Mitigation, and the Director-General of the National Economic and Development Authority (NEDA) as Vice Chairperson for Disaster Rehabilitation and Recovery, as set forth in the Implementing Rules and Regulations of the Republic Act no. 10121.

The NDRRMC shall provide guidelines on the selection and screening of the civil society organizations (CSOs) and private sector representatives. The NDRRMC, empowered with policy-making, coordination, integration, supervision, monitoring, and evaluation functions, shall have the following responsibilities:

a) Develop a NDRRM Framework which shall provide for comprehensive, all-hazards, multi-sectoral, inter-agency and community-based approach to disaster risk reduction and management. The Framework shall serve as the principal guide to disaster risk reduction and management efforts in the country and shall be reviewed on a five (5) year interval, or as may be deemed necessary, in order to ensure its relevance to the times;
b) Ensure that the NDRRM Plan is consistent with the NDRRM Framework;
c) Advise the President on the status of disaster preparedness, prevention, mitigation, response and rehabilitation operations being undertaken by the government, CSOs, private sector, and volunteers; recommend to the President the declaration of a state of calamity in areas extensively damaged; and submit proposals to restore normalcy in the affected areas, to include calamity fund allocation;
d) Ensure a multi-stakeholder participation in the development, updating, and sharing of a Disaster Risk Reduction and Management Information System and Geographic Information System-based national risk map as policy, planning and decision-making tools;
e) Establish and/or strengthen a comprehensive, all hazards national early warning and emergency alert system to provide accurate and timely advice to national or local emergency response organizations and to the general public through diverse mass media to include digital and analog broadcast, cable, satellite television and radio, wireless communications, and landline communications;
f) Develop appropriate risk transfer mechanisms that shall guarantee social and economic protection and increase resiliency in the face of disaster;
g) Monitor the development and enforcement by agencies and organizations of the various laws, guidelines, codes or technical standards required by the Act;
h) Manage and mobilize resources for disaster risk reduction and management including the National Disaster Risk Reduction and Management Fund;
i) Provide necessary guidelines and procedures, and monitor the Local Disaster Risk Reduction and Management Fund (LDRRMF) releases as well as utilization, accounting, and auditing thereof;
j) Develop assessment tools on the existing and potential hazards and risks brought about by climate change to vulnerable areas and ecosystems in coordination with the Climate Change Commission;
k) Develop vertical and horizontal coordination mechanisms for a more coherent implementation of disaster risk reduction and management policies and programs by sectoral agencies and LGUs;
l) Formulate a national institutional capability building program for disaster risk reduction and management to address the specific weaknesses of various government agencies and LGUs, based on the results of a biennial baseline assessment and studies.
m) Formulate, harmonize, and translate into policies a national agenda for research and technology development on disaster risk reduction and management;
n) In coordination with the Climate Change Commission, formulate and implement a framework for climate change adaptation and disaster risk reduction and management from which all policies, programs, and projects shall be based;
o) Constitute a technical management group composed of representatives of the abovementioned departments, offices, and organizations, that shall coordinate and meet as

often as necessary to effectively manage and sustain national efforts on disaster risk reduction and management;

p) Task the OCD to conduct periodic assessment and performance monitoring of the member-agencies of the NDRRMC, and the Regional Disaster Risk Reduction and Management Councils (RDRRMCs), as defined in the NDRRMP;
q) Coordinate or oversee the implementation of the country's obligations with disaster management treaties to which it is a party and see to it that the country's disaster management treaty obligations be incorporated in its disaster risk reduction and management frameworks, policies, plans, programs and projects; and
r) Coordinate or oversee the implementation of the country's obligations with disaster management treaties to which it is a party such as the ASEAN Agreement on Disaster Management and Emergency Response (AADMER), which came into force on 24 December 2009, and see to it that the country's disaster management treaty obligations be incorporated in its disaster risk reduction and management frameworks, policies, plans, programs and projects.

The DND as the Chair of the NDRRMC, is the government organization established to lead, administer, and coordinate all disaster management activities. The DND is the central entity responsible for coordinating risk reduction and emergency management in the country. In the event of a National Declaration of a State of Calamity by the Office of the President of the Republic of the Philippines or the Local Declaration by the Local Government Unit , the NDRRMC and the Local Disaster Risk Reduction and Management Council (LDRRMC), respectively, have the responsibility to administer a comprehensive national civil defense and disaster risk reduction and management program by providing leadership in the continuous development of strategic and systematic approaches as well as measures to reduce the vulnerabilities and risks to hazards and manage the consequences of disasters.

The DOH is mandated to work in close collaboration with the DND as Chairperson of the NDRRMC, the OCD as the implementing arm of the NDRRMC, and other relevant inter-ministerial committees, where relevant support on the technical discussions on DRR and other related activities of the Project, which may include the activation of the Contingency Emergency Response Component (CERC). Moreover, the DOH including other member agencies, is mandated by the Republic Act to (i) establish a disaster office, (ii) maintain a functional operations center, (iii) mainstream disaster risk reduction management (DRRM) in all planning activities, and (iv) orient all their employees on DRRM.

The Republic Act 7160 or the Local Government Code of 1991 mandates DOH to have the following authorities and roles in emergency and disaster risk response and management:

a. Enhance and strengthen the capabilities of LGUs to provide health services and facilities to their constituents;
b. Have the final decision in determining the presence of ‘widespread public dangers’ in a particular area or region [Section 44 (b) and (c)] including situations in calamity areas and in relation to a displaced population [Section 43 (a)];
c. Recommend to the President the issuance of an appropriate order directing the DOH to assume direct supervision and control over local health operations in affected areas; and
d. Prepare, implement, and monitor plans of action in such circumstances, and of evaluation of the local health situation [Section 45, (c) and (f)].

The Local Government Code of 1991 institutionalized a devolved health care system where the responsibility of delivering health care services in the local level are assigned to the local government units (LGUs) and not the DOH Central Office. The LGUs have the primary responsibility of providing immediate and direct response to disasters, but in cases where disasters have reached proportions beyond the capability of the LGUs, the national government takes control as stipulated under Section 105 of the Code. Relatedly, Executive Order no. 102 s. 1999 – 'Redirecting the Functions and Operations of the DOH' provides that the DOH shall (1) serve as the lead agency in health emergency response services, including referral and networking systems for trauma, injuries and catastrophic events, (2) promote health and well-being through public information and provide the public with timely and relevant information on health risks and hazards, and (3) assume leadership in health in times of emergencies, calamities and disasters, and system failures.

The Health Emergency Management Bureau (HEMB) as the focal unit of the DOH in emergency response, has the following roles and responsibilities:

a) Act as the DOH Coordinating unit and Operation Center for all health emergencies and disasters, as well as incidents with the potential of becoming an emergency, and coordinate the mobilization and sharing of resources;
b) Provide communication linkage among DOH Central Office and other concerned agencies, including the hospitals and the regions, during emergencies and disasters;
c) Maintain updated information of all health emergencies and disasters (except epidemiological investigation reports) and provide such information to other offices and agencies in accordance with existing protocols;
d) Maintain a database of all health emergency personnel, technical experts, and resource speakers. Together with the Health Facilities Development Bureau (HFDB) and the Health Facilities Enhancement Program Management Office (HFEPMO), HEMB shall maintain a database of capabilities of health facilities;
e) Lead in the development of Disaster Risk Reduction & Management in Health (DRRMH) Plan and the development of protocols, guidelines and standards for health emergency management;
f) Provide technical assistance in the development of programs and planning activities for HEM for other government and non-government organizations;
g) Lead advocacy activities, including simulation exercises;
h) Develop and implement an Integrated Human Resource Training Agenda for the Health Sector for emergencies and disasters;
i) Lead in the networking of hospitals and health sector organizations responding to emergencies and disasters; and
j) Monitor and evaluate the enforcement of compliance to policies and recommend the formulation or amendment of policies related to health emergency management.

Given the crucial role of the DOH in DRRM, the Manual of Operations on Health Emergency and Disaster Response Management was developed in 2015. The Manual provides guidelines on the health emergency and disaster response framework and the management of the event/incident, victims, service providers, information system, and non-human resources.

The development and implementation of a national policy framework for emergencies and disasters in the health sector was established by the DOH Administrative Order no. 168 series of

2004 entitled National Policy on Health Emergencies and Disasters. It aims to decrease mortality and promote physical and mental health, as well as prevent injury and disability on the part of both victims and responders specifically through the (i) development of goals, strategies, plans and policies for ensuring an efficient system for managing emergencies and disasters in the health sector, (ii) improvement of the effectiveness of DOH systems, structures, capacities and mechanisms, and (iii) building up of the preparedness and response activities of both the public and private health facilities for administering mass casualty events, and (iv) strengthening the links between partner agencies and stakeholders in responding to and managing emergencies and disasters in the country.

The DOH Administrative Order no. 0024 s. 2008 – 'Adoption and Institutionalization of an Integrated Code Alert System Within the Health Sector' provides that there should be a Code Alert System in the mobilization and deployment of resources, including the expected levels of preparation and the most appropriate response by all facilities in emergencies and disasters. Previously, DOH AO no. 182 s. 2001 was issued for the Adoption and Implementation of the Code Alert System for DOH Hospitals During Emergencies and Disasters.

The DOH Policies and Guidelines on the Establishment of Operations Center for Emergencies and Disasters (DOH AO no. 29 s. 2010) describes the policies and guidelines in the establishment of Operations Center (OpCen) at all levels from the national to the local government to ensure a well-coordinated response of the health sector. Its objectives include to i) develop policies and guidelines on the establishment and management of an Operations Center, (ii) identify the functions of the OpCen at the different levels, (iii) set the minimum specification for the design of an OpCen and minimum standards for logistical requirements, human resource requirements, coordination mechanisms, and relationship among Operations Centers, and (iv) provide funds to sustain its functionality. The DOH also issued the Guidelines on Health Emergency Management (HEM): Manual for Operations Center, 2nd edition, in 2008 outlining the (1) requirements and standards for health emergency management staff, (2) the element, physical attributes, standard operating procedures, information management, human resource development, evaluation of operation centers, and the (3) guidelines for operation centers in DOH CHDs and hospitals. The first volume of the Information Management Manual for Coordinating and Monitoring Health Emergency and Disaster Response: Manual of Guidelines and Procedures on Information Management for Selected Functions of the Health Emergency Management Staff of the Department of Health was issued in 2007 To provide guidance on the information needs of key players in HEM at the national level, information sources and data collection tools, data collection flow and reporting mechanisms, assuring quality of information, and data processing (collation, information dissemination, and storage).

To provide guidance in ensuring an effective and efficient reporting mechanism to yield a responsive evidence- based decision- making process during emergencies and disasters, the DOH released AO no. 14 series of 2012 – Policy and Implementing Guidelines on Reporting in Emergencies and Disasters. The AO required the reporting of units at all levels of the health sector to submit timely, reliable, and continuous reports of all health-related events with standardized reporting mechanisms at all levels for emergencies/disasters. It has the objective of ensuring consistency and compliance of all reporting units with the reporting mechanisms in emergencies and disasters.

With the aim of further improving disaster surveillance, the DOH issued AO 2014- 011 – Policies and Guidelines on the Implementation of Surveillance in Post Extreme Emergencies and Disasters

(SPEED). The AO aims to institutionalize SPEED, an early warning system is vital in detecting health conditions or diseases with outbreak potential and in accessing real-time information for prompt and appropriate response, in all levels of health emergency and management response.

The DOH AO no. 13 series of 2012 entitled Policy and Guidelines on Logistics Management in Emergencies and Disasters provides guidelines on the effective and efficient management of logistics support at all levels of the health system in emergency or disaster situations. It mandates the DOH to lead in formulating policies and plans for logistics management in emergencies and disasters and, in coordination with members of the health sector, formulate guidelines, standards, procedures and protocols in relation to logistics management in emergencies and disasters with corresponding reporting systems and tools. The Guidelines on the Acceptance and Processing of Foreign and Local Donations During Emergency and Disaster Situations (DOH AO no. 17 series of 2007) was issued in relation to this to set a rational and systematic procedure for the acceptance, processing and distribution of foreign and local donations that are exclusively for unforeseen, impending, occurring and experienced emergency and disaster situations. Similarly, the Food and Drug Administration has issued the FDA Circular no. 2020-009 or the Guidelines on the Identification, Notification, Evaluation, Regulatory Enforcement Action, and Review and Monitoring of Donated Health Products Solely Intended to Address COVID-19 Public Health Emergency. The Bureau of Customs also issued in 2014 the Guidelines and Procedures on Customs Clearance of International Donations Availing of Duty and/or Tax Exemption During Calamities.

In 2004, the Implementing Guidelines for Managing Mass Casualty Incidents (MCI) During Emergencies and Disasters (AO no. 155 series of 2004) was issued by the DOH. It states that the DOH is the lead in implementing a mass casualty system and procedures for resource mobilization, field management, and hospital reception to a comprehensive and well- coordinated response in MCI.

The DOH AO no. 2013-004 – Policies and Guidelines on Hospitals Safe from Disasters was issued with the goal of reducing disaster risks to ensure protection and continuous operation of hospitals and other health facilities and save lives during emergencies and disasters. It prepares hospitals to address operation challenges during disasters and emergencies with the vision of remaining as the last building standing and functioning, specifically through (i) strictly enforcing national and local government safety regulations and codes in the construction, expansion, renovation, repair and rehabilitation of hospitals, (ii) inclusion in the hospital licensure requirements of a program for regular maintenance consistent with the most current Hospitals Safe from Disasters indicators, (iii) subjecting hospitals to yearly self-assessments and action planning to address their structural, non-structural, and functional vulnerabilities and capacities using the most current assessment tool, (iv) ensure surge capacity to be able to manage increased demand, and (v) utilize, build and strengthen partnerships and networks and develop corresponding mechanisms in times of emergencies and disasters. The Safe Hospitals in Emergencies and Disasters released by the DOH in 2009 lists the Philippine Indicators for monitoring and evaluation.

The NDRRMC has developed the National Disaster Response Plan outlining the policies, key strategies, guidelines. And roles and responsibilities of agencies in DRR response management. The DOH was the lead in health services including in the areas of water, sanitation, and hygiene (WASH), nutrition, and psychosocial services. As such, the DOH issued the Guidelines in the Provision of the Essential Health Service Packages in Emergencies and Disasters in 2017 (AO 2017-0007). It aims to set the standards for the effective, efficient, and timely delivery of essential health

services in emergencies and disasters. Specifically, it (i) sets the guidelines in the delivery of essential health services in emergencies and disasters, (ii) define the essential service components for health, nutrition, water and sanitation hygiene, and mental health and psychosocial support that need to be available and accessible before, during, and after emergencies and disasters, and (iii) delineate the roles and responsibilities of concerned offices, stakeholders, and partners in the delivery of essential health service packages. Moreover, the DOH is currently developing the WASH in Emergencies (WiE) Technical Guidelines and the Green and Safe Health Care Facility Manual.

DOH Administrative Orders – Hospitals and Other Health Facilities and Clinical Laboratories

Joint DOH-DENR Administrative Order No. 2005-02 dated August 24, 2005 defines health care wastes as all wastes generated as a result of the following: 1) diagnosis, treatment, management, and immunization of humans or animals, 2) research pertaining to the above activities, 3) producing or testing of biological products, 4) wastes originating from minor or scattered sources (e.g. dental clinics, alternative medicine clinics, etc.). The DAO also identifies its hazards to people and the strategies to manage these wastes.

The **DOH Administrative Order No. 2005-0029** dated December 12, 2005 entitled "Amendment to Administrative Order No. 147 s. 2004: Amending Administrative Order No. 70-A series 2002 re: Revised Rules and Regulations Governing the Registration, Licensure and Operation of Hospitals and Other Health Facilities in the Philippines" amends specific provisions of preceding issuances. Amendment includes the requirement for hospitals and other health facilities applying for initial License to Operate to accomplish/submit a Waste Management Plan, among other documents.

Department of Health Administrative Order (AO) No. 2007-0027 "*Revised Rules and Regulations Governing the Licensure and Regulation of Clinical Laboratories in the Philippines*" prescribes "…*a revised minimum standard for clinical laboratories* [to]…*ensure accuracy and precision of laboratory examinations in order to safeguard public health and safety.*" The AO requires all clinical laboratories, government or private, to have written policies and procedures for the provision of laboratory services and for the operation and maintenance of the laboratory, including proper disposal of waste and hazardous substances, as well as biosafety and biosecurity. This AO applies directly to activities under the project, most specifically under Component 2.

3.1.16 DOH Department Circular (DC) 2020-0191 – Circulation of the Health Care Waste Management Manual Fourth Edition

The DoH issued the DC 2020-0191 last 23 April 2020 institutionalizing the use of the 4th Edition of the Health Care Waste Management Manual. It is intended to serve as the most comprehensive set of guidelines on the safe management of wastes generated from heath care activities in the country. It incorporates the requirements of all Philippine laws and regulations governing HCWM and considers the recommendations of the World Health Organization (WHO) and stakeholders, including end-users.

This edition is intended and designed for the use of individuals, establishments, and other entities involved in the segregation, collection, handling, storage, treatment, and disposal of waste generated.

The DOH Health Care Waste Management (HCWM) Manual 4th edition classifies discarded items used in handling of vaccines, such as vials, or boxes with residues, gloves, and masks, as pharmaceutical wastes.

3.1.17 Department of Health COVID-19 Interim Guidelines

DoH has developed a series of Interim Guidelines specifically targeted at COVID-19 response (https://www.doh.gov.ph/2019-nCov/interim-guidelines?page=1). Relevant guidelines include:

- Department Memorandum No. 2020-0188 - Interim Guidelines on the Zoning of COVID-19 Laboratories (https://www.doh.gov.ph/sites/default/files/health-update/dm2020-0188.pdf)
- Department Memorandum No. 2020-0157 - *Guidelines on Cleaning and Disinfection in Various Settings as an Infection Prevention and Control Measure Against COVID-19* (https://www.doh.gov.ph/sites/default/files/health-update/dm2020-0157.pdf)
- Department Memorandum No. 2020-0151 – *Interim Guidelines on Expanded Testing for COVID-19* (https://doh.gov.ph/sites/default/files/health-update/dm2020-0258-A.pdf)
- Department Circular 2020-0174 – *Reiteration of Department Memorandum No. 2020-0151 dated March 31, 2020 entitled "Interim Guidelines on Expanded Testing for COVID-19"* (https://www.doh.gov.ph/sites/default/files/health-update/dc2020-0174.pdf)
- Administrative Order No. 2020-2014 – *Guidelines in Securing a License to Operate a COVID-19 testing Laboratory in the Philippines* (https://www.doh.gov.ph/sites/default/files/health-update/ao2020-0014.pdf)
- Department Memorandum No. 2020-0170 – *Interim Guidelines on the Management of Health Care Waste in Health Facilities, Community Quarantine Units and Temporary Treatment and Monitoring Facilities with cases of Coronavirus Disease 2019 (COVID-19)* (https://www.doh.gov.ph/sites/default/files/health-update/dm2020-0170.pdf)
- Department Memorandum No. 2020-0153 - Interim Guidelines for Emergency Hiring of Health Personnel in Select Hospitals and Other Health Facilities in Response to COVID-19 Health Emergency (https://www.doh.gov.ph/sites/default/files/health-update/dm2020-0153.pdf)
- Department Memorandum No. 2020-0142 - *Interim Guidelines on COVID-19 Referral Hospitals* https://www.doh.gov.ph/sites/default/files/health-update/dm2020-0142.pdf
- Department Memorandum No. 2020-0123 - *Interim Guidelines on Management of Surge Capacity through the Conversion of Public Spaces to Operate as Temporary Treatment and Monitoring Facilities for the Management of Persons Under Investigation and Mild Cases of Coronavirus Disease 2019 (COVID-19)* (https://www.doh.gov.ph/sites/default/files/health-update/dm2020-0123.pdf)
- Department Memorandum No. 2020-0072 - *Interim Guidelines on the Activation of 5 DOH Subnational Laboratories for the 2019-nCoV (*https://www.doh.gov.ph/sites/default/files/health-update/DM2020-0071-Interim-Guidelines-on-the-Activation-of-Five-DOH-Subnational-Laboratories-for-the-2019-nCoV-ARD-Response.pdf)
- Department Memorandum No. 2020-0072 - *Interim Guidelines For 2019 Novel Coronavirus Acute Respiratory Disease Response In Hospitals And Other Health Facilities* https://drive.google.com/file/d/1zmXeJt_3kmIOzyJyt9IaVXTfk6JKJsbT/preview

The application of these Guidelines should be considered in comparison with evolving WHO guidance to ensure that contemporary good practice is adopted.

3.1.18 National Policy Issuances on the Philippine National Deployment and Vaccination Plan for COVID-19 Vaccines (NDVP)

The National Task Force Against COVID-19 (NTF) has issued last 26 January 2021 the Memorandum Circular No. 5 series of 2021 – 'Adaptation and Implementation of the Philippine National Deployment and Vaccination Plan for COVID-19 Vaccines' (NDVP) with reference to the IATF Resolution no. 95 series of 2021 (January 21, 2021) which approved and ratified the NDVP. The NTF DM mandates all regional and local COVID-19 Task Forces and Vaccination Operations Centers to implement the NDVP.

3.1.19 Issuances on the National Strategic Policy Framework for COVID-19 Vaccine Deployment and Immunization

The DOH issued Administrative Order no. 2021-0005 – 'National Strategic Policy Framework for COVID-19 Vaccine Deployment and Immunization' dated 12 January 2021 which aims to provide strategic policy guidance and direction on the selection, access, deployment of the COVID-19 vaccine and the COVID-19 immunization program. Specifically, it aims to (a) provide guidance on vaccine delivery strategies, vaccine acceptance, human resource management and training, supply chain, and management of health care waste, safety and surveillance, and immunization monitoring systems, (b) guide the implementation and provision of a free, safe, and effective, high-quality vaccine/s against SARS-CoV2, prioritizing the most-at-risk and most-vulnerable populations, and (c) ensure implementation of risk communication, health education and community engagement activities utilizing diverse platforms, and the conduct of strategies and interventions addressing vaccine hesitancy. The National Strategic Policy Framework is further disseminated through the DOH Department Circular 2021-0009 dated 14 January 2021, circulated together with the DOH's Strategic Plan for COVID-19 Vaccination 2021-2023.

3.1.20 Other Issuances on COVID-19 Vaccination

The Department Memorandum (DM) no. 2021-0031 – Interim Guidelines on the Management of Health Care Wastes Generated from COVID-19 Vaccination (https://doh.gov.ph/sites/default/files/health-update/dm2021-0031.pdf) aims to provide guidance on the proper management of health care wastes generated from the COVID-19 vaccination activities in all health care facilities (HCFs) involved.

In order to prepare the country for the COVID-19 vaccination program of the DOH, the creation and maintenance of a masterlist of priority sectors is necessary to: (a) provide basis for identification of target eligible groups for vaccination and identification of priority areas for registration of eligible individuals; (b) ensure uniqueness of individuals in the vaccine administration plan; and (c) provide input to operational planning especially for costing and allocation of resources. Hence, the DM no. 2021-0047 – Interim Guidelines on Masterlisting for the COVID-19 Electronic Immunization Registry (CEIR) - Phase 1 was developed.

Moreover, to establish the processes/activities to be followed as soon as the COVID-19 vaccines has been procured from the pre-shipment, during delivery and the acceptance of the vaccines and

ancillary immunization commodities to the Central Cold Storage Facility and Warehouses, the DM no. 2021-0053 was issued last 28 January 2021.

3.1.21 Executive Order no. 121 series of 2020

The Executive Order no. 121 s. of 2020 grants the Director General of the Food and Drug Administration to issue emergency use authorization for COVID-19 drugs and vaccines.

3.1.22 Food and Drug Administration Circular no. 2020-036 – Guidelines on the Issuance of Emergency Use Authorization for Drugs and Vaccines for COVID-19

This Circular shall apply to the pharmaceutical industry and government entities such as the national procurer or health program implementors intending to apply for an emergency use authorization (EUA) for drugs and vaccines for COVID-19, and shall pertain only to unregistered (anywhere in the world) drugs and vaccines for prevention, diagnosis and treatment of COVID-19 and granted an EUA by the National Regulatory Authority (NRA) of the country of origin or any other mature and established NRA as identified by FDA.

The EUA is defined as an authorization issued for unregistered drugs and vaccines in a public health emergency. The EUA is not a Certificate of Product Registration (CPR) or a marketing authorization. The evaluation process of the product may be facilitated by reliance and recognition principles, but stricter conditions on the use and monitoring following authorization shall be imposed.

The EUA shall only be issued and remain valid only when all of the following circumstances are present: (1) based on the totality of evidence available, including data from adequate and well-known controlled trials, it is reasonable to believe that the drug or vaccine may be effective to prevent, diagnose, or treat COVID-19; (2) the known and potential benefits of the drug or vaccine, when used to diagnose, prevent, treat COVID-19, outweigh the known and potential risks of the drug or vaccine, if any; and (3) there is no adequate, approved and available alternative to the product for diagnosing, preventing or treating COVID-19. The last condition is deemed present when there exists no registered drug or vaccine in the country for diagnosing, preventing, or treating COVID-19.

3.1.23 Bureau of Food and Drug (BFAD) Circular 16, series of 1999 – Amending BFAD MC No. 22 dated September 8, 1994, regarding Inventory, Proper Disposal, and/or Destruction of Used Vials or Bottles

The BFAD circulars were released to prevent the proliferation of adulterated, misbranded, and counterfeit drugs brought about by the recycling of used pharmaceutical bottles and vials. The circular contains the guidelines on the proper inventory and destruction of bottles and vials. The Chief Pharmacists of government and private hospitals are required to conduct at least, a semestral inventory of the proper disposal and destruction of used vials or bottles. The inventory is to be submitted to the BFAD within five days from the date of the inventory. The nurse administering the drugs must be under strict instruction to return all empty vials to the hospital

pharmacy for destruction on a quarterly basis. All inventories and/or destruction shall be done under the supervision of duly authorized representative of BFAD.

3.1.24 FDA Circular no. 2020-009 – Guidelines on the Identification, Notification, Evaluation, Regulatory Enforcement Action, and Review and Monitoring of Donated Health Products Solely Intended to Address COVID-19 Public Health Emergency

In line with DOH Administrative Order No. 2007-0017 – Guidelines on the Acceptance and Processing of Foreign and Local Donations during Emergencies and Disaster Situations, the FDA released Circular no. 2020-009 which covers the identification, notification, evaluation, review and monitoring and other regulatory or enforcement action of FDA covering foreign or locally donated health products solely intended to address the COVID-19 public health emergency. This Circular is applicable to the following: (a) face masks including N-95 masks, (b) shoe covers, (c) gloves, (d) head covers, (e) gowns, (f) goggles/ face shields, (g) COVID-19 diagnostic test kits, (h) alcohol, hand sanitizers, etc., and (i) other health products that may hereinafter be identified and listed by the FDA. The Food and Drug Action Center (FDAC), Center for Drug Regulation and Research (CDRR), Center for Device Regulation, Radiation Health, and Research (CDRRHR), Center for Cosmetics Regulation and Research (CCRR), Center for Food Regulation and Research (CFRR), Field Regulatory Operations Office (FROO), and Testing Laboratories are the focal units for the implementation of the Circular.

3.1.25 FDA Circular No. 2020-028 || Reissuance of the Guidelines for the Registration of Drug Products under Emergency Use (DEU) for the Coronavirus Disease 2019 (COVID-19)

This Circular was issued to amend FDA Circular Nos. 2020- 012, -A, and -B with the aim of providing streamlined requirements and application process for the registration of Drug Products under Emergency Use (DEU) for COVID-19, covering all Marketing Authorization Holders (MAH) intending to manufacture and import/distribute the drug products listed in the PSMID Interim Guidelines on the Clinical Management of Adult Patients with Suspected or Confirmed COVID-19 Infection.

3.1.26 Greening and Energy- Efficiency Guidelines of the Department of Health

The DOH is currently developing the Green and Safe Health Care Facilities Manual. The following are existing guidelines circulated to various offices on the greening and energy- efficiency of health care facilities:

- Department Memorandum 2020-0240. Submission of hospital energy consumption and generated health care waste (28 May 2020)
- Department Memorandum 2020-0051. Designation of energy efficiency and conservation officer (EECO) (3 February 2020)
- Department Memorandum 2019-0280. Establishment of green public procurement (GPP) system in the health care facility (4 July 2019)

- Department Circular 2019-0059. Green certification of government health care facility projects (14 February 2019)
- Department Memorandum 2018-0151. Accomplishment and submission of the green healthcare facility components survey questionnaires (3 April 2018)
- Department Memorandum 2018-0035. Submission of energy consumption information of DOH hospitals to establish energy efficiency standards as part of the green healthcare facilities standards (25 January 2018)
- Department Memorandum 2017-0118. Accomplishment and submission of the green healthcare facility self- assessment checklist (20 March 2017)
- Administrative Order 2012-0005. National policy on climate change adaptation for the health sector (13 March 2012)

3.1.27 Labor Legislation

Labor Code of the Philippines

Presidential Decree No. 44, as amended by RA 6715, known as the "Labor Code of the Philippines", governs all employment practices and relations in the country. Provisions of the Code are aligned with international good practice on decent work and shall be strictly implemented. These provisions include:

Wage and Welfare

1. Employees shall receive their wages by means of legal tender, at least once every two weeks or twice a month at intervals not exceeding sixteen (16) days.
2. In a contracted work, employees of the contractor and of the latter's subcontractor, shall also be paid in accordance with the labor code.
3. The wage paid by the employers to the workers shall not be lower than the prescribed minimum wage set by the Regional Tripartite Wages and Productivity Boards.

Working Time, Rest Days and Holidays

1. The normal work hours for every employee shall not exceed eight (8) hours a day. If all or any part of the employee's working hours falls on 10:00 PM to 6:00 AM, he/she shall be entitled to a night shift pay in addition to the regular wage. If the worked performed exceeds the normal working hours, he/she shall be given overtime pay.
2. It is the right of every employee for a rest period not less than twenty-four (24) consecutive hours after every six (6) consecutive normal workdays.
3. Compensation shall be given for work performed during holidays and Sundays.

Equal Rights

1. Workers shall have the right to self-organization and to form, join, or assist labor organizations of their own choosing for purposes of collective bargaining.
2. Minimum employable age is 18 years old.

3. Gender discrimination in employment and labor relations shall be prohibited. Male and female employees are entitled to equal compensation for work of equal value and access to promotion and training opportunities.

International Labour Organisation

The Philippines became a member of the International Labor Organization (ILO) on 15 June 1948. It was the first country in Asia to participate in a pilot programme on decent work in 2002. The Philippines has ratified thirty-eight (38) ILO Conventions including all of the eight (8) Fundamental Conventions, as follows:

- C.29 Forced Labour Convention, 1930
- C.87 Freedom of Association and Protection of the Right to Organise Convention, 1948
- C.98 Right to Organise and Collective Bargaining Convention, 1949
- C.100 Equal Remuneration Convention, 1951
- C.105 Abolition of Forced Labour Convention, 1957
- C.111 Discrimination (Employment and Occupation) Convention, 1958
- C.138 Minimum Age Convention, 1973
- C.182 Worst Forms of Child Labour Convention, 1999

The 1987 Constitution of the Republic of the Philippines provide the following relevant provisions as legislative framework for labor concerns:

- Sec. 3, Art. XIII – The State shall afford full protection to labor, local and overseas, organized and unorganized, and promote full employment and equality of employment opportunities for all. It shall guarantee the right of all workers to self-organization, collective bargaining and negotiations, and peaceful concerted activities, including the right to strike in accordance with the law. They shall be entitled to security of tenure, humane conditions of work, and a living wage. They shall also participate in policy and decision-making processes affecting their rights and benefits as may be provided by law. The State shall promote the principle of shared responsibility between workers and employers and the preferential use of voluntary modes in settling disputes, including conciliation, and shall enforce their mutual compliance therewith to foster industrial peace. The State shall regulate the relations between workers and employers, recognizing the right of labor to its just share in the fruits of production and the right of enterprises to reasonable returns to investments, and to expansion and growth.
- Sec. 11, Art. II – The State values the dignity of every human person and guarantees full respect for human rights.
- Sec 13, Art. II – The State recognizes the vital role of the youth in nation-building and shall promote and protect their physical, moral, spiritual, intellectual, and social well-being. It shall inculcate in the youth patriotism and nationalism, and encourage their involvement in public and civic affairs.
- Sec. 14, Art. II – The State recognizes the role of women in nation-building, and shall ensure the fundamental equality before the law of women and men.
- Sec. 1, Art III – No person shall be deprived of life, liberty, or property without due process of law, nor shall any person be denied equal protection of the laws.
- Sec. 4, Art. III – No law shall be passed abridging the freedom of speech, of expression, or of the press, or the right of the people to peaceably assemble and petition the government for redress of grievances.

- Sec. 14, Art. XIII – The State shall protect working women by providing safe and healthful working conditions, taking into account their maternal functions, and such facilities and opportunities that will enhance their welfare and enable them to realize their full potential in the service of the nation.

Occupational Health and Safety

The protection against OHS risk to the workers embodied in various international laws, national laws and administrative issuances governing the public sector, shall be observed.

Republic Act 11058 – The Occupational Safety and Health Standards Act

This law strengthens the compliance with Occupational Safety and Health Standards to ensure a safe and healthful workplace for all working people by affording them full protection against all hazards in their work environment. To ensure that the provisions of the Labor Code of the Philippines, all domestic laws, and internationally recognized standards on occupational safety and health are being fully enforced and complied with by the employers. And to protect every worker against injury, sickness or death through safe and healthful working conditions thereby assuring the conservation of valuable manpower resources and prevention of loss or damage to lives and properties. DOLE Department Order No. 198-2018 sets out the implementing rules and regulations of this act.

Department of Labor and Employment (DOLE) Department Order no. 13 series of 1998 – Guidelines Governing Occupational Safety and Health in the Construction Industry

This Department Order was issued to ensure the protection and welfare of workers employed in the construction industry, ensure the protection and welfare of the general public within and around the immediate vicinity of any construction worksite as well as the promotion of harmonious employer-employee relationships, and consider the relevant industry practices and applicable government requirements. This guideline will apply to all construction activities, including demolition, regardless whether private or public property. The Department Order sets forth the inclusion of a 'Construction Safety and Health Program' prior to the onset of the construction where in the construction project manager is required to submit a comprehensive plan for the said program to the respective DOLE Regional Office. The said program includes the creation of a Safety and Health Committee, safety policies, penalties and sanction, orientation, instruction and training, and waste disposal. The DO also highlights the need for the use of personal protective equipment, designation of a safety personnel, use of construction safety signages, observance of safety and health information, and the practice of safety inspection and tool box meeting.

Department of Public Works and Highways (DPWH) Department Order no. 39 series of 2020 – Revised Construction Safety Guidelines for the Implementation of Infrastructure Projects During the COVID-19 Public Health Crisis, repealing Department Order no. 35, series of 2020

The DPWH DO 39 was issued on May 19, 2020 to provide guidelines on the allowed construction activities during the COVID-19 pandemic and the corresponding safety protocols for the workers in the said period. It covers all allowed government and private construction projects as stated in

the Inter-Agency Task Force (IATF)- issued Revised Omnibus Guidelines dated 15 May 2020 for areas under enhanced community quarantine (ECQ), modified enhanced community quarantine (MECQ), general community quarantine (GCQ), and modified general community quarantine (MGCQ).

Joint Memorandum Circular no. 20-04-A series of 2020 – DTI and DOLE Supplemental Guidelines on Workplace Prevention and Control of COVID-19

The JMC 20-04-A of DTI and DOLE issued last August 15, 2020 provides guidelines on workplace safety and health during the COVID-19 pandemic which covers all private establishments regardless of economic activity, including those located inside special economic zones and other areas under the jurisdiction of Investment Promotion Agencies (e.g. Philippine Economic Zone Authority (PEZA), Clark Development Corporation (CDC), Authority of the Freeport Area of Bataan (AFAB), Aurora Pacific Economic Zone and Freeport (APECO, etc.)) It describes measures on increasing physical and mental resilience, reducing virus transmission, management of symptomatic and asymptomatic employees in the workplace, COVID-19 testing, notification and reporting, OSH Committees, disinfection and closure of buildings/workplaces, and leave of absences and entitlements.

ILO Technical Convention: C187 – Promotional Framework for Occupational Safety and Health Convention

This convention will enter into force for Philippines on 17 June 2020 which is well within the period of implementation of the Project. The following are National Policy under Section 3:

1. Each Member shall promote a safe and healthy working environment by formulating a national policy;
2. Each Member shall promote and advance, at all relevant levels, the right of workers to a safe and healthy working environment;
3. In formulating its national policy, each Member, in light of national conditions and practice and in consultation with the most representative organizations of employers and workers, shall promote basic principles such as assessing occupational risks or hazards; combating occupational risks or hazards at source; and developing a national preventative safety and health culture that includes information, consultation and training.

1987 Constitution of the Republic of the Philippines

The relevant provisions of the Constitution as regards OHS are as follows:

- Sec. 3, Art. XIII – The State shall afford full protection to labor, local and overseas, organized and unorganized, and promote full employment and equality of employment opportunities for all. It shall guarantee the right of all workers to self-organization, collective bargaining and negotiations, and peaceful concerted activities, including the right to strike in accordance with the law. They shall be entitled to security of tenure, humane conditions of work, and a living wage. They shall also participate in policy and decision-making processes affecting their rights and benefits as may be provided by law.
- Sec 13, Art. II – The State recognizes the vital role of the youth in nation-building and shall promote and protect their physical, moral, spiritual, intellectual, and social well-being. It

shall inculcate in the youth patriotism and nationalism, and encourage their involvement in public and civic affairs

- Sec. 14, Art. XIII – The State shall protect working women by providing safe and healthful working conditions, taking into account their maternal functions, and such facilities and opportunities that will enhance their welfare and enable them to realize their full potential in the service of the nation.
- Sec. 11, Art. II – The State values the dignity of every human person and guarantees full respect for human rights.

Civil Service Commission Administrative Issuances

- Memorandum Circular No. 33, Series of 1997 (Policy on Working Conditions at the Workplace) – all government offices shall provide adequate office ventilation and lighting, clean and adequate comfort room facilities, potable drinking water, First Aid Kit facilities, and all government offices should be non-smoking areas.
- Memorandum Circular No. 08, Series of 2011 (Reiteration of the Physical Fitness Program "Great Filipino Workout") – requiring all agencies to adopt "The Great Filipino Workout" in order to develop a healthy and alert workforce.
- Memorandum Circular No. 04, Series of 2003 (Promotion of Good Nutrition in the Bureaucracy) – promotion of good nutrition of workers as an effective strategy to achieve and sustain increased organizational productivity.

3.1.28 Persons with Disabilities (PWDs)

Republic Act 7277 – An Act Providing For The Rehabilitation, Self-Development And Self-Reliance Of Disabled Person And Their Integration Into The Mainstream Of Society And For Other Purposes

The RA 7277 or the Magna Carta for Disabled Persons highlights the rights and privileges of disabled persons, such as equal opportunity for employment, access to quality education, inclusion in the national health program, provision of rehabilitation centers, provision of auxiliary social services, access to telecommunications, provision of sign language inset or subtitles, political and civil rights, and accessibility. Accessibility includes a barrier- free environment, mobility, and access to public transport facilities. To ensure the attainment of a barrier-free environment, disabled persons will be provided access to public and private buildings and establishments and such other places mentioned in Batas Pambansa 344 or the Accessibility Law. Related discrimination and corresponding penalties such as in employment, transportation, use of public accommodations and services, and use of government recreational or sports centers were described.

Republic Act 11106 – An Act Declaring the Filipino Sign Language as the National Sign Language of the Filipino Deaf and the Official Sign Language of Government in All Transactions Involving the Deaf, and Mandating its Use in Schools, Broadcast Media, and Workplaces

The RA 11106 or the Filipino Sign Language Act, in compliance with the United Nations Convention on the Rights of Persons with Disabilities, aims to eliminate discrimination in public communications and to promote inclusion through the use of Filipino sign language for the deaf. This RA is also in line with the Early Years Act (Republic Act No. 10410) and the Enhanced Basic

Education Act (Republic Act No. 10533), which have recognized Filipino Sign Language in the education of the deaf learners from early childhood up to the secondary level. The Section 8 of this RA or the Filipino Sign Language in the Health System mandates all public health facilities to provide access of health services to the deaf through the free provision of FSL interpreters and accessible materials upon request of deaf patients, or individuals who have family members who are deaf. Meanwhile, private health care facilities are encouraged to provide access to health services to all deaf patients and their family members as part of their corporate social responsibility.

Batas Pambansa (BP) bilang 344 – An Act to Enhance the Mobility of Disabled Persons by Requiring Certain Buildings, Institutions, Establishments and Public Utilities to Install Facilities and Other Devices

The BP 344 or the Accessibility Law mandates the provision of architectural facilities or structural features which will provide access to the PWDs such as ramps, railings, sidewalks and the like in all facilities, establishments, and public utilities, such as educational institutions, airports, sports and recreation centers and complexes, shopping centers, public parking places, and workplaces. Posters and similar signages will also be displayed in prominent areas to generate public awareness on the rights and needs of the PWDs.

3.1.29 Indigenous Peoples

The Republic Act 8371 entitled 'An Act to recognize, protect and promote the rights of indigenous cultural communities/indigenous peoples, creating a national commission on indigenous peoples, establishing implementing mechanisms, appropriating funds therefor, and for other purposes,' or the *Indigenous Peoples' Rights Act of 1997* (IPRA), is a landmark legislation that recognizes and respects the rights of indigenous communities in the Philippines, including rights of control of their ancestral lands and right to self-determination. The law requires, among others, that development undertakings within the declared ancestral domains of the ICC/IPs shall be subject to their free, prior informed consent (FPIC) following different procedures depending on the character of activities. The IPRA, inter alia, declares that the State shall recognize and promote the rights of ICCs/IPs to government's basic health services. The National Commission for Indigenous Peoples (NCIP) is responsible for implementing the IPRA. Likewise, the Joint Memorandum Circular 2013-01 entitled "Guidelines on the Delivery of Basic Health Services for Indigenous Cultural Communities / Indigenous Peoples" will also be considered.

The Department Circular 2020-0192 - Ensuring that people in GIDAs, Indigenous Cultural Communities/Indigenous Peoples are well-informed on COVID-19 and have access to Temporary Treatment and Monitoring Facilities and Referral Hospitals was issued by the Department of Health led by the Bureau of Local Health Systems Development (BLHSD) last April 2020. The Centers for Health Development (CHDs) and the Ministry of Health - Bangsamoro Autonomous Region in Muslim Mindanao (MOH-BARMM) were tasked to coordinate with the local government units (LGUs) to ensure that the people in geographically- isolated and disadvantaged areas (GIDAs) and the indigenous cultural communities/indigenous peoples (ICCs/IPs) are well informed on COVID-19 and have access to temporary treatment and monitoring facilities (TTMF), whether national- or LGU-managed, and COVID-19 referral hospitals.

3.1.14 Gender- Based Violence (GBV) and Violence Against Women and Their Children (VAWC)

The Republic Act 9262 or the Anti-Violence Against Women and Their Children Act of 2004 upholds the dignity and rights of women and children cognizant of the need to protect the family and its members particularly women and children, from violence and threats to their personal safety and security. This is in accordance with the Constitution and the Provisions of the Universal Declaration of Human Rights, the convention on the Elimination of all forms of discrimination Against Women, Convention on the Rights of the Child and other international human rights instruments of which the Philippines is a party. This law covers the acts of violence against women and their children, penalties, and protection orders.

The Special Protection of Children Against Abuse, Exploitation and Discrimination Act or Republic Act 7610 aims to protect and rehabilitate children gravely threatened or endangered by circumstances which affect or will affect their survival and normal development and over which they have no control. It provides special protection to children from all firms of abuse, neglect, cruelty exploitation and discrimination and other conditions, prejudicial their development; and provide prevention and deterrence of and crisis intervention in situations of child abuse, exploitation and discrimination. The Republic Act 10354 , the Responsible Parenthood and Reproductive Health Act of 2012, also highlights the elimination of violence against women and children and other forms of sexual and gender-based violence. In addition, the DOH Administrative Order 1-B entitled "Establishment of a Women and Children Protection Unit in All Department of Health (DOH) Hospitals" was promulgated in response to the increasing number of women and children who consult due to violence, rape, incest, and other related cases.

3.1.30 Republic Act 9184 – An Act Providing for the Modernization, Standardization and Regulation of the Procurement Activities of the Government and for other Purposes

Republic Act 9184 or the Government Procurement Reform Act and its implementing rules and regulations outline the legal framework of the public procurement from procurement planning up to contract implementation. The public procurement process refers to the Generic Procurement Manuals and standard Philippine Bidding Documents (PBDs) for mandatory use by all government procuring entities. The PBDs define the objective, scope, and expected outputs of the proposed contract, the eligibility requirements of the bidders, the expected contract duration and the obligations, duties, and functions of the winning bidder. The technical specifications of goods and infrastructure projects are defined in the PBDs including any green criteria or green technical specifications.

3.1.31 Executive Order 301 series of 2004 – Establishment of a Green Procurement Program in all Government Agencies

Executive Order 301 s. of 2004 establishes a Green Procurement Program for all departments, bureaus, offices, and agencies of the executive branch of government. It promotes the culture of making environmentally- informed decisions in government during the purchase and use of different products and in including environmental criteria in public tenders, whenever possible and practicable. The order also requires the establishment of specifications and requirements for products and services to be considered as environmentally advantageous and incentive programs

for suppliers of environmentally sound products and services. The Philippines has a Green Public Procurement Roadmap.

3.1.32 GPPB Resolution No. 15, series of 2013 – Approval to Support the Implementation of Sustainable and/or Green Public Procurement Regime in Government

The resolution was issued by the Government Procurement Policy Board (GPPB) which recognizes that sustainable public procurement (SPP) or GPP must be included in the public procurement system, rules and procedures in line with sustainable consumption and production, green economy, and sustainable development strategies. The GPPB oversees the implementation of the public procurement reform agenda. It is an independent inter-agency body with government and private sector representation that was established by virtue of Section 63 of RA 9184.

3.2 World Bank Environmental and Social Policies

Key aspects of the Philippines legal framework relevant to the Project are described in the previous section. A high-level comparison has been made with the Bank's ESF, consistent with the template for COVID-19 health projects provided by the World Bank. There are no significant gaps between the national framework and the ESF. However, the Project will apply both the relevant ESSs of the ESF and national legislation relevant to the Project and its E&S risks.

3.2.1 ESS1 Assessment and Management of Environmental and Social Risks and Impacts

ESS1 is relevant given the environmental and social risks to assess and manage. The Philippine environmental regulations, particularly the Philippine Environmental Impact Statement System (PEISS) reflects the spirit of ESS1 and the key elements are covered mostly under its implementing rules and regulations. The PEISS functions as a regulatory and approval tool of projects aside from its intent as a planning tool to ensure environmental, social, and economic sustainability. The process of EIA and decision-making and balancing environment protection and development is reflected as one of DENR's focus areas of mandate in ensuring implementation of the principles of sustainable development. The ESMF is prepared consistent with both the national legislation and the Bank's ESF.

The main environmental risks associated are: (i) occupational health and safety risks resulting from the operation of medical facilities and laboratories involved in COVID-19 response and the vaccination activities which inherently expose staff to infection risk; (ii) health care waste management and disposal and community health and safety issues related to the handling, transportation and disposal of healthcare wastes generated from the vaccine administration; and (iii) possible environmental and safety risks associated with small scale civil works for warehousing of the COVID-19 vaccine, medical facilities refurbishment, or completion of ongoing construction. Occupational health and safety and medical waste management are of particular concern.

Healthcare- associated infections due to inadequate adherence to occupational health and safety standards can lead to illness and death among healthcare and laboratory workers and exposed communities. The laboratories, relevant healthcare facilities, and community settings which will

be used for the COVID-19 vaccine administration will generate infectious wastes such as sharps, used vials, syringes, cotton swabs, gloves, PPEs, and masks as well as non-hazardous solid wastes such as packaging materials, syringe wrappers, and syringe capping. Effective management and control measures will have to be in place to avoid and minimize risks of the infectious wastes from contaminating the environment and causing harm to the people. Measures to avoid risks and impacts can be implemented through proper management, treatment, and disposal of healthcare wastes, use of appropriate disinfectants, implementation of quarantine procedure for COVID-19, implementation of occupational health and safety protocols, ensuring proper use of chemicals in the laboratory, use of non-ODS refrigerants in the cold chain, and implementation of environmentally-sound construction practices for any civil works, as documented in this ESMF and in line with guidelines from WHO and applicable GoP regulations. The ESMF includes guidelines for assessing adequacy of the existing Health Care Waste Management system for handling increased quantities of waste and identifying measures for strengthening capacity of the DOH, hospitals and its regional health units, if needed. Direct and indirect social risks include potential exclusion of or inadequate response measures for marginalized and vulnerable social groups, such as persons with disabilities and indigenous peoples, risk of panic/conflicts resulting from false rumors and social unrest (for instance at quarantine and isolation facilities not welcomed by local communities), the social stigma associated with COVID-19, and Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH), Gender-Based Violence (GBV) and/or Violence Against Children (VAC) for workers (except VAC) and patients.

The Project's ESMF also provides environmental and social risk management for the Contingent Emergency Response Component (CERC)[13] should it be activated during project implementation. The CERC may be activated for another health-related emergency with similar needs and eligible activities and within the scope of the Project Development Objective. However, since activation of the CERC for emergency activities outside of the health sector cannot be ruled out, the applicability of the risk management measures of the ESMF will be assessed before activation of the CERC. For eligible emergencies outside of the health sector, e.g., earthquakes, typhoons, and volcanic eruptions, where the measures included in this ESMF do not fit the activities of the activated CERC, an ESMF for the CERC would be prepared with the situation-specific environmental and social risk assessment and management measures. This CERC ESMF will be prepared prior to CERC activation and will cover all activities financed by the CERC in line with the Emergency Action Plan prepared for the CERC. In all circumstances, the ESMF provisions will be reflected in the CERC Operations Manual that will be prepared to guide CERC implementation, including a description of the type of activities eligible for support in response to the emergency and their environmental and social risks and management measures as well as a negative list of activities categorically excluded from support under the activated CERC.

3.2.2 ESS2 Labor and Working Conditions

The Labor Code of the Philippines is the main legislation that protects workers' rights including security of tenure, self-organization, collective bargaining, and humane working conditions. The Labor Code provides a competent system that allows for speedy resolution of labor disputes and

[13] The CERC is a project component that is designed to provide swift response in the event of an eligible crisis or emergency, defined as "an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact associated with natural or man-made crises or disasters." Project funds may be transferred to respond to such emergencies at the request of the government.

includes a provision on grievance machinery and voluntary arbitration. The Labor Code together with RA 11058 on occupational health and safety plus other Philippine laws prohibiting forced and child labor and sexual harassment provide a suite of national legislation that is relatively aligned with the provisions of ESS 2.

Most activities supported by the Project will be conducted by health and laboratory workers, i.e. civil servants employed by the Government of the Philippines and professional consultants and contractors (hired as contracted workers). Activities encompass the provision of quarantine and isolation rooms, proper storage for medicines, PPEs, laboratory equipment necessary for the proper care of COVID-19 patients which may require minor expansion that would involve small-scale civil works for medical facilities refurbishment or completion of ongoing construction. There is a risk that health care workers are exposed to COVID-19 during the initial screening and vaccine administration in the health facility or community setting. There is also a risk that the cleaners and waste collectors of the health care facilities and waste service providers are exposed to infectious wastes generated from the immunization activities. The key risk is the contamination with COVID-19 (or other contagious illnesses as patients taken seriously ill with COVID-19 are likely to suffer from illnesses which compromise the immune system), which can lead to illness and death of workers.

The project will ensure the application of OHS measures as outlined in the ESMF's Labor Management Procedures (LMP) (Annex B), the Philippine Labor Code, the Philippine Occupational Health and Safety Act and the International Labor Office Occupational health and safety management systems (ILO- OSH 2001). These laws and guidelines provide basis for the procedures for entry into health care facilities, including minimizing visitors and undergoing strict checks before entering; procedures for the protection of workers in relation to infection control precautions; provision of immediate and ongoing training on the procedures to all categories of workers, and post signage in all public spaces mandating hand hygiene and PPE; ensuring adequate supplies of PPE (particularly facemask, gowns, gloves, handwashing soap, and sanitizer); and overall ensuring adequate OHS protections in accordance with General EHSGs and industry-specific EHSGs and follow evolving international best practice in relation to protection from COVID-19. Also, the project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 globally.

The project's LMP incorporates issues for the DOH staff and contracted workers: working conditions and management of worker relationships, protecting the workforce and ensuring proper OHS, and a grievance mechanism for project workers whether direct or contracted workers hired for the small-scale civil works. Child labor is forbidden in accordance with ESS2 and Philippines law, and due to the hazardous work situation, no person under the age of 18 will be hired by the Project.

To prevent risks of Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH), Gender-Based Violence (GBV) and/or Violence Against Children (VAC) from interactions within work forces and between workers and patients and other community members, the LMP includes provisions for training on community interaction and SEA/SH/GBV/SEA to all teams, staff (civil servants and outsources staff/contractors) to ensure the teams respect local communities and their culture and will not engage in misconduct, including Codes of Conduct (CoC). Other relevant documents, such as letter of DOH's staff appointment and contracts for contracted workers in line with relevant national laws and legislation to be adopted and applied under the project, will also include the CoC. The LMP includes similar provisions for security personnel that will be involved in project activities, for instance in providing security at health facilities.

3.2.3 ESS3 Resource Efficiency and Pollution Prevention and Management

The Philippines has very comprehensive regulatory mechanism for regulating hazardous wastes. The challenge exists in relation to the availability of hazardous waste transporter and treatment and disposal facilities in various parts of the country. Title III of DAO 29 of RA 6969 defines the legal and technical requirements of hazardous waste management. The requirements for hazardous waste generators, transporters, and treaters are outlined in DAO 2013-22 including the procedures to follow to comply with the provisions of the law. The DENR EMB MC 2020-20 specify the health and safety protocols for compliance of the transporters and TSD facilities to ensure the proper handling of infectious COVID-19 wastes. The safety protocols include the preparation and submission of reports such as the report of compliance and completion of transport or the manifest and the certificate of treatment (COT) after each completed transport and treatment of the transporter and TSD, respectively. The ESMF is prepared based on national legislation as well as ESS3.

Wastes generated by healthcare facilities, laboratories, quarantine and isolation centers, and screening posts may include infectious wastes such as pathological wastes, sharps, pharmaceutical wastes, and chemical wastes (including water, reagents, infected materials, etc.) from the laboratory testing. The COVID-19 immunization activities may also generate infectious wastes in the form of sharps, syringes, vials, cotton swabs and PPEs used by healthcare workers during administration of the vaccine. These types of wastes are classified as hazardous wastes which may have substantial impact on the environment and human health when handled and disposed inappropriately. All facilities will follow the requirements of the ESMF and the national standards and regulations in place such as the DOH Healthcare Waste Management Manual (4th edition). The DENR also sets the requirements for the registration of healthcare facilities as hazardous waste generators and the commissioning of DENR-registered transporters and treaters in cases when the health care wastes are treated and disposed offsite.

Disposal of health care waste will not be permitted at sites which threaten human or environmental health including natural habitats. It similarly includes measures to ensure that standards relevant to the provision and protection of water resources and the effective management of wastewater from the facilities are observed. Measures related to transportation and management of samples and medical goods or expired medications and chemicals are also included in the Infection Control and Waste Management Plan (ICWMP). The project, as documented in the ESMF, will ensure the use of resources (water, air, etc.) in quarantine facilities and laboratories and that standards and measures consistent with the US- Center for Disease Control (CDC), and the WHO environmental infection control guidelines for medical facilities will be followed. As indicated, no major physical works are permitted.

In support to the ESMF, the Project developed healthcare waste management self- assessment audit tools for the adoption and regular use of the project recipient hospitals. The tools aim to monitor the waste management of hospitals, particularly on COVID-19 vaccination and other related infectious wastes, to ensure the safety of the staff, community, and the environment. Through the self- assessment, hospitals would be able to identify the gaps and barriers in proper infectious waste management. The results of the assessment would also aid the Project to provide informed support to the project recipients such as through capacity building.

3.2.4 ESS4 Community Health and Safety

A variety of national legislations exist that are at par with the provisions of ESS 4. The Philippine EIA review process ensures that assessments of health and safety impacts of projects in the community are conducted. Public health issues are referred to the Department of Health.

The communities may have fear and apprehension on COVID-19 vaccination due to its efficacy and safety. Misinformation on the adverse health effects of vaccines and other rumors remain widespread and add to the fears on vaccine safety. To ensure the safety of the COVID-19 vaccines, the approval of the vaccine by the WHO- identified SRAs as well as the proper storage and transport conditions will be observed. The profiling and screening of candidate individuals to be vaccinated as well as the data management system should done to avoid the risk of vaccine contraindications. Risk communications for the populations will also be done together with counselling and prior informed consent. Ensure existence of protocols regarding consent to vaccinations, process for agreeing to or refusing to be vaccinated, and measures to protect those that refuse to be vaccinated would be in place at regional and local levels.

Health care wastes generated from vaccine administration have a potential of carrying microorganisms that can infect the community at large if they are not properly collected, stored, treated, and disposed of. There is a possibility for the infectious microorganism to be introduced into the environment if not well contained within the health care facility or laboratory or due to accidents or emergencies, such as a fire response or natural phenomena event (e.g., seismic). The health care facilities and possible community settings involved in the vaccine administration, laboratories, quarantine and isolation centers, and screening posts will have to follow appropriate COVID-19 prevention and control protocol, procedures, and guidelines applicable infection prevention and control and health care waste management procedures prescribed by the DOH, DENR and the LGUs where the facilities are located. The operation of quarantine and isolation centers needs to be implemented in a way that staff, patients, and the wider public follow and are treated in line with the international good practices for patient handling and treatment as outlined in the WHO guidance for COVID-19 response.

The Magna Carta for Disabled Persons and the Accessibility Law ensure that persons with disabilities are granted universal access. In 1995, RA 7877 was signed into law which prohibits sexual harassment in the workplace and in educational settings including trainings. In 2019, the Safe Spaces Act expanded the coverage to include online work, all public spaces, and gender-based violence among peers. Payment for ecosystem benefits is a known concept in the country but so far there is no legislation to support its use and is not relevant to the Project at hand. Moreover, the vulnerable groups are considered in the vaccine population prioritization.

The Project's Stakeholder Engagement Plan (SEP) also ensures engagement with communities in order to disseminate information related to project activities, particularly with communities in the vicinity of health facilities, such as screening and quarantine facilities.

The project will need to mitigate potential risks of Sexual Exploitation and Abuse by applying the WHO Code of Ethics and Professional Conduct for all workers in the quarantine facilities as well as the provision of gender-sensitive infrastructures, such as segregated toilets and enough lighting in quarantine and isolation centers. As noted under ESS2, the LMP includes provisions to prevent SEA/GBV/SEA through training and Codes of Conduct (CoC) to ensure workers respect local communities and their culture and will not be involved in misconduct.

Crowd management in vaccination sites will also be observed. Crowd management for the COVID-19 vaccination sites is to use some uniformed or security personnel to ensure the observance of social distancing and peace and order. In relation to security of the vaccines, supplies, and equipment during delivery, DOH's freight service provider ensures that all vaccines are delivered intact and safe onsite with the proper storage and transport conditions. DOH reports that security has not been an issue in the delivery of equipment in different areas nationwide. However, as COVID-19 may develop in unpredictable ways and due to potential concerns among the public, the use of additional government security personnel from the local or national police, or in some instances possibly the military, may be directed to implement measures to ensure peace and order in affected areas, including in vaccine administration sites, quarantine, isolation, decontamination, and other health facilities.

The potential scope of such security measures, and potential risks surrounding them, have been assessed as part of preparing the ESMF to manage environmental and social risks concerning project activities and monitored during project implementation. In cases where project activities are supported by private or government security personnel, it will be ensured that the security personnel follow a strict code of conduct and avoid any escalation, taking into consideration protocols consistent with ESS4 and best practice international guidance as outlined in IFC *Good Practice Handbook on the Use of Security Forces: Assessing and Managing Risks and Impact*s"[14]. Likewise, any incident involving security personnel will need to be recorded in the Grievance Mechanism, described under ESS10, following WB incident classification: indicative, serious and severe. Any severe incident involving security personnel will need to be reported to the World Bank no later than 48 hours with basic information and a detailed incident report within 10 workings days. Details about incident classification and incident reporting are included under Annex B – Labour Management Procedure (LMP).

3.2.5 ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

The Bank's ESS 7 on Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities (IPs or Indigenous Cultural Communities/ Indigenous Peoples (ICC/IPs) in the Philippines context) aims to:

- ensure that the development process fosters full respect for the human rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of IPs;
- avoid adverse impacts of projects on IPs, or when avoidance is not possible, to minimize, mitigate and/or compensate for such impacts;
- promote sustainable development benefits and opportunities for IPs in a manner that is accessible, culturally appropriate and inclusive;
- improve project design and promote local support by establishing and maintaining an ongoing relationship based on meaningful consultation with IPs affected by a project throughout the project's life cycle;
- obtain the Free, Prior and Informed Consent (FPIC) of affected IPs in the three circumstances described in ESS7; and

[14] IFC Handbook on the use of Security Forces can be found here: https://www.ifc.org/wps/wcm/connect/bd858b9c-5534-4e65-b713-01f6376a7ef4/p_handbook_SecurityForces_2017.pdf?MOD=AJPERES&CVID=lSLfJ0Q

- recognize, respect and preserve the culture, knowledge, and practices of IPs, and to provide them with an opportunity to adapt to changing conditions in a manner and in a timeframe acceptable to them.

When indigenous peoples are present in, or have collective attachment to, a project area ESS7 requires that:

- The IPs should be fully consulted about, and have opportunities to actively participate in, the project design and the determination of project implementation arrangements.
- There should be an assessment of the nature and degree of the expected direct and indirect economic, social, cultural (including cultural heritage), and environmental impacts on them.
- The borrower should develop a consultation strategy and means by which affected IPs will participate in project design and implementation and adopt measures and actions in consultation with the affected IPs to be contained in a time-bound plan (IP Plan) which will be proportionate to the potential risks and impacts of the project.
- Adverse impacts on the IPs should be avoided by exploring alternatives to the project and where adverse impacts are unavoidable, the Borrower will minimize, mitigate and/or compensate for these impacts in a culturally appropriate manner. The mitigation and compensation measures shall include culturally appropriate and sustainable development benefits whether delivered through the community or individually.

The standard requires free, prior, and informed consent (FPIC) when a project may have adverse impacts on the land and natural resources, cause relocation or have significant impacts on IPs' cultural heritage. None of these circumstances are present in this project.

There are a few differences between the national framework and ESS7. These concern the requirements for FPIC, the scope of undertaking a social assessment, preparing an Indigenous Peoples Plans (IPP), and disclosure and monitoring of such plans. However, given the nature of the project's activities, these differences do not have material effects and the project would not require free, prior and informed consent under ESS7 or IPRA, nor require the preparation of IPPs. Sections 4.2 and 6.2 of this ESMF describes the measures for engagement with indigenous peoples at health facilities supported by the Project and measures to address particular issues concerning indigenous peoples, including through working with traditional health practitioners and local experts to ensure that affected members of indigenous communities are able to access appropriate health services.

3.2.6 ESS10 Stakeholder Engagement and Information Disclosure

The PEISS provides for information dissemination and the conduct of consultations as required under ESS 10. The DENR Guidelines on Public Participation under the PEISS provides that for the entire EIA process, public participation should be conducted with the stakeholders during the early and various stages of the process. The stakeholders should be involved in the assessment, management, and monitoring of environmental impacts of a project. Public information/disclosure is required, especially to the stakeholders to enable for them to understand and appreciate their participation in the whole process. The PEISS also has provisions on grievance redress but these are limited to environmental issues and not for all project concerns as required in ESS 10. However, government agencies including DOH have set up their own hotlines and systems for dealing with complaints from the public. These hotlines and systems will be redesigned and reviewed to ensure a mechanism with multiple intake points for feedback

and grievances in relation to the vaccine program. As a result, PEISS and DOH will establish an Emergency Operations Center with complete data management systems and tools particularly for the COVID-19 deployment nationwide.

The SEP has been prepared based on ESS10 and PEISS. The project recognizes the need for effective and inclusive risk communication and engagement with all relevant stakeholders and the population at large. Considering the serious challenges associated with COVID-19 pandemic and the COVID-19 vaccines, dissemination of clear messages around physical distancing, high-risk demographics, self-quarantine, and when necessary, mandatory quarantine is critical. Meaningful consultation, particularly when public meetings are counter to local and national advisories on physical distancing, means that meaningful disclosure of appropriate information and innovative and virtual stakeholder engagement assume huge significance for ensuring public health and safety from all perspectives social, environmental, economic, and medical/ health.To address these challenges a Stakeholder Engagement Plan (SEP) has been prepared. The SEP defines a program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project cycle. It outlines the ways in which the DoH and partners will communicate with stakeholders and includes a grievance redress mechanism by which people can raise concerns, provide feedback, or make complaints about the project and any activities related to the project. Provisions have been included to reach and meaningfully engage vulnerable and disadvantaged groups (e.g., elderly, children, poor households, vulnerable groups, people with disabilities and indigenous peoples), including in rural areas with little access to the internet.

Under the parent project, a preliminary vaccine allocation for priority eligible groups as well as mapping of stakeholders was included. Individuals and groups likely to be affected (direct beneficiaries) have been identified. Mapping of other interested parties such as government agencies/authorities, at regional and local levels, NGOs and CSOs, and other international agencies have also been done. The additional financing will support the costs of expanding activities of the Philippines COVID-19 Emergency Response Project (P173877, the parent project)[15] to enable affordable and equitable access to COVID-19 vaccines and help ensure effective vaccine deployment in the country through enhanced vaccination system and to further strengthen preparedness and response activities under the parent project for additional US $ 300 million. As a result, the SEP will be revised to strengthen social mobilization, information awareness and risk communication and engagement strategy for the COVID – 19 vaccine deployment nationwide. The strategy will ensure to generate confidence, acceptance, and demand for COVID-19 vaccines.

As a result, the draft SEP will be re-disclosed publicly by DOH and at the World Bank's external website. The SEP will be updated during implementation and publicly re-disclosed as needed.

3.3 International and Regional Regulations and Guidance

3.3.1 Vaccine Introduction Readiness Assessment Tool (VIRAT)/Vaccine Readiness Assessment Framework (VRAF) Integrated Tool

The Vaccine Introduction Readiness Assessment Tool (VIRAT)/Vaccine Readiness Assessment Framework (VRAF) Integrated Tool was developed by WHO, UNICEF and the World Bank. The introduction of the integrated tool or Readiness Assessment Tool is a national level instrument which aims to assist countries assess readiness to deliver COVID-19 vaccines when they become

[15] World Bank. 2020. Philippines - COVID-19 Emergency Response Project . Washington, D.C. : World Bank Group. https://hubs.worldbank.org/docs/imagebank/Pages/docProfile.aspx?nodeid=32002941

available; identify gaps and prioritize opportunities for enhanced readiness; and identify opportunities for financial support.

The VIRAT/VRAF tool measures countries' readiness to administer the COVID-19 vaccine across ten categories namely: a) Planning and Coordination, b) Budgeting, c) Regulatory, d) Prioritization, Targeting and COVID19 Surveillance, e) Service Delivery, f) Training and Supervision, g) Monitoring and Evaluation, h) Vaccine, Cold Chain, Logistics, and Infrastructure, i) Safety Surveillance, j) Demand Generation and Communication. Within these categories are assessment/activity areas. The tool is designed to provide information necessary for identifying gaps in readiness across the various activities, listing actions necessary to meet the gaps and generating financial implications of those actions.

3.3.2 World Health Organization

WHO SAGE Roadmap for Prioritizing Uses of COVID-19 Vaccines in the Context of Limited Supply

The Strategic Advisory Group of Experts (SAGE) on Immunization of the World Health Organization (WHO) has released guidelines on 13 November 2020 on the implementation of national vaccination programs against COVID-19 which include the values framework, prioritization roadmap, and vaccine- specific recommendations. It outlines vaccine allocation, prioritization, and administration recommendations.

WHO SAGE Values Framework for the Allocation and Prioritization of COVID-19 Vaccination

The WHO SAGE published the Values Framework for the Allocation and Prioritization of COVID-19 Vaccination on 14 September 2020 to provide guidance for countries on national prioritization and allocation of COVID-19 vaccines considering the limited supply. The main goal is for the COVID-19 vaccines to contribute significantly to the equitable protection and promotion of human well-being among all people of the world. The guiding principles include the (a) human well-being, (b) equal respect, (c) global equity, (d) national equity, (e) reciprocity, and (f) legitimacy.

Under national equity, the goals include to (1) ensure that vaccine prioritization within countries takes into account the vulnerabilities, risks and needs of groups who, because of underlying societal, geographic or biomedical factors, are at risk of experiencing greater burdens from the COVID-19 pandemic; and to (2) develop the immunization delivery systems and infrastructure required to ensure COVID-19 vaccines access to priority populations and take proactive action to ensure equal access to everyone who qualifies under a priority group, particularly socially disadvantaged populations.

Hence, priority groups and others which need to be consider include the following:

- People living in poverty, especially extreme poverty
- Homeless people and those living in informal settlements or urban slums
- Disadvantaged or persecuted ethnic, racial, gender, and religious groups, and sexual minorities and people living with disabilities
- Low-income migrant workers, refugees, internally displaced persons, asylum seekers, populations in conflict setting or those affected by humanitarian emergencies, vulnerable migrants in irregular situations, nomadic populations
- Hard to reach population groups

Risk communication and community engagement readiness and response to coronavirus disease (COVID-19)

This guideline release by WHO on 19 March 2020 provides checklists for risk communication and community engagement (RCCE) readiness and initial responses to the COVID-19 outbreak for countries in preparation for the pandemic as adopted from the adapted from the WHO's RCCE guidance and training materials. It describes steps on the implementation of effective RCCE strategies which contribute to public health protection. It fosters proactive public communication of experts and authorities and gauges the risk perception of population groups.

Laboratory Assessment Tool for laboratories implementing COVID-19 testing

This tool has been designed to assess the capacity of laboratories that have implemented or intend to implement testing for SARS-CoV-2, the virus that causes novel coronavirus disease 2019 (COVID-19). The tool is a shortened version of the 2012 Laboratory assessment tool that is widely used to assess national laboratory systems and the capacity of laboratories.

Laboratory biosafety guidance related to coronavirus disease (COVID-19)

The purpose of this document is to provide interim guidance on laboratory biosafety related to the testing of clinical specimens of patients that meet the case definition of the novel pathogen identified in Wuhan, China, that is, coronavirus disease 2019 COVID-19 in all duly accredited laboratories -

https://www.who.int/publications-detail/laboratory-biosafety-guidance-related-to-coronavirus-disease-2019-(covid-19)

Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19)

This document summarizes WHO's recommendations for the rational use of personal protective equipment (PPE) in health care and community settings, as well as during the handling of cargo; in this context, PPE includes gloves, medical masks, goggles or a face shield, and gowns, as well as for specific procedures, respirators (i.e. N95 or FFP2 standard or equivalent) and aprons.

The document includes guidance on PPE in various settings including points of entry in all healthcare facilities, quarantine and isolation rooms and laboratories.

3.3.3 Stockholm Convention

The *Stockholm Convention on Persistent Organic Pollutants* is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the environment. Exposure to Persistent Organic Pollutants (POPs) can lead to serious health effects including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and damages to the central and peripheral nervous systems.

The Philippine government ratified the Convention in 2004 and is therefore required (under Article 5) to take measures to reduce or eliminate releases from unintentional POPs production.

The Convention requires the promotion of best available techniques and best environmental practices to reduce these releases. Medical waste incineration is a significant source of POPs in the form of dioxins and furans which can be released in the form of emissions from the burning process and in ash remaining after combustion.

3.3.4 Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer

The Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, which was adopted in the 28th Meeting of the Parties of the Protocol in 15 October 2016. The Kigali Amendment aims to phase down the consumption and production of hydrofluorocarbons (HCFs) as stated in Decision XXVIII/1. This was ratified by 65 countries and led by the UN Environment Programme (UNEP) with the aim of preventing global warming by up to 0.4°C this century by reducing the production and consumption of hydrofluorocarbons (HFCs) and potent greenhouse gases (GHGs).

3.3.5 Doha Declaration on the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and Public Health

The Doha Declaration in 2001 which was adopted by the member states of the World Trade Organization (WTO) addresses the issue on the access of affordable medicines for developing countries in the context of disease control and public health protection, such as for HIV, tuberculosis, and malaria. It balances the interests of the suppliers with intellectual property rights protection and the consumers with interest on price affordability.

The Doha Declaration ratifies that the TRIPS agreement should not restrict access of countries from affordable drugs and details the 'right to grant compulsory licenses and the freedom to determine the grounds upon which licenses are granted, the right to determine what constitutes a national emergency and circumstances of extreme urgency, and the freedom to establish the regime of exhaustion of intellectual property rights.'

In relation, the World Trade Organization delays decision on the waiver on COVID-19 drugs and intellectual property rights for COVID-19 vaccines[16][17].

4 Environmental and Social Baseline

The Philippines moved aggressively to mitigate the COVID-19 pandemic at an early stage when confirmed cases were still at a very low level. The President declared the whole Philippines under a State of Calamity for a period of six months from March 16 and imposed an Enhanced

[16] World Trade Organization, (2020). COVID-19 and world trade. https://www.wto.org/english/tratop_e/covid19_e/covid19_e.htm

[17] Reuters. (December 2020). WTO delays decision on waiver on COVID-19 drug, vaccine rights. https://www.reuters.com/article/us-health-coronavirus-wto-idUSKBN28K2WL.

Community Quarantine (ECQ) throughout the island of Luzon (which includes Metro Manila) from March 17 to May, with location- specific community quarantine guidelines per time period.

On March 24, 2020, the Congress passed the Bayanihan To Heal As One Act (Republic Act no. 11469) which declares a national emergency due to COVID-19, and grants the President expanded powers to adopt measure to prevent and suppress the spread of COVID-19 for three months. The Act also authorizes the Executive branch to reallocate and realign savings from the national budget as well as from government corporations. The Bayanihan to Recover As One Act or the Republic Act no. 11494 dated July 27, 2020 provides guidelines on the COVID-19 response and recovery interventions and acceleration of recovery including the economy.

The number of confirmed COVID-19 cases has continued to increase rapidly. After ramping up testing capabilities, current testing capacity is approximately 1,000 per day. Based on the official tally reported by DOH, as of December 14, 2020, there have been 450,733 confirmed cases and 8,757 deaths. Confirmed cases stretch across the age distribution, with a larger share among those age group of 20-30 with mostly male. The epicenter of COVID-19 is Metro Manila, which accounts for 72.6% of confirmed cases. In the COVID-19 Situation Report for the Philippines, the WHO notes that hospitals have faced shortages of active- duty healthcare workers, Personal Protective Equipment, and ventilators.

4.1 Philippine National Deployment and Vaccination Plan for COVID-19 Vaccines

The Philippine National Deployment and Vaccination Plan for COVID-19 Vaccines was drafted for the purpose of providing operational guidance in the implementation of the COVID-19 vaccine deployment and vaccination program. It is a living plan to be updated as more information becomes available or as recommendations are provided by international and national organizations. Its development has involved the participation of various government agencies to ensure alignment of policies and plans among agencies and integration of the said plans into national governance mechanisms. The development process for this Plan was participatory and involved various stakeholders led by the COVID-19 Vaccine Cluster and its Task Group (TG) and Sub-Task Group (STG) members. These TGs and STGs were composed of various Departments and Agencies as outlined in the section of Governance. The TGs and STGs under the COVID-19 Vaccine Cluster developed briefs to guide the implementation of the vaccine. Key Informant Interviews were also conducted to understand various perspectives in addition to various rapid assessments. A short-term technical assistance staff was hired to collate the briefs/guides developed by each of the TGs and STGs. A series of meetings were held to review and enrich the plan. The final draft of the NDVP was presented to the DOH Executive Committee, COVID-19 Vaccine Cluster of the National Task Force for endorsement.

The target audience includes policy makers, planners, program and project implementers, development partners, health service providers, partners in public and private sector, civil society organizations, health consumers, and the general public. The NDVP was approved and ratified by the IATF Resolution no. 95 and further reinforced by the NTF Against COVID-19 Memorandum Circular no. 5 series of 2021.

4.1.1 Shipment and Storage

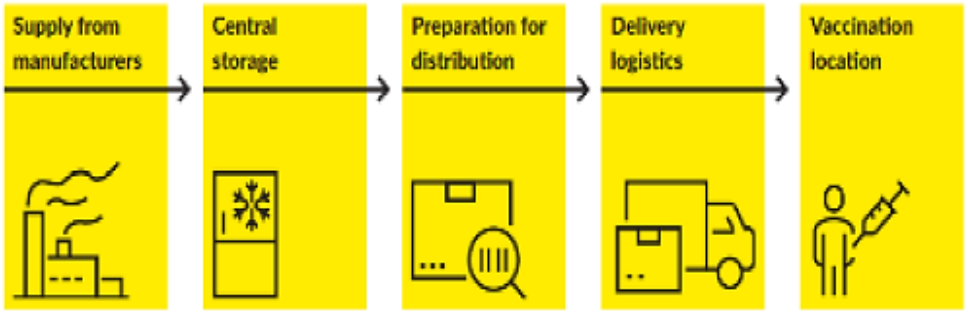
1. Supply Chain System

To ensure uninterrupted availability of quality vaccines from manufacturer to service-delivery points, effective vaccine storage, handling, and stock management should be observed through proper temperature control in the cold chain and maintenance of adequate logistics management information systems. In response to the foreseen complex supply chain management of the COVID-19 vaccines, a rapid assessment has been conducted by the DOH to identify strengths and gaps in the existing end-to-end supply chain system to prepare and build capacity which include but are not limited to the following parameters: storage systems, distribution, real time temperature monitoring and tracking, real-time tracing, and reporting of vaccine stocks. Based on the results of the assessment, the implementation will be guided by the NDVP, with the following measures:

- Coordinated deployment plans and standard operating procedures (SOPs) are developed and communicated to all levels of the supply chain;
- Adequately trained, and sufficient quantity of supply chain and health staff;
- Sufficient cold chain capacity, including surge capacity, and capacity for ongoing maintenance, necessitating the contracting of private providers;
- Efficient supply chain system and infrastructure, preferably leveraging on existing systems;
- Real time robust data recording and reporting mechanism for vaccines and cold chain equipment;
- Robust oversight and data-driven management, including systems for monitoring adherence to cold chain practices; and
- Adequate secured resources from both internal and external sources.

The supply chain process will involve the receipt of vaccines in the Philippines from several manufacturers, the storage of these vaccines in a temperature controlled central storage facility, preparation of vaccines for distribution to vaccination locations and the delivery logistics to vaccination locations (Figure 4.1). Additional supply chain and logistics expertise across the wider public sector and the private sector will be leveraged where necessary.

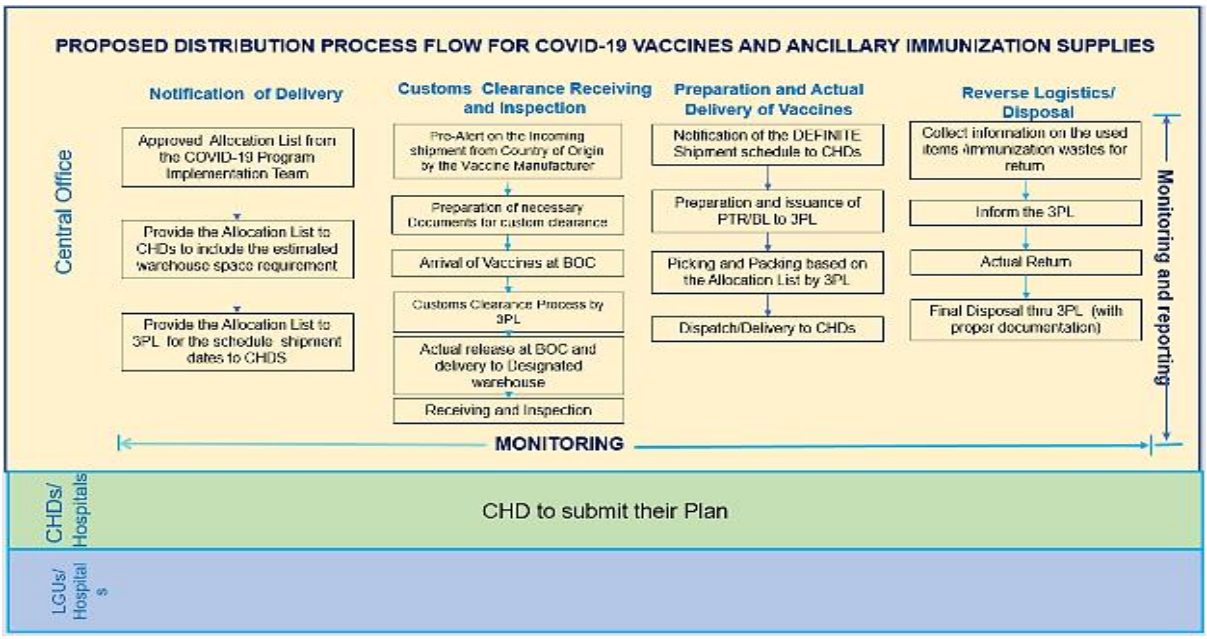
Figure 4.1. Five components of the supply chain management



Supply from manufacturers. The arrangements for supply of potentially approved vaccines from pharmaceutical companies as well as from the GAVI COVAX facility and the timing of delivery to the Philippines are currently under discussion. It is expected that the volume of vaccines delivered will ramp-up through 2021 as production capacity increases. Shipping methods from manufacturing sites will mainly be by air and agreed upon with manufacturers. Supply Chain risks associated with natural disasters and emergencies will be included in contingency planning.

Proposed distribution process flow for COVID-19 vaccines and ancillary immunization. The proposed process flow of the vaccines and other immunization supplies at the national level from the notification of the delivery up to the reverse logistics for the final disposal of the immunization wastes gathered from all the vaccination sites is summarized in Figure 4.2. The CHDs and the LGUs as well as those that will be identified as recipients of these immunization commodities shall likewise develop their distribution plan appropriate to their situation. This shall be consolidated by the Task Force to develop a comprehensive national cold chain and logistics plan for COVID-19 vaccination. A detailed process in each category shall be presented. Existing relevant forms required for each process shall be reviewed, revised and adopted specific for this purpose.

Figure 4.2. Distribution process flow for COVID-19 vaccines and ancillary immunization supplies



2. Cold Chain Management

The storage of the COVID-19 vaccines will be centralized and managed preferably by a single logistics provider with substantial relevant experience considering the Philippines' geographic size and population. It should be noted that the COVID-19 vaccines require refrigeration with temperature ranges of +2ºC to +8ºC, -15ºC to -24ºC and to as low as -70ºC to -80ºC. As the different types of vaccine require varying temperature storage requirements, (1) ultra-cold (-70°C to -80°C), (2) frozen (-15°C to -25°C), and (3) refrigerated (2°C to 8°C), the identified logistics partner/s should have substantial capacity for each temperature range.

Cold chain management, whereby adequate refrigeration levels are maintained from manufacturing, storage, and distribution of vaccines, ensuring integrity of vaccine compounds via specialized packaging as well as refrigeration and freezer devices are needed. However, ensuring effective cold chain management for COVID-19 vaccines shall entail particular requirements and constraints on temperature maintenance for transport and storage and

administration of the vaccines. With this, supply chain readiness at all the management levels shall be in place to efficiently deploy COVID-19 vaccines to the target population.

To ensure the correct volume of vaccines are received by each Vaccination Administration Location (VAL) at the right time, a robust, accurate, real-time inventory management system will be in place to guarantee availability and maintenance of adequate supplies, minimize potential wastage, and accurately forecast demand which can be met. The varying storage temperatures and shelf-lives out of storage of each vaccine type will mean certain vaccine types may be more suited to certain vaccination location types, depending on the volume of vaccinations carried out at the setting and the storage facilities on site. The distribution plan has accounted for this assigning the different vaccines for different locations. Ensuring adequate availability of the vaccine for the second dose will also be considered when managing stock levels.

In view of the three (3) main temperature categories, namely: (1) +2°C to +8°C, (2) -20°C and (3) -70°C to -80°C, a scenario based planning has been developed. The first two temperature ranges can be handled in the current health structures because vaccines in the National Immunization Program (NIP) has the same temperature requirement. However, the vaccines requiring -70°C to -80°C are new and shall need a special storage package and a complicated distribution mechanism. Thus, the following scenarios has been considered in the vaccine distribution:

Table 4.1. Vaccination scenario per temperature requirement and cold chain management strategy

Scenario	Temperature (Deg C)	Proposed Cold Chain Management Strategy
1	+2 to +8	Distribution shall follow the pathway for the routine vaccines from the national cold storage facilities up the service delivery points, the health centers and hospitals allow the cold chain storage and distribution in NIP pathway of the current vaccines in the National Immunization Program of the DOH. These vaccines require +2°C to +8°C cold storage facilities. Such facilities are in place such as the Research Institute for Tropical Medicine (RITM) as the centralized vaccine hub, regional warehouses and the RHUs and hospitals.
2	-20 to	
3	-70 to -80	Currently, none of the government hospitals are capable of such, thus the government will have to

		procure or outsource/hire a private facility.

These scenarios may also vary based on the services that will be provided by the vaccine manufacturer such as but not limited to direct distribution to the service delivery sites and presence of distributors. In the country, the existing infrastructure and established vaccination distribution channels will mean vaccines can be delivered efficiently using air and road distribution channels directly from the central storage facility to the designated cluster hub warehouses. The logistics partner/s will also manage the delivery fleet and outbound logistics/delivery to the principal vaccination locations. All deliveries will be by chilled (+2°C to +8°C) distribution using the selected logistics partner's fleet. The fleet will operate to a very high specification with full GPS monitoring, remote temperature monitoring and redundancy on the cooling systems on the vehicle. The vaccine handling characteristics for other vaccines will be more clearly defined by manufacturers as the regulatory approvals process emerges.

Assessment of Cold Chain Facilities and Dry Storage Capacities. The plan to introduce the vaccine includes the calculation of additional space requirements and cold chain equipment at the national, and local levels, and even in the vaccination rooms. The data on additional storage requirements are based on the dosage form and characteristics of the new vaccine and those currently in use. and transport capacity for the vaccine at each level of the cold chain, determining the need for additional equipment. This evaluation offers an ideal opportunity to update the national cold chain inventory by type of equipment and operating condition. Both public and privately managed cold storage facilities and logistics providers shall be assessed and visited in partnership with the FDA. As of today, the number and locations of the cold chain and dry storages are not yet finalized.

Distribution of the Ancillary Immunization Supplies. Ancillary immunization supplies provided by the program shall include auto-disabled (AD) needles and syringes, mixing syringes, safety collector boxes (SCB), PPEs (masks and face shields). The same process as above shall be followed. It is planned that all these items shall be delivered earlier than the vaccines.

4.1.2 Distribution and Deployment

The identification of eligible populations for vaccination was based on the WHO Strategic Advisory Group of Experts on Immunization (SAGE) Values Framework for the Allocation and Prioritization of COVID-19 Vaccination and the recommendations of the National Immunization Technical Advisory Group (NITAG) of COVID-19 Vaccines shall guide the identification and finalization of the eligible population, taking into consideration the national context, the epidemiologic settings and the COVID-19 vaccine characteristics and supply. The Decision Matrix and the priority eligible populations for COVID-19 vaccination are in Chapter 7.

1. Vaccine Deployment Strategies

The deployment of vaccines will be in a phased approach depending on the delivery (timing, available doses, logistical requirements) of vaccines to the country. It will be executed based on sectoral approach - that is, all frontline healthcare workers will be vaccinated first before

proceeding to the next priority group. The number of individuals to be vaccinated in a round will depend on the total number of vaccines delivered, in which computation of the 2nd dose is already considered. Since the delivery of vaccines to the country is in tranches, the deployment of vaccines in specific geographical areas shall be based on the burden of COVID-19 cases. In the identification of geographical areas, the NITAG set the indicators in determining the areas with high burden of COVID-19 cases. The indicators are as follows:

1. Number of Active Cases in recent four weeks
2. Attack rate per 100,000 in recent four weeks

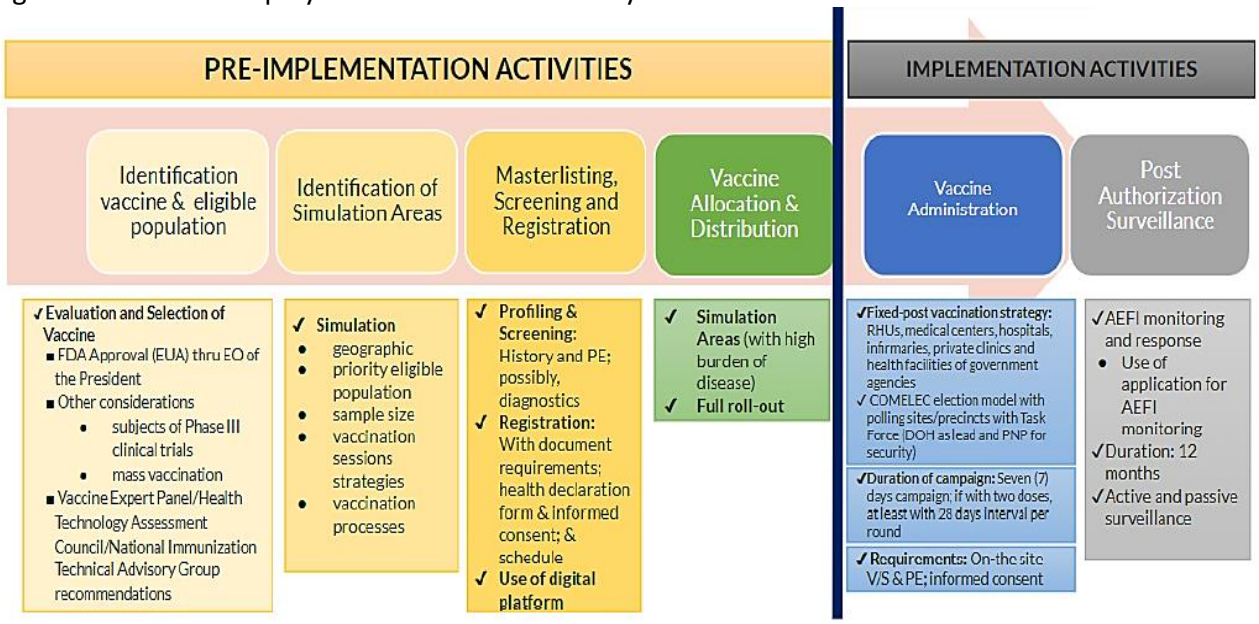
Active cases refer to the total confirmed cases less those recovered and fatalities. These active cases as such are assumed to be still infectious and currently isolated. For the purpose of this ranking, the attack rate was computed using the total newly reported cases in the recent 4 weeks divided by the region's projected population and a multiplier of 100,000 population. The determination of priority geographical areas will be per region. Likewise, the NITAG will review the burden of COVID-19 cases in the country every month and will recalibrate the priority areas accordingly.

Table 4.2. Priority regions based on burden of COVID-19 cases as of January 2021

Region	Rank Active Cases	Rank Attack Rate	Average Rank Burden of Disease	Overall Rank Burden of Disease
NCR	1	2	1.5	1
Region IV-A	2	5	3.5	2,3,4
Region XI	4	3	3.5	2,3,4
CAR	6	1	3.5	2,3,4
Region VIII	5	4	4.5	5
Region III	3	8	5.5	6
Region II	8	6	7	7
Region VI	7	10	8.5	8
Region X	9	9	9	9,10
CARAGA	11	7	9	9,10
Region I	12	11	11.5	11
Region VII	10	14	12	12
Region XII	13	12	12.5	13
Region IX	14	13	13.5	14
Region V	15	16	15.5	15,16
Region IV-B	16	15	15.5	15,16
BARMM	17	17	17	17

As the National Government will roll-out policies and plans, several activities in coordination with the Local Government Units will be conducted, such as simulation activities, such as table activities and drills, to test local plans and implementation of policies in the local level (Figure 4.3).

Figure 4.3. Vaccine deployment and service delivery activities



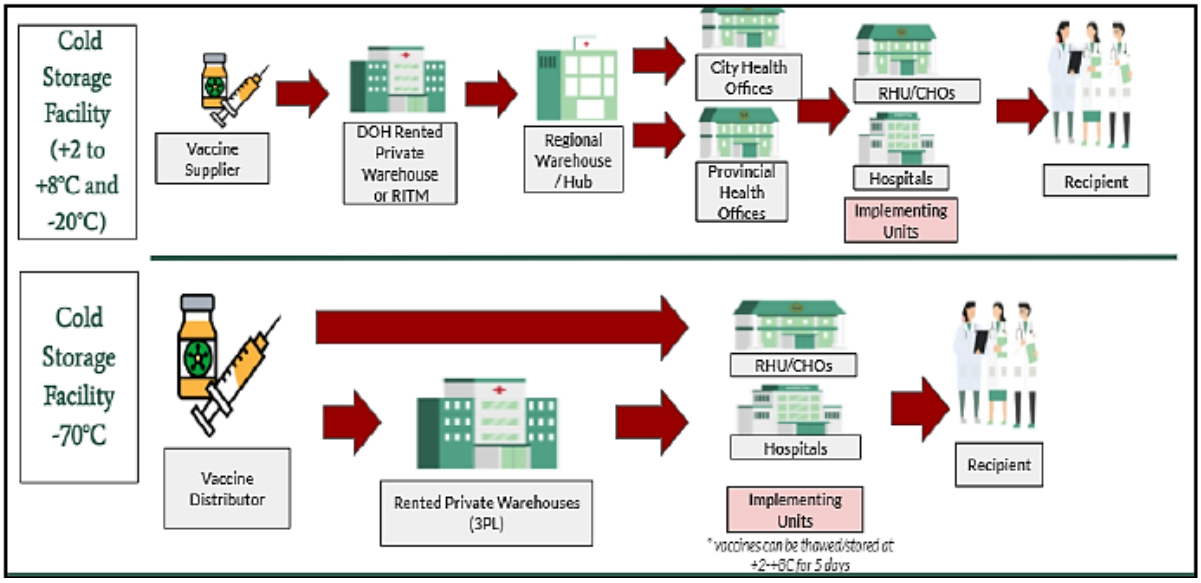
2. Vaccine Distribution Strategies

As the manner of the distribution of vaccines will depend on the storage requirements specific to each vaccine, the DOH will provide a Department Memorandum detailing the operational guidelines, including the vaccine storage and cold chain requirements, delivery and deployment mechanisms for each specific vaccine.

For vaccines requiring +2°C to +8°C storage, the vaccines will be delivered from the supplier to the RITM, which will serve as the government Centralized Vaccine Hub. From RITM, the vaccines will be passed on to the regional warehouses/hubs. The Centers for Health Development, in coordination with logistics partners and other government agencies, shall deliver the vaccines to Local Government Units. The LGUs will then allocate vaccines to implementing units such as medical centers, hospitals, infirmaries, RHUs and CHOs, and private clinics, where the vaccine will be administered to the eligible recipient. The distribution process for vaccines requiring -20°C storage will utilize the same process used for vaccines requiring +2°C to +8°C storage.

In addition, for vaccines requiring -70°C to -80°C storage, the vaccines will be delivered from the supplier to a private centralized vaccine hub. And through a private distributor, the vaccines will be delivered to hospitals and medical centers with cold chain capacity to store the vaccines. Or the vaccines can temporarily be stored in rented private warehouses before they are delivered to hospitals and medical centers. Plans and arrangements will be carefully made for the vaccines to be distributed to implementing units and the administration of the vaccine to the eligible recipient.

Figure 4.4. Distribution of vaccines according to storage facility requirements



Currently, the number and location of health care facilities as COVID-19 vaccination sites, the mode of transport and vehicles for vaccine delivery, the cold chain and dry storage facilities number and location, and number of health care workers in vaccination teams have not yet been determined.

Below are the results of the initial assessment on the cold chain and dry storage or warehousing capacity which was conducted by the DOH Supply Chain Management Service (SCMS):

Table 4.3. Net cold chain storage capacity of the regions as of 10 January 2021

Site	Total Net Storage Capacity (liters)		Currenty Occupied Volume (liters)		Available Net Volume (liters)	
	+2°C to +8°C	-15°C to -25°C	+2°C to +8°C	-15°C to -25°C	+2°C to +8°C	-15°C to -25°C
RITM-SDD	173,367	10,631	161,250	6,367	12,117	4,264
NCR	9,710	389	4,159	-	5,551	389
CAR	7,522	288	1,688	70	5,834	218
Region I	18,824	432	3,641	177	15,183	255
Region II	18,951	144	2,118	133	16,833	11
Region III	8,571	720	7,140	430	1,431	290
Region IV-A	9,710	741	3,586	526	6,124	215
Region IV-B	4,988	247	149	-	4,839	247
Region V	16,094	5,264	9,523	240	6,571	5,024
Region VI	14,286	194	2,425	30	11,861	164
Region VII	10,402	389	6,089	389	4,313	-
Region VIII	14,539	338	5,917	338	8,622	-
Region IX	8,824	391	4,189	101	4,635	290
Region X	10,633	683	1,587	91	9,046	592
Region XI	20,238	770	2,212	45	18,026	725
Region XII	15,045	292	2,326	48	12,719	244
CARAGA	8,824	432	1,690	113	7,134	319
TOTAL RITM-SDD	**173,367**	**10,631**	**161,250**	**6,367**	**12,117**	**4,264**
TOTAL CHDs	**197,161**	**11,714**	**58,439**	**2,731**	**138,722**	**8,983**

Table 4.4. Inventory of warehouses per DOH regional office as of 22 January 2021 (in line with GSP)

CHDs	WAREHOUSES	STATUS		AREA (in sqm)	IDEAL STORAGE CAPACITY (in cbm)	AVAILABLE STORAGE CAPACITY (in cbm)
		Owned	Rented			
Metro Manila	Pasig WH	/		792	130	26
	Tala WH	/		25	20	22.5
	Mandaluyong WH	/		85	26	Full
CAR	DOH-CHD CAR WH (609.74 cbm ambient; 30.50 temp. controlled)	/		400	640.24	0 ambient ; 0 temp controlled
	Pucay WH (ambient)		/	350	586.89	2
	Marcos WH (ambient)		/	250	426.82	3
I	Warehouse 1	/		272.02	3087	6
	Warehouse 2		/	1,200.00	22627	0
II	CHD WH (Controlled temperature)	/		450	583.2	full
	Covered court (ambient)	/		551	800	100
III	Main (Controlled Temperature)	/		29	75.4	Full (nip routine vaccines)
	Sindalan WH		/	1,500.00	3900	200 cbm (dry store)
IV-A	CHD CALABARZON WH	/		625	525 cbm ambient 100 cbm controlled	9 cu.m. controlled ambient full
IV-B	CHD MIMAROPA WH	/		515	650.74	full
V	Main WH (temperature controlled)	/		216	648	not utilized due to ongoing renovation
	Extension WH (temperature controlled)	/		156.93	831.74	400 cbm
	RMC WH (ambient)		/	844	6750	54.81 cbm
VI	CHD Western Visayas WH (TCF)	/		131.86	322.88	Full (stocks delivered from CO)
	CHD Western Visayas WH (ambient)	/		455.31	339.81	Full (local purchase stocks)
	Jaro WH (ambient)		/	230. 00	250	Full (stocks delivered from CO)
	Philpost (ambient)		/	24.13	67.625	Full
VII	CHD Central Visayas WH	/		538	596.88	Full
VIII	Warehouse 1	/		136	129	10 cbm
	Warehouse 2	/		132	171	Full
	Warehouse 3 (TB Room)	/		36	34	15 cbm
	Warehouse 4	/		109	38	Full
	Warehouse 5 (New Warehouse)	/		300	313	21 cbm
	Warehouse 6 (C2)		/	132	225	100 cbm

IX	Warehouse 1	/		228	658.08	Full
X	Warehouse 1	/		200	600	200 cbm
	Warehouse 2 (XIMEX warehouse)		/	1,000.00	3000	500 cbm
XI	Arrowgo Logistics (controlled and ambient)		/	1000 sqm (including air space)	800 cbm	200 cbm
	DOH Regional Warehouse (ambient)	/		308 sqm	620 cbm	300 cbm
SOCCSKSARGEN	Regional Warehouse, Main (Controlled Temp)	/		418.4	1296	Full
	Regional Warehouse, Exntension (Ambient)	/		336	2016	Full
CARAGA	DOH WH (Controlled Temp.)	/		TFA - 455	-	-
	-1st floor	/		340	1655	
	- 2nd floor	/		115	330	36
	Annex WH (Ambient)		/	1,000.00	7000	
BARMM	MOH - Cotabato City WH		/	330	720	FULL
	MOH - Zamboanga City WH (Transit point)		/	800	-	FULL
	MOH Office WH	/		240	720	FULL

4.1.3 Implementation of Nationwide Vaccination

The implementation of a nationwide COVID-19 vaccination program shall be in a phased approach taking into consideration the quantity of vaccines delivered to the country, the cold chain requirements, and burden of COVID-19 cases in geographical areas. Therefore, there shall be several rounds of COVID-19 vaccination campaign conducted within the year.

The Local Government Units, as mandated in Republic Act 7160, otherwise known as the "Local Government Code of 1991", shall take the lead in the implementation of the COVID-19 vaccination program in accordance with the policies and guidelines set by the COVID-19 Vaccine Cluster and DOH. Thus, participating agencies and the private sector are enjoined to closely coordinate with the LGUs in which their health facilities are located.

On the other hand, the National Government and its regional counterparts, shall provide strategic direction, and technical and logistical assistance; cascade policies and guidelines; and capacitate implementers, among others.

Specifically, for each deployment of a specific type and quantity of COVID-19 vaccine, the DOH shall provide a Department Memorandum detailing the specific operational guidelines applicable for the specific vaccine. Further, all vaccination activities, whether the COVID-19 vaccines to be administered have been procured by the National Government, the private sector or the LGU,

shall be closely coordinated with DOH and shall follow DOH policies and guidelines. No vaccination activity shall be conducted without the guidance and the knowledge of DOH.

The implementation of a nationwide COVID-19 vaccination program is divided into three phases, namely: 1) the pre-implementation phase, where preparations for the actual vaccination activity are carried out, 2) the implementation phase or the actual vaccine administration schedule, 3) the post-implementation phase, where all activities and reports to conclude a certain round are completed.

1. Pre- Implementation Phase

In the pre-implementation phase, the following activities enumerated are to be undertaken by LGUs, specifically municipalities and cities:

1. Establishment of a Vaccination Operations Center (VOC)
2. Masterlisting of Eligible Populations, Vaccination Workforce, Implementing Units and Vaccination Sites/Posts
3. Microplanning
4. Mapping of Vaccination Sites and Vaccination Workforce
5. Vaccines, Logistics and Cold Chain Inventory and Management
6. Capacity Building and Training
7. Advocacy, Community Engagement and Social Preparation
8. Preparation of Vaccination Sites/Posts
9. Monitoring and Supervision

Masterlisting, Microplanning, and Mapping (3Ms)

The 3Ms, namely, masterlisting of eligible population, vaccination workforce and implementing units and vaccination posts/sites; microplanning; and mapping of vaccination workforce and vaccination posts/sites are critical in the implementation of the COVID-19 vaccination program. In the succeeding section, each of the Ms will be discussed in detail.

a. Masterlisting of eligible population, vaccination workforce and implementing units and vaccination posts/sites

To prepare the country for the COVID-19 vaccination program, creation and maintenance of a masterlist of priority sectors is necessary to: (a) provide basis for identification of target eligible groups for vaccination and identification of priority areas for registration of eligible individuals; (b) ensure uniqueness of individuals in the vaccine administration plan; and (c) provide input to operational planning especially for costing and allocation of resources.

Masterlisting is the linelisting and registration of the population prior to vaccination. This could be done through an online or offline platform developed by the DICT, and DOH's KMITS and EB. From the masterlist, eligible population for specific vaccines will be culled out and accessed by appropriate regions or LGU for registration, scheduling, mapping-out on appropriate vaccination sites and advisory.

Phased Submission of LGU Masterlists. Masterlisting shall use the phased approach, as follows:

Table 4.5. Phases of masterlisting

Group A	Phase 1: Workers in Frontline Health Services
	Phase 2: All Senior Citizens (Indicate if indigent)
	Phase 3: Indigent Population
	Phase 4: Uniformed Personnels (UPs)
Group B	Phase 5: Other Frontline Workers and Special Populations
Group C	Phase 6: Remaining Population

Interim Minimum Data Standards for the COVID-19 Electronic Immunization Registry (CEIR).
The COVID-19 Electronic Immunization Registry (CEIR) shall be the official platform for masterlisting and registration for COVID-19 vaccination. External systems may be used to submit the necessary information following the Interim Minimum Required Data Fields as indicated below.

Table 4.6. Interim minimum required data fields for masterlisting

Data Set	Definition	Type	Format
1. Category	Category of the Target Eligible Population 01 – Health Care Worker 02 – Senior Citizen 03 – Indigent 04 – Uniformed Personnel 05 – Essential Worker 06 – Other	String	Dropdown
2. CategoryID	ID number depending on the category type For 01 – PRC number 02 – OSCA number 03 – Facility ID number 04 – PWD ID 05 – Other ID	String	Freetext
3. PhilHealth ID	PhilHealth ID	Integer	Freetext, 12 digits only
4. Last name	Surname/Last Name	String	Freetext
First name	First Name/Given name	String	Freetext
Middle Name	Middle Name	String	Freetext
Suffix	Suffix	String	Dropdown
5. Contact_no	Contact Number (Mobile Number or Landline)	Integer	Freetext, 12 digits only
6. Full_address	Unit/ Building/ House Number, Street Name, Purok, Zone	String	Freetext
Province	Name of province	String	PSGC, Dropdown
MunCity	Name of city or municipality	String	PSGC, Dropdown
Barangay	Name of barangay	String	PSGC, Dropdown
7. Sex	Sex 01 – Female 02 – Male 03 – Not to disclose	String	Dropdown
8. Birth date	Date of birth (mm/dd/yyyy)	Date	Date picker
9. Civil status	Civil Status	String	Dropdown

	01 – Single 02 – Married 03 – Widow/Widower 04 – Separated/Annulled 05 – Living with Partner		
10. Employed	Employment Status 01 – Government Employed 02 – Private Employed 03 – Self-employed 04 - Private practitioner 05 – Others	String	Dropdown
11. Profession	01 – Dental Hygienist 02 – Dental Technologist 03 – Dentist 04 – Medical Technologist 05 – Midwife 06 – Nurse 07 – Nutritionist-Dietician 08 – Occupational Therapist 09 – Optometrist 10 – Pharmacist 11 – Physical Therapist 12 – Physician 13 – Radiologic Technologist 14 – Respiratory Therapist 15 – X-ray Technologist 16 – Barangay Health Worker 17 – Maintenance Staff 18 – Administrative Staff 19 – Other Workers in Frontline Health Services *Categories for other subgroups to be included in succeeding versions; LGU may create sub categories not listed here		
Direct_covid	Providing direct COVID care? 01 – Yes 02 – None	Boolean	Dropdown
12. Employer_name	Name of employer	String	NHFR or freetext
Employer_LGU	Province/ HUC/ ICC of employer	String	PSGC, Dropdown
Employer_address	Full address of employer	String	Freetext
Employer_contact_no.	Contact number of employer	Integer	Freetext,12 digits only
13. Preg_status	If female, pregnancy status 01- Pregnant 02- Not Pregnant	Boolean	Dropdown, conditional (if female only)
14. W_allergy	With Allergy 01 – Yes 02 – None	Boolean	Dropdown

Allergy	Name of Allergy 01 – Drug 02 – Food 03 – Insect 04 – Latex 05 – Mold 06 – Pet 07 – Pollen	String	Freetext, conditional(if with allergy only)
15. W_comorbidities	With Comorbidities 01 – Yes 02 – None	Boolean	Dropdown
Co- morbidity	Name of Comorbidity 01 – Hypertension 02 – Heart disease 03 – Kidney disease 04 – Diabetes mellitus 05 – Bronchial Asthma 06 – Immunodeficiency state 07 – Cancer 08 – Others	String	Dropdown
16. covid_history	Patient diagnosed with COVID-19 01 – Yes 02 – No	Boolean	Dropdown
covid_date	Date of first positive result / specimen collection (mm/yyyy)	Date	Date picker
covid_classification	Classification of infection 01 – Asymptomatic 02 – Mild 03 – Moderate 04 – Severe 05 – Critical	String	Dropdown
17. Consent	Provided electronic informed consent for data collection? 01 – Yes 02 – No 03 – Unknown	String	Dropdown
18. Consent_vacc	Provided initial consent for vaccination? 01 – Yes 02 – No 03 – Unknown	String	Dropdown

Prescribed Processes for Masterlisting Intended Vaccinees

1. Local Government Units shall lead masterlisting efforts within their catchment area and consolidate by municipality/CC/HUC/ICC.
2. All institutions (ex: health facilities) shall submit the masterslists to the municipality/CC/HUC/ICC, through any of the following methods:
    a. COVID-19 Electronic Immunization Registry (CEIR);
    b. Information system of the LGU linked to the CEIR through an application program interface (API);

c. Dataset consistent with prescribed formats for bulk uploading through the CEIR;
d. Dataset consistent with prescribed formats for bulk uploading through the assistance of DOH CHDs.

The CEIR platform may be accessed through http://ceir.doh.gov.ph. Training videos and submission templates may be retrieved from http://bit.ly/CEIRdocuments. Regional templates with PSGC codes are also available in said link. For help desk and support please contact covid19ceir@doh.gov.ph.

3. Masterlist data may be submitted and consolidated in phases, to include the following fields:
   a. Patient List - 1, 4, 7, 8, 10, 12
   b. Full Patient Demographics - 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12
   c. Full Patient Health Profile - 3, 13, 14, 15, 16, 17, 18
4. LGUs shall ensure that there will be no duplication in masterlists across facilities within their catchment. The DOH shall likewise conduct deduplication checks on the final endorsed masterlists.
   a. Masterlisting for Phase 1: Workers in Frontline Health Facilities shall be done based on the location of their health facility of assignment.
   b. For the eligible population with multiple affiliations (e.g.: health care worker in multiple hospitals), they shall choose only one health facility as their intended site for vaccination.
5. Masterlisting of UPs and essential personnel shall be based on their command. Masterlisting of the general population shall be based on the LGU where the vaccinee is residing in.
6. The province/HUC/ICC health office shall provide a status report and updated consolidation masterlist to their respective CHD every Friday.
7. After completion of masterlisting in a health facility, the Chief of Hospital or Head of Facility shall submit physically signed endorsement of all workers in the facility for phase 1 vaccination to the respective local government unit copy-furnish the CHD. The endorsement should indicate those who have and consented and who have not.
8. CHDs shall compile and store all signed and attested masterlists of all LGUs and health facilities, and scan copies saved according to the following format: Region-Health facility name, i.e., NCR-SAN LAZARO HOSPITAL. The document shall be saved in Portable Document Format (PDF) and be uploaded to the bit.ly link provided for their respective region.
9. Consistent with actions necessary for Universal Health Care, LGUs are instructed to initiate profiling the health status of their population now and generate a masterlist of population with comorbidities and other important information that will be necessary to implement the National Deployment and Vaccination Plan. Health profiling through Electronic Medical Records consistent with DOH standards is recommended.
10. Complete masterlist including patient list, full demographics, and full health profile is required prior to actual vaccine administration. Phased submissions shall guide local and national planning of the vaccine deployment plan.

Masterlisting the Vaccination Workforce. LGUs shall develop masterlists of the vaccination workforce by Municipality/CC/HUC/ICC using the following minimum data fields:

Table 4.7. Minimum data fields required for the masterlisting of the vaccination workforce

Data Set	Definition	Type	Format
heathfacility_name	Name of health facility	String	NHFR or freetext
healthfacility_LGU	Province/ HUC/ ICC of employer	String	PSGC, Dropdown
Last name	Surname/Last Name	String	Freetext
First name	First Name/Given name	String	Freetext
Middle name	Middle Name	String	Freetext
Suffix	Suffix	String	Dropdown
Position	Position or designation of the	String	Freetext
Team	Team category 01 - Vaccination Team 02 - AEFI/ AESI Composite Team	String	Dropdown
Role	Role in the vaccination team 01 - Screening and Assessment 02 - Health educator 03 - Vaccinator 04 - Documentor/ Recorder 05 - AEFI Monitoring 06 - Others	String	Dropdown

Microplanning

Microplanning is a “bottom-up” planning process carried out to determine local needs and gaps and to ensure smooth and satisfactory vaccine implementation. This is one of the key activities to ensure the planning of the vaccination campaign lays out all operational aspects of the activity at the municipal/city and barangay levels. It is the translation of the national and regional macroplan to the local situation. Microplanning is one of the tools that health workers use and endorsed by the NIP to ensure that immunization services reach every community.

The microplanning activity has been tailored fit for COVID-19 vaccines taking into consideration diverse vaccine portfolios and the complexities of COVID-19 vaccine development. The following are the objectives of microplanning:

- To ensure that campaign objectives are reached and immunization strategies are well implemented at the service delivery points (health facilities and LGUs).
- To ensure that adequate resources are mobilized and in place with expected results to be accomplished on time.
- To anticipate the challenges and maximize use of limited resources in an efficient manner in the context of the COVID-19 pandemic.

The microplanning shall be done by the LGUs, specifically by municipalities and cities, and shall commence at once after masterlist and/or training has been obtained by the LGU. It is paramount that microplans get validated at each level as data are collected. This calls for effective supervision of the development of each microplan. Therefore, microplans are

submitted in the following order: for municipalities and component cities, to the Provincial Health Offices (PHO) copy furnished Provincial DOH Offices (PDOHO), then the PHO to the CHDs; and for HUCs and ICCs, directly to the CHDs.

Once microplans from C/MHO level reach the province, they get aggregated and the provincial coordinators add province-specific costs (supervision, meetings, transport) are incorporated, before forwarding the plan up to the regional and national level. The microplan must be updated as frequently as possible.

A readiness assessment tool shall be used to assess and monitor the implementation of the plan. This can also be https://tinyurl.com/covidvaccineRA. Also, a microplanning template in excel form is accessible in this link: https://tinyurl.com/microplanningc19. The critical steps in microplanning are as follows:

Critical Step 1: Determine the number of eligible population for COVID-19 vaccination in your area.
Criteria Step 2: Identify the implementing units in your area, and the number of vaccination sites/posts, and plot in your operational spot map.
Critical Step 3. Identify the number of supervisors, vaccination teams, AEFI/AESI composite teams and other personnel needed and available for the vaccination activity.
Critical Step 4: Assign vaccinees and teams to an implementing unit / vaccination post/site.
Critical Step 5: Estimate the vaccine requirement and ancillary supplies needed
Critical Step 6: Identify gaps in cold chain capacity
Critical Step 7: Ensure timely delivery of vaccines and ancillary logistics
Critical Step 8: Prepare a Daily Vaccination Session Plan (daily itinerary)
Critical Step 9: Develop a communication plan for community advocacy, social mobilization, partnership and engagement
Critical Step 10: Prepare a supervision and monitoring plan and schedule
Critical Step 11: Prepare an AEFI/AESI management, surveillance and response plan
Critical Step 11: Develop a waste management plan

Mapping of Vaccination Workforce, Implementing Units and Vaccination Sites/Posts

Vaccination Workforce. For the COVID-19 vaccination campaign, a diverse set of professionals and personnel, both from the public and private sector, shall be utilized as part of the vaccination workforce. As more doses of vaccines become available during 2021- 2022, there will be a need to expand the pool of skilled workforce to administer vaccines and to deliver the program.

Table 4.8. Recommended composition of the vaccination and AEFI composite teams, and other personnel needed in the implementing units

Team/Other Personnel Needed	Composition
Vaccination Team (6)	(2) for screening and assessment: Physician/Nurse/Midwife(1) as health educator: Allied Professionals/ Volunteers from partner agencies (e.g. teachers, social workers, medical students, etc) (1) as vaccinator: Physician/Nurse/Midwife of RHU/Pharmacist (certified by PRC) (2) as documentor/recorder and vital signs-taker: Midwife/BHW/Health Staff / Volunteers from partner agencies (e.g. teachers, social workers, medical students, etc)
AEFI Composite Team (2)	(1) to monitor and provide response: Paramedic/Nurse/Midwife (1) to conduct surveillance: Surveillance Officer/ Nurse/Midwife/Pharmacist
Supervisors/Monitors	(1) Vaccination Team Supervisor: preferably a physician, for at least three (3) vaccination teams (1) Implementing Unit Level Supervisor: for the entire implementing unit (1) LGU Level Supervisor: for the entire LGU Internal Monitors and Independent Monitors
Other personnel needed in the implementing units	Cold Chain and Logistics Officer/s Local Officials (barangay captains) Security Personnel (PNP) Drivers Safety Officers (Barangay Tanods, among others)
Other personnel needed in community/health facilities	Social mobilizers: BHWs and hospital staff (HR) Navigators/Transport: BHWs and Local Officials, Health Facility Management

Table 4.9. Roles and responsibilities of the vaccination workforce

Teams and Personnel	Roles and Responsibilities
1. Vaccination Team	● Man the vaccination administration area in the vaccination post/site ● Ensure that the vaccination administration procedure has been conducted efficiently and correctly ● Ensure that reports and information are encoded truthfully and submitted timely
a. Personnel assigned as documenter and recorder	● Man the registration area ● Ensure that documents and identification presented by the vaccinee are valid ● Ensure that all information and data are encoded in the data management system ● Assist other team members, especially on vital signs taking ● Submit daily coverage, refusals and deferrals to the C/MHO
b. Personnel assigned as health educator	● Man the health education area ● Ensure that equipments and IEC materials are available during the vaccination post/area ● Provide information to vaccinees, particularly on the benefits of vaccination, the possible adverse reactions, and how to seek help if with adverse reaction, either by answering their queries, or providing them with IEC materials ● Facilitate the signing of the informed consent ● Coordinate with social mobilizers and navigators for those who were deferred and those who refuse on-site.
c. Personnel assigned for screening and assessment	● Man the screening and assessment area ● Conduct physical examination and take the history of present illness (if applicable) and record in the CEIR ● Provide clearance for the vaccinee to be vaccinated. Those deferred for vaccination shall be coordinated with the social mobilization team for follow-up and shall be provided with a possible vaccination schedule
d. Personnel assigned as a vaccinator	● Man the vaccine administration area ● Follow the step-by-step procedure of vaccine administration as recommended by the manufacturer and as guided by the immunization protocols ● Completely fill-up the vaccination card and encode the needed information to the data management system ● Dispose syringe and vials accordingly
2. AEFI/AESI Composite Team	● Man the post-vaccination area in the vaccination post/site ● Ensure that the vaccinee is monitored and observed for any adverse reaction in the 1st hour after vaccination ● Provide immediate intervention and response for vaccinees experiencing adverse reactions on-site and refer them accordingly and timely
a. Personnel assign to monitor and	● Monitor and observe the vaccine for any adverse reaction in the 1st hour after vaccination

provide response	● If the vaccinee has any adverse reactions, provide immediate intervention/treatment ● Refer vaccinee/s with adverse reaction/s to appropriate AEFI/AESI referral health facilities in a timely manner ● Provide the vaccinee with information on what signs and symptoms he/she should watch for at home and where he/she should proceed to for treatment
b. Personnel assign for surveillance	● Monitor and observe the vaccine for any adverse reaction in the 1st hour after vaccination ● If the vaccinee has any adverse reactions, conduct surveillance investigation ● Follow-up the vaccinee/s for any adverse reaction/s at home
Supervisors and Monitors	Supervisors ● Supervise and oversee the vaccination activity ● Address concerns and coordinate accordingly ● Ensure timely submission of reports Monitors ● Monitor and evaluate the quality of vaccination implementation ● Provide feedback to VOCs
a. Vaccination Team Supervisor	● Visit Vaccination Teams at least once a day for supportive supervision using the Supervision Checklist ● Compile vaccination team reports, analyze them and report to higher level ● Review team performance and undertake corrective actions if needed
b. Implementing Unit Level Supervisor	● Visit Vaccination Teams with Team Supervisors, at least once a day for supportive supervision using the Supervision Checklist ● Compile and review vaccination team reports, analyze them and report to higher level ● Review team performance and undertake corrective actions if needed ● Communicate daily with Coordination team in the VOC
c. LGU Level Supervisor	● Visit implementing units 1-2 weeks prior to the campaign to monitor progress in preparedness. ● Support training and microplanning activities ● Review submitted reports, compile and analyze health center level data
d. Monitors and Independent Monitors	● Visit vaccination sites and complete monitoring forms ● Monitor the vaccination implementation and ensure that it is based on the guidelines set by DOH ● Participate in meetings of the coordination team ● Assist in troubleshooting, as needed

Implementing Units and Vaccination Sites/Posts. A permanent fixed-post vaccination strategy shall be used in the conduct of the COVDI-19 vaccination campaign. As defined in the National Immunization Program, permanent fixed-posts are posts located at health facilities where there is sufficient capacity and equipment to immediately respond and refer AEFI/AESI cases, and where sufficient health human resources are available. The following shall be utilized as implementing units:

a. Medical centers, hospitals and infirmaries (private and public)

b. Rural Health Units

c. Health facilities of other government agencies (e.g. AFP hospitals and facilities, BJMP/BuCor health facilities, and DepEd clinics)

d. Private clinics

The LGUs shall ensure that all implementing units, including private health facilities, adhere to the protocols required for an implementing unit / vaccination posts/sites. No implementing unit shall be allowed to conduct vaccination activity without compliance to the protocols required of a vaccination post.

Human Resource Management and Training. The national training plan shall target (a) national and departmental coordinators of areas directly or indirectly related to vaccine introduction [e.g., information system, communication, cold chain, surveillance, etc.], who will facilitate the vaccination processes at the district/municipality and local levels, and (b) vaccination workforce who will directly or indirectly conduct the vaccination.

Table 4.10. Roles and responsibilities of the COVID-19 training teams

Level of Training Team	Roles and Responsibilities
WHO, UNICEF and DOH vaccination experts and trainers	● Develop/ Co-Develop the training materials ● Conduct the initial ToT for the Core Trainers ● Provide post training support to the Core trainers
DOH Cluster trainers	● Identify regional training teams Conduct TOT for the regional training teams ● Work with the regional training teams to develop regional training plans ● Provide oversight for the cascading of the trainings within each region ● Monitor the standards of and the implementation of training for the local implementing units. ● Conduct monitoring and evaluation of the training activities
Regional training teams	● Conduct training needs assessment ● Develop regional training plan ● Conduct trainings for the local implementing units ● Conduct post training supportive supervision, observation and mentoring for the local implementing units ● Implement quality improvement as needed based on gaps identified during the post training support activities

COVID-19 Vaccine and Cold Chain Capacity Inventory and Logistics Management

In the pre-implementation phase, in order to maintain a reliable vaccine cold chain and logistics management at the LGU level, the following key procedures shall be observed:

a. Receive vaccines logistics requirement for the vaccination campaign.
b. Count all vaccines and logistics (syringes, SCBs, re-sealable plastic, among others) received to ensure NO short shipment.
c. Check the vaccine label and ensure that it is intact.
d. Store vaccines and diluents within the required temperature ranges at all sites/levels. Keep vaccines in appropriate vaccine refrigeration equipment. Keep all COVID-19 vaccine vials together in the same cold chain equipment at all times.
e. Label storage equipment containing COVID-19 vaccines properly.
f. Use a temperature monitoring device to ensure temperatures remain according to the recommended temperature.
g. Pack and transport vaccines to and from implementing units according to recommended procedure. Transport vaccines to immunization sessions in a vaccine carrier, correctly packed using coolant packs that have been properly prepared.
h. Keep vaccines and diluents within recommended cold chain conditions during vaccination sessions. During the vaccination sessions, fit a foam pad (if available) at the top of the vaccine carrier.

The LGU and in implementing units, one person shall be in-charge of logistics and cold chain management. An alternate shall also be identified to take over if the in-charge is absent. Their responsibilities shall include:

a. Checking and recording vaccine temperatures twice daily; in the morning and at the end of the session or day.
b. Properly storing vaccines, diluents and ice packs.
c. Handling preventative maintenance of the cold chain equipment.

Preparation of Vaccination Sites/Posts. The vaccination post/site shall have the following areas (as shown in Figure 4.4):

1. Waiting Area. The waiting area shall be prepared for vaccinees waiting for their vaccination turn.
2. Vaccination Area: The vaccination area shall have at least three (3) vaccination teams and three (3) AEFI/AESI composite teams. Each area shall have several sanitation areas for each vaccination team. The following areas, arranged in sequential order, shall be set in placed:
    a. Registration Area: An area where the vaccinee's information and documents are checked and submitted. Each vaccination team shall have their respective areas in the registration area. Equipment needed to scan the QR code should be available in this area.
    b. Health Education Area. There shall be one health education area for the whole vaccination site/post. In this area, IEC materials, such as pamphlets, leaflets and brochures shall be made available. Also, a projector or a TV shall be set up in this area, or the least, a flipchart, for health education purposes.
    c. Screening Area. Since the screening procedure may take longer compared with other areas, it is advised that at least two screening stations per team shall be set up. Equipment needed to scan the QR code should be available in this area.
    d. Vaccination Area. Each vaccinator shall have his/her own area. The vaccination area should have an accessible cold chain equipment to store the vaccines in the vaccination post/site.

3. Post-vaccination Monitoring Area. Since the observation of vaccinees post-vaccination will take 30 minutes to one hour, it is expected that there might be pooling or crowding of vaccinees in this area. Thus, this area must be spacious enough to accommodate all vaccinees and to allow observance of physical distancing measures. In addition, equipment needed for AEFI response must be available and accessible.

Figure 4.4. Vaccination site/post lay-out

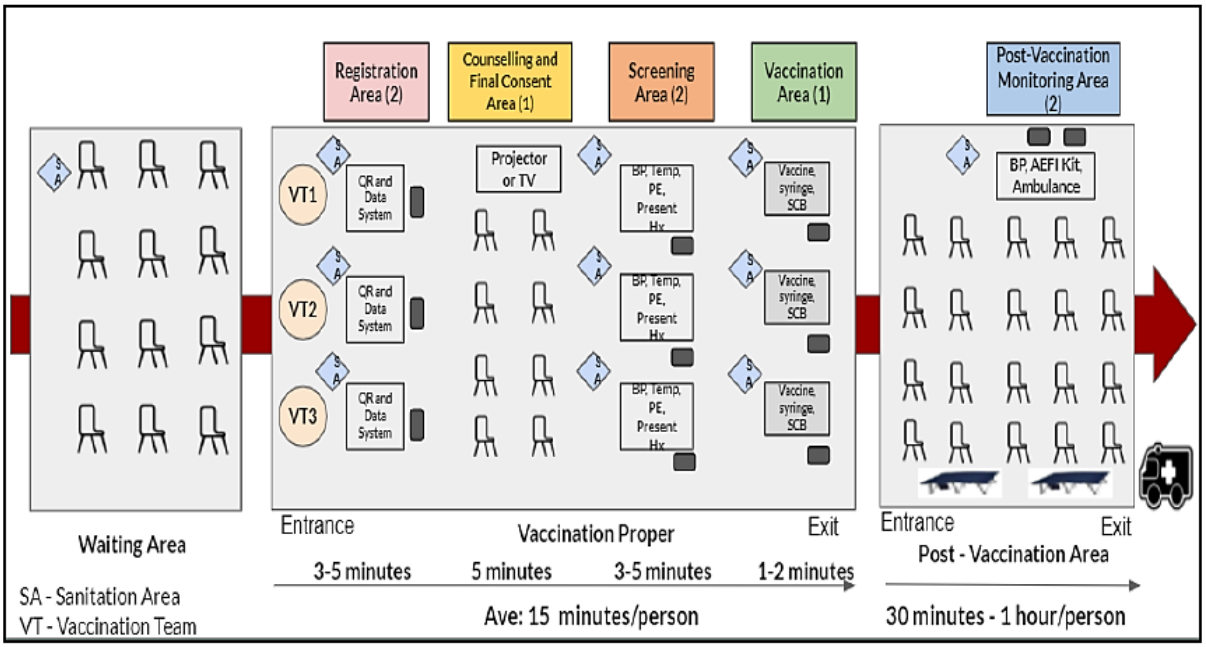
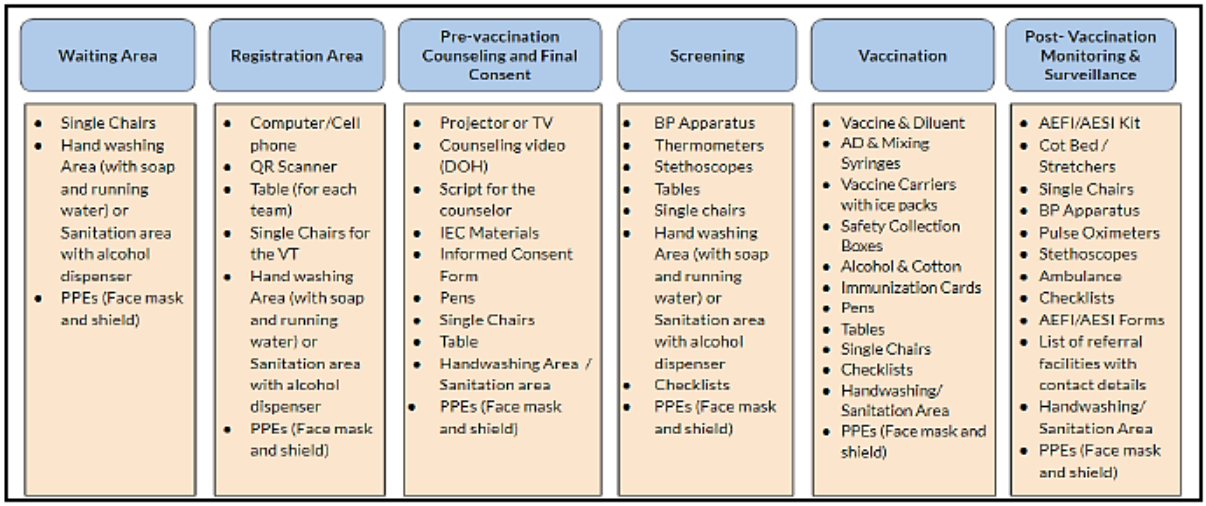


Figure 4.5. Equipment are needed in the vaccination site/post

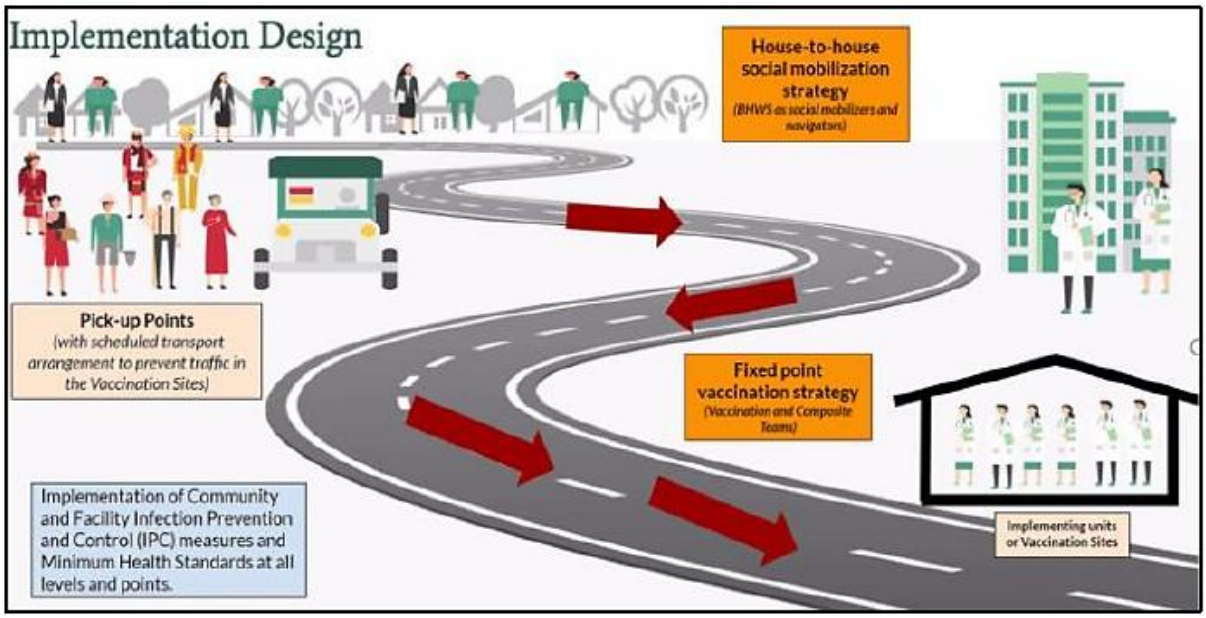


2. Implementation Phase

*Mobilizing the eligible recipients***.** During the vaccination activity, eligible recipients who have successfully registered for vaccination shall proceed to the assigned vaccination posts/sites based on the schedule provided or they may be fetched from assigned pick-up points through previously arranged transport mechanisms. BHWs, local officials and other personnel may

also do house-to-house visits to mobilize eligible recipients who have successfully registered for the vaccination, so that they can proceed to the assigned vaccination site (see Figure 4.6).

Figure 4.6. Illustration of the mobilization of eligible recipients for the actual COVID-19 vaccination



The following steps shall be undertaken every vaccination day:

1. Before every vaccination activity, prepare the vaccine carriers and the ice packs.
2. In each vaccine carrier, arrange the frozen ice packs exactly as recommended on the manufacturer's instruction on the inside of the lid. Do not cover the frozen ice packs in paper.
3. Prepare re-sealable plastic bags and an extra one for opened/used vials (after the vaccination day).
4. Place 20 vaccine vials in one re-sealable plastic bag. The number of vaccines to be used per vaccination team shall be determined prior to the activity.
5. Put the resealable plastic with the vaccines in the middle of the vaccine carrier to protect them from damage due to condensation.
6. Daily issuances of vaccines should be recorded in the distribution and collection form acknowledged by the vaccination team leader / supervisor.
7. At the end of each vaccination day, all vials (unopened, fully or partially used) shall be placed in resealable plastic bags and returned to the same health facility where they received the vaccines in the morning. The facility supervisor shall record the vials received at the end of each vaccination day.
8. Health facilities / vaccination distribution points must then keep the unopened usable vials in the cold chain. The vaccines can be used for the next day.
9. All opened or unusable vials contained in resealable plastic by twenties (20s) must be kept in a sack and be picked up by the CHD at the end of the vaccination round for disposal.

Table 4.11. Vaccine distribution and collection form

Vaccine Distribution and Collection Form

Region:_____ Province:_____ Municipality:_____ Date (mm/dd/yyyy):_____

Name of VT/Barangay/ City/ Municipality/ Province	Target	Number Immunized	Vaccine Distribution								Name of Vaccinator	Contact Number	Signature
			Vaccine Issued		Additional Vaccine Issued		Total Vaccine Received (in Vials)	Empty / opened vials	Unopened vial returend (in Vials)	Total (in Vials)			
			Quantity (in Vials)	Lot/ Batch No.	Quantity (in Vials)	Lot/ Batch No.							

Vaccine Administration

Prior to the vaccination, the vaccinee will be provided with a vaccination date and time schedule, and an immunization card with a QR code, which he/she will bring to the vaccination post, to ensure smooth implementation of the vaccination activity and avoid congestion in the vaccination site/post. No walk-in vaccination shall be accommodated since vaccines allocated for the day are sufficiently allocated for the projected number of vaccinations to be conducted in a day. However, a walk-in eligible recipient shall be scheduled and provided with an immunization card with a QR code immediately, and advised accordingly.

Upon arrival at the vaccination site/post, the vaccinee shall wait for his/her turn in the waiting area. Upon entry in the waiting area, the vaccinee's temperature will be checked. The Safety Officer shall ensure that physical distancing measures shall be implemented at all times at the waiting area.

Each vaccinee shall be assigned to a specific vaccination team. When his/her turn arrives, he/she will proceed to the vaccination area, and in a stepwise approach, he/she will proceed from the registration area, health education area, screening area and lastly, to the vaccination area.

At the registration area, the vaccinee shall present his/her immunization card with QR code and shall be scanned. The profile of the vaccinee shall be retrieved in the computer system and the vaccinee's identity shall be verified by presenting his/her government ID (eg. driver's license, PRC license, PhilHealth ID, UMID, Passport, etc.). Other relevant documents shall be presented at the registration.

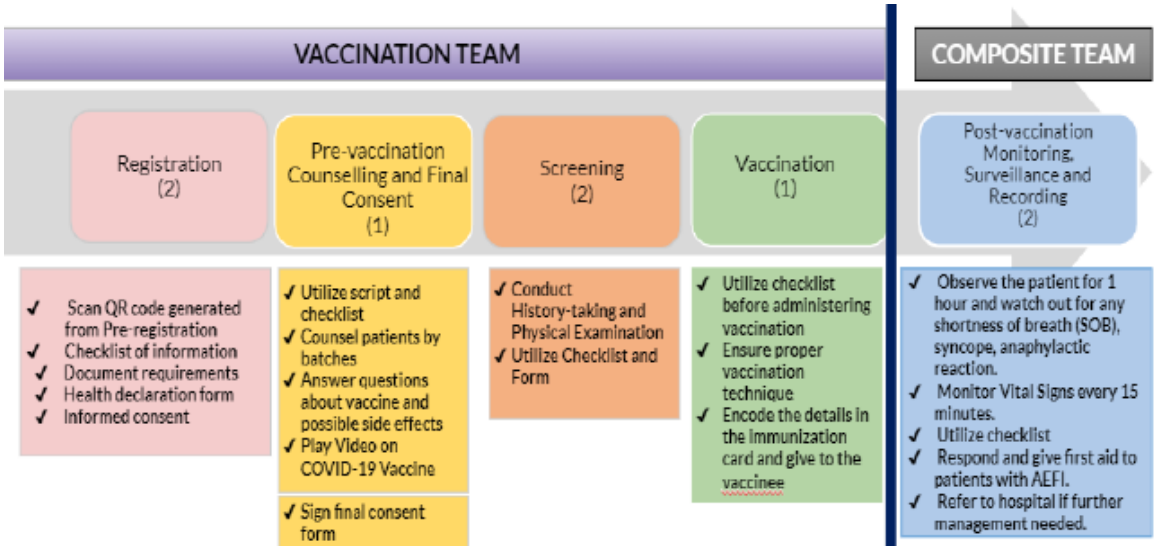
The vaccinee shall then be directed to the Health Education Area where health educators shall present IEC materials and answer any question the vaccinee may have regarding the COVID-19 vaccine. Once all questions are answered, the vaccinee shall be asked to sign the Final Consent form.

At the Screening Area, the personnel assigned shall scan the patient's QR code and conduct history-taking and physical examination to ensure the eligibility of the vaccinee. Using both the CEIR and screening form hard copy, the health worker shall update the vaccinee's profile and determine whether or not he/she is qualified to receive the vaccination.

The vaccinee shall then be directed to the Vaccination Area where the vaccine shall be administered. Once vaccinated, the QR code shall be scanned and the vaccination details (e.g., date of vaccination, vaccine manufacturer, batch number, lot number, name of vaccinator and signature) shall be recorded in the CEIR and immunization card.

After vaccination, the vaccinee shall be observed for adverse reactions for 30 minutes to one hour at the post-vaccination monitoring area. The post-vaccination monitoring area must be closely linked with an identified referral health facility. After an hour, once cleared, the vaccinee shall be provided with instructions about the possible adverse reaction that the vaccinee might experience and the location of facilities where he/she can proceed should he/she experience adverse reactions.

Figure 4.8. Vaccine administration flow



Infection Prevention and Control (IPC), Injection Safety, Management of Health Care Waste and Reverse Logistics

All throughout the implementation phase, infection prevention and control measures must be practiced. Table 4.9 shows minimum standards for IPC that must be practiced during the vaccination.

Table 4.12. Minimum infection prevention and control measures during COVID-19 vaccine administration

Aspect of vaccine administration	Minimum IPC measures
Vaccination post	• Open or well-ventilated areas • Frequently disinfected areas • Spacious enough to implement physical distancing, crowd control measures

	● Limit number of vaccinees within the vaccination area to <24 individuals at a given time.
Vaccination Team and Composite Team, and other personnel in the vaccination site	● Wear face mask and face shield ● Practice hand hygiene before and after procedure/vaccine ● Limit contact between vaccinator and vaccinee to less than 15 minutes ● Daily self-monitoring for COVID-19 symptoms ● Log-in upon entering and exiting a vaccination area on a daily basis
Vaccinees	● Wear face mask and face shield ● Frequently practice hand hygiene ● Abide to physical distancing guidelines

3. Post- Implementation Phase

Reverse Logistics

The following are reverse logistics guidelines:

a. Empty and unopened vials should be returned daily by the Vaccination Team to the implementing unit or RHU/CHO for consolidation.
b. At the end of each vaccination period, accounted empty/opened vials should be kept in a safe and secured place in the health facility.
c. Unopened usable vials should remain stored at required temperature.
d. Properly accomplish Form A to await pick up by the CHD for destruction.

Computation and Terms

a. Calculate vaccine wastage rate: (number of vaccine doses used - number of eligible population) / number of vaccine doses used x 100 = vaccine wastage rate (%)
b. “Vaccine doses used” includes doses used for immunization and all doses discarded or lost for any reason (including expiry, indication of heat exposure, missing inventory, cold chain failure, freezing or discarding of open vials of vaccine at the end of a session or campaign activity).
c. The wastage rate is the percentage of vaccine doses that are wasted - in other words, doses that are not used for immunization and are discarded or lost for any reason.

Retrieval of vials from the field

a. The vaccination team should return vials in re-sealable plastic bags (a maximum of 20 vials per resealable plastic bag).
b. Supervisors should count collected empty vials at the end of vaccination day.
c. Empty vial retrieved should be well accounted and documented.

Vials accountability. Unaccounted vials should be:

a. Reported to the supervisor.
b. Reason/s for the unaccountability should be stated.
c. Investigated with the support of the LGUs.
d. Incident report should be prepared and endorsed by the following: NIP, RHU, LGUs and submitted to overseeing VOC.

4.1.4 Assessment, Monitoring, and Evaluation

Vaccine Safety Monitoring, and Management of Adverse Events Following Immunization

The role of vaccine safety monitoring during COVID-19 vaccine introduction is to facilitate the early detection, reporting, notification, investigation and analysis, and feedback of Adverse Events Following Immunization (AEFIs) and Adverse Events of Special Interest (AESI), to ensure appropriate and timely case management and response. These activities shall assist vaccinees and ensure them of prompt and timely response should an AEFI occur. The AEFI surveillance entails:

- Timely detection of serious AEFIs/AESIs to provide up-to-date and accurate data that can be shared with relevant stakeholders for appropriate response;
- Generation of data to characterize the safety of the COVID-19 vaccines in use;
- Identification, investigation, assessment and validation of safety signals and recommendation of appropriate public health interventions or other interventions; and
- High quality safety surveillance and maintenance of public and stakeholder confidence in vaccines and immunization

The WHO defines *Adverse Event Following Immunization* (AEFI) as any untoward medical occurrence which follows immunization, and which does not necessarily have a causal relationship with the usage of the vaccine. If not rapidly and effectively dealt with, AEFIs can undermine confidence in a vaccine and ultimately have dramatic consequences for immunization coverage and disease incidence. Based on consultations with experts and the latest data from published clinical trials as of 16 January 2021, the following are the identified AEFI from various brands of COVID-19 vaccination and must be reported.

Table 4.13. List of Adverse Events Following COVID-19 Vaccination of Selected Candidate COVID-19 Vaccine

Manufacturer	University of Oxford and Astrazeneca						BioNTech and Pfizer	NIAID and Moderna	Novavax		
Adverse Events*											
Age	18-55		56-69		>70+			>18			
									Mild	Moderate	Severe
Pain at injection site	75%	64%	63%	54%	34%	22%	84.1%	92.0%	45% 39%	0% 12.5%	0%
Redness	7%	11%	12%	12%	11%	11%	9.5%	10.0%	0%	0%	0%
Swelling	7%	7%	12%	12%	14%	14%	10.5%	14.7%	0%	0%	0%
Tenderness	87%	75%	83%	76%	64%	62%		19.8%	36% 45.8%	16% 29.2%	0% 4.2%
Warmth	27%	25%	22%	32%	27%	14%					
Itch	14%	25%	22%	18%	14%	11%					
Induration	7%	7%	12%	12%	11%	11%					
Feverish	58%	22%	27%	32%	22%	20%					

Fever	39%	7%	12%	12%	7%	7%	14.2%				15.5%	4.2%		
Chills	50%	27%	27%	27%	14%	7%	31.9%				45.4%			
Joint Pain	48%	17%	35%	36%	27%	20%	23.6%				46.4%	8.0%	4.2%	8.3%
Muscle Ache	67%	52%	56%	44%	32%	32%	38.3%				61.5%	24% 37.5%	8% 8.3%	- 8.3%
Fatigue	87%	69%	69%	61%	56%	48%	62.9%				70%	28% 25%	12% 16.7%	0% 8.3%
Headache	78%	45%	69%	54%	56%	34%	55.1%				64.7%	28% 41.7%	4% 16.7%	4% -
Nausea/ Vomiting	41%	20%	31%	40%	20%	17%	1.1%				23%	12.5%	4%	
Diarrhea							11.1%	10. 4%	8.2%	8.3%				
Need for antipyretics							27.8%	45. %	19.9%	37.7%				
Malaise	56%	43%	46%	27%	39%	25%	0.5%					20% 12.6%	8% 16.7%	0% 8.3%
Serious Adverse Events* Event-based	0.7% (84/12021)						0.4% (n=10841) 18-55 0.8% (n=7960) >55				1.0% (n=147)			
	haemolytic anaemia in the control group neuroinflammatory disorders transverse myelitis which is likely to be idiopathic, short segment, spinal cord demyelination fever higher than 40°C Deaths road traffic accident, blunt force trauma, homicide, and fungal pneumonia						Related to vaccine 1 Lymphadenopathy 1 Shoulder injury due to incorrect administration Unsure Appendicitis Facial paralysis (Bell's palsy) G51.0 7,400 Ventricular arrhythmia I47.0 12,200 pain in the lower back/extremities/and radicular paraesthesia <u>Coincidental</u> Active group 1 Anaphylactoid reaction (related to bee sting) 1 Drug hypersensitivity (doxycycline) T78.2 Anaphylaxis 7600 Placebo group 1 Anaphylactoid reaction due to ant bite 16-17 years old 1 facial bone fracture Deaths 7 deaths (2 active 4 placebo) Due to pre-existing diseases including aortic rupture				Lymphadenopathy 1.1% Hypersensitivity:1.5% (injection site rash and injection site urticaria) 3 cases of Bell's palsy facial swelling intractable nausea and vomiting in a participant with prior history of severe headache and nausea requiring hospitalization.			

Special population	Elderly: safety data limited in >65, no dosing adjustments Pediatric: no data available	Pregnancy: very limited Elderly: no specific safety concern Immunocompromised: on stable ART for 6 months, Pediatric: limited participants	for use in individuals 18 years of age and older. Elderly >65 no notable differences in the safety profiles

In the context of the COVID-19 vaccination program, any health event that has occurred after vaccination must be reported and considered as AEFI, pending proper professional consultation/case classification. AEFI surveillance shall be performed by the Surveillance Officer (stimulated passive surveillance) every two (2) weeks for the first two (2) months, then monthly for one year. This is to ensure that no health event relevant to COVID-19 shall be experienced by the recipient per incubation period of the disease.

Figure 4.9. Process flowchart for AEFI surveillance and response in the context of COVID-19 vaccine administration

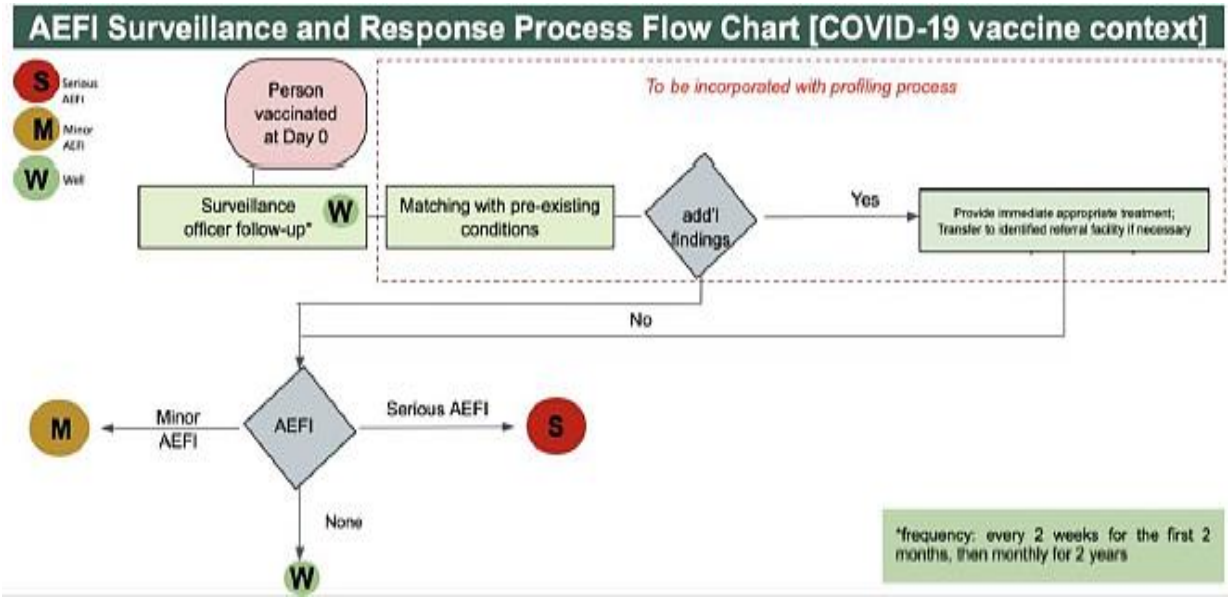


Figure 4.10. Process flowchart for responding to serious AEFIs of COVID-19 vaccine

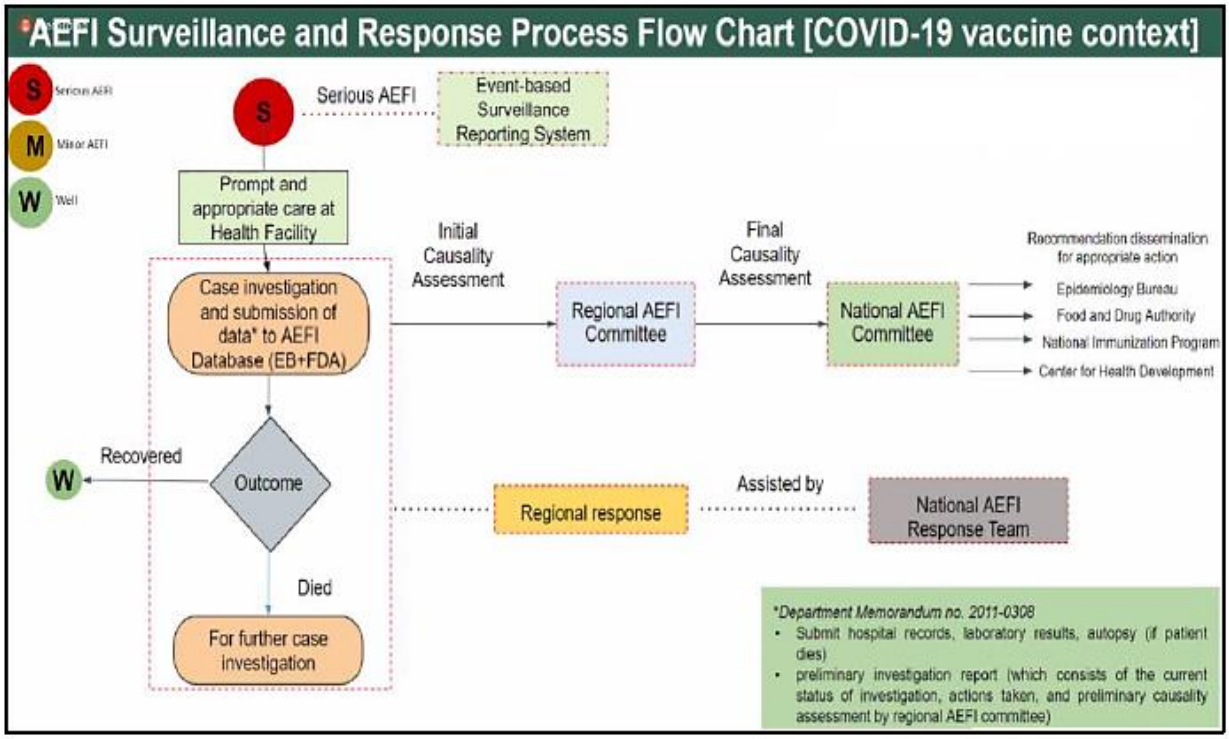


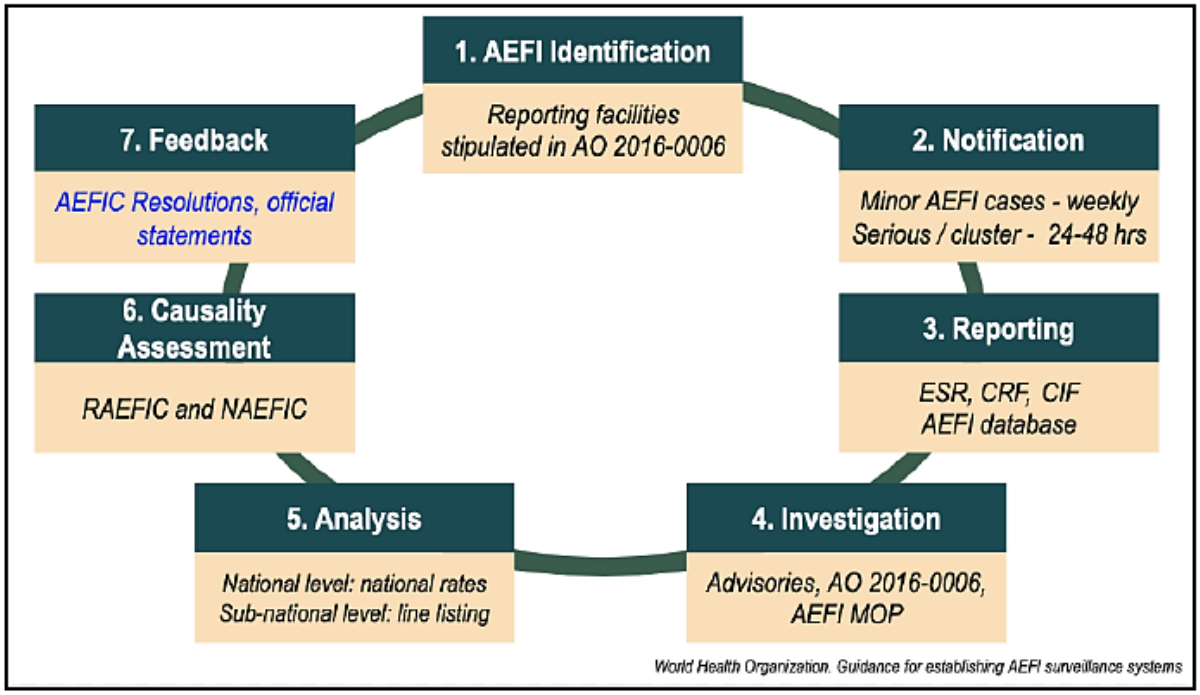
Table 4.14. WHO-recommended safety surveillance activities for all countries introducing COVID-19 vaccine regardless of AEFI surveillance capacity

Objective	Recommended AEFI surveillance activities
Strengthen routine passive AEFI surveillance reporting systems for the management of increased frequency or severity of AEFI reports (mild, moderate and severe)	● Conduct training on identification and reporting of AEFI for health care professionals. ● Update, print and distribute AEFI surveillance tools. ● Use both vaccine tracking information and passive AEFI reporting information to perform vaccine-specific safety analyses. ● Review and adapt processes for timely reporting, review and data sharing nationally, regionally and globally (e.g. uploading data to global databases such as the WHO VigiBase) ● Develop clear standard operating procedures (SOPs) for the coordination process between the NRA, NIP/EIP, and other institutions with responsibilities for AEFI surveillance. ● Consider coordination of activities with Public Health Emergency Units. ● Consider setting up AEFI committees at subnational as well as national level, particularly in large countries
Investigate potential AEFIs causing concern, such as clusters, serious events, programmatic errors, community concerns	● Prepare investigation teams and train them for AEFI investigation activities that are relevant in the population being vaccinated. ● Update, print and distribute AEFI investigation tools to obtain information on specific outcomes. ● Ensure the collection and storage of all relevant data to help make a causality assessment (AEFI reporting and investigation forms, clinical case record, laboratory reports, autopsy reports, etc.)

Perform systematic causality assessment of AEFIs causing concern	● Constitute an National AEFI committee to review and respond to AEFI safety signals and public concerns or contact the WHO Country or Regional Office or send email to gvsi@who.int for assistance. ● Provide training on causality assessment processes using WHO causality assessment guidelines for members of the National AEFI committee. ● Ensure regular updates to the Committee members on COVID-19 vaccine development and safety data, including safety reports from ongoing phase III clinical trials or any events reported in clinical trials. ● Foster and use the committee's expertise to identify AEFI cases in need of further investigation, such as AESIs. 5. Anticipate an increased number of AEFI reports that will need to be reviewed and consider including AEFI committees at subnational as well as national level, particularly in large countries.
Use AEFI and disease surveillance data to detect potential safety signals or clustering of events	● Regularly review and report AEFI surveillance data, particularly those relevant to AESIs or other conditions identified during pre-licensure COVID-19 vaccine clinical trials. ● Explore the use of disease surveillance data to complement AEFI surveillance systems for the detecting of AESIs, if indicated. ● Consider use of early signal detection methods, especially for certain AESIs.
Prepare comprehensive plans to respond rapidly to any COVID-19 vaccine-related event	● Outline roles and responsibilities of key stakeholders (including the private sector) for the implementation of safety surveillance activities and responding to vaccine-related events. ● Keep stakeholders up to date with COVID-19 vaccine safety information. ● Communicate with WHO regions and globally and share data on outcomes of AEFIs and AESIs in a rapid, timely and regular manner.
Address concerns of healthcare professionals and maintain community confidence. (Link to communication module to be added)	● Create and share a COVID-19 vaccine safety communication plan with relevant stakeholders. ● Train and support personnel at all levels to address concerns that may arise before, during and after COVID-19 vaccine introduction. ● Develop, print, and distribute messages concerning the safety COVID-19 vaccines

Note: Objectives and Recommendations were adapted from the WHO COVID-19 Vaccines Safety Surveillance Manual: Module on Establishing surveillance systems in countries using COVID-19 vaccines, 2020.

Figure 4.11. AEFI surveillance cycle



Further details on the AEFI are in Section 7.4 of the ESMF.

4.2 Health Care Waste Management of Infectious Wastes Related to COVID-19

DENR Memorandum Circular 2020-16 provides the guidelines with which waste transporters and treatment, storage, and disposal (TSD) facilities need to comply with during the extended community quarantine. In order to avoid the piling of infectious health care wastes and prevent environmental and community contamination, the continuous operations of the waste transporters and TSD facilities are ensured through the simplified permit provisions such as through the issuance of a special permit to transport (SPTT) online and the extension of the validity of the TSD Registration Certificates and Transporter Registration Certificates for 60 days and immediate renewal within 5 days after lifting of the ECQ. Similarly, DENR Memorandum Circular 2020-20 provides for the simplified procedures for permit issuance of transporters and TSDs, as well as safety and health protocols through the submission of manifest or the report of compliance and completion of transport and the certificate of treatment (COT) by the transporter and TSD, respectively. The manifest of the registered transported shall be attested by the duly designated representative or PCO of the health care facility or hazardous waste generator and the TSD, within 24 hours for M501 wastes and 7 days for other hazardous wastes after delivery to the TSD facility. The TSD facility shall also submit a report of compliance and completion of treatment or the COT to be attested by their PCO within 7 days after M501 wastes and 21 days for other types of hazardous wastes, after completion of treatment.

The DENR Administrative Order 2013-22 entitled Revised Procedures and Standards for the Management of Hazardous Wastes provides the procedures for generation and compliance to the legal and technical requirements of hazardous waste management, including guidelines for waste generators, transporters, and treatment, storage, and disposal facilities. With this policy,

pathological, infectious wastes, and sharps are categorized as M501 wastes or pathological or infectious wastes while the vials used in the vaccination activities will be classified as M503 or pharmaceuticals and drugs. Hence, the syringes, cottons, and other materials used in the vaccination which had contact to the patient are considered as infectious wastes (M501). The M501 and M503 health care wastes generated from the vaccination activities will be collected and transported by DENR- registered waste transporters and will be treated and disposed of by DENR- registered TSD facilities.

It is important to conduct a capacity mapping of the health care facilities on their health care waste management. This will be conducted through the HCWM self- audit tools developed under the Parent Project, including the determination if the health facility has existing in- house treatment and contract with DENR- accredited waste service providers. These will be done with consultation and requested assistance from the DOH Health Facilities Development Bureau.

In view of the upcoming COVID-19 vaccination, the DOH has released the Department Memorandum (DM) 2021-0031 entitled 'Interim Guidelines on the Management of Health Care Wastes Generated from COVID-19 Vaccination.' In this guideline, all materials used in the vaccination will be considered as infectious wastes, which include but are not limited to empty vaccine vials, syringes/sharps, PPEs, cottons, tissues, and other materials which had contact with the patient. It provides guidelines on the management of wastes generated from the COVID-19 vaccination activities, from segregation, onsite collection and transport, onsite storage, offsite transport, up to the offsite treatment and disposal of these hazardous/infectious wastes. It covers all cover all health care facilities, CHDs, and LGUs involved in the COVID-19 vaccination. This Interim Guideline includes reverse logistics to account and monitor the inventory of vaccines, through the collection of empty vaccine vials in groups of 20 pieces in resealable bags prior to storage in yellow plastic liners and waste audit, i.e., volume recording.

Since not all health care facilities which will be vaccination sites do not have contract with waste service providers, the CHD or Provincial Health Office (PHO) were designated as temporary storage areas, from which the waste service contractor to be procured by the DOH will be collecting (Table 4.15). The DOH has also submitted a request to DENR for a (1) Special Permit to Transport (SPTT) for the collection, transport, treatment, and disposal of the health care wastes generated from the COVID-19 vaccination activities through the DOH- procured transporters and TSD facilities and for the (2) DOH CHDs and PHOs to be allowed as temporary waste storage facilities to cater to those health care facilities without existing access to the TSD providers.

A series of orientation and consultation meetings had been conducted by the DOH DPCB with the Environmental Health Coordinators in the CHDs to discuss this DM. The CHD and PHO will determine suitable temporary waste storage areas in their facilities.

Table 4.15. COVID-19 Immunization Program Waste Collection Point for Health Care Facilities without Waste Service Providers

Region	Waste Collection Point	Location
NCR	CHD	6 Barangay Road, Welfareville Compound, Barangay Addition Hills, Mandaluyong City 1550
CAR	CHD	BGHMC Compound, Baguio City, Benguet 2600

I- Ilocos	CHD	8 MacArthur Highway, Parian, San Fernando City, La Union 2500
II- Cagayan Valley	CHD	Carig Regional Center, Tuguegarao, Cagayan
III- Central Luzon	CHD	Regional Government Center Park, Diosdado Macapagal Regional Center, Main Road San Fernando, Pampanga 2000
IV-A- CALABARZON	PHOs	**Provincial Health Office- Cavite** Cavite Collaboration Center for Public Health, Gen. Emilio Aguinaldo Memorial Hospital Compound, Brgy. Luciano Trece Martires City, 4109 **Provincial Health Office- Laguna** J. De Leon St, Santa Cruz, Laguna 4009 **Provincial Health Office- Batangas** Roxas Rd, Kumintang Ibaba, Batangas, 4200 **Provincial Health Office- Rizal** **M. Santos Street, Antipolo City, Rizal** **Provincial Health Office- Quezon** Quezon Avenue, Lucena, Quezon Province 4301
IV-B- MIMAROPA	PHOs	**Provincial Health Office- Occidental Mindoro** Old Provincial Hospital Compound, Ilaya, Calapan 5200 **Provincial Health Office- Oriental Mindoro** **Mamburao, Occidental Mindoro, 5106** **Provincial Health Office- Marinduque** Santol Street, Boac, Marinduque **Provincial Health Office- Romblon** Bldg. 1, RPH compound, Brgy. Liwanag, Odiongan, Romblon **Provincial Health Office- Palawan** Prim Building, Peo Road, Sps Government Center, Puerto Princesa City, Palawan
V- Bicol	CHD	Bagtang Road, Legazpi, Albay 4500
VI- Western Visayas	CHD	Q. Abeto, Mandurriao, Iloilo City 5000
VII- Central Visayas	CHD	Osmena Boulevard, Cebu City
VIII- Eastern Visayas	CHD	Candahug, Palo Leyte 6501
IX- Zamboanga Peninsula	CHD	Labuan - Limpapa National Road, Zamboanga, Zamboanga del Sur
X- Northern Mindanao	CHD	J. Seriña St, Cagayan de Oro, 9000 Misamis Oriental
XI- Davao	CHD	JP Laurel Ave, Buhangin, Davao City, Davao del Sur

XII- Soccsksargen	CHD	ORG Compound, Gov. Gutierrez Ave., RH VII, Cotabato City 9600
XIII- Caraga	CHD	Pizarro-Narra Streets, Butuan, 8600 Agusan Del Norte
BARMM	PHOs	**Provincial Health Office- Lanao del Sur** Marawi City, Lanao del Sur **Provincial Health Office- Lanao del Norte** Pigcarangan, Tubod, Lanao del Norte Tubod, Philippines, 9209 **Provincial Health Office- Maguindanao** Old Provincial Capitol, Don Teodoro V. Juliano Avenue, Cotabato City **Provincial Health Office- Basilan** Capitol Builduing, Isabela City Basilan 7300 **Provincial Health Office- Sulu** Asturias St., Jolo, Sulu 7400 **Provincial Health Office- Tawi-tawi** Tubig-Boh Bongao, Tawi-Tawi, Bongao, Tawi-Tawi

4.3 Health Care Waste Transporters and Treatment, Storage, and Disposal Facilities (TSDs)

As of the May 2020 data of the Department of Environment and Natural Resources-Environmental Management Bureau, not all regions in the Philippines have DENR- accredited waste treaters and treatment, storage, and disposal facilities (TSDs) for health care wastes, specifically for M501 and M503 wastes.

Tables 2 and 3 show the summary of DENR- accredited M501 and M503 waste treaters and TSDs, respectively. The full list of the treaters and TSDs for M501 and M503 wastes are in Annexes J and K, respectively. It should be noted that the MIMAROPA, Central Visayas, Zamboanga Peninsula, Northern Mindanao, Davao, Soccksargen, Caraga, and BARMM regions have no registered M501 and M503 waste transporters located in their region. Meanwhile, the Cagayan Valley, Bicol, Zamboanga Peninsula, Soccsksargen, and BARMM regions have no accredited M501 and M503 waste TSDs located in their regions.

The unavailability of appropriate DENR- accredited waste transporters and TSD facilities poses health and environment risks, such as exposure of the public to infectious wastes, considering the high volume of health care wastes expected to be generated from the COVID-19 immunization activities.

Table 4.16. DENR- accredited M501 and M503 waste treaters

Region	Transporter			
	M501 only	M503 only	M501 and M503	Total
NCR	1	9	5	15
CAR	—	—	1	1
I- Ilocos	—	—	1	1
II- Cagayan Valley	1	—	—	1
III- Central Luzon	—	7	11	18
IV-A- CALABARZON	1	12	16	29
IV-B- MIMAROPA	—	—	—	—
V- Bicol	1	—	1	2
VI- Western Visayas	—	—	1	1
VII- Central Visayas	—	—	—	—
VIII- Eastern Visayas	3	1	1	5
IX- Zamboanga Pen.	—	—	—	—
X- N. Mindanao	—	—	—	—
XI- Davao	—	—	—	—
XII- Soccsksargen	—	—	—	—
XIII- Caraga	—	—	—	—
BARMM	—	—	—	—
			Grand Total	73

Table 4.17. DENR- accredited M501 and M503 waste TSD facilities

Region	No. of DENR- accredited M501/3 TSDs
NCR	6
CAR	1
I- Ilocos	2
II- Cagayan Valley	–
III- Central Luzon	19
IV-A- CALABARZON	7
IV-B- MIMAROPA	1
V- Bicol	–
VI- Western Visayas	1
VII- Central Visayas	1
VIII- Eastern Visayas	1
IX- Zamboanga Peninsula	–
X- N. Mindanao	2
XI- Davao	1
XII- Soccsksargen	–
XIII- Caraga	1
BARMM	–
Grand Total	43

4.4 Training for Implementers on the COVID-19 Vaccination Activities

The DOH has developed a set of training modules in support to the upcoming vaccination activities against COVID-19. It aims to provide guidance to health workers and partner implementing agencies on the efficient nationwide implementation of the COVID-19 Immunization Program. Content experts on COVID-19, vaccination, human resource training, data management, logistics, health communication, and counselling, surveillance, and waste management were consulted for development of this training course. The training course encompasses the whole spectrum of the delivery of services from pre- to post-implementation.

This training course shall update the skills and knowledge of our program coordinators and implementers, surveillance teams, community health educators and workers and partner agencies on vaccination in consideration to dealing with a communicable / infectious disease and managing and administration of a new vaccine. This training course is composed of the following modules:

- Module 1 – Microplanning
- Module 2 - Profiling and Data Management
- Module 3 - Supply Chain and Cold Management
- Module 4 - Risk Communication and Community Engagement
- Module 5 - Mental Health and Psychosocial Support (MHPSS) and Counselling
- Module 6 – Immunization
- Module 7 - Managing Adverse Events Following Immunization (AEFI) following COVID-19 Vaccination
- Module 8 - Immunization Waste Management

Each module focuses on specific activities and tasks. The training shall follow a blended learning strategy combining different teaching and learning methodologies. eLearning for didactic topics and face-to-face skills training shall be utilized. Online and offline modules will be made available. Two (2-3) days shall be allotted to complete this whole training course.

A DOH Core and Regional Training Team will be organized to plan, strategize, oversee, and implement the cascading of this training course. They shall act as training lead and resource person on the conduct of training. Mentoring sessions and post-training supervision shall be conducted by trainers to ensure standard delivery of training and services.

The training course shall be monitored and reviewed by the Department of Health.

4.5 Air Quality and Healthcare Waste Incineration

Air quality in the Philippines (and Manila in particular) has improved substantially in the 20 year-period since the enactment of the *Clean Air Act of 1999* (CAA). A Japan International Cooperation Agency (JICA, 1997) study cited waste incineration as a major source of air pollution in Manila leading to a ban on incineration in 1999 under the CAA. The incineration ban was subsequently appealed with the Supreme Court ruling that only incinerators that emit poisonous and toxic emissions were banned. Hence, thermal waste treatment is permitted provided that emissions meet standards specified in the CAA. A phase-out of medical waste incinerators under the CAA was also deemed impractical due to the lack of affordable best available technologies (BAT). Incinerator operators are

required to self-regulate emissions and report to the Department of Environment and Natural Resources Environmental Management Bureau (DENR-EMB).

WHO (2019) describes the following HCW management hierarchy:

- The preferred approach is to avoid generating waste and thus minimise the quantity entering the waste stream.
- Where practicable and safe, those waste items that can be recovered for secondary use is the next most preferable method.
- Waste that cannot be recovered must then be dealt with by the least harmful options, such as treatment or land disposal to reduce their health and environmental impacts.

Under COVID-19 conditions the HCW quantities are expected to increase substantially potentially overwhelming thermal treatment capacity with associated OH&S and environmental pollution implications.

The Stockholm Convention recommends that priority consideration should be given to alternative processes, techniques or practices that have similar usefulness, but which avoid the formation and release of dioxins and furans. Non-incineration waste treatment technologies should always be implemented wherever possible. WHO has called on all stakeholders to uphold the Stockholm Convention and work towards incrementally improving safe health care waste management practices to protect health and reduce harm to the environment.

4.6 Indigenous Peoples

The project is likely to take place in areas with indigenous peoples, particularly for some regional health facilities and local health centers. No direct adverse impacts on indigenous peoples are expected from project activities, although as generally a marginalized group they may be more affected by the virus should it spread in their communities. Civil works are expected to be confined to existing premises of health facilities and would not require any land acquisition. Some health facilities in areas with indigenous peoples may be directly supported with vaccines, equipment, supplies, and critical medical services. Stakeholder engagement and information sharing at these sites would be key to ensure that indigenous communities and COVID-19 affected persons are able to avail themselves of health services supported by the Project.

The term “indigenous cultural communities/indigenous peoples” (ICC/IP) is used in the Indigenous Peoples Rights Act (IPRA) of 1997 (Republic Act No. 8371) and includes a wide variety of groups that share certain conditions which set them apart from mainstream society in the Philippines. The IPRA defines ICCs/IPs as a group of people or homogenous societies identified by self-ascription and ascription by others, who have continuously lived as organized community on communally bounded and defined territory, and who have, under claims of ownership since time immemorial, occupied, possessed and utilized such territories, sharing common bonds of language, customs, traditions and other distinctive cultural traits, or who have, through resistance to political, social and cultural inroads of colonization, non-indigenous religions and cultures, became historically differentiated from the majority of Filipinos.

The IPRA definition has been found to be consistent with the identifying characteristics for social groups covered by the Bank’s previous Operational Policy (OP 4.10) on indigenous peoples and is also considered consistent with the new E&S Standard 7 (ESS7) on indigenous peoples. ESS7 identifies social groups covered by the standard as a distinct social and cultural group possessing

the following characteristics in varying degrees: (a) Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others; and (b) Collective attachment6 to geographically distinct habitats, ancestral territories, or areas of seasonal use or occupation, as well as to the natural resources in these areas; and (c) Customary cultural, economic, social, or political institutions that are distinct or separate from those of the mainstream society or culture; and (d) A distinct language or dialect, often different from the official language or languages of the country or region in which they reside.

Indigenous peoples live in most areas of the Philippines, but the majority resides in Mindanao (about 60 percent) and North-Central Luzon (about 30 percent). There are no accurate census data regarding the number of indigenous peoples, but it is estimated to be between 10-15 million people. The National Commission on Indigenous Peoples (NCIP) officially recognizes the existence of 110 ethno-linguistic groups in the country. In Luzon, most of the indigenous peoples are concentrated in the northern mountain ranges of the Cordilleras (e.g. the Kalinga, Ifugao, Ibaloy, and Ilongot) and in the Sierra Madre mountain ranges (e.g. the Agta, Dumagat, and Itawis). They are also found in Zambales, Pampanga, Tarlac, Quezon Province, Pollilo Island, and the Bicol Peninsula (e.g. the Pinatubo, Baluga and Agta).

The Western Islands Region and Central Philippine Islands Region are home to the Mangyan, Tagbanua, Batak, Tau't Bato, Keney, Sulod, Magahat, Ata and Ati, mainly in Mindoro, Palawan, Panay and Negros. In the island of Mindanao, there are about fifteen major indigenous groups and several subgroups living in the interior rainforest, hills, plateaus, narrow valleys and marginal plains, which include the Mandaya, Manobo, Bilaan, T'boli, Tiruray, Subanun, Higaonon, Tasaday, Bagobo, Manuvu, Matigsalug, Ata, and others; collectively they are called Lumads. The majority Muslim population in Mindanao, called Moro, is not considered to meet the identifying criteria as indigenous peoples and ESS7 is not applicable to them. The Bangsamoro Autonomous Region in Muslim Mindanao or BARMM is inhabited by indigenous peoples, including some marginalized Muslim groups such as the Badjao.

4.7 Disadvantaged and Vulnerable Groups

4.7.1 Persons with Disabilities

As COVID-19 continues to have wide-reaching impacts across the globe, it is important to note how persons with disabilities are uniquely impacted by the pandemic and may have constraints in accessing services. This section serves as a brief overview of emerging impacts and sets out some preliminary steps to mitigate the impact within the Bank's unfolding operations on COVID-19.

Situation Overview in Key Areas

Health

- Many persons with disabilities have additional underlying health needs that make them particularly vulnerable to severe symptoms of COVID-19, if they contract it.
- Persons with disabilities may be at increased risk of contracting COVID-19 because information about the spread of the disease, the symptoms associated with it, and how to prevent getting it are not provided in accessible formats, such as print materials in Braille or large print, sign language interpretation, captions, audio provision, and graphics.

- Persons with disabilities may be at increased risk of contracting COVID-19, as they may not have the same access to handwashing facilities/alternatives or may have trouble social distancing because they require in-person assistance in various ways.
- Some persons with disabilities who require personal protective gear or other medical supplies, such as ventilators, for their regular health needs may have more difficulty accessing them due to an increased demand for those particular items.
- In addition, in economies where persons with disabilities have personal assistants for essential home-based care social distancing mandates may jeopardize support received, and the burden of care heightened.
- Existing physical and communication barriers that limit the accessibility of health systems still exist and might prevent persons with disabilities from seeking appropriate care for COVID-19 and other needs.
- Reduced access to personal aides and support is likely to have harmful effects on health. In particular, there may be long-term impacts on sexual and reproductive health because of lack of access to clean water, contraceptives, and menstrual hygiene products.

Education

- As schools close nation-wide in over 160 countries and many more at localized levels, over 87% of the world's student population is out-of-school, interrupting educational progress and risking that children with disabilities have difficulty returning to school.
- Interruption of schooling can also interrupt access to basic services like meal programs; assistive technologies; access to resource personnel; recreation programs; extracurricular activities; and water, sanitation, and hygiene programs, all of which have benefits for children with disabilities.
- In settings where online learning is possible and provided to ensure instructional continuity, children with disabilities may have difficulty accessing the online platforms and content if accessibility features are not considered. They may miss out on important therapies, services, or accommodations they typically receive to support their learning if alternative options are not offered.

Economic and Employment Impacts

- Persons with disabilities already experience higher poverty rates and lower levels of employment. The current economic situation is expected to exacerbate economic and employment instability for persons with disabilities, especially those who are freelance workers or self-employed.
- Persons with disabilities represent a high proportion of informal sector employment, including the gig economy which is particularly adversely affected by the current economic environment and pandemic.
- Workplace accommodations, including physical accommodations or assistive technologies, may be workplace bound and employees with disabilities may face delays in receiving similar setups at home to continue their job tasks.

Transport and Travel

- As public transport systems reduce or stop services, persons with disabilities who rely on these methods for accessible transport may not be able to travel, even for basic necessities or critical medical appointments.
- With rapidly changing guidance and travel restrictions, persons with disabilities might not be able to return to their homes or to places that are more accessible to them.

Social Protection and Safety Nets

- There are concerns and reports that existing barriers, isolation, stigma, and discrimination are intensifying amid the outbreak.
- Social protection systems are weak in many countries and do not always cater to the needs of persons with disabilities.
- Safety nets may need to cover caregiving and other expenses particularly those emerging from ruptures in services for persons with disabilities.
- With increased stress, family confinement, and isolation, there is also an increased risk of gender-based violence. Since evidence shows that persons with disabilities, particularly women and girls, experience greater rates of violence and abuse, they are at a heightened risk during this period.

4.7.2 Disability-Inclusion in the World Bank's COVID-19 Response

With the robust funding commitments to help clients fight COVID-19, there are opportunities to address persons with disabilities and limit the impacts delineated above. DOH has consulted with organizations representing persons with disabilities (PWD) and developed measures to address their particular circumstances and needs.

The DOH Health Facilities Development Bureau (HFDB) has reported that there are 10 provincial hospitals which currently have Filipino sign language interpreters (FSL) who are mostly social workers employed by the hospital. They are as follows:

Table 4.18. Health care facilities with FSL interpreters

Region	Hospital
NCR	Jose Fabella Memorial Hospital, Lung Center of the Philippines
I	Mariano Marcos Memorial Medical Center, Ilocos Training and Regional Medical Center, Region I Medical Center
IV	Batangas Medical Center
VI	Corazon Locsin Montelibano Memorial Regional Hospital, Don Jose Monfort Memorial Medical Center Extension Hospital
VII	Vicente Sotto Memorial Medical Center
XII	Cotabato Regional Medical Center

According to the Degenerative Disease Office of the Disease Prevention and Control Bureau (DPCB-DDO), the new education curriculum of social workers has integrated basic FSL. It should be noted that hospitals have at least 1 social worker. It would be ideal if the employed social worker has background on FSL. The Metro Manila and CALABARZON Centers for Health Development (CHDs) are conducting community- based trainings on FSL. It is planned to cascade the training to the other regions in 2021. The Congress is also discussing the provision of FSL interpreters in health facilities. However, the timeline for this is not yet known.

The Project will be conducting a baseline assessment on the capacity of the recipient hospitals to provide accessible health services to vulnerable groups, including provision of virtual FSL services based on parameters such as availability of devices and internet connection. The baseline assessment will also cover GBV, VAWC, and IPs. Based on the results of this assessment, the Project in consultation with and through technical assistance of the DOH Bureaus will determine

the support to be provided by DOH to these facilities to improve health service delivery to the vulnerable groups.

The DOH Health Promotion Bureau (HPB) has no COVID-19 health promotion materials for the PWDs at present. Currently, they only have the 30- second video with FSL interpretation for polio. The HPB and the DPCB- DDO have included PWD- accessibility in their Communication Plan for 2021 which will include printer materials with Braille and videos with sign language. The DPCB-DDO in partnership with the Philippine Information Agency (PIA), have previously developed a Communication Plan for PWDs which was also presented to the PWD CSOs.

The concerns of PWDs, particularly accessibility, will be considered in the activities under Component 3, Project Management and Monitoring and Evaluation, of the project by integrating into the prevention and preparedness activities. Project management and monitoring should ensure that the improved capacity of the health care facilities results in improved access for PWDs.

The request for vaccination of children and other vulnerable groups as well as the guidelines for carers/personal assistants of PWDs and children will be relayed to the DOH DPCB, HFDB, and the DOH IATF Focal Team. The PWD CSOs will be requested to submit a formal request to the IATF (iatfsecretariat@gmail.com) and DOH regarding the grievances of the carers/personal assistants.

Other potential responses may include: Immediate, as part of the COVID-19 Support Package:

- Inclusion of vulnerable groups in the priority populations for vaccination in line with the WHO SAGE guidelines.
- Ensure existing health needs of persons with disabilities are met, and not superseded, by additional health system needs.
- Contract health facilities and temporary testing and treatment facilities that comply with universal access standards.
- Provide health information and government guidance in accessible formats. This includes explanations of what is happening during the time of care for deaf, blind and people with cognitive disabilities. Accessible formats may include print materials in Braille or large print, sign language interpretation, captions, audio provision, and graphics.
- Disaggregated monitoring and evaluating for prevention, preparedness, and community-based disease surveillance by disability status and type to understand how persons with disabilities are impacted in pandemic situations. This should include data on differentiated rates of infection, economic impacts, and regarding the burden of care, barriers of access to care for people with disabilities.
- Integrate accessibility and disability considerations into all technical assistance the World Bank provides on supporting the outbreak. Considerations may need to balance disability-related and social distancing needs, including exemptions for personal caregivers during lockdowns/shelter-in-place procedures and access to personal protective equipment (PPE).
- Employ universal design principles in expanding clinical care capacities, including refurbishing ICUs or inpatient hospital facilities.

Long-term actions to ensure the needs of persons with disabilities are met in the coming months and future outbreak situations:

- Train health workers, including community health workers or volunteers in rural communities; government officials; emergency planners; and other stakeholders on interacting with persons with disabilities and how to support their needs.
- Strengthen disability-disaggregated data collection to address and mitigate risks to persons with disabilities during outbreak situations.
- Contract health facilities and temporary testing and treatment facilities that comply with universal access standards.
- Engage persons with disabilities in future public health emergency preparedness planning.
- Strengthen social security networks, particularly for people in the informal sector.
- Ensure that children with disabilities are supported in returning to school.
- Implement universal design standards in the development and use of online and virtual platforms, tools, and applications used to support government services, educational, employment, public awareness, emergency communications, and recreational activities.

4.7.3 Gender and Gender-based Violence

The Project will benefit both men and women by reducing the risks of COVID-19 to their personal health. The Department of Health generates sex and age- disaggregated data and it is expected that slight variations in project benefits will accrue by gender depending on the subgroup of the population being analyzed. Based on trends of DOH information of COVID-19 patients, men constitute around 60 percent of those afflicted with the disease with women comprising the remaining 40 percent. Although health care has shifted much from being a predominantly female profession and there is no gender-disaggregated data on COVID- 19 frontline workers yet, anecdotal evidence and inference shows that there will be likely more women nurses, medical technologists, etc. who are involved in taking care of COVID-19patients.

In the time of COVID-19, gender-based violence can occur in three major areas: in health facilities, at home by spouses or other members of the family, and in the streets by enforcers of community quarantine including the military, police, security personnel, and barangay patrollers. In hospitals and health clinics/centers, women health workers are exposed to sexual harassment by colleagues, patients, or relatives and friends of patients. The added stress of dealing with the pandemic could also result in other forms of workplace harassment including verbal abuse. Women patients are also prone to sexual harassment especially when unaccompanied in quarantine facilities. The medical profession has a code of ethics and it is expected that health facilities will be able to ensure that these are followed including their respective codes of conduct for their employees.

With families under quarantine, the incidence of domestic violence within a household can be expected to increase. This means that households experiencing domestic violence are more likely to experience it more and that domestic violence is not likely to spread across the community. Women are faced with the risk of abuse as they stay at home and the risk of getting infected with the disease when they go out to seek help. However, with service-providers not in operation or overwhelmed with other tasks, women survivors are not able to receive the full support they need. At the very least, hotlines and online psychosocial support needs to be available to survivors.

With enforcers of community quarantine seemingly having more power, violence against women may also increase. In many households particularly in rural areas, women are tasked to go to the market which is the only allowed form of social mobility during quarantine. As they perform this role, women are exposed to formal and informal security forces stationed in their communities. Provided that maximum tolerance will be enforced and there will be no abuse of power, women should be generally safe from gender-based violence when they go outside their homes.

Further, aside from gender-based violence, access to sexual and reproductive care services have become limited due to exhaustion of resources addressing COVID-19. There are alleged reported cases of women who died due to birth-related complications caused by untimely maternal care by certain hospitals. With this, there is a risk of increase in maternal and infant mortality rates.

4.8 National Immunization Context

The DOH Field Health Services Information System (FHSIS) Annual Report 2018 provided data on the Expanded Program on Immunization (EPI). The percentage of fully immunized children in the Philippines in 2018 is 66.18%, with the Caraga Region as the highest at 74.30% and the Region IV-A (CALABARZON) as the region with least vaccinated children (58.47%). Meanwhile, in 2017, the fully immunized children at the national level is at 67.47% and 69.84% in 2016 (FHSIS 2016 and FHSIS 2017). Region 10 has the highest number of fully vaccinated children in 2016 and 2017 at 84.77% and 80.91%, respectively. Region V or Bicol Region has the least fully vaccinated children in 2016 at 51.54% and the BARMM in 2017 at 50.27%. Based on the FHSIS data on full vaccination on children, it can be said that immunization rate has decreased from 2016 to 2018.

4.9 Social and Behavioral Issues on Immunization

In 2016, the Department of Health (DOH) launched a program to vaccinate children against dengue, where more than 800,000 children received at least one dose of the dengue vaccine. But in the following year, the manufacturer released information that there may be an added risk for children who have received the vaccine. This change in guidance sparked public outrage and political turmoil that resulted in heightened public anxiety, and a general distrust in vaccines and the process of vaccination.

Between the years 2015 and 2019, the Vaccine Confidence Project estimated a significant drop in vaccine confidence in the Philippines. The percentage of people strongly agreeing that vaccines are important dropped from 99% in 2015, down to only 81% in 2019. Also, the percentage of people strongly agreeing that vaccines are safe dropped from 83% in 2015, down to only 60%in 2019. Also, the percentage of people strongly agreeing that vaccines are effective dropped from 81% in 2015, down to only 63% in 2018[18].

In a survey done during the peak of Dengvaxia, 25% of respondents said they do not trust vaccines provided by DOH. NCR figures however are double of national average at 47%. In the same PulseAsia survey, reports on Dengvaxia and reports in the media of child deaths allegedly due to

[18] DOH National Demand Generation and Communications Plan for COVID-19 Vaccines (January 2021)

vaccines were identified as the top reasons that influenced the respondents to distrust the vaccines provided by the DOH.

However, the dengue vaccine controversy may not be the only contributing factor for the drop of vaccine confidence. Post-campaign reports for the DOH's supplemental immunization activities (SIA) also identified a range of supply-side (e.g., access, availability of vaccines, etc) and demand-side factors (eg. religious beliefs, fears, distrust, etc) that may well have contributed to the decline of vaccine confidence and coverage even prior to the introduction of the dengue vaccine. This is supported by the data that shows that even before the 2017 dengue vaccine crisis, the vaccination rates of the basic vaccines for children in the Philippines have already been dropping.

The Philippine National Demographic Health Survey (NDHS) in 2017, which collected information on children born within three years prior to the survey, found that only an estimated 70% of children aged 12-23 months received all basic vaccines. This percentage is less than the findings of the NDHS in 2008 that reported estimated 80% of children aged 12-23 months received all basic vaccines. In preparation for the eventual vaccine roll-out for COVID-19 vaccines, UNICEF Philippines in partnership with the Department Health conducted a survey in September 2020 to understand the public's perception on the COVID-19 vaccines. The key findings can be seen summarized in the table below:

Table 4.19. Key findings of the UNICEF assessment on vaccine acceptability

RESEARCH QUESTIONS	KEY FINDINGS
Are respondents interested in getting vaccines for themselves and others when available?	• About half of respondents would get vaccines for themselves when available; 25% were not sure, and 23% would not. • Fewer would get vaccines for their children than for themselves (44% yes, 29% no). • Men were generally more likely to get vaccinated than women
What factors are considered when deciding whether or not to get a vaccine?	• Safety was the primary concern cited by those who would not get vaccines for themselves or children (77% self, 85% children). Some others (9%) did not view COVID as enough of a threat to warrant getting a vaccine. • Effectiveness was the most frequently cited important piece of information necessary for deciding whether to get a vaccine (40%), followed by side effects and safety risks (18% and 17% respectively).
What level of risk is acceptable for getting vaccines?	• When presented with a 1 in 1000 risk of being hospitalized from vaccine side effects, people accepted the vaccine in similar rates to when presented no specific risk (53% yes, 28% no).
To what extent does interest in the common good motivate getting a vaccine?	• When told that 70% of people must get vaccinated to stop the pandemic, only 19% of those who originally said no decided to get vaccinated. Young people were more likely to switch from "no" to "yes" (21% vs. 11%).

4.10 Lessons Learned on the Immunization Roll-out of a Novel Vaccine

The vaccination roll-out of the Dengvaxia against dengue, globally and in the Philippines in 2018 has posed several lessons on immunization of populations using a novel vaccine, as reported by Thomas and Yoon (2019)[19], which are as follows:

[19] Thomas, S.J. and Yoon, IK. (2019). A review of Dengvaxia®: development to deployment. Hum Vaccin Immunother., 15(10): 2295–2314. doi: 10.1080/21645515.2019.1658503.

- A more in-depth understanding of the induction, kinetics, and contributions to safety and protection of long-term homotypic, transient heterotypic, and long-term heterotypic immune responses is required, which will, in turn, require better ways to measure them;
- Multivalent replicating vaccines are at theoretical risk of experiencing immunodominance and immune interference in the recipient, likely necessitating a more iterative development approach to evaluate individual infectivity and immunogenicity (example – exploring monovalent dengue vaccines in separate clinical studies prior to combination);
- Since clinically relevant immune responses can change over time after natural infection or vaccination, the timing of efficacy measurements will need to be taken into account when considering vaccine efficacy and risk;
- Surveillance systems applied to vaccine efficacy trials should be designed to capture clinical end-points of interest for the period of time required to make a maximally informed decision about the vaccine's potential for clinical benefit (i.e., how many dengue seasons?);
- Exploring immunogenicity and efficacy as a function of vaccine viral strains and contemporary circulating DENV types and genotypes should be considered by Sponsors, especially those using vaccine strains collected many years prior;
- Understanding the impact of age, baseline dengue and non-dengue flavivirus serostatus, infecting serotype, and time from vaccination on immunogenicity, efficacy, and safety should be a focus of Sponsors;
- Expanding and standardizing methods to complete quantitative and qualitative measures of humoral immune responses are required to leverage an understanding of protective and deleterious responses and what constitutes each (i.e., target epitopes);
- Exploring, in a prospective manner, immune correlates or surrogates of protection and risk should be a Sponsor priority, and will likely require collecting baseline blood samples on all trial participants, lengthening the duration of active surveillance, and having secondary efficacy endpoints assessing various time points remote from the vaccination; and
- Use of experimental human infection models should be considered to assist with early development decisions (i.e., antigen selection, dose, and schedule), gaining an early understanding of a vaccine candidate's potential for clinical benefit prior to large clinical endpoint studies, and potentially adding to a data package supporting pursuit of a specific indication (example – fillings gaps in knowledge from field efficacy studies).

5 Potential Environmental and Social Impacts and Mitigation Measures

The anticipated overall environmental and social risks as in the parent project remain substantial. The measures to address social and environmental risks in the parent project remain relevant, including infection prevention and control improvements in health facilities, such as assessment and mitigation measures for medical waste risk management that will be expanded as inoculation sites expand. While experience indicates that substantial risk ratings can be expected for the environment, more attention should be given to address the medical waste and occupational health and safety risks, especially because of gaps in healthcare waste management systems, the appropriateness and safety of refrigerants, and the potential huge demand for cold storage and transportation requirements needed to cover the entire country. The social risk is anticipated to

be at least substantial; in the Philippines there is a broader social risk of inequity in access to vaccines and elite capture, such as due to political pressures to provide vaccines to groups that are not prioritized.

These risks will be mitigated through several measures to ensure vaccine delivery targets the most vulnerable populations, particularly health care workers, poor and elderly populations, and uniformed personnel, as specified in this AF. First, the Bank will support the Philippines to develop and adopt an explicit, contextually appropriate, and well-communicated targeting criteria and implementation plan (e.g., the national vaccination program and any subsidiary programs), including criteria for access to vaccines. As part of the SEP, the Borrower will ensure that this plan is subject to meaningful consultations per ESS 10.

5.1 Methodology for Assessing Risk and Impacts

The ESMF is prepared based on an assessment of direct and indirect risks and impacts of the specific project activities. A direct impact is defined under the ESF as "…*an impact which is caused by the project, and occurs contemporaneously in the location of the project*." An indirect impact is one "…*which is caused by the project and is later in time or farther removed in distance than a direct impact, but is still reasonably foreseeable, and will not include induced impacts*". Induced impacts are those that are unknown, speculative, uncertain, or remote. Induced impacts are not considered further in this document as they cannot be reasonably assessed or mitigated at this time. Induced impacts emerging during project implementation will be managed responsively and the ESMF amended accordingly.

The project will apply the World Bank's Environment and Social Framework (ESF), procedures for IPF operations designed to respond to COVID-19 and processed as an emergency operation under paragraph 12 of the IPF Policy. The Project will have positive social and environmental impacts as it should improve COVID-19 immunization, surveillance, monitoring, and containment. However, the project could also cause substantial environment and social risks.

5.2 Risk Summary

5.2.1 Environmental Risks

The main environmental risks are the occupational safety and health risks (OSH) to the health care workers brought about by the profiling and screening of patients prior to vaccination, administration of the vaccine, and the operation of medical facilities and laboratories involved in COVID-19 response might expose the health care workers to infection and cause unsafe environment. There are also OSH risks to the workers/laborers due to the possible exposure during the construction activities in the health facilities and laboratories. Occupational safety and health risks for cleaners and waste handlers in health facilities and the waste service providers are present due to the possible exposure to infectious health care wastes during the collection, storage, treatment, and disposal stages. There are risks from infectious healthcare wastes as they are generated from the testing and vaccination activities, including waste collection from the health care facility by the facility's waste handlers and cleaners and by the contracted waste service providers, as well as community health and safety issues related to the handling, transport, treatment, and disposal of the healthcare wastes are present. The COVID-19 vaccines require specific temperatures during storage and distribution to maintain efficacy and safety. The availability of cold storage and refrigerated transportation suitable to the temperature needs of

the vaccine and in the location of vaccine administration is a potential risk to the Project's implementation. Relatedly, the cold storage to be procured or rented may contain refrigerants which do not conform to the requirements of the Montreal Protocol, Kigali Agreement, and the chemical control order on ozone- depleting substances (ODS) and contribute to the generation of greenhouse gases (GHG). Other refrigerants are also toxic and flammable and can pose risk to people's health and safety. Cold storage systems also require huge amount of energy to operate that may have an impact on climate change. The compliance with biosafety protocols during the transport of the vaccines is also a risk, as breakage of the vials and spillage of the vaccine might occur. Similarly, natural disasters such as earthquake, landslide, flooding, storm surge and other climate change- related risks as well as unstable power supply in some areas in the country may affect the security of the delivery and distribution of the vaccines.

Hazardous, infectious, and toxic (HIT) wastes that may be generated from the vaccine administration include liquid contaminated waste (e.g. blood, other body fluids and contaminated fluid) and infected materials (water used; syringes, vials, and cottons) which require special capacity to manage and dispose. Without proper handling, these infectious wastes may pose risk to the healthcare workers and communities who are in contact or handle the waste and live near its disposal area. Since the healthcare facilities have instituted HCWM protocol in its operations even before the COVID-19 pandemic and the third party hazardous waste TSD facilities as well as the landfill sites are heavily regulated by government to enable proper management of the risks and impacts involved, the environmental risks are considered moderate. Moreover, the unavailability of appropriate DENR- accredited waste transporters and TSD facilities in some regions may pose incapacity to properly handle the high volume of health care wastes expected to be generated from the COVID-19 immunization activities and lead to health and environment risks, such as exposure of the public to infectious wastes, considering the

5.2.2 Social Risks

The social risks are considered substantial, although the direct social impacts and risks associated with the activities proposed by this project are expected to be mostly temporary, predictable, and avoidable.. Any construction works that requires land acquisition and resettlement will not be financed by the Project, and it is part of the negative list of activities.

The major areas of social risks are expected to concern the biosafety issues of the vaccine, inequity and exclusion, social acceptability and acceptance of the vaccine, regulatory measures, misinformation surrounding biosafety and deployment and stigma and discrimination. Due to the novelty and relative timeframe of the development and clinical trials of the COVID-19 vaccine, the communities may have fear and apprehension on its scientific integrity, efficacy, and safety. The contraindications and storage and transport condition requirements of the vaccine may pose risk. Transparency on the vaccine information and manufacturer credibility are important considerations for the public. Misinformation and disinformation on the adverse health effects of vaccine is also a risk which should be addressed.

The case management of population for vaccination includes risks of contraindications and adverse health effects as result of improper or incomplete profiling and screening of individuals prior to vaccination. There is a risk of not completing the vaccine dose/shots due to the individual's apprehension and/or schedule mismanagement. The data management of cases, surveillance system, and schedule monitoring are also risks. With the use of more than one

vaccine during the immunization period, close monitoring of adverse events in vaccinated individuals using information technology, i.e., 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

The global demand for the vaccine and the limited vaccine production makes access to the COVID-19 vaccines a risk. The conduct of strict regulatory measures should be ensured in view of the novelty of the vaccine. Regulation and access concerns should be equally taken into consideration. Moreover, the work of relevant bodies such as the Food and Drug Administration (FDA), the National Immunization Technical Advisory Group (NITAG), and the Health Technology Assessment Committee (HTAC) should be continually aligned and synchronized to ensure the expeditious national approval of the vaccines.

Community health and safety risks consider infectious health care wastes generated from the vaccination and other COVID-19- related responses pose risk to community health and safety if not handled, transported, treated, and disposed of according to the proper health care waste management practices. Hospital visitors and other non- COVID-19 patients may also be exposed to the virus as well as the workers when establishing or upgrading health facilities. There is also a risk of not completing the vaccine dose/shots due to the individual's apprehension and/or schedule mismanagement. The vaccine administration may also lead to crowding and violation of physical distancing measures, increasing the risk of exposure of the candidates and the residents within the vicinity of the site.

Risks on social inequity and exclusion include the accessibility of COVID-19 vaccines due to its price is a risk. Due to the novelty and urgent need of the vaccine, there is a risk in price regulation and compliance with fair trade guidelines. 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, treatment, and vaccines. The elderly, those with underlying medical conditions, and people living with disability, though included in the priority populations to be vaccinated as identified in the WHO SAGE Roadmap for Prioritizing Uses of COVID-19 Vaccines in the Context of Limited Supply, may have limited access to the vaccines due to reduced mobility. The vulnerable groups may also be excluded from coverage of the national program and local responses to COVID-19. The information materials on the COVID-19 vaccine to be developed could exclude the most vulnerable or be developed in a way that is not sensitive to the needs and access of these different groups. The vaccine distribution and deployment may also exclude populations based on geographical distribution, i.e. those in far- flung areas in GIDAS, and on socioeconomic status, such as less access for the marginalized.

Stigma and discrimination risks involve misinformation on the adverse health effects of vaccines and hearsays on the conspiracy theories and underlying political agenda on the vaccines are widespread. The vaccine acceptance may also be affected by the country's previous experience with the Dengvaxia vaccination. The fear and apprehension of individuals and communities on the scientific integrity, efficacy, and safety of the COVID-19 vaccines may lead to people refusing vaccination. It 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 in contracting the virus, frustrations over medical care, or misinformation.

There may also be some risks concerning sexual exploitation and abuse and violence against women and children related to healthcare workers and people in quarantine. Civil works envisaged in the project mainly refer to repair and rehabilitation of existing buildings. New facilities will be on existing premises and activities that would require land acquisition or involuntary resettlement are not eligible for project financing.

The potential risks and impacts will be addressed through the implementation of a Stakeholder Engagement Plan (SEP), including a Grievance Mechanism, and this Environmental and Social Management Framework (ESMF), including Labor Management Procedures (LMP), prepared based on an assessment of environmental and social risks and impacts in line with the applicable WB ESSs of the WB's ESF, the WHO COVID-19 guidance on risk communication and community engagement, and national laws and regulations.

Women, the elderly, adolescents, youth, and children, persons with disabilities, indigenous populations and minorities generally experience the highest degree of socio-economic marginalization. Marginalized people often become more vulnerable in emergencies due to poor, or lack of, access to health services, information, and lack of effective monitoring and early-warning systems. The Project aims to provide health services to all COVID-19 affected persons, however, in some instances additional measures may be needed to ensure inclusion and outreach to vulnerable and marginalized people.

5.3 Construction Stage

5.3.1 Environmental Risks

Environmental risks at the construction stage are not expected to be significant. Construction works will mainly involve fit-out type activities in existing premises. Minor quantities of construction waste will be generated; however, none is expected to be hazardous and all will be disposed in accordance with local regulations.

Construction activities within health facilities will need to comply with relevant regulations for the specific circumstances to ensure that the integrity of the facility is not compromised. The environmental guidelines that will be complied with include air and water quality, vibration and noise standards, COVID-19 protocol and healthcare wastes management guidelines relevant to the small works construction, management of healthcare equipment and operational activities of the healthcare facilities financed by the project.

5.3.2 Occupational Health and Safety

Risks

Occupational health and safety hazards during construction activities include potential exposure to COVID-19 and regular hazards associated with construction activities. COVID-19 transmission hazards can be considered in terms of work location in accordance with the LMP, with works in health facilities carrying the potential for nosocomial transmission (infection contracted because of an infection or toxin that exists in a certain location, such as a hospital). Hence, there is a slightly elevated risk of COVID-19 transmission due to proximity to patients and health workers. Works to establish quarantine facilities and decontamination stations carry similar hazards to normal community activities under COVID-19 restrictions. Depending on location and scope there may be some impacts to local communities near the site, e.g., in terms of dust, noise, traffic,

workers. There may also be fear, mistrust and resistance among the local community. Information disclosure and stakeholder engagement is therefore required in these circumstances following the provisions of the SEP.

Mitigation Measures

All workers involved with construction activities must follow basic hygiene procedures at all times to prevent the transmission of COVID-19:

1. performing hand hygiene frequently with an alcohol-based hand rub if your hands are not visibly dirty or with soap and water if hands are dirty;
2. avoiding touching your eyes, nose, and mouth;
3. practicing respiratory hygiene by coughing or sneezing into a bent elbow or tissue and then immediately disposing of the tissue;
4. workers exhibiting respiratory symptoms must not attend the workplace and should seek immediate medical advice;
5. maintaining social distance (a minimum of 1 meter) from other persons, particularly if they are showing respiratory symptoms.

The contractors shall observe the health protocols and guidelines outlined by the IATF and observe the Labor Management Procedures (LMP). Conduct of training and awareness raising activities will be done to ensure these procedures are followed, as needed. Construction works required under the project are low hazard activities; hence standard construction OH&S principles should be followed as described in Department of Labor and Employment (DOLE) (2020) *Occupational Safety and Health Standards*.

As an overarching philosophy the OHS hierarchy of controls should be adopted to mitigate OHS risks as shown in Figure 5.1.

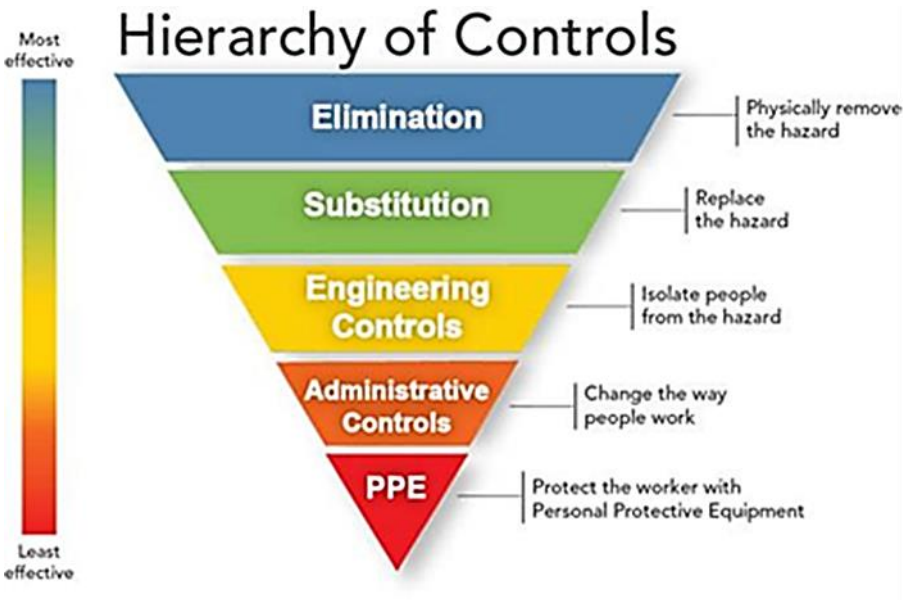


Figure 5.1. OHS Hierarchy of Controls

The provisions of Department Order No. 198 (DO 198-18) (Implementing Rules of Republic Act No. 11058) must be complied with by all construction contractors. Specifically, the following provisions must be adhered to:

- All employers, also applicable to contractors, must develop an Occupational Health and Safety Program in accordance with Section 12;
- All workers must undertake the Mandatory 8-hour Safety and Health Seminar for Workers (Section 3); and
- Each construction workforce must have a qualified Safety Officer in accordance with DO 198 Section 14

The Environmental and Social Management Plan (ESMP), Environmental Codes of Practice (ECOP), and the Labor Management Procedures (LMP), Contractor's Personnel Grievance Redress Mechanism will be developed by the Contractors based on the templates as part of the bidding document. The ESMP, ECOP, LMP and GRM will be implemented, updated, and monitored by the Contractors and project recipient facilities throughout the project duration. Monthly monitoring reports will be prepared accordingly using the templates. To further specify the liability of the contractors to the workers if they contract COVID-19, it will be explicitly stated in the contract that the DOH and the recipient hospitals will not be in-charge of the medical bills and wages of the workers and that it will be covered by the contractor.

5.4 Operational Stage

5.4.1 Occupational Health and Safety

Occupational health and safety (OHS) risks in the operational stage are predominantly associated with COVID-19 transmission risk. There is a risk that health care workers are exposed to COVID-19 during the initial screening and vaccine administration in the health facility or community setting if the proper infection and prevention control measures are not observed. The hazard will vary according to the location of the activities and the exposure to the main modes of COVID-19 transmission. WHO[20] notes "*COVID-19 virus is primarily transmitted between people through respiratory droplets and contact routes.*" Contact routes involve viral particles emitted from the respiratory tract of an infected individual landing on a surface. Then another person touches that object then touches their nose, mouth or eyes and the virus enters the body via the mucous membranes, infecting the second person. These are the predominant modes of COVID-19 transmission.

A secondary transmission mode is airborne. Airborne transmission is different from droplet transmission as it refers to the presence of microbes within droplet nuclei, which are generally considered to be particles less than 5 microns (μm) in diameter which can remain in the air for long periods of time and be transmitted to others over distances greater than one metre. This transmission mode "…*may be possible in specific circumstances and settings in which procedures or support treatments that generate aerosols are performed; i.e., endotracheal intubation, bronchoscopy, open suctioning*…" etc.[20]

[20] WHO (2020) *Modes of Transmission of virus causing COVID-19: implications for IPC precaution recommendations*. Scientific Brief. March 27, 2020.

Noting the above "*WHO continues to recommend droplet and contact precautions for those people caring for COVID-19 patients. WHO continues to recommend airborne precautions for circumstances and settings in which aerosol generating procedures and support treatment are performed, according to risk assessment*[20]."

Rational use of Personal Protective Equipment (PPE)

WHO[21] (March 19 2020) noted "*The current global stockpile of PPE is insufficient, particularly for medical masks and respirators; the supply of gowns and goggles is soon expected to be insufficient also. Surging global demand – driven not only by the number of COVID-19 cases but also by misinformation, panic buying, and stockpiling – will result in further shortages of PPE globally*". The European Centre for Disease Prevention and Control (ECDC) [22] (May 2020) noted:

> "*…countries worldwide affected by COVID-19 have been experiencing difficulties in accessing personal protective equipment (PPE) and hand hygiene materials. Coordinated supply chains for PPE should ensure distribution of such materials to healthcare systems in order to reduce the potential of healthcare-associated transmission to vulnerable groups and healthcare workers*."

In these circumstances it is important that PPE is allocated in a rational way to ensure that those at highest risk of disease transmission are protected from infection. Judgements on the rational use of PPE should be guided by WHO[21] (Table 1) reproduced in part in Table 2.

Infection Control

To ensure that infection is controlled, DOH has instituted a containment strategy that includes extensive testing, quarantine, isolation, and treatment either in a medical facility or at home. Details of the infection control measures are discussed in Annex I.

Cargo Handling

To date, there is no epidemiological information to suggest that contact with goods or products shipped from countries affected by the COVID-19 outbreak have been the source of COVID-19 disease in humans[21].

Training

WHO has developed a free course - *Infection Prevention and Control (IPC) for Novel Coronavirus (COVID-19)* (https://openwho.org/courses/COVID-19-IPC-EN) – targeted at healthcare workers and public health professionals. The course includes information on what facilities should be doing to be prepared to respond to a case of an emerging respiratory virus such as COVID-19, how to identify a case once it occurs, and how to properly implement IPC measures to ensure there is no further transmission to HCW or to other patients and others in the healthcare facility.

Guidance on the proper use of PPE will be promoted to participating health facilities based on WHO interim guidance on the rational use of PPE reflected in Table 2.

[21] WHO (2020) *Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19) Interim guidance.* 19 March 2020

[22] European Centre for Disease Prevention and Control. Infection prevention and control for COVID-19 in healthcare settings – Third update. 13 May 2020. ECDC: Stockholm; 2020.

Table 2 Recommended PPE during the outbreak of COVID-19 outbreak, according to the setting, personnel, and type of activity

Setting	Target personnel or patients	Activity	Type of PPE or procedure
Inpatient facilities			
Patient room	Health care workers	Providing direct care to COVID-19 patients	Medical mask; Gown; Gloves; Eye protection (goggles or face shield)
		Aerosol-generating procedures performed on COVID-19 patients	Respirator N95 or FFP2 standard, or equivalent; Gown; Gloves; Eye protection; Apron
	Cleaners	Entering the room of COVID-19 patients	Medical mask; Gown; Heavy duty gloves; Eye protection (if risk of splash from organic material or chemicals); Boots or closed work shoes
	Visitors	Entering the room of COVID-19 patients	Medical mask; Gown; Gloves
Other areas of patient transit (e.g. corridors).	All staff, including health care workers.	Any activity that does not involve contact with COVID-19 patients	No PPE required
Triage	Health care workers	Preliminary screening not involving direct contact.	Maintain spatial distance of at least 1 metre. No PPE required
	Patients with respiratory symptoms	Any	Maintain spatial distance of at least 1 metre. Provide medical mask if tolerated by patient
	Patients without respiratory symptoms	Any	No PPE required
Laboratory	Lab technician	Manipulation of respiratory samples	Medical mask; Gown; Gloves; Eye protection (if risk of splash)
Administrative areas	All staff, including health care workers.	Administrative tasks that do not involve contact with COVID-19 patients.	No PPE required
Outpatient facilities			
Consultation room	Health care workers	Physical examination of patient with respiratory symptom	Medical mask; Gown; Gloves; Eye protection
		Physical examination of patient without respiratory symptom	PPE according to standard precautions and risk assessment.
	Patients with respiratory symptoms	Any	Provide medical mask if tolerated.
	Patients without respiratory symptoms	Any	No PPE required
	Cleaners	After and between consultations with patients with respiratory symptoms.	Medical mask; Gown; Heavy duty gloves; Eye protection (if risk of splash from organic material or chemicals); Boots or closed work shoes

Setting	Target personnel or patients	Activity	Type of PPE or procedure
Waiting room	Patients with respiratory symptoms	Any	Provide medical mask if tolerated. Immediately move the patient to an isolation room or separate area away from others; if this is not feasible, ensure spatial distance of at least 1 metre from other patients.
	Patients without respiratory symptoms	Any	No PPE required
Triage	Health care workers	Preliminary screening not involving direct contact.	Maintain spatial distance of at least 1 metre. No PPE required
	Patients with respiratory symptoms	Any	Maintain spatial distance of at least 1 metre. Provide medical mask if tolerated.
	Patients without respiratory symptoms	Any	No PPE required
Points of entry			
Administrative areas	All staff	Any	No PPE required
Screening area	Staff	First screening (temperature measurement) not involving direct contact.	Maintain spatial distance of at least 1 metre. No PPE required
		Second screening (i.e. interviewing passengers with fever for clinical symptoms suggestive of COVID-19 disease and travel history)	Medical mask
	Cleaners	Cleaning the area where passengers with fever are being screened	Medical mask; Gown; Heavy duty gloves; Eye protection (if risk of splash from organic material or chemicals); Boots or closed work shoes
Temporary isolation area	Staff	Entering the isolation area, but not providing direct assistance	Maintain spatial distance of at least 1 metre; medical mask; gloves
	Staff, health care workers	Assisting passenger being transported to a health care facility	Medical mask; gown; gloves; eye protection
	Cleaners	Cleaning isolation area	Medical mask; Gown; Heavy duty gloves; Eye protection (if risk of splash from organic material or chemicals); Boots or closed work shoes

5.4.2 Healthcare Waste Management at Healthcare Facilities

In 2005, DOH has instituted a number of policies and guidelines on healthcare waste management (HCWM) including the DENR-DOH Joint Administrative Order No. 02-2005 entitled Policies and Guidelines on Effective and Proper Handling, Collection, Transport, Treatment, Storage and Disposal of Healthcare Waste. The implementation and enforcement of relevant rules and regulations are still lacking in practice. The DOH Health Care Waste Management Manual 4th Edition serves as a guidebook for the healthcare workers and other professionals involved in the health sector. It provides options for a safe, efficient, environment-friendly waste management options.

Natural disasters and conflicts, by their nature, are highly disruptive and dangerous events. Their consequences are unpredictable, and it is inevitable that many essential public services will be interrupted. HCFs, public health and municipal services, such as waste management, may totally or partially cease due to destroyed buildings, damaged equipment, dislocation of staff and blocked roads.

In such situations, all forms of wastes including hazardous healthcare wastes (HCW) remains uncollected and untreated. It is inevitable that wastes will accumulate, and serious environment and health hazards (e.g. hepatitis B and C) may affect communities. Therefore, measures need to be taken to remove wastes as soon as possible after an emergency. The purpose is to reduce the proximity of people to accumulated wastes and so reduce the potential for disease transmission.

The purpose of HCWM in an emergency is to avoid wastes from being scattered indiscriminately around medical buildings and their grounds and reduce the likelihood of secondary infections. As a basic starting point and to avoid sharps injuries, HCW generated by emergency medical care activities (in tents, field hospitals, mobile hospitals) should be segregated using a “two-bin solution” that is, sorting waste into used sharps and non-sharps wastes (including general wastes and infectious, pathological, and pharmaceutical residues). The two bins should be kept segregated until final disposal. Basic considerations in emergency response in HCWM. Safety boxes are to be used for sharps. The following management measures are to be observed:

- All non-sharps wastes, without exception, should be collected in medical areas in rigid containers, such as plastic buckets with a cover, to prevent waste items from being exposed to disease transmission by contact by hand, airborne particles and flying insects.
- Containers and covers should be washed and disinfected daily after being emptied.
- Reuse of rigid waste containers after disinfection with a chlorine (0.2%) solution may be the most practical option to introduce quickly in an emergency situation and is low cost at a time when resources for better forms of waste segregation and storage may be scarce.
- Sharps wastes should be stored safely in puncture-proof and leak-proof containers.

Burial of non-sharps and sharps wastes in pits or trenches may be considered as a pragmatic option in emergency situations.

Hazards and Risks

Actual cases of non-sharps waste being demonstrated to cause an infection in health care personnel and waste workers are rarely documented. HCW handlers are at greatest risk from infectious hazards which include chemical exposures such as chemotherapeutic drugs, disinfectants and sterilants; physical hazards such as ionizing radiation; and ergonomic hazards. The COVID-19 health care wastes may not be properly segregated with the general health care wastes, posing threat to the waste collectors and general public.

Mitigation Measures

The following preventive measures can also be implemented during an emergency response phase to reduce public and occupational health risks:

- Provide hepatitis B vaccination to all health care personnel and waste handlers.
- Encourage hand hygiene (washing, preferably followed by disinfection).
- Use gloves and masks for handling HCW.
- Raise the awareness of staff about simple post exposure prophylaxis in the event of an occupational injury (e.g., needle-stick injury).
- Contain and promptly clean up spillages of infectious materials and disinfect quickly to avoid pathogen transmission.
- Disinfect body fluids before their discharge.
- Conduct on-site awareness-raising activities (whenever possible) to remind health care personnel about occupational exposures and the safe practices for managing HCW.

Table: HCWM practice in emergencies

Segregation and packaging	All containers and bags should be filled to three quarters of their capacities to avoid spillage and kept covered to prevent casual access by people or disease vectors. Should colour coding of plastic bags and containers not be possible, signs or marks can be put on containers to differentiate between hazardous health-care waste and general waste. Segregated waste should be regularly removed and safely stored to reduce the risk of transmission of pathogens and improve general standards of cleanliness and hygiene in medical areas. If plastic bags are not available, containers for non-sharps wastes should be washed and disinfected after being emptied.
Collection	Exclusively allocated carts or trolleys with lids should be used to collect and transport health-care waste. Carts should be regularly cleaned and disinfected. Highly infectious wastes (e.g. laboratory wastes and wastes from persons with contagious diseases) should be collected quickly and carried to a

	single, secure central storage area; on no account should collected waste be left anywhere other than at a central storage point.
Storage	Segregated waste should preferably be stored in specific restricted areas. The storage area should be a locked room or guarded enclosure. If this is not available, large containers with lids may be used for temporary storage of segregated waste and should be placed in restricted areas to minimize contact with people and animals. Mark the storage area with the biohazard symbol, or put a sign or mark that is understood locally to differentiate between hazardous and non-risk wastes.
Treatment and Disposal	Should resources not be available, minimal treatment and disposal practices should continue to be used as follows: • onsite burial in pits or trenches; • disposal in special cells in municipal dumping sites; • incineration in low-cost double-chamber incinerators; • encapsulation of sharps waste or small quantities of pharmaceuticals followed by onsite burial or burial in special cells in municipal dumping sites; • incineration in high-temperature industrial incinerators (provided that there is a safe means of transportation); • disinfection of infectious and sharps wastes with a small autoclave (when resources are available); non-sharps disinfected wastes should join the general waste stream. • Body parts should be safely stored and disposed of according to local culture and customs.

Source: DOH HCWM Manual 4th edition (2020)

Reference to the DOH Health Care Waste Management Manual 4th edition should be made for in-depth discussion on the management protocol on COVID-19 and Emerging Infectious Diseases.

An ongoing assessment is being done by the Project to evaluate the existing health care waste management system in the facilities that will be covered by the project to ensure that it will be able to handle the anticipated increase in HCW load, fulfills international standards, and to propose mitigating measures if found otherwise in the project's environmental and social risk management instruments. This is being done using health care waste management self-audit tools developed by the project. The HCWM self- audit tools will be provided to the hospitals to aid in their regular assessment, recording, reporting, and monitoring of their health care waste management practices. This will assist the facilities in improving their practices, especially the segregation of infectious and general health care wastes. Results of the self- assessment of the hospitals will inform the Project if there is a need for provision of supplies and training on health care waste. Moreover, it should be ensured that the waste contractors or treatment, storage, and

disposal facilities (TSDs) personnel observe proper practices of the health care waste management streams as inspected by the health facilities upon renewal of service contract.

5.4.3 Wastes from COVID-19 Vaccination

Risks

The vaccination activities will produce wastes such as sharps and infectious non-sharp wastes that can cause direct negative health impacts on the community and healthcare workers. There are also indirect health effects to the community and environment resulting from inadequate treatment and disposal of these wastes.

Mitigation Measures

The management of wastes from the vaccination program will be in accordance with the DOH Health Care Waste Management Manual, 4th edition. Measures to be implemented include the following:

- Waste segregation and packaging
    - Segregation of sharps from non-sharps
    - Discard entire syringe with needle into a safety box immediately after use
    - Placement of the safety boxes (when full) into plastic bags closed hermetically and with clear marking to avoid leakage during transportation
    - Placement of empty vials into waste containers with plastic lining to avoid leakage.

- Waste treatment and final disposal
    - Placement of sharp boxes and containers of empty vials into secure septic vaults for on-site burial.
    - If septic vaults are not available, employ the services of a DENR-licensed hazardous waste treatment facility for the off-site transportation and treatment of the vaccination wastes.

- Return Back to Supplier

The vaccine procurement program will apply the Extended Producer Responsibility (EPR) concept or return back condition as a green procurement approach in managing vaccine wastes. The return-back condition in the contract agreement with vaccine suppliers will be specifically applied in areas with limited capacities for safe onsite disposal or in areas with no available third-party hazardous waste treatment facilities or whose municipal landfills do not have dedicated cells for hazardous wastes.

5.4.4 Labor Rights and Gender

Risks

The following potential risks at health facility may occur:

- Workers, in particular health personnel (especially nurses) and cleaners, 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 and required by law;
- Women in particular, if they are single heads of household and have child-care duties may have difficulties responding to requests for overtime;
- 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 who are female, may face mental issues or burnout as result of an outbreak; and
- Health workers, cleaners or workers involved in upgrades experiencing respiratory symptoms may fear not getting paid and continue to show up at work.
- There is a risk that health care workers are exposed to COVID-19 during the initial screening and vaccine administration in the health facility or community setting.
- There is also a risk that the cleaners and waste collectors of the health care facilities and waste service providers are exposed.

There is a minor risk of underage workers working as cleaners in medical facilities or transporting medical supplies or equipment. Labor law prohibits anyone under 18 years being involved in hazardous work.

Mitigation Measures

The following mitigation measures are applicable to labor rights and gender as per the Philippines labor law and consistent with ESS2:

- All workers must be paid for overtime in accordance with Government labor laws;
- 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 staff with lower qualification or less experienced working in the health sector (e.g., cleaners, 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;
- 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 possible;
- All workers 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);

- Child labor or indentured labor is absolutely prohibited in the project. All medical staff, cleaners, and all others handling equipment, tests, wastes, etc. or involved in the transportation of medical equipment and supplies related to the project must be over 18 years.

5.4.5 Community Health and Safety

Risks

Potential community health and safety risks associated with the project activities include:

- Transport of wastes, transport of lab tests, transport of people who have tested positive with COVID-19 and movement of health workers and other staff in contact with patients with COVID-19, has the potential to spread the virus in the community (note transport of medical supplies and equipment is not expected to result in virus transmission);
- Communities may have fear and apprehension on COVID-19 vaccine efficacy and safety due to the novelty and relative timeframe of development;
- The proper storage conditions and transport of the vaccines are also major risks as they are needed to ensure the efficacy and safety of the vaccine.
- Misinformation and disinformation on the adverse health effects of vaccines and hearsays on the conspiracy theories and underlying political agenda on the vaccines are widespread.
- There is a risk of adverse health effects if the profiling and screening of candidate individuals to be vaccinated and proper data management were not observed to consider vaccine contraindications.
- Crowding or influx of people in the vaccination sites as well as the violation of physical distancing are also risks.
- Use of Security and Military personnel in the delivery and distribution of the vaccines may also exist.
- Health workers may face discrimination and harassment when going back to their communities due to people's fear in contracting the virus, frustrations over medical care or misinformation;
- Screening of people entering the country, in particular land borders with migrants coming back into Philippines, as well as checks and/or enforcement of any community movement restrictions or quarantine/lockdown or social restriction measures, could lead to abuse of power by law enforcement, fear from community members (especially the elderly), a potential for discrimination of marginalized groups, GBV, Sexual Exploitation and Abuse (SEA) and/or VAC;

Mitigation Measures

The SEP provides measures for stakeholder engagement at participating health facilities to inform local communities of project activities, seek their feedback on potential risks and mitigation

measures. The following community health and safety measures will be applied and for civil works included in the ESMP:

- Transport of all COVID-19 wastes and lab tests, blood samples, etc., should be collected safely in designated containers and bags, treated and then safely disposed;
- 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 biosafety measures and WHO guidelines on Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected human cases;
- Transport of medical equipment/supplies is not expected to be a vector in transmitting the virus, however, workers transporting materials should be reminded to wash hands appropriately and to avoid touching their face;
- To ensure the safety of the vaccines to be procured, the vaccine regulatory approval of the Stringent Regulatory Authorities (SRAs)[23] identified by the World Health Organization will be required;
- Appropriate messages will be developed under the risk communication plan to address the vaccine safety concerns of communities;
- A Communications Campaign Plan will also be developed by the DOH Health Promotion Bureau (HPB) for the COVID-19 immunization program. It will have a whole-of-government, whole-of-system, and whole-of-society approach which will encompass general information on (i) COVID-19 and the need for sanitation and hygiene practices, (ii) COVID-19 vaccine basic information, (iii) trials results and procurement, and (iv) vaccine program roll-out. The WHO Risk communication and community engagement readiness and response to coronavirus disease (COVID-19) released on 19 March 2020 will also be used as reference in the development of messages and planning of risk communication and community engagement (RCCE) activities.
- A series of counselling and obtaining of informed consent will be conducted prior to the administration of the COVID-19 vaccine;
- The profiling and screening of candidate individuals to be vaccinated should be performed so as to avoid the risk of vaccine contraindications;
- A comprehensive data management system is also needed to support the profiling, screening, and scheduling to address the risk of individuals not completing the required shots/doses of the vaccine;
- Coordination with the local government units as well as the uniformed personnel will be done to assist in crowd management;
- Training must be provided to medical and other staff (doctors, nurses, cleaners, lab technicians, etc.) in contact with patients with COVID-19 and/or their wastes, clothes, linen or tests, on disinfection procedures when going back to their homes/communities. In extreme cases, this may involve isolating medical and other personnel involved with COVID-19 patients;

[23] World Health Organization. (June 2020). Essential medicines and health products: List of stringent regulatory authorities (SRAs). https://www.who.int/medicines/regulation/sras/en/.

- Any medical or other hospital staff (including cleaners) experiencing symptoms of COVID-19 or a respiratory illness (fever + cold or cough) must remain at home/isolated and report symptoms immediately to supervisors;
- 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 other staff are taking to protect themselves against the virus and their use of PPE;
- Ensure widespread engagement with communities in order to disseminate information related to community health and safety, particularly around social distancing, hand washing, high-risk demographics, self-quarantine, and mandatory quarantine; Workers and law enforcement personnel must adhere to Code of Conduct (CoC), including fair treatment and non-discrimination when carrying out their duties. Key points in CoC must be publicly available as part of disclosure and law enforcement personnel must be made aware and trained in key items (especially non-discrimination, OHS and issues relating to GBV).
- Security and military personnel may be utilized for vaccine deployment. It will be ensured that the security personnel follow a strict code of conduct and avoid any escalation consistent with the ESF and IFC guidance on the use of security personnel (IFC *Good Practice Handbook on the Use of Security Forces: Assessing and Managing Risks and Impact*s). In these cases, DOH will assess risks posed by these security arrangements to project workers and the local community. Security personnel will provide security services in a manner consistent with the applicable laws and code of practices and will be consistent with the relevant requirement of the World Bank's ESS4.
- DOH will ensure that the workers and local community are informed about the security arrangements and the project's GRM. DOH will review any allegations of unlawful or abusive acts of security personnel, take action (or urge appropriate parties to take action) to prevent recurrence and, where necessary, report unlawful abusive acts to the relevant authorities. Any incidents, concerns or grievances regarding the conduct of security personnel will be received, monitored, documented (taking into account the need to protect confidentiality), and resolved through the Project's grievance mechanism following incident classification: Indicative, serious and severe. Any severe incidents with such personnel need to be reported to the Bank no later than 48 hours with basic information and a detailed incident report within 10 working days. Details about incident classification and incident reporting are included under the Labour Management Procedure (LMP).

Regular community consultations will be conducted continuously to identify the additional risks and mitigation measures in the health care facilities as well as their additional needs. The Grievance Redress Mechanism is already in place.

5.4.6 Social Exclusion

Risks

The following potential risks of social exclusion have been identified:

- Planning and design of measures to screen people for COVID-19 and information materials developed could exclude the most vulnerable, including the poor, elderly, indigenous peoples, people living with a disability and households headed by single women, who are also less likely to have access or be active on social media.
- Limited access to COVID-19 testing and other public health services, especially in rural areas.
- Restrictions on travel, general movement, etc. have the potential to enhance negative impacts to the vulnerable groups, who may have lower incomes, lack social support, lose jobs, have childcare duties, and may also be the most vulnerable to contracting COVID-19.
- The information materials on the COVID-19 vaccine to be developed could exclude the most vulnerable or be developed in a way that is not sensitive to the needs and access of these different groups.
- Communication materials may not reach the most vulnerable, in particularly the elderly, IPs and workers from the informal sector, a lot of whom are women, who tend to have lower levels of education, lower incomes and may have lower literacy.
- 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 vaccines.
- The elderly, those with underlying medical conditions, and people living with disability, though included in the priority populations to be vaccinated as identified in the WHO SAGE Roadmap for Prioritizing Uses of COVID-19 Vaccines in the Context of Limited Supply[24], may have limited access to the vaccines due to reduced mobility.

Mitigation Measures

The following mitigation measures are considered for social exclusion impacts:

- Planning of quarantine measures and social distancing 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);
- Communication materials must be clear and concise and 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

[24] World Health Organization. (November 2020). WHO SAGE Roadmap for Prioritizing Uses Of COVID-19 Vaccines in The Context of Limited Supply. https://www.who.int/publications/m/item/who-sage-roadmap-for-prioritizing-uses-of-covid-19-vaccines-in-the-context-of-limited-supply.

on social-distancing). This may require different media (social media, radio, tv) plus engaging existing formal and informal public health and community-based networks (schools, healthcare service providers at local level, etc), including information on the vaccine and its administration.

- 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.
- 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.
- Transport assistance for vulnerable groups for increased access to vaccination sites or identification of strategic locations for vaccine administration.
- 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.
- 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.
- Stakeholder Engagement Plan (SEP) includes consultations with NGOs and other stakeholders that can provide recommendations on how to communicate information.

5.4.7 Gender-Based Violence (GBV) and/or Violence Against Children (VAC)

Gender is a critical consideration when designing policies and interventions in emergency situations and pandemics. Gender plays an important role in who gets access, and how fast, to critical health services. Gender also determines the social roles ascribed to people that can influence their risk of exposure to disease, as well as of spreading it. At the same time, the biological sex can influence how susceptible a person is to disease and how well they respond to treatment and/or vaccines. In a pandemic, this has multiple implications. On the one hand, pandemic response has to be cognizant of the gender-based differences in access to and use of services due to limited mobility and financial capacity; and on the other, support needs to be provided to at-risk groups such as caregivers (the majority of whom are women taking care of children and the elderly) to reduce their risk of getting ill and/or passing it on to others. Moreover, pandemics can create or exacerbate economic and social vulnerabilities that especially put women and girls at risk of sexual exploitation.

Health care workers involved in the deployment of vaccines are comprised mostly of women, which in turn enhances outreach to women. In 2015, women comprised 57% of physicians and 74% of nurses (Philippine Institute of Development Studies, 2019). Barangay health workers also tend to be females. Women generally bear heavier care responsibilities at home, such as child and elder care. These female health workers (as well as males with care responsibilities) may therefore need alternative care arrangements as they perform their duties in the deployment effort.

The frontline health workers are also among the top three priority population groups to be given the COVID-19 vaccination, along with indigent senior citizens, and the remaining senior citizens. The 2015 population census shows that 56% of senior citizens are female (Philippine Statistics Authority). These three priority population groups, comprising 10% of the population, are therefore predominantly female. If the vaccination will cause some down time to vaccine recipients, this will compound the need for alternative care arrangements for female vaccine recipients who have care responsibilities at home.

Risks

GBV and VAC risks may include the following:

- Quarantine measures, together with fears over COVID-19, livelihood impacts as a result of any restrictions in movement, social isolation and increased economic pressures and loss of jobs (informal or formal sector) may exacerbate household tensions and lead to an increase in GBV and VAC.
- School closures mean children are at home and this could increase risk of VAC and GBV, in particular if family members are stressed, drinking or violent. Young females may be in particular risk.
- Project staff (civil servants and outsourced staff/contractors) may be involved in misconduct behaviours impacting women and children at local level.

Mitigation Measures

The following measures should be considered in mitigating GBV and VAC risks:

- Communication materials should include advice to cope with psychological aspects of the COVID-19 pandemic, including loss of jobs and quarantine measures. For instance, there should be information on how to cope with stress and anxiety, recommendations on how to talk to children, etc. Information materials should provide links to resources/organizations that can provide support.
- Ensure that GBV-resolution mechanisms and GBV and other mental health services continue to be well resourced as there may be increased demand for their services. NGOs or other organizations working on GBV or mental health may need to be supported to increase their services (or, for instance, enhancing support to a hotline to report cases or to women's shelters).
- Apply the WHO Code of Ethics and Professional Conduct -Code of Conduct (CoC) for all workers in the quarantine facilities as well as the provision of gender-sensitive infrastructure, such as segregated toilets and enough light in quarantine and isolation centers.
- Codes of Conduct (CoC) included in the letter of PIU's staff appointment and contracts (for contracted workers) in line with relevant national laws and legislations and the project's Labor Management Procedures (LMP).
- Training on community interaction and GBV/VAC to be provided for all teams, staff (civil servants and outsources staff/contractors) to ensure the teams respect local communities and their culture and not engage in misconduct.

5.4.8 Social Stigma

Another potential risk is the social acceptability of the vaccine given the biosafety characteristics of the vaccine and possible negative side effects. These risks will be mitigated through the establishment of a robust risk communication strategy informing society and beneficiary communities of safety issues and treatment if negative side effects are shown. The AF will support the development and implementation of vaccine demand generation and communication through the deployment of the vaccine and an M&E system. The DOH will introduce revised protocols regarding consent to vaccinations, a process for agreeing to or refusing to be vaccinated. Two indicators will be introduced to monitor citizen engagement and additional care and treatment to people with negative side effects. The National Adverse Events Following Immunization Committee will ensure that standard protocols for AEFI surveillance and investigation are correctly followed. The said Committee will also review all reported serious and cluster of AEFI cases presented for expert opinion and provide a final causality assessment of the AEFI cases. Likewise, as part of the AF, the SEP has been reviewed with additional measures for consultation with key stakeholders. Besides, the grievance redress mechanism (GRM) has continued developing since the parent project was approved. It should be in place and equipped to address community, worker, and/or individual grievances related to COVID-19 vaccine administration and deployment.

Other risk that has been identified is data-related, and this is rated as substantial. Large volumes of personal data, personally identifiable information and sensitive data are likely to be collected and used in connection with the management of the COVID-19 vaccination and deployment efforts under circumstances where measures to ensure the legitimate, appropriate and proportionate use and processing of that data may not feature in national law or data governance regulations, or be routinely collected and managed in health information systems. To the extent feasible, the project will incorporate good international practice for dealing with such data in such circumstances. Such measures may include, by way of example, data minimization (collecting only data that is necessary for the purpose), data accuracy (correct or erase data that are not necessary or are inaccurate), use limitations (data are only used for legitimate and related purposes), data retention (retain data only for as long as they are necessary), informing data subjects of use and processing of data, and allowing data subjects the opportunity to correct information about them, etc.

Risks

Indirect risks include social stigma that could be precipitated by COVID-19 both to and from sufferers as follows:

- 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”.
- Misinformation on the adverse health effects of vaccines and hearsays on the conspiracy theories and underlying political agenda on the vaccines are widespread.

- The fear and apprehension of individuals and communities on the scientific integrity, efficacy, and safety of the COVID-19 vaccines may lead to people refusing vaccination activities.
- The vaccine acceptance may also be affected by the country's previous experience with the Dengvaxia vaccination.

Mitigation Measures

Mitigation of social stigma should include the following measures:

- When developing communication messages about COVID-19, it is important to have social stigma issues in mind and 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".
- Ensure accurate information about the virus is widely disseminated, and that there is also a focus on people who have recovered.
- 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.
- 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.
- Engage community leaders of indigenous peoples when it comes to vaccination activities.

5.4.9 Cold Chain Operation

Risks

Refrigeration[25] in the cold chain system for vaccine storage and distribution is necessary to maintain efficacy of the vaccines. Through proper refrigeration, the potential to generate vaccine rejects is also avoided. However, the refrigeration facilities (cold storage and refrigerated road transport), require huge amount of energy to operate and use different kinds of cooling agents/refrigerants in their cooling systems. The use of refrigerants in the cold chain system can cause depletion of the ozone layer and can contribute to greenhouse gas emissions that cause global warming. The lack of proper maintenance and knowledge very often translates into an inadequate management of the life cycle of refrigerant gases. More refrigerant leakage results to less efficient equipment and higher emission of high global warming potential (GWP) gases into the atmosphere.

[25] In the 2017 UNEP Report of the Technology and Economic Assessment Panel (Montreal Protocol on Substances that deplete the ozone layer), industrial refrigeration accounts for approximately 2% of HFC consumption in terms of CO2-eq and is projected to grow by approximately 6.7% annually between 2015 and 2050.

Refrigerants are toxic and some are flammable and could form explosive mixture with air if leakage occurs, posing risk to people's health and safety. Some cold storage warehouses use ammonia as a refrigerant which has negligible GWP but is toxic and mildly flammable, with the potential to cause health hazards. It is therefore necessary that safe practices are applied. Moreover, some cold storage may not be energy- efficient.

Mitigation Measures

- Use of alternative refrigerants with zero or low climate impact in the refrigeration system
- Use of more energy-efficient technology for the refrigeration system
- To include relevant technical specifications as part of procuring cold storage/chain equipment and transport and/or stipulating performance standards for the cold chain service providers
- Ensure that the refrigeration system including its maintenance and servicing, complies with the requirements of the CCO on ODS
- Improve energy efficiency of refrigeration systems through maintenance of the refrigeration systems, implementation of procedures and best practices that reduces energy consumptions of chillers and refrigeration systems, e.g. closing the doors of cold rooms during operation, switching-off mobile refrigeration units while opening doors of refrigerated trucks, parking refrigerated trucks in the shade, regular controls and monitoring of all equipment parameters, such as energy performance, pressure, and temperature.
- Observe proper handling of refrigerants and during servicing and ensure that workers involved in servicing are trained to avoid leakage of refrigerant in the atmosphere and use PEEs to avoid exposure to refrigerants.

5.4.10 Climate- Change Related Risks

The Philippines has been screened for climate and disaster risk and found to be extremely vulnerable to the effects of climate change. There are particular vulnerabilities to extreme temperature, extreme precipitation and flooding, drought, sea level rise, storm surges, strong winds, and landslides. The Global Climate Risk Index ranks the Philippines as the world's second most affected country by climate change related shocks. Projected increases in temperature by as much as 0.9^{o}C to 1.9^{o}C across the country increase the risk of extreme heat events as well as potential changes in suitable crops. Increasing temperatures bring uncertainty for the prediction of precipitation patterns. It is predicted that there may be more intense and unpredictable rainfall during the monsoon season; these changes are associated with a higher probability of catastrophic cyclones associated with increased risk of tidal inundation. This has been evident in the recent cyclones that hit the country during lockdown. Incidence of floods is also on the rise. Concurrently there is also a risk of drought at other times, particularly associated with El Nino years, as observed during the 1980s and 1990s. The sea level has risen by as much as 5.7-7.0 mm/year over the Philippine Sea, higher than global average rates. These rising levels are exacerbated by long-term land subsidence, as observed in Manila from 1955-2015, attributed to excessive groundwater withdrawal. Projected changes in sea level in the Philippines are slightly higher than global

averages. The Philippines has a mountainous terrain prone to landslides, which climate change-related precipitation is predicted to make more frequent.

The climate-related threats highlighted above are expected to affect the most vulnerable project beneficiaries. Older people and those with pre-existing health condition are at particular risk from higher climate-induced temperatures, including extreme heat events as well as increasing average temperatures. This is particularly the case for those suffering from chronic respiratory or cardiovascular conditions and diabetes. Extreme weather events, in particular those leading to heavy precipitation, flooding, storm surges, and high winds, inflict a heavy toll on human life—with acute impacts including physical injuries and drowning, followed by increases in risks of vector and waterborne disease. In the longer term, more profound adverse health impacts are mediated through damage to health infrastructure, as well as the mental health effects of traumatic experiences and the economic hardships these events precipitate. Each of these climate related health threats are expected to hit poorest households and communities hardest, with income and health shocks driving them deeper into poverty. Conversely, severe food shortages from drought lead to numerous adverse nutrition impacts, with women and children the most vulnerable. Reduced social interaction and population movements implemented by the GOP to reduce the spread of COVID-19 can exacerbate social isolation and increase vulnerability to certain climate-related exposures, in particular extreme heat. Climate-related disruption to health facilities, healthcare delivery, and access to services also impact the most vulnerable populations, such as older people, women, babies, and young children. Moreover, the natural disasters such as earthquake, landslide, flooding, storm surge and other climate change- related risks as well as unstable power supply resulting to power outages exist in some areas in the country which may affect the security of the delivery and distribution of the vaccines. The possible hot weather in the country may also have an effect on the efficacy of low temperature- requiring vaccines.

Adaptation Activities

The AF will work to minimize the aforementioned vulnerabilities and enhance resilience and adaptation through the following activities. Through Component 1, Strengthening Emergency COVID-19 Health Care Response, under sub-component 1.2: Provision of medical supplies, including Personal Protective Equipment (PPE), COVID-19 vaccines, medicines, and ambulances (AF of US$374.7 million), activities will support the procurement of COVID-19 vaccines for a large proportion of the population. This will be focused in the 2nd to 4th priority on coverage of climate vulnerable groups, including indigent and senior citizens, thereby allowing these groups to return to normal life and reduce their climate vulnerability—in particular to extreme heat events and other climate-sensitive diseases. These groups cover over 20% of the total population. Given that other populations groups are also climate vulnerable and will also be vaccinated, a minimum of 20% of the AF allocated to this should be considered to be adapting to climate change, perhaps significantly more. Under sub-component 1.3: Enhancing isolation/quarantine facilities (AF of US$10.7 million) is supporting the establishment, construction, retrofitting/refurbishment of quarantine facilities in major points of entry as well as increases in numbers of regular isolation rooms in DOH and provincial hospitals—and will ensure these facilities withstand the impacts of extreme climate related events, such as flooding and heat events, thereby enhancing the climate resilience of the populations and adapting these healthcare facilities to climate-related risks. The impact of this is important such that at least 10% of the AF allocated to this should be considered to be adapting to climate change.

Component 2: Strengthening laboratory capacity at national and sub-national level to support Emerging Infectious Diseases (EIDs) Prevention, Preparedness, and Response (AF of US$8.3 million) will support the establishment of national reference laboratories as well as selected sub-national and public health laboratories, thereby by enhancing the capacity of the health system to detect, track, and respond to future climate-related disease impacts, in particular emerging infectious and communicable diseases. In addition, the works themselves will be designed to withstand the impacts of extreme climate related events, in particular heat events, thereby enhancing the climate resilience of the populations and adapting these healthcare facilities to predicted climate related risks. The impact of this is significant to the extent that 30% of the AF allocated to this should be considered to be adapting to climate change. Furthermore, the adaptation activities are consistent with and support the DOH Health Sector Strategy for Climate Change Adaptation (Department Circular No. 2010-0187) and National Policy on Climate Change Adaptation for the Health Sector (Administrative Order No. 2012-005) and its operational guidelines (Administrative Order No. 2012-0018), thereby contributing to enhancing the Department's institutional adaptive capacity.

Mitigation activities

In addition, specific project activities financed by this AF will support climate change mitigation through the following activities. Under Sub-component 1.3: Enhancing isolation/quarantine facilities (AF of US$10.7 million) the support for the afore mentioned works to improve healthcare facilities will be undertaken with attention to enhancing the energy efficiency of these facilities through improved insulation, door closures, and where possible renewable energy sources to reduce greenhouse gas emissions from these facilities. The impact means that 10% of the AF allocated to this should be considered to be mitigating climate change. Under Component 2: Strengthening laboratory capacity at national and sub-national level to support Emerging Infectious Diseases (EIDs) Prevention, Preparedness, and Response (AF of US$8.3 million) is with the above sub-component these works will be undertaken with attention to enhancing the energy efficiency to reduce greenhouse gas emissions from these facilities. This impact means that 10% of the AF allocated to this should be considered to be mitigating climate change. The mitigation activities support the DOH initiative to establish emergency efficiency standards as part of the Green Health Care Facilities Standards (Department Memorandum No. 2018-0035) and facilitates the Department's compliance with the Government Energy Management Program under the Energy Efficiency and Conservation Act of 2019 (IAEECC Resolution No. 01, s. 2020).

Risks

The potential impact of climate and geophysical hazards on the project's investments is rated based on exposure ratings for the location, and an understanding of the project's historical and future sensitivity to these risks. It is important to assess the effect that these impacts may have on the investment, and the ability of the project to sustain and enhance these investments under a changing climate.

In terms of health infrastructure, extreme temperatures can reduce comfort in health clinics and increase the need for heating and cooling devices, while extreme precipitation and flooding, strong winds or sea level rise and storm surge can damage hospitals and health care equipment

and cause power outages in clinics and cold chain storages of vaccines. Building climate smart health infrastructure should be highly considered when enhancing resilience in these contexts.

In terms of other project activities pertaining to different subsectors, extreme precipitation and flooding or sea level rise and storm surge can prevent community health workers from traveling to provide education, treatment, or health care services in the community, while extreme temperature may disrupt the delivery of nutrition supplies.

Mitigation Measures

Information collection and development of management systems including early warning systems, improve risk management systems, and strengthening health systems to take into account these impacts from climate and geophysical hazards should be considered to enhance resilience.

Climate and disaster risk management plans of hospitals and health care facilities will be reviewed and updated consistent with the DOH Administrative Order No. 2012-005 "National Policy on Climate Change Adaptation for the Health Sector."

Greening of health care facilities and related establishments is a long- term measure. To ensure operation of vaccine cold storage during power outages, generators should be available.

6 Procedures to Address Environmental and Social Issues

6.1 Screening Process

Annex D. Screening Form for Potential Environmental and Social Issues comprises a screening form that should be used by the BIHC and DPCB in DoH to screen for the potential environmental and social risks and impacts of specific activities. Screening will allow BIHC and DPCB to identify the relevant Environmental and Social Standards (ESS), establish an appropriate environmental and social risk rating, and specify the type of environmental and social risk management measures required, including specific instruments, if needed.

In addition to Annex D, results from the VIRAT/VRAF (see Annex L) can inform the procedures to address environmental and social issues that will guide the development of the Vaccine Delivery and Distribution Manual and National Deployment and Vaccination Plan (NDVP). The VIRAT/VRAF has key indicators related to environmental and social risk management for the deployment of the COVID-19 vaccine including planning and coordination; budgeting, regulatory planning, and coordination; budgeting; regulatory framework; prioritization, targeting and COVID-19 surveillance; service delivery; training and supervision; monitoring and evaluation; cold chain, logistics and infrastructure; safety surveillance; and demand generation and communication. Based on the initial assessment, the planning and coordination for vaccine deployment will build on and enhance the existing structures in the DOH and the Inter-Agency Task Force for

Management of Emerging Infectious Diseases (IATF) to provide oversight for COVID-19 vaccine introduction; the STWG on Vaccine Development will be reconstituted to support the IATF in its oversight function; and a Vaccine Cluster established under National Task Force (NTF) against COVID-19 to promote whole government approach with participation of all government agencies. The government will be guided by the National COVID-19 Vaccine Roadmap and COVID-19 Vaccine Deployment and Immunization Plan in exploring complementary options for accessing vaccines including COVAX facility, advance market commitments and bilateral negotiations with countries manufacturing vaccines. In addition, the management of wastes from the vaccination program as outlined in the criteria on waste management protocols for COVID-19 vaccination, both hazardous and non-hazardous, including development and dissemination of practices and guidelines for disposal routes, appropriate waste management systems in all relevant sites, and adequately trained human resources, and identification and mobilization of properly-licensed waste management providers for hazardous waste storage, transportation and disposal.

Various activities in the VIRAT/VRAF are in progress, albeit mostly in early stages related toVaccine service delivery, cold chain, logistics and infrastructure. The HCWM self-audit tools developed under the Parent Project will assist DOH and health care facilities identify gaps and areas for improvement in HCWM specifically for COVID-19 wastes (i.e., COVID-19 Waste Management Self-Assessment - Compliance Audit Checklist, Monthly Ward / Department Review, and Healthcare Facility Compliance Statement). A COVID-19 Waste Management Operations Manual has been developed under the Parent Project to provide supplemental guidance on the requirements of the Government to manage wastes/recyclables correctly in line with current legislation and relevant health policies (e.g. Infection Control and OHS). The manual covers pharmaceutical waste which includes COVID-19 vaccines and residues. Philippine government policies and regulations identified in the preceding section will similarly inform the action required to get a completed (or more than 90%) status of the VIRAT/VRAF activities. The COVID-19 Waste Management Operations Manual will be reviewed and the next steps on the use of the Manual will be vetted upon by the relevant DOH Bureaus.

Additional findings based on the initial VIRAT/VRAF assessment also shows that public consultation will be conducted in January 2021 other partners, government agencies, NGOs, and private sector and activities will be included in the SEP. Likewise, the Government is in the process of establishing an Emergency Operations Center with the complete data management systems and tools, including the management of the GRM system, starting on January 2021. In terms of risk communication and stakeholder engagement, the government will strengthen human resources including communication organizers and developing a risk communication strategy including data collection systems, including 1) social media listening and rumour management, and 2) assessing behavioural and social data.

6.2 Environmental and Social Management Plans

For activities involving civil works or construction activities an Environmental and Social Management Plan (ESMP) template has been prepared by DoH. The ESMP or ECOP, together with the LMP, and Contractor's Personnel GRM will be accomplished by the Contractors together with the bid

documents. The DoH will evaluate the capacity of the Contractors to implement the ESMF together with the aforementioned requirements. This will be included in the indicators for the selection of the bidders. The ESMP shall be site-specific, and proportionate and relevant to the hazards and risks associated with the particular activity and will be implemented by the health facility and contractors. For example, activities such as establishment of isolation tents and first line decontamination facilities are simple construction activities and the ESMP aside from the Labor Management Plan (LMP), may comprise simple standard management and mitigation measures such as those defined in the ECOPs provided in Annex G. Establishment of quarantine facilities involving the expansion of a new wing within the compound of a health facility, the possible establishment of warehousing for the vaccines, or the rehabilitation of an existing building that may involve extensive construction, a more comprehensive ESMP will be prepared and implemented.

An ESMP will comprise a simple matrix in the format shown in Annex E. When designing mitigation measures the ESMP should address site-specific environmental and OHS issues and shall draw on the Environmental Codes of Practice (ECOP) included in Annex G and relevant, up-to-date guidance from WHO, DOH, DENR and other relevant government agencies on COVID-19 specific advice.

The site specific ESMP or ECOP will include as attachments, as needed, the LMP, GRM, and ICWMP. For each identified environmental and social risk, the format shows (1) proposed risk mitigation measures, including measures to be implemented by the construction contractor; (2) responsibility for each risk mitigation measure, (3) Timeline (e.g. pre-construction, during construction, etc.); and (4) Budget. For mitigation measures that are the responsibility of the construction contractor, the supervising engineer will verify that measure have been properly implemented. Implementation of E&S risk mitigation measures will be reported and will be a condition for approval of payments.

6.3 Health-care Waste Management

The project is supported by a consultant to provide technical assistance and capacity building to DOH on health-care waste management until materials and tools to supplement the DOH Health Care Waste Management Manual 4th Edition on management of health care wastes related to COVID-19 and emerging infectious diseases have been developed, and capacity building of concerned health workers are completed. HCWM is well-regulated in the Philippines through the Fourth Edition of the Health Care Waste Management Manual (April 2020) of DOH. However, capacity gaps in the implementation of the Manual still occurs.

The technical assistance program will involve provision of real-time capacity building support to DOH on immediate priorities for safely managing COVID-19 HCW. A second pre-testing of the developed health care waste management self- audit tools is being undertaken for six health facilities to establish a compliance baseline and assess the contents and user-friendliness of the tools. Using this baseline, a video training package will be developed for distribution across all health-care facilities. Annex I contains an Infection Control and Waste Management Plan (ICWMP) template which can be used as a checklist during the capacity building exercise and cross-referenced with the DOH Manual to determine any gaps or opportunities for improvement.

I DOH will coordinate with the Department of Environment and Natural Resources- Environmental Management Bureau (DENR-EMB) to discuss the surge of M501 and M503 health care wastes due to the COVID-19 vaccination activities. It is important to guarantee the capacity of the waste transporters and TSD facilities to accommodate the influx of health care wastes and that a clear road map/strategy is developed by the DOH in coordination with the DENR to strengthen capacity of the country to manage health care wastes.It should be noted that not all regions have DENR- accredited M501 and M503 wastes transporters and treatment, storage, and disposal facilities (TSDs) based on their area, as discussed in Chapter 4.

The DOH will also be conducting trainings for the implementers of the vaccine deployment and administration on proper health care waste management of infectious and pharmaceutical wastes.

6.4 Indigenous Peoples

Despite the strong rights provided by the IPRA and the historic recognition of indigenous peoples in the Philippines, conflicts over their identities and access to land and natural resources continue. And despite being relatively well- organized, including the existence of numerous local and national indigenous peoples' organizations, they still face social and political marginalization. They are among the poorest population groups in the Philippines, far worse in terms of health and education indicators and are affected by civil conflicts such as in Mindanao.

Given these vulnerabilities, the COVID-19 pandemic poses particular risks to indigenous peoples. The United Nations' Department of Economic and Social Affairs has noted that indigenous peoples often "experience poor access to healthcare, higher rates of communicable and non-communicable diseases, lack of access to essential services, sanitation, and other key preventive measures, such as clean water, soap, disinfectant, etc." Likewise, most nearby local medical facilities, if and when there are any, are often under-equipped and under-staffed. Even when indigenous peoples are able to access healthcare services, they can face stigma and discrimination.

A key factor is to ensure these services and facilities are provided in indigenous languages as part of the BIHC's support to the DOH Centers of Health Development, and as appropriate to the specific situation. It is also noted that indigenous peoples' traditional lifestyles are a source of their resilience, but can also pose a threat to spreading of the virus, e.g. through traditional gatherings to mark special events and living in multi-generational housing. Many communities in relative isolation and remote areas may be less exposed to the virus, but if it does reach such communities the risks would be heightened due to their lack of access to adequate health and social services and effective monitoring and early-warning systems.

Health facilities close to the indigenous communities are available to provide health services to nearby IPs. The upgraded facilities are to be located within existing premises of health facilities or government premises. As such, construction does not pose risks to indigenous peoples, but they would need to be included in stakeholder engagement processes for civil works activities. This is also prescribed in the SEP.

It has been found that providing health care to indigenous peoples can be more effective when integrating Western medicine with traditional knowledge, systems, and practices of healing, which may include herbal medicines, acupressure, acupuncture, and *hilot*, an ancient Filipino art of healing

derived from shamanic traditions that uses different techniques of manipulation and massage to achieve the treatment outcome. A study of health perceptions and practices of the *Lumads* of Mindanao finds that they recognize the benefits of Western medicine provided through the government's health services. However, they continue to combine such health care with their indigenous health and treatment beliefs, practices and rituals provided by the *bayian* or traditional healer when confronted with health problems.

The active participation of IPs, their organizations and health practitioners, is critical in providing efficient and culturally appropriate health services in indigenous communities. Such as an approach is recognized by DoH in the "Guidelines on the Delivery of Basic Health Services for Indigenous Peoples/Indigenous Cultural Communities" or Joint Memorandum Circular No. 2013-01 agreed to between DOH, NCIP, the Department of Interior and Local Government (DILG) on April 19, 2013, which will guide the project's approach to supporting health services in areas with indigenous peoples.

The project will not develop a stand-alone indigenous peoples instrument (e.g. an Indigenous Peoples Plan). Instead, the requirements of ESS7 will be addressed through a targeted engagement strategy, included in the Project's Stakeholder Engagement Plan and in ESMPs when these are required for civil works. This is appropriate given the project activities to support hospitals and local health facilities to combat COVID-19, through procuring equipment and PPEs for health workers and enhancing testing, quarantine, and treatment capabilities. It is consistent with ESS7's emphasis on developing plans that are proportionate to the potential risks and impacts of the project (paragraphs 13 and 17). No civil works outside of existing health premises are expected to be financed by the project and no activities that would require any land acquisition will be financed. Therefore, no circumstances requiring free, prior, and informed consent under ESS7 are present in project activities. It should also be noted as part of the vulnerable groups, the indigenous peoples should be considered in the priority eligible population for COVID-19 vaccination, as aligned with the WHO SAGE Values Framework for the Allocation and Prioritization of COVID-19 Vaccination.

Stakeholder engagement and public consultations with representatives of indigenous peoples and their organizations are provided for in the SEP. These organizations and representatives will be consulted during project implementation. The NCIP at national, regional, and local levels will also be consulted, particular for any project activities taking place within the ancestral domain of indigenous communities, and indigenous peoples in areas of site-specific project activities will be engaged and consulted consistent with the IPRA, the Joint Memorandum Circular No. 2013-01 and ESS7.

For site-specific project support to regional and local health facilities in areas with indigenous communities, DoH and local partners (e.g., LGUs) will consult with indigenous peoples, their representatives and NCIP; local NGOs or CSOs may also be consulted.

Project activities in areas with indigenous communities will be informed by the Joint Memorandum Circular, which provides guidelines around five key principles for delivering health services to indigenous peoples:

1) Making basic health services available and culture-sensitive.

'Culture-sensitive' health care, means policymakers and health workers acknowledge and respect cultural diversity among the populace since this affects values, learning, behaviour, health practices and outcomes. Health care providers will recognize existing beliefs and practices to the extent that these are not a hindrance to effective measures against the COVID-19 pandemic, and 'culture-sensitive' orientation and training to health workers, managers and other stakeholders is provided as appropriate.

Indigenous health care practitioners in communities should be informed about COVID-19 symptoms and local outbreaks, and should be involved in engagements with indigenous communities and patients, as appropriate (indigenous practitioners are likely to be the first point of contact for indigenous peoples seeking medical services).

2) Providing equitable distribution of needed health resources.

At project-supported health facilities in areas with indigenous peoples, they and their support organizations will be informed of the services provided and efforts will be made to ensure the indigenous peoples affected by COVID-19 will receive the same treatment as non-indigenous patients.

Indigenous health care providers/staff at DoH and LGU facilities, when available, are provided with the same resources, including PPEs and information about COVID-19. These may also be provided to indigenous health practitioners.

3) Ensuring non-discrimination of ICCs/IPs in the delivery of health services.

'Culture-sensitive' orientation and training to health workers, managers and other stakeholders is provided as appropriate.

Indigenous health care providers at DoH and LGU facilities, when available, and indigenous health practitioners are involved in providing health care services to indigenous communities and patients, as appropriate.

4) Managing geographical, financial and socio-cultural barriers so that IPs can access basic health services.

As the project is financing emergency responses to COVID19 this principle is not applicable. However, once the emergency subsides additional measures to enhance IPs' access to health services may be considered.

5) Strengthening recognition, promotion, and respect of safe and beneficial traditional health practices.

Efforts to hire indigenous health care workers should be made to the extent possible. Existing indigenous health care workers at DoH and LGU facilities will be involved in providing services to indigenous communities. An IP health care worker or an IP-oriented health care worker at health facilities should be designated to care for, or oversee care for, indigenous patients. Indigenous health practitioners are involved in providing health care services to indigenous communities and patients, as appropriate.

Measures to enhance benefits and avoid adverse impacts will be developed in consultation with representatives of the indigenous peoples as appropriate in the local context and in a manner proportional to the project activities' risks and potential impacts or benefits. Physical distancing and other COVID-19 restrictions will be respected.

7 Stakeholder Engagement, Consultation and Disclosure

The Stakeholder Engagement Plan (SEP) has been developed to ensure that stakeholders are informed about project risks and mitigation measures, information is disclosed properly, communities and local government units are engaged, and social preparation for areas that will host isolation and quarantine facilities will be conducted.

The ESMF is prepared together with the Project's SEP and Environmental and Social Commitment Plan (ESCP). The ESCP and the first draft of the SEP were disclosed on April 2, 2020 at the DOH website at https://www.doh.gov.ph/sites/default/files/health_advisory/Environmental%20and%20Social %20Commitment%20Plan%20(ESCP).pdf. They were disclosed on April 8, 2020 at the World Bank's external website (www. http://documents.worldbank.org/curated/en/home). The t ESMF, ESCP, and SEP were disclosed in the DOH website on 4 August 2020, 09 October 2020, 25 November 2020, and January 8, 2021 at https://www.doh.gov.ph/COVID-19/emergency-response-project and will be disclosed at the World Bank's website.

7.1 Stakeholder Consultations on the Parent Project

Consultations with affected and interested stakeholder on the ESF documents of the Parent Project were conducted on 18-19 August 2020. Due to the physical distancing restrictions, the engagement process was conducted virtually through a WebEx meeting.

The ESF documents, i.e. ESMF, ESCP, and SEP, updated for the Additional Financing will be disclosed in the DOH website on 10 January 2021. Public consultation will be conducted in January 2021 with other partners, government agencies, civil society organizations, and private sector based on the initial inputs in the VIRAT/VRAF.

The key feedback of the stakeholders in the said Consultation are as follows:

1. Highlight of the VAWC and GBV in the ESMF and SEP and awareness was suggested to be part of the project activities;

2. Development of guidelines for watchers, carers, and personal assistants, especially for the PWDs and children, in health care facilities, testing facilities, and quarantine areas is recommended;

3. Revision of the ESMF to include RA 11106 and 7277 to emphasize institutional mandate for support to PWDs;

4. Recommended provision of health promotion materials and virtual sign language interpretation for PWDs in health care facilities, testing facilities, and quarantine areas;

5. Recommended inclusion of disaggregated COVID-19 data on indigenous peoples;

6. Recommended provision of vaccines, e.g., pneumococcal, flu, and hepatitis B, for health care workers and vulnerable groups such as persons with disabilities (PWDs), children and the elderly;

7. Declaration of contractor's liability on workers for medical bills and wages once they contract COVID-19;

8. Stricter compliance of waste generators and waste service providers (treatment, storage, and disposal facilities/ TSDs) to the DENR Environmental Management Bureau guidelines on health care wastes as improper disposal is still observed; and

9. Proposed extension of the Project benefits to other health care facilities.

Below are the detailed feedback of stakeholders during the National Stakeholders Consultation on 18-19 August 2020 and the responses and updates from DOH:

Table 7.1. Key agreements on the National Stakeholders Consultation of the Parent Project, August 2020

Topic	Stakeholder	Comment / Feedback	Response
Stakeholder Engagement	Save the Children Philippines	Query on the difference in the engagement among groups or if the groupings were made to facilitate consultation In view of the prolonged pandemic and its wide impact, it may also be necessary to review who are affected.	The SEP is a guide for stakeholder engagement throughout the project implementation. It is a living document which will be revised as appropriate, considering the feedback of the stakeholders. The SEP distinguishes between affected and interested stakeholders and identifies vulnerable stakeholders that may require special attention.
	Philippine Coalition on the UNCRPD	VAWC is an important issue. We should raise awareness, provide information on how to access, and provide help desks.	VAWC and GBV are highlighted in the ESMF and SEP and awareness will be integrated in the project activities.
	Saint Anthony Mother and Child Hospital	Risk of transmission is high for patient watchers within hospitals. Guidelines for control and mitigation measures of transmission and accommodation for them for social distancing is recommended to be provided.	The patient watchers are covered by the guidelines on the rational use of personal protective equipment (PPE). There are no accommodations for them due to the high number of cases needed to be catered and the risk of infection.
Strengthening capacity in the regions	MIMAROPA Center for Health Development (CHD) CARAGA CHD	Health care manpower is the main challenge, especially in geographically isolated and disadvantaged areas (GIDAs). Health care facilities are existing but there are no applicants. The locally stranded individuals or LSIs are major sources of COVID-19 infection (56%) in the MIMAROPA region. Ways in which the project can help address this problem are sought.	The project activities include mostly provision of equipment to build COVID-19 response capacity and some repairs of health care facilities and laboratories, including the isolation rooms. There will also be a capacity building component for health care workers.

<table>
<tr><td></td><td></td><td>Moreover, ways to strengthen capacity at the regional and facility levels are sought.</td><td>Project consultations and trainings will be provided. These will mostly be online due to challenges in the implementation of the project due to the pandemic.</td></tr>
<tr><td>Services for persons with disabilities (PWDs) and children</td><td>National Commission on Disability Affairs (NCDA)

Filipino Sign Language Access Team for COVID-19

Philippine Alliance of Persons with Chronic Illness (PAPCI)

Philippine Federation of the Deaf

Philippine National Association of Sign Language Interpreters (PNASLI)

Live Haven, Inc.</td><td>The accessibility of services and infrastructure (e.g., ramps) and hospitalization support for PWDs who will contract COVID-19 should be provided. It was also pointed out that each type of disability has specific needs and support services which may need capacity building of health care personnel.

There is a need for virtual sign language interpretation services in health care facilities, testing centers, and quarantine/isolation areas. There are networks who may be able to provide sign language interpreters but they are mainly based in Manila. TFSL interpretation in health facilities through video calls provided by service providers is recommended. It was also pointed out that the DOH and DILG should comply with RA 11106 or the Filipino Sign Language Law by providing such services in health facilities, workplaces, and the media. Guidelines on FSL interpreter qualifications, including skills and ethical considerations is needed.

Access to information for PWDs is also a main concern as sign language interpretation is still very limited. Unlike national TV news, regional TV news do not have sign language interpretation. Grassroots organizations have turned to social media to disseminate information. They requested that the project stress the importance of access to information through DOH, even if the COVID IEC funds come from a different donor source.</td><td>The DOH Health Facilities Development Bureau (HFDB) has reported that there are 10 provincial hospitals which currently have Filipino sign language interpreters (FSL) who are mostly social workers employed by the hospital. They are as follows:

<table><tr><th>Region</th><th>Hospital</th></tr><tr><td>NCR</td><td>Jose Fabella Memorial Hospital,
Lung Center of the Philippines</td></tr><tr><td>I</td><td>Mariano Marcos Memorial Medical Center,
Ilocos Training and Regional Medical Center,
Region I Medical Center</td></tr><tr><td>IV</td><td>Batangas Medical Center</td></tr><tr><td>VI</td><td>Corazon Locsin Montelibano Memorial Regional Hospital,
Don Jose Monfort Memorial Medical Center Extension Hospital</td></tr><tr><td>VII</td><td>Vicente Sotto Memorial Medical Center</td></tr><tr><td>XII</td><td>Cotabato Regional Medical Center</td></tr></table>
According to the Degenerative Disease Office of the Disease Prevention and Control Bureau (DPCB-DDO), the new education curriculum of social workers has integrated basic FSL. It should be noted that hospitals have at least 1 social worker. It would be ideal if the</td></tr>
</table>

	Philippine Coalition on the UNCRPD	Assistance to the deaf in finding hospitals which are deaf- accessible and providing counseling services should be given. There is a need to accommodate and entertain carers/personal assistants of PWDs and children in health care facilities, testing centers, and quarantine/isolation areas. Vaccination for children and other vulnerable sectors should be provided. The PWD groups have expressed their interest in being engaged and involved in the project implementation. The need to recognize vulnerable groups, e.g. PWDs and IPs, were pointed out.	employed social worker has background on FSL. The Metro Manila and CALABARZON Centers for Health Development (CHDs) are conducting community- based trainings on FSL. It is planned to cascade the training to the other regions in 2021. The Congress is also discussing the provision of FSL interpreters in health facilities. However, the timeline for this is not yet known. The Project will be conducting a baseline assessment on the capacity of the recipient hospitals to provide accessible health services to vulnerable groups, including provision of virtual FSL services based on parameters such as availability of devices and internet connection. The baseline assessment will also cover GBV, VAWC, and IPs. Based on the results of this assessment, the Project in coordination with HFDB and DPCB- DDO, will determine the feasibility of the virtual FSL services which would be in partnership with the FSL interpreters and PWD representatives to be financed by the Project. The DOH Health Promotion Bureau (HPB) has no COVID-19 health promotion materials for the PWDs. Currently, they only have the 30-second video with FSL interpretation for polio. The HPB and the DPCB- DDO have included

			PWD- accessibility in their Communication Plan for 2021 which will include printer materials with Braille and videos with sign language. The DPCB- DDO in partnership with the Philippine Information Agency (PIA), have previously developed a Communication Plan for PWDs which was also presented to the PWD CSOs. The concerns of PWDs, particularly accessibility, will be considered in the activities under Component 3, Project Management and Monitoring and Evaluation, of the project by integrating into the prevention and preparedness activities. Project management and monitoring should ensure that the improved capacity of the health care facilities results in improved access for PWDs. The PWDs and other vulnerable sectors will be highly considered in the project. The ESMF will also be revised to include Republic Acts 11106 and 7277 and Batas Pambansa 344 to further strengthen the framework.
	Philippine Pediatric Society (PPS) Pediatric Infectious Disease Society of the		The request for vaccination of children and other vulnerable groups as well as the guidelines for carers/personal assistants of PWDs and children will be relayed to the DOH DPCB, HFDB, and the DOH IATF Focal Team. The PWD CSOs will be requested to submit a formal request to the IATF

	Philippines (PIDSP)		(iatfsecretariat@gmail.com) and DOH regarding the grievances of the carers/personal assistants. The HFDB, with assistance from the Project, will develop a policy issuance to consider the carers of PWDs and children in health facilities.
Indigenous Peoples	Tebtebba Foundation	It was recommended to include disaggregated data for Indigenous Peoples related to the COVID-19 response. The group also relayed that they have conducted an assessment on IPs and COVID-19 which they may share with the Project Team.	The DOH Epidemiology Bureau (EB) which is in- charge of the data management on COVID-19 does not have disaggregated data for IPs. The request has been communicated to EB. The Tebtebba Foundation has submitted their request for data on Indigenous Peoples (identified as to their ethnicity) infected by COVID-19 and history of infection aside from the usual data provided to the EB. The Project will further assist Tebtebba Foundation on this request. To ensure that IPs will have access to the COVID-19 related health services, the DOH Bureal of Local Health Systems Development (BLHSD) has issued Department Circular 2020-0192 last April 2020 entitled 'Ensuring that people in GIDAs, Indigenous Cultural Communities/Indigenous Peoples are well-informed on COVID-19 and have access to Temporary Treatment and Monitoring Facilities and Referral Hospitals.'
BARMM	Community and Family Services International	Coordination with BARMM MOH and project coverage inclusion was asked.	BARMM is covered by the project. The Amai Pakpak Medical Center is included in the tentative list of recipient facilities. Coordination with BARMM MOH will be done

			through the Field Implementation and Coordination Team- Visayas and Mindanao
Grievance Redress Mechanism	Save the Children Philippines	It was raised that if the grievance pertains to the service received from a local health facility or LGU, submitting the grievance to them may prevent the community to raise concern.	It would be good if the issue will be resolved at the local level. Grievance may be elevated to regional and national levels, following the GRM process.
ESMF	Philippine Medical Association	The provision of pneumococcal, flu, and hepatitis B vaccines for health workers was recommended.	This will be considered in the project activities. It has also been relayed to DOH DPCB, as it is in-charge of vaccination initiatives (not financed by the Project). It should be noted that these vaccines are covered in the Expanded Program on Immunization (EPI) of DOH.
		There is a need to address health hazards brought about by the improper disposal of face masks.	The infectious waste- generating establishments as well as the waste service providers or treatment, storage and disposal facilities (TSDs) should comply with the DENR EMB guidelines for waste generators. The ESMF includes measures to improve waste management and will be further enhanced through an ongoing audit of current infectious waste management at health facilities. The audit tool developed by the Project will provide the health facilities self- assessment tools to monitor waste disposal. Education campaigns and information materials on infectious wastes and proper disposal will be further promoted.
		Occupational safety and health risks during construction should be addressed. It was inquired whether specific guidelines will be issued due to the	The project will not develop additional guidelines as there is limited construction activities involved. Workers will be provided with face masks by the contractors and social

	Cebu South Medical Center	COVID-19 pandemic, aside from the usual OHS and DOH issuances. The coverage of medical bills and wages of workers who will contract COVID-19 was queried. Experience on symptomatic workers in which the hospitalization costs and compensation were covered by the hospital was relayed.	distancing measures for construction will be adhered to. The contractors will also be asked to prepare the Environmental and Social Management Plan (ESMP), Environmental Codes of Practice (ECOP), Labor Management Procedures (LMP), and Contractor's Personnel Grievance Redress Mechanism to minimize occupational risks in the civil works components. The Republic Act 11058, Department Order 198, and the IATF issuances set liability on the contractor. To further highlight the contractor's responsibility, the liability clause will be explicitly stated in the contract. The ESMF includes Labor Management Procedures.
Recipient hospitals and equipment	Pangasinan Provincial Health Office Luis Hora Memorial Regional Hospital Mariano Marcos Memorial Hospital and Medical Center	The health facilities which will be covered by the project and the equipment to be given were asked. The hospitals invited in the National Stakeholders Consultation are included in the initial list of recipients recommended by the HFEPMO. The local government units through the provincial, city, and municipal health offices were invited for their information and guidance on the project. It is envisioned to expand the testing in the rural areas also. However, the project recipients are chosen based on the ongoing application for testing accreditation.	The hospitals to be included as recipients of the World Bank loan are the 70 retained DOH hospitals and the 30 hospitals part of the Universal Health Care implementation sites which were first approved by the NEDA. Other hospitals not part of the project may be covered by other projects such as that of ADB. The recipient facilities were selected based on capacity to test, i.e., ongoing application for accreditation. The local government units through the provincial, city, and municipal health offices were invited for their information and guidance on the project.

			It was also clarified that the project is different from the existing project of HFEPMO. The HFEPMO will finalize the list of hospitals and equipment to be distributed.
Project Implementation	Mariano Marcos Memorial Hospital and Medical Center	The project requirements and expectations from recipients, e.g., proposal, timelines, funding approval, project termination, and monitoring and evaluation.	There will be no project proposal required as the health care facilities are chosen beneficiaries of the project. It will follow the usual protocol on accepting donations from the DOH Central Office, such as accomplishing the Deed of Donation, i.e., formal transfer of ownership and acceptance from DOH to the recipient hospital. The recipient is expected to maintain the equipment for its sustainability. Post- evaluation and monitoring may also be conducted by the Project Team. The HFEPMO clarified that there will be mostly retrofitting/upgrading of the existing hospitals and that currently, only the National Center for Mental Health and Dr. Jose Rodriguez Memorial Hospital will have new constructions. The list of construction works will be sent by the HFEPMO.
	Corazon Locsin Montelibano Memorial Regional Hospital	It was queried if the civil works component of the project will cover only the existing facilities.	For the safety of the workers, PPEs will be worn and the hierarchy of controls will also be observed. Engineering controls and substitution will also be observed.
Project Sustainability	Tebtebba Foundation	The COVID-19 recovery will take a “heal as one” approach, aside from the direct results of the project, entailing community mobilization.	To extend the benefits of the project, the recipient hospitals will have to and are expected to take good care of the project donations, such as the equipment. Training of

		It was asked if there would be an exit strategy to guaranteed sustainability of project benefits. It was also inquired how the exit strategy ensure that indigenous health care, knowledge and management systems, as well as traditional health care providers would be acknowledged and recognized, given their significant roles in community health.	personnel will also be part of the sustainability initiatives. In areas with IP, the ESMF includes measures to coordinate with traditional health care providers, consistent with DoH's Guidelines on the Delivery of Basic Health Services for Indigenous Peoples/Indigenous Cultural Communities.

The SEP provides further details on the consultations on the draft documents and the plan for continued stakeholder engagement during project implementation. The SEP has been developed to ensure that stakeholders are informed about project risks and mitigation measures, information is disclosed properly, communities and local government units are engaged, and social preparation for areas that will host isolation and quarantine facilities will be conducted. The SEP will be implemented in a way that takes into consideration specific circumstances for indigenous peoples, other vulnerable groups, and the locality's ways of information dissemination and conducting consultations while communities or households may be in quarantine or physical distancing restrictions. The SEP includes a grievance redress mechanism by which people can raise concerns, provide feedback, or make complaints about project related activities.

A series of consultations will be conducted with the implementers of the GRM.

7.2 Stakeholder Consultations on the Additional Financing

A series of consultations participated by the implementers and stakeholders of the COVID-19 vaccination activities, in consultation with and per directive of the COVID-19 Vaccine Cluster Organizational Structure, had been conducted. These consultations involve the Centers for Health Development, the Food and Drug Administration, local government units (LGUs), the recipient health facilities, priority eligible population for vaccination, and the private sectors involved in cold chain management. The DOH HPB is also conducting Town Hall Meetings (https://doh.gov.ph/press-release/DOH-AND-PHILIPPINE-NURSES-ASSOCIATION-HOLD-TOWN-HALL-TO-PROMOTE-VACCINE-CONFIDENCE). The proceedings of which will be requested.

The DOH DPCB has conducted the online Public Consultation on the National Strategic Policy Framework for COVID-19 Vaccine Deployment and Immunization last December 7, 2020 and January 8, 2021 which was participated by national government agencies, DOH CHDs, health care facilities, professional organizations, the academe, civil society organizations, private sector (health insurance corporation), and development partners. The key agreements are as follows:

Table 7.2. Key agreements in the Public Consultation on the National Strategic Policy Framework for COVID-19 Vaccine Deployment on December 7, 2020

Topic	Stakeholder	Key Agreement/ Recommendation
General Guidelines	UP College of Medicine (UPCM)	To include communication and health education in the specific objectives To include and to prioritize the widespread communication and understanding of COVID burden and its prevention To include and prioritize the widespread communication and understanding of COVID burden and its prevention
	DOH	Reconsider statement that COVID-19 vaccine is a 'public good' as this term is different in economics

	UP College of Public Health (UP CPH)	To consider the reciprocity Principle under WHO SAGE framework
Financing and Funding Mechanisms	UPCM	To specify the establishment of plans and strategies to make the country vaccine 'resilient' able to address setbacks, disruptions, crises that could destroy the immunization programme with a view to ensure programme continuation
Identification of Eligible Population	UNICEF	To identify the minimum list of the priority population
	DOH Epidemiology Bureau (EB)	Inclusion of the term 'herd immunity'
	Coalition for People's Right to Health (CPRH)	Exclusion criteria must also be mentioned apart from eligibility
Supply Chain and Management of Health Care Waste and Injection Safety	UNICEF	To have the supply chain management plan linked to the overall EPI cold chain management plan and to use the evidences from the VRAT/VRAF assessment and EVMA recommendations
	Office of the Presidential Adviser on the Peace Process (OPAPP)/ National Incident Command-Emergency Operations Center (NIC-EOC)	Inclusion of the statement 'Facilitate procurement through various mechanisms allowed under existing laws, rules, and regulations through bilateral, multilateral and other financial modalities (e.g., COVAX Facility, etc.)'
Human Resource Management and Training	Philippine Pharmacists Association (PPhA)	To include a provision for the active involvement of the barangay health workers at the level of the community To include training of uniformed men to understand the pro per handling and storage of these vaccines
	DOH EB	To include 'health care waste' management plan
	DOH DPCB Occupational Diseases Division (ODD)	Consider to include in the definition of terms who are the members of the committees such as NITAG, etc.
Vaccine Acceptance and Uptake	UP CPH	To identify and consult the end-users of the data management system with the other stakeholders in the process of developing the information system (IS) to come up with a user-friendly digital system To train end-users in the functionality of the IS to minimize use of parallel (often paper-based) technologies which arise with non-familiarity with the new system
Vaccine Safety Monitoring,	UPCM	To have an active surveillance system rather than just a passive surveillance system

Management of AEFI and Immunization Safety		There is a need for media management when it comes to AEFI reporting
Immunization Registration, Monitoring and Data Management Systems	CPRH	There should be communication of exclusion criteria to be specified apart from eligibility.
	DOH EB	A phased-in profiling of eligible populations based on areas with high burden of disease and priority population groups shall be conducted.
Roles and Responsibilities	OPAPP/NIC-EOC	Task Group on Procurement and Finance be led by the Department of Finance with DBM and DOH as members One of the Task Groups to develop a strategic map with necessary indicators and targets for easy monitoring To include the number and general description of the NITAG's composition
	DOH EB	To include FDA in the agencies/ offices to be provided with recommendations by the NAEFIC
	PPhA	Task Group on Cold Chain and Logistics to consider mobilizing pharmacies to be center for pharmacy-based immunization
	CPRH	To review the implications on the implementation if Phase III clinical trials and the implementation of the vaccines with EUA will overlap

Table 7.3. Key agreements in the Public Consultation on the National Strategic Policy Framework for COVID-19 Vaccine Deployment on January 8, 2021

Topic	Stakeholder	Queries/Recommendations	DOH Responses
Presentation of the National COVID-19 Deployment and Vaccination Plan	Dr. Quizon	Why are indigent populations among priority groups? Their risk is no greater than a rich person. Is there evidence that those who got infected so far, are indigents?	DPCB answered that it will be discussed during the next NITAG meeting to discuss the order of priority
	League of Provinces of the Philippines	Will the National Government's purchase of vaccines be provided to the LGUs, as identified according to the IATF's priority plan?	DPCB said yes and all vaccines will be coursed through the LGUs.
	Mr. Jose, Jr.	Order of priority for non-medical government officials such as Mayors; local Gov't officials and Government workers in Government offices? Also Congressmen and Senators?	Dir. Sudiacal of DPCB responded that Government workers aside from those mentioned in Priority A area under Priority B.

	Far Eastern University - Nicanor Reyes Medical Foundation School of Medicine	How will the vaccinees be notified of their vaccination schedule? What is the implication of the vaccine pre-registration already being done by various LGUs (i.e., online registration via Google Forms) with the proposed plan of vaccine deployment?	The LGU and the implementing unit such as the health facility will determine your schedule. On the other hand, a digital system will notify you of your vaccination schedule date. As of now, DOH is working closely with the LGU to marry existing information systems and the COVID-19 Vaccine Electronic Immunization Registry (CEIR). Ideally, only those registered in the CEIR will be provided with a unique QR Code, and thus, eligible to be vaccinated.
	Ms. Ramos	In the vaccination program and asked if the HCWs will be prioritized. However, this will impact the resources needed for the vaccination program as well as continuous health services. In particular for the first round of 1.7M HCWs, they will need time off after vaccination due to the expected side effects. Will there be a number of people who will supplement the HCWs while they are recuperating? How long will they be given time off?	The DOH is requiring each implementing unit to do micro planning to ensure that contingency plans are available if a health worker is not able to report due to adverse reactions. And the vaccination activity is done through a determined schedule basis. Thus, the health facility should be able to allocate adequate human resources for the conduct of continuous health services.
	Ms. Kraft	If remaining indigent population has been indicated as a priority population group, will this group include those who are below 17 years old? I ask because some of the vaccines have not been tested on children.	The vaccines will be given to eligible population groups. As of now, data shows that COVID-19 vaccines can only be administered to >16 yo and above.
	Ms. Rabe	Can the LDRRM Fund or Quick Release Fund be used for the purchase of vaccines?	Unfortunately, we do not have any jurisdiction on this. We will forward your concern to DBM. As reiterated by Usec. Cabotaje, the vaccines will not be available commercially until late

			2022. Procurement will be coursed through DOH.
	Ms. Nievera	Will there be instances where vaccines will be used interchangeably - meaning another vaccine is used for the 2nd dose? How do we monitor/manage/avoid such cases?	The vaccines will be given to eligible population groups. As of now, data shows that COVID-19 vaccines can only be administered to >16 yo and above.
	Mr. Songco	Who is allowed to vaccinate?	Doctors and nurses.
	Ms. Luzande	What kind of distribution model will the government employ? Centralized, Hub and/or Decentralized?	It will be a centralized hub.
HTAC Evaluation Framework for COVID-19 Vaccines	Mr. Ybiernas	What type and brand of vaccine to be given to the Filipino People?Do we have a list of brands to consider?	Dr. Guerrero mentioned that there is a need for EUA before we can use and administer the vaccine. The FDA has yet to issue EUA to any vaccine but they have received at least 2 applications as of the moment.
	Ms. Villa	Regarding prioritization of vaccines to be given, will it be considered to prioritize giving to those LGUs who have not manifested procurement of their own vaccines?	Yes, we are adhering to the principles of equity and reciprocity. The national government will provide vaccines to all LGUs/areas, following the priority eligible population.
	Cotabato Regional Medical Center	If the individual has already been infected,what priority level will they belong to?	Dir. Arevalo mentioned that DOH through the Health Promo Bureau has done social listening and surveys. Demand Generation is headed by the PCOO along with DOH, DICT and PIA. Conduct of a series of townhall meetings have started to increase awareness about the vaccination. US experience: Vaccination sites were not prepared so the DOH
	Ms. Maderazo	If the EAU will be given to DOH only for purposes of intense side effect monitoring, does it mean that the LGUs with alleged budget allocation for their own vaccine procurement is not necessary?	
	Laban Consumer	The acceptability of vaccination among Filipinos is only 50% as a result of the surveys. Therefore, what is the plan of the government to increase acceptance of the vaccine?	

			has started the capacity building and other strategies including communication before the vaccination.
	Ms. Kapunan	Will the LGUs be able to independently procure vaccines or will the EUA be granted only to DOH?	The LGU can procure vaccine
	Health Technology Assessment Council (HTAC)	How will the government certify that a person has been vaccinated? Will this certificate be recognized abroad? Are there internationally accepted formats right now?	The DPCB will coordinate with HFSRB and LGUs.
	Philippine Hospital Association	What is the role of hospitals in this immunization program?	Dir. Arevalo answered that Hospitals will be vaccination sites. Further, capacity building through e-learning will be done starting next week. Hence, both the Public and private hospitals are included in the training. Contact details of hospitals and LGUs where they are located were requested for succeeding trainings.
	Ms. Tiamzon	In the news there are private companies who are saying that they will also be procuring COVID-19 vaccine. How is this in sync with the government's procurement of the vaccine?	The DPCB will still coordinate with the private sectors.
	League of Provinces of the Philippines	On the EUA/FDA Approval: Can LPP get the contact information of the FDA approved supplier?	FDA will provide information on the vaccines approved by January 15, only one applied is currently being assessed. Usec. Myrna Cabotaje added that all vaccine trials are on Phase III, they have not finished Phase III and Phase IV yet. The DOH cannot introduce vaccines unless they are in Phase IV of the clinical trial.

			The EUA is an authorization not a marketing authorization so this will not make the vaccine commercially available for procurement of individuals, private entities and the government. Acquisition and access are done through Sec. Galvez. Consignee designation through Sec. Duque. Hence, we always have tripartite agreements.
	Ms. Delos Reyes	Is the vaccination program on a voluntary basis? How do we handle persons in the Priority Group who will not allow themselves to be vaccinated?	Vaccination will be based on vaccine availability. If they miss their opportunity to be vaccinated the first time they will have to wait for the second round based on the available vaccine. Dir. Arevalo said that it depends upon the LGUs, Hospitals and Priority group heads to encourage them to be vaccinated. If they refuse, it will be given to other priority groups. Dir. Arevalo encouraged them to be the champion among their organization to increase the uptake of COVID-19 vaccination.
	Mr. Salacut	Under Eligible Population in the presentation, No. 5 is Uniformed Personnel. For its Definition of Term, recommend the following: All Officers and Enlisted Personnel	This has been duly noted.
	Dr. Dy	Which Priority Group would non-senior citizen patients with underlying medical conditions (such as DM, with Congestive Heart Failure) belong to?	If they are healthcare workers they will be prioritized but there will be intersectoral prioritization for those with co-morbidities will be prioritized.

			The WHO SAGE recommendation does not include the co-morbidities.
	Ms. Ciriaco	In this program, the vaccine will be given to the priority population for free, be it private or government?	
	Philippine Coast Guard Medical Services	How to register personnel to attend the TOT?	The secretariat will contact them.
	Ms. Tinio	What about the private clinics or physicians in private practice?	
	Mr. Faraon	Will there will be a geographic prioritization based on local context and epidemiologic setting? how will allocation be done? NCR will have more allocation compared to Batanes?	It will be determined based on the eligible population
	Mr. Cruz	What if, for example, a frontliner works in Quezon City but resides in San Juan City, which LGU will vaccinate this frontliner?	The vaccinee will be vaccinated in his workplace as a frontliner
	Mr. Yudelmo	What interventions are done to ensure that people will get vaccinated?	Dir. Arevalo said that there are communication handles to have greater uptake on COVID19 immunization. Training for navigators, community mobilizers will also be conducted especially those affected by previous vaccination initiatives. Dir. Arevalo enjoined all attending the forum to help promote the vaccination program of the government. Videos are being disseminated to Health Promotion Officers to be popularized.
	Dr. Anthony Faraon	Will NCR be prioritized?	Dir. Arevalo said that Eligible population is based on the

	Family Foundation	Considering the portfolio of medicines (5 to 6) how will this be allocated? What if an LGU has preference over a certain vaccine other than what is allocated to them?	burden (sectoral) and geographical (based on prevalence). The NITAG will discuss the priority population based on certain criteria (attack rate, case fatality, readiness of the LGU) tomorrow and give the recommendation to DOH and the vaccine czar. In terms of vaccine portfolio, the vaccines that will come based on the prioritization based on the specific guidelines that will not be based on preference . It will be administered as prioritized and not on preference. If they waive their opportunity to be vaccinated, there will be a second round still based on availability.
	Health Care Professional Alliance on COVID-19	After the use of EUA, will they still undergo HTAC review? Timeline after EAU to HTAC recommendation? Is there guidance for LGUs who already set aside their budget for procurement of vaccines?	Dr. Guerrero said that LGUs can not procure without the clearance of HTAC. Even without the EAU, the HTAC are already reviewing the evidence for the vaccines for publication. It is easier to issue the recommendation. Per Bayanihan Law, only Phase IV was waived. The second question was already answered by Usec. Cabotaje earlier based on specific guidelines to be released thru Sec. Galvez and Sec. Duque.
	Mr. Dimagiba	After all requirements have been complied, what is the procedure for the vaccination? Will this be a prescriptive vaccine or available in the market for consumers?	The vaccine will not be available yet in the market and will not be available on prescription basis. We are still waiting for the EUA to vaccinate the priority population.

			The LGU preparation will follow the usual campaign of the National Immunization Program except that the vaccine is not yet available in the market but through EUA.
	Ms. Paredes	It was suggested that the DOH and HTAC can be invited in their meeting for the Governors which they will schedule soon, to discuss the COVID-19 vaccines. Please communicate through sandy.paredes.lpp@gmail.com 09167528005	Noted.
		When will the vaccine be commercially available?	The vaccine after clinical phase IV, will be given CPR and only then can it be commercially available. The Director General of FDA predicts that it might be commercially available by late 2022. Depending on the supply of the vaccine, all will be vaccinated on a phased implementation.
	Ms. Rabe	What will be the guidelines/process for securing the consent of patients for the administration of the vaccine? what is the timeline for the release of the national roadmap on vaccine availment?	The STG on registry and data management is in close coordination with the Legal service.
	LPP	How does DOH/IATF intend to allocate the limited vaccines to 82 provinces?	Distribution will be primarily based on sectoral prioritization. Followed by geographical prioritization,(based on disease burden - attack rate, incidence rate/active cases and readiness of LGU.

	UP Diliman	Recently, there has been news that Taiwan has found 73 side effects of China's Sinopharm, while Sinovac's vaccine appeared to have efficacy of less than 80% in other countries, notwithstanding the more expensive price of these vaccines compared to other Western-made. Considering that the Duterte administration prefers vaccines from China and that the DOH prioritizes efficacy, how would the DOH (particularly the COVID-19 Task Force) compromise?	DPCB answered that the vaccines are evaluated regularly based on a set of guidelines.
	Ms. Belen	Makati LGU announced that they can include the vaccine purchase of businesses around Makati if these companies would like to buy the vaccine. Is this allowed? Also, Red Cross, as mentioned by Sen Gordon the other day, can procure vaccines for the country, and sell these to those who can pay. Is this allowed as well?	The IATF will still have to determine the process
	PHPSP	Will the vaccine procurement undergo HTAC review? Will the review happen before or after issuance of EUA?	HTAC recommendations can only be issued after an EUA is issued by the FDA to ensure that basic safety and efficacy standards are met.

7.3 Priority Eligible Populations for the COVID-19 Vaccination

The DOH Administrative Order No. 2021-0005 entitled “National Strategic Policy Framework for COVID-19 Vaccine Deployment and Immunization” provides the Decision Matrix in determining priority eligible population groups based on the principles of the WHO Strategic Advisory Group of Experts on Immunization (SAGE) Values Framework for the Allocation and Prioritization of COVID-19 Vaccination and the recommendations of the National Immunization Technical Advisory Group (NITAG), taking into consideration the national context, the epidemiologic settings and the COVID-19 vaccine characteristics and supply. Table 7.4 below outlines the priority groups based on the said principles.

Table 7.4. Decision Matrix in determining priority eligible population groups

Principles	Objectives	Population Groups
Human well-being	● Reduce deaths and disease burden ● Protect those in the health services and essential services	● Health workers ● Older adults (senior citizens with or without comorbidities) ● Persons with comorbidities ● Personnel in government agencies providing essential services (DSWD, DeEd, DILG, BJMP & Bureau of Correction, PNP, AFP, PCG, BFP, CAFGU) ● Government workers, teachers and students, essential workforce (agriculture, tourism, transportation, food industry, tourism, manufacturing, construction, among others) ● All workforce
Reciprocity	● Protect those who bear significant additional risks and burdens of COVID-19 to safeguard the welfare of others	● Health workers (all) ● Essential workers outside the health sector, those with high-risk of exposure, such as contact tracers, social workers providing social services, among others
Equal respect	● Treat the interest of all individuals and groups with equal consideration as allocation and priority setting ● Vaccinate all citizens	● All citizens based on the availability of vaccines
National equity	● Ensure that vaccine prioritization takes into account vulnerabilities, risks and needs groups because of underlying societal, geographic or biomedical factors	● People living in poverty (indigent population) ● Disadvantaged groups (PWD, PDLs, among others) ● Low-income workers ● Hard-to-reach areas ● Overseas Filipino Workers

Using the Decision Matrix, the National Government has determined that below will be the priority eligible groups for COVID-19 vaccination:

Table 7.5. Priority eligible groups for COVID-19 vaccination

Priorities	Population Group	Definition of Terms
Priority Eligible Group A*		
1	Frontline Health Workers	All health workers from the PRIVATE and PUBLIC sector currently on ACTIVE practice/service, whether they are permanent, contractual, job-order and/or outsourced employees or staff:
	a) Public and private health facilities [hospitals, medical centers, laboratories, infirmaries, Treatment Rehabilitation Centers (TRCs) and Temporary Treatment and Monitoring Facilities (TTMFs)]	● All those are working in medical centers, hospitals, clinics, laboratories, Temporary Treatment and Monitoring Facilities (TTMFs), and Treatment Rehabilitation Centers (TRCs). If the vaccine supply is limited, priority shall be given to hospitals and medical centers directly catering to COVID-19 patients, including suspects, probable and confirmed COVID-19 cases. ● Specifically, all those who are assigned in the triage areas, out-patient departments, emergency rooms, wards, intensive care units, operating rooms, delivery rooms, laboratory, radiologic and pathology areas, rehabilitation units, among others. ● Medical and allied health students who are serving as clerks or interns in hospitals ● Those who are assigned as part of the disinfection or decontamination teams, medical social workers, admin personnel, and security guards of the above-mentioned facilities.
	b) Public health workers (all RHU/CHO personnel, PHO, PDOHO, CHD and CO) and LGU contact tracers	All workers in the public health sector: ● All employees in the public primary care facilities (Rural Health Units, City Health Offices (whether LGU-hired or DOH-hired/deployed) ● All health workers employed/deployed/ detailed in Provincial Health Offices, Center for Health Development and Department of Health Central Offices, including Food and Drug Administration and Bureau of Quarantine ● All health workers employed/deployed/ detailed in DOH-attached agencies such as Philippine Health Insurance Corporation, Philippine National AIDS Council, Philippine Institute of Traditional

		Alternative Health Care, Dangerous Drugs Board, and National Nutrition Council ● LGU-deployed/designated/hired contact tracers [those with appropriate documents stating deployment/designation of government employees as contact tracers either through an Executive Order (EO), resolution and/or ordinance] ● Note: If the vaccine supply is limited, among workers in public health, priority shall be given to those who are providing direct health services.
	c) Barangay Health Workers including Barangay Health Emergency Response Teams (BHERTs)	● All Barangay Health Workers in active service ● All active members of the BHERTs (based on appropriate documents stating designation either through an LGU EO, resolution and/or ordinance)
	d) Other NGAs (DSWD, DepEd, DILG, BJMP and Bureau of Correction)	● DSWD, and its regional and local counterparts ○ All employees manning close-setting facilities and long-term care facilities, e.g. orphanage, home for the aged, women's crisis centers. ○ Social workers providing social amelioration, and social services in the communities ● DepEd ○ Health and nutrition personnel ● DILG ○ Those hired by DILG as contact tracers (active service) ● BJMP (under DILG) ○ All employees and health workers assigned in direct contact with Persons Deprived of Liberty (PDLs) such as jail officers, wardens, and/or guards ● BuCor (under DOJ) ○ All employees and health workers assigned in direct contact with Persons Deprived of Liberty (PDLs) such as jail officers, wardens, and/or guards
2	Indigent Senior Citizens	All indigent senior citizens registered and as determined by DSWD

3	Remaining Senior Citizens	All senior citizens (not categorized as indigent) registered and as determined by DWSD
4	Remaining Indigent Population	All indigent population as determined by DSWD
5	Uniformed Personnel	All enlisted uniformed personnel in active services under the: ● Armed Forces of the Philippines ● Philippine National Police ● Philippine Coast Guard ● Bureau of Fire Protection ● Citizen Armed Force Geographical Unit
Priority Eligible Group B**		
6	Teachers and school workers	ALL teachers and school workers, whether permanent, job-order, contractual or out-sourced in all educational levels, from primary, secondary and tertiary, and vocational educational institutions, both private and public
7	All government workers (national and local government)	All government workers, whether permanent, job-order, contractual or out-sourced, in national government agencies, government-owned and controlled corporations (GOCCs), government financial institutions (GFIs), local government units, among others.
8	Essential workers	● All workers providing basic services during this time of pandemic and essential to the growth of the economy as determined by DTI and DOLE ● These workers may come from the following sectors: agriculture, forestry and fisheries; transportation; construction; food industries; manufacturing of essential goods; tourism; essential retail; water-refilling stations; laundry services; logistics service providers; delivery and courier services; water supply and sanitation services; telecommunication services; energy and power companies; gasoline stations, among others
9	Socio-demographic groups at significant higher risk other than senior citizens and indigent populations [e.g. Persons Deprived of	● All Persons Deprived of Liberty as determined by BJMP and BuCor ● All Persons with Disability as determined by DSWD, and National Council for Disability Affairs (NCDA) and LGUs

	Liberty (PDLs), Persons with Disabilities (PWDs), Indigenous Peoples, Filipinos living in high-density areas) Eligible Students	● All Indigenous Peoples as determined by the National Commission on Indigenous Peoples (NCIP). This may include: the Lumads of Mindanao, the Peoples of the Cordillera, and scattered tribal peoples of the hinterlands of Central and Southern Luzon, Viasayas, Mindoro and Palawan ● All Filipinos living in high-density areas as determined by the LGUs (as documented in the LGU's Comprehensive Land Use Plan) such as in slums and temporary shelters, among others; including those who are homeless and living in temporary shelters and homes ● All students in primary, secondary and tertiary and vocational educational institutions. However, vaccination of students below 18 y.o. will depend on the recommendations of WHO and NITAG, with the concurrence of the COVID-19 Vaccine Cluster.
10	Overseas Filipino Workers (OFWs)	Filipino migrant workers who reside in another country for a limited period of employment that were not yet vaccinated
11	Other remaining workforce	All remaining Filipino workforce as determined by the DOLE, DTI and CSC
Priority Eligible Group C**		
12	Remaining Filipino Citizens	All Filipino Citizens that were not mentioned in priority A and B

** Persons with co-morbidities are being taken into consideration as part of Priority Eligible Group A depending on the latest development and scientific evidence. This is being discussed by the NITAG.*
***The Priority Eligible Group B and C may change as these categories will still undergo review of the NITAG and final approval of the COVID-19 Vaccine Cluster and the IATF.*

It should be noted that the prioritization of population groups are based on the following goals:

Primary Goals

- Direct reduction of morbidity and mortality.
- Maintenance of most critical essential services.

Secondary Goals

- Substantially control transmission
- Minimize disruption of social, economic and security functions.

Tertiary Goal

- Resumption to near normal.

Table 7.6. Priority groups per population with size

Ranking of vulnerable group, or inclusion in which phase	Population group	Number of people	% of population
Stage 1 (2021)	1st Priority: Frontline Health Workers	1,762,994	*1.6%*
	a) Public and private health facilities (Hospitals, Treatment and Rehabilitation Centers, and Temporary Treatment and Monitoring Facilities)	612,975	*0.6%*
	b) Public health workers (all Rural Health Units/City Health Office personnel; Provincial Health Office, Provincial DOH Officer, CHD, and Central Office field workers) and LGU contact tracers	602,982	*0.6%*
	c) Barangay Health Workers including Barangay Health Emergency Response Teams	414,640	*0.4%*
	d) Other National Government Agencies (Department of Social Welfare Development, DepEd, DILG, BJMP & Bureau of Correction)	132,397	*0.1%*
	2nd Priority: Indigent Senior Citizens	3,789,874	*3.5%*
	3rd Priority: Remaining Senior Citizens	5,678,544	*5.3%*
	4th Priority: Remaining Indigent Population	12,911,193	*12.0%*
	5th Priority: Uniformed personnel – Philippine National Police (PNP), Armed Forces of the Philippines (AFP), Philippine Coast Guard (PCG), Bureau of Fire Protection (BFP), Citizen Armed Force Geographical Unit (CAFGU)	525,523	*0.5%*
Sub-total	Sub-Total	24,668,128	*23%*
Stage 2 (2022)	a. Teachers and school workers (public and private) b. All government workers (National and Local Government) c. Essential workers in agriculture, food industry, transportation, and tourism d. Sociodemographic groups at significantly higher risk other than the senior citizens and indigent population (PDLs, Persons with Disability, Filipinos living in high-density areas) e. Overseas Filipino Workers (OFWs) f. Other remaining workforces g. Students	44,628,902	*40%*
Stage 3 (2023)	All remaining Filipino citizens	41,770,329	37%

Ranking of vulnerable group, or inclusion in which phase	Population group	Number of people	% of population
Total		111,067,422	100%

7.4 Monitoring of Adverse Events Following Immunization (AEFI)

The National Adverse Events Following Immunization Committee was created to monitor and assess the possible adverse effects of the COVID-19 vaccine on individuals. The roles and responsibilities of the Committee include the following:

- Review all reported serious and cluster of AEFI cases presented for expert opinion and provide a final causality assessment of the AEFI cases as well as the cases that were not classified by the Regional AEFI Committee.
- Ensure evidence-based causality assessment by recommending further investigation and data collection as needed.
- Make final decisions on causality assessment of inconclusive investigations.
- Ensure standard protocols for AEFI surveillance and investigation are correctly followed.
- Engage with other national and international experts when requirements arise in establishing causality and vaccine quality issues.
- Provide recommendations to the National Immunization Program, EB and National Cold Chain Manager on improving immunization service delivery, compliance with injection safety and effective vaccine management based on lessons from the AEFI cases.
- Serve as technical advisory group on vaccine and immunization safety-related issues of highest consideration such as immediate recall of vaccine from the market or temporary/permanent withdrawal of a vaccine from the immunization program.
- Serve as resource person in other AEFI related meetings, conferences or capacity building activities as requested.

The draft DOH training modules on the COVID-19 vaccine administration provides guidelines on the Adverse Events Following Immunization (AEFI). The working objectives of the module are as follows:

Objectives:

1. To know the overall safety surveillance framework
2. To identify, manage, report and communicate effectively all adverse effects following immunization (AEFI) concerns
3. To be oriented on the basics of Immunization Safety
4. To be able to discuss AEFIs to patients and vaccine-recipients

By the end of this module, the health care worker should be able to:

1. Understand the safety surveillance framework and activities
2. Rapidly identify AEFI signs and symptoms for COVID-19 vaccines

3. Administer initial management of AEFI
4. Report AEFI cases to the national database timely and accurately
5. Able to discuss AEFIs to patients and vaccine-recipients
6. Vaccinator should be able to discuss Immunization Safety
7. Vaccinator should be able to discuss Injection Safety

The content of the module will include:

I. COVID-19 Vaccines: Safety Surveillance Manual by WHO
Source:
https://www.who.int/vaccine_safety/publications/Global_Manual_on_Surveillance_of_AEFI.pdf

II. Overview of COVID-19 vaccines clinical trial results
III. Basics of what to look out for vaccine-recipients suspected for AEFI
Source:
https://www.doh.gov.ph/sites/default/files/publications/AEFI_MOP%202014%20Final.pdf, Recognition and Treatment of Anaphylaxis from AEFI MOP (2014)

IV. AEFI case management protocols (experiences from previous campaigns)
V. Significance of AEFI reporting (minor, serious, minor clusters)
VI. Procedural reporting of AEFI cases
VII. Procedural follow-up of vaccination cohort (with and with AEFI case)
VIII. FAQs on AEFI
IX. Counselling techniques on AEFI risk communications
X. Importance of Immunization Safety
XI. Ultra-Cold Chain Management
XII. Personnel and Equipment
XIII. Procedures, Vaccine Schedule and Storage
XIV. What is injection safety?
XV. Injection equipment
XVI. Effects of unsafe injection practices
XVII. Expired vaccines
XVIII. Practices that can harm recipient, health worker, and the community (in the context of COVID-19 pandemic)

As part of the module, it is preliminarily envisioned in the working plan that the vaccinators/program implementers should be able to develop a final operational plan for the COVID Vaccine Program Implementation, including a system or plan for AEFI monitoring with the AEFI Monitoring Protocol/Plan as an output with the identified persons responsible for AEFI Monitoring.

7.5 National Demand Generation and Communications Plan for COVID-19 Vaccines

The DOH Health Promotion Bureau has developed the National Demand Generation and Communications Plan for COVID-19 Vaccines, with the following objectives for the citizens:

- Understand, feel confident in the government's approach to roll-out COVID-19 vaccines, and believe that it is fair;
- Maintain trust in, and demand for, COVID-19 vaccine and routine immunization;
- Understand the importance of physical and mental resilience and continued practice of other preventive health behaviors (hand washing, mask wearing, and physical distancing); and
- Rely on government-initiated platforms as the authoritative source of information on COVID-19 vaccines deployment.

The specific objectives are as follows:

- Adults, caregivers, and parents understand the threat of COVID-19 and the need for herd immunity to protect their families;
- Eligible Filipinos are aware of the COVID-19 deployment plan (authorization for safety and efficacy, prioritization of recipients) and implementation plan (schedule, venue, and requirements for safe vaccination before the deployment start date);
- All Filipinos understand the key difference of the COVID-19 vaccine clinical trials and the government-led roll out of the COVID-19 vaccines;
- Health workers, community volunteers, and other frontline workers are able to communicate key messages of the campaign, respond to concerns regarding the campaign, and verify information appropriately; and
  Private sector, civil society organizations, Local Chief Executives, and other key stakeholders are engaged to champion the immunization activities through provision of accurate and timely information and of resources for community mobilization.

The approaches and strategies will include the following:

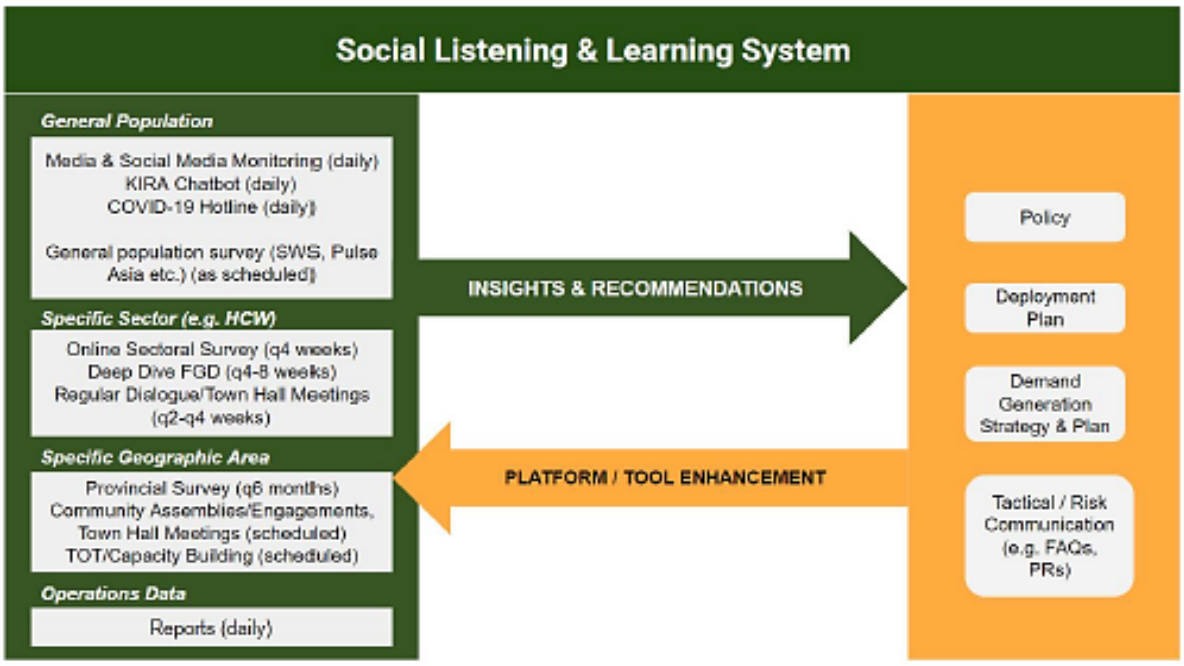
- Raising awareness and engagement through unified messaging across multiple but streamlined communication platforms or spokespersons.
- Ensuring feedback loops from monitoring of platforms to inform calibration of messages.
- Strengthening capacities of health workers and other frontline workers on communication and engagement
- Advocacy and engagement of partners and influencers, including Local Chief Executives (LCEs)
- Media engagement and management

Table 7.7. Overview of the key messages per phase

Phases	Pre-roll out	Deployment	Post-Deployment
Themes for General Public	1. Benefits of Vaccine and Urgency of Deployment 2. Prioritization and Timing 3. Rigorous Development, Approval, and Monitoring 4. Global Cooperation	1. Patient responsibility and follow-through 2. Legitimate sources of vaccines and reliable vaccination posts	1. Continuous monitoring and responsible reporting 2. Sense of community

Social listening allows the COVID-19 vaccine communication team to prioritize and evaluate feedback from the different sources of information in order to create messages with relevant content for target audiences. Through this, communication can be adjusted based on trends and continuously shift strategies to fit the current needs of the target audiences. Social listening activities will generate insights and recommendations that will guide the development of policies, demand generation plans, creation, and dissemination of frequently asked questions (FAQs) and other communication materials regarding COVID-19 vaccines, and the overall COVID-19 vaccine deployment plan and strategies.

Figure 7.1. Social listening framework for the COVID-19 vaccination



The social listening activities per geographic areas will be based in Table 7.8.

Table 7.8. Social listening strategy per geographic area level

Tool	Level	Task	Output
Community Events	Regional	Communicate with local counterparts through established communication channels/social media groups; identify and consolidate relevant concerns	Weekly reporting to national Social Listening Sub-task Group (starting Feb) (every Friday)
	Local	Organize Community Assemblies, Town Hall Meetings, or Community Engagement Activities; gather relevant concerns and respond to queries and concerns	Weekly feedback to the CHD/ Regional Vaccine Operation Center (starting Feb)
COVID-19 Vaccine Online Survey (Healthcare Workers)	Regional	Disseminate the online survey to more than 345 healthcare workers in the region	
	Local	Help the Regional in disseminating the online survey to health care workers in their localities	
COVID-19 Vaccine Provincial Face-to-Face Survey (General Adult Population)	Regional	Oversee and coordinate survey dissemination and data gathering activities; Communicate regularly with local counterparts to update on survey status through established communication channels/social media groups; Feedback regular updates on survey status to national Social Listening team	Monitoring of data encoded and submitted online by local counterparts
	Local	Conduct face-to-face data gathering for more than 500 adult respondents per province and independent city; Feedback regular updates on survey status to CHD/ Regional Vaccine Operation Center	Encode and submit data online on March (Round 1) and September (Round 2)

The following table shows critical topics that are recommended to be covered per target group of stakeholders (Table 7.9).

Table 7.9. Topics for targeted stakeholders for demand generation of the COVID-19 vaccines

Non-HCW community frontliners	Overview of the Vaccine Deployment Plan: 10 THINGS YOU NEED TO KNOW	Demand Generation: Framework for Action	Demand Generation: Playbook	Feedback Mechanisms and Social Listening	Vaccine Reportage and Communications
Target Groups at the National Level					
CHD & HEPOs, Provincial/Municipal Information Officers, LGU HEPOs, Province/City Health Officer, PDRRMOs					
LCE/LGUs (through ULAP)					
Key NGAs (e.g. DILG, DepEd, DSWDs, AFP, PNP, NDRRMC)					
Medical Societies					
Media					
Faith-based groups					
Provincial/Regional/Local focal points (capacity-building or cascading by Priority National Target Groups)					
Barangay LGU Officials					
BHWs / BHERTs					
Public and Private elementary and high school teachers					
Medical societies and networks					
Faith-based groups					
Community Leaders					
Youth-based groups					

The DOH Health Promotion Bureau (HPB) regularly convenes with the Office of the Vaccine Czar, with the following schedule:

- Mondays at 8:00 AM, with the Boston Consulting Group, Vaccine Czar, and leads of the Task Group (TG) Demand Generation and Communications
- Tuesdays at 6:00 PM, the Vaccine Cluster Meeting with other Task Groups (TGs) and Sub-task Groups (STGs)

Together with the Office of the Vaccine Czar, the DOH HPB holds the 'Laging Handa: COVID-19 Vaccines Explained' as information and demand generation campaign for the COVID-19 vaccines. The other platforms of interface include chat group with NTF, PIA, and DOH for issues management. The health promotion campaign of the HPB for the COVID-19 response (Figure 7.2) and the vaccination (Figure 7.3) may be summarized in the following figure:

Figure 7.2. Health promotion campaign strategy of DOH for the COVID-19 response

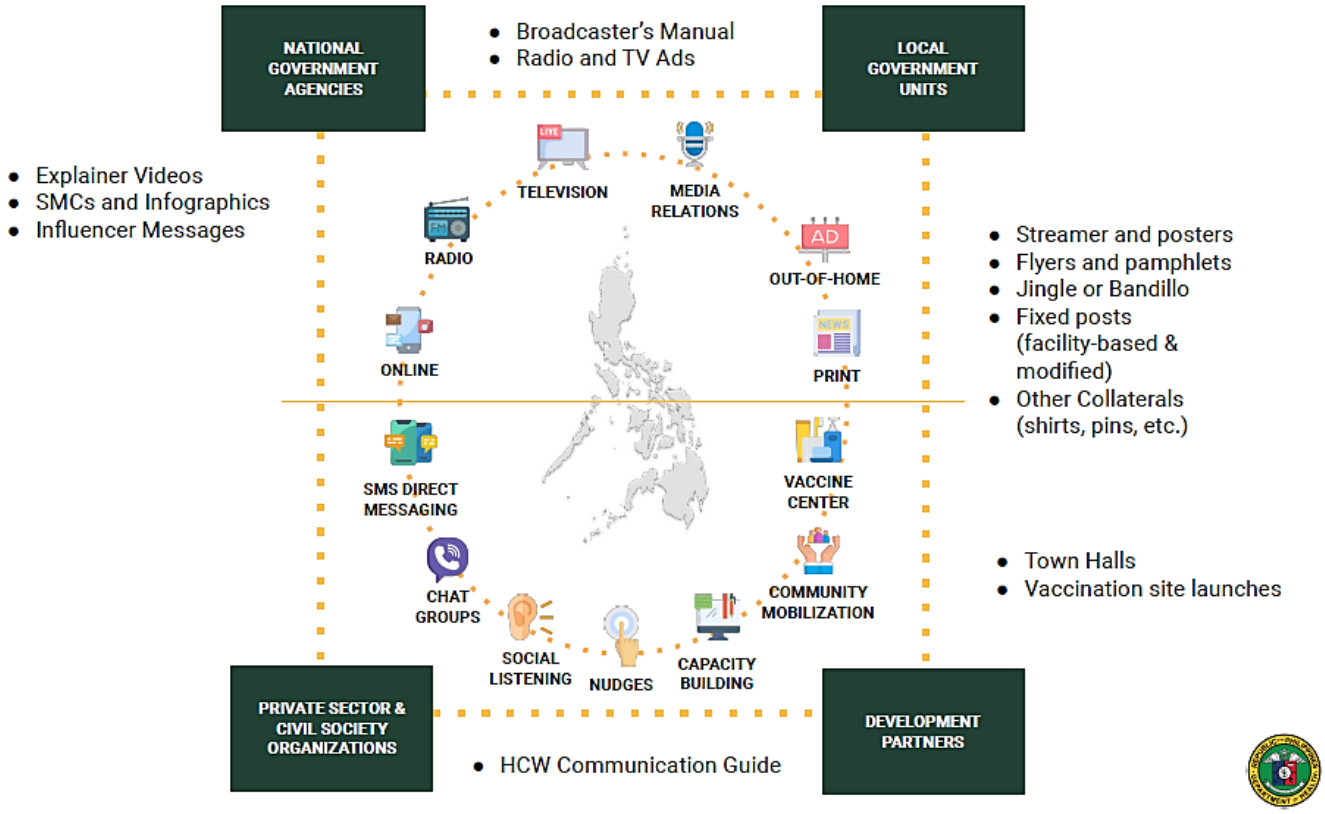
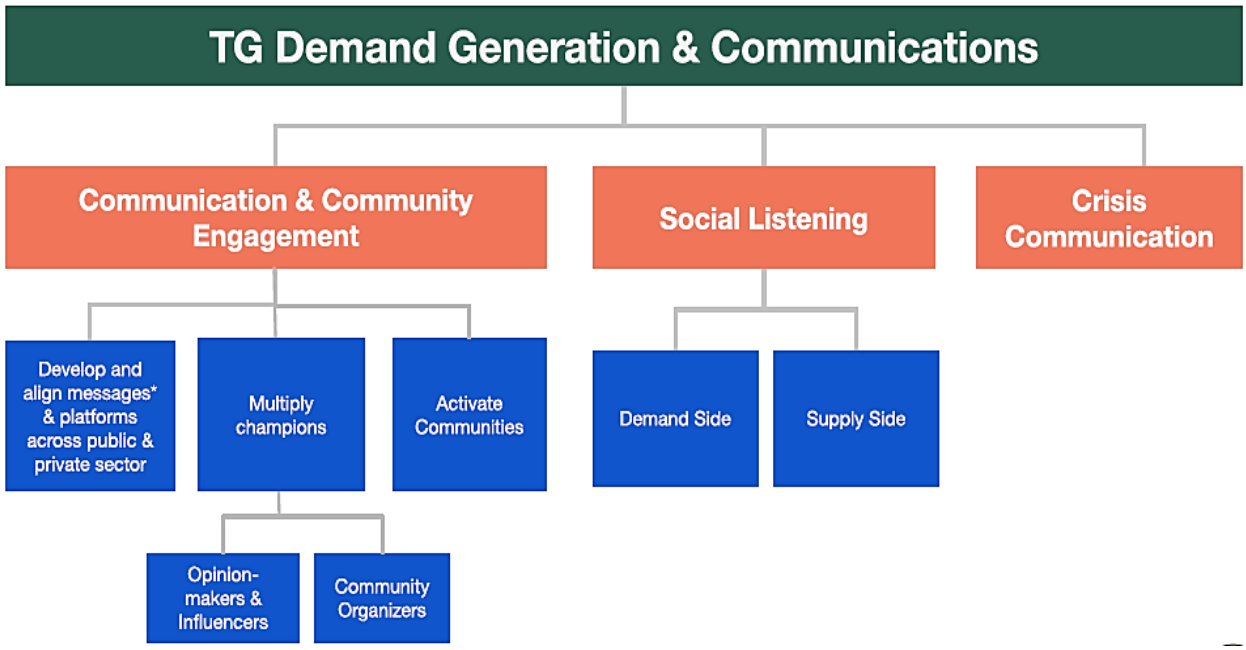
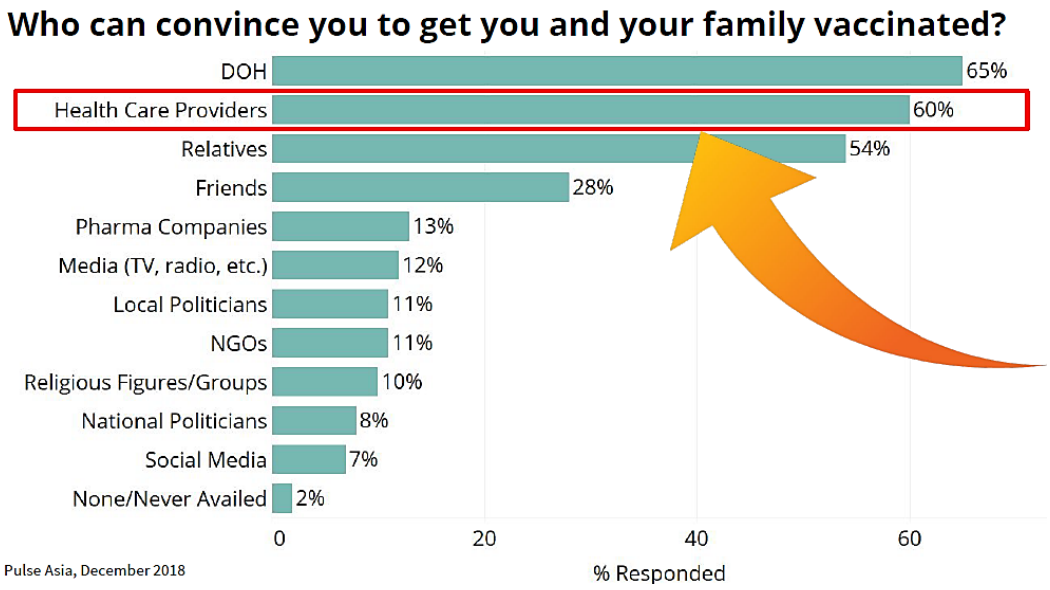


Figure 7.3. Health promotion campaign strategy of DOH for the COVID-19 vaccination



The PulseAsia has conducted a survey last December 2018 on who can get an individual vaccinated and it is shown that health care providers, relatives, and local government units play a crucial role, considering the devolved nature of health care in the country (Figure 7.4). It is important to note that this survey is not in the context of COVID-19.

Figure 7.4. Pulse Asia survey on vaccination positive influencers (2018)



The HPB also has been conducting a series of Town Halls wherein various stakeholder groups are invited to consult on the COVID-19 vaccination. Consultations with the Philippine Medical Association (PMA) last 14 January 2021, Philippine Nurses Association (PNA) last 16 January 2021, with pharmacists last 23 January 2021, and with midwives last 30 January 2021 show the vaccine acceptance of these groups, upon the poll on the question “How likely are you to get the COVID Vaccine if available, with safety and effectiveness comparable to other common vaccines, and with FDA approval for public use?”.

Table 7.10. Vaccination acceptance results during the Town Halls led by the HPB (2021)

	Town Hall with PMA (14 Jan 2021)		Town Hall with PNA (16 Jan 2021)		Town Hall with Pharmacists (23 Jan 2021)		Town Hall with Midwives (30 Jan 2021)	
	Entry Poll (N=301)	Exit Poll (N=293)	Entry Poll (N=298)	Exit Poll (N=314)	Entry Poll (N=534)	Exit Poll (N=723)	Entry Poll (N=322)	Exit Poll (N=495)
Highly Likely	84%	94%	67%	83%	58%	88%	47%	75%
Not Likely	2%	1%	4%	4%	10%	3%	15%	5%
Not Sure	17%	7%	29%	13%	33%	9%	38%	20%

Various health trainings on COVID-19 and vaccination are also made available at the DOH Academy E-Learning Platform (https://learn.doh.gov.ph/). The module on health promotion for COVID-19 vaccines includes the following topics:

Table 11. Health promotion module for COVID-19 vaccines in the DOH Academy E-Learning Platform

Topic	Target Audience
1: Overview of the Vaccine Deployment Plan: 10 Things You Need to Know	Communicators, General Public
2: Demand Generation: Framework for Action	Communicators
3: Demand Generation: Playbook	Communicators
4: Feedback Mechanisms and Social Listening	Communicators
5: Vaccine Reportage and Communications	Communicators

8 Project Implementation Arrangements, Responsibilities, and Capacity Building

8.1 Implementation Arrangements

The Department of Health (DOH) will be the implementing agency for the Project. The DOH has appointed a Project Director (Undersecretary level), and a Project Manager (Director level). The Project Director and Project Manager will be acting through DOH's technical departments and national programs, as well as the regional health units, LGUs, referral hospitals, and health centers. Within the DOH, the Project will be implemented through the Bureau of International Health Cooperation (BIHC), Health Facility Enhancement Program Management Office (HFEPMO), Disease Prevention and Control Bureau (DPCB), Health Emergency Management Bureau (HEMB), Procurement Service (PS), Finance Management Service (FMS), and relevant units, with BIHC as the main project focal point. A Task Force will be created through a Department Personnel Order

consisting of the focal persons of the DOH Bureaus to facilitate more effective coordination with the technical units involved.

The project implementation will use mainstream DOH processes and will not involve a parallel project implementation unit or secretariat. However, the DOH has assigned officials who will be in charge of project implementation. The project will have a provision to strengthen DOH units' capacity and skills through additional consultants or advisors. Additional consultants or advisors will be recruited with an aim to strengthen the overall fiduciary, ESF functions as well as to support implementation of project activities. DOH will also ensure effective implementation at the sub-national levels and close coordination with relevant LGUs.

The Project Operations Manual, includes guidance on standard project fiduciary, environmental and social risk management (a summary of the ESMF and SEP provisions and arrangements, including for GRM), implementation, and M&E requirements, as well as relevant official documents to be developed. However, the SEP and ESMF, along with the ESCP, are the documents that describe the ESF provisions and implementation arrangements. In addition, Annual Work Plan and Budget (AWPB) will be submitted for no-objection to the World Bank no later than October 30 of each year, detailing the project work program and budget for each government fiscal year and specifying the allocation and sources of funding for all project components.

While the DOH had limited experiences working on Bank operations in recent years, lessons learned from previous projects could guide DOH to avoid past challenges in future projects. The last two health projects in the Philippines were National Sector Support for Health Reform (2006-2012) and Women's Health and Safe Motherhood Project (2005-2013). The support from the first project led to an increase in the coverage of PhilHealth, from 13.6 million poor receiving subsidized coverage in 2007 to 31.4 million in 2013. This, in turn, contributed to the increased use of health services by the poor. The second project led to a large increase in the number of facility-based deliveries. However, there were key implementation challenges faced by both projects, including slow implementation by DOH, delays in delivery of key reports, limited support to LGUs. The implementation of the second project was so slow that only 18 percent of funds were disbursed in the first five years of the project. At project closing, 35 percent of project funds were not used and had to be cancelled.

DOH does not have recent experience or dedicated capacity implementing World Bank financed projects and is not familiar with the Bank's safeguards or Environmental and Social Framework (ESF) requirements. It is, however, familiar with the Philippines' relatively well-developed regulatory framework for environmental and social management as it pertains to the health sector.

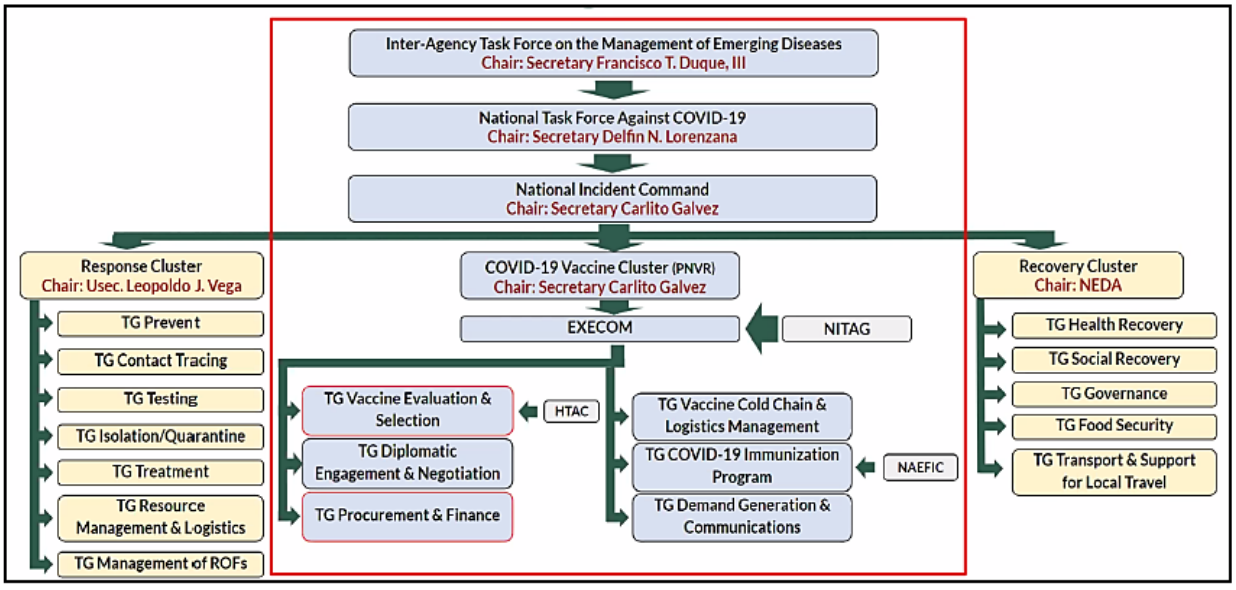
DoH has a designated team of DOH's civil service officials, led by a project director and project manager, and with one Environmental and one Social Risk Management Focal Points to coordinate ESF implementation, including the environment and social risk screening of the activities and the compliance reviews of the ESMPs and other ESF measures. DoH designated the Focal Points already during project preparation. While the project management is at the central level, the roles, duties, and responsibilities of the personnel in the health care facilities and workers in the project sites will be re-defined based on their contracts.

The implementation of ESF instruments will be supported and monitored by World Bank staff throughout project implementation to assist the implementing agencies to undertake the planned

environmental and social risk management measures, including stakeholder engagement and preparation of required management plans to be applied under the Project and provide training to the assigned staff.

The COVID-19 Vaccine Cluster Organizational Structure. The COVID-19 Vaccine Cluster shall serve as a unified command, control, coordination, communication, and cooperation mechanism that ensures the procurement, deployment of COVID-19 vaccine and the vaccination of identified eligible populations.

Figure 8.1. COVID-19 Vaccine Cluster organizational structure



The organizational structure and line of command for COVID-19 vaccines is as follows:

1. The **Inter-Agency Task Force on Emerging Infectious Diseases** (**IATF-EID**, or merely the **IATF**) is a task force created through Executive Order No. 168 s. 2014 by the Philippine President to respond to affairs concerning emerging infectious diseases in the country. For COVID-19 vaccines, the IATF-EID shall serve as the National Coordinating Committee.

2. For the COVID-19 pandemic response, President Rodrigo Roa Duterte established the **National Task Force (NTF) Against COVID-19** to oversee the operations of the national response. Detailing the strategic framework of the pandemic response, the National Task Force drafted the National Action Plan Against COVID-19 (NAP) to guide the operations of the pandemic response anchoring on the principle that the response should be national-government-enabled, local government unit (LGU)-led, and people-centered.

3. Under the NTF Against COVID-19, there are three clusters namely, the Response Cluster, the Recovery Cluster and the **COVID-19 Vaccine Cluster.** As mentioned above, seeing the need for an

organizational structure to support the strategic directions of the national government, the COVID-19 Vaccine Cluster was added based on the guidance stipulated in the NAP Phase III. In line with the directions of the VIRAT, the COVID-19 Vaccine Cluster shall serve as the National Technical Working Group. The COVID-19 Vaccine Cluster is led by Secretary Carlito G. Galvez, Jr., who was designated by President Rodrigo Roa Duterte as the COVID-19 Vaccine Czar. The President of the Philippines appointed a Vaccine Czar for the purchase of vaccines and negotiate with manufacturers. To support the Vaccine Czar, the Inter-agency Task Force on Emerging Infectious Diseases (IATF-EID) created a structure that would manage and distribute COVID-19 vaccines once they become available to the Philippines. The vaccine task group is led by the Department of Health.

4. Under the COVID-19 Cluster are six **Task Groups**, and based on the direction of the VIRAT, shall serve as the Sub-Technical Working Groups. Each TGs is represented by the designated lead in the COVID-19 Vaccine Cluster Executive Committee. The Committee, in turn, advises and updates the COVID-19 Vaccine Cluster Chair. The six Task Groups are (see Figure 2): a. Scientific Evaluation and Selection

b. Diplomatic Engagement and Negotiation
c. Procurement and Finance
d. Cold Chain and Logistics Management
e. Immunization Program
f. Demand Generation and Communications.

The COVID-19 vaccination activities will be implemented in accordance with the directives of the COVID-19 Vaccine Cluster Organizational Structure. The Inter-Agency Task Force on the Management of Emerging Diseases is Chaired by Secretary Francisco Duque IIII of the Department of Health while the National Task Force Against COVID-19 is Chaired by Secretary Delfin Lorenzana of the Department of Defense. Secretary Carlito Galvez, Jr., Presidential Adviser on the Peace Process, is the Chairperson of the National Incident Command and COVID-19 Vaccine Cluster (Philippine National Vaccine Roadmap or PNVR). Undersecretary Leopoldo Vega of the Department of Health is the Chairperson of the Response Cluster while the National Economic and Development Authority (NEDA) is the Chair of the Recovery Cluster.

The following are the COVID-19 Vaccine Clusters and the Sub - Task Groups under the TG COVID-19 Immunization Program:

COVID-19 Vaccine Cluster Task Group (TG)	
TG Vaccine Evaluation and Selection Lead: DOST Members: DOH, FDA, RITM, Vaccine Experts	TG Cold Chain and Logistics Management Lead: TGRML Members: DOH, DBM, DILG (PNP), DND (AFP, OCD)
TG Diplomatic Engagement and Negotiations	TG Immunization Program Lead: DOH (PHST) Members: DOJ, FDA, DILG, DSWD, DepEd, AFP, DOTr, DICT

Lead: DFA (Special Envoy of the President and Presidential Assistant on Foreign Affairs) Members: DOF, DOH, NTF, DOST	
TG Procurement and Finance Lead: DBM (Procurement Service) Members: DOH, DOF	TG Demand Generation & Communications Lead: PCOO Members: DOH, NTC, PIA
Sub - Task Groups (STGs) under the TG COVID-19 Immunization Program	
STG Planning, Policy & Technical Support Lead: DOH (DPCB OD IV) Member: DOJ, OCPLC, DepEd, DILG STG Sec STG Program Implementation Lead: DOH (DPCB OD III) Members: DILG (BFP, PNP, BJMP), DSWD, DepEd, DND (AFP), DOJ (BuCor), DOTr (PCG) STG Sec	STG Registry, Data Management & M&E Lead: DOH (EB and KMITS) Member: DICT, DSWD, DepEd STG Sec STG Safety Surveillance & Response Lead: FDA (Office of the Director) Member: DOH (EB, DPCB, FICT) STG Sec
TG Secretariat (TG Sec)	

The following are the roles and responsibilities of the COVID-19 Vaccine Cluster Organizational Structure:

Team	Roles and Responsibilities
TG Vaccine Evaluation and Selection	• Review results of clinical trials • Coordinate and Collaborate with the TGs and STGs, NITAG and HTAC
TG Diplomatic Engagement and Negotiation	• Meet with international parties and entities. • Provide feedback and updates to the other respective TGs pertaining to vaccine development in the global market. • Coordinate and collaborate with TG Procurement and Finance in identifying viable global market vaccine manufacturers and entities.
TG Procurement and Finance	• Facilitate advanced market commitment and/or framework contracting and/or procurement through international facilities (COVAX) • Activate price negotiation board subject to HTA's cost-effective price • Coordinate with DBM and legislators, as may be necessary on budget and co-payment ceilings • Explore local vaccine production and supply
TG Cold Chain and Logistics Management	• Map the potential port(s) of entry, points of storage (stores), and fallback facilities in the country with their respective cold chain and transportation/capacity distribution for vaccines, and

	ancillary products and assess dry storage and cold chain capacity at all levels • Facilitate acceptance and inventory of vaccines and logistics • Facilitate and ensure storage, distribution and delivery of vaccines and logistics to target areas • Monitor cold chain practices and ensure that vaccines are handled and disposed correctly and properly
TG Immunization Program	• Plan and craft policies, guidelines and standard operating procedures related to the COVID-19 vaccine deployment and program implementation. • Estimate potential numbers of target populations that will be prioritized for access to vaccines stratified by target group and geographic location • Identify potential COVID-19 vaccine delivery strategies • Create a data information system for all vaccine recipients • Provide capacity building and trainings to implementers • Develop or adapt existing and implement AEFI/Post-marketing surveillance and monitoring framework • Ensure or craft guidelines, procedures and tools for planning and conducting vaccine pharmacovigilance activities
TG Demand Generation and Communications	• Design a demand and risk communication plan • Implement social mobilization and community engagement activities • Ensure social preparation of target population groups and geographical areas prior to vaccination
National Immunization Technical Advisory Group (NITAG)	• Review the latest position papers, studies, international guidelines and recommendations from internationally acknowledged resources [i.e., World Health Organization (WHO), Strategic Advisory Group of Experts for Immunization (SAGE)] for possible adoption in the country policies and plans for the National Immunization Programme. • Conduct existing policy analysis, review of the program data and evidence in order to provide evidence-based technical advice and recommendations for the development of appropriate and sustainable immunization policies, guidelines, strategies and approaches related to immunization program. • Advise the DOH in the formulation of policies, plans and strategies for research and development of existing and new vaccines and the vaccine delivery technology.
National Adverse Events Following Immunization Committee	• Review all reported serious and cluster of AEFI cases presented for expert opinion and provide a final causality assessment of the AEFI cases as well as the cases that were not classified by the Regional AEFI Committee. • Ensure evidence-based causality assessment by recommending further investigation and data collection as needed. • Make final decisions on causality assessment of inconclusive investigations.

	• Ensure standard protocols for AEFI surveillance and investigation are correctly followed. • Engage with other national and international experts when requirements arise in establishing causality and vaccine quality issues. • Provide recommendations to the National Immunization Program, EB and National Cold Chain Manager on improving immunization service delivery, compliance with injection safety and effective vaccine management based on lessons from the AEFI cases. • Serve as technical advisory group on vaccine and immunization safety-related issues of highest consideration such as immediate recall of vaccine from the market or temporary/permanent withdrawal of a vaccine from the immunization program. • Serve as resource person in other AEFI related meetings, conferences or capacity building activities as requested.
Health Technology Assessment Council	• Oversee and coordinate the health technology assessment process of candidate COVID-19 vaccine. • Review and assess existing evidences of COVID-19 vaccines undergoing/undergone clinical trials. • Coordinate and provide recommendations to the TG Vaccine Evaluation and Selection.

8.2 Security/ Uniformed Personnel Engagement in COVID-19 Vaccine Delivery and Deployment

The Philippine Government Security Plan or "Caduceus" has been developed to provide guidance on the engagement of security or uniformed personnel in the delivery and deployment of COVID-19 vaccines. The military and police shall be mobilized during the vaccination campaign as laterally and vertically coordinated with the Local Government Units. There is no need for an agreement between the DOH and uniformed units since the Department of National Defense and the Philippine National Police are integrated in the organizational structure managing the deployment of COVID-19 vaccines and the vaccination program, the COVID-19 Vaccine Cluster under the National Task Force Against COVID-19. In addition, a Presidential Decree (PD) no. 2020-157 was also given by the President instructing the DND and DILG to provide support to the COVID-19 vaccination efforts. Furthermore, since the country is still under a Public Health Emergency and a State of Calamity, the DND and DILG are mandated to perform their duties under Republic Act no. 10121 or the Philippine Disaster Risk Reduction and Management Act of 2010.

The Security Sector will mobilize personnel to all vaccination sites and will put dedicated control points to ensure the unhampered and unimpeded movements of vaccines in support to the vaccination efforts. The Philippine government cannot currently divulge the number of military and police personnel to be deployed for security reasons.

8.3 Capacity Building

The Philippines, together with almost all countries, has capacity issues in responding to the unprecedented COVID-19 pandemic including infection control, testing and laboratory analysis, establishment and operation of quarantine and isolation facilities and waste management. Additionally, the citizen and stakeholder engagement process is continually evolving in response to the unpredictable disease outbreak.

The Project will provide funding, training, and capacity building to support these critical initiatives, building on international expertise to achieve international best practices in line with WHO guidelines as follows:

- supporting DOH in preparing a guidance note on standard design for hospital isolation and treatment centers to manage Severe Acute Respiratory Infections (SARI) patients;
- training on use of medical and laboratory equipment, devices, and testing kits for health providers and technicians; and supporting the necessary logistics arrangements to deploy goods and equipment to health facilities without delay;
- training on the appropriate use of PPE, guided by the WHO (2020) interim guidance *Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19)*, 19 March 2020;
- capacity building for laboratory staff and technicians on COVID-19 testing; and
- health care waste management and infection prevention and control in health care facilities;
- training of relevant DOH personnel and designated logistics team for the management and maintenance of cold chain and effective management for maximizing efficiencies

The DOH will be conducting trainings for the implementers of the vaccine distribution and administration prior to vaccine roll-out with the lead of the Public Health Services Team.

8.4 Estimated Budget

The costs of implementing the ESMF relate to activities and costs beyond the costs of the dedicated E&S personnel involved in various measures and actions of the ESMF. The main costs of implementing this ESMF relate to (i) training and workshops, (ii) development of E&S due diligence as well as measures and other tools, (iii) information and communication, and (iv) supervision, monitoring, and reporting. A budget estimate for these costs is provided in Table ; it may be readjusted during project implementation to ensure adequate management of environmental and social risks.

Table 8.3. ESMF Implementation Costs

ESMF Activities	Description of Activities	Estimated Cost (USD)
Training and capacity building	Development of annual work plans. Training on good practice environmental and social management, including healthcare waste management at national, provincial and local government level.	150,000

Development of E&S Due Diligence,	Recruitment of consultants for preparation/adaption of ECOPs, ESMPs, etc.	120,000
Information and Communication	Development of communication strategy and stakeholder engagement. Production and dissemination of communication materials targeting vulnerable groups and indigenous peoples	50,000
Supervision, monitoring, and reporting	Travel to provinces for training and conducting monitoring and reporting	60,000
TOTAL		**$380,000**

ANNEXES

A Abbreviations and Acronyms

COVID-19	Coronavirus Disease 2019
CERC	Contingent Emergency Response Component
CoC	Code of Conduct
DBF	Department of Budget and Finance
DA	Designated Account
ECQ	Enhanced Community Quarantine
EOC	Emergency Operation Center
ESMF	Environmental and Social Management Framework
FMM	Financial Management Manual
FM	Financial Management
GCQ	General Community Quarantine
GRS	Grievance Redress Service
IDA	International Development Association
IBRD	International Bank for Reconstruction and Development
IHR	International Health Regulations
IPF	Investment Project Financing
IMF	International Monetary Fund
M&E	Monitoring and Evaluation
DOH	Department of Health
PDO	Project Development Objective
SEP	Stakeholder Engagement Plan
SOP	Standard Operational Procedures
SPRP	Strategic Preparedness and Response Program
STEP	Systematic tracking of Exchanges in Procurement
UNICEF	United Nations Child'en's Fund
WBG	World Bank Group
WHO	World Health Organization

B Labor Management Procedures (LMP)

Under ESS2 on Labor and Working Conditions, Borrowers are required to develop labor management procedures (LMP). The purpose of the LMP is to facilitate planning and implementation of the project. The LMP identifies the main labor requirements and risks associated with the project, and helps the Borrower to determine the resources necessary to address project labor issues. The LMP is a living document, which is initiated early in project preparation, and is reviewed and updated throughout development and implementation of the project.

B.1 Labor and Working Conditions

Labor Use

The Project will employ about a hundred contracted workers to refurbish existing or construct new quarantine facilities or isolation rooms in various parts of the Philippines. The Project will benefit thousands of health workers including medical technicians mostly in major cities in the country including Baguio City, Cebu, Metro Manila, and Surigao City, including through the procurement of PPE. Waste management personnel who are expected to be part of the labor force of health facilities will also benefit from the protection and safety equipment to be provided by the Project.

Security personnel in hospitals are usually contracted out. Civil servants of the Department of Health and local government units will be involved as part of the project implementation team. Community workers will not be employed.

Characteristics of Project Workers

The minimum legal working age in the Philippines is 18 years old. All workers must meet this requirement. Contracted workers, mainly for civil works, will most likely be male. Health workers will most likely be female. Health workers will consist of medical professionals directly employed by the health facilities as organic staff or contracted on a temporary basis. There may also be some volunteers.

A small number of civil servants from the Department of Health at the national and local levels and LGUs will be involved in project implementation. Construction workers will be hired in time for the refurbishment or construction of the isolation facilities.

Health workers are expected to already be working in the hospitals and laboratories. Provision of laboratory equipment may entail the need to hire additional technicians. Contracted workers are expected only for the construction of quarantine facilities which will not constitute major civil works. These will most likely be small, temporary buildings scattered in various areas of the country with local hospitals in partnership with LGUs in charge of procuring these small contracts.

Health workers will be at the forefront in the fight against COVID-19. As such, they are at the most risk of infection but with the provision of PPEs, reagents, and technology against the virus, they are also the main beneficiaries.

Civil servants from the Department of Health and LGUs will be involved in project management and are expected to abide by social distancing measures and proper hygiene as they carry out their tasks.

Waste management workers are expected to be part of the labor force of health facilities including the quarantine facilities to be constructed. Like the health workers, they are highly at risk and will benefit from the PPEs and other safety measures to be provided by the Project.

Security personnel including the military who will be involved in the Project are expected to receive the appropriate PPEs from the project. They will abide by a Code of Conduct (CoC) and DoH will ensure that they are informed about the CoC and receive appropriate training, as needed.

Migrant workers are not expected to be involved. Likewise, community workers are not expected to be involved. No risks concerning child labor and serious safety issues are identified or expected concerning primary supply workers as most of the Project's supplies will be medical equipment and PPE with a high level of standards and quality control.

B.2 Assessment of Potential Labor Risks

Health workers, waste management and security personnel will be more at risk of infection without the provision of PPE and the use of disinfectants that will be provided by the project. With physical mobility being restricted and given the nature of construction activities, labor influx is not expected. However, the movement of laborers from the worksite to the community may increase the risk of infection in both areas.

COVID-19 specific risks relate to the activities being carried out by the workers, in the context in which the project is being conducted. Potential risks could include workers mobilized from adjoining provinces or regions, or local workers returning from abroad, become vectors for transmission of COVID-19 to other workers in construction project sites and nearby communities.

These risks may be minimized and addressed through:

- conducting pre-employment health checks
- controlling entry and exit from site/workplace
- reviewing accommodation arrangements, to see if they are adequate and designed to reduce contact with the community
- reviewing contract durations, to reduce the frequency of workers entering/exiting the site
- rearranging work tasks or reducing numbers on the worksite to allow social/physical distancing, or rotating workers through a 24-hour schedule
- providing appropriate forms of personal protective equipment (PPE)
- putting in place alternatives to direct contact, like telemedicine appointments and livestream of instructions.

Another example of potential risk is where the project activity is the treatment by health care workers of COVID-19 patients. In this case the risks could include pathogen exposure, infection and associated illness, death, illegal and untenable overtime, psychological distress, fatigue, occupational burnout, stigma and passing on infections to family and community.

B.3 Labor Legislation

Presidential Decree No. 44, as amended by RA 6715, known as the "Labor Code of the Philippines", governs all employment practices and relations in the country. Provisions of the code are aligned

with international good practice on decent work and shall be strictly implemented. These provisions include:

Wage and Welfare

1. Employees shall receive their wages by means of legal tender, at least once every two weeks or twice a month at intervals not exceeding sixteen (16) days.
2. In a contracted work, employees of the contractor and of the latter's subcontractor, shall also be paid in accordance with the labor code.
3. The wage paid by the employers to the workers shall not be lower than the prescribed minimum wage set by the Regional Tripartite Wages and Productivity Boards.

Working time, Rest Days and Holidays

1. The normal work hours for every employee shall not exceed eight (8) hours a day. If all or any part of the employee's working hours falls on 10:00 PM to 6:00 AM, he/she shall be entitled to a night shift pay in addition to the regular wage. If the worked performed exceeds the normal working hours, he/she shall be given overtime pay.
2. It is the right of every employee for a rest period not less than twenty-four (24) consecutive hours after every six (6) consecutive normal workdays.
3. Compensation shall be given for work performed during holidays and Sundays.

Equal Rights

1. Workers shall have the right to self-organization and to form, join, or assist labor organizations of their own choosing for purposes of collective bargaining.
2. Minimum employable age is 18 years old.
3. Gender discrimination in employment and labor relations shall be prohibited. Male and female employees are entitled to equal compensation for work of equal value and access to promotion and training opportunities.

Occupational Health and Safety

According to Chapter III of Republic Act No. 11058 (the OSH Law), the following are the duties of every employer, contractor or subcontractor, and any person who manages, controls or supervises the work:

1. Equip a place of employment for workers free from hazardous conditions that are causing or are likely to cause death, illness or physical harm to the workers where physical distancing can be observed. Sanitation and hygiene facilities should also be present and well- disinfected regularly for the safety of workers.
2. Provide complete job safety instructions and proper orientation to all workers including, but not limited to, those entering the job for the first time and to those relating to familiarization with their work environment
3. Inform the workers of the hazards associated with their work, health risks involved or to which they are exposed to, preventive measures to eliminate or minimize the risks, and steps to be taken in case of emergency

4. Use only approved specific industry set of standards of devices and equipment for the workplace as applicable
5. Comply with OSH standards including training, medical examination, and when necessary, provisions on protective and safety devices such as PPE and machine guards. Training for workers shall include health promotion, hazards associated with their work, health risks involved or to which they are exposed to, preventive measures to eliminate or minimize risks, steps to be taken in case of emergency, and safety instructions for the jobs, activities and tasks to be handled by workers
6. Make arrangements for workers and their representatives to have the time and resource to participate actively in the processes of organizing, planning and implementation, monitoring, evaluation and action for improvement of the OSH management system
7. Provide, when necessary, for measures identifying trainings and drills, evacuation plans, etc., to deal with emergencies, fires and accidents including first-aid arrangements

To comply with the OSH standards, every employee/worker shall:

1. Participate in the capacity building activities on safety and health and other OSH related topics and programs
2. Proper use of all safeguards and safety devices furnished for workers' protection and that of others
3. Comply with instructions to prevent accidents or imminent danger situations in the workplace
4. Observe prescribed steps to be taken in cases of emergency including participation in the conduct of national or local disaster drills
5. Report to their immediate supervisor or any other responsible safety and health personnel any work hazard that may be discovered in the workplace

Employed citizens, employees shall have the following common rights:

1. To refuse to work without threat or reprisal from the employer if an imminent danger situation exists.
2. To report accidents, dangerous occurrences, and hazards to the employer, to DOLE, and to other concerned competent government agencies.
3. To receive personal protective equipment, to be provided by their employer, contractor or subcontractor, free of charge, for any part of the body that may be exposed to hazards, and other lifeline
4. To receive information on workplace conditions, risks that can impose danger to health, industrial dangerous and poisonous factors

The Occupational Safety and Health Standards, in compliance with Article 162 of the Labor Code of the Philippines, was formulated to protect every working man against the dangers of injury, sickness or death through safe and healthful working conditions. For this project, chapters discussing standards for personal protective equipment and devices, construction safety, and hazardous materials are necessary and should be complied.

DPWH Department Order 56 series of 2005: Guidelines for the Implementation of Department of Labor and Employment (DOLE) No.13 series of 1998, Guidelines in the Governing Occupational Safety and Health in the Construction Industry, it is expected that the contractors should follow the said guidelines to eliminate or reduce occupational safety and health hazards in all work places, and institute new, and update existing programs to ensure safe and healthful working conditions in all places of employment.

The following international conventions, and directives may also support measures for addressing health and safety issues relevant to COVID-19:

- ILO Occupational Safety and Health Convention, 1981 (No. 155)
- ILO Occupational Health Services Convention, 1985 (No. 161)
- ILO Safety and Health in Construction Convention, 1988 (No. 167)
- WHO International Health Regulations, 2005
- WHO Emergency Response Framework, 2017

B.4 Grievance Redress Mechanism

DOH Workers

Management of DOH personnel is governed by the Civil Service Commission which requires the establishment of a Grievance Redress Committee in charge of preventing and addressing grievances as stipulated in the following provisions:

- The Grievance Committee shall develop and implement pro-active measures or activities to prevent grievance such as employee assembly which shall be conducted at least once every quarter, “talakayan” counseling and other HRD interventions;
- Conduct continuing information drive on Grievance machinery among officials and employees in collaboration with the Personnel Administration Division;
- Conduct dialogue between and among the parties involved;
- Conduct investigation and hearing within ten (10) days from receipt of the grievance and render decision within five (5) working days after the investigation. Provided, however where the object of the grievance is the grievance committee, the aggrieved party may submit the grievance to top management;
- Direct the documentation of the grievance management process including the preparation and signing of written agreements reached by the parties involved:
- Issue Certification on the Final Action on the Grievance (CFAG) which shall contain, among other things, the information, history and final action taken by the agency on the grievance, and;
- Submit a quarterly report of its accomplishments and status of unresolved grievance to the Civil Service Commission Regional Office concerned.

Contractors

Contractors are expected to hire much of their laborers upon assuming the civil works contract. At the time of recruitment, workers will be informed of the grievance mechanism and the measures put in place to protect them against any reprisal for its use. The grievance mechanism shall be made easily accessible to all project workers. Regular meetings with the project workers to discuss any

work-related issues and concerns will be conducted. Every grievance raised by a worker will be documented with the actions undertaken by the office to address such grievance. The aggrieved worker may raise any issue anonymously through a letter which shall be submitted to his/her immediate supervisor's office. All non-anonymous grievances relative to adequate working conditions, standard occupational safety and health and other concerns from the workers shall be addressed following the procedures outlined below:

- The grievance shall be filed by the workers to the Contractor who shall follow the DOLE procedures in handling the complaints. The Contractor shall act within 15 days upon receipt thereof;
- If no understanding or amicable solution can be reached, or if the complainant does not receive a response from the Contractor within 15 days of registry of the complaint, he/she can appeal to the project grievance focal person within DOH, which should act on the complaint/grievance within 15 days from the day of its filing. If the PIU does not see itself fit to address the complaint it will immediately bring the matter to the concerned DOLE office.
- If the complainant is not satisfied with the resolution offered by the PIU, he/she can appeal to the concerned DOLE office, which should act on the complaint/grievance within 15 days from the day of its filing.

B.5 Contractor Management

Responsibilities of BIHC

1. The BIHC will request details in writing before a contract is signed from the Contractor of the measures being taken to address labor and working conditions risks. The construction contract should include health and safety requirements, and these can be used as the basis for identification of, and requirements to implement, COVID-19 specific measures. The measures may be presented as a contingency plan, as an extension of the existing project emergency and preparedness plan or as standalone procedures. The measures may be reflected in revisions to the project's health and safety manual.

2. The BIHC should require the Contractor to convene regular meetings with the project health and safety specialists and medical staff (and where appropriate the local health authorities), and to take their advice in designing and implementing the agreed measures.

3. The contractor shall assign a senior staff as a focal point to deal with COVID-19 issues during construction. This can be a work supervisor or a health and safety specialist. This person can be responsible for coordinating preparation of the site and making sure that the measures taken are communicated to the workers, those entering the site and the local community. It is also advisable to designate at least one back-up person, in case the focal point becomes ill; that person should be aware of the arrangements that are in place.

4. The BIHC may provide support in identifying appropriate mitigation measures, particularly where these will involve interface with local services, in particular health and emergency services. In many cases, the BIHC can play a valuable role in connecting the Contractor with local Government agencies, and helping coordinate a strategic response, which takes into account the availability of resources.

5. Workers should be encouraged to use the existing project grievance mechanism to report concerns relating to COVID-19, preparations being made by the project to address COVID-19 related issues, how procedures are being implemented, and concerns about the health of their co-workers and other staff.

6. The BIHC, in coordination with local LGU and health facility, shall issue construction quarantine pass to the individual qualified personnel of the contractors, subcontractors, and suppliers, clearly stating the identification, designation, nature of work, validity and destination. It is understood that the pass shall cover transit of personnel from (a) General Community Quarantine (GCQ) area to Enhanced Community Quarantine (ECQ) area, and vice versa and (b) an area not under community quarantine to a GCQ or ECQ area, and vice versa.

Responsibilities of the Contractor

Prior to Deployment

1. Only persons from eighteen (18) to fifty-nine (59) years of age, without pre-existing health conditions, such as, but not limited to, immunodeficiency, comorbidities, or other health risks, including any person who resides with the aforementioned; and who did not come into contact with someone with COVID-19 shall be allowed to be included in the workforce, in accordance with the Omnibus Guidelines on the Implementation of Community Quarantine in the Philippines ("OG") dated 22 October 2020 and relevant DPWH guidelines

2. Construction personnel shall be required to undergo any available COVID-19 test, as may be prescribed by DOH, and retested as the need arises. In this regard, consultation with medical doctors (duly accredited by DOH, if possible) prior to the conduct of COVID-19 test shall be made.

3. The contractors, subcontractors, and suppliers shall provide for their personnel/workers the necessary welfare facilities and amenities, such as employees' quarters for board and lodging, ensuring compliance to social distancing, proper hygiene, etc. Contractors shall submit the design for the said welfare facilities and amenities, for monitoring, to BIHC.

4. Contractors shall ensure compliance with DOLE D.O. NO. 13 series of 1998. Contractors shall provide their personnel and workers continuous supply of vitamins, particularly vitamin C, other ov–r - t–e - counter medicines, quarantine facilities, and oxygen tanks for emergency purposes.

5. Contractors shall provide disinfection facilities in their respective project sites in compliance with pertinent DOH and IATF Guidelines, to be placed at strategic locations to ensure the safety and welfare of all personnel.

6. Proper information dissemination regarding COVID-19 construction protocols on top of existing construction safety practices shall be conducted by Safety Officers to all personnel.

7. For Government construction projects, personal records of all personnel necessary for contact tracing shall be submitted by the contractors, subcontractors, and suppliers to the DPWH IO and shall be resubmitted and updated monthly, or as the need arises.

During Deployment

1. Conduct an inventory of works for the construction sequencing to be followed and undertaken to uphold the required social distancing. Break times shall be conducted in a staggered manner.

2. Employees shall be housed in their respective quarters for the entire duration of the project covered by the ECQ and GCQ. Otherwise, "Prior to Deployment" procedures shall be conducted at every instance of re-entry.

3. Errands to be conducted outside the construction site premises shall be kept to a minimum. Number of personnel running errands shall be limited and shall be properly disinfected and closely monitored for symptoms within fourteen (14) days upon re-entry.

4. Field offices, employees' quarters, and other common areas shall be regularly maintained including the daily disinfection of such facilities.

5. Adequate food, safe/potable drinking water, disinfectants, and hand soaps shall be made available by the concessionaires, contractors, subcontractors, and suppliers to its in – house personnel.

6. Daily monitoring of the pre- and post- work health conditions of workers shall be undertaken by the contractors, subcontractors, and suppliers including, but not limited to, temperature, health, and exposure monitoring, as preventive measures. Personnel with manifestations or symptoms relative to COVID-19 shall be immediately isolated and quarantined for fourteen (14) days and if necessary, brought to the nearest DOH COVID-19 treatment facility under strict confidentiality and privacy. Proper protocols in accordance with the DTI and DOLE Interim Guidelines on WorkPlace Prevention and Control of COVID-19 shall likewise be strictly observed. For Government construction projects, a daily health monitoring report to be prepared by the Safety Officer shall be submitted to the DPWH IO. The Contractor will also cover the medical bills and wages of the workers should they be infected by the virus.

7. Work activities shall be under daily strict monitoring by the Safety Officer at site to ensure compliance to safety standards and quarantine protocols.

8. For government construction projects, the DPWH Engineers assigned at the site shall ensure strict compliance to DOLE D.O. 13, series of 1998, and implementation of wearing additional Personal Protective Equipment (PPE) required such as, but not limited to, face masks, safety glasses/goggles, face shields, and long sleeve T-shirts, to contain the spread of COVID-19 in the workplace. On the other hand, contractors for essential private construction projects under GCQ shall assign a full-time safety officer devoted to ensure compliance with D.O. 13, series of 1998 and implementation of social distancing measures provided herein.

9. For off-site employees' quarters, transport service, duly disinfected before and after use, shall be provided, with social distancing observed.

10. Sharing of construction and office equipment is discouraged. However, if necessary, the shared equipment must be disinfected in between transfers amongst personnel.

11. All material and equipment delivery and disposal shall be conducted by a specific team of personnel on an isolated loading/unloading zone while limiting contact with the delivery/disposal personnel. All material and/or equipment entering the construction site shall be duly disinfected, as possible.

12. Non-essential personnel, visitors, and the general public shall be restricted to enter the construction site, employees' quarters, and field offices. Otherwise, all personnel entering the construction site premises on a temporary basis (e.g. Delivery truck drivers, inspectors, etc.) shall be properly logged and checked for symptoms. Gatherings, Liquors, and/or merry – making are strictly prohibited within the construction site premises.

13. Proper waste disposal shall be provided for infectious waste such as PPEs and other waste products coming from outside the construction premises.

14. Requirements on general hygiene should be communicated and monitored, to include:

    - Training workers and staff on site on the signs and symptoms of COVID-19, how it is spread, how to protect themselves (including regular handwashing and social distancing) and what to do if they or other people have symptom.
    - Placing posters and signs around the site, with images and text in local languages
    - Ensuring handwashing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places throughout site, including at entrances/exits to work areas; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; at stores; and in common spaces. Where handwashing facilities do not exist or are not adequate, arrangements should be made to set them up. Alcohol based sanitizer (if available, 60-95% alcohol) can also be used.
    - Setting aside part of worker accommodation for precautionary self-quarantine as well as more formal isolation of staff who may be infected
    - Conducting regular and thorough cleaning of all site facilities, including offices, accommodation, canteens, common spaces. Review cleaning protocols for key construction equipment (particularly if it is being operated by different workers).
    - Providing cleaning staff with adequate cleaning equipment, materials and disinfectant.
    - Reviewing general cleaning systems, training cleaning staff on appropriate cleaning procedures and appropriate frequency in high use or high-risk areas.
    - Where it is anticipated that cleaners will be required to clean areas that have been or are suspected to have been contaminated with COVID-19, providing them with appropriate PPE: gowns or aprons, gloves, eye protection (masks, goggles or face screens) and boots or closed work shoes. If appropriate PPE is not available, cleaners should be provided with best available alternatives.

- Training cleaners in proper hygiene (including handwashing) prior to, during and after conducting cleaning activities; how to safely use PPE (where required); in waste control (including for used PPE and cleaning materials).
- Any medical waste produced during the care of ill workers should be collected safely in designated containers or bags and treated and disposed of following relevant requirements (e.g., national, WHO).

15. Consider whether existing project medical services are adequate, taking into account existing infrastructure (size of clinic/medical post, number of beds, isolation facilities), medical staff, equipment and supplies, procedures and training. Where these are not adequate, allocate in the project cost the upgrading of services, including:

    - Training medical staff, which should include current WHO advice on COVID-19 and recommendations on the specifics of COVID-19. Where COVID-19 infection is suspected, medical providers on site should follow WHO interim guidance on infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected.
    - Assessing the current stock of equipment, supplies and medicines on site, and obtaining additional stock, where required and possible. This could include medical PPE, such as gowns, aprons, medical masks, gloves, and eye protection. Refer to WHO guidance as to what is advised.
    - If PPE items are unavailable due to world-wide shortages, medical staff on the project should agree on alternatives and try to procure them. Alternatives that may commonly be found on constructions sites include dust masks, construction gloves and eye goggles. While these items are not recommended, they should be used as a last resort if no medical PPE is available.
    - Ventilators will not normally be available on work sites, and in any event, intubation should only be conducted by experienced medical staff. If a worker is extremely ill and unable to breathe properly on his or her own, they should be referred immediately to the local hospital.
    - Review existing methods for dealing with medical waste, including systems for storage and disposal.

16. Given the limited scope of project medical services, the project may need to refer sick workers to local medical services. Preparation for this includes:

    - Obtaining information as to the resources and capacity of local medical services (e.g. number of beds, availability of trained staff and essential supplies).
    - Conducting preliminary discussions with specific medical facilities, to agree what should be done in the event of ill workers needing to be referred.
    - Considering ways in which the project may be able to support local medical services in preparing for members of the community becoming ill, recognizing that the elderly or those with pre-existing medical conditions require additional support to access appropriate treatment if they become ill.
    - Clarifying the way in which an ill worker will be transported to the medical facility, and checking availability of such transportation.
    - Establishing an agreed protocol for communications with local emergency/medical services

- Agreeing with the local medical services/specific medical facilities the scope of services to be provided, the procedure for in-take of patients and (where relevant) any costs or payments that may be involved.

B.6 Use of security personnel

Health facilities supported by the project is expected to use some security personnel. Military and security personnel may also be involved in the deployment and administration of the COVID-19 vaccines. Normally a security agency is contracted on a long-term basis by health care facilities to ensure safety of employees and the facility, including the equipment and supplies. In relation to security of the equipment during delivery, DOH's freight service provider ensures that all equipment is delivered intact and safe onsite. DOH reports that security has not been an issue in the delivery of equipment in different areas nationwide.

The Project is not expected to use government security personnel in construction of facilities financed by the Project. However, as COVID-19 may develop in unpredictable ways and due to potential concerns among the public, the use of additional government security personnel from the local or national police, or in some instances possibly the military, may be directed to implement measures to ensure peace and order in affected areas, including at quarantine, isolation, decontamination, and other health facilities.

The potential scope of such security measures, and potential risks surrounding them, will be assessed and monitored during implementation and this LMP may be revised accordingly to manage environmental and social risks concerning project activities. The World Bank's ESS4 on Community Health and Safety encourages disclosure of government security arrangements and that clients ensure that government personnel act in a manner consistent with the provisions of the standard.

In case project activities are supported by private or government security personnel, it will be ensured that the security personnel follow a strict code of conduct and avoid any escalation consistent with the ESF and IFC guidance on the use of security personnel (IFC *Good Practice Handbook on the Use of Security Forces: Assessing and Managing Risks and Impact*s). In these cases, DOH (through BIHC) will assess risks posed by these security arrangements to project workers and the local community. Security personnel will provide security services in a manner consistent with the applicable laws and code of practices and will be consistent with the relevant requirement of the World Bank's ESS4. DOH will ensure that the workers and local community are informed about the arrangements and the project's GRM. DOH will review any allegations of unlawful or abusive acts of security personnel, take action (or urge appropriate parties to take action) to prevent recurrence and, where necessary, report unlawful abusive acts to the relevant authorities. Any incidents, concerns or grievances regarding the conduct of security personnel will be received, monitored, documented (taking into account the need to protect confidentiality), and resolved through the Project's grievance mechanism following incident classification: Indicative, serious and severe. Any severe incidents with such personnel need to be reported to the Bank no later than 48 hours with basic information and a detailed incident report within 10 working days.

Incidents categorization:

There are three levels of classification: Indicative, Serious and Severe Indicative –

Indicative: A relatively minor, small-scale, localized incident that negatively impacts a small geographical area or a small number of people and does not result in significant or irreparable harm to people or the environment, or failure to implement required E&S measures with limited immediate impacts. Although relatively minor and limited in its immediate effects, this type of incident may be indicative of wider-scale issues or underlying organizational weaknesses within a project that could lead to serious or severe incidents if left uncorrected.

Serious: An incident that caused or may cause significant harm to the environment, workers, communities, or natural or cultural resources, is complex or costly to reverse and may result in some level of lasting damage or injury; or failure to implement E&S measures with significant impacts or repeated non-compliance with E&S policies; or failure to remedy Indicative non-compliance that may potentially cause significant impacts. Examples of serious incidents may include injuries to workers that require off-site medical attention, exploitation or abuse of vulnerable groups, consistent lack of Occupational Health and Safety (OHS) plans in a civil works project, and large-scale deforestation.

Severe- Incidents that caused or may cause great harm to individuals or the environment, or present significant reputational risks that could hamper the Bank's ability to operate in a country or region. The Borrower's inability or unwillingness to remedy situations that could result in serious or severe harm would be a factor in classification. A severe incident is complex and expensive to remedy (if possible) and is likely irreversible. A fatality is automatically classified as severe, as are incidents of major environmental contamination, forced or child labor, abuses of community members by project security forces or other project workers (including GBV) violent community protests a project, kidnapping, and trafficking in endangered species.

Severe incidents need to be reported to the World Bank no later than 48 hours with basic information and a detailed incident report within 10 working days.
Incident Report:

The **Incident Report** should be 1 – 2 pages and include, at a minimum, the following information:
• Country, Name of Project,
• Preliminary classification of the incident,
• What was the incident? What happened? To what or to whom?
• Where and when did the incident occur?
• When and how did the Project find out about it?
• Are the basic facts of the incident clear and uncontested, or are there conflicting versions? What are those versions?
• What were the conditions or circumstances under which the incident occurred (if known at this stage?
• Is the incident still ongoing or is it contained?
• Is loss of life or severe harm involved?
• What is their response to date?
• What measures have been or are being implemented by the Project/Contractor?

C. Labor Management Procedures (LMP) Monitoring Form Template

Additional inputs may be provided based on the LMP submitted by the Contractor and the project recipient facility.

Item	Status (Complied/Not Complied)	Timeline	Gaps/ Barriers for Implementation of Item	Actions to be Taken
B1. Labor and Working Conditions				
Workers are above minimum legal age				
Workers are provided and are wearing proper PPEs at all times				
Workers are aware and practice the Code of Conduct (CoC)				
Designated OHS Committee and Safety Personnel				
B2. Assessment of Potential Labor Risks				
Pre-employment health checks				
Controlled entry and exit from site/workplace				
Provision of accommodation arrangements to reduce contact with community which enables physical distancing with regular disinfection				
Provision of sanitation and hygiene facilities which are regularly disinfected				
Reviewed contract durations, to reduce the frequency of workers entering/exiting the site				
Rearranged work tasks or reducing numbers on the worksite to allow social/physical distancing, or rotating workers through a 24-hour schedule				
Provided appropriate forms of personal protective equipment (PPE) to all personnel				
Alternatives to direct contact such as telemedicine appointments and livestream of instructions				

B3. Labor Legislation				
<u>Wage and Welfare</u> Employees shall receive their wages by means of legal tender, at least once every two weeks or twice a month at intervals not exceeding sixteen (16) days.				
In a contracted work, employees of the contractor and of the latter's subcontractor, shall also be paid in accordance with the labor code.				
The wage paid by the employers to the workers shall not be lower than the prescribed minimum wage set by the Regional Tripartite Wages and Productivity Boards.				
<u>Working time, Rest Days and Holidays</u> The normal work hours for every employee shall not exceed eight (8) hours a day. If all or any part of the employee's working hours falls on 10:00 PM to 6:00 AM, he/she shall be entitled to a night shift pay in addition to the regular wage. If the worked performed exceeds the normal working hours, he/she shall be given overtime pay.				
It is the right of every employee for a rest period not less than twenty-four (24) consecutive hours after every six (6) consecutive normal workdays.				
Compensation shall be given for work performed during holidays and Sundays.				
<u>Equal Rights</u> Workers shall have the right to self-organization and to form, join, or assist labor organizations of their own choosing for purposes of collective bargaining				
Gender discrimination in employment and labor relations shall be prohibited. Male and female employees are entitled to equal compensation for work of				

equal value and access to promotion and training opportunities.				
<u>Occupational Health and Safety</u> Equip a place of employment for workers free from hazardous conditions that are causing or are likely to cause death, illness or physical harm to the workers where physical distancing can be observed. Sanitation and hygiene facilities should also be present and well- disinfected regularly for the safety of workers.				
Provide complete job safety instructions and proper orientation to all workers including, but not limited to, those entering the job for the first time and to those relating to familiarization with their work environment.				
Inform the workers of the hazards associated with their work, health risks involved or to which they are exposed to, preventive measures to eliminate or minimize the risks, and steps to be taken in case of emergency.				
Use only approved specific industry set of standards of devices and equipment for the workplace as applicable.				
Comply with OSH standards including training, medical examination, and when necessary, provisions on protective and safety devices such as PPE and machine guards.				
Training for workers shall include health promotion, hazards associated with their work, health risks involved or to which they are exposed to, preventive measures to eliminate or minimize risks, steps to be taken in case of emergency, and safety instructions for the jobs,				

activities and tasks to be handled by workers				
Make arrangements for workers and their representatives to have the time and resource to participate actively in the processes of organizing, planning and implementation, monitoring, evaluation and action for improvement of the OSH management system				
Provide, when necessary, for measures identifying trainings and drills, evacuation plans, etc., to deal with emergencies, fires and accidents including first-aid arrangements				
Report to their immediate supervisor or any other responsible safety and health personnel any work hazard that may be discovered in the workplace				
Report accidents, dangerous occurrences, COVID-19 cases, and hazards to the employer, to DOLE, and to other concerned competent government agencies.				
B4. Contractor's Personnel Grievance Redress Mechanism (GRM)				
Development of a GRM for the project site				
Implementation and monitoring of the GRM for civil works				
B5. Contractor Management				
<u>Prior to Deployment</u> Only persons from 21 to 59 years of age, without pre-existing health conditions, such as, but not limited to, immunodeficiency, comorbidities, or other health risks, including any person who resides with the aforementioned; and who did not come into contact with someone with COVID-19 shall be allowed to be included in the workforce.				
Construction personnel shall be required to undergo any available				

COVID-19 test, as may be prescribed by DOH, and retested as the need arises. In this regard, consultation with medical doctors prior to the conduct of COVID-19 test shall be made.				
The contractors, subcontractors, and suppliers shall provide for their personnel/workers the necessary welfare facilities and amenities, such as employees' quarters for board and lodging, ensuring compliance to social distancing, proper hygiene, etc. Contractors shall submit the design for the said welfare facilities and amenities, for monitoring to DPCB.				
Contractors shall provide their personnel and workers continuous supply of vitamins, particularly vitamin C, other over -the-counter medicines, quarantine facilities, and oxygen tanks for emergency purposes.				
Contractors shall provide disinfection facilities in their respective project sites in compliance with pertinent DOH and IATF Guidelines, to be placed at strategic locations to ensure the safety and welfare of all personnel.				
Information dissemination regarding COVID-19 construction protocols on top of existing construction safety practices shall be conducted by Safety Officers to all personnel.				
For Government construction projects, personal records of all personnel necessary for contact tracing shall be submitted by the contractors, subcontractors, and suppliers to the DPWH IO and shall be resubmitted and updated monthly, or as the need arises.				
<u>During Deployment</u>				

Conduct an inventory of works for the construction sequencing to be followed and undertaken to uphold the required social distancing. Break times shall be conducted in a staggered manner. Employees shall be housed in their respective quarters for the entire duration of the project covered by the ECQ and GCQ. Otherwise, "Prior to Deployment" procedures shall be conducted at every instance of re-entry.				
Errands to be conducted outside the construction site premises shall be kept to a minimum. Number of personnel running errands shall be limited and shall be properly disinfected and closely monitored for symptoms within fourteen (14) days upon re-entry.				
Field offices, employees' quarters, and other common areas shall be regularly maintained including the daily disinfection of such facilities.				
Adequate food, safe potable drinking water, disinfectants, and hand soaps shall be made available by the concessionaires, contractors, subcontractors, and suppliers to its in – house personnel.				
Daily monitoring of the pre- and post- work health conditions of workers shall be undertaken by the contractors, subcontractors, and suppliers including, but not limited to, temperature, health, and exposure monitoring, as preventive measures.				
Personnel with manifestations or symptoms relative to COVID-19 shall be immediately isolated and quarantined for fourteen (14) days and if necessary, brought to the nearest DOH COVID-19 treatment facility under strict confidentiality and privacy.				

Work activities shall be under daily strict monitoring by the Safety Officer at site to ensure compliance to safety standards and quarantine protocols.				
The Contractor will also cover the medical bills and wages of the workers should they be infected by the virus.				
Implementation of wearing additional Personal Protective Equipment (PPE) required such as, but not limited to, face masks, safety glasses/goggles, face shields, and long sleeve T-shirts, to contain the spread of COVID-19 in the workplace.				
For off-site employees' quarters, transport service, duly disinfected before and after use, shall be provided, with social distancing observed.				
Sharing of construction and office equipment is discouraged. However, if necessary, the shared equipment must be disinfected in between transfers amongst personnel.				
All material and equipment delivery and disposal shall be conducted by a specific team of personnel on an isolated loading/unloading zone while limiting contact with the delivery/disposal personnel.				
Non-essential personnel, visitors, and the general public shall be restricted to enter the construction site, employees' quarters, and field offices.				
Proper waste disposal shall be provided for infectious waste such as PPEs and other waste products coming from outside the construction premises.				
Training workers and staff on site on the signs and symptoms of COVID-19, how it is spread, how to				

protect themselves, and what to do if they or other people have symptoms.				
Placing posters and signs around the site, with images and text in local languages.				
Ensuring handwashing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places throughout site, including at entrances/exits to work areas; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; at stores; and in common spaces.				
Setting aside part of worker accommodation for precautionary self-quarantine as well as more formal isolation of staff who may be infected.				
Conducting regular and thorough cleaning of all site facilities, including offices, accommodation, canteens, common spaces.				
Provision of cleaning staff with adequate cleaning equipment, materials, and disinfectant.				
Review of general cleaning systems, training cleaning staff on appropriate cleaning procedures and appropriate frequency in high use or high-risk areas.				
Where it is anticipated that cleaners will be required to clean areas that have been or are suspected to have been contaminated with COVID-19, providing them with appropriate PPE: gowns or aprons, gloves, eye protection (masks, goggles or face screens) and boots or closed work shoes.				
Training cleaners in proper hygiene (including handwashing) prior to, during and after conducting cleaning activities; how to safely				

use PPE (where required); in waste control (including for used PPE and cleaning materials).				
Any medical waste produced during the care of ill workers should be collected safely in designated containers or bags and treated and disposed of following relevant requirements (e.g., national, WHO).				
Consider whether existing project medical services are adequate, taking into account existing infrastructure (size of clinic/medical post, number of beds, isolation facilities), medical staff, equipment and supplies, procedures and training.				
B6. Use of security personnel				
In case project activities are supported by private or government security personnel, it will be ensured that the security personnel follow a strict code of conduct and avoid any escalation consistent with the ESF and IFC guidance on the use of security personnel (IFC *Good Practice Handbook on the Use of Security Forces: Assessing and Managing Risks and Impact*s)				

Is there any support needed from DOH?

_____
_____
_____
_____
_____

D. Screening Form for Potential Environmental and Social Risk

This form is to be used by DOH to screen for the potential environmental and social risks and impacts of specific project activities. It will help the BIHC identify the relevant Environmental and Social Standards (ESS), establishing an appropriate E&S risk rating for these activities and specifying the type of environmental and social assessment required (if any), E&S risk management measures and specific instruments if required (e.g. ESMP/ECOP, SEP, LMP). Use of this form will allow DOH to form an initial view of the potential risks and impacts***. It is not a substitute for specific E&S assessments or specific mitigation plans, if needed.***

The screening form will be used both for participating health facilities benefiting from the project (e.g. receiving equipment and PPE) and for health facilities that will involve civil works. Participating health facilities that will not involve civil works will follow the guidance and requirements of the ESMF, for instance concerning health care waste management. If they are located in areas with indigenous peoples additional efforts will be made to engage with them and provide additional measures as described in the ESMF. The use of security personnel will also be assessed and addressed as needed.

Annex E provides a template for an ESMP that will be prepared for project activities that include civil works. It also provides standards Environmental and Social Codes of Practice for various project activities.

A note on *Considerations and Tools for E&S Screening and Risk Rating* is included in this Annex to assist the process.

Activity	
Location	
Health Care Facility	
Estimated Investment	
Start/Completion Date	

Questions	**Answer**		**ESS relevance**	**Due diligence / Actions**
	Yes	No		
Does the activity include any of those in the negative list?				If yes, activity is not eligible
Does the project activity involve civil works inside the compound of the healthcare facilities including new construction, expansion, upgrading or rehabilitation of healthcare facilities and/or waste management facilities?			ESS1	If yes, prepare ESMP or ECOP

Does the project activity involve land acquisition and/or restrictions on land use?			ESS5	If yes, activity is not eligible
Does the project activity involve acquisition of assets for quarantine, isolation or medical treatment purposes?			ESS5	If yes, activity is not eligible
Is the local health facility associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant for healthcare waste disposal?			ESS3	In both cases (Y/N), prepare ESMP or ECOP (scope and substance will depend on risks)
Is there a sound set of practices, protocols, procedures and institutional capacity in place for healthcare facility infection control and healthcare waste management?			ESS1	In both cases, prepare ESMP or ECOP (scope and substance will depend on risks)
Does the local health facility have an adequate system in place (capacity, processes and management) to address healthcare waste?			ESS3	In both cases, prepare ESMP or ECOP (scope and substance will depend on risks)
Does the project activity involve recruitment of workers including direct, contracted and/or community workers?			ESS2	If yes, prepare LMP and observe SEP
Does the local health facility have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?			ESS2	In both cases, prepare LMP, ESMP
Does the project activity involve transboundary transportation (including Potentially infected specimens may be transported from healthcare facilities to testing laboratories, and transboundary) of specimen, samples, infectious and hazardous materials?			ESS3	If yes, prepare LMP, ESMP

Does the project activity involve use of security or military personnel during construction and/or operation of healthcare facilities and related activities including deployment of COVID-19 vaccines?			ESS2, ESS4	If yes, prepare Assessment of Risks, Code of Conduct, Training and report any incidents base on WB incident categorization: indicative, serious, severe. Severe incidents need to be reported to the WB within 48 hours.
Is the project activity located within or in the vicinity of any ecologically sensitive areas that will cause to generate significant impacts?			ESS6	If yes, activity is not eligible
Are there any indigenous groups (meeting specified ESS7 criteria) present in the subproject area and are they likely to be affected by the proposed project activity negatively or positively?			ESS7	If yes, observe SEP provisions. Meaningful consultations with IP community and traditional health practitioners, coordination with traditional health practitioners
Is the project activity located within or in the vicinity of any known cultural heritage sites that will cause the generation of significant impacts?			ESS8	If yes, activity is not eligible
Does the project area present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?			ESS1, ESS2, ESS4	If yes, prepare Code of Conduct and Training

INFECTION CONTROL: CONSIDERATIONS AND TOOLS TO ASSIST IN E&S SCREENING AND RISK RATING:

In the context of global COVID-19 outbreak, this project will adopt a containment strategy that includes extensive testing, quarantine, isolation and treatment either in a medical facility or at home.

This COVID-19 response project will include the activities below. Details are found in Annex I.

- construction of and/or operational support to medical laboratories, quarantine, and isolation centers at multiple locations and in different forms, and infection treatment centers in existing healthcare facilities
- procurement and delivery of medical supplies, equipment and materials, such as reagents, chemicals, and Personal Protective Equipment (PPEs)
- transportation of potentially infected specimens from healthcare facilities to testing laboratories
- construction, expansion or enhancing healthcare waste and wastewater facilities
- training of medical workers and volunteers
- community engagement and communication

1. Screening E&S Risks of Medical laboratories

This project will include capacity building and operational support to existing medical laboratories. It is important that such laboratories put in place procedures relevant to appropriate biosafety practices. WHO advises that non-propagative diagnostic work can be conducted in a Biosafety Level 2 (BSL-2) laboratory, while propagative work should be conducted at a BSL-3 laboratory. Patient specimens should be transported as Category B infectious substance (UN3373), while viral cultures or isolates should be transported as Category A "Infectious substance, affecting humans" (UN2814).The process for assessing the biosafety level of a medical laboratory (including management of the laboratory operations and the transportation of specimens) should consider both biosafety and general safety risks. OHS of workers in the laboratory and potential community exposure to the virus should be considered.

The following documents provide further guidance on screening of the E&S risks associated with a medical laboratory. They also provide information for assessing and managing the risks.

- WHO; Prioritized Laboratory Testing Strategy According to 4Cs Transmission Scenarios
- WHO COVID-19 Technical Guidance: Laboratory testing for 2019-nCoV in humans:
- WHO Laboratory Biosafety Manual, 3rd edition
- USCDC, EPA, DOT, *et al*; Managing Solid Waste Contaminated with a Category A Infectious Substance (August 2019)

2. Screening E&S Risks of Quarantine and Isolation Centers

According to WHO:

- **Quarantine** is the restriction of activities of or the separation of persons *who are not ill but who may have been exposed to* an infectious agent or disease, with the objective of monitoring their symptoms and ensuring the early detection of cases
- **Isolation** is the separation of *ill or infected persons* from others to prevent the spread of infection or contamination.

This project will include construction, renovation and equipping of quarantine and isolation centers at Point of Entry (POE), in urban and in remote areas. There may also be circumstances where tents are used for quarantine or isolation. Public or private facilities such as a stadium or hotel may also be acquired for this purpose.

In screening for E&S risks associated with quarantine and isolation, the following may be considered:

- contextual risks such as conflicts and presence or influx of refugees
- construction and decommissioning related risks
- land or asset acquisition
- use of security personnel or military forces
- availability of minimum requirements of food, fuel, water, hygiene
- whether infection prevention and control, and monitoring of quarantined persons can be carried out effectively
- whether adequate systems are in place for waste and wastewater management

The following documents provide further guidance regarding quarantine of persons.

- WHO; Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19)
- WHO; Key considerations for repatriation and quarantine of travelers in relation to the outbreak of novel coronavirus 2019-nCoV
- WHO; Preparedness, prevention and control of coronavirus disease (COVID-19) for refugees and migrants in non-camp settings

3. SCREENING E&S RISKS OF TREATMENT CENTERS

WHO has published a manual that provides recommendations, technical guidance, standards and minimum requirements for setting up and operating severe acute respiratory infection (SARI) treatment centers in low- and middle-income countries and limited-resource settings, including the standards needed to repurpose an existing building into a SARI treatment center, and specifically for

acute respiratory infections that have the potential for rapid spread and may cause epidemics or pandemics.

- WHO Severe Acute Respiratory Infections Treatment Centre
- WHO Covid-19 Technical Guidance: Infection prevention and control / WASH
- WBG EHS Guidelines for Healthcare Facilities

4. SCREENING E&S RISKS RELATING TO LABOR AND WORKING CONDITIONS

A COVID-19 project may include different types of workers. In addition to regular medical workers and laboratory workers who would normally be classified as direct workers, the project may include contracted workers to carry out construction and community workers (such as community health volunteers) to provide clinical support, contact tracing, and data collection, etc. The size of the workforce engaged could be considerable. Risks for such a workforce will range from occupational health and safety to types of contracts and terms and conditions of employment. Further details relevant to labor and working conditions for COVID-19 projects are discussed in the LMP section.

E. Environmental and Social Management Plan Template

I. Subproject Information

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

II. Site/Location Description

Concisely describes the proposed location and its geographic, ecological, social, and temporal context including any offsite investments that may be required (e.g., access roads, water supply, etc.). Normally includes a map showing the location and project areas of influence.

III. ESMP Matrix

Potential E&S Risks and Impacts	Proposed Risk Mitigation Measures	Responsibility	Timeline	Budget

Below is a sample of accomplished ESMP Matrix

Potential E&S Risks and Impacts	Proposed Risk Mitigation Measures	Responsibility	Timeline/ Budget
Community Health and Safety			
Legal issues of the construction	All legally required permits have been acquired for construction and/or rehabilitation. 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).	Contractor	

	The local construction and environment inspectorates and communities have been notified of upcoming activities		
Dust due to construction activities	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. During interior demolition, debris-chutes shall be used above the first floor	Contractor	
Road blockage/ heavier traffic due to construction activities.	There will be no excessive idling of construction vehicles at sites. Allocation of designated areas for construction vehicles.	Contractor	
Increased community solid waste.	There will be no open burning of construction/waste material at the site. 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 collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities. Proper waste collection, storage, and disposal of wastes generated from construction activities. Construction waste will be collected and disposed properly by licensed collectors. 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.	Contractor	
Increased wastewater discharge.	The approach to handling sanitary wastes and wastewater from building sites (installation or reconstruction) must be approved by the local authorities.	Contractor	

	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.		
Noise from construction activities	Construction noise will be limited to restricted times agreed 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. 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.	Contractor	
Community exposures to physical hazards (dust, noise, traffic)	Compliance of contractors to DOLE Department Order No. 198 (DO 198-18) (Implementing Rules of Republic Act No. 11058)		
Fear, mistrust and resistance among the local community	Conduct of community consultations and open feedback loop for communities.	Contractor	
Potential discrimination of marginalized groups, GBV, Sexual Exploitation and Abuse (SEA) and/or VAC	Law enforcement personnel must adhere to Code of Conduct (CoC), including fair treatment and non-discrimination	Contractor	
Civil servants and outsourced staff/contractors may be involved in misconduct impacting women and children at local level.	Training on community interaction and GBV/VAC	Contractor, DOH	
Occupational Health and Safety			
Transfer of potentially infected specimens and exposure to contaminated working/construction area	Observance of biosafety practices. Patient specimens should be transported as Category B infectious substance (UN3373), while viral cultures or isolates should be transported as Category A “Infectious substance, affecting humans” (UN2814). Disinfection of area prior to construction.	RITM Contractor	
Exposure of workers and visitors as the	Designation of respective areas and re-routing scheme	RITM	

construction activity might coincide with COVID-19 vaccination			
Occupational, Health, and Safety (OHS) risks for project workers associated with the upgrading activities	Compliance to construction regulations. All employers must develop an Occupational Health and Safety Program in accordance with of DO 198-18 Section 12 All workers must undertake the Mandatory 8-hour Safety and Health Seminar for Workers (Section 3). Each workforce must have a qualified Safety Officer in accordance with DO 198 Section 14	Contractor	
OHS risks related to the spread of the virus	Rational use of PPE. All workers involved with construction activities must follow basic hygiene procedures at all times to prevent the transmission of COVID-19. Conduct on-site awareness-raising activities to remind personnel about occupational exposures and safe practices. Practice of minimum public health standards. Practice of occupational Safety and Health Standards.	Contractor	
Workers may be asked to work overtime	Provide OT pay. Consult with workers.	Contractor	
Occupational health risks: Exposure to infectious waste (chemical and physical hazards)	Encourage hand hygiene (washing, preferably followed by disinfection). Use gloves for handling waste. Raise the awareness of staff about simple post exposure prophylaxis in the event of an occupational injury (e.g., needle-stick injury).	Contractor	
Workers experiencing respiratory symptoms may fear not getting paid and continue to show up at work	All workers 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 Procedures (LMP).	Contractor	
Possibility of underaged workers	Ensure that all staff must be over 18 years and below 60 years old.	Contractor	

IV. Attachments

ECOPs*, ICWMP*, Contractor's Personnel GRM, and LMP

*= not mandatory

V. Review & Approval

<table>
<tr><td colspan="2">Prepared By: ……(Signature)
Position: …… Date ……</td></tr>
<tr><td>Reviewed By: ……(Signature)
Position: ……Date ……</td><td>Approved By: ……(Signature)
Position: …… Date ……</td></tr>
</table>

F. Environmental and Social Management Plan Monitoring Report Template

I. Subproject Information

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

II. Site/Location Description

Concisely describes the proposed location and its geographic, ecological, social and temporal context including any offsite investments that may be required (e.g. access roads, water supply, etc.). Normally includes a map showing the location and project areas of influence.

III. ESMP Matrix

Potential E&S Risks and Impacts	Proposed Risk Mitigation Measures	Responsibility	Target Timeline	Budget	Status (Complied or Not)	Actual Timeline (Date Complied/to be Done)	Remarks)

IV. Attachments

ESMP, ECOPs*, ICWMP*, Contractor's Personnel GRM, and LMP

*= not mandatory

V. Review & Approval

Prepared By: ……(Signature) Position: …… Date ……	
Reviewed By: ……(Signature) Position: ……Date ……	**Approved By**: ……(Signature) Position: …… Date ……

G. Environmental Codes of Practice (ECOP) Checklist

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.
- ✓ 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).
- ✓ 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 be separated at all times 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.

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.

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 lose 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

Sharps 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).
- ✓ 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).
- ✓ 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.
- ✓ Place signages in the project site/vicinity visible to the public informing on the construction activities and associated risks, e.g. falling debris.
- ✓ 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, and in a manner that is culturally appropriate to the respective groups and specific needs.
- ✓ Promote large scale social and behaviour 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.

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

Community Health and 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)

Worker Safety

- ✓ Designate Safety Officer/s.
- ✓ Access to sanitation facilities in the project site.
- ✓ Access to clean and safe transient quarters for workers allowing social distancing and with regular disinfection.
- ✓ Access to clean and safe drinking-water.
- ✓ Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots)

General Rehabilitation and/or Construction

- ✓ 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.
- ✓ All legally required permits have been acquired for construction and/or rehabilitation
- ✓ 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.
- ✓ Proper waste collection, storage, and disposal of wastes generated from construction activities.
- ✓ Construction waste will be collected and disposed properly by licensed collectors

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);

H. Environmental Codes of Practice (ECOP) Monitoring Form Template

I. Subproject Information

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

II. Checklist Monitoring and Evaluation

Date of Accomplishing the Checklist:

_____

Checklist	Items not Practiced/Complied	Gaps/ Barriers for Implementation of Item	Actions to be Taken
1: COVID- 19 Exposure at Health Care Facility			
2: COVID- 19 Waste Management Procedures			
3: COVID- 19 Community and Social Inclusion			
4: COVID-19 Small Scale Construction, Upgrades, Rehab, Expansion			

Are there any support needed from the DOH Project Team?

_____
_____
_____
_____
_____

III. Review & Approval

Prepared By: ……(Signature) Position: …… Date ……	

Reviewed By: ……(Signature) Position: ……Date ……	**Approved By**: ……(Signature) Position: …… Date ……

I. Infection Control and Waste Management Plan (ICWMP)

1. Introduction

1.1 Describe the project context and components

1.2 Describe the targeted healthcare facility (HCF):

- Type: e.g. general hospital, clinics, inpatient/outpatient facility, medical laboratory, quarantine or isolation centers;
- *Special type of HCF in response to COVID-19: E.g. existing assets may be acquired to hold yet-to-confirm cases for medical observation or isolation;*
- Functions and requirement for the level infection control, e.g. biosafety levels;
- Location and associated facilities, including access, water supply, power supply;
- Capacity: beds

1.3 Describe the design requirements of the HCF, which may include specifications for general design and safety, separation of wards, heating, ventilation and air conditioning (HVAC), autoclave, and waste management facilities.

2. Infection Control and Waste Management

2.1 Overview of infection control and waste management in the HCF

- Type, source and volume of healthcare waste (HCW) generated in the HCF, including solid, liquid and air emissions (if significant)
- Classify and quantify the HCW (infectious waste, pathological waste, sharps, liquid and non-hazardous) following WBG EHS Guidelines for Healthcare Facilities and pertaining GIIP.
- *Given the infectious nature of the novel coronavirus, some wastes that are traditionally classified as non-hazardous may be considered hazardous. It's likely the volume of waste will increase considerably given the number of admitted patients during COVID-19 outbreak. Special attention should be given to the identification, classification and quantification of the healthcare wastes.*
- Describe the healthcare waste management system in the HCF, including material delivery, waste generation, handling, disinfection and sterilization, collection, storage, transport, and disposal and treatment works
- Provide a flow chart of waste streams in the HCF if available
- Describe applicable performance levels and/or standards
- Describe institutional arrangement, roles and responsibilities in the HCF for infection control and waste management

2.2 Management Measures

- Waste minimization, reuse and recycling: HCF should consider practices and procedures to minimize waste generation, without sacrificing patient hygiene and safety considerations.
- Delivery and storage of specimen, samples, reagents, pharmaceuticals and medical supplies: HCF should adopt practice and procedures to minimize risks associated with delivering, receiving and storage of hazardous medical goods.
- 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): HCFs with their own waste incineration facilities installed onsite should practice due diligence 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.

3. Emergency Preparedness and Response

Emergency incidents occurring in a HCF may include spillage, occupational exposure to infectious materials or radiation, accidental releases of infectious or hazardous substances to the environment, medical equipment failure, failure of solid waste and wastewater treatment facilities, and fire. These emergency events are likely to seriously affect medical workers, communities, the HCF's operation and the environment.

Thus, an Emergency Response Plan (ERP) that is commensurate with the risk levels is recommended to be developed. The key elements of an ERP are defined in ESS 4 Community Health and Safety (para. 21).

4. Institutional Arrangement and Capacity Building

A clearly defined institutional arrangement, roles and responsibilities should be included. A training plan with recurring training programs should be developed. The following aspects are recommended:

- Define roles and responsibilities along each link of the chain along the cradle-to-crave infection control and waste management process;
- Ensure adequate and qualified staff are in place, including those in charge of infection control and biosafety and waste management facility operation.
- Stress the chief of a HCF takes overall responsibility for infection control and waste management;
- Involve all relevant departments in a HCF, and build an intra-departmental team to manage, coordinate and regularly review issues and performance;
- Establish an information management system to track and record the waste streams in HCF; and
- Capacity building and training should involve medical workers, waste management workers and cleaners. Third-party waste management service providers should be provided with relevant training as well.

5. Monitoring and Reporting

Many HCFs in developing countries face the challenge of inadequate monitoring and records of healthcare waste streams. HCF should establish an information management system to track and

record the waste streams from the point of generation, segregation, packaging, temporary storage, transport carts/vehicles, to treatment facilities. The HCF is encouraged to develop an IT based information management system should their technical and financial capacity allow.

As discussed above, the HCF chief takes overall responsibility, leads an intra-departmental team and regularly reviews issues and performance of the infection control and waste management practices in the HCF. Internal reporting and filing systems should be in place.

Externally, reporting should be conducted per government and World Bank requirements.

ICWMP Table

Activities	Potential E&S Issues and Risks	Proposed Mitigation Measures	Responsibilities	Timeline	Budget
General HCF operation – Environment	General wastes, wastewater and air emissions				
General HCF operation – OHS issues	- Physical hazards; - Electrical and explosive hazards; - Fire; - Chemical use; - Ergonomic hazard; - Radioactive hazard.				
HCF operation - Infection control and waste management plan					
Waste minimization, reuse and recycling					
Delivery and storage of specimen, samples, reagents, pharmaceuticals and medical supplies					
Storage and handling of specimen, samples, reagents, and infectious materials					
Waste segregation, packaging, color coding and labeling					
Onsite collection and transport					
Waste storage					

Onsite waste treatment and disposal					
Waste transportation to and disposal in offsite treatment and disposal facilities					
HCF operation – transboundary movement of specimen, samples, reagents, medical equipment, and infectious materials					
Emergency events	- Spillage; - Occupational exposure to infectious; - Exposure to radiation; - Accidental releases of infectious or hazardous substances to the environment; - Medical equipment failure; - Failure of solid waste and wastewater treatment facilities; - Fire; - Other emergent events	Emergency response plan			
Operation of acquired assets for holding potenial COVID-19 patients					
To be expanded					

J DENR- Accredited M501 and M503 Waste Transporters

Region	Name of Transporter	Address	Contact No.	Email Address	Date of Expiration	Waste Type
CAR	Cybertechnologies Co.	Km. 12, ACOP, Tublay, Benguet	0928-6898770; 0919-0017547	yollycybertech@yahoo.com	16-Jan-21	M501, M503
NCR	Edgardo Rivera Trading	2848 Int. 4 Lorenzo Dela Paz St., Barangay 839, Pandacan, Manila	(02) 748-4263	riveraegay@gmail.com	02-Jul-20	M503
NCR	EK2 Marketing	1151 Oliveros Cpd. F. Bautista St. Ugong, Valenzuela City	02-4428663	ek2.eddieong@gmail.com	17-Sep-20	M503
NCR	RiveRainier General Merchandise	1121 A-2 New Antipolo Street, Tondo, Manila	353-6675	riverainier@yahoo.com	02-Jul-20	M503
NCR	Eco Safe Hazmat Treatment Inc.	Lot 7 West Los Angeles Street, California Village, San Bartolome Novaliches, Quezon City	417-8888	ecosafe_hazmat@yahoo.com	30-Jan-21	M501, M503
NCR	OASIS RECYCLING & RECOVERY MANAGEMENT CORP.	Unit 305 Emerald Place Bldg. 604 Shaw Blvd., Kapitolyo, Pasig CitY / Garage Address: 3406-A Lubiran St., Bacood, Sta. Mesa, Manila	(02) 358-7557	oasisrrmc@gmail.com	02-Jul-20	M501, M503
NCR	Mr. Trustbin Environmental and Maintenance Services	14 Maria Teresa St., Commonwealth, Quezon City; Garage Address: 483 Manotok Compound, Tullahan Road, Sta.Quiteria, Brgy. 162, District 1, Caloocan City	0977-0492567	mrtrustbin@gmail.com	06-May-21	M501, M503
NCR	Blue Sea Energy Technology Corp.	439 C3 Road, Kaunlaran Village, Caloocan City	282-5344	info@blueseaconsultants.com	09-Jan-21	M501
NCR	Marpila Trading	22-I Maysan Rd., Malinta, Valenzuela City	298-3582	marpilatrading02@gmail.com	02-Aug-20	M503
NCR	JM ECOTECH SOLUTIONS CO.	168 Gen. Luis St., Brgy. Kaybiga, Caloocan City	(02) 936-4632	docs@jmecotech.com; sales@jmecotech.com	30-Aug-20	M503

NCR	Adcan Petroleum Products, Inc.	144 F. Dulalia St., Lingunan, Valenzuela City	294-6764, 282-2358	adcanpetroleumproducts@yahoo.com	09-Jan-21	M503
NCR	Trame Oil & Environmental Specialist, Inc.	L2 B2 Pearl Island Industrial Compound, Brgy. Punturin, Valenzuela City	02-9689575	trameoil.environmental@gmail.com	04-Mar-21	M503
NCR	Udenna Environmental Services, Inc.	4 Sta. Maria Drive, Sta. Maria Industrial Estate, Bagumbayan, Taguig City	(02) 551-7235	adrian.borebor@udenna.ph	13-Jun-20	M501, M503
NCR	HAZARD WASTE MANAGEMENT SERVICES	165 Isagani st. Rizal Village Alabang Muntinlupa City	7889339, 8420612	hazardwaste2002@yahoo.com.ph	16-Jan-21	M503
NCR	A. Sevidal Trading	Block 1 Lot 12 Saint Urcising St., Saint Joseph Subd., Pulanglupa Dos, Las Piñas City	874-0169, 872-5330, 874-0250	asevidaltrading@gmail.com; anastacia.sevidal@yahoo.com	28-Nov-20	M503
NCR	Myra A. Osbuna Transport Services	No5 Puerto Azul St, Camella Homes 4, Poblacion, Muntinlupa City	850-3302	obsuna.mao@yahoo.com.ph	12-Dec-20	M501, M503
I	Servo-Treat Philippines, Incorporated	Brgy. Pinmaludpod, Urdaneta City, Pangasinan	0917-8058448	servotreat_phils@yahoo.com	02-Aug-20	M501, M503
II	R2 Safewaste Management Services	Ipil St., District 1, Cauayan City, Isabela	0917-8469774	r2sms@yahoo.com	30-Jan-21	M501
III	ADL Waste Management	Sitio Binasak, Brgy. Mabiga, Hermosa, Bataan 2111	(047) 250-0385	adlwastemanagement@yahoo.com.ph	17-Sep-20	M503
III	Envirocare Mgt. Precision, Inc.	53 C Mercado St., Poblacion, Guiguinto, Bulacan	(02) 242-9810 loc. 106	info@envirocare.ph	17-Sep-20	M501, M503
III	Aide Environmental Management	B8 L20 Ph 1 Pecsonville Subdivision, Brgy. T. Mangga, District 1, San Jose del Monte, Bulacan	(02) 504-5859	aemanagement19@yahoo.com	02-Jul-20	M503
III	Fuelcycle Int'l. Co. Ltd.	Tibagan, Sta. Rosa II, Marilao, Bulacan	0926-0569203	admin@fuelcycleph.com	14-Aug-20	M503
III	Wacuman Incorporated	Sitio Tiakad, Brgy. San Mateo, Norzagaray, Bulacan	(02) 573-7710	info_wacuman@yahoo.com	15-Aug-20	M501, M503
III	JCZS TRADING	Warehouse 316, Brgy. Sulucan, Bocaue, Bulacan	(02) 261-4205	litazafra@yahoo.com; litazafra14@gmail.com	27-Sep-20	M503

III	ALL WASTE SERVICES, INC.	Km 32 McArthur Highway, Tuktukan, Guiguinto, Bulacan	(044) 794 2669, 794 2668	pco@aws.ph	12-Dec-20	M501, M503
III	Far East Fuel Corporation	888 Purok 5, Irabagon St., Brgy. Anyatam, San Ildefonso, Bulacan	(02) 366-9072	fareastfuel@gmail.com	16-Jan-21	M501, M503
III	Asia United Oil Industry Corp.	Muralla St., Iba, Meycauayan, Bulacan	(044) 764-9525/0926670-8114	asiauoi@yhoo.com.ph	27-Aug-20	M503
III	Positive A Envirotech Specialist	#651 Tibagan Road, Brgy. Sta. Rosa II, Marilao, Bulacan	0915-8412353	positivea.es@gmail.com	12-Feb-21	M501, M503
III	DCH Ecogreen Solutions	No. 29 R. Nicolas Sr. St., Poblacion, Sta. Maria, Bulacan	(044) 913-6193	dch.ecogreensolutions@gmail.com	08-Nov-20	M501, M503
III	Globaltec Waste Management, Inc.	9 Westmont Industrial Subdivision, Brgy. Loma De Gato, Marilao, Bulacan	0927-2781300; 0918-3337600	gtwminc@gmail.com	27-Sep-20	M501, M503
III	Safewaste Incorporated	Bldg. 9801 A-C DOST-Technology Resource Center, Mabalacat City, Pampanga	(045) 436-6008	safewaste@ymail.com	01-Aug-20	M501, M503
III	Semirecycling Co., Inc.	Phase II Lot 1-A, CPIP, IE5, M.A. Roxas Highway, Clark Freeport Zone, Pampanga	045-599-6953; 499-3150/1	srci@semirecycling.com	08-Nov-20	M503
III	DoloMatrix Philippines, Inc.	Angeles Industrial Park, Inc. Calibutbut, Bacolor, Pampanga	(02) 671-4060, 671-5295	pco@dolomatrix.com.ph	08-Nov-20	M503
III	Unified Hazwaste Expert, Inc.	1-E-4 Brgy. Gandus Mexico, Pampanga	0917-8451140	unifiedhazwaste@yahoo.com	03-Mar-21	M501, M503
III	Joechem Environmental Corporation	Brgy. Aranguren, Capas, Tarlac	(02) 281-3227; (045) 493-0474	joechemenvironmental@gmail.com; pco.joechemenvironmental@gmail.com	02-Jul-20	M501, M503
III	Cleanway Environmental Management Solutions, Inc.	Barangay Cutcut II, Capas, Tarlac	9178677629	dean.castaneda@cleanway.com.ph	01-Apr-21	M501, M503

IV-A	Earthclean Environmental Management Corp.	T.M Kalaw St. Brgy. 3 Lipa City, Batangas; Garage Address: Purok Almasiga, Brgy. Inicbulan, Bauan, Batangas	(043) 302-1080; 706-6058	earthclean.2014@yahoo.com	06-May-21	M501, M503
IV-A	Sanikleen Laundry Corporation	Brgy. Pinagkawitan, Lipa City	(043) 756-5541	sanikleen15@yahoo.com	03-Sep-20	M501, M503
IV-A	258 Global Ventures, Inc.	Sitio Muzon, Brgy. Puting Kahoy, Silang, Cavite	(046) 404-3650	258globalventures@gmail.com	22-Jan-21	M501, M503
IV-A	Dynamo Trucking & Development Corporation	Brgy. Mambugan, Antipolo City, Rizal; Garage Address: Unit 307 J & F Bldg. 2, V.V. Soliven Avenue 3, San Isidro, Cainta, Rizal	(02) 477-7613	ddc_philippines@yahoo.com	03-Sep-20	M503
IV-A	Jen and Janette Junkshop	Brgy. Tinurik, Tanuan, Batangas	(043) 406-1598	jhen.perilla_19@yahoo.com	15-Aug-20	M503
IV-A	Solvtech Consultancy Resources	BlK 11 Lot 6A Phase 1 Sterling Technopark Maguyam,Silang Cavite	(02) 994-2241, 826-3285	aav@navsolvtech.com; navsolvtech@gmail.com	13-Jun-20	M501, M503
IV-A	Green Eco Techwin, Inc. (Formerly Clean Echo Techwin, Inc.)	B2 L8 P2 Golden Gate Business Park Buenavista II General Trias Cavite	(046) 428-1846, 423-1846	ad.cleanecho@gmail.com; orly.julian@yahoo.com	24-Jul-20	M501, M503
IV-A	Waste and Resources Management, Inc.	Pineapple St., Sitio Pag-asa I, Brgy. Aguado, Trece Martires City, Cavite	(046) 419-1100	lmcarino@warmphilippines.com	20-Aug-20	M501
IV-A	Danvis Trading	Barangay Lambingan, Tanza, Cavite	(046) 450-2722	danvistrading@yahoo.com	18-Oct-20	M501, M503
IV-A	Cleanway Environmental Management Solutions, Inc.	Meridian Industrial Complex II, Brgy. Maguyam, Silang, Cavite	(02) 529-8329, (046)865-2952	marosel@cleanway.com.ph	27-Sep-20	M501, M503
IV-A	Red Stallion Trading	Alano Compound Brgy. Mabuhay, Carmona, Cavite	0977-853-3206	redstalliontrading@yahoo.com	02-Jul-20	M501, M503
IV-A	Jorm Trading Corporation	595 General Trias Drive, Tejero, General Trias, Cavite	(046) 437-8623; 509-4274	jormtrading@yahoo.com	07-Feb-21	M503

IV-A	VDGP ENTERPRISES	10-A Tagaytay Sta. Rosa Road, Purok IV, Barangay Putting-Kahoy, Silang, Cavite City	(046) 404-6346	vdgp@orangehub.com	17-Sep-20	M501, M503
IV-A	Eco Care Trading and Waste Management Services (Formerly J.I.T TRADING,HAULING AND SORTING SERVICES)	#37, 38 Block 4, Sitio Manalo, Brgy. Sampaloc, Dasmariñas City, Cavite	046-5385113	acpullon@yahoo.com	15-Aug-20	M501, M503
IV-A	Blue Ocean General Merchandise	Block 4 Lot 6, Golden Gate Business Park I, Brgy. Buenavista II, General Trias, Cavite	(02) 243-3429	blueocean.general@yahoo.com	01-Aug-20	M503
IV-A	Ecoserv Environmental Technologies & Services	Lot 2 Block 30, Zone 1, Bulihan, Silang, Cavite	(046) 424-0865	francis.phillip.armena@gmail.com	18-Oct-20	M503
IV-A	AUGUST-10 ENTERPRISE CO	192 Brgy.Sto.Tomas Binan Laguna	(049) 512-6421/542-9693	august_10_enterprises@yahoo.com	07-May-21	M503
IV-A	Maritrans Recycler, Inc	Unit 3 D.M. Ragasa Warehouse, #763 National Highway, Parian Calamba City, Laguna	(049) 545-9055, 545-9056	meselag@pldtdsl.net; norie_genove@maritransrecycler.com	03-Dec-20	M503
IV-A	Riffa Antonio Gen. Merchandise & Services	Blk. 5A2 Lt-16C, Juana 6 Subdivision, Gabriel St., San Francisco, Biñan, Laguna	(02) 664-4024/529-2157	benjie.razalan@yahoo.com	01-Aug-20	M501, M503
IV-A	Something Nice Environmental Corp.	No. 67 Purok 1, Brgy. Milagros, Calamba, Laguna	(049) 511-8245	sales@sne-corp.com	02-Dec-20	M501, M503
IV-A	F.R.O.A. Enterprises	0190 Unit A, Purok III, Brgy. Timbao, Timbao, Biñan City, Laguna	0908-8155021; 0917-3044053	froaenterprises@gmail.com	07-Jul-20	M503
IV-A	Tritek Reverse Logistics Corporation	7270 Magsaysay Rd., San Antonio, San Pedro, Laguna	(02) 869-8404	hsbarawid@tritek.com.ph	02-Jul-20	M503
IV-A	RV CABRERA TRADING	1490 Espiritu Compound, Pooc, Sta. Rosa City, Laguna	530-2581	rvcabreratrading@yahoo.com	15-Aug-20	M501, M503
IV-A	AR-BI ABERGOS ENTERPRISES	Block 9 Lot 1 Brgy. Don Jose, Sta. Rosa City, Laguna	0918-3037066; 0927-8851877	arbiarbergos@yahoo.com	02-Aug-20	M503

IV-A	Greensouth Waste Transport Services (Formerly Christian and Aileen's Trading)	329 Barangay Talangan Nagcarlan,Laguna	(049) 559-1615	greensouth.wts@yahoo.com	29-Jan-21	M503
IV-A	CleanHAUL Environmental Services Inc.	Lot 31, 32 & 33 Block 1 Pines Street. Pinesville, Brgy. Dolores, Taytay Rizal	02-727-9005, 727-9001	admin@cleanhaul.ph	28-Nov-20	M501, M503
IV-A	New Parbuilt Construction& Services Corporation	67 Gen. Luna St., Ampid 2, San Mateo Rizal	570-2059, 997-7220, 571-9627	newparbuiltcs@yahoo.com; newparbuiltcorp@gmail.com	17-Sep-20	M501, M503
IV-A	Royal Earth Enterprises	Road 20 Extension, Nagtinig, Brgy. San Juan, Taytay, Rizal	(02)298-7385, 0938435008, 0956-5960195	royalearthent@gmail.com	17-Sep-20	M503
V	Philippine Geothermal Production Company, Inc.	Brgy. Libjo, Tiwi, Albay	7976-6108	apvs@pgpc.com.ph	12-Feb-21	M501, M503
V	Zigs Eco Sanitation Corporation	Sitio Banasian, Brgy. San Ramon, Daraga, Albay	9199990706	zigseco@gmail.com	22-Apr-21	M501
VI	Westy Transporter (Formerly Westy Used Cooking Oil Trading)	Sitio Airport, Caticlan, Malay, Aklan	(036) 288-9518	hazwastewestytransporter@gmail.com	01-Aug-20	M501, M503
VII	One Stop Logistics Solutions, Inc.	Warehouse 16, Benedict Ventures, Inc., P. Basubas St., Tipolo, Mandaue City, Cebu; Garage Addresses: c/o Tell Trans, Inc., Tayud, Consolacion, Cebu; c/o San Remegio Trucking Services, E.O. Perez St., North Reclamation Area, Subangdaku, Cebu City	(02) 527-5555	oisi@msl.com.ph	07-Feb-21	M501, M503
VII	Pollution Abatement Systems Specialist Inc	Rm 10 A. Geson Bldg D. Jakosalem St. Cebu City; Garage Address: Sanitary Landfill, White Road Inayawan, Cebu City	(032) 2551535, 5203251	mailfwd.passi@gmail.com	13-Jun-20	M501
VII	Davao City Environmental Care, Inc.	Dumpsite Road, Plaridel St., Barangay Paknaan, Mandaue City	(032) 236-2011	dceci_ph2012@yahoo.com.ph	12-Feb-21	M501

VII	MEDCLEAN Management Solutions, Inc.	Castillex Compound, ML Quezon St., Cabancalan, Mandaue City	(032) 3447378, 3450596	medtranport@yahoo.com	01-Aug-20	M501
VII	Arc Merchandising	Purok Pomelo, Pamutongan, Jubay, Liloan, Cebu	(032) 424-1457	arcmerchandising@yahoo.com	02-Jul-20	M503

K DENR- Accredited M501 and M503 Waste Treatment, Storage, and Disposal (TSD) Facilities

Region	Name of Transporter	Address	Contact No.	Email Address	Date of Expiration	Waste Type	TSD Category
CAR	Lepanto Consolidated Mining Company (LCMC)	Lepanto, Paco, Mankayan, Benguet	09154760056	rolando.reyes@lepantomining.com	10-Jul-20	M501	A
NCR	Eco Safe Hazmat Treatment Inc.	Lot 7 West Los Angeles Street, California Village, San Bartolome, Novaliches, Quezon City	417-8888, 419-9267	ecosafe_hazmat@yahoo.com	17-Sep-20	M501, M503	E
NCR	Integrated Waste Management, Inc.	Lung Center of the Philippines Compound, QuezoN Ave. Quezon City	(02) 519-4583, 519-4583	michai.marzan@gmail.com, policarpiobernie@yahoo.com	18-Oct-20	M501	B
NCR	Green Planet Management, Inc.	Lot 9 Block 4, Joy Street, Pearl Island Industrial Compound, Punturin, Valenzuela City	984-8647, 984-8648	gpmi_planeta@yahoo.com.ph	29-Aug-20	M503	E
NCR	Trame Oil & Environmental Specialist, Inc.	L2 B2 Pearl Island Compound, Punturin, Valenzuela	27968957	trameoil.environmental@gmail.com	22-Jan-21	M503	E
NCR	JM Ecotech Solutions Co.	168 Gen. Luis St., Kaybiga, Caloocan City	(02) 936-4632	mail@jmecotech.com; docs@jmecotech.com	18-Oct-20	M503	E
NCR	Maya Med Waste Corporation	WH#30, Toprite Industrial Compound, 1617 P. Jacinto St. Sitio Malinis, Bagbaguin, Valenzuela City	02 281-8513	mayamedwastecorp@yahoo.com; info@mayawastesolutions.com	01-Aug-20	M501, M503	B

I	La Union Medical Center	Nazareno, Agoo, La Union Engr. Rodney Abibuag			28-Apr-21	M501	F
I	Servo-Treat Philippines, Incorporated	Zone 6, Brgy. Pinmaludpod, Urdaneta City, Pangasinan	09178058448, 09176304103	servotreat_phils@yahoo.com M	06-Mar-21	M501 M503	B D
III	Udenna Environmental Services, Inc.	Brgy. Mambog, Hermosa, Bataan	(02) 551-7235	christopher.ambito@udenna.ph	07-Feb-21	M501, M503	B
III	Wacuman Incorporated	Sitio Tiakad, Brgy. San Mateo, Norzagaray, Bulacan	(02) 732 2230, 7322564	info_wacuman@yahoo.com	15-Aug-20	M501, M503	C
III	Holcim Philippines, Inc.	Norzagaray, Bulacan	0915-8412353	markanthony.torres@lafargeholcim.com	23-Jul-20	M503	A, B, D
III	Asia United Oil Industry Corporation	Muralla Street, Iba, Meycauayan, Bulacan	(044)7649525, 09266708114	asiauoi@yahoo.com	25-Jul-20	M503	B
III	Far East Fuel Corporation	Purok 5, Irabagon St., Brgy. Anyatam, San Ildefonso, Bulacan	(02) 366-9072	fareastfuel@gmail.com	09-Jul-20	M501, M503	B
III	All Waste Services, Inc.	Km32 McArthur Highway, Tuktukan, Guiguinto, Bulacan	(044) 7942669 loc 227; 794-2668	pco@aws.ph	14-Aug-20	M503	E
III	Total Organic Environmental Solutions, Inc.	Brgy. Longos, Pulilan, Bulacan	044-892-0475	melbamangabat@ymail.com	26-May-21	M501	B
III	Recytechphil Inc.	138 Provincial Road, Brgy. Tambubong, Bocaue	(044) 893-6688	recytechphilinc@yahoo.com	18-Oct-20	M503	E
III	Republic Cement & Building Materials Inc.	Brgy. Bigte, Norzagaray Bulacan	(02) 819-5506, 815-2678	jeffrey.monsalud@republiccement.com	07-May-21	M503	A, B, D
III	Globaltec Waste Management, Inc.	9 Westmont Industrial Subdivision, Brgy. Loma De Gato, Marilao, Bulacan	(044) 896-4181	gtwminc@gmail.com	23-May-20	M503	E
III	Glochem Marketing & Recycling Corp.	Purok 6, Brgy. San Roque, San Isidro, Nueva Ecija	(044) 806-2432	office@gmrs.ph, secglochem.office@gmail.com	18-Oct-20	M501 M503	B B, E
III	Dolomatrix Philippines, Inc.	Angeles Industrial Park, Inc. (AIPI), Brgy. Calibutbut, Bacolor, Pampanga	(02) 671-9086; 671-1975	santy.mallari@dolomatrix.com.ph	17-Sep-20	M503	E

III	SafeWaste Incorporated	9801 A-C Technology Resource Center, Paralayunan, Mabalacat City, Pampanga	045-4366008	safewaste@ymail.com	10-Feb-21	M501	B
III	VAG General Merchandise	Brgy. Gutad, Floridablanca, Pampanga	09171680400; 09323623872	vag_genmerchandise@yahoo.com	12-Dec-20	M503	D, E
III	RMS Petroleum Technology and Waste Management Corporation	Brgy. San Nicolas, Mexico, Pampanga	(02) 710-5660	rmspetroleumtechnology@gmail.com	20-Nov-20	M501, M503	B
III	Metro Clark Waste Management Corporation	Clark Special Economic Zone, Sub-zone D, Sitio Kalangitan, Cutcut II, Capas, Tarlac	(045) 606-8830, 599-6317	info@mcwm.net; joseantonioramos@yahoo.com	04-Jul-20	M501, M503	C
III	Tarlac Provincial Hospital	San Vicente, Tarlac City, Tarlac	045-9821234	enro_tarlac@yahoo.com	07-Feb-21	M501	A
III	Clean Leaf International Corporation	Brgy. Anupul, Bamban, Tarlac	(02) 990-6607, 962-8313	cleanleaf@gmail.com	20-Nov-20	M501, M503	B
III	Cleanway Environmental Management Solutions, Inc	Brgy. Cutcut II, Capas, Tarlac	(02) 529-8329 (046) 865-2952	marosel@cleanway.com.ph	31-Jul-20	M501	B
IV-A	Republic Cement & Building Materials, Inc.	Brgy. Mapulo, Taysan, Batangas	(02) 887-5116 (02) 815-2678 to 79	sharry.apud@republiccement.com	01-Aug-20	M503	A/D
IV-A	Cleanway Environmental Management Solutions, Inc.	Meridian Industrial Complex II Brgy.Maguyam, Silang, Cavite	(02) 529-8329	maroselo@cleanway.com.ph	09-Jan-21	M501 M503	B,C,F C,F
IV-A	Green Eco Techwin Inc.	Block 2 Lot 8 Phase 2, Golden gate Business Park, Brgy. Buenavista II, Gen. Trias, Cavite	(046) 470-1846	orly.julian@yahoo.com	30-Aug-20	M501, M503	B
IV-A	Green Horizon Environmental Management, Inc.	223 Ilaya St., Brgy. Niog II, Bacoor City, Cavite	(046) 417-0317	mugar.angie@gmail.com	08-Nov-20	M503	E
IV-A	HAZCHEM,INC.	0947 Purok V, Brgy. Makiling, Calamba City, Laguna	(049) 502-6989	hazcheminc@yahoo.com.ph	12-Dec-20	M501 M503	B B,E
IV-A	AUGUST-10 ENTERPRISE CO.	192 Brgy.Sto.Tomas Binan Laguna	(049) 542-9693	august_10_enterprises@yahoo.com.ph	13-Aug-20	M503	B

IV-A	Green Resource & Environmental Management Solutions, Inc	Warehouse 6, MMG 3 Industrial Compound, E. Gerodias St., San Antonio, San Pedro City, Laguna	632-4034096	info@greenresourceincph.com; jabacunawapco@greenresourceincph.com	02-Jul-20	M503	E
IV-B	Pollution Abatement Systems Specialists, Inc.	Sanitary Landfill, Brgy. Sta. Lourdes, Puerto Princesa City, Palawan		mail.fwd@gmail.com	28-Apr-21	M501	B
VI	Pollution Abatement Systems Specialists, Inc.	Calajanunan Dumpsite, Mandurriao, Iloilo City, Iloilo			14-Feb-21	M501	B
VII	Davao City Environmental Care, Inc.	Dumpsite Road, Plaridel St., Brgy. Paknaan, Mandaue City, Cebu	(032) 236-2011	dceci_ph2012@yahoo.com.ph	12-Feb-21	M501	B
VIII	Cleanway Philippines Inc.	LIDE, Brgy. Libertad, Isabel, Leyte	053-556 8705	jqmoraleta@cleanway.com.ph, cheryl.mahusay@cleanway.com.ph	20-Dec-20	M503	E
X	Republic Cement	Iligan, Inc. Kiwalan, Iligan City	(063) 222-0801 loc 3114; 0917-8245370	nisa.sampaco@republiccement.com	09-Jan-21	M503	B/D
X	Philippine Sinter Corporation	PHIVIDEC Industrial Estate, Villanueva, Misamis Oriental	(088) 565-0005, 565-0026	bernard.baobao@philsinter.com.ph	03-Mar-21	M501	A
XI	Maya Med Waste Corporation	Brgy. New Carmen, Tugbok District, Davao City	(082) 224-2505, 224-2538	gel.radgreendavao@gmail.com	01-Aug-20	M501, M503	B
XIII	Taganito HPAL Nickel Corporation	Taganito Special Economic Zone, Brgy. Taganito, Claver, Surigao del Norte	(02) 548-7140; 548-7141; 856-7170	Osamu.Nakai@smm.com.ph	08-Nov-20	M501, M503	A

L Vaccine Introduction Readiness Assessment Tool (VIRAT)/ Vaccine Readiness Assessment Framework (VRAF) Tool

Vaccination readiness findings from the VIRAT/VRAF 2.0 assessment

Core Activity Areas	Assessment Area	Readiness and Key Gaps
A. Planning and Management	A1. Vaccination objectives and targets	**Readiness:** Consultations held among key stakeholders at national and sub-national levels and vaccine objectives and targets agreed. A Department of Health Administrative Order on National Strategic Policy Framework for COVID-19 Vaccine Deployment and Immunization has been issued on January 12, 2021, providing strategic policy guidance and direction on the selection, access, deployment of the COVID-19 vaccine and the COVID-19 immunization program. The Interim NDVP have been ratified by IATF on January 21, 2021 and disseminated through the National Task Force Memorandum Circular No. 5 series of 2021. DOH has conducted online public consultations on the National Strategic Policy Framework for COVID-19 Vaccine Deployment and Immunization in December 2020 and January 2021 with a range of stakeholders, including national government agencies, regions, health care facilities, professional organizations, the academe, civil society organizations, private sector (health insurance corporation), and development partners. **Key gaps:** Wider public consultations on the newly developed NDVP and table-top exercises with key stakeholders including NGOs, the private sector, development partners, and government agencies are still to be scheduled, followed by orientation of local chief executives and local leaders.
	A2. Regulation and Standards	**Readiness:** Guidelines for Emergency Use Authorization exist (FO 121 & FDA Circular No. 2020-036). **Key gaps:** Details on time taken for import approvals and lot releases are required.
	A3. Performance management and M&E	**Readiness:** Monitoring tools for the National Immunization Program are being adapted for COVID-19 vaccine deployment. Both paper based and electronic monitoring tools are under development. **Key gaps:** Piloting of electronic monitoring tools under NITAG oversight still to be completed; public consultations and finalization.
	A4. Budgeting	**Readiness:** Budget available for the implementation of the National COVID-19 Vaccine Deployment and Vaccination Plan from the 2021 General Appropriations Act (GAA) (P2.5 billion) and continuing appropriations from 2020 for Bayanihan II (P10 billion). Financing sought from the ADB, World Bank, and AIIB to complement grant from GAVI COVAX. **Key gaps:** Estimation and budgeting of operational costs required for each vaccine platform as negotiations with developers are still ongoing (quantity and vaccine preparations i.e. prefilled syringe, 5-dose vial, 10-dose vial).
B. Supply and Distribution	B1. Vaccines, PPEs and other	**Readiness:** The NDVP has been completed and has been ratified by the IATF. Draft guidelines for COVID-19 vaccine and ancillary immunization supplies prepared.

	medical and non-medical supplies	**Key gaps:** LGUs are still to develop their respective plans, aligning with the NDVP.
	B2. Logistics and cold chain	**Readiness:** National logistics working group in place. Data gathering on cold chain, transportation and warehousing capacity at sub-national level covering both government and private sector in progress. **Key gaps:** Final assessment of gaps in cold chain, warehousing, and transportation is still to be completed.
	B3. Waste management	**Readiness:** Guidelines for reverse logistics of immunization wastes prepared for different levels of facilities and draft contract for providers to offer Treatment, Storage, and Disposal (TSD) of medical wastes for hospitals ready. **Key gaps:** Adaptation of guidelines by regional and local governments is still to be completed. Additional Center for Health Development (CHD) and LGU training in immunization and waste management of novel vaccine are still to be completed.
C. Program Delivery	C1. Community engagement and advocacy	**Readiness:** Comprehensive plan for social mobilization developed. Key stakeholders, Philippines Information Agency and private sector partners have concurred to the plan; orientation of regional staff and partners has been conducted. **Key gaps:** Pretesting and production of communication materials are still to be completed. Dedicated Call Center for clarifying any doubts and concerns is still to be operationalized.
	C2. Points of delivery	**Readiness:** COVID-19 vaccine delivery including outreach strategies and consent being incorporated in the NDVP guidelines. **Key gaps:** Adaption of operational manual and guidelines by regional and local levels and training is still to be completed.
	C3. Vaccine safety surveillance	**Readiness:** Existing guidelines on AEFI being updated. Provisions for manufacturers to report safety data to NRA in place. **Key gaps:** Updating AEFI guidelines incorporating COVID-19 vaccination.
D. Supporting Systems and Infrastructure	D1. Data quality	**Readiness:** Data standards finalized and IT systems under development. **Key gaps:** Establishment of Emergency Operations Center with complete data management systems by early 2021.
	D2. Infrastructure	**Readiness:** Needs being identified at regional and local government levels. **Key gaps:** Hiring of encoders and procurement of tablets and other IT inputs such as computer hardware, software, and infrastructure for establishment of Emergency Operations Center is still to be completed.

Indicative Action Plan to address key readiness gaps for COVID-19 Vaccine Deployment

Core Activity Areas	Assessment area	Actions to be completed	Indicative timeline
A. Planning and Management	A1. Vaccination objectives and targets	• Piloting and finalization of electronic monitoring tool. ● Criteria for prioritization spread over 3 stages	● Complete wide consultation on NDVP by March 2021 ● Electronic monitoring tool piloted and finalized by February 2021

		finalized. ● Philippines Statistical Authority (PSA) will launch the registration process spread over two phases. National ID will not be mandatory for registration.	● PSA to register 14.9 million eligible population covering frontline health workers, indigent, elderly, and uniformed forces during January-March 2021. Remaining registration to be completed during April-December 2021.
	A2. Regulation and Standards	● Mechanisms for indemnification against product liability claims and payment of no-fault compensation defined by the government (*) ● Regulatory pathways finalized for: (i) data privacy and governance of vaccination data; (ii) process of obtaining consent to vaccinations including measures to protect those refuse to be vaccinated (*)	● Mechanisms for indemnification and remaining regulatory arrangements to be finalized by early 2021
	A4. Budgeting		
B.Supply and Distribution	B1. Vaccines, PPEs, and other medical and non-medical supplies		●
	B2. Logistics and cold chain	● Vaccination delivery including outreach strategies being incorporated in the NDVP guidelines including sites identification, cold chain, logistics, and enhanced Infection Prevention and Control (IPC) procedures(*) ● Procurement plan is being updated for ancillary supplies and PPEs	● Strategies for addressing gaps in cold chain, warehousing and transportation; and finalization and dissemination of SOP for storage, distribution, and delivery in NDVP to be agreed by early 2021. ● Updating of procurement plans will be continuous process due to dynamic nature of the program ● Strategy for addressing gaps in cold chain, transportation and warehousing through additional support from WHO and UNICEF or contracting private sector to be finalized and approved by early 2021.
	B3. Waste management	● Award of contract to Treatment, Storage and Disposal (TSD) providers.	● Contracts for TSD to be awarded by March 2021.

C.Program Delivery	C1. Community engagement and advocacy	● Comprehensive plan for social mobilization developed to provide information on vaccine safety and efficacy, eligibility, registration process, vaccination sites, timing, and reporting any adverse events ● Call center to support COVID-19 vaccine related grievances and address public queries. ● Technical assistance on Infodemic management and social listening; and contracting agency for third party surveys.	Hiring community organizers, pretesting and production of communication material and operationalization of dedicated call center by February 2021 ● Call center to be operationalized by March 2021 ● DOH finalizes plan for TA for infodemic management, social listening and third- party surveys with support for development partners by February 2021.
	C2. Points of delivery	● Vaccination teams trained and equipped with necessary knowledge and skills ongoing	● Adaptation of NDVP operational manual and guidelines by regional and local governments followed by training to be completed by March 2021. ● Trainings for initial arrival of vaccines will be finalized by negotiations, with ongoing trainings during project implementatio
	C3. Vaccine safety and surveillance	● Data standards finalized and IT system under development under the oversight of Department of Information and Communication Technology (DICT) ● Existing guidelines on AEFI being updated. Legal provisions for manufacturers to report safety data to NRA in place	● Agency for development of IT system contracted by negotiations. ● Dedicated Emergency operation center made operational by March 2021 ● National AEFI guidelines updated incorporating COVID-19 vaccination to be completed by Appraisal followed by positioning of planned additional staff.
D.Supporting Systems and Infrastructure	D1. Data quality	● A dedicated Emergency Operations Center with complete data management systems to be established at DOH to monitor including adverse events and grievance reporting to be setup	● Dedicated Emergency Operations Center made operational by March 2021
	D2. Infrastructure	● Additional infrastructure needs to be identified by regional and local governments	● Additional infrastructure needs including tablets and IT support to be finalized by March 2021.

Note: *Actions marked with (*) need to be completed before vaccine roll-out. Others can be completed within the first 6 months after deployment.*

M Resource List: COVID-19 Guidance

World Bank Environmental and Social Management Framework for COVID-19 Response, April 20, 2020

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