MINISTRY OF HEALTH OF UKRAINE

UKRAINE EMERGENCY COVID-19 RESPONSE AND VACCINATION PROJECT

Environmental and Social Management Framework (ESMF)

(DRAFT)

June 2021

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#

# Introduction

This Environmental and Social Management Framework (hereinafter referred to as ESMF) is prepared to assist the Borrower through the Ministry of Health of Ukraine (hereinafter referred to as MOH) with environmental and social management of ‘Ukraine Emergency Covid-19 Response and Vaccination Project’ (hereinafter referred to as the Project) following national regulations and Environmental and Social Standards (hereinafter referred to as ESS) of the World Bank (hereinafter referred to as WB). The ESMF covers all applicable provisions of the relevant WB ESSs.

The Project Development Objective is to prevent, detect, and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness in Ukraine.

The main purpose of the ESMF is to manage the process of environmental and social assessment of MOH aimed at avoiding, minimizing and mitigating potential adverse environmental and social risks and impacts of the Project that may be primarily caused by:

* inadequate medical waste management during and after testing and vaccinating against COVID-19;
* improper occupational health and safety for medical staff and laboratory staff when testing and vaccinating against COVID-19;
* improper occupational health and safety related to collection, transportation and disposal of medical waste;
* applying improper cold storages (may contain refrigerants (ODS) which do not conform to the requirements of the Montreal Protocol)
* natural disasters such as landslide, flooding, windstorm, abnormal hot weather and other climate change- related risks which may cause unstable power supply and affect the security of the delivery and distribution of the vaccines.
* obstacles for vulnerable and disadvantaged groups to access facilities and services provided by the project activities;
* social tensions that could be exacerbated by the project and community health and safety-related outcomes (especially related to post-vaccination complications).

To mitigate these risks and impacts MOH prepared the present ESMF, which contains provisions, procedures, tools, templates that are available in the Annexes part of the ESMF. Overall, the ESMF provides guidelines for the development of appropriate prevention and mitigation measures for adverse impacts that might result from the Project activities.

The ESMF is a manual for environmental and social management within the Project implementation, one of several environmental and social instruments developed by MOH for the Project as required by WB Environmental and Social Framework (hereinafter referred to as ESF). Labor Management Procedures (hereinafter referred to as LMP) are an integral part of this ESMF. The LMP envelope requirements for ensuring health and safety of Project workers, and it is aimed at summarizing mitigation measures that will be adopted by the Project to address the risks related to labor management.

One more instrument developed by MOH for the Project according to the ESF is Stakeholder Engagement Plan (hereinafter referred to as SEP). The SEP is a stand-alone document summarized and referenced in this ESMF. The SEP was already disclosed on the official MOH website. In the meantime, the SEP is a ‘living document’ which may be updated in course of the Project implementation to ensure effective communication and engagement of stakeholders and communities.

The Project beneficiary healthcare facilities (hereinafter referred to as HCF) will be responsible for implementing actions to prevent the spread of COVID-19 and ensure proper treatment of medical waste at all stages of Project operations. The main instrument to be used for reporting concerning waste management issues in HCF is Infection Control and Waste Management Plan (hereinafter referred to as ICWMP). Each beneficiary HCF will prepare and implement the ICWMP, based on the sample provided in Annex 4. The main provisions for infection control and waste management are included into this ESMF.

The Project is not expected to fund any civil works. If minor improvement/reconstruction works are deemed necessary, these works will be funded by the HCF and/or state budget. Environmental and social impacts caused by such works, as well as mitigation measures to be applied, will be detailed in the Environmental and Social Management Plan (hereinafter referred to as ESMP) developed by HCF following template provided in Annex 3. Moreover, ESMP to be developed by HCFs involved will contain general information on the environmental and social impacts, their minimization and monitoring within HCF.

MOH will be ensuring compliance with provisions of the present ESMF. The Project Implementation Unit (hereinafter referred to as PIU) will be responsible for monitoring of the Project activities and supervision for implementation of ESMF provisions by relevant HCF. The Project will be implemented countrywide.

Types of environmental and social instruments and timing of their development and implementation are defined in the Environmental and Social Commitment Plan (hereinafter referred to as ESCP).

The ESMF prepared to a standard acceptable to the WB will be disclosed on the MOH and on the WB websites.

Upon disclosure on MOH website the ESMF will be considered a ‘living document’, and corresponding amendments may be introduced to the document if any comments or recommendations are provided by stakeholders.

# Background

An outbreak of the 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. During first weeks 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 spread across the world.

COVID-19 is one of several infectious zoonotic diseases in recent decades that have resulted 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 have pre-existing chronic health conditions that represent risk factors for severe COVID-19; the older age structure of the population also increases vulnerability as older adults are at higher risk of severe disease and death from COVID-19. 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 83-98 percent of patients develop a fever, 76-82 percent develop a dry cough and 11-44 percent develop fatigue or muscle aches. Other symptoms, including headache, sore throat, abdominal pain, and diarrhea, have been reported, but are less common. 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 International Development Association/International Bank for Reconstruction and Development (IDA/IBRD) countries to minimize the global risk and impact of this disease.

Starting from the beginning of pandemic, Government of Ukraine (hereinafter - GoU) implemented considerable steps to prevent its spreading, i.e.:

* On 11 March 2020 with the Decree no.211 the Cabinet of Ministers of Ukraine (hereinafter - CMU) issued a Decree ‘On prevention of coronavirus COVID-19 spread on the territory of Ukraine’.
* On 12 March 2020, a three-week nationwide quarantine was imposed and public events with over 200 people were shut down.
* On 17 March 2020, all schools, educational institutions, cafes, restaurants, gyms, shopping malls and entertainment venues were closed. Most public transport was also shut down. Grocery stores, pharmacies, banks and gas stations remained open. Gatherings of over 10 people were also prohibited.
* On 25 March 2020, the quarantine was extended until 24 April 2020, and on 22 April 2020 the GoU announced a further extension to 11 May 2020.
* On 4 May 2020, the Prime Minister announced a relaxation of containment measures as of 11 May 2020 but an extension of quarantine until 22 May 2020, whereby some enterprises were to remain closed and did not function, i.e.: most public transport, intercity and foreign travel by train and air, indoor cafes and restaurants, schools and universities.
* Since 22 May 2020, Ukraine has been in the “adaptive quarantine” stage, which means that most of the restrictions have been lifted, but in the areas with high infection rate all quarantine restrictions are to be maintained. Decisions on easing of or return to confinement measures in cities or regions are to be taken by local and regional authorities.
* On 26 August 2020, the government further extended the COVID-19 “adaptive quarantine” until 31 October 2020, due to the worsening dynamic of new infections in the country.
* On 31 October 2020, the government extended the COVID-19 “adaptive quarantine” until 31 December 2020.
* On 11 November 2020, the GoU introduced a weekend lockdown,
* Starting from 13 November 2020 all non-essential commerce was prohibited, and obligation to wear a mask was imposed, as well as to have an ID in public spaces and transport, limitations referred to public transport, gyms, cinemas, religious and cultural events.
* On 9 December 2020, with a Resolution of the GoU No 1236 it was decided to continue quarantine until 28 February 2021. Following the Resolution, starting from 8 January 2021 to 24 January 2021 a strict quarantine regime was introduced in Ukraine. All public events were banned; cinemas, fitness clubs, gyms, non-food stores, theatres and shopping centres were shuttered, while cafes, restaurants and bars were closed except for take-away and delivery. All educational institutions, except for kindergartens, were also sent on vacation.
* On 18 February 2021, the Resolution of the CMU No 104 dated February 17, 2021 was published, which extended the quarantine on the territory of Ukraine until April 30, 2021.
* On April 24, 2021, the Resolution of the Cabinet of Ministers of Ukraine No 405 dated April 21, 2021 on the extension of the quarantine in Ukraine until June 30, 2021 entered into force.

One of the most important measures undertaken to combat the pandemic in Ukraine was approval of "Roadmap for introduction of vaccine against acute respiratory disease COVID-19 caused by coronavirus SARS-CoV-2, and mass vaccination in response to the COVID-19 pandemic in Ukraine in 2021–2022” (hereinafter - the Roadmap) by the Order of MoH (dated December 24, 2020 №3018). In addition, in April 12, 2021, the Order of the CMU No 340-r "On approval of the National Vaccine Prevention Plan against acute respiratory disease COVID-19 caused by coronavirus SARS-CoV-2, for the period up to December 31, 2021" was issued, which provides for increase of the Roadmap status. See more information on the Roadmap and the National Vaccine Prevention Plan in Paragraph 5 of this ESMF.

The MoH is working out mechanisms to address issues related to Covid-19 and it proposed to involve WB loan to implement the Project, which will focus on measures to combat the pandemic in Ukraine. The Project will include emergency response measures to COVID-19, which provide for continued support of the GoU, and a set of measures, including, in addition to planning and vaccination, measures necessary for monitoring and quality implementation. The use of results-based financing mechanisms (hereinafter referred to as PBC) to address investment priorities in response to COVID-19 pandemic has been recognized as an effective tool for optimizing the use of WB resources and their better aligning with the country's priorities. At present, Ukraine has a positive experience in projects implementation using the WB-supported PBC mechanism.

The main assignments of the Project include:

* support of the priority response measures to COVID-19 pandemic in Ukraine in terms of further increase of the number of SARS-CoV-2 tests, improvement of registration related to disease cases and infected people contact tracing;
* support for the financing of a set of measures that accompany preparation for vaccination and the vaccination, including financing of vaccines, logistics (transportation and storage of vaccines in compliance with the manufacturer's requirements), related services and activities (information and analytical system, information and communication campaign, staff training), materials and equipment that ensure quality vaccination and improvement of medical waste management practices;
* support to the health care system and involved service providers in terms of vaccination against COVID-19 for persons at risk.

# Project Description

The proposed project is structured to support the health system preparedness for the rollout of the early phases of COVID-19 vaccination to priority population groups. It consists of two components. The first component will directly finance vaccine procurement, cold chain, waste management and COVID-19 testing strengthening activities, while the second component will finance eligible deployment expenditures subject to the achievement of PBCs.

# *3.1 Component 1: Strengthen public health system for COVID-19 response (US$60 million).*

This component will cover:

* COVID-19 vaccine procurement for at least two million people and any associated costs not covered by COVAX—storage, in-country logistics to the regional and sub-regional levels.
* Procurement of goods to prepare the health system for COVID-19 vaccination deployment—cold chain, storage, logistics, waste management.
* Elements of vaccination campaigns, and development of essential vaccine management information systems. It will also support activities to further expand testing capacity.

**Subcomponent 1.1 COVID-19 vaccination support (US$ 40 million)** will finance procurement and delivery of COVID-19 vaccines that satisfy the World Bank’s VAC for safety and effectiveness. In addition, any COVID-19 vaccines benefitting from World Bank financing – deployed using World Bank-financed capacity building and training/logistics, etc. – must also meet these same thresholds, even if the vaccine purchase is not directly financed by the Project.[[1]](#footnote-2) These requirements have been discussed with and accepted by the MOH and Ministry of Finance.

**The Project will finance the procurement of vaccines for four percent or more of the population beyond the amount that will be fully subsidized by COVAX, as well as the cost of logistics.** It is expected that COVAX will make available vaccines that are sufficient to cover 20 percent of the population. However, only part of this share will be fully subsidized by COVAX. Per latest available information, COVAX will fully subsidize the vaccine for 16 percent of the population and make vaccines for the other four percent of the population—or more if prices fall or COVAX funding increases—available to the Government at low prices negotiated with vaccine producers. The World Bank will provide funding for the vaccine for the four percent or more of the population not fully subsidized by COVAX. The vaccine will be purchased either through COVAX at the negotiated prices or using direct procurements, depending on pricing and availability. Vaccines secured by COVAX—both those fully subsidized and those offered at negotiated prices—will be procured through the UNICEF Supply Division, COVAX’s procurement agent. It is expected that the Project will cover the additional costs associated with vaccine procurement needed to cover the 20 percent or more of the population, including logistics, storage, materials and equipment. The Project can support investment to increase ultracold chain capacity or use of private logistic services depending on efficiency and feasibility considerations. It may cover essential technical assistance to vaccine procurement and deployment that is not budgeted by the Government or supported by other development partners. The Project can retroactively reimburse expenditures incurred by the Government to procure goods needed to ensure timely supplies of agreed materials before the Project is approved. Retroactive financing of up to 40 percent of the Project amount will be available.

**Table 1: Summary of vaccine sourcing and World Bank financing**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **National plan target (population %)** | **Source of vaccine financing and population coverage** | **Specific vaccines and sourcing plans** | **Doses purchases with Bank finance (2 doses assumed)** | **Estimated allocation of Bank financing\*\*** |
| **COVAX grant** | **Bank-financed through COVAX or direct purchase** | **Other\*** |
| Stage 1: 20%Stage 2: 50% | 8%8% | 4%- | 8%22% | Pfizer, AstraZeneca AstraZeneca, Novavax, other | 4,000,000- | $30,000,000- |

\* Other: includes coverage financed by the Government, bilaterally, from other DPs, etc.

\*\* Assuming average cost of one dose of COVID-19 vaccine at $7 and including costs of logistics

**Because of the recent emergence of COVID-19, there is not yet conclusive data available on the duration of immunity that vaccines will provide**. While some evidence suggests that an enduring immune response will occur, this will not be known with certainty until clinical trials follow participants for several years. As such, this project will allow for re-vaccination efforts if they are warranted by peer-reviewed scientific knowledge at the time. If revaccination is required, priority populations such as health workers and the elderly will need to be targeted for revaccination given constraints on vaccine production capacity and equity considerations—tradeoffs between broader population coverage and re-vaccination. As a prudent and contingent measure, funding has been retained for revaccination, if needed, of such a subset of the population.

**This subcomponent will also finance investments in vaccine readiness to address gaps identified in the VRAF**. Based on the current assessment, the following investments are expected to be supported: cold chain and waste management modernization, elements of a vaccination campaign, development of information systems and IT equipment for vaccine management. Procurement criteria that require or promote use of highly energy-efficient appliances/equipment or low-carbon technology will be applied.The Project will, however, flexibly respond to evolving needs, including understanding about specific vaccines, epidemiological conditions, and assessment of needs.

**Cold chain.** The rapid assessment of the available cold chain suggests that there are sufficient resources in the public system to ensure storage of 11,900,000 doses of vaccines that require refrigeration at temperatures between 2°C and 8°C at the national level and 6,877,697 doses—assuming that storage of 1 dose of vaccine takes 80 cm3—at the regional level, which should be sufficient. In addition, this assumes that two million doses for up to five percent of population can be stored simultaneously in various storage facilities throughout the country, if received through COVAX.[[2]](#footnote-3) At the same time, refrigerators currently used for transportation of vaccines are either not safe, as they cannot be opened from inside, or outdated and may need replacement. Depending on the availability of vaccines from different providers, Ukraine may use available capacities for regular temperature vaccines or private providers for transportation and storage of vaccines requiring ultra-cold chain logistics. The related costs will be supported through project resources. A detailed assessment of cold chain needs, facilitated by UNICEF, was conducted in January 2021. One of the key gaps identified by the assessment is the need to replace refrigerators available at the service delivery sites, as many health care facilities are using outdated refrigerators that are not certified for the storage of vaccines.

**Safe management of healthcare waste.** Project activities will assist in ensuring safe medical waste management and disposal systems and mobilizing and training health personnel to set up appropriate procedures onsite and for mobile teams engaged in rollout of vaccination. The Project will support procurement 67 autoclaves, shredders and other disinfection devices to prepare waste for sanitary landfill after disinfection.[[3]](#footnote-4)

**Communication campaign**. The Project will provide complementary support to communication campaign activities financed by other development partners through UNICEF and other organizations. It will continue supporting the COVID-19 hotline launched under the COVID-19 component of the SPIH Project to provide information and support to people inquiring about the COVID-19 vaccination campaign. Information packages for operators of the hotline to advise on COVID-19 vaccination will be developed by the MOH with support from UNICEF. The packages will also as well as address other communication needs around COVID-19 vaccination including vaccine hesitancy, eligibility, and the voluntary nature of participating in COVID-19 vaccination program. The hotline will continue operating free of charge for users calling from mobile and landline telephones; it is convenient for users who may have mobility barriers, cannot access information via internet, or have no or limited digital skills to navigate the information on vaccination process through the phone without assistance. Messaging on COVID-19 vaccination will be targeted to adjust to needs of certain subsections of population such as the elderly, patients with comorbidities, and gender to avoid any misconceptions or confusions that may prevent vaccine uptake. Based on a joint assessment of information and knowledge campaigns with MOH and development partners, recommendations for different approaches needed to encourage participation will be considered. Different outreach strategies, including phone surveys, may be supported by the Project, as appropriate.

**IT systems**. The Government has already launched the electronic system for the registration of people, receiving COVID-19 vaccinations. The system was developed in consultation with the World Bank and includes all necessary parameters to track individual-level information, vaccine administered, and other data elements. The Project will use the existing system or will help to upgrade it if additional needs will arise. For tracking of COVID-19 vaccines stocks, vaccination coverage to target eligible populations, COVID-19 vaccine safety monitoring and tracking of adverse effects, available modules in the eHealth system will be upgraded or developed with the support from the Project, if necessary. A reliable system to register people receiving COVID-19 vaccines is an important element of the Project and will need to be strengthened to keep track of individual level data and the brand name of the vaccine administered. The Project will support increasing server capacity and improving IT systems to ensure that these systems are cybersecure, resilient to outages including for connectivity, and follow good practices regarding data protection and privacy. Procurement of tablets connected to the Internet can be supported by the Project to secure timely reporting on people vaccinated by mobile brigades. Additional training and capacity building needs for appropriate data collection for COVID-19 vaccination and testing will be provided as necessary.

**Subcomponent 1.2 COVID-19 testing (US$ 20 million)** will provide laboratory equipment and supplies to further expand access to COVID-19 testing, consistent with WHO guidelines in the Strategic Response Plan. This subcomponent will help strengthen disease surveillance systems through public health laboratories, which subordinate to the MOH, or facility-based systems for detection and confirmation of cases or by contracting private sector providers that can offer additional PCR and antigen testing for people with COVID-19 symptoms referred by the primary care providers. The MOH has estimated additional needs to further develop and expand testing capacities of the laboratories in the country in the amount of UAH 17 billion (US$607 million), but the proposed program did not receive financing from the Government in 2021 because of fiscal constraints. The Project will invest in further strengthening of the capacity of hub laboratories to cover four inter-regional hubs in the eastern, southern, northern and western part of the country, and may support procurement of laboratory tests from private providers which currently cover about one third of total COVID-19 testing and have potential to expand their capacity. Additional support could be provided to strengthen health management information systems to facilitate referrals of eligible patients for COVID-19 testing, recording, and on-time virtual sharing of information.

# *3.2 Component 2: COVID-19 vaccination deployment (US$30 million)*

It is expected that the GoU will finance the delivery of COVID-19 vaccines to eligible populations by introducing a separate COVID-19 vaccination package into the Program of Medical Guarantees administered by the NHSU. This package will provide resources to cover the additional costs associated with the rollout of the COVID-19 vaccination program, including “surge staffing”—additional staff time or additional staff needed to provide COVID-19 vaccination, hazard pay, additional PPEs, fuel, and small consumables. Public providers will be selected by NHSU for the provision of COVID-19 vaccination based on agreed with the World Bank criteria and will be paid agreed fees. The NHSU will modify existing contracts to include provisions agreed with the World Bank for contracting of providers. This component will reimburse the cost of providers for completion of COVID-19 vaccination for individuals from priority populations. Financing these payments will be conditional on the Project achieving agreed PBCs to ensure that vaccines are administered to people from the prioritized population groups. Additionally, vaccines administered to people from priority groups supported by the Project must meet the vaccine eligibility criteria of the World Bank. Deployment of COVID-19 vaccines is not expected to impact the provision of basic health services, as they COVID-19 vaccination will be organized using separate premises and managed by additional staff (or additional paid hours of work) so as to minimize conflict with other essential services provided at the primary care level.

The Project will support deployment to select priority population groups identified in the COVID-19 Vaccine Deployment Roadmap.In agreement with the MOH and Ministry of Finance, these populations includemedical and non-medical staff of health care facilities , social workers, residents and staff of long-term care facilities, people aged 60 years and older, teachers and education workers, and adults with comorbidities.[[4]](#footnote-5) Stages of vaccine rollout to these groups are being finalized and will be provided in the updated National COVID-19 Vaccination Roadmap. The software used for tracking vaccines administered to eligible groups will also track individual-level data such as age, sex, specific type of vaccine, number of doses received by each person, place and date of vaccination, and other attributes agreed with the Government.

**The Project will finance eligible expenditures carried out by the NHSU within the COVID-19 vaccination package of service, upon achievement of PBCs**. The PBCs are linked to the vaccination coverage of priority groups of population according to approved protocols – as defined in the National COVID-19 Vaccine Deployment Plan – by NHSU-contracted facilities. The NHSU and the World Bank will jointly review and approve procurement and anticorruption provisions that will be used for contracting eligible providers that meet set requirements such as terms of staffing, resources, use of waste management protocols, and use of the IT system agreed with the World Bank for recording information on vaccinated people. COVID-19 vaccination procedures will be additionally approved by the MOH and will be mandatory for use by providers. The PBC results will be disaggregated by age group and sex when reported by the MOH. The PBCs are also linked to PDO indicator 2: Number of individuals from priority population groups have received full COVID-19 vaccination from eligible providers in accordance with the agreed procedures. The targets of each PBC are cumulative, such that the Project will support deployment of vaccines to a total of 10 million people:[[5]](#footnote-6)

* PBC 1.1 (US $3.6 million): a total of at least 1.2 million individuals from priority population groups have received full COVID-19 vaccination from eligible providers following the procedures set forth in the Operations Manual;
* PBC 1.2 (US $8.4 million): a total of at least 4 million individuals from priority population groups have received full COVID-19 vaccination from eligible providers following the procedures set forth in the Operations Manual;
* PBC 1.3 (US $12 million): a total of at least 8 million individuals from priority population groups have received full COVID-19 vaccination from eligible providers following the procedures set forth in the Operations Manual; and
* PBC 1.4 (US $6 million): a total of at least 10 million individuals from priority population groups have received full COVID-19 vaccination from eligible providers following the procedures set forth in the Operations Manual.

**List of restrictions:**

This Project does not envisage activity with potentially high indexes of environmental and social risks.

List of activities, which are not subject to financing includes, but is not limited to:

* Activities that will result in forced land acquisition, resettlement of households, loss of income or other livelihoods, and hindering land and livelihoods used by households.
* Activities that will directly or indirectly cause any significant loss or degradation of important habitats.
* Activity that will affect cultural heritage located in different regions of the country.

# *3.3 Project beneficiaries*

The expected Project beneficiaries will be at least 20 percent of Ukraine’s population and the population at large given the nature of the disease. Benefits from COVID-19 vaccination are direct for those in the priority groups of population that will receive COVID-19 vaccination, including medical and non-medical staff of healthcare facilities, social workers, residents and staff of long-term care facilities, people aged 60 years and older, teachers and education workers, and adults with comorbidities. As the Project will invest in the preparation of the health system to deployment of COVID-19 vaccination, other eligible people for COVID-19 vaccination will also directly benefit from project investments. The population at large would also benefit from investments in strengthening COVID-19 testing and through potential slowdown in transmission effected by reduction in cases among the vaccinated. The reduction of cases will potentially free up resources for prevention—for example, COVID-19 testing—and treatment of COVID-19 cases among the non-vaccinated population. Also, investments in COVID-19 vaccination readiness will prepare the health system to reach the strategic target of vaccinating 50 percent of the population laid out in the National COVID-19 Vaccination Deployment Roadmap.

# 4. Policy, Legal and Regulatory Framework

## 4.1. Overview of National Environmental Legislation Relevant for the Project

Ukrainian legislative and regulatory framework that regulates environmental issues is quite broad and complex. It consists of international conventions, agreements, protocols and treaties ratified by the Verkhovna Rada; laws; resolutions and orders of the CMU; orders of Ministries. Numerous norms, rules, standards and guidelines, often collectively referred to as regulations, are to be approved by the CMU resolutions and orders of different Ministries.

Provisions of numerous executive bodies (ministries, state institutions, state inspections, state services and other central executive bodies), which determine obligations of relevant governmental body and its branches at the regional (oblast and district) level, are also important.

Environmental aspects are also regulated by the relevant legal provisions contained in other parts of the country's legislation (civil law, water code, land code, administrative law, criminal law, etc.). In particular, these provisions set out the grounds and details of disciplinary, administrative, material and / or criminal penalties applicable to the violator of environmental legislation and relating to damage caused by the crime, environmental risk and extent of the negative impact.

The following is a list of basic laws regulating environmental and social aspects of the Project:

- The Law of Ukraine "On Environmental Protection" (1991). This Law contains general provisions on environmental protection, safety of human health and the environment.

- The Law of Ukraine "On Labor Protection" (1992) defines the basic provisions for the implementation of the constitutional right of employees for protection of their lives and health in the course of work, to appropriate, safe and healthy working conditions.

- The Law of Ukraine "On ensuring the sanitary and epidemiological well-being of the population" (1994). Comprehensive Law, which is accompanied by numerous legal acts, such as "State sanitary norms and rules of maintenance of populated areas", rules of urban planning, etc.

- The Law of Ukraine "On waste" (1998). This Law defines the area of responsibility of the Ministry of Environmental Protection and Natural Resources (hereinafter referred to as MEPNR) and several other ministries and local authorities. It has undergone significant changes, especially after Ukraine became a member of the Basel Convention (1999).

- The Law of Ukraine "On Environmental Impact Assessment" (2017). The law sets out general provisions for environmental assessment. It should be noted that this Law applies only to those activities that require EIA. Provided that decision for installation of incinerators will be taken within a framework of the Project, the law will be applied.

Provided that solution for installation of incinerators within this Project is taken, in addition to the Law of Ukraine ‘On Environmental Impact Assessment’, the following laws will be considered:

- The Law of Ukraine “On ratification of Convention on access to information, public participation in the decision-making process and access to justice in environmental matters” (1999).

- The Law of Ukraine "On protection of the population and territories from emergencies of man-caused and natural character" (2000) defines organizational and legal bases of protection of citizens of Ukraine, foreigners and stateless persons staying on the territory of Ukraine, protection of industrial, social facilities and environment from man-made and natural character emergencies.

- The Law of Ukraine "On Atmospheric Air Protection" (1992). This Law is aimed at preserving and restoring the natural state of the atmosphere, creating favorable conditions for life, ensuring environmental safety and preventing the harmful effects of the atmosphere on human health and the environment.

- Land Code of Ukraine (2001). The task of land legislation is to regulate land matters in order to create conditions for rational use and protection of land, equal development of all forms of land ownership and management, preservation and reproduction of soil fertility, improvement of the environment, protection of citizens, enterprises, institutions and organizations.

- Water Code of Ukraine (1995). The Water Code, in combination with measures of organizational, legal, economic and educational impact, contributes to the formation of water and environmental law and environmental safety of the population of Ukraine, as well as more efficient, scientifically sound use of water and its protection from pollution, clogging and depletion.

Also, there are many laws related to specific environmental issues (i.e. laws "On Protected Areas", "On Ecological Network", etc.), but they are not relevant to the Project activities.

Pursuant to the Project activities the following specific laws and regulations related to Occupational health and safety are considered relevant:

* The Labor Code of Ukraine (1972).
* The Law of Ukraine "On labor protection" (1992).
* The Law of Ukraine "On Remuneration of Labor" No 108/95-VR dated 24.03.1995.
* Resolution of the Cabinet of Ministers of Ukraine "On remuneration of employees on the basis of the Unified tariff grid of categories and coefficients for remuneration of employees working in institutions, establishments and organizations of certain areas of public sector" No 1298 dated 30.08.2002.
* Resolution of the Cabinet of Ministers of Ukraine "On remuneration of employees working in institutions, establishments and organizations of certain areas of public sector" No 1037 of 28.12.2016.
* Resolution of the Cabinet of Ministers "Some issues on remuneration of medical and other workers who are directly involved in the elimination of acute respiratory disease COVID-19 caused by coronavirus SARS-CoV-2" No246 dated 23.03.2020.
* Resolution of the Cabinet of Ministers "Some issues on remuneration of medical and other employees of health care institutions" No 610 dated 19.06.2020.
* Order of the Ministry of Labor and Social Policy and the Ministry of Health “On regulating the remuneration of employees of health care and social protection institutions” No 308/519 dated October 5, 2005.
* Order of the Ministry of Labor and Social Policy "On the conditions of remuneration of medical and other workers for the period of epidemics and outbreaks of infectious diseases, as well as in centers of dangerous infectious diseases" No145 dated 02.06.2003.
* Order of MOH ‘On amendments to the Standards of medical care "Coronavirus disease (COVID-19)" No 2122 dated September 17, 2020.
* Order of MOH "About the statement of Methodical instructions for medical workers in immunization units (points) and for mobile crews" No 212 dated 18.04.2008.
* Order of MOH "Questions of organization of immunization units functioning" No1095 dated 31.12.2009.
* Order of MOH "Organization of medical care for patients with coronavirus disease (COVID-19)" No722 dated 28.03.2020.
* "Regulations on organization and conduct of preventive vaccinations", approved by MOH Order No 595, dated 16.09.2011.
* Instruction ‘On organization and implementation of the system of infection control in obstetric hospitals "Methods of treatment of hands of medical personnel and patients, use of medical gloves" of Ukraine, registered in the Ministry of Justice of Ukraine No 695/13962 dated June 21, 2007 (Appendix 6).
* DSTU EN 14126: 2008 Protective clothing. Protection against infectious agents. Performance requirements and test methods (EN 14126: 2003, IDT).
* DSTU EN 13034: 2017 Protective clothing. Protection against liquid chemicals. Performance requirements for protective clothing for limited protection against liquid chemicals (types 6 and RV [6]) (EN 13034: 2005 + A1: 2009, IDT).
* DSTU EN 14683: 2014 Surgical masks. Requirements and test methods (EN 14683: 2005, IDT).
* DSTU EN 149: 2017 Respiratory protective devices. Filter half masks for protection against aerosols. Requirements, tests, markings (EN 149: 2001 + A1: 2009, IDT).
* DSTU EN 166: 2017 Personal eye-protection. Technical conditions (EN 166: 2001, IDT).

The below norms and regulations refer to questions of infection control and medical waste treatment to be reviewed within the Project implementation:

* Order of the MOH of Ukraine "On approval of rules for disposal and destruction of drugs," No 242 dated 24.04.2015.
* Order of MOH “On approval of the State sanitary and anti-epidemic rules and regulations on medical waste management” No325 dated June 8, 2015.
* Order of MOH "On the organization of prevention of nosocomial infections in obstetric hospitals" No234 dated May 10, 2007.
* Order of MOH "On the organization of control and prevention of postoperative purulent-inflammatory infections caused by microorganisms resistant to antimicrobial drugs" No236 dated 04.04.2012.
* Order of MOH "On approval of the Standard of infection control for health care facilities providing care to patients with tuberculosis" No 287 dated February 01, 2019.
* Order of MOH "On amendments to the List of features of dangerous infectious and parasitic human diseases and carriers of pathogens of these diseases" No 521 dated February 25, 2020.

On November 8, 2017, the Cabinet of Ministers of Ukraine approved the Ukrainian National Waste Management Strategy until 2030. The strategy identifies the main directions of state regulation in the field of waste management for the coming decades, taking into account the European approaches to waste management set out in the following Directives:

- Directive 2008/98/EC of the European Parliament and the Council dated 19 November 2008 on waste and repealing certain Directives.

- Council Directive 1999/31/EC dated 26 April 1999 on disposal of waste.

- Directive 2006/21/EC of the European Parliament and the Council dated 15 March 2006 on the management of extractive waste, and amending Directive 2004/35 / EC.

- Directive 94/62 / EC of the European Parliament and of the Council dated 20 December 1994 on packaging and packaging waste.

- Directive 2012/19 / EC of the European Parliament and the Council dated 4 July 2012 on electrical and electronic equipment waste (WEEE).

- Directive 2006/66 / EC of the European Parliament and the Council dated 6 September 2006 on batteries and accumulators and operated-off batteries and accumulators.

For cold chain provision within the Project special attention will be paid to:

- The Order of MOH No 595 dated 16.09.2011 ‘The procedure for ensuring appropriate conditions for storage, transportation, reception and accounting of vaccines, toxoids and tuberculosis allergen in Ukraine’.

## Institutional Framework for Environmental Management

At the national level environmental policy is formed by the Ministry of Environmental Protection and Natural Resources (MEPNR). Until recently MEPNR has been developing and implementing environmental policy. Currently, within the framework of state administration reform it is planned to focus Ministry’s efforts specifically on expert work and analytics which consist in development of politically-motivated decisions in environmental protection activities and their direct implementation will be entrusted to various government agencies, services or local authorities. At the strategic level, the environmental policy priorities are defined in the Draft Law of Ukraine "On the basic principles (strategy) of the state environmental policy of Ukraine for the period up to 2030".

In general, MEPNR creates and implements state policy in the field of environmental protection and safety, as well as radiation, biological and genetic safety within the powers prescribed by the law; in the field of fisheries and fish industry, protection, use and reproduction of aquatic bioresources, fisheries and sea fishery vessels’ maritime safety regulation, forestry and hunting sector.

State Environmental Inspectorate of Ukraine (Derzhekoinspektsiya) is a central executive body whose activities are directed and coordinated by the CMU through the MEPNR and who implements state policy on the state supervision (control) in the field of environmental protection, sustainable use, reproduction and protection of natural resources. The main tasks of Derzhekoinspektsiya include state supervision (control) over compliance with the law, in particular, regarding the waste, hazardous chemicals, pesticides and agrochemicals waste within the powers prescribed by the law.

State Sanitary and Epidemiological Service (SES) of Ukraine is a central executive body whose activity was directed and coordinated by the CMU through the Minister of Health of Ukraine. The main tasks of the SES consisted in submission of suggestions regarding formation of state policy in the field of sanitary and epidemiological safety of society and implementation of state policy in this area. The Service was headed by the Chief State Sanitary and Epidemiological Doctor - First Deputy Minister of Health of Ukraine. On March 29, 2017, the government decided to liquidate the SES, as its functions are performed by theMoH the State Labor Service (Derzhpratsi) and the State Service of Ukraine on Food Safety and Consumer Protection (Derzhprodspozhyvsluzhba). In February 2020, the position of Chief State Sanitary and Epidemiological Doctor (but not the entire SES) was reinstated. It was stipulated that the Doctor would coordinate actions of government authorities to prevent the coronavirus disease COVID-19 on the territory of Ukraine and provide communication with journalists on this issue. MoH is studying possibility of reinstating the Sanitary and Epidemiological Service. Options being considered provide for establishing a service within MoH instead of separate central executive body. It is envisaged that, this service will have clear functions, which will include, but not limited to: carrying out epidemic prevention measures, implementing infection control and epidemic situations response. It is expected that an effective sanitary and epidemiological service will allow to fight many diseases (including coronavirus COVID-19) in a more efficient way.

## International Conventions Ratified by Ukraine

There are five international environmental conventions that are directly relevant to health procurement and waste management. As a member of the global community, Ukraine can be a party to international conventions that impose certain obligations and responsibilities on those who sign them.

*The Vienna Convention* *for protection of ozone layer and the Montreal Protocol* on substances that deplete the ozone layer are an international treaty aimed at ending the use of ozone-depleting substances (ozone-depleting substances - ODS). This is the first international convention of any type that has reached universal ratification. This Convention and its Protocol are relevant for health procurement and medical waste management, since a number of ODS are still manufactured and used in laboratories and the pharmaceutical industry, such as refrigerators used for vaccines, refrigeration equipment for refrigerators, etc. . Therefore, it is important to first make sure that there are alternatives that do not contain ODS, available for purchase, or that waste containing these substances is properly treated and disposed of. The Vienna Convention was ratified by Ukraine on June 18, 1986.

*The Basel Convention* related to the control of transboundary movements of hazardous wastes and their disposal aims to protect human health and environment from the negative effects of hazardous wastes. This Convention is relevant for health procurement and medical waste management, as it aims to reduce waste generation, promote environmentally sound waste management practices, and restrict the transboundary movement of hazardous wastes. The Convention defines four streams of hazardous medical waste and determines how it should be treated and disposed of. It was ratified by Ukraine on October 8, 1999; and entered into force on January 6, 2000.

*The Stockholm Convention* on persistent organic pollutants (POPs) aims to protect human health and environment from the harmful effects of POPs by eliminating and/or controlling the production, trade, use and release of POPs. This Convention applies to procurement in the field of health care and management of medical waste, as unintentional POPs (uPOPs) may be formed during medical waste incineration. To avoid the formation of POPs, the Convention recommends the use of non-incineration technologies or the availability of incinerators of adequate quality that meet national and international standards for uPOPs emissions. It was ratified by Ukraine on September 25, 2007; and entered into force on December 24, 2007.

*The Rotterdam Convention* on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade, promotes the joint responsibility of exporting and importing countries for the protection of human health and the environment from the harmful effects of certain hazardous chemicals and pesticides and provides for the exchange of information on such chemical substances. Although the Convention does not cover pharmaceuticals and medical waste, some of the pesticides listed in the annexes are still procured in some cases by international health organizations. Ratified by Ukraine on December 6, 2002.

*The Minamata Mercury Convention* is the latest international treaty aimed to protect human health and environment from anthropogenic and mercury emissions. This Convention applies to health procurement and medical waste management, as the health sector is one of the main sources of mercury emissions from medical waste incineration. The convention calls for the purchase of mercury-free alternatives in health care and for the implementation of appropriate solutions in the field of waste management. MEPNR has prepared a draft Law of Ukraine "On Ukraine's accession to the Minamata Convention on Mercury", which was sent for approval to the relevant central executive bodies.

*The Aarhus Convention*helps member countries to establish rights of the public (individuals and their associations) to receive environmental information that is held by public authorities ("access to environmental information"). This can include information on the state of the environment, but also on policies or measures taken, or on the state of human health and safety where this can be affected by the state of the environment. In addition, public authorities are obliged, under the Convention, to actively disseminate environmental information in their possession. Upon ratification of the convention, the county took up an obligation to ensure citizens’ access to justice in environmental matters. The obligation considers provision of a package of guarantees that allows citizens, including civil society, to ask a national court to check whether a public authority has respected the rights and fulfilled the related legal requirements. Ratified by Ukraine on July 6, 1999.

## Environmental and Social Standards of the World Bank Relevant for the Project

This Project, like all other World Bank projects that became operational after October 1, 2018, will be subject to a new environmental and social protection policy in accordance with the new World Bank social and environmental standards.

The Bank is committed to support Borrowers in the development and implementation of projects that are environmentally and socially sustainable, and to enhance capacity of Borrowers E&S frameworks to assess and manage the E&S risks and impacts of projects. To this end, the Bank has defined specific ESSs, which are designed to avoid, minimize, reduce or mitigate the adverse E&S risks and impacts of projects. The projects supported by the Bank must comply with the ESSs.

The Table below gives overview of the ESSs and their applicability to this Project:

**Table 2: ESSs relevant to the Project**

|  |  |
| --- | --- |
| **ESS** | **Applicable to the project** |
| ESS1 | Assessment and Management of Environmental and Social Risks and Impacts | **Yes** |
| ESS2 | Labor and Working Conditions | **Yes** |
| ESS3 | Resource Efficiency and Pollution Prevention and Management | **Yes** |
| ESS4 | Community Health and Safety | **Yes** |
| ESS5 | Land Acquisition, Restrictions on Land Use and Involuntary Resettlement | No |
| ESS6 | Biodiversity Conservation and Sustainable Management of Living Natural Resources | No |
| ESS7 | Indigenous People | No |
| ESS8 | Cultural Heritage | No |
| ESS9 | Financial Intermediaries  | No |
| ESS10 | Stakeholder Engagement and Information Disclosure | **Yes** |

As can be seen on the Table 2, of the ten ESSs comprising the ESF, five are relevant to the Project. They establish the standards that the Project and its implementing agency (MOH) will meet through the Project life cycle, as follows:

**ESS 1 – *Assessment and Management of E&S Risks and Impacts***. is applied to all projects supported by the Bank through Investment Project Financing. The objective is to identify, evaluate and manage E&S risks and impacts associated with each stage of Project, in order to achieve E&S outcomes consistent with Bank requirements and the national legislation.

This ESMF is prepared for the Project under provisions of ESS1.

One of the instruments envisaged by the ESMF is environmental and social screening to be provided at the early stage of the Project implementation.

In the meantime, following templates and recommendations provided by the ESMF, the HCFs-beneficiaries of the Project will develop the ESMP which shall include general information of social and environmental management in the HCFs involved to the Project.

**ESS 2 – *Labor and Working Conditions***. ESSs regulates working conditions, and scope of its application depending on type of employment relations between the Borrower and project workers.

The project shall be carried out in accordance with the applicable requirements of ESS 2, in a manner acceptable to the Bank, including through, inter alia, implementing adequate occupational health and safety measures (including emergency preparedness and response measures), setting out grievance arrangements for project workers, and incorporating labor requirements.

The LMP prepared for this Project are covered by ESS2. The LMP are an integral part of this ESMF. Following the LMP each person involved into the Project shall be officially employed or shall have a valid contract concluded. It is also important that each employee or consultant is aware of the GRM and have possibility to submit grievances, if any.

**ESS 3 – *Resource and Efficiency, Pollution Prevention and Management***. ESS 3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. ESS 3 sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle consistent with Good International Industrial Practice (hereinafter referred to as GIIP).

To cover provisions of the ESS3, recommendations for development of the ICWMP are provided to HCFs-beneficiaries of the Project in Annex 4 to this ESMF.

**ESS 4 –** ***Community Health and Safety***. ESS 4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.

To cover the ESS4, all members of community, following the GRM described in the SEP and this ESMF, may provide their grievances during all period of the Project implementation.

**ESS 10 –** ***Stakeholder Engagement and Information Disclosure***. ESS 10 recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.

Consultations with stakeholders were held, and the SEP was prepared and disclosed on MOH website for this Project, which is stipulated by the ESS10.

## The World Bank Group Environmental, Health and Safety Guidelines

The Environmental, Health and Safety (hereinafter referred to as EHS) Guidelines[[6]](#footnote-7) are technical reference documents with general and industry-specific examples of GIIP and are referred to in the ESF. The EHS Guidelines contain the performance levels and measures that are normally acceptable to the World Bank Group, and that are generally considered to be achievable in new facilities at a reasonable cost by using relevant technology. The World Bank Group requires borrowers to apply the relevant levels and/or measures of the EHS Guidelines. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects will be required to achieve whichever is more stringent. General EHS Guidelines applied to the Project are listed below:

EHS 1.5 – Hazardous Materials Management;

EHS 1.6 – Waste Management;

EHS 2.7 – Personal Protective Equipment;

EHS 3.5 – Transportation of Hazardous Materials;

EHS 3.6 – Disease Prevention;

EHS 4.1 – Environment; and

EHS 4.2 – Occupational Health and Safety.

Additionally, the EHS for Health Care Facilities also applies to the Project. The EHS Guidelines for Health Care Facilities include information relevant to the management of EHS issues associated with health care facilities, including general hospitals and small inpatient primary care hospitals, as well as outpatient, assisted living, and hospice facilities. Ancillary facilities may include medical laboratories and research facilities, mortuary centers, blood banks and collection services.

## WHO Guidance

The WHO is maintaining a website specific to the COVID-19 pandemic with up-to-date country specific and general technical guidance[[7]](#footnote-8). As the situation remains fluid it is critical that those managing both the national response as well as specific health care facilities and programs keep abreast of guidance provided by the WHO and other international best practice. Current technical guidance provided by the WHO includes the following topics, which are being updated regularly:

* + Critical preparedness, readiness and response for COVID-19;
	+ Surveillance, rapid response teams, and case investigation;
	+ National laboratories;
	+ Country-level coordination, planning, and monitoring;
	+ Clinical care;
	+ Infection prevention and control
	+ Serology and early investigation protocols;
	+ Essential resource planning;
	+ Guidance for schools, workplaces & institutions;
	+ Risk communication and community engagement;
	+ Virus origin / reducing animal-human transmission;
	+ Points of entry / mass gatherings;
	+ Naming the coronavirus disease (COVID-19);
	+ Humanitarian operations, camps, refugees/migrants in non-camps and other fragile settings;
	+ Health workers; and
	+ Maintaining Essential Health Services and Systems.

Besides the guidance for governments and states, WHO also recommends public and citizens to comply with the safety measures at home, public areas and workplaces. Those recommendations include application of PPE, sanitizers and suggested models of safe behavior and healthy practice and lifestyle.

Even prior to adopting COVID-19-specific, constantly evolving guidance and recommendations by WHO, the world health body already had had a well-designed guidelines and standard requirements to prepare for and manage pandemic situations worldwide, including specific chapters for communicable diseases control and preventions. Those to immediate relevance to Emergency COVID-19 Response Project include but are not limited to:

* Safe management of waste from health-care activities[[8]](#footnote-9). The guideline is designed for state, medical facilities, health-care personnel and waste carrier to advise them about the safe, sustainable and affordable management of medical waste. The guideline aims at reducing health problems and eliminating potential risks to people’s health, health-care service provision inevitably create waste that may itself be hazardous to health. The waste produced in the course of health-care activities carries a higher potential for infection spread and injury than any other type of waste. Wherever waste is generated, safe and reliable methods for its handling are therefore essential. Inadequate and inappropriate handling of health-care waste may have serious public health consequences and a significant impact on the environment. Sound management of health-care waste is thus a crucial component of environmental health protection.
* Infection prevention and control (IPC)[[9]](#footnote-10). IPC related standards and guidelines give direction to followers on the effective application of IPC programs, safety of injections, the right infrastructure and resources to achieve good IPC standards, including actions such as hand hygiene at the point of care. Based on systematic reviews, as well as presenting practical country examples, expert consensus guidelines developed by WHO are inherently linked to focusing on implementation and mean that countries and health facilities can prioritize practical actions for improvement. The group of IPC guideline by WHO includes guidelines on:
	+ - Hand hygiene;
		- Injection safety;
		- Antimicrobial resistance (AMR);
		- Surgical site infections;
		- Device-associated infectious diseases related to provision of health care;
		- Core components of IPC and other interventions.
* Personal Protection Equipment. PPE is one of the elements in preventing transmission of the communicable diseases not only in hospitals, but also through various activities linked to health-care provision: cleaning, waste management and community care related to the outbreak and pandemic situation. In that regard, WHO sets standard requirements and recommendations on PPE[[10]](#footnote-11) and on its rational use[[11]](#footnote-12).

# Environmental and Social Baseline

## 5.1. Roadmap for the introduction of the vaccine against COVID-19 and National Plan for Preventive Vaccination

It should be primarily noted that before commencement of the Project implementation the Roadmap for the introduction of the vaccine against COVID-19 and National Plan on Preventive Vaccination were approved and will be referred below hereto.

The Roadmap was developed by the MoH in cooperation with national and international partners in the field of public health and immunization, the National Technical Group of Experts on Immunoprophylaxis and public agencies to ensure proper and equal access to an effective vaccine against COVID-19 for population of Ukraine.

This strategic document describes the main components of the COVID-19 vaccination deployment plan. The Roadmap for vaccination against COVID-19 in Ukraine provides for vaccination for at least 50 percent (20 866 390 people) of the population, starting with the priority groups identified in it. The document explains the purpose and objectives of vaccination against COVID-19, criteria for selecting priority groups and targets of coverage, stages and process of vaccination campaign, cold chain capacity and logistics scenarios, pharmacovigilance, approach to vaccination monitoring, training and communication campaign. According to updated version the Roadmap dated March 1, 2021, it is anticipated that vaccination against COVID-19 will be carried out in two main ways: by involving 200 mobile teams (an average of 8 per region) at an early stage of the vaccination campaign, each team will be able to vaccinate up to 100 people a day; and 1,650 vaccination rooms (66 per region) in HCF, each of which can vaccinate up to 30 people a day.

It is expected that the number of mobile teams in the future will increase to 572 (23 per region), and the number of vaccination rooms up to 4250 (170 per region). The Roadmap will be regularly updated following development and improvement of COVID-19 vaccination plans.

Coordination of the COVID-19 coronavirus vaccine implementation process and the vaccination campaign is carried out by the MoH operational headquarters for responding to the spread of infectious diseases that can be prevented by vaccination, the composition and provisions of which are approved by the MoH Order No 1319 dated 07 June 2019 (in edition of the MOH Order dated 02 December 2020 No 2784).

The operational headquarters is headed by the Minister of Health of Ukraine. The operational staff includes representatives of the MoH, the Ministry of Internal Affairs of Ukraine, the Armed Forces of Ukraine, the National Health Service of Ukraine, the State Service of Ukraine for Medicines and Drug Control, Public Health Center of the MoH, SE "State Expert Center of the MoH", representatives of higher medical education institutions, representatives of the WHO Office in Ukraine, UNICEF, US Centers for Disease Control and Prevention, etc.

Work on the COVID-19 coronavirus vaccination campaign began in September 2020. A working expert group of national experts and representatives of the WHO Office in Ukraine, UNICEF, the US Centers for Disease Control and Prevention, etc. was convened on the basis of the PHC on behalf of the Deputy Minister of Health - Chief State Sanitary Doctor of Ukraine to develop practical recommendations for campaign preparation in Ukraine on vaccination against coronavirus COVID-19. Members of the National Technical Group of Experts on Immunoprophylaxis (hereinafter - NTGEI) were also involved in the work. As a result of joint work, the NTGEI and the expert community have developed recommendations on criteria for priority groups to be covered by COVID-19 coronavirus immunization in Ukraine.

At the regional level, COVID-19 coronavirus immunoprophylaxis measures will be coordinated by regional coordinators designated in each oblast and in Kyiv at the request of the MoH. The list of regional coordinators was approved by the Order of MoH No 99 of January 21, 2021.

In order to effectively coordinate the process of distribution and use of vaccines at the regional level, individuals will be identified who will be responsible for settlements and orders for weekly delivery, who will work closely with representatives of the PHC. The algorithm for the distribution of vaccines will be as follows:

At the first stage, the PHC prepares proposals for distribution and agrees them with regional health units, which should provide confirmation of readiness to receive the vaccine and information on a single vaccine recipient facility identified at the regional level. The agreed distribution shall be submitted for approval to the MoH and approved by the relevant order. Based on the order of MoH, a preliminary schedule of deliveries shall be formed on a weekly basis and submitted to the logistics company.

On a weekly basis, the regional structural subdivisions for health care submit to the PHC the applications for transportation to full use in accordance with quantities determined by the order of MoH. PHC verifies the submitted applications and on a weekly basis submits to the logistics company the final applications for transportation to full use in accordance with the quantities specified by the order of MoH.

A similar algorithm is used to distribute vaccines at the regional level. Based on approved order from MoH, the health departments approve regional distribution orders and distribute vaccines on a weekly basis according to verified applications.

Immunization of the population with a safe and effective vaccine against coronavirus COVID-19 is the most important component of the strategy of the GoU in overcoming the acute phase of the pandemic of coronavirus COVID-19. The general purpose of mass vaccination of the population is to stop spreading of coronavirus COVID-19 in Ukraine. Implementation of the Roadmap aims to achieve the following: to reduce the number of deaths due to coronavirus COVID-19; reduce the risk of complications to human health due to COVID-19 coronavirus disease.

According to the Roadmap, the following issues are identified that need further attention and improvement to ensure an effective mass vaccination process in Ukraine:

* available equipment at the regional and district levels practically does not allow to store vaccines that require low temperatures (-20 ° C and -70 ° C), respectively, it is recommended to store the bulk of these vaccines at the national level (for vaccines with a storage mode of -60 ° C to -80 ° C it is planned to involve a private company with appropriate capacities, and vaccines with a temperature of -20 ° C are planned to be stored at the capacities of SE "Ukrvaktsina");
* part of the existing refrigeration equipment at the regional and district levels needs to be updated and retrofitted;
* insufficient equipment for temperature monitoring at the regional and district levels;
* there is no systematic supply of safe injection devices (syringes with automatic shut-off (AD)) and safety boxes for the disposal of sharp objects on site;
* the need for comprehensive additional training on the topic of "cold chain" during transportation and storage (especially for the vaccine, which should be stored at ultra-low temperatures), management of residues and supply of vaccines;
* the need for training on the disposal of used syringes and needles, in order to minimize the risks to health workers (occupational risks), as well as to strengthen staff knowledge about the handling of vaccines. Additional purchase of syringes and boxes for safe disposal, planned at the expense of the state budget, as well as with the involvement of donor funds.

Regarding disposal of medical waste after vaccination, the Roadmap states that disposal of unused vaccines, as well as the treatment of medical waste in Ukraine is regulated as follows: in cases of inability to use the vaccine (in particular, due to errors in preparing the vaccine, violation of storage conditions in "cold chain", etc.) a disposal procedure will be applied that complies with the Rules of disposal and destruction of medicines, approved by the Order of MoH No 242 dated 24.04.2015. Medical waste management and disposal in Ukraine is regulated by the State sanitary and anti-epidemic rules and regulations on medical waste management, approved by the Order of MoH dated June 8, 2015 **No 325**. In order to organize a safe vaccination process, safety boxes will be applied to dispose used tools.

On April 12, 2021, the Order of the Cabinet of Ministers of Ukraine No 340-r "On approval of the National Plan for preventive vaccination against acute respiratory disease COVID-19 caused by coronavirus SARS-CoV-2, for the period up to December 31, 2021" was issued.

According to the National Plan for Preventive Vaccination, Ukraine should receive 21.913 million doses of vaccines against coronavirus by the end of the year, of which 13.913 million doses will be purchased from the state budget; 8 million doses should be received by the COVAX mechanism. In particular, 500,000 doses of AstraZeneca vaccine and 1.5 million doses of Sinovac Biotech vaccine, purchased at the expense of the state budget, are expected to be delivered in May 2021. In June 2021, Ukraine expects to receive 1.409 million doses of AstraZeneca vaccine under the COVAX mechanism, as well as 500 thousand doses of this vaccine and 213 thousand doses of Sinovac Biotech vaccine purchased from the state budget. In July 2021, 948.7 thousand doses of Pfizer / BioNTech vaccine are expected to be delivered under the COVAX mechanism and 500 thousand doses of state-purchased AstraZeneca vaccine. 1.032 million doses of the latter under COVAX are expected monthly during August-December 2021. Also in August-December 2021, Ukraine expects to receive 2 million doses of Novavax vaccine purchased at the expense of the state budget every month. At the same time, the National Plan does not supply Pfizer / BioNTech vaccine purchased at state expense. In total, by 2021, the need for vaccine against coronavirus is estimated at almost 47.9 million doses.

The Plan states that the stages of vaccination campaign are to be determined in accordance with the Roadmap, which was previously approved by the MoH. The MoH should take measures to supply vaccines to Ukraine for the specific prevention of COVID-19, conduct a monthly review of the National Plan taking into account its actual state of implementation and new supply contracts. Together with the Ministry of Culture and Information Policy, MoH should ensure effective outreach on vaccination of the population.

The GoU obliged the Ministry of Foreign Affairs to take measures aimed at improving effectiveness of cooperation with foreign states and international organizations in supply of coronavirus vaccines to Ukraine. Regional and Kyiv state administrations are responsible for vaccination at the local level.

## 5.2. Statistic data on Covid-19 in the country

As of 03.06.2021 the following statistic data on situation with COVID-19 in the country may be provided (data are taken for the whole period of pandemic in Ukraine):

fell ill (persons) – 2209417

recovered (persons) – 2072091

deaths – 50959

PCR tests performed – 10261649

Vaccination against COVID-19 in Ukraine started on February 24, 2021. Since the beginning of the campaign, a total of 1 214 883 vaccinations have been carried out:

|  |  |
| --- | --- |
| **Number of vaccinated persons against COVID-19 (from beginning of vaccination campaign):** | **1076795** |
| Received one dose, total | 1076793 |
| Received two doses, total | 138090 |
| Vaccinated with vaccine COVISHIELD, total | 487023 |
| Vaccinated with vaccine CORONAVAC, total | 156972 |
| Vaccinated with vaccine COMIRNATI, total | 80613 |
| Vaccinated with vccine ASTRAZENECA, total | 351963 |
| Vaccinated with vaccine JOHNSON AND JOHNSON, total | 224 |

*Distribution of the number of vaccinated (first dose), as of 02.06.2021*



*Distribution of the number of vaccinated (second dose), as of 02.06.2021*



More information on preventive vaccination against Covid-19 and testing in Ukraine which is updated on a daily basis can be found on the following websites:

<https://moz.gov.ua/article/news/operativna-informacija-pro-poshirennja-koronavirusnoi-infekcii-2019-cov19>;

<https://vaccination.covid19.gov.ua>;

<https://health-security.rnbo.gov.ua/vaccination>;

<https://covid19.gov.ua>.

## 5.3. Environmental Characteristics

All Project activities will be implemented countrywide on government-controlled territories. Project activities will be implemented in urban as well as in rural areas.

Hereby the following brief information on condition of physical and natural environment is provided:

**Physical Environment**

**Geographical Location.** Ukraine is a country in Eastern Europe, in the southwestern part of the Eastern European Plain. The area is 603,628 km2. The largest country whose territory lies entirely in Europe, the second largest country on the European continent, considering Russia, the 46th largest country in the world. It borders Russia to the east and northeast, Belarus to the north, Poland, Slovakia and Hungary to the west, and Romania and Moldova to the southwest. In the south and southeast it is washed by the Black and Azov seas. The population of Ukraine is 42 million people.

**Relief**. The relief is quite diverse: 70% of the modern territory of Ukraine is occupied by lowlands, 25% - hills and 5% - mountains. In the west the Carpathian Mountains and in the extreme south the Crimean Mountains are located. The height of the plains of Ukraine above sea level averages 175 m. Mountain ranges reach 1700-2000 m, the highest point of all Ukraine is Mount Hoverla (2061 m) in the Carpathians.

**Climate.** Ukraine lies in a temperate climatic zone influenced by moderately warm, humid air from the Atlantic Ocean. Winters in the west are considerably milder than those in the east. In summer, on the other hand, the east often experiences higher temperatures than the west. By multiannual research data average annual temperatures range from about 42–45 °F (5.5–7 °C) in the north to about 52–55 °F (11–13 °C) in the south. The average temperature in January, the coldest month, is about 26 °F (−3 °C) in the southwest and about 18 °F (−8 °C) in the northeast. The average in July, the hottest month, is about 73 °F (23 °C) in the southeast and about 64 °F (18 °C) in the northwest. Precipitation is uneven, with two to three times as much falling in the warmer seasons as in the cold. Maximum precipitation generally occurs in June and July, while the minimum falls in February. Snow falls mainly in late November and early December; accumulation varies in depth from a few inches in the steppe region (in the south) to several feet in the Carpathians. Western Ukraine, notably the Carpathian Mountains area, receives the highest annual precipitation—more than 47 inches (1,200 mm). The lowlands along the Black Sea and in Crimea, by contrast, receive less than 16 inches (400 mm) annually. The remaining areas of Ukraine receive 16 to 24 inches (400 to 600 mm) of precipitation.

**Project impact on Climate**. Extreme temperatures are expected to rise in the coming decades, with precipitation increasing in some regions and decreasing significantly in others. Such changes may adversely affect the target beneficiaries of the Project throughout the country.

The main priorities for climate change adaptation identified by the GoU include CO2 monitoring, greenhouse gas emission allowance trading, climate change adaptation in agriculture and forestry, water management, transport strategy and construction to support for national mitigation plans and implementation of international obligations.

The Project aims to address climate vulnerability by facilitating adaptation to climate change through the measures set out in Part 1. The Project will support GoU to provide more energy efficient cold chain by purchasing environmentally friendly cold chain equipment to reduce greenhouse gas emissions, including from refrigerants, which have a high potential for ozone layer depletion; increasing the level of reliability of vaccine storage and determining sustainable options for decommissioning of old or environmentally hazardous cold chain equipment. The Project's contribution to strengthening the cold chain for vaccine storage will strengthen the overall immunization function provided by HCV, and at the same time help the GoU not only in implementing COVID-19 response measures, but also in controlling other diseases that can be prevented by vaccination, as some of these are becoming more common due to climate change.

The envisaged use of safe disposal boxes under the Project is also one of the measures to adapt to climate change and mitigate the effects of climate change, as it will reduce the risk of medical waste exposure in the event of natural emergencies.

In addition, the Project will purchase equipment for waste management that does not have negative impacts on the environment, i.e. autoclaves with shredders will be purchased.

**Hydrography.** The territory of Ukraine is bordered by the waters of the Black Sea and the Sea of Azov. More than 95% of the rivers are part of those two seas' drainage basins. A few rivers are part of the Baltic Sea basin. There are seven major rivers in Ukraine: Desna, Dnipro, Dnister, Danube, Prypiat, Siverian Donets, and Southern Buh.

**Natural resources.** Significant natural resources in Ukraine include: iron ore, coal, manganese, natural gas, oil, salt, sulfur, graphite, titanium, magnesium, kaolin, nickel, mercury.

**Environmental issues.** Ukraine does have many environmental concerns. Some regions lack adequate supplies of potable water. Air and water pollution, as well as deforestation, improper waste management and radiation contamination, in the northeast stemming from the 1986 accident at the Chernobyl NCP considerably affect the country.

**Waste Management**

On 8 November 2017, the Cabinet of Ministers of Ukraine approved the Ukrainian National Waste Management Strategy until 2030. It envisages development of regional waste management plans, creation of an integrated adequate network of waste disposal facilities, which will allow the state or region to ensure its own disposal of waste.

The strategy envisages introducing circular economy principles and extending manufacturer’s liability to encourage the businesses to minimise and recycle waste, as well as the establishment of the 5-step waste hierarchy, introduced in the European Union. First of all, this means waste prevention and only in some cases – waste disposal.

The high level of waste generation and low rates of its use as secondary raw materials have led to the situation where significant volumes of solid waste from the industrial and municipal sectors accumulate in Ukraine yearly, and only a small part of waste is used as secondary raw materials, the rest ends up in landfills.

Compared to other developed countries, the waste situation in Ukraine differs due to large volumes of waste generation and lack of infrastructure for waste handling.

In general, the waste management system in Ukraine is determined by the following: accumulation of waste in both industrial and domestic sectors, which has an adverse impact on the environment and human health; improper treatment and disposal of hazardous waste; storage of household waste without taking into account possible dangerous consequences; improper use of waste as a secondary raw material.

Ukraine has an underdeveloped infrastructure for medical waste disposal.

Under quarantine, the amount of medical waste generated has almost doubled, but only half of waste generated by hospitals is safely disposed of (such as incineration of waste sealed in airtight containers).

Most HCFs do not have appropriate material and technical resources to ensure that medical waste is properly managed. Financing of medical waste disposal services by state institutions is carried out from the state budget. HCFs are engaged in the organization of the process, including selection of licensed company for transportation and disposal of waste. Existing licenses are checked before concluding agreements. The state budget for the purchase of containers and packaging, vehicles for the collection and maintenance of temporary storage is insufficient. Although separation and collection of medical waste on site is generally well organized, final disposal is a problem, especially in rural areas.

Low fines for violating the rules of medical waste disposal do not solve the problem.

It is important to note that in Ukraine the requirements for medical waste management (collection, transportation, storage, sorting, treatment (recycling), disposal, export, disinfection, processing, destruction) in the HCF are stipulated by the Order of MOH dated 08.06.2015 No 325.

According to the Order No325 medical waste are divided into the following categories

Category A - epidemically safe medical waste. It includes:

• food waste of all departments of the institution, except for infectious, including venereological and tuberculosis;

• wastes that have not been in contact with biological fluids of patients, infectious and dermatological and venereological patients;

• household waste (solid, large, repair) of all departments of the institution, except for infectious, including venereological and tuberculosis.

Category B - epidemic hazardous medical waste. It includes:

• used medical instruments (sharp objects: needles, syringes, scalpels and their blades, slides, ampoules, empty test tubes, broken glassware, vasofixes, feathers, pipettes, lancets, etc.);

• items contaminated with blood or other biological fluids;

• organic medical waste of patients (tissues, organs, body parts, placenta, embryos, etc.);

• food waste from infectious diseases departments of the institution;

• waste generated as a result of medical laboratories (microbiological cultures and strains containing any live pathogens, artificially grown in large quantities, live vaccines, unusable, etc.);

Category C - toxicologically dangerous medical waste:

• medicines, diagnostic, disinfectants;

• batteries, items containing mercury, appliances and equipment containing heavy metals;

• wastes generated as a result of operation of equipment, transport, lighting systems, etc..

Category D - radiologically hazardous medical waste:

• all materials formed as a result of the use of radioisotopes for medical and / or scientific purposes in any physical state, exceeding the permissible levels established by radiation safety standards.

Within the framework of the Project, medical waste of category B will be generated.

Category B wastes are infected and potentially infected waste that is subject to obligatory disinfection.

Category B medical waste cannot simply be taken to a landfill and disposed of with ordinary household waste, as it contains hazardous chemicals and microorganisms that pose an epidemiological threat. Such waste must first be decontaminated. The main methods of decontamination include:

- physical method - involves the use of special equipment - installations for disinfection of Category B waste, such as autoclaves;

- chemical method, which includes treatment of waste with solutions of disinfectants. The use of chemical methods of disinfection is allowed only for disinfection of food waste from the wards of infectious patients, as well as for primary anti-epidemic measures in the foci of infection.

- incineration of medical waste. In Ukraine, according to the MEPNR (as of January 6, 2020), only one health care facility, namely the Municipal Non-Profit Enterprise "Khmelnytskyi Regional TB Dispensary", received a license to dispose of (incinerate) medical waste, while others enter into agreements with legal entities and private entrepreneurs who have received a license to handle hazardous medical waste. Among companies operating in Ukraine, carrying out incineration of hazardous waste and have licenses for their disposal are as follows: LLC "Eco Protection-Ukraine", LLC "Ukrmitbest", LLC "Ekovdm", LLC "Kivach", LLC "Ukrainian Center for Waste Management", DSL-2010 LLC, Ecological Processing Technologies LLC, Ukrekoprom Research and Production Company LLC, REI Brovary LLC, A-ENERGO LLC, Vtormag LLC, Utilvtorprom LLC.

Addressing the issue of waste management in general, and medical waste management in particular, is fundamentally important for the energy and resource independence of the country, for preservation of natural energy resources.

This Project will help to improve the situation with medical waste decontamination by purchasing 67 autoclaves with shredders, which provides an opportunity not only to decontaminate hazardous medical waste, but also to significantly reduce the amount of already decontaminated waste prior to its transportation to the landfill.

## 5.4 Population and Socio-Economic Characteristics

Since the last census in Ukraine was conducted in 2001 (by the resolution of the Cabinet of Ministers dated December 9, 2020 No1542-r the next census is scheduled for 2023), the following calculations (estimates) of the population were carried out on the basis of available administrative data of state registration of birth and death, and change of residence registration (without the temporarily occupied territory of the Autonomous Republic of Crimea and Sevastopol.). Data were taken from the data bank of the State Statistics Service of Ukraine.

**Table 3:** Population in Ukraine in 2020



**Diagram 1**: Age structure of the population (2020)



The average age of the population in urban and rural areas as of the beginning of 2020 is 41.8 years. The average age of women is 44.3 y.o., and the average age of men is 39.0 y.o..

Mortality per 1,000 people of the current population in total 14.7 people. At the same time, the death rate in rural areas is 17.2 people per 1,000, and in urban areas - 13.4 people per 1,000.

**Table 4.** Distribution by causes of death (persons), by year



**Gender**. Globally, and in Ukraine, the health and economic impact of the COVID-19 crises is not gender-neutral. The gender differentials are associated with differences in the prevalence of health-related risk factors, differences in longevity, differences in occupation and employment patterns, and differences in health-seeking behaviors. In general, women are at higher risk of contracting COVID-19 because they predominate in “frontline” occupations that involve a lot of inter-personal interaction. This includes not only health care workers, but also teachers, clerical workers, cleaners and food preparation assistants. However, once infected, men are at greater risk of worse clinical outcomes and death than women are. This is because men have a higher incidence of relevant morbidities, including hypertension (18.5 percent of men in the age group 60-69 years compared to 17.7 percent of women), and also because men tend to seek healthcare less frequently and later in the course of disease progression than women do (for example, in 2019, only 39 percent of adult men reported having preventive electrocardiography screening compared to 48.7 percent of women). That said, in Ukraine, there are some other relevant morbidities that exacerbate COVID-19 outcomes that are more common among women, including diabetes (10 percent of men compared to 18.8 percent of women). Also, at the population level, since the life expectancy gap between women and men in Ukraine of 10 years (66.3 and 76.3 years for men and women, respectively), and older people are more vulnerable to progressing to severe COVID-19 and death) than other people, the absolute number of women infected by COVID-19 may well be higher than men. Also, at the population level, there is some evidence to suggest that the economic impact of the COVID-19 pandemic is also not gender-neutral. The October 2020 World Economic Outlook showed that, globally, women are more likely than men to be negatively affected by the economic downturn caused by the COVID-19 pandemic and the most recent World Economic Outlook showed that women’s employment has declined more than that of men. However, in Ukraine, the opposite has been observed: unemployment among men increased from 8.4 percent in March 2020 to 9.6 percent in September 2020, while unemployment among women increased from 8.7 to 8.9. In addition, it is expected that women are likely bearing the greater burden of supervising and caring for children who are learning from home during COVID-19 lockdowns and school closures (such as the school closures during Ukraine’s January 8th to 24th lockdown).

The approach to COVID-19 vaccination taken by the project will be gender-sensitive and take the above-mentioned differentials into account. Vaccination of health workers, who are mainly women, will be a top priority of the project. Another priority group is schoolteachers, among whom women also predominated. This will help to address the higher risk faced by women of contracting COVID-19 due to the fact that they predominate in frontline occupations. The project will also prioritize the vaccination of older people among whom, because of the gender differences in life expectancy in Ukraine mentioned above, there will be a larger share of women than men, thus protecting vulnerable older women. Among younger people, the project will prioritize those with important relevant morbidities, thus helping to mitigate the potential gender differentials in severe COVID-19 and death that arise from gender differentials in the incidence of NCDs. Gender and population specifics will also be accounted for in the communication campaign to support COVID-19 vaccination uptake, tailoring messages to address potential vaccine hesitancy such that there are separate messages that target both men and women. The workers manning the COVID-19 hotline will also be trained to be sensitive to gender. From an economic perspective, the effective implementation of COVID-19 vaccination that allows businesses and the broader economy to re-open, children to return to school, and people to go back to work, will help to address the gender distortions in unemployment and the likely disproportionate burden being place on women with respect to school closures. The PDO-level indicator related to vaccination will be disaggregated by sex, as well as relevant intermediate indicators. Also, when the MOH reports on the attainment of the PBCs on the number of people fully vaccinated, the numbers will be disaggregated by gender.

# Potential Environmental and Social Risks and their Mitigation

## 6.1. Environmental and Social Risks of the Project

The anticipated overall environmental and social risks are Substantial.

The main environmental and social risks identified at the initial stage are:

* generation of medical waste and its management;
* the problem of labor protection related to testing, vaccination and handling of vaccine stocks during vaccination;
* logistical problems related to transportation of vaccines across the country in compliance with recommended temperature requirements;
* community health and safety issues related to unforeseen consequences of vaccination, as well as treatment, transportation and disposal of hazardous and infectious waste in the health sector.

In order to mitigate the risks associated with handling, transportation and disposal of medical waste on site, the Project will invest in purchasing of medical equipment for the disposal of COVID-19-related waste, i.e. autoclaves with shredders. The equipment will be distributed following waste management needs assessment, which will include information on HCFs, medical waste that accumulates inside of the HCFs, existing waste disposal service providers, means of transporting and disposing of waste, licensing, operational practices and efficiency, as well as waste management needs for vaccination and testing. The study (evaluation) will be conducted at the beginning of the Project implementation. To determine which waste streams should be disinfected within the HCF and which should be transported to a specialized facility outside, the study will propose optimal waste management schemes for involved HCFs, and requirements for staff training will be outlined.

The Project will take all possible measures to implement the ICWMP, developed and approved by involved HCFs on the basis of the recommendations provided in Annex 4 of the ESMF. The ICWMP will be reviewed by the PIU and approved by the WB. Each HCF will comply with provisions of approved ICWMP to avoid contamination of air, water and soil with medical waste generated after testing and vaccination.

The social risks of the Project are anticipated to be substantial, as there may be significant gaps in the program's coverage of the most vulnerable and low-income groups and provision of appropriate support for them. Other social risks are related to the health and safety of the population, including organization of work, provision of appropriate working conditions, management of employment relationships, potential risks of sexual exploitation and violence / sexual harassment, and the provision of appropriate support. Given that information on the detailed distribution of vaccines is limited at the initial stage of the Project implementation, measures will need to be taken to reduce the risk of excluding groups or individuals in need of vaccination. With the assistance of donor partners, including the WB, the GoU prepared a draft vaccination readiness assessment system and developed a Roadmap (referred to in Paragraph 5.1 above), which sets out detailed vaccination procedures and protocols. against COVID-19 and proposes measures for effective vaccination of population. The Roadmap will be regularly updated. The WB will also continue to provide technical support in the implementation of the Project to reduce the risk of restricted access for priority groups. This risk will also be mitigated by involving citizens and consulting stakeholders.

To comply with provisions of ESS1, ESS2, ESS3, ESS4 and ESS10, the above risks will be managed by this ESMF, and relevant management plans developed on its basis, such as ESMP, ICWMP, LMP, also some risks will be managed by a separate document, i.e. - SEP.

The activities envisaged by the Project will not affect biodiversity in the country.

The Project does not involve forced labor, child labor, or other forms of exploitation. The LMP (Annex 5) provide more information on this issue.

Implementation of the Project will not include cross-border movement. Samples or hazardous material will be transported only within the country.

The Project will not affect the cultural heritage of the country.

The Project will have long-term positive environmental and social consequences, as it should strengthen the overall health care system in general and in particular improve the control, monitoring, prevention and containment of the spread of COVID-19.

In general, this project aims to achieve long-term protection of public health through vaccination.

The following are the biggest environmental and social risks that need to be addressed at the Project planning stage:

* **Risks related to medical waste**

While performing its functions of diagnosing and treating patients, preventing diseases and eliminating potential risks to human health, the health care system produces a huge amount of waste, including hazardous waste. Waste generated by healthcare facilities causes risks of chemical, toxic, carcinogenic, mutagenic and radiation effects on the human body, injuries and infections. Inadequate and inappropriate treatment of medical waste can have serious consequences for public health, both through direct impact and through negative effects on the environment. Thus, the rational and safe management, transportation and disposal of medical waste are important components of occupational safety, infection control and a safe environment.

*Risk of trauma and infection*

Health-care wastes are a source of potentially dangerous micro-organisms that can infect hospital patients, personnel and the general public. There are many different exposure routes: through injury (cut, prick), through contact with the skin or mucous membranes, through inhalation or through ingestion.

It is nursing staff who are most at risk of infection through contaminated needles. Sharps and pathogenic cultures are regarded as the most hazardous medical waste.

Pathogenic micro-organisms have a limited capacity of survival in the environment. Survival, and correspondingly potential contamination depends on each specific microorganism and on environmental conditions (temperature, humidity, solar radiation, availability of organic substrate, presence of disinfectants, etc.). Bacteria are less resistant than viruses at the ambient temperature.

With reference to Covid-19 – the virus it can remain viable on surfaces from 3 hours to several days. Specific terms depend on a number of conditions. For example, surface type, temperature and humidity. Therefore, it is important to disinfect surfaces, door handles, appliances, etc.

*Chemical risks*

Many chemical and pharmaceutical products are used in HCFs. Most of them entail a health risk due to their properties (toxic, carcinogenic, mutagenic, reprotoxic, irritant, corrosive, sensitizing, explosive, flammable, etc.). There are various exposure ways for contact with these substances: inhalation of gas, vapor or droplets, contact with the skin or mucous membranes, or ingestion.

Some substances (such as chlorine and acids) are incompatible and can generate toxic gases when mixed.

*Incineration risks*

In some cases, particularly when wastes are incinerated at low temperature (less than 800°C) or when plastics containing polyvinyl chloride (PVC) are incinerated, hydrochloric acid (which causes acid rain), dioxins, furans and various other toxic air-borne pollutants are formed. They are found in emissions but also in residual and other air-borne ash and in the effluent gases released through incinerator chimneys. Exposure to dioxins, furans and other coplanar polychlorinated biphenyls can have effects that are harmful to public health. These substances are persistent, that is to say, the molecules do not break down in the environment and they accumulate in the food chain. The bulk of exposure to dioxins, furans and coplanar polychlorinated biphenyls takes place through food intake. Even in high-temperature incinerators (over 800°C) there are cooler pockets at the beginning or the end of the incineration process where dioxins and furans can form. Optimization of the process can reduce formation of these substances when incineration takes place only at temperatures above 800°C.

*Risk for environment due to improper utilization of medical waste*

At present, a significant part of medical waste in Ukraine is transported to refuse dumps and unauthorized landfills due to the irresponsible approach of HCF to this issue, the poor condition and unavailability of recycling and disposal facilities for medical waste.

Waste sent for recycling to licensed companies is often subjected to chemical disinfection and transportation, which creates additional risks for employees of such companies. Disposal of waste by the licensed companies, in most cases, is carried out at the landfill without prior physical treatment. This approach creates an additional burden on the environment due to the combined effects of medical waste and disinfectants.

Medical waste is one of the most dangerous. It contains pathogenic microorganisms and toxic substances, leads to direct or indirect pollution, is the cause of various infectious and non-infectious diseases. Disposal of medical waste in Ukraine with violation of current legislation provides for administrative and criminal liability.

Disposal of waste in uncontrolled areas can have a direct impact on the environment in terms of soil and water pollution. Waste sorting must always be the responsibility of the entity that produces them. It must be done as close as possible to the site where the wastes are produced. Waste must be collected regularly - at least once a day. It must never be allowed to accumulate where it is produced. A daily collection programme and collection round must be planned. Each type of waste must be collected and stored separately. Infectious waste must never be stored in places that are open to the public.

The following main existing problems in the field of medical waste management in Ukraine can be identified:

• inadequate level of medical waste utilization in health care facilities;

• lack of facilities for collection, internal logistics and safe temporary storage of infectious waste within HCF;

• lack of refrigeration equipment for storage of certain medicines at low temperatures;

• lack of special sanitary and hygienic equipment, inventory, consumables for medical waste packaging;

• limited capacity of HCF to purchase high-quality medical waste treatment equipment.

* **Risks related to Occupational Health and Safety (OHS)**

The risks of inadequate OHS under the Project may relate to both medical staff and consultants (PIU staff).

It is anticipated that consultants within the framework of the Project would perform office operations primarily, in addition to occasional site visits to HCFs involved to the Project. Therefore, health and safety risks of consultants are estimated as low. Risks such as excessive overtime hours, irregular wage payments, informal work are not expected.

Healthcare professionals in the context of responding to COVID-19 may be at occupational risk, leading to illness, injury and even death. Such risks include the possibility of infection with COVID-19 in place of occupational activity; various skin lesions from prolonged use of PPE; exposure to toxins due to increased use of disinfectants; psychological stress; chronic fatigue; and discrimination, physical and psychological violence and harassment. Mitigating these hazards and protecting the health, safety and well-being of healthcare professionals requires concerted and comprehensive measures to prevent and control infections, occupational health and safety, health management and psychological support. Insufficient health and safety measures can lead to increase of diseases among health workers, decrease of their productivity and quality of medical services.

*Risk of SARS-CoV-2 infection in the workplace*

The risk for health workers’ occupational exposure to SARS-CoV-2 can be determined by the likelihood of coming into direct, indirect or close contact with a person infected with the virus. This includes direct physical contact or care, contact with contaminated surfaces and objects without use of PPE and without following rules and practices of hand hygiene, or work with infected people.

*Risks of prolonged use of PPE*

In principle, PPE is intended to be used for short periods of time, however in the context of COVID-19, heavy workload, patient flows and shortages of PPE may require health workers to wear PPE for extended periods of time.

Prolonged use of PPE for respiratory and eye protection (masks, respirators and goggles) can also cause skin damage: itching, rash, acne, pressure injury, contact dermatitis, urticaria and aggravation of pre-existing skin diseases. To decrease the risk of skin damage, it is a good practice to provide health workers with properly fitted PPE, to avoid sustained friction or pressure on the same site; to apply moisturizers or gel before wearing facial protective equipment to lubricate and reduce friction between skin and masks or goggles; and to avoid using over-tight goggles, which can damage the skin and generate fogging.

Prolonged use of PPE, such as gowns, masks, coveralls, traps heat and sweat, limits evaporative cooling of the body and can lead to heat stress.

*Risks due to use of disinfectants*

The increased use of disinfectants in health facilities may cause toxic effects among health workers, i.e. nasal and eye irritation, chest tightness, wheezing, difficulty breathing, and skin irritation may result.

*Risks due to workload*

During the COVID-19 pandemic, health workers may be working long hours with heavier workloads and insufficient time for rest and recuperation. These demands can result in chronic fatigue and lack of energy, with decreased alertness, coordination and efficiency.

*Risks due to violence, harassment, discrimination, and stigma*

Incidents of violence and harassment against health workers have been increasing during the COVID-19 pandemic. The most widespread risk factors for workplace violence in the health sector include stress and fatigue, long patient waiting times, crowding, the burden of transmitting negative prognoses, COVID-19-specific prevention and control measures (such as placing individuals in quarantine or isolation facilities), contact tracing or not allowing access to the bodies of deceased loved ones. These can all lead to additional tensions and violence.

Because of their proximity to potentially infected people, health workers may also be seen as infection threats within the community and thus face stigma and discrimination. Wearing work clothes, or other signs that make health workers easy to identify, may increase the risk of experiencing stigma, discrimination or violence and harassment by the public.

Workplace violence and harassment has been shown to have negative effects on the organization of health services and well-being of health practitioners. Health workers in service delivery roles, such as nurses, first responders, emergency room staff and physicians, and those working long hours or night shifts, are at higher risk. Male providers are slightly more likely to become victims of physical violence, while female providers have a higher risk of exposure to sexual harassment and sexual violence. Health workers from ethnic minorities and other minority groups might be particularly at risk.

*Risks for mental health*

In addition to the pressures mentioned above, health workers’ mental health can be affected in the context of COVID-19. This can be caused by contact with affected patients, perceived impediments to doing their jobs, insufficient organizational support, forced redeployment to jobs with higher levels of risk, lack of confidence in protective measures.

Personal risk factors for health workers’ mental health include lower levels of education, inadequate training, less clinical experience, working as a part-time employee, increased time in quarantine, social isolation, younger age, comorbid physical health conditions and the impact of the pandemic on their personal lifestyle etc..

Mental health issues can contribute to reduced performance, staff resignations, reduction in efficiency and increased possibility of human error, which may pose a threat to both health workers and patient safety.

Please see Annex 5 (LMP) for additional information concerning health and safety provisions.

* **Risk of non-compliance with cold chain requirements**

According to the Order of MoH dated 16.09.2011 No 595, the cold chain is a continuously functioning system that provides optimal storage temperature and transportation at all stages of movement of vaccines from the producer to the consumer for the purpose of preservation of their properties from influence of negative factors.

The main risks associated with providing a cold chain may include:

- insufficient supply of equipment (refrigerators, thermal containers, data loggers, etc.);

- violation of the process of providing a cold chain, which leads to the unsuitability of the vaccine (such violations may include staff errors, equipment failure, etc.);

- low quality of planning the process of distribution of vaccines;

- insufficient training of personnel involved in the vaccination process.

In addition to the need for rapid distribution and timely delivery of vaccines to storage sites and vaccination points, the fundamental issue is to maintain the integrity of the cold chain and temperature monitoring to ensure the proper quality of the vaccine provided to the consumer at the vaccination point.

In this context, the greatest attention is drawn to the Pfizer / BioNTech vaccine, which should be kept at -70 ° C, after thawing - stored at 2-8 °C for 5 days, and after being taken from the refrigerator should be used within 6 hours.

Compliance with the cold chain is a particularly important issue at the level of district storage points, vaccination points and mobile vaccination teams, where this is where the greatest risk of violating the requirements of transportation and storage of the vaccine may arise. This issue is particularly acute in the delivery of Pfizer / BioNTech, and requires additional involvement of private sector.

## Risks Mitigation and provision of needs Under the Project

* **Minimization of medical waste risks**

To minimize the risks associated with medical waste, it should be properly disposed of.

As already mentioned, the main part of the waste generated in the framework of the Project will belong to category B.

The main methods of category B waste disinfection in Ukraine are:

* physical method of waste disinfection), which includes treatment with saturated water vapor under excessive pressure and temperature using special equipment - installations for disinfection of category B waste, as well as means and methods of radiation and electromagnetic radiation of the corresponding purpose directly within the facility;
* chemical method of waste disinfection includes treatment with solutions of disinfectants having bactericidal (including tuberculocidal), virucidal, fungicidal action in appropriate modes, used by special installations or by immersing waste in marked containers with disinfected solution in places of their formation.

As it was already mentioned, following data provided by the Ministry of Environmental Protection and Natural Resources of Ukraine (as of January 6, 2020), only one health care institution has received a license for the treatment (disposal) of medical waste, i.e. the Municipal Non-Profit Enterprise "Khmelnytsky Regional TB Dispensary", while others enter into agreements with businesses and private entrepreneurs who have received a license to handle hazardous medical waste.

Given the risks that accompany the current approach to the disposal of infectious medical waste, one way to solve the problem is to organize a full cycle of disposal in HCFs by physical means. As hospitals are usually located in densely populated areas, it is impossible to place incinerators on their territory. The safest and most economically justified method is sterilization of waste by steam treatment under pressure (autoclaving) at a temperature of at least 121 ºC for 30 minutes, followed by grinding. Autoclaves do not require a large list of additional requirements for the establishment and operation of personnel, including staff training (almost every health care facility in Ukraine has an autoclave with certified workers). Autoclaving followed by shredding reduces waste by up to 80% and makes it impossible to reuse. For waste disposal by steam treatment under pressure, the humidity of waste does not matter, which is extremely important for medical waste that is contaminated with biological fluids.

Disposal of medical waste by autoclaving has the following disadvantages, in relation to incineration:

1) the impossibility of reloading during disposal, which reduces the potential amount of treated waste;

2) reduction of waste volume to 80%, which is much less than in incineration - up to 98%;

3) the need to grind waste after disposal, in order to eliminate the possibility of their reuse.

The amount of medical waste that is estimated to be able to sterilize a single 600-liter autoclave is about 20 kg per cycle (may be much more if only needles or scalpels are to be disposed of, or much less if personal protective equipment is sterilized) that per day is about 800 kg. The incinerator, which is designed for 150-250 kg and a volume of about 1 m3, can dispose of about 2500-3000 kg of medical waste with continuous shift work.

The need for coronavirus vaccination (COVID-19) currently requires a rapid response. Therefore, in order to dispose of medical waste within the framework of the Project, it is primarily planned to install autoclaves and industrial shredders in regional HCF, and in the long run it is considered possibility to install incinerators in a certain place outside densely populated areas.

An approximate calculation of the oblast's needs for equipment to cover medical waste disposal needs is given in the table below. The calculation is based on the report of the Kyiv city and regional state administrations for November 2020.

**Table 5.** Approximate calculation for equipment to cover medical waste disposal needs

| **Oblast** | **Total amount of accumulated waste, weight in kg** | **Equipment for waste disposal** |
| --- | --- | --- |
| **Total** | **Outpatient-polyclinic profile** | **Inpatient profile** | **Autoclaves\*, pcs./waste de-contaminated\*\*, kg per month** | **Incinerators, pcs./waste de-contaminated\*\*, kg per month** |
| Vinnytsia | 43975,0 | 0,0 | 43975,0 | 3/10800 | 1/750000 |
| Volyn | 20350,3 | 4400,1 | 15950,2 | 2/7200 | 1/75000 |
| Dnipropetrovsk | 113441,3 | 31062,0 | 82379,3 | 4/14400 | 1/75000 |
| Donetsk | 12664,0 | 6190,0 | 6474,0 | 2/7200 | 1/75000 |
| Zhytomyr | 32789,5 | 7616,4 | 25173,1 | 2/7200 | 1/75000 |
| Zakarpattya | 31530,0 | 0,0 | 31530,0 | 2/7200 | 1/75000 |
| Zaporizhia | 106928,9 | 55305,1 | 51623,8 | 4/14400 | 1/75000 |
| Ivano-Frankivsk | 2845,3 | 367,0 | 2478,3 | 2/7200 | 1/75000 |
| Kyiv | 27541,8 | 10440,4 | 17101,4 | 2/7200 | 1/75000 |
| Kirovohrad | 3464,6 | 0 | 3464,6 | 2/7200 | 1/75000 |
| Luhansk | 11218,9 | 1869,8 | 9349,1 | 2/7200 | 1/75000 |
| Lviv | 39412,6 | 3449,0 | 35963,6 | 3/10800 | 1/75000 |
| Mykolaiv | 2372285,0 | 0,0 | 2372285,0 | 5/18000 | 1/75000 |
| Odesa | 19446,1 | 7442,0 | 11846,1 | 2/7200 | 1/75000 |
| Poltava | 20707,7 | 0,0 | 20707,7 | 2/7200 | 1/75000 |
| Rivne | 16364,5 | 2460,0 | 13994,5 | 2/7200 | 1/75000 |
| Sumy | 13337,7 | 3163,1 | 10174,6 | 2/7200 | 1/75000 |
| Ternopil | 9841,0 | 1325,0 | 8516,0 | 2/7200 | 1/75000 |
| Kharkiv | 112760,1 | 11602,8 | 101157,3 | 4/14400 | 1/75000 |
| Kherson | 7460,5 | 1059,7 | 6400,8 | 2/7200 | 1/75000 |
| Khmelnytskyi | 21180,5 | 272,8 | 21107,7 | 2/7200 | 1/75000 |
| Cherkasy | 72750,0 | 2716,0 | 70034,0 | 3/10800 | 1/75000 |
| Chernivtsi | 334774,2 | 1940,8 | 31533,5 | 5/18000 | 1/75000 |
| Chernihiv | 15490,0 | 2746,8 | 12743,2 | 2/7200 | 1/75000 |
| Kyiv City | 126532,9 | 0,0 | 126532,9 | 4/14400 | 1/75000 |
| **Total in Ukraine** | 3589092,3 | 155428,8 | 3132495,6 | 67/241200 | 25/1875000 |

\* - a set of autoclaves and industrial shredder

\*\* - calculated amount of medical waste decontaminated can be considerably increased, for example, by work in two or three shifts

The above calculation shows that in order to meet the needs of Ukraine in the disposal of medical waste, health care facilities must be equipped with 67 autoclaves and one incinerator (25 units) must be installed in each of the regions. According to preliminary calculations, the cost of installing sets of autoclaves and shredders is 10.05 million dollars (150 thousand dollars per set, including installation and training of personnel), incinerators - 6.525 million dollars (225 thousand dollars per incinerator, including installation and training staff). The period during which sets of autoclaves and shredders will be installed is: for the first 25 (one in each region) - 3-5 months; other 42 - for the next 6-8 months. Installation of incinerators requires appropriate engineering and organizational solutions, such as allocation of land or premises within the industrial zone or outside the settlement, preparation of the site for installation (supply of relevant communications, including gas, water, electricity), logistics (transportation of medical waste) , obtaining appropriate permits for activities (permission to use gas equipment, sanitary and hygienic conclusion, conclusion of ecological expertise, obtaining a license for transportation and disposal of hazardous waste, permit for emissions) and staff training. This process usually takes about 12-18 months.

To ensure the sustainable effect of effective medical waste management, health care facilities should be equipped with specialized containers for sorting, storage and transportation of medical waste of limited use. On average, each health care facility requires 3 containers for category B medical waste (infectious hazardous waste). According to the Center for Medical Statistics of the Ministry of Health of Ukraine, as of the beginning of 2020, there were 4250 vaccinating centers in Ukraine.

Hereby Exemplary technical specifications for waste management equipment are provided:

**Exemplary technical specifications:**

1. Autoclave (steam sterilizer):

1) the chamber of 450-650 liters;

2) intended for medical institutions (disposal of medical waste, including textiles, rubber and plastic items, as well as packaged items, porous material and solutions);

3) control by means of the contact display;

4) the presence of programs for sterilization at a temperature of at least 132 ºC for 60 minutes;

5) compliance with DSTU EN 285: 2019 Sterilization. Steam sterilizers. Large sterilizers;

6) compliance with DSTU EN ISO / IEC 17065: 2014 Conformity assessment. Requirements for certification bodies for products, processes and services;

7) possibility of warranty service in Ukraine.

2. Shredder (industrial shredder):

1) grinds syringes, needles, transfusion and blood collection systems;

2) power not less than 8 kW / h;

3) capacity of not less than 20 kg of waste per hour;

4) possibility of warranty service in Ukraine.

3. Incinerator (incinerator):

1) stationary accommodation;

2) used fuel - gas;

3) volume of the combustion chamber - not less than 1 m3;

4) purpose - utilization of hazardous medical waste;

5) the presence of a combustion chamber;

6) temperature in the main chamber - not less than 750 ºС, in the combustion chamber - not less than 1200 ºС;

7) temperature control;

8) control by means of the contact display;

9) possibility of additional loading during combustion;

10) gas purification system;

11) burning rate - not less than 5000 kg per day;

12) compliance with technical regulations for appliances running on gaseous fuel;

13) he possibility of warranty service in Ukraine.

4. Container for storage and transportation of medical waste of limited (frequent) use:

1) the color of the containers - red, availability of biological danger symbol will be an advantage;

2) volume - not less than 80 liters;

3) material - a synthetic polymer made of material resistant to damage, washing and disinfection, resistant to climatic changes (at a temperature from -30 to + 600C);

4) purpose - for temporary storage and transportation of category B medical waste;

5) has a tightly closed lid, handles for its transportation, smooth internal walls, presence of wheels will be an advantage.

An assessment will be conducted at the initial stages of the Project implementation. The assessment will propose optimal waste management schemes (to define which waste streams should be disinfected at the healthcare facility level and which should be transported to specialized facility outside) for all beneficiary healthcare facilities and outline staff training requirements. This commitment is reflected in the ESCP.

Taking into consideration results of the above assessment, a range and scope of appropriate equipment for medical waste management will be determined.

* **Mitigation of Occupational Health and Safety (OHS) Risks**

***Mitigation of SARS-CoV-2 infection risk at the workplace***

Employers, consulting with their occupational health and safety experts, should regularly update a workplace risk assessment for SARS-CoV-2, plan and implement adequate measures for risk prevention and mitigation for health workers.

The following workplace risk levels may be useful for employers and occupational health services when carrying out rapid risk assessments for potential occupational exposure to SARS-CoV-2 for different jobs or tasks.

1. Lower risk − jobs or tasks without frequent, close contact with the public or others and that do not require contact with people known or suspected of being infected with SARS-CoV-2.

2. Medium risk − jobs or tasks with close frequent contact with patients, visitors, suppliers and co-workers but that do not require contact with people known or suspected of being infected with SARS-CoV-2.

3. High risk − jobs or tasks with high potential for close contact with people who are known to be or suspected of being infected with SARS-CoV-2 or contact with objects and surfaces possibly contaminated with the virus.

4. Very high risk − jobs and tasks working with infected people in indoor, crowded places, including infected people, without adequate PPE.

Levels of workplace risk, even in the same work setting, may vary based on health worker tasks and roles. Therefore, a workplace risk assessment should be carried out for each specific setting, as well as for each role, task or set of tasks.

The risk assessment should lead to prevention and mitigation measures to avoid additional risks, bearing in mind the local epidemiological situation, the specificity of the work setting and work tasks, the hierarchy of controls and the level of adherence to preventive measures.

Some health workers may be at higher risk of developing severe COVID-19 illness because of complicated anamnesis. Such workers should not be required to carry out tasks with medium, high or very high-risk levels in accordance with WHO recommendations.

Some health workers, especially those who are students, volunteers, interns, newly-graduated or are returning to the workplace after time away, may be at greater individual risk because they are unfamiliar with IPC procedures or make errors while practicing newly acquired skills. Appropriate task delegation and role assignment should be considered, with provisions for regular supportive supervision in line with WHO and ILO recommendations.

Health workers should be encouraged to report if they have had occupational or non-occupational exposure to COVID-19 without use of PPE.

***Mitigating risks of other professional infections***

While providing care to COVID-19 patients and delivering essential health services, health workers may be exposed to other infectious hazards.

During the COVID-19 pandemic, health workers should continue receiving vaccination recommendations and, giving consent of informed person, be vaccinated in accordance with national immunization program and WHO recommendations. The WHO also recommends to encourage health workers to be vaccinated against a seasonal flu.

***Mitigation of PPE prolonged use risks***

The time spent in a complete set of PPE should be limited.

In healthcare, PPE is used to protect mucous membranes, respiratory tract, skin and clothing from contact with infectious agents. Suits, gowns, masks, respirators, goggles, shields and gloves must meet state standards:

*- Biosafety suit*

It should be soft and light, with glued or sealed seams, with knitted cuffs on the sleeves or a loop for the fingers, antistatic finish. The suit must be combined with other PPE. It should also be waterproof, light in color, with long sleeves and ankle length.

It is worn with boot covers to protect the patient's skin and clothing from biological secretions during airborne procedures, disinfection, or in case of close contact with a person with a suspected or confirmed case of COVID-19. The suit must meet the requirements of DSTU EN 14126: 2008 and DSTU EN 13034: 2017, DSTU EN 14605: 2017.

*- Disposable insulating medical dressing gown*

Soft and light, with glued or welded (sealed) seams, with knitted cuffs on the sleeves or finger loop, antistatic treatment and can be combined with other types of PPE. The robe should be waterproof, light in color, with long sleeves and mid-calf length, with straps that are fixed at the waist and neck. Like the suit, the gown is worn to protect the patient's skin and clothing from biological secretions during airborne procedures, disinfection, or when in close contact with a person with a suspected or confirmed case of COVID-19. The dressing gown must meet the requirements of DSTU EN 14126: 2008 and DSTU EN 13034: 2017, DSTU EN 14605: 2017.

*- Surgical masks*

Made of hypoallergenic odorless non-woven material. The outer and inner surfaces should be different colors, on elastic bands, with a lock on the bridge of the nose. Masks should not interfere with free breathing. Surgical masks must meet the requirements of DSTU EN 14683: 2014.

*- Respirators of protection class FFP2 and above*

Respirators are designed to protect against fine aerosols. Maximum protection against solid and liquid aerosols at concentrations up to 12 MAC for FFP2 and up to 50 MAC for FFP3. The respirator must be made of non-woven filter material, be equipped with a nose clip (nose clip) and a nasal obturator. The inside of the respirator should be made of a soft hypoallergenic non-woven fabric. The respirator must meet the requirements of DSTU EN 149: 2017.

- *Safety goggles*

Safety goggles must have indirect ventilation, transparent plastic lenses with anti-fog coating and scratch protection, adjustable straps provide a strong attachment. Alternatively, there may be a flexible frame that easily adapts to all facial contours and is placed with uniform pressure. Reusable safety goggles must be resistant to cleaning and disinfection. Safety goggles must meet the requirements of DSTU EN 166: 2017.

- *Protective shield*

Must completely cover the face, in particular, on the sides and length. It must be made of transparent plastic material with a coating against fogging and protection from scratches. An adjustable strap is required for a snug fit on the head and comfortable wearing. The protective shield must be resistant to cleaning and disinfection.

The protective shield must comply with DSTU EN 166: 2017.

- *Gloves not powdered with nitrile*

Must have a long cuff, be free of talc. These should be universal nitrile, elastic gloves for single use. Compliance with DSTU EN 455-1: 2014, DSTU EN 16523-1: 2018.

***Mitigation of risks due to use of disinfectants***

Disinfectant solutions must be prepared and used according to the manufacturer’s recommendations in well-ventilated areas, avoiding mixing of different disinfectants.

Health workers involved in the preparation and application of disinfectants should be evaluated for medical contraindications, trained in the safe use of disinfectants, provided with adequate PPE and instructed in its proper use. WHO does not recommend spraying individuals with disinfectants under any circumstances.

***Mitigation of risks due to workload***

To ensure a fair distribution of workload and management of working hours, as well as for the organization of work, it is necessary to provide support to health care workers.

In the case of a declared public emergency, such as the COVID-19 pandemic, exceptions to the provisions on normal working hours should be authorized only temporarily in accordance with ILO recommendations. Measures should be taken for the optimal organization of working hours, shifts and rests, as practically feasible, based on the local situation.

***Mitigation of violence, harassment, discrimination and stigma risks***

Violence, harassment, discrimination and stigma against health workers should be prevented and eliminated as much as possible. Some countries have introduced specific legislation, for example by criminalizing such acts and providing regulatory protection for health workers, to prevent and eliminate violence and harassment and retaliation against health workers. National governments and local authorities can adopt community-engagement and communication initiatives and behavioural standards, to prevent stigmatization of health workers at the workplace and in the community thereby promoting public respect and recognition of the role of health workers.

***Mitigating mental health risks***

The WHO interim guidance, Health workforce policy and management in the context of the COVID-19 pandemic

response, from 3 December 2020, specifies interventions to support health workers’ mental health issues at the

individual level. According to international recommendations by WHO and others, the following additional measures should be considered for protecting mental health in the workplace:

• Implement surveillance measures to detect critical incidents and mitigate their impact on the mental health of

health workers.

• Ensure that quality communication and accurate information updates are provided to all health workers, and

rotate workers from higher-stress to lower-stress functions.

• Ensure availability to confidential mental health and psychosocial support services for health workers, including remotely-provided services.

• Provide mechanisms for early and confidential identification and management of anxiety, depression and other

mental health conditions, and initiate psychosocial support strategies.

• Promote a mental health prevention culture among health workers and health managers.

***Sanitation, hygiene and rest facilities***

Functioning hand hygiene facilities should be present for all health workers at all points of care: in designated areas where PPE is put on or taken off; in toilets and rooms for personal and menstrual hygiene, and where health-care waste is handled. Ensure availability of clean running water, liquid soap, single-use paper towels. Sanitizers containing 60−80% alcohol should be available at all points of care.

Access to rest and relaxation rooms, safe drinking-water, toilets, supplies for personal hygiene should all be available during work shifts. These areas should allow for adequate ventilation.

There should be daily accounting for cleaning and disinfection of surfaces, waste disposing and disinfecting the bins.

Facilities should be provided at the workplace for health workers to change into and out of work clothing.

* **Mitigating risks related to non-compliance with cold-chain requirements**

In Ukraine, the system of supply and storage of vaccine against COVID-19 has the following levels:

- national level - SE "Ukrvaktsina";

- regional level - 25 warehouses;

- district level - 490 storage points;

- vaccination points, which will be created specifically for vaccination against coronavirus COVID-19 (planned number - 4250). It is also planned to include 572 mobile vaccination teams in the vaccination program.

The organization of receipt to the national warehouse and distribution of vaccines to warehouses of regional level is carried out by means of autorefrigerators of SE "Ukrvaktsina". From the oblast level to the regional level vaccines are distributed by vehicles, which mainly belong to health care facilities, and to the vaccination points they will be delivered directly by the primary health care facilities where the vaccination points are located (if necessary or at least once per month) using thermal containers.

In order to properly assess the storage conditions and determine the potential of the existing equipment of the cold chain the PHC in the 4th quarter of 2020 carried out an inventory of existing refrigeration equipment in the regions and analyzed information from structural units on health care of administrative territories concerning condition of existing refrigeration equipment used for storage of medical immunobiological drugs in health care facilities at different levels of the cold chain.

The analysis identified the need to upgrade the existing refrigeration equipment in HCFs, in particular 2,583 refrigerators produced before 2000 are used and 6,393 refrigerators produced within a timeframe from 2000 to 2010, which need to be depreciated.

In addition, an evaluation was conducted in collaboration with UNICEF using the Sizing Tool, i.e. a tool for determining a size and links of a cold chain. This tool makes it possible to obtain and evaluate data on planned and additional immunizations (cold chain capacity), possible transport costs from the initial level (national) to the lower level of distribution (vaccination points), input requirements for immunization per one recipient (vaccine, solvent, toolfor injections, etc.), the amount of waste generated and the cost of their disposal, a general idea of ​​the analysis of distribution routes, etc.

According to the results of the calculation, insufficient volumes of warehouses of oblast level were determined in 4 oblasts (Poltava, Ternopil, Kharkiv and Chernihiv) with vaccine storage conditions of +2 - + 8 ° С;equipment shortages were determined in 18 oblasts and in the national warehouse with vaccine storage conditions of -20 ° C. Only 6 oblasts (Zhytomyr, Zaporizhia, Kherson, Khmelnytskyi, Cherkasy, Chernivtsi and Kyiv City have sufficient capacity to receive a vaccine.

With reference to the results of the assessment to be carried out at the initial stage of the Project implementation, necessity of refrigeration equipment purchasing will be determined to ensure the storage of the vaccine against COVID-19 in accordance with the requirements of the cold chain. In HCF where the Project procures new refrigerators for the transportation and storage of vaccines, old refrigerators containing ozone-depleting substances must be disposed of safely in accordance with pertinent national regulations and international requirements.

## 6.3. Monitoring and reporting within the Project implementation

MOH through PIU is responsible for overall implementation of the Project, ensuring that project implementation is compliant with the World Bank’s ESF - particularly, with the relevant ESSs; the World Bank Group’s EHS Guidelines; WHO COVID-19 Guidelines; and this ESMF. The PIU will be adequately staffed and maintained throughout the project life.

Within the framework of the Project the PIU will be responsible for monitoring of environmental and social management tools implementation.

At the initial stage of the Project implementation, a screening (assessment) of the HCFs participating in the Project shall be provided to check their operational system of infection control and disposal of medical waste, and compliance with requirements of OHS.

The actual ways of handling medical waste used in health care facilities will be assessed to determine how they correlate with the World Bank's guidelines on OHS, as well as the current WHO guidelines on COVID-19. The evaluation of existing waste management systems will be carried out following the form provided in Annex 2, and it will include:

* + - * + Identification of current methods of medical waste management and disposal at the healthcare facility;
				+ Identification of any on-site disinfection/distraction and/or disposal facilities for medical waste including incinerators, pits for burial of medical waste, etc.;
				+ Identification of removal and final disposal of medical waste from a given healthcare facility, including how material is gathered and stored, routes taken to the disposal facility, and disposal procedures;
				+ Review of protocols for dealing with medical waste specifically related to infectious diseases like COVID-19;
				+ Review of training delivered to healthcare workers and other relevant employees of medical facilities for medical waste management and disposal; and
				+ Identification of whether an ICWMP need to be prepared for a given HCF.

Furthermore, a review of instructions related to OSHhHS for protecting healthcare workers from infections disease applied by the given HCF based on current WHO Guidelines (<https://www.who.int/medical_devices/priority/COVID_19_PPE/en/> ) for COVID-19 and the ICWMP (Annex 4) as well as the ILO guidance on safety measure for
employees in the health sector

(<https://www.ilo.org/sector/Resources/publications/WCMS_741655/lang--en/index.htm>) will be done.

The review will include:

* + - * + Determination whether preparation of healthcare workers and other employees of the HCF is adequate;
				+ Determination if adequate stocks of PPE are available on-site.

Since the Project will address the identified gaps and shortcomings it will be important that the Project uses international expertise to achieve international best practices in line with WHO guidelines.

All measures implemented by the Project will be assessed in accordance with the form set out in Annex 2, in order to exclude unacceptable and risky activities, identify potential environmental and social problems and environmental and social risks. Copies of each of these forms of screening (assessment) will be kept in the PIU office. The quarterly PIU report to the WB will include copies of screenings conducted during the quarter.

The beneficiary HCFs of the Project will prepare and implement the necessary environmental and social tools and procedures for activities funded under the Project, following templates provided by the ESMF. The PIU will provide materials and support in development of necessary documents, among them ESMP and ICWMP, also clarifications concerning LMP, GRM, OHS procedures and Code of conduct in accordance with requirements of WB ESSs and this ESMF.

* The ESMP - after screening an Environmental and Social Management Plan shall be prepared on the basis of the model given in Annex 3. The ESMP prepared by the beneficiary HCFs shall contain the following information (but not limited to): the Project context and components, identify Project risks and impacts, include issues of labor safety and protection, the institutional capacity, the GRM. In the meantime, the ESMP should include Mitigation Measures Plan and Monitoring Plan.
* The ICWMP - each beneficiary medical institution will prepare and implement the ICWMP on the basis of the recommendations provided in Annex 4. The ICWMP will provide information of adequate facilities for hand washing, cleaning and disinfection procedures, use of PPE and medical waste disposal. When developing the ICWMP, the WHO guidelines on the rational use of PPE during the COVID-19 pandemic, which focuses on the problems arising from the global shortage of PPE, should be taken into consideration.

The ESMP and the ICWMP should include the relevant elements of occupational safety and health management, as described in the WB OHS Guidelines.

* With reference to the Labor Management Procedures (LMP) the PIU will monitor that each person performing work under the Project or providing consultant services, is officially employed or has a signed contract; that each employee or consultant is familiarized with the Project GRM and has opportunity to express concerns or submit grievance.
* The SEP – MOH has developed a Stakeholders Engagement Plan (SEP) for the Project that is applied for all activities funded by the Project. This document is aimed at achieving interaction with stakeholders of the Project, communication with them, informing the public about the Project. The document contains links to GRM and information channels. The document was officially disclosed on MOH website in March 2021.

*Consultations and disclosures*. Given the need for social distancing during the COVID-19 pandemic, stakeholder consultations on environmental and social tools will be conducted remotely when required. The PIU and the beneficiary medical institutions identify key stakeholders and consult with them through virtual platforms and e-mails, if necessary, and hold smaller meetings for healthcare workers, temporarily for no more than ten people. All tools will be published on the websites of the MoH and medical beneficiary institutions, if such websites exist, and printed versions of these documents will be available and submitted on request. The documents will also be published on the World Bank's website.

*Review and approval*. Environmental and social management tools will be prepared by the beneficiary HCFs supported by the PIU, thereafter they will be reviewed by the PIU and approved by the WB.

*Implementation*. Beneficiary medical institutions will be responsible the implementation of environmental and social management tools. The PIU will support and monitor the implementation of the Project.

*Monitoring and reporting*. the Project provides for two types of reports: monthly reports of beneficiary medical institutions to be provided to the PIU and quarterly reports to be provided by the PIU to the WB:

* + - *Monthly reports*. Each HCF will prepare monthly reports on each type of environmental and social activities for submission to the PIU. These reports will include updated information on any minor ongoing work (if performed), updated data related to the implementation of the ICWMP, recorded complaints received under the GRM, information on their consideration and resolution, and any other relevant information.
		- *Quarterly reports*. During the Project implementation period, the PIU will quarterly submit to the WB general reports on the Project implementation. These reports will include updated data on the implementation of the Project; summary information on received complaints and their resolution; summary of environmental and social activities for each individual beneficiary HCF, copies of screenings (assessments) and other tools related to specific HCF prepared during the quarter. Quarterly reports will be part of the PIU's overall reporting to the WB of the Project progress.

## WB risk minimization and impact mitigation tools under the Project

All environmental and social risks that exist or will be identified during the implementation of the Project will be mitigated with the help of the relevant WB ESSs. The PIU will monitor if the Project activities provided by HCFs comply with requirements of the ESSs. ESS1, ESS2, ESS3, ESS4 and ESS10, which have been identified as relevant to the Project, will be applied to avoid, minimize or mitigate environmental and social risks. In accordance with these ESSs, the PIU prepared the following environmental and social management tools:

* ЕSS1 - Assessment and Management of Environmental and Social Risks and Impacts .

ESS1 regulates preparation of the following main instrument of environmental and social management:

The ESMF is a manual that includes templates for development of Environmental and Social Management Plan (ESMP) (Annex 3) and the Infection Control Waste Management Plan (ICWMP) (Annex 4) by the HCFs to support international best practices of prevention, diagnosis, treatment and vaccination against COVID-19 within the Project.

* ESS2 – Labor and working conditions.

The Project will be carried out in accordance with the applicable requirements of ESS2 in a manner acceptable to the WB, including, inter alia, implementing adequate occupational health and safety measures (including emergency preparedness and response measures), setting out grievance arrangements for project workers, and incorporating labor requirements into the ESHS specifications.

The Project is expected to encompass the following categories of labor resources: independent consultants who will directly provide services for implementation of the Project, and medical staff who will work under an employment agreement or under a contract.

In accordance with ESS2, the LMP were prepared as an integral part of the ESMF, and presented in the Annex 5 of this ESMF. It is designed to respond to specific occupational safety issues related to COVID-19; and to protect labor resources' rights, as set out in ESS2.

* ЕSS3 - Resource and Efficiency, Pollution Prevention and Management.

Medical wastes can have impact on the environment and human health.

Each beneficiary medical facility/lab, following the requirements of the ESMF, WHO COVID-19 guidance, and other best international practices, will prepare and follow an ICWMP to prevent or minimize adverse impacts due to generation of medical waste. The ICWMP will mandate that any waste associated with COVID-19 testing or vaccination will be treated on site whenever possible. It will also contain specific preventive measures for disinfecting and packing of such waste prior to their transportation by the licensed companies.

* ЕSS4 – Community Health and Safety.

Medical wastes and general waste from the labs, health centers, and quarantine and isolation centers have a high potential of carrying micro-organisms that can infect the community at large if they are not properly disposed of. There is a possibility for the infectious microorganism to be introduced into the environment if not well contained within the laboratory or due to accidents/ emergencies e.g. a fire response or natural phenomena event (e.g., seismic).

The operation of HCF needs to be implemented in a way that staff, patients, and the wider public follow and are treated in line with international best practice as outlined in WHO guidance for COVID-19 response.

The Project will avoid the risks of sexual exploitation and abuse by applying the WHO Code of Ethics and Professional Conduct to all health care workers, and will pay special attention to the functioning of gender-sensitive infrastructure, such as separate toilets for men and women, adequate lighting of medical centers, etc..

The Stakeholder Engagement Plan (SEP) also provides for wider engagement of public to disseminate health and safety information.

* ЕSS10 – Stakeholder Engagement and Information Disclosure.

The Project recognizes the need for effective and inclusive engagement with all of the relevant stakeholders and the population at large. Considering the serious challenges associated with COVID-19, dissemination of clear messages around envisaged vaccination is critical.

In accordance with ESS10, a Stakeholder Engagement Plan (SEP) was prepared, which identifies and analyzes key stakeholders and describes the process and methods of exchanging information on Project activities, includes comments from Project stakeholders, provides for reporting and disclosure of Project documents. The SEP is intended not only to assist in the implementation of the Project’s public mobilization and attitudes, but also to prevent dissemination of false information related to COVID-19 and vaccination, and to ensure equal access to services. The document was reviewed, adopted by the WB and published on the official website of the MoH.

Stakeholders were involved in the initial phase of this Project: on December 2-03, 2020, the first public consultations with governmental and non-governmental NGOs were held. Thereafter a draft SEP was published on the official website of the MoH. Subsequently, in March 2, 2021, a second public consultations with stakeholders were held, and on March 5, 2021, the final version of the SEP was published on the MoH website. More information on consultations can be found in section 3.4 of the SEP.

No activities that exceed anticipated environmental and social risks will be supported by the Project.

In general, the Project is anticipated to have positive environmental and social consequences.

# Public Consultation and Disclosure

According to the WB ESF, the borrower through the Project implementing entities, should ensure the open dialogues, public consultations, timely and full access to information related to the Project activities. Accordingly, the draft ESMF will be disclosed on MOH website both in Ukrainian and English and be made available for feedback from any interested parties/individuals, civil society organizations, labor organizations and environmental professionals through different network channels and e-mail with advance notice before disclosure. Due to the recent regulations in the country related to the Covid-19 pandemic, a public consultation meeting on current ESMF will be conducted virtually. The day before the public consultation, interested parties will be sent reminders and provided with corresponding link. The minutes of the public consultation meeting will be annexed to this ESMF (Annex 7).

The Final ESMF cleared by the World Bank will be disclosed on the official websites of MOH and the World Bank.

# Grievance Redress Mechanism (GRM)

## 8.1. Definition of the GRM

Transparency and accountability are core elements of the Project. For this purpose, the Project will include a GRM. The goal of the GRM is to strengthen accountability to beneficiaries and to provide channels for project stakeholders to provide feedback and/or express grievances related to project supported activities. The GRM is a mechanism that allows for the identification and resolution of issues affecting the project. By increasing transparency and accountability, the GRM aims to reduce the risk of the project inadvertently affecting citizens/beneficiaries and serves as an important feedback and learning mechanism that can help improve project impact. The mechanism focuses not only on receiving and recording complaints but also on resolving them. While feedback should be handled at the level closest to the complaint, all complaints including anonymous should be registered at the respective grievance log and follow the basic procedures set out in this chapter.

Accessible grievance mechanism shall be established, publicized, maintained and operated in a transparent manner that is culturally appropriate and readily accessible to all Project-affected parties, at no cost and without retribution, including concerns and grievances filed anonymously, in a manner consistent with ESS10. The grievance mechanism shall also receive, register and address concerns and grievances related to the sexual exploitation and abuse, sexual harassment in a safe and confidential manner, including through the referral of survivors to gender-based violence service providers

GRM is a process for receiving, evaluating, and addressing project-related complaints from citizens and affected stakeholders at the level of the project. The terms ‘grievance ‘and ‘complaint’ are used interchangeably.

## GRM Scope and Use

*SCOPE:* GRM will be available for project stakeholders and other interested parties to submit questions, comments, suggestions and/or complaints, or provide any form of feedback including anonymous on all project-funded activities.

*GRM’s users:* Project beneficiaries, project affected people (i.e. those who will be and/or are likely to be directly or indirectly affected, positively or negatively, by the project), as well as the broader citizenry can use the GRM for the above purposes (see Scope).

*GRM’s management*: The GRM is managed by the MOH`s PIU, under the direct responsibility of PIU director.

*Submission of complaints:* Complaints can be expressed at any time throughout project implementation.

## Procedures and Channels to Make Complaints

The Project-level GRM mechanism will be available to project stakeholders including those who believe are negatively affected by the project to submit questions, comments, suggestions and/or complaints and provide any form of feedback on all project-funded activities. A GRM will also be established at all beneficiary health institutions where the project activities are implemented, including COVID-19 activities, that are available to local population and the staff of beneficiary health institutions.

GRM shall establish mechanisms and procedures for:

* Channel(s) to make complaints;
* Registration of complaints and keeping logbook;
* Investigation of the event(s) and their consequences;
* Response to the complainant;
* Right of complainant to appeal.

Project stakeholders will be able to submit questions, complaints and compliments/suggestions through the GRM, without disclosing the identify if so wished (anonymous requests). The GRM will focus not only on receiving and recording feedback, questions and complaints but also on how complaints are responded to and resolved.

The GRM will be established at 3 levels:

Level 1. Health facility site. All beneficiary health institutions will establish a GRM at the facility level. The channels for grievance submission will be disclosed near reception area of the healthcare facility, chief doctor’s office or the testing/vaccination site if applicable. Special grievance box will be available for submitting grievances (including anonymous). The local focal point during 3 days should decide who is responsible for addressing the grievance and forward it accordingly. Collected information will be documented at health facility level GRM log and submitted to the central level PIU for GRM Focal Point attention and acknowledgment in project GRM log.

Level 2. Local authorities also could receive the grievances or appeals related to the project activity. According to Law of Ukraine "On citizens appeals" the period for grievance addressing can’t exceed more than 30 calendar days. The PIU will periodically request info regarding grievances received by local authorities and incorporate it to the grievance log with status of grievance/appeal resolution.

Level 3. PIU – In case if the Complainant has not been satisfied with the results of grievance consideration at the local level, he/she can also submit the grievance to PIU which have designated focal person. The designated person should review the complaint during 3 business days and identify relevant circumstances of the situation. The corrective measures should take place within 10 business days and the response provided to the complainant during 5 business days after closing of the grievance.

In case, if more time needed for addressing the complaint, the complainant will be further notified.

The complainant will be able to submit grievance to PIU on address:

*Ministry of Health of Ukraine*

*COVID-19 Emergency response Vaccination Project Team*

*Grushevskogo Street 7*

*01601, Kyiv*

*Email: moz@moz.gov.ua; j.kohut.moz@gmail.com*

Citizens’ appeals, complaints and recommendations procedure is specified in the Law On Citizens’ Appeals and amendments to the latter through the 2015 amendment on Electronic Petitions.

According to the mentioned law and Constitutional Article 40, the Project proposes the following channels through which citizens, beneficiaries and PAPs can make complaints regarding project-funded activities:

1. By the MOH hotline number: 0-800-60-2019
2. By E-mail: moz@moz.gov.ua; j.kohut.moz@gmail.com
3. Through the following web page: wb.moz.gov.ua
4. In writing to MOH
5. In person: at the above addresses or at the addresses of delegated authority by the latter
6. Complaint box at health care facilities with indication of the contact information for feedback (full name, contact telephone number, e-mail address).
7. Other: Written complaints to project staff (through project meetings)

The project shall ensure flexibility in the channels available for complaints, as well as ensure accessibility to the contact information for individuals who make complaints.

To this effect, in addition to the GRM provided by the project, citizens can also file their appeals in accordance with Article 5 of the Law of Ukraine On Citizens’ Appeals. In the latter case, the appeals filed by citizens should contain full name, place of residence, the issue of the question, comment, application, claim, statement, request or demand. A written appeal should be signed and dated by the appealer (appealers). An appeal sent via e-mail to the MOH noted above should contain an e-mail address or postal address or any other means of communication in order to answer the appeal. The use of electronic signature is not required for e-mail appeals.

Confidentiality will be ensured in all instances, including when the person making the complaint is known. For this reason, multiple channels to make a complaint have been established and conflicts of interest will be avoided. Project Affected People also have possibility to file complaint anonymously.

The person receiving the complaint will complete a grievance form provided in SEP and will record the complaint in the Register of Complaints, kept under GRM manager who will be dedicated in PIU as focal point. The Project Coordinator is responsible for determining who to direct the complaint to, whether a complain requires an investigation (or not), and the timeframe to respond to it.

When determining who will be the investigating officer, the Project Coordinator should ensure that there is no conflict of interest, i.e. all persons involved in the investigation process should not have any material, personal, or professional interest in the outcome and no personal or professional connection with complainants or witnesses.

Once the investigation process has been established, the person responsible for managing the GRM records and enters this data into the Register of Complaints.

The number and type of suggestions and questions should also be recorded and reported so that they can be analyzed to improve project communications.

Under Article 20 of *the Law of Ukraine on Citizens’ Appeals,* appeals are considered and resolved no later than one month from the date of its receipt, and immediately to those that do not require additional study, but not later than 15 days from the date of its receipt. If issues raised in the appeal cannot be resolved within one month, the head of the body, enterprise, institution, organization, or his deputy define necessary time for its consideration, and report about it to the person who filed the appeal. At the same time the entire term for resolving issues raised in the appeal may not exceed forty-five days.

To process the grievance, the person responsible for investigating the complaint will gather facts in order to generate a clear understanding of the circumstances surrounding the grievance. The investigation/follow-up can include site visits, review of documents and a meeting with those who could resolve the issue.

The results of investigation and the proposed response to the complainant will be presented for consideration to the Project Coordinator, who will decide on the course of action. Once a decision has been made and on the complainant informed, the investigating specialist describes the actions to be taken in the grievance form (see Annex 1 to SEP), along with the details of the investigation and the findings, and submits the response to the Coordinator for signing.

The complainant will be informed about the results of verification via letter or email, as received. The response shall be based on the materials of the investigation and, if appropriate, shall contain references to the national legislation.

The deadline for investigating the complaint may be extended by 30 working days by the Project Coordinator, and the complainant is to be informed about this fact, whether:

1. additional consultations are needed to provide response to the complaint;
2. the complaint refers to a complex volume of information and it is necessary to study additional materials for the response.

## Tasks and responsibilities of the PIU team on the GRM

The Project Coordinator will allocate responsibilities to the PIU staff – Grievances Focal points (GPF). These will be documented in the Project Operations Manual, and kept updated.

* Overall management of the GRM system
* Developing and maintaining awareness-building
* Collection of complaints
* Recording complaints
* Notification to the complainant on the receipt and timeline to review a complaint
* Sorting/categorization of complaints
* Thorough examination of the issues, including the causal link between project activities and alleged damage/harm/nuisance
* Decision-making based on such examination
* Processing appeals or continuous communication with complainants with the purpose to resolve issues amicably
* Organization and implementation of information materials and awareness campaigns
* Reporting and feedback on GRM results.

## Grievance Log

The Grievance Focal Points will maintain local grievance logs to ensure that each complaint has an individual reference number and is appropriately tracked, and recorded actions are completed. When receiving feedback, including grievances, the following is defined:

- Type of appeal;

- Category of appeal;

- People responsible for the study and resolution of the grievance;

- Deadline of resolving the complaint; and - Agreed action plan

The GFPs will ensure that each complaint has an individual reference number and is appropriately tracked, and recorded actions are completed. The log should contain the following information:

* Name of the PAP, his/her location and details of his / her complaint;
* Date of reporting by the complaint;
* Date when the Grievance Log was uploaded onto the project database;
* Details of corrective action proposed, name of the approval authority;
* Date when the proposed corrective action was sent to the complainant (if appropriate);
* Details of the Grievance Committee meeting (if appropriate);
* Date when the complaint was closed out; and Date when the response was sent to the complainant.

## Monitoring and Reporting

The Head of PIU will review quarterly the functioning of the GRM in order to:

* Provide a monthly/quarterly snapshot of GRM results, including any suggestions and questions, to the project team and the management.
* Review the status of all submitted complaints including anonymous to track which are not yet resolved and suggest any needed remedial action.

During quarterly PIU meetings, the project team shall discuss and review the effectiveness and use of the GRM and gather suggestions on how to improve it.

In the semi-annual project implementation reports submitted to the Bank, MOH will provide information on the following:

* Status of establishment of the GRM (procedures, staffing, awareness building, etc.);
* Quantitative data on the number of complaints received, the number that were relevant, and the number resolved;
* Qualitative data on the type of complaints and answers provided, issues that are unresolved;
* Time taken to resolve complaints;
* Number of grievances resolved at the lowest level, raised to higher levels;
* Any particular issues faced with the procedures/staffing or use;
* Factors that may be affecting the use of the GRM/beneficiary feedback system;
* Any corrective measures adopted.

# Annexes

## Annex 1. Abbreviations and Acronyms

|  |  |
| --- | --- |
| CMU  | Cabinet of Ministers of Ukraine |
| COVAX  | COVID-19 Vaccines Global Access Facility |
| COVID-19 | Coronavirus Disease 2019 |
| EHS | Environmental, Health and Safety |
| EIA | Environmental Impact Assessment |
| EPRP | Emergency Preparedness and Response Plan |
| ESCP | Environmental and Social Commitment Plan |
| ESF | Environmental and Social Framework |
| ESHS | Environmental, Social, Health and Safety |
| ESIA | Environmental and Social Impact Assessment |
| ESMF | Environmental and Social Management Framework |
| ESMP | Environmental and Social Management Plan |
| ESS | Environmental and Social Standards |
| GBV | Gender based violence |
| GIIP | Good International Industry Practice |
| GoU | Government of Ukraine |
| GRM | Grievance Redress Mechanism |
| HCF | Health Care Facility |
| HIV | Human immunodeficiency virus |
| IBRD | International Bank for Reconstruction and Development  |
| IDA | International Development Association |
| ICWMP | Infection control and waste management plan |
| IFC  | International Financial Corporation  |
| ILO  | International Labor Organization |
| IPC | Infection prevention and control |
| Labor Code | Labor Code of Ukraine |
| LMP | Labor Management Procedures |
| MEPNR  | Ministry of Environmental Protection and Natural Resources |
| MOH | Ministry of Health of Ukraine  |
| MS | Minimum Salary  |
| MWM  | Medical Waste Management |
| NPP | Nuclear Power Plant |
| NSHU  | National Health Service of Ukraine |
| NTGEI | National technical group of experts on immunization |
| ODS | Ozone-depleting substances |
| OHS | Occupational Health and Safety |
| PBCs | Performance Based Conditions |
| PHC | Public Health Center |
| PIU | Project Implementation Unit |
| POPs  | Persistent organic pollutants |
| PPE | Personal Protection Equipment |
| Project | Ukraine Emergency COVID-19 Response and Vaccination Project |
| Roadmap | Roadmap for the introduction of the vaccine against acute respiratory disease COVID-19 caused by the coronavirus SARS-CoV-2, and mass vaccination in response to the pandemic COVID-19 in Ukraine in 2021-2022 |
| SARS-CoV-2 | Severe Acute Respiratory Syndrome – Coronavirus disease  |
| SEA | Sexual Exploitation and Abuse |
| SEP | Stakeholder Engagement Plan |
| SES | State sanitary and epidemiological service of Ukraine |
| UN  | United Nations |
| UNDP | United Nations Development Program |
| UNICEF | United Nations Children’s Fund |
| USAID | United States Agency for International Development |
| UTN | Unified Tariff Net |
| VRAF | Vaccine Readiness Assessment Framework |
| WB | World Bank |
| WBG | World Bank Group |
| WHO  | World Health Organization  |
| WTF | Water Treatment Facility |

## Annex 2. Screening Form for Potential Environmental and Social Issues

This form is to be used by the Project Implementation Unit (PIU) to screen for the potential environmental and social risks and impacts of a proposed subproject. It will help the PIU in identifying the relevant Environmental and Social Standards (ESSs). Use of this form will allow the PIU to form an initial view of the potential risks and impacts of a Project***.***

|  |  |
| --- | --- |
| Subproject Name |  |
| HCF Location |  |
| Start/Completion Date  |  |

| **Questions** | **Answer** | **ESS relevance** | **Due diligence / Actions** |
| --- | --- | --- | --- |
| **Yes** | **No** | **N/A** |  |  |
| Are the conditions available (a separate place envisaged) for storage of dangerous medical waste of category B within HCF? |  |  |  | ESS3 | ICWMP |
| Which ways of dangerous medical waste disinfection are applied within HCF:- autoclaving- use of chemicals - incineration- transfer to licensed companies |  |  |  | ESS3 | ICWMP |
| Is there a responsible person appointed by the HCF to work with dangerous medical waste  |  |  |  | ESS3 | ICWMP |
| Does the Project involve civil works including new construction, expansion, upgrading or rehabilitation of HCF? |  |  |  | ESS1 | ESMP/ SEP |
| Is it planned to arrange/install/reconstruct external waste treatment within the framework of the Project? (for example: incinerator, wastewater treatment plants for medical waste disposal, etc.)  |  |  |  | ESS3 | Installation of incinerators is possible in long-term perspective, will be regulated by the EIA; ICWMP. |
| Are expansion and improvement of waste treatment and disposal facilities envisaged in HCF within the Project? |  |  |  | ESS3 | ICWMP |
| Whether sufficient number of appropriate refrigerators are available within HCF? |  |  |  | ESS1 | ESMP |
| Does the Project envisage modernization of refrigeration equipment for vaccine storage in this HCF? |  |  |  | ESS1 | ESMP |
| Is there a clear regulatory framework and institutional capacity for infection prevention and control, including medical waste management within the HCF? |  |  |  | ESS3 | ICWMP/ESMP/SEP |
| Does the HCF provide for additional recruitment of employees to implement the Project? |  |  |  | ESS2 | LMP, SEP |
| Do the OHS procedures and the use of PPE in the involved HCF comply with the current regulations? |  |  |  | ESS2 | LMP |
| Are all consultants and employees of the HCF familiar with the GRM within the Project? |  |  |  | ESS10 | SEP |
| Does the subproject involve transboundary transportation of specimen, samples, infectious and hazardous materials from HCF within the Project? |  |  |  | ESS3 | - |
| Does the subproject involve use of security or military personnel during HCF operation connected with testing and vaccination? |  |  |  | ESS4 | Will be carried out when necessary - SEP |
| Can activity provided by HCF present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk? |  |  |  | ESS4, ESS10 | SEP |
| Does the subproject carry risk that disadvantaged and vulnerable groups may have unequitable access to vaccines provided to HCF within the Project? (especially considering deficiency of vaccines as of the period of Project commencement) |  |  |  | ESS4 | SEP, Roadmap |

**Conclusions:**

1. **Proposed Environmental and Social Risk Ratings (High, Substantial, Moderate or Low). Provide Justifications.**
2. **Proposed E&S Management Plans/ Instruments.**

## Annex 3. Environmental and Social Management Plan (ESMP) Template

**Introduction**

The HCFs involved into the Project will need to develop an Environmental and Social Management Plan (ESMP), setting out how the environmental and social issues will be managed through the project lifecycle. The below templates may be used by the HCFs when developing their ESMP.

The ESMP should also include other key elements relevant to delivery of the Project, such as institutional arrangements, plans for capacity building and training plan, and background information. The HCF may incorporate relevant sections of the ESMF into the ESMP, with necessary updates.

Appropriate stakeholder involvement should be ensured in the identification of mitigation measures, including the participation of health professionals and medical waste management experts.

The PIU will submit corresponding recommendations and materials to HCF for ESMP development.

Developed ESMP should be submitted to the Project Implementation Unit (PIU) for their review and approved by the World Bank (WB).

*Recommended structure for development of the ESMP:*

|  |
| --- |
| *Main Part* |
| *1* | Introduction. |
| *2* | Description of Project and its components. |
| *3* | Legislation. |
| *4* | HCF Institutional capacity. |
| *5* | Determination of the main risks and impact of the Project. |
|  | 5.1 Medical waste management.5.2 OHS.5.3 Provision of cold chain requirements. |
| *6* | Mitigation measures. |
| *7* | Grievance redress mechanism. |
| *8* | Stakeholders engagement. |
| *Annexes* |
| *1* | Mitigation Management Plan. |
| *2* | Monitoring Plan. |
| *3* | Grievance Register. |
| *4* | Minutes of consultations with stakeholders. |

It is suggested that Annexes to the ESMP include the following template:

| **Key Activities** | **Potential E&S****Risks and Impacts** | **Proposed Mitigation Measures** | **Responsi-bilities** | **Timeline** | **Budget (source)** |
| --- | --- | --- | --- | --- | --- |
| General HCF operation – Environment | General wastes, wastewater and air emissions |  |  |  |  |
| General HCF operation – OHS issues | * Physical hazards;
* Electrical hazards;
* Fire;
* Chemical use;
* Ergonomic hazard;
* Radioactive hazard
 |  |  |  |  |
| HCF operation – Labor issue | Noncompliance with Labor legislation, LMP |  |  |  |  |
| HCF operation – cleaning  | - lack of cleaning supplies,- insufficient qualiy of cleaning;- failure to provide staff with necessary PPE;- Inadequate training of cleaning staff. |  |  |  |  |
| Waste minimization from testing and vaccination, reuse and recycling | - uncontrolled production of medical waste;- lack of optimal ways of waste disinfection;- uncontrolled waste disposal. |  |  |  |  |
| Storage of waste from testing and vaccination | - lack of safety boxes;- lack of containers for waste disposal . |  |  |  |  |
| Waste segregation | Lack of color coding of medical waste containers |  |  |  |  |
| Onsite waste treatment and disposal | - excessive use of chemicals for processing;- unauthorized disposal of waste on the territory of the HCF |  |  |  |  |
| Validity of agreements concluded for utilization of medical waste  | Expiration of agreements with licensees. |  |  |  |  |
| Waste transportation to and disposal in offsite treatment and disposal facilities  | Disposal of HCF waste in unauthorized landfills |  |  |  |  |
| Emergency events | * spillage;
* accidental releases of infectious or hazardous substances to the environment;
* medical equipment failure;
* failure of solid waste and wastewater treatment facilities
* other emergent events
 | * Emergency Response Plan
 |  |  |  |

## Annex 4. Recommendations for preparation of Infection Control and Waste Management Plan (ICWMP)

One more important part of HCF environmental and social reporting within the Project, besides ESMP, will be Infection Control and Waste Management Plan (ICWMP).

While the ESMP will focus on generalizing the existing environmental and social issues in the HCF, the ICWMP will describe ways to deal with different categories of medical waste, as well as measures to implement infection control.

The approximate contents of the ICWMP are provided below:

1. **Introduction**
2. Describe the project context and components.
3. Describe the targeted healthcare facility (HCF).
4. **Infection Control**

**2.1** Overview of Infection Control Management in the HCF:

* Describe institutional arrangement, roles and responsibilities in the HCF for infection control management.
* Describe applicable performance levels and/or standards related to infection control.

**2.2** Infection ControlManagement Measures:

* Describe infection control measures already taken by the HCF.
* Describe procedures of infection control observed by the medical staff of the HCF:

- use of PPE;

- hand hygiene;

- use of supplies and equipment (such as safety boxes), etc.

* Describe measures taken by the HCF for patients’ protection:

- availability of entrance for contagious patients;

- availability of safety routing (strips);

- hand hygiene, etc.

1. **Waste Management**

**3.1** Overview of 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 following WBG [EHS Guidelines](http://www.ifc.org/ehsguidelines) 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; and
* Describe institutional arrangement, roles and responsibilities in the HCF for waste management.

**3.2** 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 waste.
* 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: an 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. autoclaves, incinerators). Within each HCF there should be existing scheme off treatment and disinfection of medical waste.
* Transportation and disposal at offsite waste management facilities. HCFs should have valid agreements with licensed companies.
* 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 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 should be conducted.
1. **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).

1. **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.
1. **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.

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.

When developing ICWMP by HCF the following Table should be taken into consideration:

***Table: Assessment of medical waste management in HCF***

|  |  |
| --- | --- |
|  | **Implementation status** |
| Requirements:1) HCF identified the person (persons) in charge of transportation of medical waste to the decontamination site:а) The person(s) in charge received appropriate education, training and testing of knowledge;b) PPE provided (at least, medical (surgical) mask, disposable or limited use apron, protective gloves);c) The schedule of medical waste removal/disposal from each unit (with the possibility of additional removal/disposal in case of excessive generation) developed, approved and implemented;2) disposable PPE is not disinfected at the place of removal;3) PPE is packed in a plastic bag, resistant to physical damage, so that the bag was filled no more than ¾:а) the process takes place in the sluice (for PPE removal or mixed-type);б) the outer surface of the package is treated with 05,% chloramine solution or 70-90% ethyl alcohol solution before transportation of the packages to temporary storage;4) temporary storage area/premises\* defined for packages with disposable PPE;5) the outer side of the package is treated with 0.5% chloramine solution or 70-90% ethyl alcohol solution before transportation;6) the person in charge picks up the packages at the scheduled time. | □□□□□□□ |

It is also recommended that the following Model Standards for Operating Procedures are considered in the preparation of the ICWMP:

Sample Operating Procedure Standards

‘Management of medical waste generated during vaccination campaign’\*

‘\_\_\_’ \_\_\_\_\_\_\_\_\_, (year)\_\_\_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
|  | Position | Name | Signature |
| Developed |  |  |  |
| Agreed |  |  |  |
| Approved | Head of HCF/SWF (Social Welfare Facility) |  |  |

Algorithm for medical waste transportation to temporary storage and

transfer to a specialized organization\*\*

| **#** | **Transport modalities and rules** | **Transport operation algorithm and clarifications** | **Regulatory instrument** |
| --- | --- | --- | --- |
| 1. | Modalities to be met | 1. Temporary storage site meets the following requirements:1) the floor of the premises has a sealed base, resistant to washing and disinfection;2) wall decoration is resistant to washing and disinfection at all heights;3) the premises are easily accessible to employees who are responsible for waste disposal;4) lock in place to prevent access by unauthorized persons;5) it is recommended that a dedicated trolley(s) be provided for waste transportation, made of materials resistant to cleaning and disinfection.2. The following consumables and means are available:1) containers for hazardous acute category B medical waste in two sizes, with the larger container accommodating the smaller one;2) containers or plastic bags resistant to damage with strings (hereinafter - the bag) for category B medical waste;3) bags;4) disinfectant containing 70-90% alcohol (hereinafter – the disinfectant) and detergent;5) disposable rags;6) bucket with a pedal for solid household waste/category A medical waste (hereinafter – the bucket). | State sanitary and epidemiological rules and regulations on medical waste management, approved by MoH Order No. 325 of June 8, 2015 registered with MoJ on August 7, 2015 at No. 59/27404. |
| 2. | Medical waste classification | 1. Category A medical waste:1) PPE in which waste is transported, except for PPE contaminated with biological fluids or immunobiologicals;2) rags;3) disposable wipes impregnated with alcohol;4) package of medical devices and consumables free of contamination with biological fluids and immunobiologicals.2. Category B medical waste:1) dangerous sharp objects - needles and other sharp objects contaminated with biological fluids or immunobiologicals;2) hazardous medical waste - any medical waste contaminated with biological fluids or immunobiologicals.3. Category C medical waste - immunobiologicals. Given identical approaches to decontamination, they are treated according to category B handling algorithm. | State sanitary and epidemiological rules and regulations on medical waste management, approved by MoH Order No. 325 of June 8, 2015 registered with Ministry of Justice on August 7, 2015 at No. 59/27404. |
| 3. | Modalities to be met as regards designated responsible employees | 1. Employees provided with the following PPE:1) medical (surgical) mask;2) disposable protective apron against infectious agents and/or chemicals (e.g., cellophane) (hereinafter – the apron);3) medical gloves;4) Kevlar gloves.2. Employees trained, which is confirmed by documentary evidence on:1) PPE putting, wearing, removing and disposing;2) hand hygiene;3) acute object trauma algorithm;4) medical waste handling algorithm;5) algorithm for medical waste transfer to a specialized organization, including the transfer schedule;6) algorithm of actions in emergency situations (for example, container/bag damage, trolley overturning). | Measures and means to prevent infection in the care of patients, approved by MoH Order of August 3, 2020, registered with MoJ on November 10, 2020 at No. 1110/35393.The procedure for emergency post-exposure prophylaxis of HIV infection in employees in the exercise of an occupational activity, approved by MoH Order No. 955 of November 5, 2013 registered with MoJ on November 20, 2013 at No. 1980/24512.State sanitary and epidemiological rules and regulations on medical waste management, approved by MoH Order No. 325 of June 8, 2015 registered with MoJ on August 7, 2015 at No. 59/27404.Methodological recommendations ‘Surgical and Hygienic Hand Treatment of Medical Staff’, approved by MoH Order No.798 of September 21, 2010 |
| 4. | PPE putting on/removal algorithm | PPE putting on algorithm:1) perform hygienic treatment of hands;2) put on the apron;3) wear a medical (surgical) mask;4) put on medical gloves.PPE removal algorithm:1) remove medical gloves;2) remove the apron;3) remove the medical (surgical) mask;4) perform hygienic treatment of hands. |
| 5. | Algorithm for transportation of hazardous medical waste  | Algorithm:1. Put on PPE;2. Make sure the container is tightly closed and its walls are not damaged;3. Treat the outer surfaces of the container with a cloth soaked in disinfectant;4. Allow exposure time of 60 seconds;5. Put the container in a bag and tie it up;6. Put the bag with the container on the trolley (if any) and/or transport it to temporary storage;7. Treat the surfaces of the trolley (if any) with disinfectant;8. Remove PPE and put them in the bucket;9. Perform hand hygiene. |
| 6. | Algorithm for transportation of dangerous acute medical waste in case of container damage | Algorithm:1. Put on PPE;2. Make sure the container is damaged;3. Place the container in the larger container for dangerous sharp objects and close it tightly;4. If at that sharp objects are dropped out of the damaged container on the floor or other surfaces, an employee must follow the following sequence of actions:1) remove medical gloves and throw them into the bucket;2) perform hygienic treatment of hands;3) wear Kevlar gloves;4) wear medical gloves;5) carefully collect sharp objects in the container;6) tightly close the container;7) treat medical gloves with disinfectant and allow exposure time of 60 seconds;4. Treat the outer surfaces of the container with a cloth soaked in disinfectant;5. Allow exposure time of 60 seconds;6. Put the container in a bag and tie it up;7. Put the bag with the container on the trolley (if any) and/or transport it to temporary storage;8. Treat surfaces of the trolley (if any) with disinfectant;9. Remove PPE and put them in a bag and tie it up (further handling according to category B medical waste handling and transportation algorithms);10. Perform hand hygiene.After transportation of the damaged container, the premises where it was located are thoroughly cleaned.  |
| 7. | Algorithm for transportation of category B medical waste  | Algorithm:1. Put on PPE;2. Make sure the container or bag is tightly closed/tied and its walls are not damaged;3. Treat the outer surfaces of the container/bag with a cloth soaked in disinfectant;4. Allow exposure time of 60 seconds;5. Put the container/bag in the bag and tie it up;6. Put the bag with the container/bag on the trolley (if any) and/or transport it to temporary storage;7. Treat the surface of the trolley (if any) with disinfectant;8. Remove PPE and put them into the bucket;9. Perform hand hygiene. |
| 8. | Algorithm for transportation of category B medical waste in case of container/bag damage | Algorithm:1. Put on PPE;2. Make sure the container/bag is damaged;3. Put the container/bag in the bag and tie it up;4. If at that the contents are dropped out of the damaged container/bag on the floor or other surfaces, an employee must follow the following sequence of actions:1) carefully collect the contents in the bag;2) tie the bag up;3) treat medical gloves with disinfectant and allow exposure time of 60 seconds;4. Treat the outer surfaces of the container with a cloth soaked in disinfectant;5. Allow exposure time of 60 seconds;6. Put the container/bag in the bag and tie it up;7. Put the bag with the container on the trolley (if any) and/or transport it to temporary storage;8. Treat the surfaces of the trolley (if any) with disinfectant;9. Remove PPE and put them in the bag and tie it up (further handling in accordance with category B medical waste handling and transportation algorithms);10. Perform hand hygiene.After transportation of the damaged container, the premises where it was located are thoroughly cleaned.  |
| 9. | Algorithm for medical waste transfer from the temporary storage to a specialized organization | Algorithm:1. Put on PPE;2. Make sure the containers and bags are tightly closed/tied and their walls are not damaged;3. Treat the outer surfaces of containers/bags with a cloth soaked in disinfectant;4. Allow exposure time of 60 seconds. 5. Put containers and bags on the trolley (if any); 6. Transfer containers/bags to a representative of a specialized organization (place in a specialized transport);7. Remove PPE and put them in the bucket;8. Perform hand hygiene.If the containers or bags are damaged, the algorithm specified in paragraph 5 or 7 of this operating procedure standard shall be followed.After containers and bags have been removed from the temporary storage, it is thoroughly cleaned. |

\* Template used to develop standard operating procedures.

\*\* ‘Specialized organization’ means an organization that has been licensed to handle hazardous waste in accordance with the law and has the capacity for waste incineration.

## Annex 5. Labor Management Procedures

***Introduction***

The Labor Management Procedures is aimed at summarizing mitigation measures that will be adopted by the project to address the risks related to labor management, including those relating to responding to the specific risks to workers posed by COVID-19.

The Project will be carried out in accordance with the applicable requirements of ESS2, in a manner acceptable to the Bank. This will include, inter alia, implementing adequate occupational health and safety measures (including emergency preparedness and response measures), setting out grievance arrangements for project workers, and incorporating labor requirements into the ESHS specifications of the procurement documents and contracts with contractors and supervising firms.

It is expected that the Project will cover the following categories of labor resources: independent consultants who will directly provide services for the implementation of the Project (hereinafter - direct consultants), and health workers who will work under a labor agreement or contract (hereinafter – hired employees).

PIU includes the above consultants. Under the Project, PIU consultants will mainly perform office work, with the exception of periodic visits to HCFs. Therefore, the risks to health and safety of these individuals are assessed as low. Risks such as overtime, irregular remuneration for services rendered and informal tasks are not expected.

Hired employees who will work under a labor agreement or under a contract include medical staff. The expected risks faced by medical staff include: exposure to the SARS-CoV2 and infectious disease caused by the virus COVID-19 with potential to grave outcomes including fatal illness and death, physical and mental exhaustion, occupational burnout, stigma and passing on infection to families and local communities, long shifts with little or no break and deprivation of sleep.

A locally based GRMs specifically for direct and contracted workers will be provided.

*Number of Labor Resources within the Project*

Direct Consultants. Preliminary, as of the beginning of the Project, the total number of consultants involved in the Project is 20, but this figure will be clarified during the Project.

Contracted Workers. The number of project contracted workers who will be employed are not known as of now. This will become known as and when implementation begins. It will be clarified when Project implementation begins.

Community workers: there are not expected to be any community workers in this project.

Assessment of Key Potential Labor Risks

Project activities may cause potential labor risks primarily for medical staff at vaccination.

The Project will support the increase of testing capacity in the country since even with the initiation of vaccine deployment, the incidence of new COVID-19 cases will not fall substantially in the short term.

Testing may also cause labor risks. Strong testing is essential for vaccine surveillance to monitor the vaccine-induced immunity with testing on a population level and the real-world effectiveness of COVID-19 vaccines and variations across different locations and populations. Further, testing is an essential part of prevention, which will remain critical given that vaccine coverage will be incomplete and focused on priority populations for some time due to global supply limitations.

*Key Labor Risks*

The key labor risks related to the occupational and health safety relate to the above-mentioned vaccination and testing. It is estimated that the risks would include, but not be limited to the following:

* risk of infection with COVID-19 at the place of professional activity;
* various skin lesions from prolonged use of PPE;
* exposure to toxins due to increased use of disinfectants;
* psychological stress;
* chronic fatigue;
* and discrimination, physical and psychological violence and harassment

Brief overview of labor legislation: terms and conditions

Labor legislation from the Labor Code of Ukraine and other laws or regulations of the Government.

* *Wages and deductions*

Remuneration of medical staff in HCF is regulated by:

* Clause 98 of the Labor Code of Ukraine (Labor Code);
* Clauses 8 and 13 of the Law of Ukraine “On Labor Remuneration”;
* Resolution of the CMU dated 30.08.2002 No 1298 “On remuneration of employees on the basis of the Unified tariff net of categories and coefficients for remuneration of employees in institutions, establishments and organizations of certain fields of public sector”;
* Resolution of the CMU dated 28.12.2016 № 1037 “On remuneration for employees of institutions, establishments and organizations of certain fields of public sector” ;
* Order of the Ministry of Social Policy and the Ministry of Health “On streamlining remuneration of employees of health care institutions and social protection institutions” dated 05.10.2005 No 308/519 (hereinafter - Order No 308/519 ; Conditions No 308/519).

Remuneration of employees is carried out for the actual time worked, based on the official salary (tariff rate), or depending on the implementation of performance rates and piece rates, taking into account the increases, surcharges and allowances provided by applicable law. The employee's salary is not limited. The specific amounts of surcharges, allowances and other payments are determined by the head of HCF at the expense and within the salary fund.

Size of the official salary of a particular employee is determined by multiplying size of official salary of employee of the first tariff category by the corresponding tariff coefficient specified in the Unified Tariff Net (UTN). The size of the minimum tariff rate (salary) of an employee with the 1st tariff category may not be lower than the subsistence level. Such requirements are stipulated by Clause 6 of the Law on Labor Remuneration and Clause 96 of the Labor Code. Since the subsistence level from January 1, 2021 is 2270 UAH, employers determine the size of salaries of employees multiplying 2270 by the appropriate tariff rate UTN.

In addition to the base salary, there is a legally defined concept of additional salary. It is a reward for work carried out above the established norms, for labor successes and ingenuity and for special working conditions. It includes surcharges, allowances, guarantee and compensation payments provided by the current legislation; bonuses related to the performance of production tasks and functions.

For example, legislation provides for bonuses for the duration of continuous operation (from 20% to 80%), for honorary titles, etc.

In particular, legislation on labor remuneration of medical workers contains guarantees related to implementation of the norm on the minimum wage (MW), in particular:

• if employee worked a monthly working time norm, but his wage does not reach the minimum wage, the employer makes additional payments to the level of the MW;

• if employee worked part-time, his MW is calculated and paid in proportion to the time worked;

• minimum wage includes salary, supplemental payments, allowances, bonuses;

• certain types of payments are not included in the MW.

The GoU sets the guaranteed minimum wage from 01.01.2021 to 30.11.2021 in the amount of 36,11 UAH per hour, or 6000 UAH per month.

The GoU sets the guaranteed minimum wage from 01.12.2021 to 31.12.2021 in the amount of 39,12 UAH per hour, or 6500 UAH per month.

The employers usually deduct the income tax and health and social insurance contributions automatically from the wages and transfer them to the appropriate fiscal, medical and social authorities. The total amount of deductions cannot exceed 50 percent from the wage to be paid to the employee.

* *Supplemental payment for COVID-19 treatment*

In 2020, a new type of supplemental payment for physicians appeared, related to the response to the COVID-19 pandemic. Currently, there are several regulations that determine surcharges for care for patients with coronavirus:

• Order of the Ministry of Labor and Social Policy of Ukraine dated 02.06.2003 No145 "On the conditions of remuneration of medical and other workers for the period of work on the elimination of epidemics and outbreaks of infectious diseases, as well as in centers of dangerous infectious diseases", registered in the Ministry Justice of Ukraine, on June 27, 2003 23523/7844;

• Resolution of the Cabinet of Ministers of Ukraine of 23.03.2020 № 246 "Some issues of remuneration of medical and other workers who are directly involved in the elimination of acute respiratory disease COVID-19 caused by coronavirus SARS-CoV-2";

• Resolution of the Cabinet of Ministers of Ukraine of 19.06.2020 № 610 "Some issues of remuneration of medical and other employees of health care facilities";

Surcharges defined by these regulations have different amounts, methods of calculation and sources of funding.

* *Working Hours*

According to Article 50 of the Labor Code of Ukraine (Labor Code), the normal working hours of employees may not exceed 40 hours per week. Enterprises and organizations may set a lower working time limit when concluding a collective agreement. With a six-day working week, the duration of daily work may not exceed 7 hours at a weekly rate of 40 hours. The legislation sets reduced working hours for certain categories of employees (including medical employees). For night duty, additional payment is made in the amounts specified in paragraph 3.2 of the "Terms of remuneration of health care and social protection institutions employees". Employees of health care institutions and social protection institutions may, with their consent, be introduced a working day divided into parts (with a break of more than 2 hours) provided that the total duration of work does not exceed the established norm of the working day (Clause 60 of Labor Code)).

* *Rest Breaks*

Employees are given a rest and meal break for no more than two hours. The break is not included into working hours. A break for rest and meals should be provided, as a rule, four hours after the start of work. The start and end time of the break is set by the rules of internal labor regulations. The duration of the weekly uninterrupted rest must be at least forty-two hours. Work on a day off may be compensated, with the consent of the parties, by providing another day off or payment in double amount. Remuneration for work on the day off is calculated according to the rules of Clause 107 of the Labor Code.

*Leaves*

Workers having in employment relations with enterprises, institutions, organizations, regardless of ownership, type of activity and industry affiliation, as well as working under an employment contract with an private entrepreneur, are granted annual (basic and additional) leave with preservation of work and salary. Annual basic leave is granted to employees for at least 24 calendar days for the completed working year, which is calculated from the date of conclusion of the employment contract. It does not include days of temporary incapacity for work of the employee, as well as maternity leave. Holidays and non-working days are not taken into account when determining duration of annual leave. The procedure and terms for granting annual leave are regulated by Clause 79 of the Labor Code. State guarantees of the right to leave are established by the ‘Law on Leave’ (1997).

* *Overtime Work*

Overtime work is considered to a working day with length over the established duration. Overtime work, as a rule, is not allowed, except cases determined by law and in part 3 of Clause 62 of the Labor Code.

It is forbidden to involve for overtime work:

• pregnant women and women with children under the age of three (Clause 176 of the Labor Code);

• persons under the age of eighteen (Clause 192 of the Labor Code);

Women who have children between the ages of three and fourteen or a child with a disability may be involved in overtime work only with their consent (Clause 177 of the Labor Code).

The legislation may provide for other categories of employees who are prohibited from engaging in overtime work.

The rules for overtime pay are set out in Clause 106 of the Labor Code. Remuneration of medical workers in budgetary institutions in case of overtime work is carried out above the minimum wage. Overtime work is paid depending on the system of remuneration established in the medical institution. Pursuant to the law it is prohibited to compensate overtime by time off (Clause 106 of the Labor Code).

* *Labor Disputes*

The Labor Code of Ukraine (ChaptersXV-XVI) includes provisions that allow workers to resolve individual and collective disputes between the employer and the employee(s) over the terms and conditions of a labor agreement or other aspects of work, including occupational and health safety (Chapter XI). The disagreements and disputes may be solved through conciliation. The Labor Disputes Commission is obliged to consider a labor dispute within ten days from the date of submission of the application. If the parties do not agree with the recommendations of this commission, the conflict shall be settled in court.

Brief overview of labor legislation: occupational health and safety

The Ukrainian Labor Code as well as the Law on Occupational Health and Safety set the framework for occupational health and safety (OHS) in Ukraine. Several Government orders and decisions detail how these are to be implemented and outline the list of hazardous industries and occupations in the country. Overall, the Ukrainian OHS legislation is extensive and generally in line with the provisions set out in ESS2, paragraphs from 24 to 30. The main challenge being the implementation and enforcement of these provisions.

* *Employers’ Obligations*

Ensuring safe and harmless working conditions is the responsibility of the employer or his authorized body. Working conditions in the workplace, safety of technological processes, machines, mechanisms, equipment and other means of production, the state of collective and individual protection used by the employee, as well as sanitary conditions must meet the requirements of regulations on labor protection. The owner or his authorized body must implement modern safety measures that prevent occupational injuries, and provide sanitary and hygienic conditions that prevent the occurrence of occupational diseases of workers. The employer or his authorized body is not entitled to require the employee to perform work associated with a clear danger to life, as well as in conditions that do not comply with labor protection legislation. The employer is obliged to provide the employee with personal protective equipment in accordance with the regulations on labor protection and the collective agreement. The employer must ensure functioning of the occupational safety management system.

* *Employees’ Rights and Obligations*

An employee has right to refuse the assigned work if a work situation is dangerous to his life or health or to people around him and to environment. An employee may not be offered a job that is medically contraindicated due to his/her health condition. The employee must know and comply with the requirements of regulations on labor protection, rules for handling machines, mechanisms, equipment and other means of production, use the means of collective and individual protection. The employee has the right to terminate the employment contract at will, if the employer does not follow labor protection legislation, terms of the collective agreement on these issues.

Health workers are at the front line of the COVID-19 outbreak response and as such are exposed to different hazards that put them at risk. Occupational hazards include exposure to SARS-CoV-2 and other pathogens, heavy workloadб stigma, prolonged use of personal protective equipment (PPE) etc.

Health worker rights include the expectation that employers and managers in health facilities:

• assume overall responsibility to ensure that all necessary preventive and protective measures are taken to minimize occupational safety and health risks;

• provide information, instruction, and training on occupational safety and health, including;

• refresher training on infection prevention andcontrol (IPC);

• use, putting on, taking off and disposal of personal protective equipment (PPE);

• provide adequate IPC and PPE supplies (masks, gloves, goggles, gowns, hand sanitizer, soap and water, cleaning supplies) in sufficient quantity to those caring for suspected or confirmed COVID-19 patients, such that workers do not incur expenses for occupational safety and health requirements;

• familiarize personnel with technical updates on COVID-19 and provide appropriate tools to assess, triage, test, and treat patients, and to share IPC information with patients and the public;

• provide appropriate security measures as needed for personal safety;

• provide a blame-free environment in which health workers can report on incidents, such as exposures to blood or bodily fluids from the respiratory system, or cases of violence, and adopt measures for immediate follow up, including support to victims;

• advise health workers on self-assessment, symptom reporting, and staying home when ill; maintain appropriate working hours with breaks;

• consult with health workers on occupational safety and health aspects of their work, and notify the labour inspectorate of cases of occupational diseases;

• allow health workers to exercise the right to remove themselves from a work situation that they have reasonable justification to believe presents an imminent and serious danger to their life or health, and protect health workers exercising this right from any undue consequences;

• not require health workers to return to a work situation where there has been a serious danger to life or health until any necessary remedial action has been taken;

• honour the right to compensation, rehabilitation, and curative services for health workers infected with COVID-19 following exposure in the workplace – considered as an occupational disease arising from occupational exposure;

• provide access to mental health and counselling resources; and

• enable cooperation between management and health workers and their representatives.

*Health workers should:*

• follow established occupational safety and health procedures, avoid exposing others to health and safety risks, and participate in employer-provided occupational safety and health training;

• use provided protocols to assess, triage, and treat patients;

• treat patients with respect, compassion, and dignity;

• maintain patient confidentiality;

• swiftly follow established public health reporting procedures of suspected and confirmed cases;

• provide or reinforce accurate IPC and public health information, including to concerned people who have neither symptoms nor risk;

• put on, use, take off, and dispose of PPE properly;

• self-monitor for signs of illness and self-isolate and report illness to managers, if it occurs;

• advise management if they are experiencing signs of undue stress or mental health challenges that require supportive interventions; and

• report to their immediate supervisor any situation which they have reasonable justification to believe presents an imminent and serious danger to life or health.

Responsible staff

PIU will provide monitoring for the Project implementation. The coordinator will control activities of the Project, including relations with direct consultants and employed medical workers. An environmental and social consultant will provide monitoring and coordination of all safeguards matters.

Policies and procedures

This section sets out information on OHS, reporting and monitoring and other general project policies related to the management of project-related labor.

All consultants and employed workers involved into the Project should follow standard Codes of Conduct that contain measures to prevent Gender Based Violence/Sexual Exploitation and Abuse (GBN/SEA).

In line with ESS 2 and Ukraine law, the use of forced labor, child, or conscripted labor is prohibited in the Project.

All consultants and employed workers under the Project will have to comply with the Ukrainian OHS legislation and the Labor Code as well as the provisions set under the World Bank’s ESS2.

* ***Non-discriminatory Nature of Employment***

All consultants and employed workers hired under the project, whether direct or contracted, will work on the principles of non-discrimination. As per Clause 2 of the Ukrainian Labor Code, any discrimination based on gender, age, race, ethnicity, political option, social origin, residence, handicap, status or trade union activity, as well as other criteria not related to his/her professional qualities, shall be prohibited.

* ***Employee Rights and Obligations***

Employment contracts should specify the employee rights in line with the Ukrainian legislation which include, among others, the right to a safe working environment; lunch breaks and rest days; timely payment of wages and salaries; the right to appeal to employers, trade unions and authorities in case of labor disputes; the right to associate freely.

* ***Occupational Safety and Health***

Employment contracts under this project should cover the obligations of the employer to provide a healthy work environment; the obligation to assign an individual who will be responsible for the OHS arrangements at work and on site; describe and explain the main risks of the work involved to the employee; train employees and workers on the OHS arrangements at the enterprise; provide appropriate protective equipment, clothing and gear to mitigate the existing risks; record and report the work incidents on site; ensure that first-aid help is available on site and have emergency and evacuation protocols prepared and explained to staff and workers in case of emergencies.

Age of employment

According to the Labor Code of Ukraine, the employment of persons under the age of sixteen is not permitted. With the consent of one of the parents or a person replacing him, persons who have reached the age of fifteen may, as an exception, be employed. It is prohibited to employ persons under the age of eighteen in heavy work and in work with harmful or dangerous working conditions. It is also prohibited to involve persons under the age of eighteen in lifting and moving objects that weigh more than the established limits.

It is prohibited to involve in health care facilities night work and overtime work persons listed in Clause 55 and 63 of the Labor Code of Ukraine, including persons under 18. Clause 192 of the Labor Code prohibits involvement of employees under the age of eighteen in night work, overtime work and work at weekends. When hiring a person who requires special knowledge (in particular, medical), the employer or his authorized body has the right to require the employee to present a diploma or other document of education or training.

Terms and conditions

* The terms and conditions of employment applying to all types of project workers shall be governed by the internal regulations of contractors and suppliers in line with the Ukrainian Labor Code and other labor-related legislation. These terms and conditions will be clearly mentioned in the written contracts for all type of workers, whether full-time or part-time, and be made known to project workers prior to commencement of work;
* The work hours are 40 per week for all workers. The number of weekly overtime hours and the payment of overtime shall be governed by the provisions of the Ukrainian Labor Code which is in line with the ESS2.

Grievance mechanism

The Ukraine COVID 19 Emergency Response and Vaccination Project will set a GRM in place available for project stakeholders, all types of project workers and other interested parties to submit questions, comments, suggestions and/or complaints and provide any form of feedback on all project-funded activities. The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns.

Both the consultants and hired workers will follow the GRM which is an integral part of the ESMF and the SEP. In the meantime, the following information will be separately highlighted:

* a brief description of the GRM mechanism and what it is used for;
* the process to send grievances such as comments/complaints forms via suggestion boxes, email, a telephone hotline with an indication of the email, telephone number, fax; mailing address;
* stipulated timeframes to respond to grievances.

Also project stakeholders and project affected communities and individuals may submit their complaint to the Bank’s independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of non-compliance with Bank policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the Bank’s corporate Grievance Redress Service (GRS), please visit: [*http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service*](http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service). For information on how to submit complaints to the World Bank Inspection Panel, please visit [*www.inspectionpanel.org*](http://www.inspectionpanel.org).

Monitoring of hired workers activities

All procurement and other types of contracts will include language referring to labor and occupational, health and safety requirements that must comply with the Ukrainian national legislation and ESS2.

The PIU generally, and a specific assigned person within the PIU, will monitor the performance of work in relation to hired workers. This may include periodic audits, inspections, and/or spot checks of project locations or work sites and/or of labor management records and reports compiled by contractors. labor management records and reports may include: a representative sample of employment contracts or arrangements between third parties and contracted workers; records relating to grievances received and their resolution; reports relating to safety inspections, including fatalities and incidents and implementation of corrective actions; records relating to incidents of non-compliance with national law; and records of training provided for contracted workers to explain labor and working conditions and OHS for the Project.

Community workers

No community contribution is expected under the project and no community workers will be involved in the project’s minor works (if any).

Primary supply workers

The risk of child and forced labor is not expected on this Project

## Annex 6. Resource List: COVID-19 Guidance

*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/*](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](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-%28ncov%29-infection-is-suspected-20200125), issued on March 19, 2020
* [Recommendations to Member States to Improve Hygiene Practices](https://www.who.int/publications-detail/recommendations-to-member-states-to-improve-hand-hygiene-practices-to-help-prevent-the-transmission-of-the-covid-19-virus), issued on April 1, 2020
* [Severe Acute Respiratory Infections Treatment Center](https://www.who.int/publications-detail/severe-acute-respiratory-infections-treatment-centre), issued on March 28, 2020
* [Infection prevention and control at health care facilities (with a focus on settings with limited resources)](https://www.who.int/infection-prevention/tools/core-components/facility-manual.pdf), issued in 2018
* [Laboratory biosafety guidance related to coronavirus disease 2019 (COVID-19)](https://www.who.int/publications-detail/laboratory-biosafety-guidance-related-to-coronavirus-disease-2019-%28covid-19%29), issued on March 18, 2020
* [Laboratory Biosafety Manual, 3rd edition](https://www.who.int/csr/resources/publications/biosafety/Biosafety7.pdf?ua=1), issued in 2014
* [Laboratory testing for COVID-19, including specimen collection and shipment](https://www.who.int/publications-detail/laboratory-testing-for-2019-novel-coronavirus-in-suspected-human-cases-20200117), issued on March 19, 2020
* [Prioritized Laboratory Testing Strategy According to 4Cs Transmission Scenarios](https://apps.who.int/iris/bitstream/handle/10665/331509/WHO-COVID-19-lab_testing-2020.1-eng.pdf), issued on March 21, 2020
* [Infection Prevention and Control for the safe management of a dead body in the context of COVID-19](https://apps.who.int/iris/bitstream/handle/10665/331538/WHO-COVID-19-lPC_DBMgmt-2020.1-eng.pdf), issued on March 24, 2020
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**WORLD BANK GROUP GUIDANCE**

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* [ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects](https://worldbankgroup.sharepoint.com/sites/wbunits/opcs/Knowledge%20Base/ESF%20Safeguards%20Interim%20Note%20Construction%20Civil%20Works%20COVID.pdf), issued on April 7, 2020
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* [Interim Advice for IFC Clients on Supporting Workers in the Context of COVID-19](https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_tipsheet_covid-19_supportingworkers), issued on April 6, 2020
* [IFC Tip Sheet for Company Leadership on Crisis Response: Facing the COVID-19 Pandemic](https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc%2Bcg/resources/guidelines_reviews%2Band%2Bcase%2Bstudies/tip%2Bsheet%2Bfor%2Bcompany%2Bleadership%2Bon%2Bcrisis%2Bresponse%2B-%2Bfacing%2Bthe%2Bcovid-19%2Bpandemic), issued on April 6, 2020
* [WBG EHS Guidelines for Healthcare Facilities](https://www.ifc.org/wps/wcm/connect/960ef524-1fa5-4696-8db3-82c60edf5367/Final%2B-%2BHealth%2BCare%2BFacilities.pdf?MOD=AJPERES&CVID=jqeCW2Q&id=1323161961169), issued on April 30, 2007

**ILO GUIDANCE**

* [ILO Standards and COVID-19 FAQ](https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/publication/wcms_739937.pdf), issued on March 23, 2020 (provides a compilation of answers to most frequently asked questions related to international labor standards and COVID-19)

## Annex 7. Minutes of Public Consultation Process

1. COVID-19 vaccines financed from Government budgetary resources or financed from other sources and not included in the project design are not required to meet these thresholds if the Project is not financing their deployment/roll out—training, capacity building, logistics, etc.  [↑](#footnote-ref-2)
2. Under COVAX mechanism, Ukraine prioritized receiving vaccines that can be stored between 2°C and 8°C. Limited capacities are available for storing vaccines requiring other temperature regimens: 340,000 doses at the national and 160,813 doses at regional level for vaccines requiring -20oC cold chain, and 67,320 doses at the national level for vaccines requiring ultra-cold storage at -80oC to -60oC (no regional capacities for this temperature regimen). [↑](#footnote-ref-3)
3. According to the WHO guide on Management of wastes from immunization campaign activities: https://www.who.int/water\_sanitation\_health/medicalwaste/hcwm.pdf. [↑](#footnote-ref-4)
4. This corresponds to groups 1, 2, 3, 4, 7 and 8 in the current version of the National COVID-19 Vaccination Roadmap (Table 1). [↑](#footnote-ref-5)
5. This corresponds to the combination of individuals supported from procurement of vaccines with project resources (for approximately 2 million people), as well as those benefiting from the related COVID-19 vaccine investments provided by the project (additional 8 million people). [↑](#footnote-ref-6)
6. <http://documents.worldbank.org/curated/en/157871484635724258/Environmental-health-and-safety-general-guidelines> [↑](#footnote-ref-7)
7. [https://www.who.int/emergencies/diseases/novel-coronavirus-2019 (accessed on June 28](https://www.who.int/emergencies/diseases/novel-coronavirus-2019%20%28accessed%20on%20June%2028), 2020) [↑](#footnote-ref-8)
8. Safe management of waste from health-care activities, second edition 2018: <https://apps.who.int/iris/bitstream/handle/10665/85349/9789241548564_eng.pdf?sequence=1> [↑](#footnote-ref-9)
9. Infection prevention and control guidelines: <https://www.who.int/infection-prevention/publications/en/> [↑](#footnote-ref-10)
10. WHO standards related to Personal protective equipment: <https://www.who.int/medical_devices/priority/COVID_19_PPE/en/> [↑](#footnote-ref-11)
11. WHO Recommendations about rational use of PPE: [https://www.who.int/publications/i/item/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages](https://www.who.int/publications/i/item/rational-use-of-personal-protective-equipment-for-coronavirus-disease-%28covid-19%29-and-considerations-during-severe-shortages) [↑](#footnote-ref-12)