REPUBLIC OF LEBANON

**LEBANESE RED CROSS (LRC)**

**SUPPORTING LEBANON'S COVID-19 VACCINATION AND RESPONSE FOR VULNERABLE GROUPS PROJECT (SLCRVGP)**

**(P176778)**

**ENVIRONMENTAL AND SOCIAL**

**MANAGEMENT FRAMEWORK including LABOR MANAGEMENT PROCEDURES**

**(ESMF including LMP)**

**BEIRUT**

**AUGUST 2022**

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| --- | --- | --- |
| **Revision History** | | |
| **Version** | **Date** | **Description or Reason for Change** |
| 01 | July 2022 | Draft Final |
|  |  |  |
|  |  |  |
|  |  |  |

**Prepared by: The Lebanese Red Cross- LCR**

# Abbreviations and Acronyms

|  |  |
| --- | --- |
| AEC | Arcenciel |
| AEFI | Adverse Event Following Immunization |
| AQMN | Air Quality Monitoring Network |
| CAS | Central Administration of Statistics |
| CCMO | Call Center Management Officer |
| CCSS | Call Center Shift Supervisors |
| CFO | Complaints and Follow-Up Officer |
| COR | Critical Organization Requirement |
| COVID-19 | Coronavirus Disease |
| EHS | Environmental, Health and Safety |
| EIA | Environmental Impact Assessment |
| ELV | Environmental Limit Values |
| EMS | Emergency Medical Services |
| ERP | Emergency Response Plan |
| ESF | Environmental and Social Framework |
| ESMF | Environmental and Social Management Framework |
| ESMP | Environmental and Social Management Plan |
| ESS | Environmental and Social Standard |
| FEFO | First to Expire First Out |
| GBV | Gender-Based Violence |
| GOL | Government Of Lebanon |
| GM | Grievance Mechanism |
| GRS | Grievance Redress Service. |
| GSF | General Security Forces |
| HCC | Health Care Center |
| HCF | Health Care Facility |
| HCW | Health Care Worker |
| HCWMP | Health Care Waste Management Plan |
| ICU | Intensive Care Unit |
| ID | Identification Document |
| IDPs | Internally Displaced Populations |
| IEE | Initial Environmental Examination |
| IFRC | International Federation of Red Cross and Red Crescent |
| IHCW | Infectious Healthcare Waste |
| ILO | International Labour Organization |
| IMC | International Medical Corps |
| IOM | International Organization for Migration |
| IPC | Infection Prevention and Control |
| IPF | Investment Policy Financing |
| ISF | The Internal Security Forces |
| IT | Information Technology |
| ITS | Informal Tented Settlement. |
| JMC | Joint Monitoring Committee |
| LMP | Labor Management Procedures |
| LRC | Lebanese Red Cross |
| LT | Low Temperature |
| MMU | Mobile Medical Units |
| MOE | Ministry of Environment |
| MOI | Ministry of Industry |
| MOInf | The Ministry of Information |
| MOIM | Ministry of Interior and Municipalities |
| MOPH | Ministry of Public Health |
| MPI | Multidimensional Poverty Index |
| MSW | Municipal Solid Waste |
| MVU | Mobile Vaccination Units |
| NDVP | National Deployment and Vaccination Plan |
| NGO | Non-Governmental Organization |
| OECD | Organization for Economic Co-Operation and Development |
| OHS | Occupational Health and Safety |
| PEP | Post-Exposure Prophylaxis |
| PDO | Project Development Objective |
| PGI | Protection, Gender and Inclusion |
| PM | Particulate Matter |
| PMU | Project Management Unit |
| POPs | Persistent Organic Pollutants |
| PPE | Personal Protective equipment |
| PRCS | Palestine Red Crescent Society |
| PSEA | Protection from Sexual Exploitation and Abuse |
| PSS | Psycho-Social Support |
| RCCE | Risk Communication and Community Engagement |
| RDF | Refuse Derived Fuel |
| SARS | Severe Acute Respiratory Syndrome |
| SEA/H | Sexual Exploitation and Abuse / (Sexual) Harassment |
| SLCVRVGP | Supporting Lebanon’s COVID-19 Vaccination and Response for Vulnerable Groups Project |
| SOP | Standard Operating Procedure |
| SSF | State Security Forces |
| TPMA | Third Party Monitoring Agency |
| ULT | Ultra-Low Temperature |
| UN | United Nations |
| UNFCCC | The United Nations Framework Convention on Climate Change |
| UNHCR | United Nations High Commissioner for Refugees |
| UNICEF | United Nations International Children's Emergency Fund |
| UNRWA | United Nations Relief and Works Agency for Palestine Refugees in the Near East |
| UPS | Uninterruptible Power Supply |
| VAC | Vaccine Approval Criteria |
| VOCs | Volatile Organic Compounds |
| WASH | Water, Sanitation, and Hygiene |
| WB | World Bank |
| WHO | World Health Organization |
| WWTP | Wastewater Treatment Plant |

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# Executive Summary

This Environmental and Social Framework including Labor Management Procedures (ESMF including LMP) analyses the environmental and social impacts and risks associated with activities undertaken by Supporting Lebanon’s COVID-19 Vaccination and Response for Vulnerable Groups Project (SLCRVGP- P176778) and provides a framework for social and environmental management. In particular, the LMP includes procedures relating to working conditions, terms of employment, non-discrimination and equal opportunity, restrictions on child and forced labor, and prohibition of Sexual Harassment and Sexual Exploitation and Abuse (SEA/SH).

**Description of the Project**

SLCRVGP - P176778 project aims to contribute to the roll out of Lebanon’s National Deployment and Vaccination Plan (NDVP) for COVID-19 vaccines, through the support for COVID-19 vaccination and response for vulnerable groups in Lebanon. It has a total budget of US$ 3 M and a duration of 16 months. The project development objective (PDO) is to support COVID-19 vaccine registration and deployment, as well as COVID-19 response for refugee populations and their host communities in Lebanon. The main expected beneficiaries will be the refugee population (Syrian, Palestinian and other nationalities) and local host communities living in areas of high refugee concentrations. The main components of the project are the following:

**Component 1: Vaccine awareness and registration (US$ 936,808.0).**

This component will be jointly implemented by the Lebanese Red Cross (LRC) and the Palestine Red Crescent Society in Lebanon (PRCS-Lebanon). It is aiming at gaining community confidence and trust to ensure the success of the immunization initiative focusing on alleviating barriers such as hard to reach areas, Information Technology (IT) illiteracy and lack of access to technology, hesitancy, fear, and stigma that are major factors hindering the roll out of COVID-19 vaccination. As per the NDVP for COVID-19 Vaccines published on the COVID 19 vaccination remains voluntary. Vaccines are offered to all individuals above 5-years old who have the right to accept or defer[[1]](#footnote-2);

**Component 2: Vaccine deployment (US$ 984, 376.5).**

This component will be implemented by the LRC only. Providing access to vaccines is one of the most critical aspects of vaccine deployment. It will comprise the following activities:

* The project will support the **Mass Vaccination Center** in the Maten area that is already run and operated by LRC. As part of this project, the LRC will operate the mass vaccination site for two additional months depending on the need and the national campaign.
* To enhance accessibility to COVID-19 vaccines, especially for Syrian and non-Syrian refugees, the LRC will deploy mobile vaccination units to various informal tented settlements. The LRC currently operates eight (8) **Mobile Medical Units** (MMUs) as part of its medico-social sector; these are used to improve access to primary healthcare.
* Since the beginning of the vaccination campaign in Lebanon, the LRC Emergency Medical Services (EMS) have been closely supporting the implementation of the campaign. This is being done via two main activities. First is **transportation of high-risk/ physically challenged people to vaccination sites**, and second is **providing ambulances and emergency medical technicians to support vaccination campaigns** that are done outside hospitals. As part of this project, the LRC EMS will maintain and upscale these support services to ensure accessibility of vaccination to the most vulnerable and enhance patient safety by providing prompt transportation to hospitals in case of development of adverse effects following vaccination.

**Component 3: COVID-19 Response (US$ 600,085.0)**

This component will be implemented jointly by the LRC and the PRCS-Lebanon.

* Since February 2020, the LRC has been the main provider of the **pre-hospital care and transportation** **of suspected and confirmed COVID-19 cases in Lebanon**. The LRC will increase its dispatch capacities by adding 4 dispatchers to support in call taking and dispatching ambulances during the period of this project.
* The PRCS-Lebanon will **support the testing and the treatment** of Palestinian refugees COVID-19 patients in their own two hospitals in South and North – by covering medicines, medical supplies and procuring equipment dedicated for the treatment of COVID-19 patients with support from United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).
* The PRCS-Lebanon nine community centers will be providing the awareness session of COVID-19 prevention and vaccine hesitancy as well as hygiene promotion and hygiene kit distribution.

HR and Admin Support Cost (US$ 478,730.72)

This component covers the compensation of the project management unit including, project manager, social and environmental Specialist, financial officer, procurement officer, monitoring evaluation and reporting Officer and five project officers

**Policy, Legal and Institutional framework for Environmental and Social Management**

Lebanon also has an abundance of environmental laws and regulations as well as other legislations related to the activities as presented in the following Table (i)

Table (i) Laws and Regulations relevant to the Project

| **Law/Regulations** | **Subject** |
| --- | --- |
| **Environment** |  |
| Lebanese law 444/2002. | The Code of the Environment forms the legal basis for environmental management in Lebanon, for the principles mentioned below and the Environmental Impact Assessment (EIA) system. |
| Lebanese decree 8633/2012 The EIA Decree | This decree requires projects mentioned in its annexes to either undergo an EIA or an Initial Environmental Examination (IEE). It describes the process required for preparing an EIA or an IEE and the timeline for responses and approvals from the Ministry of Environment (MOE). |
| Decree 8471/2012 and Decision 189/1 - 2016 | Define the process and mechanism for environmental compliance audit report review at the MOE, which also covers the submission process and report contents. |
| Lebanese decrees 8006-2002 amended by 13389-2004 | This decree regulates and defines healthcare waste and its types. It requires proper waste segregation and minimization. It sets guidelines for the collection and storage of waste. |
| Circular 11/2011 | This circular defines the trimestral reporting template for Infectious Healthcare Waste Treatment facilities |
| Circular 7/1- 2017 | This decision provides a list of institutions for the disposal of material and equipment for potential recycling. Vaccination centers, Health Care centers (HCCs) and hospitals can make use of this list to dispose their recyclable wastes. |
| Decision 1/1294-2018 and 1/1295-2018 | These decisions regulate the transport of infectious healthcare waste (1/1294) and the construction and operation of facilities (1/1295) for the disinfection of hazardous and infectious waste. |
| Law 80 – 2018 | Integrated Solid Waste Management Law. It sets the framework for Integrated Solid Waste Management based on the principles of Law 444/2002. |
| Decree 5606 – 2019 | It specifies the principles for sorting domestic solid waste at the source into three categories: organic waste, recyclables, and inert waste. |
| Decision 59/1 – 2020 | The decision specifies the procedures and principles for hazardous waste storage facilities licensing in Lebanon. |
| Decision 998/1 – 2020 | The decision specifies the procedures and principles for hazardous waste generators in Lebanon. |
| Decision 6/1 – 2022 that supersedes Decision 8/1 2001, National Standards for Environmental Quality | This decision provides Environmental Limit Values (ELV) for wastewater discharged into different receiving media (sewerage system, surface water, sea). HCCs and hospitals are required to abide by this decision. |
| **Social** |  |
| Labor Law 1946 and its amendments | This law sets basic labor rights in Lebanon such as minimum working age, working and resting hours, etc. |
| Decree 11802 – 2004 | This decree regulates occupational prevention, safety and health in all enterprises subject to the code of labor. |
| Penal Code Decree 340 1943 | The text of Article 522 of the Lebanese Penal Code, applies to cases of assault of women, by force, violence, and manipulations which are acts that affect a woman's dignity, physical health, psychological state, and moral integrity. This is article calls for the prosecution and conviction of a person who has committed rape, kidnapping, or statutory rape. Article 503 of the Penal code defines the crime of rape as “forced sexual intercourse (against someone) who is not his wife by violence or threat. Domestic violence does not relate to Article 522. Marital rape and underage marriage, are still not considered as a crime in Lebanon . |
| Law 335 – 2001: Ratification of International Labour Organization (ILO) convention No. 182: | This text does not allow the employment of children and protects them from engaging in any work activities that could harm their health and safety. |
| Law 400/2002: Ratification of ILO convention No. 138: | Minimum age of employment on tasks and works that pose risks or hazards to health and safety. |
| Decree 8987 – 2012: Ratification of ILO convention No. 138 | Prohibits the employment of minors under the age of 18 in work that may harm their health, safety or morals. |
| Law 205 – 2020 | This law criminalizes the sexual harassment in any place including workplace.. |
| Law 28/2007 and Decree 6940/2020 (2007 and 2020) | Pursuant to Decree 6940 of 2020 all public institutions were instructed to activate administrative self-monitoring and to enhance transparency and positivity in the communication between the administration and the citizens, within one month from the date of the circular. |

Lebanon also committed to a number of International Agreements namely: The Basel Convention (Ratified by law 387/1994, 29/2015), The Stockholm Convention (Ratified by law 432/2002), Minamata Convention on mercury (Acceded by law 2/2017), The Barcelona Convention Signature (Acceded by Decree Law No. 126 30/6/1977 Amendments Adhesion Law No.34 16/10/2008) and the UNFCCC (Ratified Law No.359 11/8/1994). ILO conventions were ratified by laws mentioned in the Table above.

The World Bank (WB) Environmental and Social Framework (ESF) that became effective on October 1, 2018, applies also to the SLCRVGP. Five out of the ten Environmental and Social Standards (ESSs) of the ESF, are relevant to the SLCRVGP and their requirements apply. These are: ESS1, ESS2, ESS3, ESS4 and ESS10. The overall project risk is rated Moderate. Both, the environmental and social risks associated with the proposed project are expected to be moderate.

Consequently, the following E&S instruments were prepared for this Project: An Environmental and Social Commitment Plan (ESCP), a Stakeholders Engagement Plan (SEP), and currently the ESMF includes LMP.

The project is expected to abide by the following WB guidance and good practice notes: (i) *Environmental, Health, and Safety (EHS) General Guidelines, Health Care Facilities Guidelines,* Community Health and Safety / Traffic Safety GuidelinesandEnvironmental Guidelines, (ii) *Policy of Access to Information, (iii) Consultations and Disclosure Policy, (iv) Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings and (v) Technical note: Use of Military Forces to Assist in COVID-19 Operations Suggestions on how to mitigate risks – Version 1- March 25, 2020.*

The World Health Organization (WHO) Policies that will be followed under this project are: (i) WHO Laboratory biosafety guidance related to coronavirus disease 2019 (COVID-19), (ii) WHO Infection prevention and control during health care when COVID-19 is suspected Intended for Health Care Workers (HCWs), health care managers, and Infection Prevention and Control (IPC) teams at the facility level, national, provincial and district levels, (iii) Key provisions Applicability to ERP WHO rights, roles & responsibilities of HCWs, including key considerations for OSH in COVID-19 Outbreak, (iv) WHO Water, sanitation, hygiene, and waste management for the COVID-19 virus, (v) WHO Rational use of Personal Protective Equipment (PPE) for Coronavirus disease (COVID-19), (vi) WHO Oxygen sources and distribution for COVID-19 treatment centers and (vii) WHO Considerations for quarantine of individuals in the context of containment for COVID-19.

The Institutional Framework consists of the Ministry of Public Health (MOPH), The Ministry of the Environment (MOE), the Ministry of Information (MOInf), The Ministry of Interior and Municipalities (MOIM) and treatment and recycling companies listed in circular 7/1 (2017) of the MOE. The UN Agencies have an indirect role in providing technical support for vaccine deployment in particular The UNRWA will be supporting the project for the delivery of COVID-19 vaccines to displaced and refugee population and The United Nations High Commissioner for Refugees (UNHCR) that will be supporting the project the delivery of COVID-19 vaccines to displaced and refugee population

The LRC and the PRCS-Lebanon are the implementing agencies of the Project, the LRC will be taking the lead. LRC will be accountable for the overall project. LRC will establish a Project Management Unit (PMU) and will coordinate and collaborate with MOPH, Hospital syndicate, Nurses syndicate, Order of Physicians, WHO, UNHCR and UNRWA and all relevant vaccination committees to ensure complementarity of interventions and to avoid duplication of efforts.

**Environmental and Social Baselines**

***Environmental Baseline***

**Status of COVID-19 Vaccination in Lebanon**

The first case of COVID-19 was reported in Lebanon on February 21, 2020.and had devastating impacts on the population. In February 2021, the GOL launched the national COVID-19 vaccination campaign with a focus on the Pfizer vaccine, while negotiating with other pharmaceutical companies namely AstraZeneca to further increase the potential of vaccine coverage in the community , an inclusive approach was overtly declared to cover all individuals residing in its territories regardless of their nationalities or legal status in the country. As per the MOPH, this approach prioritizes some categories based on their age and health status. This approach was also based on the guidelines, recommendations and procedures set by the WHO.

The three potential vaccine types that are approved by the MoPH include:

1. mRNA vaccines: BNT162b2 mRNA produced by Pfizer-BioNTech and the mRNA1273 produced by Moderna. They are not thermostable.
2. Viral vector vaccines: The Astrazeneca-Oxford vaccine (ChAdOx1 nCoV-19), the Russian Gamaleya Sputnik 5 and the Johnson & Johnson Janssen COVID-19 vaccine.
3. Subunit vaccines: The Sinopharm known as Chinese vaccine.

The current Vaccination Plan targets all the population living in Lebanon including refugees and vulnerable groups. As per the World Bank Environmental and Social Framework ESS1 definition, “Disadvantaged or vulnerable refers to those who may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project’s benefits. Such an individual/group is also more likely to be excluded from/unable to participate fully in the mainstream consultation process and as such may require specific measures and/or assistance to do so. This will take into account considerations relating to age, including the elderly and minors, and including in circumstances where they may be separated from their family, the community or other individuals upon which they depend”. The MOPH was set to vaccinate 80% of the population by the end of 2021. However, and as of March 22, the percentage of fully vaccinated persons in Lebanon is still at 32.1%[[2]](#footnote-3) and this number is much lower for vulnerable populations in Lebanon. According to a WB survey, many are hesitant to take the vaccine because they are either afraid of the side effects or do not trust the healthcare system in Lebanon to support and deliver the vaccine safely.

**Climate**

Lebanon has a Mediterranean-type climate characterized by hot and dry summers (June to September) and cool and rainy winters (December to mid-March), with an average annual temperature of 15˚C. The mean annual rainfall on the coast ranges between 700 and 1,000 mm.

**Surface and Groundwater**

Annual internal renewable water resources are estimated at about 4.8 km3. Annual surface runoff is around 4.1 km3 and groundwater recharges 3.2 km3, of which 2.5 km3 constitutes the base flow of the rivers. About 1 km3 of this flow comes from over 2,000 springs with an average unit yield of about 10–15 l/s, sustaining a perennial flow for 17 of the totals of 40 major streams in the country. The annual net exploitable surface water and groundwater resources, water that Lebanon can technically and economically recover during average rainfall years, are estimated at 2.080 km3, consisting of 1.580 km3 of surface water and 0.500 km3 of groundwater[[3]](#footnote-4).

**Air quality**

Studies have shown that levels of gas pollutants, Particulate Matters (PMs) and their chemical contents, and Volatile Organic Compounds (VOCs) exceed the World Health Organization (WHO) recommended limits for yearly averages. Annual mean levels of O3, NO, NO2 and SO2 for the year 2005-2006 in a Beirut urban site were 31, 36, 40 and 11 μg/m3, respectively (Farah et al., 2014) with no exceedance of the means recommended by WHO. O3 and NO2 showed similar concentrations in 2017 as reported by the MoE monitoring network. Monthly average concentrations as collected by the AQMN, between June and December 2017 (the only continuous published record available) in urban and background locations across Lebanon, were between 12-123 μg/m3 for O3, 9-79 μg/m3 for NO2, 0-24 μg/m3 for SO2, 7-50 μg/m3 for PM2.5 and 13-59 μg/m3 for PM10[[4]](#footnote-5).

**Waste Management**

The total generation of Municipal Solid Waste in Lebanon approximated at 2,700,000 tonnes/year (t/yr), with the highest generation (at the governorate level) being in Mount Lebanon (35%), followed by North Lebanon (24%) and the Bekaa (10%).

The management of Municipal Solid Waste (MSW) in Lebanon has been unstable and is continuously changing. Currently, it follows four parallel schemes:

1. A national plan for the highly populated area surrounding the capital (Beirut, Mount Lebanon and the Caza of Keserwan).
2. Small-scale facilities in remote areas of the North, South and Bekaa regions, representing about 25% of the total generated waste.
3. Community-run systems, scattered across the country (about 55 plants, 40% of which are estimated to be operational), that are either self-funded or funded through international donations.
4. Collection and dumping activities run by local authorities that do not own, or have access to, waste facilities.[[5]](#footnote-6).

**Health Care Waste management and Infection Prevention and Control within the Mobile units, mass vaccination center and UNRWA Hospitals**

Based on an agreement between the LRC and Arcenciel (AEC), the latter will be collecting all the Infectious Healthcare Waste (IHCW) from the vaccination centers, the Mobile Vaccination Units (MVU) and the Mass Vaccination centers. AEC is currently in charge of the medical waste generated from the Mass Vaccination Center at City Mall- Dora. AEC follows the WHO waste management guidelines and the national legislations. It also provides guides and train the Health Care Worker (HCW) on the Infection Prevention and Control (IPC) and waste management in the Health Care Facility (HCF).

**Biological environment**

Though small in size, occupying only 0.007% of the world’s land surface area, Lebanon is home to 1.11% of the world’s plant species and 2.63% of the reptile, bird and mammal species.[[6]](#footnote-7) . Several protected areas are designated at the national level and their numbers are increasing. Protected areas represent 2.60% of Lebanon land surface and 0.21% of marine and coastal surface. Nationally protected areas include Nature Reserves, Natural sites and monuments and Himas.

**Fleet and Equipment to be used in the Project**

The LRC will be using EMS ambulances, Medico- Social Services-(MSS) mobile medical units in addition to LRC cars and vans. All LRC ambulances and cars are well maintained thus there will be no procurement of new vehicles.

**Emergency preparedness**

Based on LRC investigation within the framework of this project, it was noted that all the hospitals and the mass vaccination center that will receive funds from the project have fire detectors, alarm systems and fire-fighting equipment adequately placed and sized, and all the mobile vaccination units and ambulances are equipped with extinguishers. The equipment is maintained in good working order and readily accessible. The equipment is also adequate for the dimensions and use of the premises, physical and chemical properties of substances present, and the maximum number of people present.

***Social Baseline***

**Socio-economic environment**

Due to the deteriorating economic and financial situation, weak and already overstretched public services in Lebanon face growing pressure. Insufficient funding and weak institutional capacity are exacerbated by growing fiscal debt. Yet, the demand for public services, including healthcare and education, continue to rise, especially as more families become unable to afford private services. The COVID-19 pandemic poses a continued, if not growing, risk to the national health system. More specifically, as the COVID-19 pandemic has led to multi-dimensional challenges to the country, both Lebanese and non-Lebanese vulnerable communities have been severely affected. (Reuters, 2021).

**Vulnerable groups including the Syrian refugees and other non-Syrian refugees**

According to UNRWA, the total number of Palestinian refugees in Lebanon is around 480,000 persons About 45 per cent of them live in 12 refugee formal camps. Four camps are located in and near Beirut (Burj al-Barajne, Shatila, Dbayeh, and Mar Elias), two in Tripoli (Beddawi and Nahr al-Bared), three near Tyre (Burj Shemali, El-Bass and Rashidiyeh), two near Saida (Ein el-Helwe and Mieh Mieh) and one near Baalbek (Wavel). Conditions in the camps are dire and characterized by overcrowding, poor housing conditions, unemployment, poverty and lack of access to justice. As per the UNHCR, more than 1 Million Syrian refugees are registered in Lebanon (2017). Thousands more Syrians are in the country, but lack formal documentation. It is estimated that about 1.5 million Syrian refugees have fled to Lebanon. More than one third of the Syrian refugees live in the Beqaa Valley in eastern Lebanon. The new tented settlements are typically located outside villages along main roads or behind the villages. The feeder roads that lead there are generally in poor condition. Many are mere dirt tracks.[[7]](#footnote-8)

**Multidimensional Poverty Index**

The Lebanon Multidimensional Poverty Index (MPI) was developed by the Central Administration of Statistics (CAS) and the WB and published in 2022. It is based on the notion that poverty is not simply about a person or household having low income but encompasses a broader set of factors such as lack of clean water or electricity, poor quality of work or limited schooling. Multidimensional poverty measures help to provide a more comprehensive portrayal of the poor in a country. The 2019 MPI for Lebanon reveals that 53.1 percent of residents in Lebanon were multi-dimensionally poor. The extreme poor, where residents are deprived in more than 50 percent of the indicators, amount to 16.2 percent of the population, with an average intensity of 59.3 percent and an MPI of 0.096.[[8]](#footnote-9).

**Sexual Harassment, Sexual Exploitation and Abuse and Gender-Based Violence**

There are many protection agencies, in Lebanon, implementing projects specific to addressing Gender-Based Violence (GBV) which include Sexual Exploitation and Abuse and Harassment (SEA/H). They have recently begun working on removing barriers to accessing vaccine services. In this regard, the Psycho-Social Support (PSS) and Protection, Gender and Inclusion (PGI) Program at the LRC has also developed a set of measures to prevent or decrease SEA/H such as the PSEA policy.



The rest of the population in the project will be made aware of the SEA/SH prevention and control measures in consultation sessions as per the SEP. The project workers on the other hand as identified in the LMP will be signing codes of conduct and following the PSEA policy.

The LRC has also developed a complaint and feedback mechanism through the establishment of a call centre with the purpose of receiving feedback from LRC beneficiaries and participants as well as reporting any provided complaints. An ongoing process has been initiated to build the capacity of the call centre operators through providing trainings on Psychological First Aid, safe identification and linkages, Protection from SEA/H and other mandatory PGI trainings. More details are provided in section 4.2.4).

**Potential Environmental and Social Risks and Mitigation**

The Project has numerous positive impacts in particular on (i) Contribution to saving unnecessary health care costs and social care costs by preventing disease and supporting a healthy population, (ii) Increase in the productive labor force, (iii) Improvement of the health care service, (iv) Reduction of tension between refugees and local populations by engaging closely with all beneficiaries and identified stakeholders in the project and communicating clearly and widely about the project specificities and targets and the grievance mechanism and following the program of engagement as outlined in the LRC’s cleared and disclosed SEP It has also some negative impacts mainly due to (i) Wastewater discharges from hospitals treating COVID-19 cases, (ii) Medical waste management, (iii) Weak IPC and Occupational Health and Safety (OHS) measures in HCF particularly in hospitals that may lead to the spread of Infection, (iv) Emergency situations that could happen anytime while handling of hazardous materials or even during natural disaster situations such as floods or fire, (v) Risks on vaccines due to the poor maintenance of the cold chain, (vi) Risks due to the poor management of the vaccine stock, (vii) Traffic/road safety , and air pollution from vehicles transporting vaccines and from MVU, (viii) Increase of water and energy use (ix) Life and Fire Safety (L&FS).

Mitigation Measures can help eliminate and reduce the risks and impacts. They include (i) ensuring a proper management of the liquid and solid wastes, (ii) ensuring a strong IPC and OHS measures in HCF, (iii) preparation of Emergency Preparedness and Response Plans, (iv) ensuring an effective cold chain, (v) ensuring a good management of the stock of vaccine in order to prevent the potential loss of vaccines, (vi) ensuring a regular maintenance of the vehicles, train the personnel on safe driving and economy in vehicles usage, (vii) Provision of renewable energy sources for the cold-chain whenever possible and implementation of water conservation measures and (viii) Equipped HCF with fire detectors, alarm systems, and fire-fighting equipment and train the personnel on how to behave in case of fire.

The project should follow the National Vaccination Plan for COVID-19[[9]](#footnote-10) that adopts the principles of quality and equity. It aims to target just groups in remote areas. However, the project may result in some social risks such as (i) Labor risks issues such as COVID-19 Infection, OHS Risks, Unfair and/or unclear contract terms and conditions, Irregular payment of salaries, discrimination and non-equal opportunities, (ii) Risk of perception of elite Capture, (iii) OHS Risks, (iv) Gender-based violence (GBV) and SEA, (v) Hesitancy in getting vaccinated and concerns over vaccine safety and possible side effects, (vi) Difficulty in pre-registration for COVID-19 vaccine and (vii) Social tensions between host communities and refugee communities.

The relevant proposed mitigation measures include: (i) the design, implementation and maintenance of an efficient Grievance Mechanism (GM) with referral pathways in the event of SEA/SH, (ii) the adoption and implementation of LMP, SEP and ESCP ([link](https://www.redcross.org.lb/our-reports/)), (iii) Ensuring that any HCF that will receive funds/supplies from the Project has and implements an Environmental and Social Management Plan (ESMP) including a Health Care Waste Management Plan (HCWMP), (iv) Communicate reliable sources of information, (v) inclusive consultations throughout the project implementation as per the SEP; (vi) signing of codes of conduct by all project workers; (vii) training and awareness raising on SEA/SH.

**Procedures to Address Environmental and Social Issues**

This ESMF applies to all the components of the Project and will be applicable to PRCS. The Project Management Unit (PMU) at LRC shall ensure that all HCF benefiting from the SLCRVGP have proven capacities in managing E&S issues. In this regard, the eligible facilities and mobile units should have at minimum an ESMP to mitigate, avoid, and minimize the environmental and social risks associated with the project including a HCWMP.

To ensure proper implementation of the above mentioned procedure and the ESMF in general, the LRC will undertake environmental training and institutional capacity building. Environmental training and sensitization will be required for the implementing stakeholders and health workers. A capacity building program should accompany the ESMF, the ESMP and the HCWMP. The LRC PMU’s E&S officer shall train the staff of the HCF on the ESMF, ESMP and HCWMP and on how to develop implementing tools. Relevant staff of the HCF should be made aware of the requirements of the ESMP by the PMU. The trainings will also be focused on the Codes of Conducts, Grievance Mechanism and Stakeholders’ Engagement.

**Stakeholder’s Consultation**

Consultations took place before and during the preparation of the ESMF integrated with LMP. LRC has done coordination meetings with **the MOPH** and **the Prime Minister office** since May 3rd 2022 in order to coordinate the vaccination campaigns, the site of vaccination and the response to COVID-19. These included multiple meetings with the Public Health Advisor to the Prime Minister Dr. Petra Khoury held in person at LRC HQ premises and Grand Serail.

The first meeting was held in the first week of May 2021, as an outcome of this meeting the LRC agreed to initiate the first vaccination process through the first LRC-vaccination marathon that took place on May 30th 2021 as a result of the successful vaccination marathon a strategic decision was made to inaugurate the LRC Vaccination Center on June 9th 2021. It included LRC secretary general, LRC chief of staff, Mass vaccination Centre Manager and WB Team. Discussions covered the role of LRC in vaccine deployment, how to support the mass vaccination centre, how to reach vulnerable groups. Dr. Khoury shared her vision regarding the operation of the first community mass vaccination centre in the country. Discussions also highlighted all challenges related to waste disposal, cold supply chain and integrating the IMPACT software. Furthermore, several meetings were held discussing several ESMF topics like waste management with **MOPH** including Dr. Atika Berri Head of the Communicable Diseases Unit at the Ministry of Public Health, and the minister’s advisors and Dr. Dima Shams (MOPH pharmacy and warehouse) and as outlined in the SEP which has been cleared and disclosed ([link](https://www.redcross.org.lb/our-reports/)). The outcomes of the consultation sessions will be documented in the regular progress reporting of the LRC. The stakeholder engagement will continue throughout the implementation as per the SEP.

The most recent consultation meeting was done with UNHCR on 29th April 2022, the outcomes of this meeting are:

-The agreement on the regular coordination between LRC and UNHCR regarding the RCCE interventions for refugees and deployment of the vaccines

- The request to run the vaccination center in Bekaa area in which the Lebanese Red Cross is analysing all the logistics and the human resources.

Consultation meetings were also conducted with UNICEF on regular basis throughout the implementation of the “Risk Communication and Community Engagement Plan in Response to Covid-19 Pandemic in Lebanon” Project implemented from September 2021 to April 2022.

The following Precaution and safety measures were taken during all face-to-face meetings to prevent the transmission of COVID-19:

* Ensuring proper social distancing during meetings
* Wearing protective masks
* Avoiding hand shaking,
* Disinfecting hands regularly.

**Grievance Mechanism**

The project will use the LRC existing call centre with the designated hotline 1760 which was put in service in August 2020 to cover the COVID-19 related issues such as people starting to show symptoms and need to be assessed and referred to hospitals, as well as answering questions and receiving complaints. A daily report is being kept for the calls being received at COVID-19 line. Names and numbers of the callers are taken and registered. Since the establishment of the hotline, 282,552 calls were received, averaging 8,000 calls monthly. The hotline is operated by 17 operators and 5 supervisors. It is operational 24 hours/7 days. Sensitives complaints are answered in Max 24H, non-sensitives complaints are answered with a top of 10 Days). The respondents are regularly trained on how to handle the calls. Complaints are not neglected even if they are reported anonymously. LRC is working on a referral system with other NGOs for some specific complaints.

As per the WB Bank ESF requirements, the project GM will be strengthened to ensure that it provides an appeal process if the complainant is not satisfied with the proposed resolution of the complaint, and this will be documented in the periodic progress reporting. Once all possible means to resolve the complaint has been proposed and if the complainant is still not satisfied then they should be advised of their right to legal recourse. Furthermore, the GM will consider multiple uptake channels to register project related grievances. Anonymous grievances can be raised and addressed. Several uptake channels under consideration by the project include:

* Toll-free telephone hotline / Short Message Service (SMS) line at 1760
* Letter to Grievance focal points at local health facilities and vaccination sites
* Complaint form to be lodged via [LRC website](https://www.redcross.org.lb/get-in-touch/)
* Walk-ins may register a complaint on a grievance logbook at healthcare facility or suggestion box at clinic/hospitals

These additional uptake channels were incorporated in the existing project GM before project activities begin, to provide other means for registering complaints and once established will be widely disseminated to all stakeholders as identified in the SEP.

The project will have referral pathways in place to handle sensitive and confidential complaints, including those related to Sexual Exploitation and Abuse/Harassment (SEA/SH) in line with the WB ESF Good Practice Note on SEA/SH. LRC has drafted a Policy on Protection from Sexual Exploitation and Abuse PSEA as well as Referral mechanism, these policies will be approved before the project implementation to ensure proper management of SEA/SH cases.

Once a complaint has been received, by any channel, it should be recorded in the complaints logbook or grievance excel-sheet/grievance database. The GM is under the direct supervision of the Secretary General Office-Chief of Staff, and consists of (i) Call Center Management Officer (CCMO): responsible of maintaining system workflow, case referral to the responsible service providers and reporting to the superior, (ii) Complaints and Follow-Up Officer (CFO) that follow up and refer to the CCMO on the complaints received on the non-emergency hotline and social media platforms on the project and services, (iii) Call Center Shift Supervisors (CCSS) that maintain attendance, behavior, work quality of the operators, support with extra work experience and information to the operators and implement follow-ups and announcements given by superiors and (iv) Operators that receive calls, apply data entry and communicate with community beneficiaries.

**Monitoring, Institutional Arrangement and Budget**

A Joint Monitoring Committee (JMC) chaired by the WB and composed of heads and technical staff from WHO, United Nations International Children's Emergency Fund (UNICEF), IOM, UNHCR, UNRWA was set up with the objective to enhance the quality of monitoring and effectiveness of the COVID-19 vaccination program implementation with respect to the NDVP, WHO standards and WB requirements. The JMC is active since the beginning of the vaccination campaign in February 2020. The JMC will be monitoring all vaccination rollout activities The PMU E&S specialist will check on the proper implementation of the ESMP and the HCWMP in the HCF. The LRC will manage the WB funds and the PMU manages the implementation of the Project. The PMU includes a project coordinator, a financial and accounting manager, and a procurement officer. The LRC has appointed one Environmental and one Social focal points (those are staff currently employed by the LRC) and will be maintained throughout the implementation phase. In addition, an environmental and social specialist will also be recruited by the LRC to support in ESMF development and management of ESHS risks. The Environmental and Social specialist will be also following up on all issues related to the project and reporting at the PMU level and will ensure implementation of the ESCP. He/She will be in charge of preparing, updating, and implementing relevant E&S standards throughout project implementation as set out in the ESCP. The estimated total budget for the implementation of the ESMF is 84,000 **USD**

# 1- Background

The first cases of COVID-19 were reported in Lebanon on February 21, 2020. In response, the Government of Lebanon (GOL) has prepared a COVID-19 Health Sector Response Plan, developed a National Multi-Sectoral Plan and initiated a COVID-19 National Deployment and Vaccination Plan (NDVP) that was prepared and deployed with support of partners and the World Bank (WB). Refer to [Annexes A, D and E)](#_Toc63586107)

However, the unmet needs for vaccination are immense as Lebanon’s economy is already going through the worst economic crisis in recent history and when the country is trying to recover from August 4, 2020, blast at Beirut Port. The Health sector is suffering, and the GOL has limited resources to respond to COVID-19 pandemic.

The COVID-19 pandemic is particularly affecting the poor and the vulnerable. The unmet health needs are immense, and the healthcare system lacks the needed human and financial resources to manage or respond to this pandemic. Lebanon is also facing a 10-year humanitarian situation caused by an unprecedented influx of displaced Syrians. Among its total population of 6.8 million, Lebanon hosts the highest number of refugees per capita in the world, Lebanon hosts 855,172 registered Syrian refugees in addition to 600,000 Syrian refugees informally residing in the country, bringing the estimated total to about 1.5 million, equivalent to over 20% of the overall population. There are also approximately 225,000 Palestinian refugee and 30,000 Palestinian refugees from Syria in Lebanon, 15,800 refugees of Ethiopian, Iraqi, Sudanese, and other origins, in addition to 400,000 migrant workers. The influx of refugees exacerbated the healthcare system's fragility, which was already overstretched by economic and political instability[[10]](#footnote-11).

Till date, the implementation of the NDVP has been successful, but despite multiple efforts to increase registration and vaccination among non-Lebanese populations, registration and vaccination coverage among this population remain low compared to the Lebanese population. Data disaggregated by nationality reveals that pre-registration and vaccination among the non-Lebanese population is lower than in the general population. A recent hesitancy survey conducted by International Medical Corps (IMC) in June/July 2021 showed that while the proportion of Lebanese willing to take the vaccine has increased by 32 percent, in the refugee community only a 10 percent increase was noted. In fact, nearly 37 percent non-Lebanese respondents considered that the COVID-19 vaccine is unsafe. It is also worth mentioning that 10 percent of refugees cited transportation to vaccination center and security concerns as barriers to vaccination. Several actors have been engaged in efforts to increase registration and vaccination among the refugee population. This includes outreach to Syrian refugees by phone and through door-to-door visits to raise awareness on the importance of vaccination and support in the registration process by the United Nations High Commissioner for Refugees (UNHCR). UNHCR’s partners have also deployed mobile units to areas of high Syrian refugee concentrations to conduct vaccination. As for the United Nations High Commissioner for Refugees (UNRWA), the agency has opened a vaccination site inside the biggest Palestinian refugee camp in Lebanon to encourage Palestinian refugees to get vaccinated and plans to expand this activity to other camps if the outcomes are satisfactory. These efforts have contributed to increased numbers of registered and vaccinated refugees; however, the coverage is still unsatisfactory and more support in these areas is needed[[11]](#footnote-12).

As a response to the above, Supporting Lebanon’s COVID-19 Response for Refugees and Host Communities Project was conceived with the Project Development Objective (PDO) to support COVID-19 vaccine registration and deployment, as well as COVID-19 response for refugee populations and their host communities in Lebanon. The Project has a budget of US$ 2.32 M and a duration of 16 months.

This Environmental and Social Management Framework (ESMF) report analyses the environmental and social impacts associated with activities undertaken by “Supporting Lebanon's COVID-19 Vaccination and Response for Vulnerable Groups “Project (SLCRVGP) and provides a framework for social and environmental management. Because specific activities under this project will be identified during the implementation phase, an Environmental and Social Management Framework (ESMF) has been developed. The purpose of the ESMF is to ensure that the activities carried out under the project, address and identify measures to avoid and minimize environmental and social impacts, as much as possible, and where they cannot be avoided, the impacts are adequately identified/assessed and necessary mitigation measures designed and implemented following relevant policies, legislations and regulatory framework

The detailed objectives of the ESMF integrated with Labor Management Procedures (LMP) can be summarized as follows:

* Describe the policy, legal and institutional framework for environmental management related to the health sector.
* Evaluate the potential environmental and social impacts of the Project and identify mitigation measures.
* Establish clear procedures and methodologies for the environmental and social planning, review.
* Develop a monitoring program for compliance of project activities to ESMF.
* Establish the project funding required to implement the ESMF requirements.

Through the LMP that is annexed to this ESMF ([Annex L](#_Annex_L:_Labor)), the Lebanese Red Cross (LRC) ensures that its activities comply with the Environmental and Social Standards (ESS) of the WB’s Environmental and Social Framework (ESF), in particular ESS2 (Labor and Working Conditions) and the requirements of the national law. Under ESS2, borrowers are required to develop an LMP. The purpose of the LMP is to facilitate planning and implementation of the project related to labor. The LMP identify the main labor requirements and risks associated with the project, and help the borrower determine the resources necessary to address project labor issues. The LMP will enable different project-related parties, for example, staff of the LRC and medical staff, to have a clear understanding of what is required on a specific labor issue.

# 2- Project Description

The World Bank will directly fund LRC to implement the Project. LRC will be accountable for the overall project and will establish a Project Management Unit (PMU) who will coordinate and collaborate with the MOPH, PRCS, Hospital syndicate, Nurses syndicate, Order of Physicians, WHO, UNHCR and UNRWA and all relevant vaccination committees to ensure complementarity of interventions and to avoid duplication of efforts. The UN Agencies are supporting the MOPH in the deployment of the vaccine in the Country, technically and financially. The SLCRVGP aims at understanding and addressing the gaps in COVID-19 vaccine preparedness and implementation and COVID-19 response in Lebanon for vulnerable populations, both host and refugee communities. To achieve that, it supports the following three components.

* ***Component 1: Vaccine awareness and registration (US$ 936,808.0)***

This component will be jointly implemented by the LRC and the Palestine Red Crescent Society – Lebanon (PRCS-Lebanon) aiming at gaining community confidence and trust to ensure the success of the immunization initiative focusing on alleviating barriers such as hard to reach areas, Information technology (IT) illiteracy and lack of access to technology, hesitancy, fear, and stigma and reasons for hesitancy such as misinformation, rumors, concerns related to the associated Adverse Events Following Immunization (AEFI) and limited trust in governmental entities. This component will take place in all governorates in Lebanon covered by the LRC Mobile Medical Units (MMU) and at PRCS-Lebanon Community Centers

* ***Component 2: Vaccine deployment (US$ 984, 376.5)***

This component will be implemented by the LRC only. Providing access to vaccines is one of the most critical aspects of vaccine deployment. It will comprise the following activities:

* The project will support the **Mass Vaccination Center** in the Maten area that is already run and operated by LRC and that can receive up to 6,000 people per day. As part of this project, the LRC will operate the mass vaccination site for two additional months depending on the need and the national campaign.
* In order to enhance accessibility to COVID-19 vaccines, especially for Syrian refugees and non-Syrian refugees, the LRC will deploy mobile vaccination units to various informal tented settlements. The LRC currently operates eight (8) **MMUs** as part of its medico-social sector; these are used to improve access to primary healthcare. Hence, as during this project, LRC will make use of 5 MMUs and transform them into Mobile Vaccination Units (MVU), they will be equipped by medical teams. Moreover, they will be supported by personnel and ambulances from LRC Emergency Medical Services (EMS) that can assist in post-vaccination monitoring and transportation to hospitals in case any of the beneficiaries develop adverse effects following vaccination. Five MVUs will operate two times per week conducting 560 campaigns dedicated for refugees and vulnerable communities.
* Since the beginning of the vaccination campaign in Lebanon, the LRC EMS have been closely supporting the implementation of the campaign. This is being done via two main activities. First is **transportation of high-risk/ physically challenged people to vaccination sites**, and second is **providing ambulances and emergency medical technicians to support vaccination campaigns** that are done outside hospitals. As part of this project, the LRC EMS will maintain and upscale these support services to ensure accessibility of vaccination to the most vulnerable and enhance patient safety by providing prompt transportation to hospitals in case of development of adverse effects following vaccination.

This component will take place at the Metn Vaccination Center (City Mall Dora), all governorates in Lebanon covered by the LRC MMUs and at PRCS Hospitals (Hamshari-Saida, Haifa-Burje EL Barajne, Safad-Beddawi Tripoli, Nasra Hospital-Barelias Bekaa, and Tel EL Zaatar Hospital-Racidiyie Tyr).

* ***Component 3: COVID-19 response (US$ 600,085.0)***

This component will be implemented jointly by the LRC and the PRCS-Lebanon.

* Since February 2020, the LRC has been the main provider of the **pre-hospital care and transportation** **of suspected and confirmed COVID-19 cases in Lebanon**. The LRC will increase its dispatch capacities by adding 4 dispatchers to support in call taking and dispatching ambulances during the period of this project. These dispatchers will support the dispatch centers available at LRC in the screening of urgent and non-urgent calls received by the emergency hotline (140) and the detection of suspected and confirmed COVID-19 cases. It will also assist in coordinating the ambulance response to COVID-19 cases. Furthermore, LRC will deploy 15 additional COVID-19 ambulance teams distributed over all governorates. The availability of these teams aims at decreasing response times for suspected and confirmed COVID-19 cases from 35 minutes to 25 minutes. Additional teams will ensure the provision of effective prehospital care and prompt transportation to hospitals. These ambulance teams will be allocated to ensure accessibility for Syrian and non-Syrian refugees as well host community in an equitable manner. In the case of the Palestinian refugees, the LRC ambulance teams and the PRCS-Lebanon hospital and ambulance teams will be coordinated and relay to cover all Palestine camps.
* The PRCS-Lebanon will **support the testing and the treatment** of Palestinian refugees COVID-19 patients in their own two hospitals in South and North – by covering medicines, medical supplies and procuring equipment dedicated for the treatment of COVID-19 patients with support from UNRWA. The PRCS is running a treatment ward for COVID-19 patients at Hamshary hospital in Saida city, south Lebanon (consisting of 6 Intensive Care Unit (ICU) beds and 16 regular beds). currently, work is underway to prepare a treatment center at PRCS-Lebanon Safad hospital in Tripoli, in North Lebanon, with a capacity of 9 ICU beds and 10 regular beds, in addition to another hospital at Al Buss camp in Tyre area, with a capacity of at least of 9 ICU beds and 15 regular beds. All five (5) hospital medical staff were trained regarding COVID-19 treatment and Infection and Protection Control (IPC).
* The PRCS-Lebanon nine community centers will be providing the awareness session of COVID-19 prevention and vaccine hesitancy as well as hygiene promotion and hygiene kit distribution.

This component will take place in the whole Country.

* ***HR and Admin Support Cost (US$ 478,730.72)***

This component covers the compensation of the project management unit including, project manager, social and environmental Specialist, financial officer, procurement officer, monitoring evaluation and reporting Officer and four project officers

# 3- Policy Legal, Regulatory and Institutional Framework

Below are the national and international policy, legal and regulatory provisions directly relevant to the activities being carried out in the project.

## 3.1 National Legislation

The following is a summary of relevant national legislation.

***Environment***

*Lebanese law 444/2002*

The Code of the Environment forms the legal basis for environmental management in Lebanon, for the principles mentioned below and the Environmental Impact Assessment (EIA) system.

*Lebanese decree 8633/2012*

Decree 8633/2012 “The EIA decree”, requires projects mentioned in its annexes to either undergo an EIA or an Initial Environmental Examination (IEE). It describes the process required for preparing an EIA or an IEE and the timeline for responses and approvals from the Ministry of Environment (MOE). Annex 1 of this decree states that the establishment of a hospital requires an EIA.

*Decree 8471/2012 and Decision 189/1 - 2016*

Define the process and mechanism for environmental compliance audit report review at the MOE, which also covers the submission process and report contents.

***Solid and Hazardous Wastes***

*Lebanese decrees 8006-2002 and 13389-2004*

Decree 13389/2004, amends decree 8006/2002. 13389 regulates and defines the healthcare wastes and their types. It requires proper waste segregation and minimization. It sets guidelines for the collection and storage of waste. Finally, it sets that the healthcare waste treatment facilities require an EIA in order to get a license from MOE. Vaccination Centers, Health Care Centers (HCCs) and Hospitals are required to abide by decree 13389/2004.

*Circular 11/2011*

This circular defines the trimestral reporting template for Infectious Healthcare Waste Treatment facilities.

*Circular 7/1- 2017*

This decision provides a list of institutions for the disposal of material and equipment for potential recycling. Vaccination centers, HCCs and hospitals can make use of this list to dispose their recyclable wastes.

*Decision 1/1294-2018 and 1/1295-2018*

These decisions regulate the transport of infectious healthcare waste (1/1294) and the construction and operation of facilities (1/1295) for the disinfection of hazardous and infectious waste. Decision 1/1295 specifies the process for the acquisition of an environmental license to operate such facilities. For the disposal of their waste, HCCs and hospitals should make sure they contract companies that abide by these two decisions, and this should be specified in the bidding documents. Healthcare waste collection and disposal companies are requested to apply for a license from the Ministry of Industry (MOI) and are required to submit an EIA to the MOE to get an environmental license. The Ministry of Public Health (MOPH) plays an indirect role as a member of licensing committees.

*Law 80 – 2018 Integrated Solid Waste Management Law*

Sets the framework for Integrated Solid Waste Management based on the principles of Law 444/2002.

*Decree 5606 - 2019*

The decree specifies the principles for sorting domestic solid waste at the source into three categories: organic waste, recyclables, and inert waste.

*Decision 59/1 - 2020*

The decision specifies the procedures and principles for hazardous waste storage facilities licensing in Lebanon.

*Decision 998/1 – 2020*

The decision specifies the procedures and principles for hazardous waste generators in Lebanon.

***National Standards for Environmental Quality***

*Decision 6/1 – 2022 that supersedes Decision 8/1 2001* National Standards for Environmental Quality

This decision provides Environmental Limit Values (ELV) for wastewater discharged into different receiving media (sewerage system, surface water, sea). HCCs and hospitals are required to abide by this decision.

***Labor and Occupational Health and Safety (OHS)***

*Labor Law 1946 and its amendments*

This law sets basic labor rights in Lebanon such as minimum working age, working and resting hours, etc.

*Decree 11802 – 2004*

This decree regulates occupational prevention, safety and health in all enterprises subject to the code of labor.

***Social Laws***

*Penal Code Decree 340 1943*

The text of Article 522 of the Lebanese Penal Code applies to cases of assault of women, by force, violence, and manipulations which are acts that affect a woman's dignity, physical health, psychological state, and moral integrity. This is article calls for the prosecution and conviction of a person who has committed rape, kidnapping, or statutory rape. Article 503 of the Penal code defines the crime of rape as “forced sexual intercourse (against someone) who is not his wife by violence or threat. Domestic violence does not relate to Article 522. Marital rape and underage marriage, are still not considered as a crime in Lebanon

*Law 335 – 2001: Ratification of International Labour Organization (ILO) convention No. 182:*

This text does not allow the employment of children and protects them from engaging in any work activities that could harm their health and safety.

*Law 400 – 2002: Ratification of ILO convention No. 138:*

Minimum age of employment on tasks and works that pose risks or hazards to health and safety.

*Decree 8987 – 2012*

Prohibits the employment of minors under the age of 18 in work that may harm their health, safety or morals.

*Law 205 – 2020*

This law criminalizes the sexual harassment.

*Law 28/2007 and Decree 6940/2020 (2007 and 2020)*

Pursuant to Decree 6940 of 2020 all public institutions were instructed to activate administrative self-monitoring and to enhance transparency and positivity in the communication between the administration and the citizens, within one month from the date of the circular.

According to Law 28/2007, the administration that receives a request for information must immediately acknowledge receipt and respond within 15 days, which can be extended for another 15 days if the request is complex. The administration should provide a written justification if it can’t provide the requested information, and the citizen can appeal this decision within two months.

## 3.2 Hospital Accreditation

In January 2019, The MOPH announced the official publication of the new accreditation standards manual for hospitals. But also mentioned that the present version will be updated soon[[12]](#footnote-13). Some of the standards were classified under Critical Organization Requirements (COR) and others were not.

The COR standards are the minimum required standards that a hospital should meet to be accredited, the “make it or break it” standards. Those standards are essential to ensure patient safety and include the international patient safety goals. The COR standards are incorporated from different themes and were selected based on a risk assessment that involves identifying a numerical risk score based on the likelihood that the identified risk will actually happen or materialize and the consequences on the organization if the risk does materialize or happen.

Achieving accreditation does not guarantee that care is optimal nor that environmental protection measures or operational, health and safety procedures are applied. A hospital can get the passing score for the accreditation even if it fails in getting a passing grade for those standards. For instance, the following standards are not considered as COR.

* IPC 23: The hospital ensures the correct usage and availability of Personal Protective Equipment (PPE), soap and hand antiseptics.
* FMS 10: The hospital has a program in place for the inventory, handling, storage, and use of hazardous materials.
* MM16: The hospital prepares and dispenses medications in a safe and appropriate environment.
* IPC 19: The hospital establishes and implements a process for proper and safe disposal of infectious wastes to reduce infection.
* IPC 20: The hospital reduces the risk of infection through proper handling and disposal of sharps.

Consequently, an accredited hospital does not necessarily follow a good environmental and social management system and other control measures should be put in place to ensure environmental and social safeguard.

## 3.3 International Agreements

*The Basel Convention (Ratified by law 387/1994, 29/2015)*

The Basel Convention on the control of transboundary movements of hazardous wastes and their disposal. The Basel Convention’s main objectives are:

* To reduce the production of hazardous waste
* To treat and dispose of hazardous waste at the nearest possible place to the source and
* To reduce transboundary movements of hazardous waste.

In 2015 hazardous waste export to and from Organization for Economic Co-operation and Development (OECD) countries has been banned.

*The Stockholm Convention (Ratified by law 432/2002)*

The Stockholm Convention on Persistent Organic Pollutants (POPs) is “a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of human and wildlife and have harmful impacts in human health or on the environment”.

*Minamata Convention on mercury (Acceded by law 2/2017)*

The Minamata Convention on Mercury is “a global treaty to protect human health and the environment from the adverse effects of mercury”.

*The Barcelona Convention Signature (Acceded by Decree Law No. 126 30/6/1977*

*Amendments Adhesion Law No.34 16/10/2008)*

The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, originally the Convention for Protection of the Mediterranean Sea against Pollution, known as the Barcelona Convention, is a regional convention that was adopted in 1976 and amended in 1995 to prevent and reduce pollution from land-based sources, ships and aircraft in the Mediterranean Sea.

*The UNFCCC (Ratified Law No.359 11/8/1994)*

The United Nations Framework Convention on Climate Change (UNFCCC)entered into force on 21 March 1994. From the handbook of the Convention (2006), according to Article 2, the Convention’s ultimate objective is "to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”.

Relevant ILO conventions were ratified by laws mentioned in section -3.1.

## 3.4 World Bank Environmental and Social Framework

The Environmental and Social Framework (ESF) of the WB became effective on October 1, 2018 and applies to all Investment Policy Financing (IPF) projects initiated after this date. It includes ten Environmental and Social Standards (ESSs) It tackles among others, the issues of labor, non-discrimination, climate change mitigation and adaptation, biodiversity, community health and safety, and stakeholder engagement including public participation and grievance mechanisms. Five out of the ten ESSs of the ESF, are relevant to the SLCRVGP and their requirements apply.

Table 1: ESS relevant to the SLCRVGP

|  |  |  |
| --- | --- | --- |
| No. | Designation | Relevance to the SLCRVGP |
| ESS1 | **Assessment and Management of Environmental and Social Risks and Impacts** | **Relevant** |
| ESS2 | **Labor and Working Conditions** | **Relevant** |
| ESS3 | **Resource Efficiency and Pollution Prevention and Management** | **Relevant** |
| ESS4 | **Community Health and Safety** | **Relevant** |
| ESS5 | Land Acquisition, Restrictions on Land Use and Involuntary Resettlement | Not Relevant |
| ESS6 | Biodiversity Conservation and Sustainable management of Living Natural Resources | Not Relevant |
| ESS7 | Indigenous Peoples/Sub-Saharian African Historically Underserved Traditional Local Communities | Not Relevant |
| ESS8 | Cultural Heritage | Not Relevant |
| ESS9 | Financial Intermediaries | Not Relevant |
| ESS10 | **Stakeholder Engagement and Information Disclosure** | **Relevant** |

## 3.5 World Bank Guidance

The following project is expected to abide by the following guidance and good practice notes:

*Environmental, Health, and Safety (EHS) General Guidelines, Health Care Facilities Guidelines,* Community Health and Safety / Traffic Safety GuidelinesandEnvironmental Guidelines.

The [EHS Guidelines](https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines) are technical reference documents with general and industry-specific guidelines. Healthcare facilities follow industry special EHS guidelines. It covers waste management, emissions to air and wastewater discharges.

*Policy of Access to Information*

This Policy governs the public accessibility to information in the WB’s possession. The WB allows access to any information in its possession that is not on a list of exceptions.

This Policy is based on five principles:

* Maximizing access to information;
* Setting out a clear list of exceptions;
* Safeguarding the deliberative process;
* Providing clear procedures for making information available; and
* Recognizing requesters’ right to an appeals process.

*Consultations and Disclosure Policy*

According to ESS10 consultations with stakeholders should be conducted through the life cycle of a project. The aim of the consultation is to present to the public the components of the proposed project along with potential environmental and social impacts and take their comments and concerns into consideration.

*Technical note on Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings (Ref to* [*Annex G*](#_Annex_G:_Technical)*)*

This note offers suggestions to World Bank task teams for advising counterpart agencies on managing public consultation and stakeholder engagement in their projects, with the recognition that the situation is developing rapidly and careful regard needs to be given to national requirements and any updated guidance issued by WHO.

*Technical note: Use of Military Forces to Assist in COVID-19 Operations Suggestions on how to mitigate risks – Version 1- March 25, 2020 (Ref to* [*Annex H*](#_Annex_H:_Technical)*)*

Where military/security forces are utilized, either directly or indirectly, in connection with Bank-supported operations, this technical note should be followed for due diligence and mitigation measures adopted to address the risk from use of military forces.

## 3.6 World Health Organization Policies

*World Health Organization (WHO) Laboratory biosafety guidance related to coronavirus disease 2019 (COVID-19)* .It aimed to provide interim guidance on laboratory biosafety related to the testing of clinical specimens of patients that meet the case definition of coronavirus disease 2019 (COVID-19) The technical guide provides basis for screening Environmental and Social Risks associated with medical laboratories and for assessing and managing the risks throughout the Emergency Response Plan (ERP) in compliance with ESS1, ESS2, ESS4 and WBG EHS Guidelines and in addition to Basic Laboratories – Biosafety Levels 1 and 2. (refer to [Annex B](#_Annex_B:_Basic))

*WHO Infection prevention and control during health care when COVID-19 is suspected Intended for Health Care Workers (HCWs), health care managers, and Infection Prevention and Control (IPC) teams at the facility level, national, provincial and district levels.* The technical guide provides a basis for screening ES Risks associated with COVID-19 treatment centers and for assessing and managing the risks throughout the ERP in compliance with ESS1, ESS2 and WBG EHS Guidelines.

*Key provisions Applicability to ERP WHO rights, roles & responsibilities of HCWs, including key considerations for OSH in COVID-19 Outbreak.* It provides specific measures to maintain the rights and responsibilities of HCWs and their OHS. The technical guide is aligned to ESS1, ESS2 and WBG EHS Guidelines to be complied with throughout the ERP.

*WHO Water, sanitation, hygiene, and waste management for the COVID-19 virus***.** It was intended for water and sanitation practitioners and providers and health care providers to ensure good and consistently applied Water, Sanitation, and Hygiene (WASH) and waste management practices in communities, homes, schools, marketplaces, and health care facilities to help prevent human-to-human transmission of the COVID-19 virus. The technical guide is aligned to ESS4, ESS10 and WBG EHS Guidelines to be complied with throughout the ERP.

*WHO Rational use of PPE for Coronavirus disease (COVID-19)*. It is intended for those involved in distributing and managing PPE and its most appropriate use by public health authorities and individuals in health care and community settings. The technical guide is aligned to ESS2, ESS4, ESS10 and WBG EHS Guidelines to be complied with throughout the ERP.

*WHO Oxygen sources and distribution for COVID-19 treatment centers.* It is Intended for health facility administrators, clinical decision-makers, and procurement officers, planning officers, biomedical engineers, infrastructure engineers and policymakers. It describes how to: quantify oxygen demand, identify oxygen sources that are available, and select appropriate surge sources to best respond to COVID-19 patients’ needs, especially in low-and-middle income countries. The technical guide is aligned to ESS1, ESS10 and WBG EHS Guidelines to be complied with throughout the ERP.

*WHO Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19)*. It aimed to offer guidance to WHO Member States on implementing quarantine measures for individuals in the context of COVID-19 outbreak. The technical guide is aligned to ESS4, ESS10 to be complied with throughout the ERP.

## 3.7- Institutional Framework for Environmental and Social Management

This section describes the responsibilities of the institutions that will be involved in the implementation of the **SLCRVGP**. LRC is the counterpart for the funds. However, LRC will ensure coordination and collaboration with MOPH, PRCS, Hospital syndicate, Nurses syndicate, Order of Physicians, WHO, UNHCR and UNRWA and all relevant vaccination committees to ensure complementarity of interventions and to avoid duplication of efforts.

### 3.7.1 Public Institutions

The Ministry of Public Health

The MOPHhas the following responsibilities:

* Prepare for regulatory approval, market authorization and post-market surveillance of COVID-19-products (e.g. laboratory diagnostics, therapeutics, vaccines), when available
* Monitoring health personnel exposed to confirmed COVID-19 cases for respiratory illness and for reporting healthcare-associated infections
* Implement surveillance strategies to monitor and report disease trends, disease severity and impacts on health and other systems
* Maintain, monitor, and develop the call center that was established at MOPH
* Monitor the good implementation of the vaccination
* Maintain, monitor, and develop the grievance redress mechanisms and hotline dedicated to COVID-19 vaccine at MOPH

The Ministry of Environment

The MOE elaborates policies, strategies, plans and projects in all that relates to the safety of the environment and the sustainability of natural resources. It also prepares laws, standards and norms.

The MOE requires, reviews and approves or not EIA and IEE studies for specified types of projects. The Service of Environmental Technology at MOE is in charge of the EIA and IEE processes and also hazardous waste including medical waste.

The MOE specifies environmental conditions for the permitting of classified facilities including healthcare waste treatment. It also sets and monitors through inspection, the implementation of strategies related to the management of hazardous waste.

The Ministry of Information

The Ministry of Information (MOInf) plays a crucial role in being part of the COVID-19 Vaccination committee. The MOInf is working in close coordination with the NCVC and the MOInf to handle the communication activities. The MOInf is being assisted by the UNICEF to put up a communication strategy.

The Ministry of Interior and Municipalities (MOIM)

The SLCRVGP under implementation is not using the armed forces. However, The Internal Security Forces (ISF), the General Security Forces (GSF) and the State Security Forces (SSF) may be needed for logistics or to provide security at the facilities where vaccines are being deployed, if and when required. They may also contribute to organize the citizens' entrance and exit if necessary. The Project will not use armed force. However, in the event that there will be a need for armed forces intervention, all vaccination-related activities that might be carried out by the armed forces under the vaccination deployment of the MOPH will be done under the control and with coordination of MOPH. All related goods, works, services, operating costs and training will be used under the direction and coordination of MOPH and strictly in accordance with COVID-19 vaccine Standard Operating Procedures (SOPs) and protocols. The Municipalities will be involved in selecting the elderly eligible to vaccination. The Municipalities can facilitate the outreach of all the communities living in their locations.

### 3.7.2 Treatment and recycling companies listed in circular No. 7/1

Arcenciel (AEC) is a Lebanese based non-profit organization established in 1985. It was recognized as a public interest Non-Governmental Organization (NGO) in 1995 by Presidential Decree No. 7541. In 2003, with help from LIFE (EU financial instrument) and AECID (Spanish Agency for International Cooperation and Development), AEC developed a network for Infectious Healthcare Waste (IHCW) to better address the untreated combustion and disposal of infectious hospital waste. Since then, AEC has developed a hospital waste management guide in collaboration with the French Development Agency (AFD). As per AEC’s website, today, the network treats more than 80% of the health care waste generated in Lebanon. AEC closely coordinates with the MOE, the MOPH, the Syndicate of Hospitals and Healthcare Institutions, and municipalities. The waste is treated by autoclaving in one of the 3 centers of AEC. Infectious waste is transformed into regular solid waste by a steam shredding and sterilizing method.

### 3.7.3 UN Agencies

UN agencies are supporting the vaccine deployment in Lebanon and other projects implemented by the MOPH. Therefore, they are indirectly involved as providers and implementers of parts of the vaccine value chain. Considering the limitations in the supply chain of required medical goods, the global involvement of relevant UN Agencies in the procurement and distribution of these goods, the procurement plan will be agreed upon between the MOPH and the UN Agencies. They will also provide technical support to the MOPH and coordinate awareness raising activities. The WHO will be providing technical support for vaccine introduction and deployment. UNICEF will continue to contract AEC for infectious waste management. The UNRWA will be supporting the project for the delivery of COVID-19 vaccines to displaced and refugee population. The UNHCR will be supporting the project the delivery of COVID-19 vaccines to displaced and refugee population

### 3.7.4 The Lebanese Red Cross and Palestine Red Crescent Society - Lebanon

The LRC is an independent humanitarian organization affiliated to the International Federation of Red Cross and Red Crescent Societies (IFRC) and an auxiliary team to the medical service of the Lebanese Army. Its headquarters is in the Lebanese capital city of Beirut. Founded in 1945, the organization comprises approximately 7,000 members/volunteers and 200 staff personnel. LRC supports primary and pre-hospital medical services. It is considered as a strong local actor and auxiliary to the Lebanese authorities in the humanitarian field, and a major health service provider across Lebanon, has been mandated already from 2020 with specific responsibilities in the response to COVID-19 as a sole transport provider for COVID-19 patients and suspected cases. The LRC has been requested more recently to set up and manage one of the nine new centers for vaccination in country.

The PRCS, officially founded in December 1968, is a national humanitarian organization. Since its establishment, it caters to the health and welfare of the Palestinian people and others in need. The role of the PRCS in the COVID-19 vaccination in Lebanon has been focused on raising awareness regarding the COVID-19 vaccine in Palestinian refugee camps in addition to providing registration support through their nine community centers. The PRCS is also complementing the work of the LRC in the Palestinian camps, managing 5 hospitals which provide COVID-19 treatment, including Intensive Care Unit (ICU). Additionally, PRCS-Lebanon supports 9 community centers that provide awareness sessions regarding COVID-19 and tackle vaccine hesitancy. the PRCS-Lebanon supports secondary health services through the hospitals it manages

### 3.7.5 International Federation of Red Cross and Red Crescent Societies

The International Federation of Red Cross and Red Crescent Societies (IFRC) is the world’s largest humanitarian network. Its secretariat supports local Red Cross and Red Crescent action in more than 192 countries, bringing together almost 14 million volunteers for the good of humanity. The IFRC is present in virtually every community on earth, and reaches 160 million people every year through long-term services, development programmes and disaster response. It also works to [improve global humanitarian standards and persuade leaders to act in the interests of vulnerable people](https://www.ifrc.org/advocacy-hub).

LRC has been an active member of the International Red Cross and Red Crescent Movement since 1947, The IFRC Secretariat’s current delegation is co-located with the LRC headquarters in Beirut. The IFRC Secretariat engages with all sectors of the National Society according to the strategic framework in place to support LRC’s strategy and plan of action for 2022-2024, primarily through the active Emergency Appeal for Lebanon Complex Humanitarian Crisis. Moreover, the LRC will closely work with the IFRC in the implementation of the project namely by developing awareness material adapted to the Lebanese context from available materials provided globally by the IFRC, the WHO and the UNICEF in several languages, to address the contextual and situational updates associated with COVID-19 progress in the country.

[The WB and the IFRC signed an agreement for the independent monitoring of Lebanon’s COVID-19 vaccination campaign.](https://twitter.com/intent/tweet?text=The+World+Bank+and+the+International+Federation+of+Red+Cross+and+Red+Crescent+Societies+%28IFRC%29+signed+an+agreement+for+the+independent+monitoring+of+Lebanon%E2%80%99s+COVID-19+vaccination+campaign.&url=https://blogs.worldbank.org/arabvoices/lebanon-fair-and-transparent-distribution-covid19-vaccine-key-real-success/?cid=SHR_BlogSiteTweetable_EN_EXT&via=WorldBankMENA) Under this agreement, IFRC as the Third-Party Monitoring Agency (TPMA), will oversee independently monitoring the compliance of the vaccination deployment with NDVP, international standards and WB requirements in all technical, environmental, and social aspects. This is to ensure safe, effective, and equitable vaccine deployment. To fulfill this mandate, IFRC will monitor storage, stock and temperature maintenance across the supply chain, service delivery at vaccination sites, eligibility of vaccine recipients and client feedback. In addition, IFRC teams will monitor social media and analyze the data from the call center set up by the MOPH as part of the Grievance Mechanism (GM) established under the project.

# 4- Environmental and Social Baselines

This chapter presents the description of the baselines relevant to SLCRVGP. It is divided into Environmental and Socio-economic baselines.

## 4.1 Environmental Baseline

### 4.1.1 Status of COVID-19 Vaccination in Lebanon

The first case of COVID-19 was reported in Lebanon on February 21, 2020.and had devastating impacts on the population. In February 2021, the GOL launched the national COVID-19 vaccination campaign, an inclusive approach was overtly declared to cover all individuals residing in its territories regardless of their nationalities or legal status in the country. As per the MOPH, this approach prioritizes some categories based on their age and health status. In the context of multilayered crisis, and despite the availability of vaccines through public and private facilities in addition to the inclusivity of this declaration, several hindrances were revealed. The current Vaccination Plan targets all the population living in Lebanon including refugees and vulnerable groups. The MOPH is set to vaccinate 80% of the population by the end of 2021. However, and as of March 22, the percentage of fully vaccinated persons in Lebanon is still at 32.1%[[13]](#footnote-14) and this number is much lower for vulnerable populations in Lebanon (both Lebanese and non-Lebanese including refugees and migrant workers)

Vaccines have become the best weapon for epidemic prevention and control in the absence of standard approved effective therapies against COVID-19. However, skepticism about the vaccine efficacy and safety is constantly reported. In fact, and according to a WB survey, only 3 out of 10 people in Lebanon are willing to take the vaccine. Many are hesitant to take the vaccine because they are either afraid of the side effects or do not trust the healthcare system in Lebanon to support and deliver the vaccine safely. Moreover, and according to a recent survey conducted by IMC at MOPH. nearly 37% non-Lebanese respondents considered that the COVID-19 vaccine is unsafe, while more than 30% of them exhibited a lack of sufficient information about the COVID-19 vaccine and how it works. Only 23% of non-Lebanese respondents were willing to get vaccinated when the vaccine becomes available. The heightened rate of mistrust in the vaccine amongst refugees is evident: only 3 % of the total Syrian refugee population has so far pre-registered for vaccination. Of note, similar concerns in terms of safety and effectiveness were shared by the Lebanese population residing in the same regions. However, the acceptance rate was higher among Lebanese citizens compared to the refugees[[14]](#footnote-15)

Testing for COVID-19 is an essential step in screening for the spread of the virus, vulnerable communities like refugees, were able to undertake the sample testing that was in collaboration with the UNHCR and MOPH. This was at a planned rate of 200 PCR tests per day and over a period of 5 weeks between May and June 2020 covering 147 sites (UNHCR, 2020). Moreover, COVID-19 testing has been occurring since the emergence of the pandemic beginning with Rafik Hariri University Hospital (RHUH), a public hospital in Beirut, and then continued through several centers distributed over Lebanon.

### 4.1.2 Climate

Lebanon has a Mediterranean-type climate characterized by hot and dry summers (June to September) and cool and rainy winters (December to mid-March), with an average annual temperature of 15˚C. Along the coast, summers are hot and humid with temperatures crossing 35°C in August. But due to the moderating effect of the sea, the daily temperature range is narrower than it is inland. January is the coldest month, with temperatures around 5 to 10°C. The mean annual rainfall on the coast ranges between 700 and 1,000 mm. About 70% of the average rainfall in the country falls between November and March and is concentrated during only a few days of the rainy season, falling in heavy cloudbursts or violent storms. Precipitation in inland Lebanon is higher than precipitation along the coast (1,600 mm), with snow in the mountains. The influence of the Mediterranean Sea, the topographic features, and the Syrian Desert in the north creates a variety of microclimates within the country with contrasting temperatures and rainfall distribution[[15]](#footnote-16).

### 4.1.3 Surface and Groundwater

Surface Water

While Lebanon is in a relatively favorable position as far as rainfall and water resources are concerned, constraints for development consist in the limited availability of water during the seven dry summer months due to the very low water storage capacity, the difficulty of capturing the water close to the sea, and the shortcomings of the existing water delivery systems and networks. The total length of streams in Lebanon is 730 km, mainly on the western side of the mountains, which have steep slopes. Annual internal renewable water resources are estimated at about 4.8 km3. Annual surface runoff is around 4.1 km3 and groundwater recharges 3.2 km3, of which 2.5 km3 constitutes the base flow of the rivers. About 1 km3 of this flow comes from over 2,000 springs with an average unit yield of about 10–15 l/s, sustaining a perennial flow for 17 of the totals of 40 major streams in the country.

The annual net exploitable surface water and groundwater resources, water that Lebanon can technically and economically recover during average rainfall years, are estimated at 2.080 km3, consisting of 1.580 km3 of surface water and 0.500 km3 of groundwater.

In total, there are about 40 major streams in Lebanon and, based on the hydrographic system, the country can be divided into five regions:

1. the Asi-Orontes Basin in the north; the Asi-Orontes River flows into the Syrian Arab Republic in the northeast of the country;
2. the Hasbani Basin in the southeast; the Hasbani River, which flows into Israel in the southeast of the country, is a tributary of the Jordan river;
3. the Litani Basin in the east and south; the Litani River reaches the sea in the southwest of the country;
4. all the remaining major coastal river basins; the northern El Kebir River Basin is shared with the Syrian Arab Republic, the river itself forming part of the border between the two countries before flowing into the sea;
5. all the small, scattered and isolated sub-catchments remaining in-between, with no noticeable surface stream flow, such as the endorheic catchments and isolated coastal pockets.

The first three river basins cover about 45 percent of the country. The Asi-Orontes and Hasbani rivers are transboundary rivers, while the Litani River flows entirely within Lebanon. With a total length of 170 km, it is the longest river in Lebanon. Its catchment area is about 2 180 km2, equal to some 20 percent of the total area of the country. The average annual water flowing in the Litani River is 475 million m3. In the coastal regions, there are about 12 perennial rivers originating in the western slopes of the mountain ranges and flowing from east to west to the sea. The coastal rivers have relatively small catchments (200 km2 on average) and small courses (< 50 km). The major replenishment of rivers in Lebanon comes from precipitation, as well as from snowmelt and springs. However, a drastic decrease in the river flow has been recorded in the last three decades.

Ground Water

There are eight major aquifers, with a total estimated volume of 1,360 million m3. The presence of fissures and fractures encourages snowmelt and rainwater to percolate and infiltrate deep into the ground and feed these aquifers. Water may reappear at lower elevations as springs that flow into rivers. Springs are commonly found in Lebanon because of the highly fractured geologic rocks, and because of the existing inter-bed rock formation of differing permeability, which is a feature of the whole country. In total, there are about 2,000 major springs and many other minor springs in Lebanon, generating an estimated flow of 1 150 million m3/year. Other springs are commonly found along the coast or in the submarine areas. They are also called “non-conventional” springs because it is more or less impossible to capture their water before it flows into the sea.

### 4.1.4 Air quality

The levels of various air pollutants in Lebanon have been reported intermittently through the national air quality monitoring network (AQMN) that was installed and operated by MoE and by researchers, through stations operated by their respective universities and short to medium term air quality measurement campaigns using portable instruments. Studies have shown that levels of gas pollutants, Particulate Matters (PMs) and their chemical contents, and Volatile Organic Compounds (VOCs) exceed the WHO recommended limits for yearly averages. Annual mean levels of O3, NO, NO2 and SO2 for the year 2005-2006 in a Beirut urban site were 31, 36, 40 and 11 μg/m3, respectively (Farah et al., 2014) with no exceedance of the means recommended by WHO. O3 and NO2 showed similar concentrations in 2017 as reported by the MoE monitoring network. Monthly average concentrations as collected by the AQMN, between June and December 2017 (the only continuous published record available) in urban and background locations across Lebanon, were between 12-123 μg/m3 for O3, 9-79 μg/m3 for NO2, 0-24 μg/m3 for SO2, 7-50 μg/m3 for PM2.5 and 13-59 μg/m3 for PM10[[16]](#footnote-17).

### 4.1.5 Waste Management

The total generation of Municipal Solid Waste in Lebanon approximated at 2,700,000 tonnes/year (t/yr), with the highest generation (at the governorate level) being in Mount Lebanon (35%), followed by North Lebanon (24%) and the Bekaa (10%).

The management of Municipal Solid Waste (MSW) in Lebanon has been unstable and is continuously changing. Currently, it follows four parallel schemes:

1. A national plan for the highly populated area surrounding the capital (Beirut, Mount Lebanon and the Caza of Keserwan) – representing about 50% of the total generated waste. The plan, consists of collection of comingled waste followed by material recovery in Amrousieh and Karantina facilities.
2. Small-scale facilities in remote areas of the North, South and Bekaa regions, representing about 25% of the total generated waste. The capital cost is funded mostly by the European Union and operational costs are paid by the Lebanese government. These facilities consist mainly of 15 sorting and composting plants with, in a few instances, an additional infrastructure that may support Refuse Derived Fuel (RDF) production.
3. Community-run systems, scattered across the country (about 55 plants, 40% of which are estimated to be operational), that are either self-funded or funded through international donations. Most of those consist of basic sorting, composting and disposal; with a few applications related to RDF (Ghosta not operational yet), anaerobic digestion (Saida and Bkessin) and thermal treatment (Qabb Elias) in private facilities.
4. Collection and dumping activities run by local authorities that do not own, or have access to, waste facilities. In addition to many relatively small MSW dumpsites, operated by small communities, major dumpsites are being adopted as final disposal sites in several locations. During the last decade, two major dumpsites (Saida and Burj Hammoud) were rehabilitated. Also, three main dumpsites (Ras El Ain-Tyre, Bar Elias-Zahle, and Tripoli), in addition to several local ones, were closed. Despite these efforts, the total number of MSW dumpsites increased from 504 in 2011 to 617 in 2016, out of which 55% remain operational. The highest number (127) of operational dumps fall in Nabatieh and South of Lebanon, followed by Beqaa and Baalbek-Hermel (96)[[17]](#footnote-18).

### 4.1.6 Location of informal settlements targeted, Mass vaccination Center and UNRWA Hospitals

The healthcare facilities to be supported by the project are: (i) the COVID-19 mass vaccination center established in the Maten Area, (ii) the MVUs, (iii) a private facility that will be converted into a vaccination center (location to be determined at later stages of the Project), and (iv) UNRWA hospitals located in Beddawi (North Lebanon), Burje Barajneh (Mount Lebanon), Saida and Rashidiyeh (South Lebanon) and Barelias (Bekaa).

The figure below shows the geographical location of the Informal Tented Settlements (ITS) where the MVUs will be operating in addition to the HCF (Vaccination Center and UNRWA Hospitals) that will be supported by the Project. The following link provides access to an interactive dashboard showing the location in detail:

<https://lebaneseredcross.maps.arcgis.com/apps/dashboards/035e39033edb45bf9f96782b7f6ed8a4>



Figure 1: Location of Informal Settlements and HCF served by the Project

### 4.1.7 Healthcare Waste Management and IPC within the Mobile units, mass vaccination center and UNRWA Hospitals

Based on an agreement between the LRC and AEC, the latter will be collecting all the IHCW from the vaccination centers, the MVU and the Mass Vaccination centers. AEC is currently in charge of the medical waste generated from the Mass Vaccination Center at City Mall- Dora. AEC follows the WHO waste management guidelines and the national legislations. It also provides guides and trains the HCW on the IPC and waste management in the HCF.

Moreover, the PRCS has a signed agreement with AEC for the treatment of medical waste (Please refer to Annex M). The agreement was signed on the 16th of November 2021. AEC is responsible for sterilizing the medical waste generated by the PRCS, which often contains contaminants and can spread diseases. Among the waste is blood, used bandages and syringes. This waste should not be mixed with domestic waste: burning or burying infectious waste without treating it first is very dangerous for the environment and public health. Once this is done, medical waste is no more harmful than any kind of domestic waste, and it is then given to domestic waste treatment companies operating in Lebanon. AEC collects the medical waste from PRCS on a weekly basis, approximate monthly waste quantity is 4,742 Kgs, (See Annex M).



PRCS is also responsible for the proper packaging of the waste (flexible packaging) that is well-sealed, with a color coding and labeled as “Biological Hazard”. Moreover, the infectious wastes are stored in specific storage containers/rooms for medical and infectious waste with a temperature ranging from 3 to 6 degrees Celsius.  AEC will also be conducting capacity building sessions for PRCS staff and volunteers on proper sorting of waste at source, and on the Infection Prevention and Control (IPC) and waste management in the Health Care Facility (HCF).

As for the vaccine storage, the following practices will be taken into consideration when storing the vaccines in line with national GSP guidelines:

* Availability of adequate cold chain equipment with sufficient storage capacity.
* Follow-up and assurance of the conditions that must be met in the cold chain before storing the vaccines.
* Arranging the vaccines inside the cold chains according to FEFO (First to expire, first out).
* Ensuring that cold chain temperatures are monitored periodically and daily; where possible, by electronic data loggers.

The LRC’s effective cold chain relies on three main elements:

* A well-trained staff
* Reliable storage and temperature monitoring equipment
* Accurate vaccine inventory management

The transport of the vaccine includes refrigerators/freezers and qualified containers for proper storage of the vaccine and adequate isolation and temperature, and data logger temperatures.

Upon arrival at the receiving facility, data logger temperatures will be verified and registered. Any cold chain irregularities will be addressed before vaccine is administered. If the cold chain has been interrupted in storage or transport, the LRC’s management will be contacted. If the management indicates that data is not available to support administration, the vaccine will not be administered.

### 4.1.8 Biological environment

Biodiversity though it is small in size, occupying only 0.007% of the world’s land surface area, Lebanon is home to 1.11% of the world’s plant species and 2.63% of the reptile, bird and mammal species. This unique biodiversity is generated mainly from the geology of its landscape, human practices over the centuries, along with the ecosystem transformation and adaptation to climate change. But the most influencing factors remains the country's location at the east shore of the Mediterranean basin, one of the most biologically rich and complex regions on Earth. The Lebanese natural landscape is rich, offering 9,119 species of which 4,633 are plants and 4,486 animals (NBSAP 1998). Floristic richness is estimated to include 2,600 vascular plant species of which 400 are endemic to Lebanon, Syria and Palestine (15%) and 92 are endemic to Lebanon (3.5%) (BCSR). When compared to neighboring countries, the faunal diversity of Lebanon is high relative to the country’s surface area reaching 0.028 species/ km2. The changing climatic conditions along topographic gradients resulted in having two major climatic zones. These are the Mediterranean zone and the pre-steppe areas (Abi Saleh et al., 1996; Zohary, 973). Mount Lebanon chain facing the Mediterranean Sea can be differentiated into six vegetation zones (i.e. thermomediterranean, eu-mediterranean, supra-mediterranean, montaneMediterranean and oro-mediterranean and montane zones). The Anti-Lebanon Mountain chain is differentiated into barren foothills supporting poor overgrazed rangelands, in addition to five vegetation zones (i.e. Batha, steppe Mediterranean, steppe supra-mediterranean, steppe montane-mediterranean, steppe oro-mediterranean). The riparian vegetation forms a fragile ecosystem playing a major role in the protection of the steep slopes from erosion and preventing watershed loss[[18]](#footnote-19) ).

Several protected areas are designated at the national level and their numbers are increasing. Lebanon has a robust protected area network, dating back to the 1930 and has significantly increased protected area coverage since the late ‘90s. Protected areas represent 2.60% of Lebanon land surface and 0.21% of marine and coastal surface. Nationally protected areas include Nature Reserves, Natural sites and monuments and Himas; Nature Reserves have the highest level of conservation. Amongst the current 18 Nature Reserves, there are 3 marine Nature Reserves and 15 inland Nature Reserves. The latest addition is the Abbassieh Coast Nature Reserve in 2020 (Law 170 dated 8/5/2020).

### 4.1.9 Fleet and Equipment to be used in the Project

The LRC will be using EMS ambulances, Medico- Social Services- MSS mobile medical units in addition to LRC cars and vans. All LRC ambulances and cars are well maintained thus there will be no procurement of new vehicles. All LRC vehicles and ambulances are thoroughly checked once every 3 months for general maintenance and safety. Exhaust filters are also checked to prevent the release of polluting gases. The wheels are also changed on a needs basis to prevent car accidents during rainy seasons.

### 4.1.10 Emergency preparedness

Based on LRC investigation within the framework of this project, it was noted that all the hospitals and the mass vaccination center that will receive funds from the project have fire detectors, alarm systems and fire-fighting equipment adequately placed and sized, and all the Mobile vaccination units and ambulances are equipped with extinguishers. The equipment is maintained in good working order and readily accessible. The equipment is also adequate for the dimensions and use of the premises, physical and chemical properties of substances present, and the maximum number of people present. Selected staff are trained to be able to be ready to act in case of emergency.

## 4.2 Social Baseline

### 4.2.1 Socio-economic environment

Due to the deteriorating economic and financial situation, weak and already overstretched public services in Lebanon face growing pressure. Insufficient funding and weak institutional capacity are exacerbated by growing fiscal debt. Yet, the demand for public services, including healthcare and education, continues to rise, especially as more families become unable to afford private services. The COVID-19 pandemic poses a continued, if not growing, risk to the national health system (Increasing Humanitarian Needs in Lebanon 2022, 2022).

These pressures have been continuously increasing in 2021, possibly to the point of a partial or complete breakdown of essential public services. Diminished services have been compounding existing access constraints, especially for migrants, refugees, stateless individuals, and people living in poverty, homeless individuals, and people with comorbidities, elderly, and other vulnerable Lebanese. People in need located in rural and chronically under-served areas will have fewer alternatives as public services retreat. Socio-economically vulnerable groups will face increased difficulties meeting their basic needs, including food, shelter and health, which will likely push an increasing number of people to resort to harmful coping mechanisms and expose them to increased protection risks.

Therefore, the associated risk factors are:

1. Further breakdown of the banking sector, supply chains and basic services - healthcare, education, water and fuel shortages, electricity cuts etc.
2. Shortage of basic commodities

More specifically, as the COVID-19 pandemic has led to multi-dimensional challenges to the country, both Lebanese and non-Lebanese vulnerable communities have been severely affected. When it comes to those communities, it is important to consider individuals residing in disadvantaged areas and other vulnerable groups. Even though Lebanon has adopted an inclusive approach and officially ensured that its vaccination national plan covers everyone living in its territory, regardless of their nationality or residency status; vulnerable groups are facing several barriers when it comes to vaccination campaigns that have been taking place ever since February 2021 (World Bank, 2021). Some of these major barriers include their limited knowledge about the vaccine, accessibility to vaccination centers, hesitancy and mistrust in vaccines based on their diverse backgrounds and cultures, and their limited levels of literacy which also includes digital literacy as beneficiaries must register through online platforms (Reuters, 2021).

### 4.2.2 Vulnerable groups including the Syrian refugees and other non-Syrian refugees

According to UNRWA, the total number of Palestinian refugees in Lebanon is around 480,000 persons About 45 per cent of them live in 12 refugee formal camps. Conditions in the camps are dire and characterized by overcrowding, poor housing conditions, unemployment, poverty and lack of access to justice. As per the UNHCR, more than 1 Million Syrian refugees are registered in Lebanon (2017). Thousands more Syrian are in the country, but lack formal documentation. It is estimated that about 1.5 million Syrian refugees have fled to Lebanon. The Syrian refugees live in the Beqaa Valley in eastern Lebanon. The new settlements are typically located outside villages along main roads or behind the villages. The feeder roads that lead there are generally in poor condition. Many are mere dirt tracks..[[19]](#footnote-20) .

### 4.2.3 Multidimensional Poverty Index

The Lebanon Multidimensional Poverty Index (MPI) was developed by the Central Administration of Statistics (CAS) and the WB and published in 2022. It is based on the notion that poverty is not simply about a person or household having low income but encompasses a broader set of factors such as lack of clean water or electricity, poor quality of work or limited schooling. Multidimensional poverty measures help to provide a more comprehensive portrayal of the poor in a country. The index is derived from 19 indicators across five dimensions which are education, health, financial security/well-being, basic infrastructure and living standards. The 2019 MPI for Lebanon reveals that 53.1 percent of residents in Lebanon were multidimensionally poor. The extreme poor, where residents are deprived in more than 50 percent of the indicators, amount to 16.2 percent of the population, with an average intensity of 59.3 percent and an MPI of 0.096.

Across the eight governorates, Akkar and Bekaa are the poorest while the greatest intensity of poverty among the MPI-poor, is experienced in Beirut. In other words, while one is less likely to be MPI-poor in Beirut, those that are poor are more likely to experience greater deprivation than in other governorates. The MPI-poor are not distributed in the same manner as the population of Lebanon. Approximately, a third of Lebanon’s MPI-poor live in Mount Lebanon where about 41 percent of the population reside. The composition of multidimensional poverty is fairly similar across the governorates. The largest share – corresponding to the absence of health insurance - contributes anywhere from 23 percent to 27.4 percent to overall poverty. At the district level, Minieh-Danniyeh and Hermel have the highest incidence of MPI-poverty, whereas Keserwan and Batroun have the lowest incidence. The poorest districts tend to be associated with lower net enrolment rates at secondary level and a lower share of students attending private education, higher illiteracy rates, lower reported income levels and a higher share of self-reported poor/very poor, and larger informality rates. However, the poorest districts do not always host the largest shares of the MPI poor - Baabda and Akkar have the largest share of multidimensionally poor (10.7 and 9 percent respectively) and Bcharre has the lowest share (0.4 percent). Across age-groups, the highest incidence of multidimensional poverty occurs among 66.8 percent of children, ages 0-4 years. This is a common finding in other countries, highlighting the vulnerability of households with young children. Particular to Lebanon, the absence of health insurance contributes the largest to MPI-poverty across the age groups followed by low school attainment. Female-headed households tend to have higher incidences of multidimensional poverty (56.7 percent) relative to male-headed households (52.6 percent). Approximately, 11.6 percent of individuals live in female-headed households while the rest (88.4 percent) reside in male-headed households. Households whose head have higher level of educational attainment are associated with lower rates of multidimensional poverty. For instance, less than 22 percent of households are MPI-poor among heads with tertiary education compared to 78.4 for those with no schooling. Larger households are found to have higher levels of poverty, consistent with MPI findings in other countries.[[20]](#footnote-21).

### 4.2.4 Sexual Harassment, Sexual Exploitation and Abuse

Following the multiple crises that Lebanon has been facing for the past few years, the amount of violence against children and women has significantly increased. With increased socioeconomic needs and vulnerabilities in addition to preexisting societal norms and differences attributed to males and females, women have become more susceptible to domestic violence, sexual harassment, sexual exploitation and abuse with increased barriers to access services and opportunities. During COVID 19, stress, the disruption of social and protective networks, loss of income and decreased access to services all can exacerbate the risk of violence for women. In the first quarter of 2020, Lebanon indicated a 4% increase of intimate partner violence compared to the same time period in 2019 [[21]](#footnote-22)

There are many protection agencies, in Lebanon such as Abaad and Kafa, implementing projects specific to addressing Gender-Based Violence (GBV) which include Sexual Exploitation and Abuse and Harassment (SEA/H). They have recently begun working on removing barriers to accessing their GBV case management and PSS services such as including transportation costs within budgets, creating alternative remote case management services and sharing information regarding these services through various means of communication such as campaigns on social media, broadcast messages over WhatsApp, and pamphlets shared in various settings.  The GBVIMS (Gender-based violence information management system) Annual Report of 2020 (Gender-Based Violence Information Management System, 2021) declared a 5% increase in Syrian GBV survivors and a 9% increase in Lebanese GBV survivors. The report also mentions that the ISF has experienced a 102% increase in phone calls made to report domestic violence cases on their hotline. This increase happened following the lockdown set due to the COVID-19 pandemic as well as the economic consequences.

In this regards, the Psycho-Social Support (PSS) and Protection, Gender, and Inclusion (PGI) Program at the LRC has developed a set of measures to prevent or decrease SEA/H. Some of these measures include:

* Providing support to strengthen LRC systems by developing different protection policies such as the Protection from Sexual Exploitation and Abuse (PSEA) Policy, Linkage and Referrals Mechanism, child Protection Code of Conduct and others.
* Mainstreaming PGI concepts within the material and tools utilized by the LRC sectors and sections such as assessments, activities and services being implemented.
* Strengthening the capacities of all LRC staff and volunteers by developing, piloting, and rolling out mandatory trainings and awareness sessions, such as awareness on PSEA, training on Protection, Gender and Inclusion and other sessions. This is based on relevance and the need to increase quality and the integration of comprehensive PGI concepts.
* Training field staff and volunteers, especially healthcare personnel, on safe identification and linkages of survivors of GBV and SEA/H.
* Providing awareness sessions on Psychoeducation, Child protection, Gender-based violence and other Protection and Gender topics to caregivers, community volunteers and other community members.

The LRC has also developed a complaint and feedback mechanism through the establishment of a call centre with the purpose of receiving feedback from LRC beneficiaries and participants as well as reporting any provided complaints. An ongoing process has been initiated to build the capacity of the call centre operators through providing trainings on Psychological First Aid, safe identification and linkages, Protection from SEA/H and other mandatory PGI trainings. These trainings are mandatory trainings delivered to all LRC staff and volunteers. Volunteers working within the call center will receive a more detailed and tailored training based on their work modality. This training is based on the SOP currently being developed for call centers. It is also important to note that LRC staff and volunteers are currently receiving a training on LRC’s linkage and referral mechanism. Within this training, the LRC staff and volunteers learn to utilize a service mapping list that includes a large number of MHPSS, GBV and CP agencies such as Kafa and ABAAD.

# 5- Potential Environmental and Social Risks, impacts and Mitigation

The following section outlines the environmental and social risks associated with the SLCRVGP and recommends the respective mitigation measures that might be required to avoid negative impacts. Given the nature of COVID-19, exposure to infection should be given special attention. IPC strategies should be enhanced to prevent or limit transmission inside and outside of the healthcare. Social risks associated with the administration of vaccines and treatment of COVID-19 infected patients should also be identified and mitigated. The project should ensure fair, equitable and inclusive access and allocation of the COVID-19 vaccine and treatment, reaching disadvantaged and vulnerable groups, and creating accountability against misallocation, discrimination, and corruption. The environmental and social risks are considered moderate, and the overall risk rating of the project is moderate. The overall project risk is rated “moderate”. The environmental risk associated with the proposed project is expected to be moderate, as the major areas of risk come from occupational health and safety (OHS) for health staff, health care waste due to the activities under the project that may affect the capacity of local authorities to manage this waste, and the use of cold chain for maintaining COVID-19 vaccines which could have further OHS impacts. The social risk associated with activities under this component is also ‘moderate’ due to potential unequal access, perception of unfair distribution and exclusion of certain groups including the disabled and undocumented individuals, risks associated with adverse events following immunization, potential rising social tension, and gender inequities.

## 5.1 Potential Positive Impacts of the Project

The following positive impacts are expected by the Project:

* Contribution to saving unnecessary health care costs and social care costs by preventing disease and supporting a healthy population.
* Increase in the productive labor force. The overall impact on the economy is positive.
* Improvement of the health care service by building its capacities and the procurement of needed equipment
* Reduction of tension between refugees and local populations because of the expansion of the services to poor who have been crowded out and denied access to services in areas with heavy overlap with the Syrian refuges. The Project will contribute significantly to reduce inter-communal tension and rebuilding the trust and social cohesiveness among the local communities where both Lebanese, Syrians, Palestinians and other nationalities coexist.
* The project focuses on outreach and awareness-raising, which will allow reaching out to those most in need who are currently not aware of these services and strengthening communication channels between beneficiaries and service providers.
* Improvement of the access to health services for vulnerable individuals living in Lebanon and provision of services to the uninsured and underserved poor and reduction out of pocket payments for the poor
* Engaging with stakeholders including vulnerable groups and seeking their feedback for successful implementation of the project

## 5.2 Environmental Risks and Negative Impacts and Mitigation Measures

Environmental risks and potential impacts arising from operational activities of the SLCRVGP are presented below:

### 5.1.1 Wastewater discharges from hospitals treating COVID-19 cases

Hospitals treating COVID-19 infected patients are associated with increased volume of wastewater and excreta. Liquid contaminated waste (e.g., pathological sample, blood, feces, urine, other body fluids and contaminated fluids) that requires special handling, as it may pose an infectious risk to Health Care Workers (HCWs) and communities if not well disposed. However, all hospitals are connected to a municipal wastewater network as a pre-requisite condition to get their construction permit. As part of an integrated public health policy, wastewater carried in sewerage systems should be treated in well-designed and well-managed centralized wastewater treatment plants[[22]](#footnote-23). Each stage of treatment (as well as retention time and dilution) results in a further reduction of the potential risk. Regarding WWTPs workers, there is no evidence to suggest that additional, COVID 19-specific protections are needed. Furthermore, there is no evidence that sewage or wastewater treatment workers contracted severe acute respiratory syndrome (SARS), which is caused by another type of coronavirus that caused a large outbreak of acute respiratory illness in 2003. WWTPs operations will continue to follow routine practices that prevent exposure to viruses.

**Mitigation measures**

* Disinfection of the liquid waste originating from the hospitals, Health Care Facility (HCF)., Vaccination Units and centers should be done before directing it to the general sewer line according to WHO-Laboratory biosafety guidance related to COVID-19 available at https://apps.who.int/iris/handle/10665/332076.
* Ensuring the availability and good conditions of the connection from the hospitals to the public sewer network or individual wastewater treatment plant as part of Environmental and Social Management Plan (ESMP) of the HCF.

### 5.1.2 Medical waste management

Vaccination and treatment residue waste can have a substantial impact on the environment and human health, and these wastes could include vaccine vials, used needles, syringes, cotton swabs, PPE, etc. Improper disposal of medical waste would have environmental and public health impacts. During their operation, several diagnostic and therapeutic activities performed at hospitals facilities and vaccination centers, such as sample collection from COVID-19 suspected patients, vaccination activities, laboratory practices and procedures (performing and handling of specimens and chemicals), and activities in vaccination centers and isolation health care facilities, generate medical waste, which must be disposed of in an appropriate medical waste disposal facility.

As per LRC site investigation, all the hospitals, Vaccination centers and mobile units that will receive funds under SLCRVGP have already a Health Care Waste Management Plan (HCWMP) and have contracted AEC to handle their medical waste or a neighboring hospital that is taking their wastes and that has a waste management contract with AEC. AEC confirmed its capacity to continue to collect and handle the quantities that will be generated by the HCF under this project.

The waste in the vaccination centers is not expected or suspected to contain or to be contaminated with COVID-19 and does not require special precautions beyond those already used to protect workers from the hazards they encounter during their routine job tasks in medical solid waste. Workers and employers should manage solid waste generated from vaccination as they would manage other hazard medical waste.

**Mitigation Measures**

* Refer to WHO Interim guidance for WASH waste management for the COVID-19 virus.
* Prior to the initiation of different operations under this project, there is need to check that each HCF, mobile vaccination unit and vaccination center has appropriate Infection Control (IC) and Health Care Waste Management Plan (HCWMP) ([Refer to Annex J](#_Annex_J:_Infection)) suitable for the quantities, type of activities and nature of identified hazards and is implementing it. The HCWMP shall ensure:
  + Integrating systems and practices to avoid the creation of waste into facility design and management and equipment and consumables purchasing and rigorous applicability of good management practices to purchase and control of chemicals and pharmaceuticals.
  + Source reduction measures such as purchasing restrictions to ensure the selection of methods or supplies that are less wasteful or generate less waste (for example use of materials that may be recycled either on- or off-site);
  + Identification and segregation of waste at the point of generation. Collection of Non-hazardous waste separately, such as paper, glass and plastic for recycling. Based on its feasibility, reuse or recycling of wastes is recommended. Identification and segregation of Infectious and / or hazardous wastes according to its category using a color-coded system is a must. In terms of disposal for infectious waste, the container should have an inner, watertight layer of metal or plastic with a leak-proof seal and an outer packaging with adequate strength and capacity for the specific type and volume of waste. For sharps, the containers must be puncture-proof.
  + Identification specific points at strategic location to place collection bins for dumping the medical wastes and other waste types, hence segregating the medical waste from other wastes.
  + Emptying the bins regularly to avoid contamination. Sealing and replacement of bags and containers when they are approximately three quarters full and immediate replacement of full bags. Identification and labelling waste bags and containers properly prior to removal.
  + Ensuring the availability of waste storage areas able to seize the scale of waste generated. Some requirements should be taken into consideration in terms of storage areas. It should have a hard, impermeable floor with drainage as well as an available water supply enabling cleaning. These areas will also be secured by locks with restricted access; and accessible only by authorized environmental staff (cleaning staff) and vehicles for regular cleaning. In addition, these places will be ventilated, equipped with appropriate lighting, protected from sun, and inaccessible to animals /rodents. Appropriate supplies of protective clothing, and spare bags / containers should be available in these areas. In general, storage time between generation and treatment of waste should not exceed 48 hours during cool season, 24 hours during hot season unless refrigerated storage is possible.
  + Ensuring transportation of waste to storage areas which should be cleaned and disinfected regularly and safe waste transportation to designated off-site facilities according to the guidelines for transport of hazardous wastes / dangerous goods.
  + Provision of appropriate PPEs, required vaccination as well as provision of Post-Exposure Prophylaxis (PEP) for HC waste handlers to ensure their health safety
* Health care waste generated in the management of COVID-19 patients is considered infectious waste. The HCF shall ensure availability of instructions on how to handle the infectious waste to the waste handlers in all health facilities, laboratories, and vaccination centers. Staff handling and managing healthcare waste contaminated with COVID-19 should receive regular and customized training which includes the following:
  + The use of appropriate / full PPEs
  + Hand hygiene practices;
  + Waste segregation strategies and clean up procedures;
  + On-site Handling,
  + Collection, Transport and Storage;
  + Exposure to COVID-19 infections and diseases transmission;
* Ensuring proper training on safe handling and appropriate use of PPEs for HCWs who handle specimens (collection, testing...), in particular for laboratory procedure generating aerosol.
* Leaking-proof specimen bags (i.e., secondary containers) that have a separate sealable pocket for the specimen (i.e., a plastic biohazard specimen bag), with the patient’s label on the specimen container (i.e., the primary container), and a clearly written laboratory request form in case there is need to transport the specimen

### 5.1.3 Weak IPC and OHS measures in HCF particularly in hospitals that may lead to the spread of Infection

The ineffective IPC and weak OHS measures including inadequate cleaning and WASH measures may spread infection in the hospital and lead to community transmission of COVID-19.

**Mitigation measures**

* Establishing and applying standard precaution by HCF including hand hygiene, respiratory hygiene, use of PPE, environmental cleaning and prevention of needle stick and sharp injuries.
* Adopting “WHO technical guideline for COVID-19 Key considerations for occupational safety” is needed as well as developing and adopting safety standards. In addition, an occupational health surveillance of HCWs within the health facility should be in place to monitor medical services, COVID-19 infection and immunization services including vaccination against COVID-19 among HCWs. Regular necessary training in health and safety should be provided.
* Implementation of additional precautions (droplet and contact and, whenever applicable, airborne precautions) for suspected cases of COVID-19;
* Performing regular training activities for HCWs on IPC and OHS issues related to COVID-19
* Ensuring provision of safe water, sanitation and hygienic conditions by HCF
* Developing IPC plan at HCF based on national guidelines and international guidelines for IPC of health facilities.
* Implementation of administrative controls.
* Developing and implementation of SOPs.
* Supervising Training with corrective actions
* Establishing a quality assurance system in close collaboration with the independent monitoring and evaluation team.
* Ensuring the decontamination of HCF that have received confirmed COVID-19 cases.
* Provision of psychosocial support to medical staff and team and any health care workers reporting COVID-19 symptoms should stop work immediately
* In addition to the above, in hospitals:
  + Triage, early recognition, and isolating patients with suspected COVID-19
  + Ensuring an adequate patient-to staff ratio
  + Establishing a surveillance process for acute respiratory infections potentially caused by COVID-19 among HCW,
  + Performing assessment to strengthen the IPC / WASH support system,
  + Promote preventive medicine; no pregnant women, staff older than 65 or staff with underlying health conditions, should be working in isolation areas
* Adequate cleaning of equipment and materials:
  + Ensure that cleaning chemicals do not introduce a product safety hazard.
  + Ensure the provision of cleaning staff with adequate cleaning equipment, materials and recommended disinfectants.
  + Storage and use of disinfectants in a responsible and appropriate manner according to the label.
  + Do not mix bleach or other cleaning and disinfection products. This can cause fumes that could be very dangerous to breathe in.
  + Review general cleaning systems, training cleaning staff on appropriate cleaning procedures and appropriate frequency in high use or high-risk areas.
  + Enhanced and regular cleaning of touch points is recommended.
  + Where cleaners will be required to clean areas that have been or are suspected to have been contaminated with COVID-19, provide appropriate PPE.
  + Train cleaners in proper hand hygiene, appropriate and safe use of PPEs prior to, during and after conducting cleaning activities as well as waste control.

### 5.1.4 Emergency Situations

Emergency situations could happen anytime while handling hazardous materials or even during natural disaster situations such as floods or fire that could cause injuries or environmental damage.

**Mitigation measures**

HCFs should prepare an Emergency Preparedness and Response Plan that should cover:

* All potential hazards including but not limited to man-made (spills, accidental releases, loss of energy supply) and flood / storm.
* Planning Coordination: This should include procedures for:
  + Informing the public and emergency response agencies
  + Documenting first aid and emergency medical treatment
  + Taking emergency response actions
  + Reviewing and updating the emergency response plan to reflect changes and ensuring that the employees are informed of such changes
* Emergency Equipment: The plan should include procedures for using, inspecting, testing, and maintaining emergency response equipment.
* Training: Employees should be trained in any relevant procedures
* Undertake regular emergency drills at healthcare facility, to test on emergency response and use the results to improve on the response mechanism.

Without provisions for fire safety, there is a risk of fire outbreak at healthcare facilities (hospitals, vaccination centers) with disastrous life and financial impact. Fires can start from ignitable materials in laboratories, cigarette smoking in non-designated places or old electrical connections. The specific mitigation measures for fire should cover:

* The HCF should be equipped with fire detectors, alarm systems, and fire-fighting equipment.
* The equipment should be maintained in good working order and be readily accessible. It should also be adequate for the dimensions and use of the premises, equipment installed, physical and chemical properties of substances present, and the maximum number of people present.
* The hospital shall be provided with manual firefighting equipment that is easily accessible and simple to use.
* Key healthcare staff shall have basic training in fire control.
* Fire emergency telephone numbers should be displayed in communal areas.
* Healthcare facilities and hospitals in particular shall prepare a fire emergency management plan that features a “safe area of gathering” in each health care facility in the event of a fire outbreak for which an evacuation is required.
* Undertake regular fire drills at healthcare facility, to test on emergency response and use the results to improve on the response mechanism.

According to LRC, all the hospitals and the mass vaccination center that will receive funds from the project have fire detectors, alarm systems and fire-fighting equipment adequately placed and sized and all the Mobile vaccination units and ambulances are equipped with extinguishers

### 5.1.5 Risks on vaccines due to the poor maintenance of the cold chain

A cold chain is a temperature-controlled supply chain that includes all vaccine-related equipment and procedures. It begins with vaccine manufacturing and ends with vaccine administration. Vaccines must be stored properly from the time they are manufactured until they are administered. Potency is reduced every time a vaccine is exposed to an improper condition. This includes overexposure to heat, cold, or light at any step in the cold chain. Shortcomings in the cold chain system could compromise the potency of the vaccines. Once lost, potency cannot be restored. There is a logistical challenge in transporting vaccines across the country in a timely manner, adhering to the recommended temperature and transportation requirements;

**Mitigations measures:**

An effective cold chain relies on three main elements: a well-trained staff, reliable storage and temperature monitoring equipment and accurate vaccine inventory management. In this context, LRC will monitor the storage and transport temperatures ensuring the good international industry practices are being followed.

The following actions and procedures shall be ensured:

* Follow up and assurance of the conditions that must be met in the cold chain before storing the vaccine. The cold chain equipment must be calibrated, clean, and operating with high efficiency and need to be fully functional at least 48 hours before the expected vaccine arrival date.
* Ensure that cold chain temperatures are monitored periodically and daily; Temperature monitoring devices and a mechanism for continuous temperature monitoring throughout the supply chain from receipt, during storage and delivery to the vaccination point;
* Perform effective and routine maintenance of the Ultra-Low Temperature (ULT) and Low-Temperature (LT) equipment. Moreover, the vaccines’ storage requirements differ according to the product; 2-8 degrees, - 20 degrees or -70 to -80 degrees, requiring different storage conditions. Thus, the final vaccination guidelines will depend on the product used which will be reflected in the training and vaccination plans. Training efforts have so far concentrated on implementing the thermos-sensitive Pfizer/BioNTech and Moderna vaccines. Identify the location and availability of dry ice for emergency purposes or in case there is a need for transporting the vaccine;
* Ensure the presence of an additional back-up generator in case of power cut or Uninterruptible Power Supply (UPS) in order to maintain the temperature for a period of not less than 24 hours until the electrical current is restored or repaired.
* Estimate the storage capacity of each unit of cold chain equipment and match it to the expected quantity to be received.

It is to be noted that the above mentioned actions and procedures are already followed by the national vaccination campaign against COVID-19 that is being implemented by the MOPH.

### 5.1.6 Risks of loss of vaccines due to the poor management of the vaccine stock

The stock of vaccine should be well managed in order to prevent the potential loss of vaccines such as expiry, damage, etc.

**Mitigations measures:**

Under the supervision of the MOPH and in coordination with the vaccination centers (mobile and fixed) LRC shall work to ensure the following measures are being implemented:

* Ensure all vaccines are carried in specialized vaccine carriers with temperatures according to the manufacturers’ instruction and transported only by authorized refrigerated vehicles specially equipped for this purpose.
* Pfizer-BioNTech COVID-19 vaccine requires storage in Ultra-Low Temperature (ULT) freezers. During storage, exposure to room light should be minimized and exposure to direct sunlight and UV light should be avoided. The Pfizer vaccine shall be shipped in ULT freezing storage container. It must be thawed for 30 minutes. Once thawed, it has a 2-hour window to dilute and once diluted it shall be used within 6 hours. If the vaccination center is not equipped with an ULT freezer, the vaccine shall arrive in refrigerated cars and must be used within 5 days. When removed from the fridge, it has 2-hour window to dilute and shall be used within 6 hours. MoPH is handling the proper functioning of the cold chain including monitoring the freezers temperature, out-of-range storage or out-of-range transport temperatures and ensuring the good international industry practices are being followed.. Unpunctured vials of the Moderna COVID-19 Vaccine can be stored refrigerated between 2°C to 8°C (36°F to 46°F) for up to 30 days prior to first use or cool storage up to room temperature between 8°C to 25°C (46°F to 77°F) for up to 24 hours prior to first use. The vaccine should not be refreeze once thawed. During storage, exposure to room light should be minimized and exposure to direct sunlight and UV light should be avoided

As for the Oxford Astrazeneza Vaccine, it can be stored in cold chain conditions of +2°C to +8°C for a maximum of 6 months as per the expiry date printed on the vial. The vaccine should not be freeze. Other vaccines like Sputnik 5, the Johnson and Johnson Janssen, and the Sinopharm COVID-19 vaccines are not being used by the LRC.

* Conduct a physical examination of the received vaccines for quality control purposes, ensuring the absence of damages, a leakage and presence of a sticker with basic information (such as the type of vaccine, expiry date, manufacturing batch number) and other quality control parameters.
* Make sure the vaccine is stored in the appropriate cold chain condition and according to the appropriate temperature, as soon as it is received.
* Arrange the vaccines inside the cold chains according to FEFO. Put the vaccines in the correct vaccine refrigerator without delay with the shortest dated foremost to ensure adequate stock rotation.
* Report the volumes, doses and ancillary items received and used on an information system to facilitate managing, tracking and reporting on the vaccine stocks and consumption effectively and follow up on expiry dates.
* Perform a daily count post vaccination
* Prepare a clear vaccination schedule and back up to avoid extended periods of storage at the vaccination point;
* Estimating the need to request additional vaccine doses.
* Develop a procedure for spillages on skin/eyes and provide handwashing facilities and eyewash kits
* Develop a procedure for spillage on surfaces and provide gloves, paper towels and all material needed as per the local chemical disinfection policy.
* Check if unused medication vials***.*** can be returned to the supplier when it expired. If the vials cannot be returned, they should be kept in their original package and disposed of as per the recommendations of the WHO. Liquids from broken vials should also be disposed of as per the recommendations of the WHO

### 5.1.7 Traffic/road safety and air pollution from vehicles transporting vaccines and from MVU

Transportation of vaccine and vulnerable people from their residences to the vaccination centers or to the hospitals for treatment are associated with traffic and road safety risks. The transport of vaccines as well as transport of hazardous and infectious healthcare for disposal can also be subject to traffic and road safety risks. Transport is also a polluting activity due to exhausts gazes from vehicles.

**Mitigations measures:**

LRC shall work to ensure the following mitigation measures are being implemented:

* Investigate the use of alternative roads for the services
* Ensure regular maintenance is being conducted for the LRC’s vehicles (Install proper air emissions filters in case of missing or damaged ones)
* Ensure that all LRC’s personnel are well trained in safe driving skills to avoid any road traffic accidents.
* Recommend the use of one car for different passengers from LRC’s staff and volunteers in transportation (while respecting the COVID-19 prevention measures) to prevent additional traffic and air pollution.
* Emphasizing safety aspects among drivers
* Improving driving skills and requiring licensing of drivers
* Adopting limits for trip duration and arranging driver rosters to avoid overtiredness
* Avoiding dangerous routes and times of day to reduce the risk of accidents

### 5.1.8 Increase of water and energy use

Most COVID-19 vaccines must be kept at a cold temperature to remain effective. Transporting vaccines from labs to everyone who needs them across country requires a system of refrigeration that works every step of the journey. The maintenance of this cold –chain requires important amounts of energy. The effective IPC measures at the vaccination centers include adequate cleaning that require also large amounts of water.

**Mitigations measures:**

LRC shall work to ensure the following mitigation measures are being implemented:

* Provide renewable energy sources for the cold-chain whenever possible
* Implement water conservation measures and prevent overuse

### 5.1.9 Fire

HCF and vaccination centers may be subject to fire that may endanger the patients’ lives especially if they are not well equipped with firefighting equipment and if proper prevention measures are not taken.

**Mitigations measures:**

* In accordance with WBG EHS guidelines specifically on (L&FS) ( 3.3 Life and Fire Safety (L&FS). https://www.ifc.org/wps/wcm/connect/eeb82b4a-e9a8-4ad1-9472-f1c766eb67c8/3%2BCommunity%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=nPtgxTd. The HCF should be equipped with fire detectors, alarm systems, and fire-fighting equipment.
* The equipment should be maintained in good working order and be readily accessible. It should also be adequate for the dimensions and use of the premises, equipment installed, physical and chemical properties of substances present, and the maximum number of people present.
* The HCF and MVUs shall be provided with manual firefighting equipment that is easily accessible and simple to use.
* Fire and emergency alarm systems shall be installed and shall be both audible and visible.
* Personnel should be trained in how to behave in case of fire.

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## 5.2 Social Risks and Negative Impacts and Mitigation Measures

The project should follow the National Vaccination Plan for COVID-19[[23]](#footnote-24) that adopts the principles of quality and equity. However, some social risks from operational activities of the SLCRVGP are presented below:

### 5.2.1 Labor risks issues

Given the nature of the Project intervention, the key labor risks which may be associated with the project include:

* Risks on Project workers related to labor and working conditions that are not compliant with either the Lebanese Labor Law or ESS2. For example, wages that are not proportionate with tasks performed or industry standards, irregular payment of salaries or non-payment, disparity in wages and/or denial of benefits (compensation, bonus, maternity benefits, etc.), discrimination towards women and workers with disabilities or other vulnerabilities, unlawful termination, withholding of benefit, including abrupt termination of employment, and Potential Sexual Exploitation and Abuse/Harassment (SEA/SH) risks and Gender-Based Violence (GBV) among the Project workers.
* Lack of understanding and implementation of Occupational Health and Safety (OHS) requirements for the workers including the special requirements in the context of COVID-19 outbreak that may lead to transmission of diseases and infections to the workers,

**Mitigation Measures**

* Design, implement and maintain an efficient GM to handle complaints and concerns for all the Project Workers including referral pathways for SEA/SH
* Sign Codes of Conducts by all the workers on the project
* Training and raising awareness of all the workers on the Project on SEA/SH and GBV
* Adopt and Implement the Labor Management Plan (LMP) prepared in the framework of this Project (***refer to*** [***Annex L.***](#_Annex_L:_Labor))
* Ensure the healthcare workers have been trained on the potential OHS risks in relation to COVID, under SLCRVGP, organize regular refresher training sessions on this same subject,
* Provide adequate and required PPEs to health workers and enforce on their use.

### 5.2.2 Risk of Elite Capture

Although the main objective of the project is to ensure equal access to vaccines for marginalized and vulnerable social groups including disabled, elderly, Internally Displaced Populations (IDPs) and refugees, people without access to internet/phone and illiterate people, there is always a risk that only an elite category only of the group targeted in this Project benefit from it.

**Mitigation Measures**

* Ensure that field teams have both female and male members who have also received relevant training to address the different needs per gender. Additionally, vaccines are provided to any individual that has received a message from the MOPH or that fits the vaccination criteria regardless of their nationality, gender or socio-economic backgrounds.
* MVUs will mainly be targeting Syrian Refugees as they aim to reach remote/distant location, but would provide the vaccine to individuals of other nationalities if they were approached by them, as long as the individual is registered on the COVAX platform.
* LRC in coordination with MOPH to follow up on the grievances in a timely manner and take proper measures in case of grievances related to elite capture.
* Adopt and implement the SEP that was prepared within the framework of this Project and disclosed on the LRC website. (Refer to the following link: ([Our Reports - Lebanese Red Cross](https://www.redcross.org.lb/our-reports/)))
* Engaging in inclusive consultations with all identified stakeholders including vulnerable groups like refugees.

### 5.2.3 Occupational Health and Safety (OHS) Risks

COVID-19 is highly infectious and the risk of contraction by healthcare workers and the general public is high, if requisite training, sensitization and protective gear are not provided. Medical facilities are a potential source of infectious waste, and these could pose unsafe conditions for healthcare staff. Of particular concern are health workers handling infectious waste (including sharps) without adequate protective gear, storage of sharps in containers that are not puncture-proof. Some OHS risks exist (hence cumulative) and would only be exacerbated by increased use of healthcare services as a result of COVID-19 cases.

**Mitigation measures**

* Ensure that any HCF that will receive funds/supplies from SLCRVGP has an Environmental and Social Management Plan (ESMP) including a Health Care Waste Management Plan (HCWMP). The HCWMP shall include a section on Personnel Protection.
* Update if needed and implement HCF OHS plan and/or emergency response plan,
* Ensure the healthcare workers have been trained on the potential OSH risks in relation to COVID, under SLCRVGP, organize refresher training on this same subject,
* Provide adequate and required PPEs to health workers and enforce on their use.
* Implementation of systemic risk management plan comprising risk prevention, evacuation of accident victims, evaluation and improvement measures.

### 5.2.4 Gender-based violence (GBV) and sexual harassment, exploitation and abuse (SEA)

Gender inequalities and norms can play an important role for access to critical health services such as vaccinations. Moreover, pandemics can create or exacerbate the conditions that especially put women and girls at greater risk of SEA/H. For instance, women and girls may be forced into exchanging sexual favors for access to testing, treatment, vaccines or even supplies.

**Mitigation measures**

* LRC in coordination with MOPH to make sure the SLCRVGP is well followed during implementation to avoid the risk of gender inequalities and potential SEA/H
* Ensure the people at the vaccination centers have access to the GM which should be strengthened with referral pathways in the event of SEA/SH complaints
* Train staff handling the GM on how to handle GBV related complaints
* All workers should sign the code of conduct to hold them accountable as detailed in the LMP ([Annex K](#_Annex_K:_Labor)).

### 5.2.5 Hesitancy in getting vaccinated and concerns over vaccine safety and possible side effects

Populations all over the World showed concerns related to the area of residence, the novelty of vaccine, side effects/vaccine safety, reliability of the manufacturer, and the number of required doses. The concerns were negatively associated with the willingness to get vaccinated against COVID-19.

**Mitigation measures**

* Stop the spread of misinformation and rumors about the vaccines, spread awareness and incentivizing individuals to register to take the vaccine
* Communicate reliable sources of information while ensuring inclusive stakeholder consultations as per the SEP to allow for information sharing and addressing any feedback and encouraging use of the project GM including LRC hotline and all relevant uptake channels

### 5.2.6 Difficulty in pre-registration for COVID-19 vaccine

The low level of digital literacy among Lebanese hosting communities, refugees, and migrants may continue to hamper the ability of these individuals to register online. The requirement of an Identification Document (ID), or official paper may also be a major difficulty in the pre-registration as many of the country’s migrant workers coming from Ethiopia, Sudan, Ghana, the Philippines and many other countries remain undocumented. They also have security concerns over a requirement of formal documentation for online registration fear of arrest, deportation, or detention.

**Mitigation measures**

* Disseminate the information of the alternative methods of registration (such as calling the national call centers) through municipalities.

### 5.2.7 Social tensions between host communities and refugee communities

Protecting the health of communities from infection from COVID-19 is a central part of the project. Without adequate controls and procedures, project activities have the potential to contribute to the spread of the virus and may also contribute to social conflict, namely between host and refugee communities. Social conflict may arise resulting from limited availability of vaccines and social tensions related to the challenges of a pandemic situation. Moreover, the deteriorating economic situation has prompted a spike in unemployment and food insecurity; according to UN ESCWA, 82 percent of households in Lebanon live in multidimensional poverty whereas 40 percent are classified as suffering from extreme multidimensional poverty[[24]](#footnote-25). These contextual developments have created increased social tension between Lebanese residents and refugees.

**Mitigation measures**

* The project has been designed in a way to ensure that all residents in Lebanon have equitable access to the vaccine regardless of their nationality and social status. The project will target Lebanese host community members, Syrians and Palestinians refugees as well as migrant workers.
* The implementation of the SEP is crucial in reducing tensions and creating an understanding of vaccination eligibility requirements ([Our Reports - Lebanese Red Cross](https://www.redcross.org.lb/our-reports/)).
* Establish and implement a communication strategy to reach remote areas and an inclusive outreach and conduct consultation sessions with the objective of reducing such tensions.
* Follow up on the grievances related to social tensions between host communities and refugees’ communities

### Risks of using military and security forces

When implementing projects and activities, the LRC has a duty to the safety and security of its staff and volunteers and thus, informs military and security forces of movement, especially in high risk areas, yet does not require direct support, since LRC has wide acceptance over the Lebanese territories which facilitates accessibility all over the country. The project will not use the military or any security forces for the vaccine transportation or for the deployment of the vaccine unless there are unforeseen circumstances, therefore the risk is very low.

# 6- Procedures to Address Environmental and Social Issues

Due to the nature of the Project, The Project Management Unit (PMU) shall ensure that all HCF benefiting from the SLCRVGP have proven capacities in managing E&S issues. In this regard, the eligible facilities should have at minimum an ESMP to mitigate, avoid, and minimize the environmental and social risks associated with the project including a HCWMP.

LRC will establish a Project Management Unit (PMU) and will coordinate with multiple stakeholders: The PMU will include a Project Manager, Environmental and Social Specialists, Financial Manager, Procurement Officer, Monitoring and Evaluation (M&E) Officer and Project Officer.

The project manager position will be held by existing LRC staff. Monitoring will be conducted via field visits by LRC M&E teams. LRC has appointed one Environmental and one Social focal points (those are staff currently employed by the Lebanese Red Cross) and will be maintained throughout the implementation phase. The LRC will also recruit an E&S officer dedicated to the Project to support the implementation of the ESMF and monitoring the social, Environmental and EHS risks.

## 6.1 Procedures

The procedure that shall be followed by the LRC vis-a-vis the HCF (Mobile units, Mass vaccination center or hospital) is as follows:

1. An assessment will be undertaken by the E&S officer assigned by the PMU. The E&S Officer shall start by checking if an ESMP including a full Infection Control and a HCWMP is in place at the HCF (Refer to Annexes J and K). In case an ESMP is not in place, then an ESMP including full Infection Control and HCWMP should be prepared.
2. The LRC will then send the ESMP to the MOE for information.
3. If an ESMP is in place or when it is prepared by the HCF as per the set conditions, the LRC will make sure the ESMP is being implemented the HCF.
4. The LRC can then initiate the activities under this Project.

The MOPH/MOE will check on the implementation of the ESMP.

## 6.2 Capacity building program

In order to ensure proper implementation of the above-mentioned procedure and the ESMF in general, the LRC will undertake training on specific aspects of environmental & social risk management as per the ESF including on stakeholder engagement, Occupational Health & Safety (OHS), grievance mechanism, SEA/SH, fair, equitable and inclusive access and allocation of Project benefits including with regards to vaccines.

A capacity building program should accompany the ESMF, the ESMP and the Infection Control and HCWMP. The PMU’s E&S officer shall train the staff of the HCF on the ESMF, ESMP and Infection Control and HCWMP and on how to develop relevant implementing tools. Relevant staff of the HCF should be made aware of the requirements of the ESMP by the PMU.

Training will be required for the LRCs staff, the trainings will be organized observing the COVID-19 preventive measures as recommended by the MOPH, the guidance by WHO and any other good international practices.

The LRC shall ensure that all Project workers are adequately instructed and trained on a regular basis, on prevention and reporting procedures available for SEA/SH as set out in this ESMF and the SEP.

# 7- Stakeholders Consultations relevant to the project and Information Disclosure

The WB’s mandatory Policy on consultations and disclosure applies to this project. Under this requirement, this ESMF and other instruments related to environmental and social aspects of the project have to be publicly consulted and disclosed prior to project appraisal. This process (i) Gives the public and other stakeholders the opportunity to comment on the potential environmental and social impacts of the project and (ii) enables the Appraisal Team to enhance the ESMF, i.e., its measures and plans to prevent or mitigate any adverse environmental and social impacts

LRC has done coordination meetings with **the MOPH** and **the Prime Minister office** to coordinate the vaccination campaigns, the site of vaccination and the response to COVID-19. They included multiple meetings with the Public Health Advisor to the Prime Minister Dr. Petra Khoury held in person at LRC Head Quarters premises and Grand Serail. The meeting held on May 29, 2021, included LRC secretary general, LRC chief of staff, Mass vaccination Centre Manager and WB Team. Discussions covered the role of LRC in vaccine deployment, how to support the mass vaccination centre, how to reach vulnerable groups. The first meeting was held in the first week of May 2021, as an outcome of this meeting the LRC agreed to initiate the first vaccination process through the first LRC-vaccination marathon that took place on May 30th, 2021 as a result of the successful vaccination marathon a strategic decision was made to inaugurate the LRC Vaccination Center on June 9th, 2021. It included LRC secretary general, LRC chief of staff, Mass vaccination Centre Manager and WB Team. Discussions covered the role of LRC in vaccine deployment, how to support the mass vaccination centre, how to reach vulnerable groups. Dr. Khoury shared her vision regarding the operation of the first community mass vaccination centre in the country. Discussions also highlighted all challenges related to waste disposal, cold supply chain and integrating the IMPACT software.

Furthermore, several meetings were held with **MOPH** including Dr. Atika Berri, Head of the Communicable Diseases Unit at the MOPH, and the minister’s advisors and Dr. Dima Shams (MOPH pharmacy and warehouse) and as outlined in the SEP which has been cleared and disclosed ([link](https://www.redcross.org.lb/our-reports/)). These meetings were held during the period of May-June 2021, and they focused on coordinating the technical aspects of implementing the vaccination centres such as how to get the vaccines, how to troubleshoot any problems related to the vaccine deployment process and how to ensure proper information management. Following the inauguration of the mass vaccination centre on 9/6/2021, recurrent meetings were held with MOPH to gather feedback and coordinate the work operations.

Moreover, LRC presented the project during the national **COVID-19 Vaccination Executive committee** which includes representatives from **MOPH, Lebanese order of physicians, Lebanese Order of nurses and multiple infectious disease specialists.** The discussions highlighted the importance ensuring that the vaccine reaches the vulnerable people especially those living in distant places also discussing many ESMF aspects such as waste management and many related topics and collaborations. These meetings take place on weekly basis every Tuesday

The most recent consultation meeting was done with UNHCR on 29th April 2022, the outcomes of this meeting are:

-The agreement on the regular coordination between LRC and UNHCR regarding the RCCE interventions for refugees and deployment of the vaccines

-The request to run the vaccination center in Bekaa area in which the Lebanese Red Cross is analysing all the logistics and the human resources.

LRC also presented the project and consulted with **the National COVID 19** committee which includes representatives from the **MOIM, Ministry of Education and Higher Education, Ministry of Public Works and Transport, Ministry of Agriculture, Ministry of Foreign Affairs and Emigrants, Ministry of Social Affairs, Ministry of Economy and Trade, Ministry of Labor, Ministry of Telecommunications, MOI, MOInf, ISF, GSF, General Directorate of Civil Aviation, Disaster Risk Management Unit at the Presidency of the Council of Ministers**. LRC has been a part of the National COVID 19 committee since January 2020, attending all meetings and contributing to the national COVID response, the last meeting held by the committee took place on September 9, 2021.

LRC has also presented the project to the **National** Risk Communication and Community Engagement **RCCE Taskforce which is chaired by UNICEF** along with various actors that are implementing COVID19- related Risk Communication and Community Engagement (RCCE) activities. The meetings are held regularly on monthly basis, the last was on February 24, 2022. The discussions focused on component 1 of the project, which is related to vaccine awareness and registration, pulling lessons learnt from implementation of previous similar activities.

Furthermore, LRC met with **WHO representatives** and presented the project during the visit of WHO General Director Dr. Tedros Ghebreyesus to LRC premises on 17 September 2021. The meeting included WHO Regional Director for the Eastern Mediterranean Dr Ahmed Al-Mandhari, WHO Representative in Lebanon Dr. Iman Shankiti, and National Professional Officer at WHO Beirut Dr. Elissar Rady. LRC was represented by Secretary General, Director of Operations, Director of EMS, COVID-19 Response Coordinator, Chief of Staff. LRC gathered feedback from WHO team regarding this project along with other feedback related to COVID 19 response.

The LRC has also engaged with **the communities** to better target the interventions. The vulnerable or disadvantaged groups from the communities included the following: People with disabilities, elderly people and Covid-19 patients, poor host communities and refugees, and women groups. Additonally, vulnerable groups within the communities affected by the project will be further confirmed and consulted through dedicated means, as appropriate. Description of the methods of engagement that will be undertaken by the project is provided in details in the SEP. For any vaccination program, the SEP includes targeted, culturally appropriate and meaningful consultations for disadvantaged and vulnerable groups before any vaccination efforts begin

A study was conducted in May 2021 on which the design of this project was based.[[25]](#footnote-26) The study explored community perceptions of the relevance of COVID-19 health messages disseminated by LRC and Red Crescent in Lebanon, and people’s access to such information. The findings and recommendations were designed to be used by LRC and Red Crescent and other actors working in the COVID-19 response in Lebanon. Specifically, the study sought to:

* Assess perceptions of the relevance of the RCCE approaches in the study areas; access to and awareness of COVID‐19 RCCE information.
* Identify learning and recommendations to improve the RCCE activities

Based on that study, the LRC proved to be the most trustworthy source of information among the public as well as the most relevant communication channels for disseminating information in the community. (More details can be found in the SEP that was prepared under this Project in a separate volume, refer to the following link : [https://www.redcross.org.lb/our-reports](https://www.redcross.org.lb/wp-content/uploads/2022/02/SEP-Dec-3-Final.pdf)/).

The study showed that people had received basic information on transmission routes, symptoms, prevention measures and isolation measures. In general, people were thought to have an adequate level of basic awareness and knowledge about COVID‐19, and to be seeking further information about how to resume their everyday activities safely under changed circumstances.

The Project was adapted based on the findings of the consultations. It will address the accessibility concern mentioned by the refugees to the vaccination sites, especially in remote areas. Thus, to address this need, LRC designed the project in terms that mobile medical units will be dispatched to these sites to increase access to vaccination for the refugees.

This ESMF (including LMP), once cleared will be publicly disclosed on the LRC Website and remain available during the project implementation. The outcomes of the consultation session will be documented in the regular progress of the LRC. The stakeholder engagement will continue throughout implementation as per the SEP.

# 8- Grievance Mechanism

The main objective of a GM is to assist to resolve complaints and grievances in a timely, effective and efficient manner that satisfies all parties involved. Specifically, it provides a transparent and credible process for fair, effective and lasting outcomes. It also builds trust and cooperation as an integral component of broader community consultation that facilitates corrective actions. Specifically, the GM:

* Ensures the principles of confidentiality and anonymity
* Provides any support and conducts referrals to appropriate service providers that any SEA/H survivor might need
* Provides Project beneficiaries with avenues for making a complaint or resolving any dispute that may arise during the course of the implementation of projects in a timely manner.
* Ensures that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants; and
* Avoids as much as possible the need to resort to judicial proceedings.

Summary of GM:

1. Calls received: 282,552 calls.
2. Average number of calls per month: 8,000 calls.
3. Percentage of closed cases: All complaints and follow up cases are 100% closed, new inquiries and requests are followed and closed based on the available projects and the possibility of support.
4. Launching of the hotline as a CFM tool for all the National society where it handles all operational sectors complaints and feedback: Sep 2020.
5. Number of Operators: 12H Shifts 5 operators + 1 Supervisor AM 2 Operators + 1Supervisor PM Shift with a total of 17 operators and 5 Supervisors.
6. Operating hours: 24 hours/7 days.
7. Timeline for closure cases: Complaints timeframe relays on the investigation time and decision taken (Sensitives complaints are answered in Max 24H, non-sensitives complaints are answered with a top of 10 Days).
8. All operators are trained on the following subjects before starting their work:

Session 1: SOPs & Guidelines

Session 2: IT Aspect

Session 3: Call Management and Call Taking

Session 4: Conduct & Accountability

Session 5: Remote PFA

Session 6: Self-Care

Session 7: Handling Sensitive Calls

Practice & Simulation

## 8.1. Description of the Existing Hotline at LRC

The project will use the LRC existing call centre with the designated hotline 1760 which was put in service in August 2020 to cover the COVID-19 related issues such as people starting to show symptoms and need to be assessed and referred to hospitals, as well as answering questions and receiving complaints. A daily report is being kept for the calls being received at COVID-19 line. Names and numbers of the callers are taken and registered. The respondents are regularly trained on how to handle the calls.

This call centre aims to create an accessible communication mechanism that help different beneficiaries submit any complaints or feedback on any LRC service through the establishment of the non-Emergency hotline number. This call centre is ensuring:

* **Accountability:** Simple accessible and straightforward mechanism used to raise issues, opinions, feedback or complaints that will feed into LRC Operational learning and support in the development of LRC future projects.
* **Impact improvement:** Received feedback or complaints will help to identify the gaps and to extract the lessons learned for the implemented activities as an additional monitoring and evaluation tool.
* **Transparency and accessibility:** Stakeholders have adequate access to inquire about any activity details.
* **Improved Operational Programming:** While it is time consuming to listen to and address issues, once the issues are resolved the LRC programs will be more effective and can be more cost-efficient particularly through improved targeting.

## 8.2 LRC Hotline Structure

LRC 1760 Call Center is under the direct supervision of the Secretary General Office-Chief of Staff, and consists of:

* **Call Center Management Officer (CCMO):** responsible of maintaining system workflow, case referral to the responsible service providers and reporting to the superior.
* **Complaints and Follow-Up Officer (CFO):** follow up and refer to the CCMO on the complaints received on the non-emergency hotline and social media platforms on the LRC projects and services.
* **Call Center Shift Supervisors (CCSS):** maintain attendance, behavior, work quality of the operators. Support with extra work experience and information to the operators and implement follow-ups and announcements given by superiors.
* **Operators:** Receive calls, apply data entry and communicate with community beneficiaries.

The structure of the LRC Hotline is provided in the figure below.

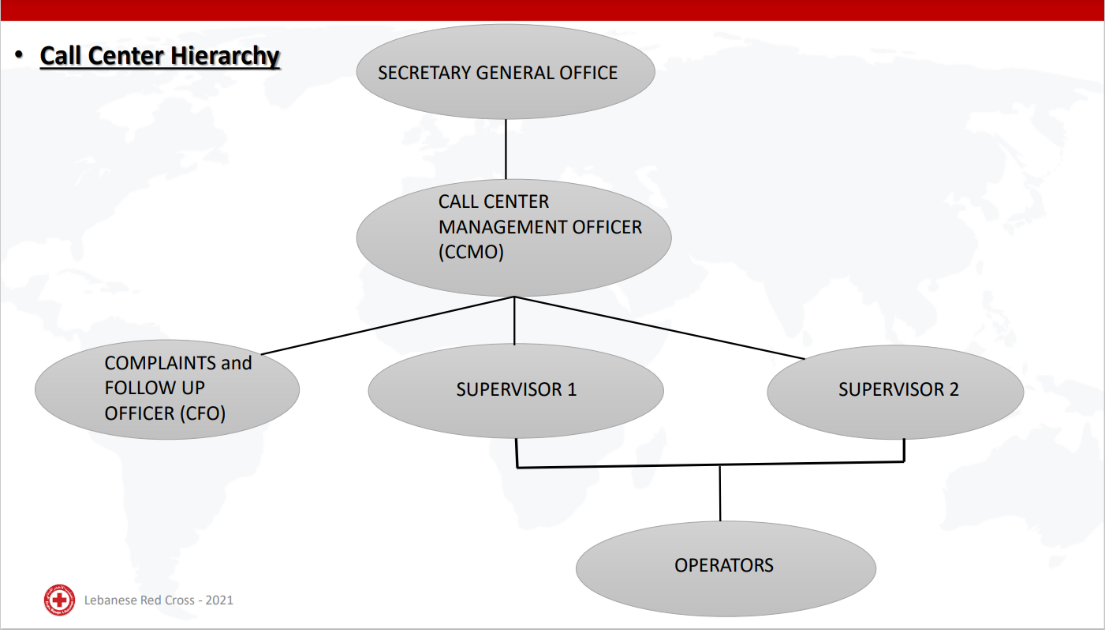


Figure 2: LRC call center hierarchy

## 8.3 LRC Process

**Inquiries and Follow-Ups.**

Call Center operators receive the call, collect the needed data in regard to the relevant service, answer the caller and/ or refer it to the CCSS for additional information or follow-up. If the call requires additional information or follow-up, CCSS elevates the case to the CCMO seeking the right answer and/ or to coordinate with the relevant services provider in the LRC to answer back the caller and close the case. Average call duration (collecting data) is estimated to be 7 minutes for answers and follow-ups from instant answers about the informative questions, and up to 10 days for external follow-ups.

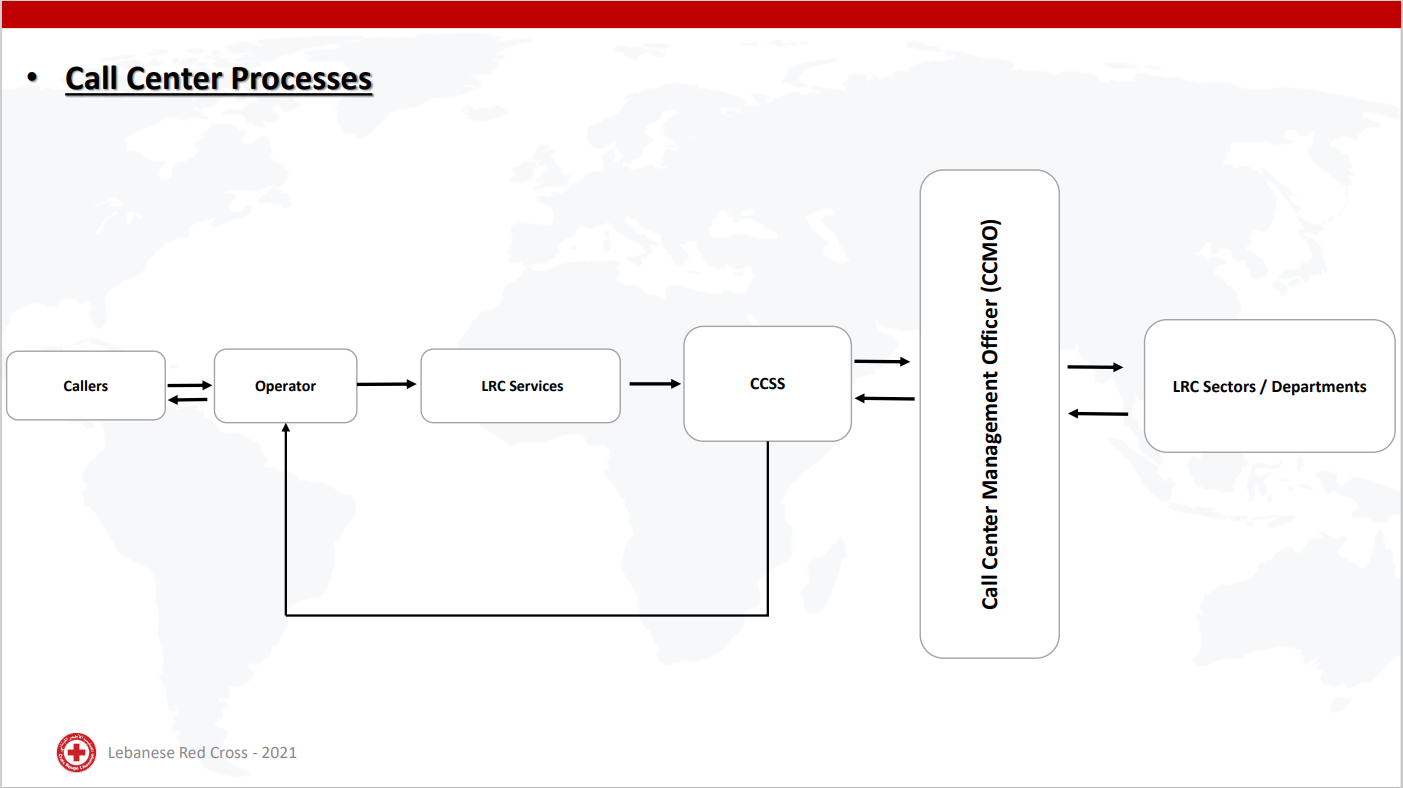


Figure 3: LRC call center processes

**Complaints Process.**

When a complaint is received, it is elevated to the CFO to gather, record and analyze the needed information segregated under 2 criteria (sensitive and non-sensitive). After examining the case, CFO submits their report to Secretary General (SG) office followed with the corrective action and while the complainant is informed of the relevant follow-up action.

During this process, complaints are shared with the SG Office when received and updated regularly on the status. A final Report is shared with SG Office after the full investigation to take the corrective action and is shared with the complainant through the Call center.

**Notes:**

* All decisions regarding sensitive complaints are taken only by SG Office.
* Complaint's timeframe relays on the investigation time and decision taken (Sensitive complaints are answered in a maximum timeframe of 24 hours; non-sensitive complaints are answered within 10 Days).
* Complaints are not neglected even if they are reported anonymously.
* LRC is working on a referral system with other NGOs for some specific complaints such as SEA/SH
* LRC has a responsibility to provide any support and conduct referrals to appropriate service providers that any SEA/H survivor might need. SEA/H survivors have a right to be informed of all available services that they can benefit from such as clinical management of rape or any medical assistance, Mental Health and Psychosocial Support, legal assistance, safe shelter relocation and others. Internal staff and volunteers must be linked with the available anonymous psychological support hotline. Any linkage or referral that may happen must adhere to the survivor-centered approach and respect all guiding principles mentioned above including principles of confidentiality while ensuring data privacy. In the event of such incidents, the bank will need to be informed within 48 hours as per the cleared and disclosed ESCP (link)
* Further, referrals shall require informed consent to be obtained from the survivor before contacting any service provider. The PSEA FP will fill out the specified referral form in case the survivor needed to be referred to external agencies

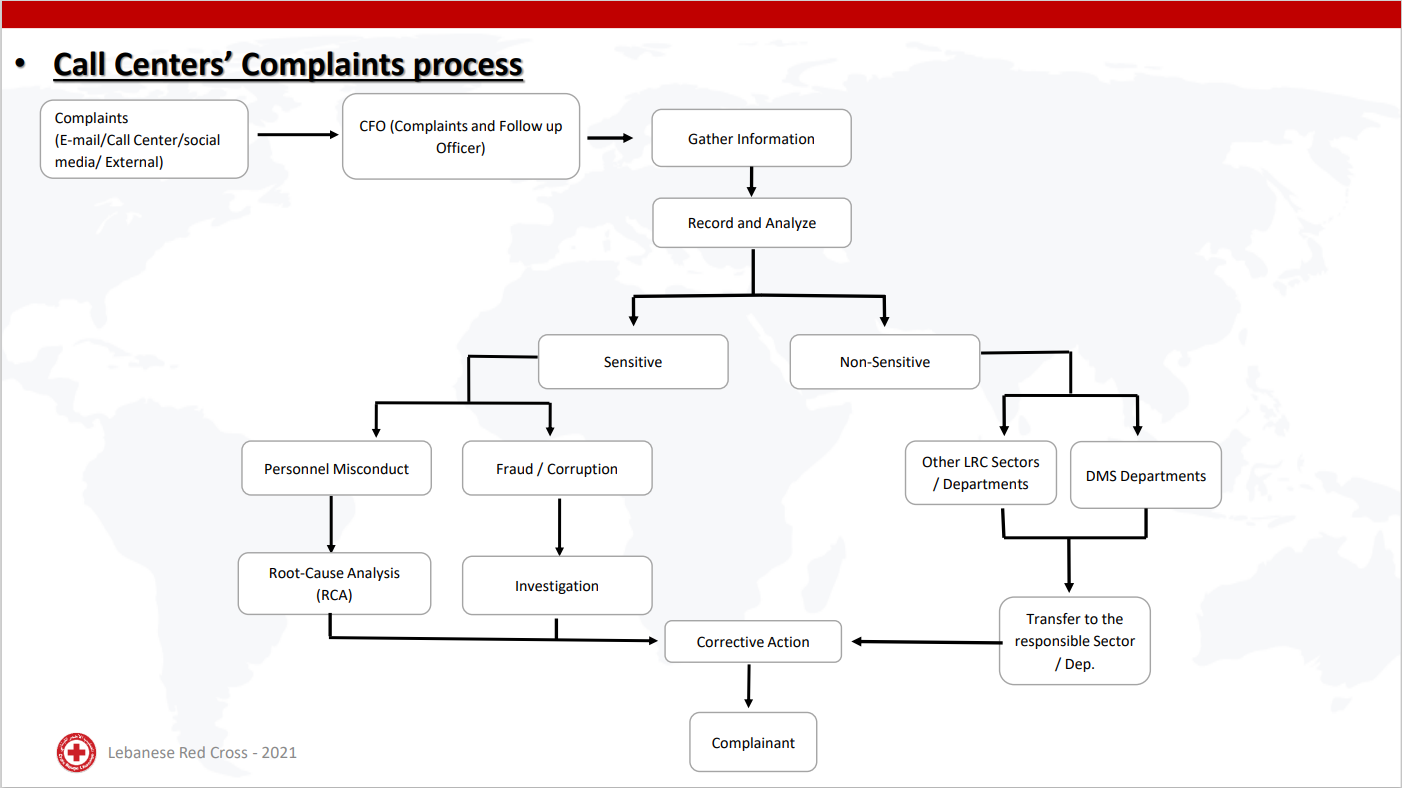


Figure 4: LRC call center’s complaints process

**Internal Communication.**

1760 Call center presents communication internally with LRC services providers and externally with callers and community members to ensure best service delivery.

***Internal Communication Types:***

There aretwo types of internal communication between 1760 call center and services providers as follows:

* Direct communication: When the call center connects the caller directly with the concerned for an instant help or answer;
  + Call center is in direct connection, 24/7, with the Medical Director for any Urgent medical advice (future medical assistance might be integrated).
  + The 1760 and 140 are connected directly for support and direct action on caller requests regarding relevant services provided. **Example**: Callers in need for hospitalization will be directly referred from 1760 to 140.
* Indirect Communication: It is when the call center waits for an answer from the concerned sector

The Call Center answers all questions, follow-ups and requests regarding all LRC services, roles and duties. This put the Center in coordination with all the sectors and sections and Projects’ focal persons to reply properly on caller requests.

***Internal Communication Channels:***

* **SG Office**: 1760 hotline is under the direction and supervision of the SG office. Reports, workflow, staff, complaints and all relative documents and issues are reported and followed in coordination with the Chief of Staff.
* **Medical Direction:** For some specific cases, 1760 connects the medical director through a conference call with the caller to answer on questions, assess and recommend the relevant follow-up. Example: Recommend oxygen machines, Home Care assistance and any other medical information.
* **PMER (DM):** DM PMER team through Call center operators, monitors and follow-up on specific projects with beneficiaries through phone call PDMs and field visits. 1760 submits reports on their related projects.
* **140:** 140 refers specific cases to the 1760 and vice versa regarding the relative services provided by each.
* **Economic Security (Syria Crisis)**: 1760 Call center receives requests from Syrian refugees and host communities for in-kind, Cash and other assistance, the person is guided to the focal person to be assessed and followed-up.
* **Economic Security (COVID-19):** 1760 Call center receives requests from Covid19 patients for in-kind assistance, the person is guided to the focal person to be assessed and followed-up.
* **Oxygen Machines:** Throughout 1760 operators, the caller is guided to the focal person in order to benefit from the oxygen machines project. Also 1760 receives follow-up calls and provides conference calls with the medical director for case assessment.
* **Home Care:** Patients seeking the Home Care services are guided and followed-up by the Home Care operators.

**External Communication:**

As for the External communication, the call center welcomes feedback concerning LRC’s services, both positive and negative, to better improve LRC’s work. Its role is to deal with any complaints or feedback related to the program operations, services, staff and volunteers of LRC and provide relevant information about certain services provided by LRC or other organizations where possible.

**1760 call center presents 2 types of communication with the external stakeholders:**

* Direct Communication: Call center answers the caller directly regarding his/her request and provides the needed information.
* Indirect Communication: If additional information is needed, Call Center files the request and refers it to the relevant service provider in LRC for actions and follow-ups.

## 9.3 GM Strengthening Needed

The project GM will be strengthened to ensure that it provides an appeal process if the complainant is not satisfied with the proposed resolution of the complaints, and this will be documented in the LRC periodic progress reporting as per the provisions of the Environmental and Social Commitment Plan (ESCP). Once all possible means to resolve the complaint has been proposed and if the complainant is still not satisfied then they should be advised of their right to legal recourse. Furthermore, the GM will consider multiple uptake channels to register project related grievances. Anonymous grievances can be raised and addressed. Several uptake channels under consideration by the project include:

* Toll-free telephone hotline / Short Message Service (SMS) line at 1730
* Letter to Grievance focal points at local health facilities and vaccination sites
* Complaint form to be lodged via LRC website through <https://www.redcross.org.lb/get-in-touch/>
* Walk-ins may register a complaint on a grievance logbook at healthcare facility or suggestion box at clinic/hospitals
* These additional uptake channels will be incorporated to the existing project GM before project activities begin, to provide other means for registering complaints and once established will be widely disseminated to all stakeholders as identified in the SEP.

The project will have other measures in place to handle sensitive and confidential complaints, including those related to SEA/SH in line with the WB Good Practice Note on SEA/SH. LRC has drafted a Policy on Protection from Sexual Exploitation and Abuse PSEA as well as referral mechanism, these policies will be approved before the project implementation to ensure proper management of SEA/SH cases. The policies will be published after finalization through the LRC website.

Once a complaint has been received, by any channels, it should be recorded in the complaints logbook or grievance excel-sheet/grievance database.

As the 1730 hotline will also be used for workers’ grievances, it should be made clear to the operator of the call center, that workers’ grievances should be directly elevated to the CFO. Details of the workers’ GM are provided in [Annex L Section 9.](#_GRIEVANCE_MECHANISM)

The CFO shall coordinate with the PMU E&S specialist and provide him/her with all details necessary for reporting purposes.

## 8.4 World Bank Grievance Redress Service

Communities and individuals who believe that they are adversely affected by a WB supported project may also submit complaints to the Bank’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank’s independent Inspection Panel which determines whether harm occurred, or could occur, because of Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WB's attention, and Bank Management has been given an opportunity to respond. Complaints can be submitted through the following links <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service> and [*www.inspectionpanel.org*](http://www.inspectionpanel.org).

# 9 Monitoring, Institutional Arrangement and Budget

## 9.1 Monitoring

A Joint Monitoring Committee (JMC) chaired by the WB and composed of heads and technical staff from WHO, UNICEF, International Organization for Migration (IOM), UNHCR, UNRWA was set up with the objective to enhance the quality of monitoring and effectiveness of the COVID-19 vaccination program implementation with respect to the NDVP, WHO standards and WB requirements. The JMC is active since the beginning of the vaccination campaign in February 2020. The JMC will be monitoring all vaccination rollout activities

The PMU E&S specialist will check on the proper implementation of the ESMP and the Infection Control and HCWMP in the HCF. The following table presents the main tasks to be undertaken to monitor the proper environmental implementation of the project.

Table 2: Monitoring Plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task** | **Indicator** | **Frequency** | **Responsibility** | **Phase** |
| Review the Infection Control and HCWMP | Infection Control and HCWMP prepared and approved by PMU/E&S specialist | Once | PMU | Before implementation of the activities in the HCF |
| Monitor the implementation of the Infection Control and HCWMP | Visit and compliance report by PMU/E&S specialist | Once | PMU | Before implementation of the activities in the HCF |
| Check the implementation of the ESMP | Visit and compliance report by PMU/E&S specialist | Twice yearly during implementation | PMU | During project life time |
| Monitor the implementation of the ESMP | Observations during site visits | Twice yearly during implementation | PMU | During project life time |
| Monitor the GM | GM logs, time of resolution, no of grievances solved, no of complaints received, nature of complaint , no. of SEA/SH cases | Monthly | The PMU E&S specialist | During project life time |

## 9.2 Institutional Arrangements

The LRC will manage the WB funds and the PMU manages the implementation of the Project. The PMU includes a project coordinator, a financial and accounting manager, and a procurement officer. An Environmental and Social specialist will be in charge of the proper implementation of the EMSF. The Environmental and Social specialist and GM officer will be also following up on all issues related to the project and reporting at the PMU level. He/She will be in charge of preparing, updating, and implementing relevant E&S standards throughout project implementation as set out in the ESCP (<https://www.redcross.org.lb/wpcontent/uploads/2022/02/ESCP-Dec-6-Final.pdf>) of the project.

## 9.3 Cost Estimate

The estimated total budget for the implementation of the ESMF is **84,000 USD**

Table 3: ESMF Budget

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Elements | Subproject Activities | Responsibility | Number of month/Event | Unit Price  US$ | Total Cost  US$ |
| Salary of the E&S Specialist for a 16 months duration |  |  | 16 months | 2,500 | 40,000 |
| Training for the preparation and implementation of an ESMP and an HCWMP | HCF | PMU/E&S Specialist | 3 (Comprising representatives of HCF including hospitals | 2,500 | 7,500 |
| Trainings on the Codes of Conducts, Grievance Mechanism and Stakeholders’ Engagement. |  |  | 2 | 2,000 | 4,000 |
| Financial Support and Contribution for the Implementation of ESMP and HCWMP | 5 Hospitals | PMU/E&S specialist | 5 | 6,500 | 32,500 |
| Total Cost |  |  |  |  | **84,000** |

# Annexes

**Annex A: Coronavirus Disease 2019 (COVID-2019) Health Strategic Preparedness & Response Plan**

**Annex B: Basic Laboratories – Biosafety Levels 1 and 2**

**Annex C: Hospital Performance Contracting 2014- MOPH – Lebanon**

**Annex D: Summary of COVID-19 Vaccination Readiness Assessment**

**Annex E: COVID-19 Vaccination Training Report by MOPH**

**Annex F: Standard Operating Procedure for COVID-19 Immunization prepared by the Primary Healthcare Department at the MOPH**

**Annex G: Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings**

**Annex H: Technical note: Use of Military Forces to Assist in COVID-19 Operations Suggestions on how to mitigate risks – Version 1- March 25, 2020**

**Annex I: Form on Adverse Event Following Immunization Reporting Form for COVID-19 Vaccine(s)**

**Annex J: Infection Control and Health Care Waste Management Plan Template**

**Annex K: General Outline of an ESMP**

**Annex L: Labor Management Procedures**

**Annex M: Agreement between PRCS and Arcenciel**

## Annex A: COVID-2019 Health Strategic Preparedness and Response Plan[[26]](#footnote-27)



**Coronavirus Disease 2019 (COVID-2019) Health Strategic Preparedness and**

**Response Plan**

**Lebanon**

10 March 2020



**I. Purpose of the Document**

This document has been developed to establish a national plan of action to scale up preparedness and response capacities in Lebanon for prevention, early detection, and rapid response to coronavirus disease 2019 (COVID-19) as required under the International Health Regulations (IHR 2005). Using the WHO global 2019 Novel Coronavirus Strategic Preparedness and Response Plan as the foundation, this plan was developed for Lebanon.

**II. Background, PHEIC declaration and Situation Analysis**

Coronaviruses are zoonotic viruses that circulate amongst animals. Some have been identified in humans, causing illness ranging from mild symptoms to severe illness.

On 31 December 2019, WHO was alerted to several cases of pneumonia of unknown origin in Wuhan City, Hubei Province of China. One week later, on 7 January 2020, Chinese authorities confirmed that they had identified a new virus as the cause of the pneumonia cluster. The new virus is a coronavirus, belonging to the same family of viruses that cause the common cold, as well as viruses that cause Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS). This new virus is currently referred to as the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2).

Since the first cases were reported, WHO has been working with Chinese authorities and global experts to learn more about the virus, including source of infection, how it spreads, severity, high-risk groups, how best to treat patients, and what countries can do to prepare for and respond to the situation or to the epidemic.

The Emergency Committee on the COVID-19 under the International Health Regulations (IHR 2005) was first convened on 22-23 January, and subsequently reconvened on 30 January 2020. The Director General of WHO declared the COVID-19 outbreak to be a public health emergency of international concern (PHEIC) after the second meeting. The Emergency Committee has provided recommendations to WHO, to the People’s Republic of China, to all countries, and to the global community, on measures to control this outbreak. The Committee believes that it is still possible to interrupt virus spread, provided that countries establish strong measures to detect disease early, isolate and treat cases, trace contacts, and promote social distancing measures commensurate with risk.

As of 1 March 2020, the total number of reported confirmed cases of COVID-19 stood at 87,161 cases reported from 60 countries and 2980 associated deaths (CFR 3.4%). Of the total number of confirmed cases, 79,968 were reported from China, 3,736 from Republic of Korea, 1,128 from Italy, and 593 from Iran. The number of confirmed/suspected cases and affected countries continues to rise.

Most cases of COVID-19 are mild in nature, but some have progressed to severe illness and death. Human-to- human transmission has been confirmed in many of the affected countries. There is not enough information about the epidemiological profile of COVID-19 to draw definitive conclusions about the full clinical features of disease, the intensity of the human-to-human transmission, and the original source of the outbreak. However, WHO is working closely with affected countries to compile more epidemiological data to answer the unknown questions.

Given high volumes of domestic and international travel both to and from affected countries and the observed human to human transmission, it is not unexpected that new confirmed cases will continue to appear in other areas and countries. With the information currently available for the novel coronavirus, WHO advises that measures to limit the risk of exportation or importation of the disease should be implemented without unnecessary restrictions of international traffic and trade.

*COVID 19 is transmitted by droplet, from an infected person. It can remain infective up to several days on inert material. The main mode of prevention remains: distancing at least 1.5 meters from an infected person, frequent hand hygiene and cough etiquette practices. Based on the current data, one person infects on average 4 persons, and the mortality is around 3%*

**a. Situation in the WHO Eastern Mediterranean Region**

*Regional health system context*

Almost two-thirds of the Region’s countries are experiencing directly or indirectly complex emergencies, with fragile health systems, weak disease surveillance, poor response capacities, and a sub-optimal level of public health preparedness – all factors making them particularly vulnerable to any emerging infectious diseases. Major religious mass gatherings are taking place in the region which pose unique risks to public health security.

Detecting and responding to emerging infectious diseases have become an important public health priority for Eastern Mediterranean Region. Majority of the countries in the region have adequate influenza and other respiratory disease surveillance system through extended network of sentinel sites. 20 out of the 22 countries in the region have functioning reference laboratories with the ability to detect and confirm seasonal influenza virus, MERS-CoV and other high threat pathogens. Furthermore, all countries in the region have trained national multidisciplinary rapid response teams for timely investigation and response to any public health threat. Countries with complex emergencies in the region have functioning early warning surveillance system with the ability to detect epidemic-prone diseases. Therefore, it’s important to leverage the existing respiratory disease surveillance and laboratory capacities for the current surveillance and investigation and response to COVID-19 outbreak.

*Regional epidemiological context*

The epidemiology of the region is constantly changing. As of March 1 2020, 11 countries in the WHO Eastern Mediterranean Region (EMR) have reported COVID-19 cases. A total of 1,122 laboratory confirmed cases, of which 978 are from Iran, have been reported in the EMR. All death in the region totaling 54, have been reported from Iran.

Due to the global nature of travel, it is expected that further cases of COVID-19 may appear in other countries in the Region. EMRO dashboard can be accessed on:

<https://app.powerbi.com/view?r=eyJrIjoiN2ExNWI3ZGQtZDk3My00YzE2LWFjYmQtNGMwZjk0OWQ1MjFhIiwid> [CI6ImY2MTBjMGI3LWJkMjQtNGIzOS04MTBiLTNkYzI4MGFmYjU5MCIsImMiOjh9](https://app.powerbi.com/view?r=eyJrIjoiN2ExNWI3ZGQtZDk3My00YzE2LWFjYmQtNGMwZjk0OWQ1MjFhIiwidCI6ImY2MTBjMGI3LWJkMjQtNGIzOS04MTBiLTNkYzI4MGFmYjU5MCIsImMiOjh9)

Number of countries in the region have taken steps to repatriate their citizens from Wuhan or other cities affected by the outbreak, and those repatriated nationals were isolated for 14 days. WHO/EMRO has developed an interim guidance to countries for evacuation and quarantine of travelers returning from China. Thus far, WHO recommends no restrictions on travel and trade while some countries in the Region decided to take restrictive measures at Points of Entries, including suspension of flight coming from/to China, South Korea, Italy, and Iran. Such restrictive legal enforcements are currently considered and decided by each state.

**III. COVID-19 Risk Analysis**

a. **Overall Risks**

As of 28 February, WHO assessed the COVID-19 risk to be very high for China, very high at the regional level, and very high at the global level.

Sitrep: <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200228-sitrep-39-covid-19.pdf?sfvrsn=5bbf3e7d_2>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Overall Risk** | | |  |
| **China** | | **Regional** | **Global** | |
| Very High | | Very High | Very High | |

This assessment takes into consideration:

• ***High likelihood of further spread:*** Human-to-human transmission, including transmission within healthcare settings, has been confirmed within Wuhan and cities outside of China. The outbreak continues to grow within China at a rapid rate. In addition, 7193 confirmed cases have been

reported by 59 countries outside China as of 1 March 2020. Local transmission has been confirmed in many countries other than China.

• ***Potential impact on human health:*** The virus can cause severe illness and death. However, many

uncertainties remain, including the full extent of the current outbreak within China, and the full clinical spectrum of illness.

• ***Effectiveness of current preparedness and response measures:*** Until now, countries that have reported an imported case have demonstrated efficient and effective disease surveillance and response measures. Many countries that are yet to report a case have also demonstrated effective surveillance measures to date, through rapid testing and isolation of suspected cases. However, of great concern are countries that are less prepared to detect and respond to an imported case.

b. **Risk Analysis in Lebanon**

Lebanon has been strengthening and maintaining its national capacities required under the International Health Regulations (IHR 2005). Lebanon has conducted the Joint External Evaluation (JEE) and developed national action plans for health security to meet their core capacity requirements under the IHR. The following JEE technical areas were used for measuring capacity; (1) IHR coordination, (2) Infection prevention and control, (3) Laboratory and Biosecurity / Biosafety, (4) Surveillance, (5) Reporting, (6) Preparedness, (7) Emergency Response, (8) Risk Communications, and (9) Points of Entry. All the countries of the region scored between 2/5 and 5/5. Lebanon preparedness and readiness relatively good, scoring 4/5.

Lebanon’s geographic location makes it a busy hub for travel to and from all the world. Although it does not have direct flights with China, the initial epicenter for the outbreak, it does have direct fights to most regional countries, and to all Europe. Based on the epidemiologic data, the first case of COVID 19 was imported to Lebanon through travelers coming back from Iran/ Qom, believed to be the epicenter in Iran. The first case was confirmed on 21 February 2020; a Lebanese woman who was aboard a plane coming from Iran. Until March 1, 2020: A total of 231 people were tested at RHUH, with results being 221 negatives and 10 positives. 8 of the COVID-19 cases had travel history to Qom city in Iran, while 2 had direct contact with persons who have been to Iran. Local transmission is confirmed but remains limited to these 2 cases.

Taking into consideration the mode of transmission, the risk of exposure, the readiness of the health system, as well as the likelihood and the severity of the impact of a local outbreak, the risk of local transmission and spanning outbreak in Lebanon is high.

**IV. Preparedness and response interventions based on Transmission Scenarios**

Through this plan, the MOH will closely work with the relevant authorities and other partners to build strong capacity to prevent, prepare, detect and respond to any potential COVID-19 outbreak. This plan will address the existing capacity gaps related to the prevention, preparedness, detection and response for emerging infectious diseases.

The overall goal of the national preparedness and response plan is to strengthen surveillance and response for COVID-19 infection to early detect any imported case, rapidly contain local transmission and mitigate the health impact of the outbreak in Lebanon.

WHO has defined 4 transmission scenarios for COVID-19:

1. Countries with no cases (No Cases);

2. Countries with 1 or more cases, imported or locally detected (Sporadic Cases);

3. Countries experiencing cases clusters in time, geographic location and/or common exposure (Clusters of cases);

4. Countries experiencing larger outbreaks of local transmission (Community transmission).

I. Preparedness Measures for Scenario 1

The main measures that were implemented in Lebanon before the 21st of February when no COVID-19 cases were detected yet included:

• Awareness raising activities, development and dissemination of IEC material

• Intensive dissemination of risk communication and community engagement messages

• Screening at POEs of travelers coming from outbreak countries

• Ensuring a functional surveillance system with clear SOPs for case detection and confirmation

II. Outbreak Containment Measures for Scenarios 2 and 3

The transmission scenario that we are currently witnessing remains contained. The cases reported have been imported by exposure from a country with local transmission or through contact with infected household member.

The main measures to be taken include:

• Intensive risk communication and community engagement

• At POE, screening travelers coming from outbreak countries

• Ensuring a functional surveillance system with clear SOPs for case detection and confirmation

• Ensuring patient care and quarantine facilities with clear SOPs for patient referral

• Ensuring adequate reference diagnostic lab capacity, with standard safety and quality SOPs.

• Provision of PPEs at health facility level

• National coordination mechanisms established

• Assessment of capacities and gaps for potential local spread and outbreak explosion

III. Outbreak Mitigation Measures for Scenario 4

In case of an outbreak and based on the current available epidemiological data, the following is estimated: for a population of 6 million, approximately 600 thousand persons (10%) will contract symptomatic infection, over a period of 2-3 months. Of these cases, 90,000 (15%) will seek healthcare, out of which 18,000 (20%) would require hospital admission and 2,700 (3%) would be admitted to the intensive care unit. The death toll is estimated at a maximum of 1,800, 2% of those seeking healthcare. A pandemic that lasts eight weeks and has an attack rate of

10% will require at its peaks (4th and 5th week), to use 61% of the ICUs in all the Lebanese territories and around

36% of the hospital beds.

• Awareness raising activities should continue and be reinforced

• Surveillance activities should be maintained

• Risk communication and community engagement activities should continue

• IPC programs should be rigorously implemented especially in all hospitals and health facilities

• Designation of additional referral hospitals

• Development of new SOPs for patient diagnosis and referral and home care

• Develop protocols for quarantine (self-quarantine, isolation canters etc.)

• Ensure sufficient stock of PPEs with focus on the health care workers

• Support referral laboratories by MOPH and partners with the needed testing kits and PPEs.

**V. Areas of work and priority actions i. Partnership and coordination**

a. Establishment of the national COVID19 Task Force to mobilize resources and monitor country level activities to facilitate coordination with relevant ministries

b. Strengthen multi-sectoral coordination, as well as coordination with WHO local office, by sharing updated information and contingency planning

c. Conduct quick mapping of human resource needs for the implementation of the national plan

d. Set up and activate Emergency Operation Centers (EOC) at national and sub-national levels to better coordinate the response

e. Coordination of activities of all health and relevant non-health partners

f. Establish and maintain the COVID19 national platform for national data collection, provide appropriate support or guidance, and closed-loop communication of answers in timely manner

g. Coordinate between relevant stakeholders (including the National CD Committee) to support priority research activities in order to close knowledge gaps

**ii. Points of Entry and IHR (2005)**

a. Establishment of multi-sector POE contingency plans and establishment of referral protocols from POE to designated health facilities

b. Provide guidance regarding issues of travel and trade based on current public health advice c. Coordinate provision of needed technical support for related IHR capacities

d. Provide and update overview of global traffic/trends in regard to COVID-19 and the EMR, as well as specific capacities at PoE

e. Share technical guidance related to IHR capacities

f. Provide targeted technical support/assessment to specific PoE (Beirut Rafic Hariri International Airport, Sea ports, and Border Crossing Points)

g. Organize trainings for health and non-health authorities at POEs

**iii. Health Information Management**

a. Disseminate standard case definitions, case investigation and follow up for active surveillance of COVID-19 to all surveillance sites (Health Facilities, Lebanese Order of Physicians, Syndicate of Hospitals, Orderof Nursing…)

b. Collect daily information relevant to COVID-19 through social media, local newspapers, community (event-based surveillance)

c. Establish active case finding

d. Ensure that national surveillance system covers laboratories, health facilities in public and private sector, points of entry, and other relevant health providers with a direct line of communication with the national IHR Focal point

e. Ensure timely notification of confirmed and probable cases to WHO (within 24 hours of identification), as well as reporting of suspected cases of COVID-19 preferably through EMFLU or using WHO interim case reporting form.

f. Enhance/establish existing acute respiration infection surveillance system, as needed, including indicator-based surveillance, event-based surveillance, and sentinel surveillance

g. Develop dashboards, repositories and situation reports (as needed)

h. Provide information required to guide all aspects of the operations – including communications, risk and needs assessment, priority setting, planning, information management, health operations and health logistics

I. Produce and disseminate daily briefing and weekly updates to all levels

**iv. Case management**

a. Ensure healthcare service continuity (facilities, personnel, medicines, supplies, medical devices) and surge plans including establishment of a referral system to designated hospitals.

b. Provide case management technical expertise and guidance to health facilities in Lebanon

c. Provide trainings on healthcare/ambulatory teams in the management of COVID-19 cases, Infectioncontrol, PPE donning and doffing …

d. Facilitate implementation of international/WHO protocols for research/clinical trials at country level if there are opportunities

**v. Infection Prevention and Control (IPC)**

a. Provide IPC technical expertise and guidance to Health facilities when needed, particularly regarding triage, early recognition, standard precautions, isolation procedures, and referral mechanisms in line with WHO guidelines

b. Organize refresher training on IPC and capacity building for all health facilities

**vi. Rapid Response Teams (RRTs)**

a. Establish multidisciplinary rapid response teams (RRTs) and ensure the RRTs are in place at national and subnational levels

b. Ensure the mechanism of activation and deployment of national RRTs is in place

c. Conduct refresher training among national RRT teams in case management, specimen collection and transport, contact tracing, decontamination, investigation, social mobilization and safe and dignified burials.

d. Ensure RRTs are trained and equipped to investigate suspected cases, especially regarding the provision of appropriate investigation protocols and case definitions, systems for contact tracing, and surveillance mechanisms as outlined

e. Coordinate with WHO local office for collaboration on outbreak investigation and response

f. Organize field-based simulation exercise to ensure the functionality of RRTs.

**vii. Laboratory diagnostics**

a. Establish and sustain laboratory confirmatory capacity for COVID-19 (at RHUH and other designated hospitals at Mohafazat level)

b. Adapt and disseminate SOPs for specimen collection, management and transportation for COVID-19 diagnostic testing

c. Strengthen national diagnostic capacity through in-service training and mentoring among lab technicians.

d. Ensure availability of testing kits and other essential supplies at the national reference laboratory at RHUH and at laboratories of designated hospitals at Mohafazat level.

e. Build capacity for collection, storage and transportation of samples and establish a process for shipment of specimens to international reference laboratories when needed.

f. Establish surge plans in to be used in times of increased testing demands

**viii. Risk communication and community engagement**

a. Develop and implement national emergency risk communication and community engagement strategies for COVID-19

b. Identify and designate media spokesperson(s) at the national level and organize regular interviews with traditional and non-traditional media organizations

c. Ensure timely and credible information is made available to the public, health professionals and other key audiences in appropriate formats through different accessible platforms addressing different audiences including the general public

d. Disseminate press releases regularly highlighting the latest situation and national response

e. Hold press briefings to raise media awareness on the latest situation, address media queries and ensure media are aware of correct facts and information.

f. Reinforce national rumor and misinformation detection and management mechanisms g. Update regularly the covid-19 page of the MOH website

h. Develop and disseminate Information, education and communication materials in coordination with concerned stakeholders (UN agencies, NGOs, Scientific Communities, Syndicates etc.)

**ix. Operations support and logistics**

a. Consolidate requests and share with the PMO’s national committee for quantification and prioritization

b. Survey for IPC and Laboratory Reagent stocks available and identify gaps

c. Develop a list of items needed for resupply or procurement (National and subnational, POE…)

**x. Programme Management**

a. Allocate funds for the execution of the National plan in collaboration with WHO country office

b. Manage and support financial allocation for all operating costs

c. Support fast track procurement requests

**V. Operationalizing the plan**

Implementation of this plan will require significant and extensive coordination and collaboration which includes but is not limited to national technical meetings, and workshops between health authorities and other partners and ministries.

**VI.Monitoringandevaluation**

Monitoring and evaluation of the national preparedness and response will be conducted at regular intervals by the MOH. **Key performance and impact indicators can be used to monitor and evaluate the implementation of the planned activities**, as well as to assess the overall performance of the programme, derive evidence & lessons learnt to correct and adjust the program and operations. A progress report will be generated and shared regularly with the national committee highlighting the progress and level of operational readiness, the strengths, weakness, gaps and recommendations on how to address the challenges.

|  |  |  |  |
| --- | --- | --- | --- |
| **Monitoring framework** | | | |
| **Type** | **Indicator** | **Target containment scenario** | **Target mitigation scenario** |
| Point of entry and IHR | Number of POE that have capacity to detect suspected/confirmed cases | 3 | 0 |
| Number of POE that have isolation | 4 | 0 |
| Health Information  Management | % of HCF where surveillance guidelines are disseminated to healthcare workers including private sector | 100% | 100% |
| Case management | Public designated hospitals to treat COVID-19 cases | 1 | 5 |
| %Nb of Hospitals where case management were disseminated | 100% | 100% |
| Infection Prevention and  Control | % of acute healthcare facilities with triage capacity | 50% | 100% |
| % of acute healthcare facilities with isolation capacity | 5% | 100% |
| Rapid Response Teams | Nb trained multidisciplinary rapid response teams at Mohafazat level | 4 | 4 |
| % of hospitals that have adequate supplies including PPEs | 100% | 100% |
| % of alerts have been verified and investigated within 48 hours | 100% | 100% |
| Laboratory diagnostics | Nb of laboratory that can provide results within 72 hours | 1? | 5 |
| Number of national reference laboratories with capacity to test COVID-19 | 1 | 1 |
| Number of national laboratories with trained  laboratory technicians on COVID-19 testing | 1 | 5 |
|  | Number of national reference laboratories reporting virological data through EMFLU or FluNet | 1 | 5 |
| Risk communication and community engagement | Presence of health communication plan that was updated according to the new situation | 1 | 1 |
| frequency of media interviews and press release in different languages | daily | Weekly |
| Operations support and logistics | Number of hospitals experiencing stock-outs of critical items | 0 | 0 |
| Number of labs receiving IPC medical supplies and laboratory reagents in response to COVID-19 | 1 | 5 |
| Programme Management | % of surge deployment resources from the external and internal rosters of experts | 0% | TBD |

**VII. Timeline**

|  |  |  |
| --- | --- | --- |
| **Areas of work** | **Activities** | **Timeline** |
| 1. Partnership and Coordination | 1. Establishment of a National COVID19 technical committee to mobilize resources and monitor country level activities to facilitate coordination with relevant authorities, ministries and WHO country office 2. Strengthen multi-sectoral coordination, by sharing updated information and contingency planning for joint actions 3. Coordinate and collaborate with WHO country office to cover gaps in preparedness and response as the outbreak evolves in order to complete and implement the national preparedness and response plan for COVID-19 4. Conduct quick mapping of human resource needs for the implementation of the national plan 5. Set up and activate Emergency Operation Centers (EOC) at national and sub-national levels to better coordinate the response 6. Support and guide the coordination of activities of all health and relevant non-health partners 7. Establish and maintain the national platform to provide appropriate support or guidance, and closed-loop communication of answers in timely manner 8. Coordinate between relevant stakeholders to support priority research activities in order to close knowledge gaps | Ongoing |
| 2. Point of entry (PoE) and IHR | 1. Provide technical expertise to inform operations for IHR and PoE issues, including guidance on establishing multi-sector PoE contingency plans and establishment of referral protocols from PoE to designated health facilities 2. Provide guidance regarding issues of travel and trade based on current public health advice and in alignment with global strategy 3. Coordinate provision of needed technical support for related IHR capacities 4. Provide and update overview of global traffic/trends in regards to COVID-19, as well as specific capacities at PoE 5. Share technical guidance related to IHR capacities 6. Provide targeted technical support/assessment to specific PoE | Feb - April |

|  |  |  |
| --- | --- | --- |
| **Areas of work** | **Activities** | **Timeline** |
| 3. Surveillance and reporting systems | 1. Disseminate standard case definitions, case investigation and follow up for active surveillance of COVID-19 to all surveillance sites 2. Collect daily information relevant to COVID-19 through social media, local newspapers, community (event- based surveillance) 3. Establish active case finding 4. Ensure national surveillance systems cover laboratory, private sector, points of entry, and other relevant health providers with direct line of communication with the national IHR Focal point 5. Ensure timely notification of confirmed and probable cases to WHO (within 24 hours of identification), as well as reporting of suspected cases of COVID-19 preferably through EMFLU or in using WHO interim case reporting form. 6. Enhance/establish existing acute respiration infection surveillance system, as needed, including indicator - based surveillance, event-based surveillance, and sentinel surveillance 7. Keep national and subnational country levels informed on the evolution of the outbreak in the region 8. Develop dashboards, repositories and situation reports 9. Provide information required to guide all aspects of the operations – including communications, risk and needs assessment, priority setting, planning, information management, health operations and health logistics 10. Monitor available research, knowledge and product development to inform the operations 11. Produce and disseminate daily briefing and weekly updates to national and subnational levels | Ongoing |
| 4. Case Management | 1. Ensure healthcare service continuity (facilities, personnel, medicines, supplies, medical devices) and surge plans including establishment of a referral system 2. Provide case management technical expertise and guidance to health facilities 3. Provide trainings on healthcare/ambulatory teams in the management of COVID-19 cases 4. Coordinate with stakeholders (National CD Committee) to address unknown about clinical characterization, challenges in clinical care and collaboration to innovate and roblem solve together 5. Facilitate implementation of international/WHO protocols for research/clinical trials at country level if there are opportunities | Ongoing |
| 5. Infection Prevention and Control (IPC) | 1. Provide IPC technical training and guidance to Health facilities when needed, particularly regarding triage, early recognition, standard precautions, isolation procedures, and referral mechanisms in line with WHO guidelines 2. Share up-to-date interim WHO IPC guidance documents with HC professionals 3. Provide IPC training and capacity building if at national and subnational levels if needed 4. Strengthen triage and isolation capacity in referral hospital(s) | February- April |

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| --- | --- | --- |
| **Areas of work** | **Activities** | **Timeline** |
| 6. Rapid Response  Teams (RRTs) | 1. Coordinate with Mohafazat and Caza physicians to activate/reactivate the multidisciplinary rapid response teams (RRTs) and ensure the RRTs are in place at national and subnational levels 2. Ensure the mechanism of activation and deployment of national RRTs is in place 3. Conduct refresher trainings among national RRT teams in case management, specimen collection and transport, contact tracing, decontamination, investigation, social mobilization and safe and dignified burials. 4. Provide technical guidance to ensure RRTs are trained and equipped to investigate suspected cases, especially regarding the provision of appropriate investigation protocols and case definitions, systems for contact tracing, and surveillance mechanisms as outlined 5. Coordinate with WHO country office for any international collaboration on outbreak investigation and response 6. Organize field-based simulation exercise to ensure the functionality of RRTs. | March-May |
| 7. Laboratory diagnostics | 1. Support reference lab to establish and sustain laboratory confirmatory capacity for COVID-19 2. Adapt and disseminate SOPs for specimen collection, management and transportation for COVID -19 diagnostic testing 3. Provide technical assistance to strengthen national diagnostic capacity through in-service training and mentoring among lab technicians. 4. Ensure availability of testing kits and other essential supplies in national reference laboratories. 5. Establish access to a designated international COVID-19 reference laboratories 6. Build capacity for collection, storage and transportation of samples and establish a process for shipment of specimens to international reference laboratories until national capacity can be established. 7. Establish surge plans in to be used in times of increased testing demands | Ongoing |
| 8. Risk communication and community engagement | 1. Provide support to develop and implement national emergency risk communication and community engagement strategies and/or action plans for COVID-19 2. Identify and designate media spokesperson(s) at national and subnational levels and organize regular interviews with traditional and non-traditional media organizations 3. Support timely and credible information is made available to the public, health professionals and other key audiences in appropriate formats through different accessible platforms addressing different audiences including vulnerable populations 4. Disseminate press releases regularly highlighting the latest situation and national response 5. Hold press briefings to raise media awareness on the latest situation, address media queries and ensure media are aware of correct facts and information. 6. Reinforce national and subnational rumour and misinformation detection and management mechanisms 7. Update regularly the nCoV info and the MOPH website | Ongoing |

|  |  |  |
| --- | --- | --- |
| **Areas of work** | **Activities** | **Timeline** |
|  | h. Conduct regional traditional and social media surveillance for listening and understanding perception of target audience and provide technical support to subnational levels  i. Develop and disseminate Information, education and communication materials |  |
| 9. Operations support and logistics | National Level   1. Consolidate requests and share for quantification and prioritization 2. Survey for IPC and Laboratory Reagent stocks available and identify gaps c. Develop a list of items needed for resupply or procurement   Subnational   1. Receive, inspect, consolidate, kit, and dispatch emergency medical supplies 2. Report on available supplies and dispatches completed 3. Liaise with the central level to monitor and report on global supply availability and forecast (request for new supplies) 4. Monitors and reports on supply chain disruptions or blockages | Ongoing |
| 10. Programme  Management | 1. Support referral hospitals with resource allocation and management 2. Ensure budget monitoring of the allocated funds with WHO country office and the National nCov technical and ministerial committees 3. Manage and support financial allocation for all operating costs 4. Support the surge deployment resources from the private sector and public sector rosters of experts 5. Support fast track procurement request for national and subnational health facilities | Ongoing |

**Surveillance documents and forms in attached zipped folder:**

• Case Definition

• Hospital Reporting Form

• Specimen collection

• Laboratory request form

• Call center

• Caller form

• Patient and data flow

• The First Few X (FFX) Cases and contact investigation protocol

• Household transmission investigation protocol

**Laboratory documents and forms in attached zipped folder:**

• Receiving and processing samples suspected for COVID-19

• Instructions of donning and removing of PPEs using gown

• Instructions on donning and doffing of PPEs using coverall

• Real time RT PCR

• Receiving and processing samples suspected for COVID-19

• Sequence of donning PPE audit checklist

• Sequence of removing PPE audit checklist

• Sequence of removing PPE using coverall audit checklist

• Specimen collection and handling guidelines of suspected novel coronavirus

• Recommendations for sample transportation

• Waste management of contaminated materials

• Reception of samples suspected of novel coronavirus

**Self -Isolation guidelines**

|  |
| --- |
| **English** |
| **Self-Isolation**  **Upon your return from an affected country, or in case you had close contact with a suspected or confirmed COVID-19 case, you need to self-isolate for 14 days even if you do not have any symptoms**  **From the airport to your house:**  • Wear a facemask before you exit the plane  • Do not hug and kiss any of your friends or family receiving you at the airport  • Use a private car to drive home  • One of the plane passengers should drive the car  • Leave car windows open  • Go directly to your house or to the place where you will self-isolate  **At your house:**  • Stay home; in your room, your apartment, or your house. Do not go to work, classes, athletic events, or other religious or social gatherings until 14 days after the date of your departure from the affected country.  • Stay in a well-ventilated room with a window that can be opened, separate from other people in your home. Keep the door closed  • Ask friends, family members or delivery services to carry out errands for you – such as getting groceries, medications or other shopping  • Wash your hands. This should be done often and thoroughly with soap and water, for at least 20 seconds, rinse and dry thoroughly. Avoid touching your eyes, nose, and mouth with unwashed hands.  • Do not invite or allow visitors to enter. If it urgent to speak to someone who is not a member of your household, do this over the phone.  • It is important that you separate yourself from other people in your home and if you share facilities like toilets and bathrooms, regular cleaning will be required.  • Ensure you use separate towels from other household members, both for drying yourself after bathing or showering and for hand hygiene purposes.  • Do not share drinking glasses, towels, eating utensils, bedding, or any other items until you are no longer asked to self-isolate.  • All waste that has been in contact with the individual, including used tissues, and masks if used, should be put in a plastic rubbish bag and tied when full. The plastic bag should then be placed in a second bin bag and tied. |

**Interventions Implemented So Far in Lebanon**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **What is already done** | **In progress** | **Partners to MOPH** |
| **coordination** | -a National Crisis Multi- Ministerial committee is established  -National inter- ministerial crisis Task force is established  -a standing National Infectious Diseases Committee is activated  -the MOPH IHR team activated | -More active engagement of non-health stakeholders (Crisis response funding, self- quarantine monitoring, points of Entry screening ) | WHO, UNCT, OCHA, DRM |
| **Points of entry** | -Written SOPs for travelers screening  -Updated travelers screening form  -Awareness roll ups and brochures  -PPEs for airport and land crossing health and security staff  -PM decision regarding measures at Airport  -Surged additional staff for screening travelers (9 RNs by WHO, 3 MDs volunteers)  -Repurposed 23 RNs (UNICEF)for land crossings  -Training Land crossing health and security staff | -Stock piling of PPEs for all POE  -More political commitment for implementation of prevention measures | WHO, UNICEF, ministry of public works, academic institutions, professional orders |
| **surveillance** | -Team trained and equipped  -Call center activated  -Case investigation SOPs updated  -Contact tracing and referral SOPs updated  -FFX investigation | -Logistics support (drivers for coordination in all Mohafazat of surveillance activities)  -Human resources for call center, and patient and contact tracing and investigation  -PPEs | WHO, heath societies:  Infectious diseases, epidemiology, pulmonary; academic institutions, professional orders and syndicates |
| **Diagnosis and treatment** | -Reference Lab at RHUH fully and safely equipped for testing  -4 isolation rooms, 128 beds dedicated, additional 64 beds under preparation at RHUH  -Stock of PPEs for one month at RHUH  -Guidelines for testing, referral, case management and IPC disseminated to all health professionals, and to UN medical team (ESCWA and UNIFIL)  -assessment of 5 public hospitals for potential patient referral | -Securing sufficient quantities of reagents and primers and lab supplies at reference lab  -Update all hospitals contingency plans  -Designate and upgrade referral hospitals in each Mohafazat  -Clarify role of private sector in crisis response and case management  -ensure a national contingency stock of advanced  PPEs for hospital case management | WHO, heath societies: infectious diseases, epidemiology,  pulmonary; academic institutions, professional orders and syndicates |
| **Risk communication** | -Awareness brochures for general public and travelers  -TV radio and social media interviews  -Daily sitrep by WHO, periodical preparedness briefs  -Sensitization meeting to Scientific societies at order of physicians  -Community volunteers ( NGOs and LEMSIC) | -Media support staff at MOPH for daily communication and updates  -More community sensitization and active engagement | WHO, UNICEF, UNCT, RCO, Media, ministry of Information, DRM. |

## Annex B: Basic Laboratories – Biosafety Levels 1 and 2

**Extracts from “WHO Laboratory biosafety manual - Third edition- 2004” available online through** [**https://www.who.int/csr/resources/publications/biosafety/Biosafety7.pdf**](https://www.who.int/csr/resources/publications/biosafety/Biosafety7.pdf)

**3. Basic laboratories­**

**Biosafety Levels 1 and 2**

For the purposes of this manual, the guidance and recommendations given as minimum requirements pertaining to laboratories of all biosafety levels are directed at microorganisms in Risk Groups 1-4. Although some of the precautions may appear to be unnecessary for some organisms in Risk Group 1, they are desirable for training purposes to promote good (i.e.safe) microbiological techniques (GMT).

Diagnostic and health-care laboratories (public health, clinical or hospital-based) must all be designed for Biosafety Level 2 or above. As no laboratory has complete control over the specimens it receives, laboratory workers may be exposed to organisms in higher risk groups than anticipated. This possibility must be recognized in the development of safety plans and policies. In some countries, accreditation of clinical laboratories is required. Globally, standard precautions (2) should always be adopted and practiced.

The guidelines for basic laboratories - Biosafety Levels 1 and 2 presented here are comprehensive and detailed, as they are fundamental to laboratories of all biosafety levels. The guidelines for containment Laboratories-Biosafety Level3 and maximum containment laboratories- Biosafety Level 4 that follow (Chapters 4 and 5) are modifications of and additions to these guidelines, designed for work with the more dangerous (hazardous) pathogens.

**Code of practice**

This code is a listing of the most essential laboratory practices and procedures that are basic to GMT. In many laboratories and national laboratory programmes, this code may be used to develop written practices and procedures for safe laboratory operations.

Each laboratory should adopt a safety or operations manual that identifies known and potential hazards, and specifies practices and procedures to eliminate or minimize such hazards. GMT are fundamental to laboratory safety. Specialized laboratory equipment is a supplement to but can never replace appropriate procedures. The most important concepts are listed below.

***Access***

1. The international biohazard warning symbol and sign (Figure 1) must be displayed on the doors of the rooms where microorganisms of Risk Group 2 or higher risk groups are handled.

*Figure 1. Biohazard warning sign for laboratory doors*



BIOHAZARD

ADMITTANCE TO AUTHORIZED PERSONNEL ONLY Biosafety Level: Responsible investigator: \_ In case of emergency call: --------

Daytime phone: Home phone: \_

2. Only authorized persons should be allowed to enter the laboratory working areas.

3. Laboratory doors should be kept closed.

4. Children should not be authorized or allowed to enter laboratory working areas.

5. Access to animal houses should be specially authorized.

6. No animals should be admitted other than those involved in the work of the laboratory.

*Personal protection*

1. Laboratory coveralls, gowns or uniforms must be worn at all times for work in the laboratory.

2. Appropriate gloves must be worn for all procedures that may involve direct or

accidental contact with blood, body fluids and other potentially infectious materials or infected animals. After use, gloves should be removed aseptically and hands must then be washed.

3. Personnel must wash their hands after handling infectious materials and animals, and before they leave the laboratory working areas.

4. Safety glasses, face shields (visors) or other protective devices must be worn when it is necessary to protect the eyes and face from splashes, impacting objects and sources of artificial ultraviolet radiation.

5. It is prohibited to wear protective laboratory clothing outside the laboratory, e.g. in canteens, coffee rooms, offices, libraries, staff rooms and toilets.

6. Open-toed footwear must not be worn in laboratories.

7. Eating, drinking, smoking, applying cosmetics and handling contact lenses is prohibited in the laboratory working areas.

8. Storing human foods or drinks anywhere in the laboratory working areas is prohibited.

9. Protective laboratory clothing that has been used in the laboratory must not be stored in the same lockers or cupboards as street clothing.

***Procedures***

1. Pipetting by mouth must be strictly forbidden.

2. Materials must not be placed in the mouth. Labels must not be licked.

3. All technical procedures should be performed in a way that minimizes the formation of aerosols and droplets.

4. The use of hypodermic needles and syringes should be limited. They must not be used as substitutes for pipetting devices or for any purpose other than parenteral injection or aspiration of fluids from laboratory animals.

5. All spills, accidents and overt or potential exposures to infectious materials must

be reported to the laboratory supervisor. A written record of such accidents and incidents should be maintained.

6. A written procedure for the clean-up of all spills must be developed and followed.

7. Contaminated liquids must be decontaminated (chemically or physically) before discharge to the sanitary sewer. An effluent treatment system may be required, depending on the risk assessment for the agent(s) being handled.

8. Written documents that are expected to be removed from the laboratory need to be protected from contamination while in the laboratory.

***Laboratory working areas***

1. The laboratory should be kept neat, dean and free of materials that are not pertinent to the work.

2. Work surfaces must be decontaminated after any spill of potentially dangerous material and at the end of the working day.

3. All contaminated materials, specimens and cultures must be decontaminated before disposal or cleaning for reuse.

4. Packing and transportation must follow applicable national and/or international regulations.

5. When windows can be opened, they should be fitted with arthropod-proof screens.

***Biosafety management***

1. It is the responsibility of the laboratory director (the person who has immediate responsibility for the laboratory) to ensure the development and adoption of a biosafety management plan and a safety or operations manual.

2. The laboratory supervisor (reporting to the laboratory director) should ensure that regular training in laboratory safety is provided.

3. Personnel should be advised of special hazards, and required to read the safety or operations manual and follow standard practices and procedures. The laboratory supervisor should make sure that all personnel understand these. A copy of the safety or operations manual should be available in the laboratory.

4. There should be an arthropod and rodent control programme.

5. Appropriate medical evaluation, surveillance and treatment should be provided for all personnel in case of need, and adequate medical records should be maintained.

**Laboratory design and facilities**

In designing a laboratory and assigning certain types of work to it, special attention should be paid to conditions that are known to pose safety problems. These include:

1. Formation of aerosols

2. Work with large volumes and/or high concentrations of microorganisms

3. Overcrowding and too much equipment

4. Infestation with rodents and arthropods

5. Unauthorized entrance

6. Workflow: use of specific samples and reagents.

Examples of laboratory designs for Biosafety Levels 1 and 2 are shown in Figures 2 and 3, respectively.

***Design features***

1. Ample space must be provided for the safe conduct of laboratory work and for cleaning and maintenance.

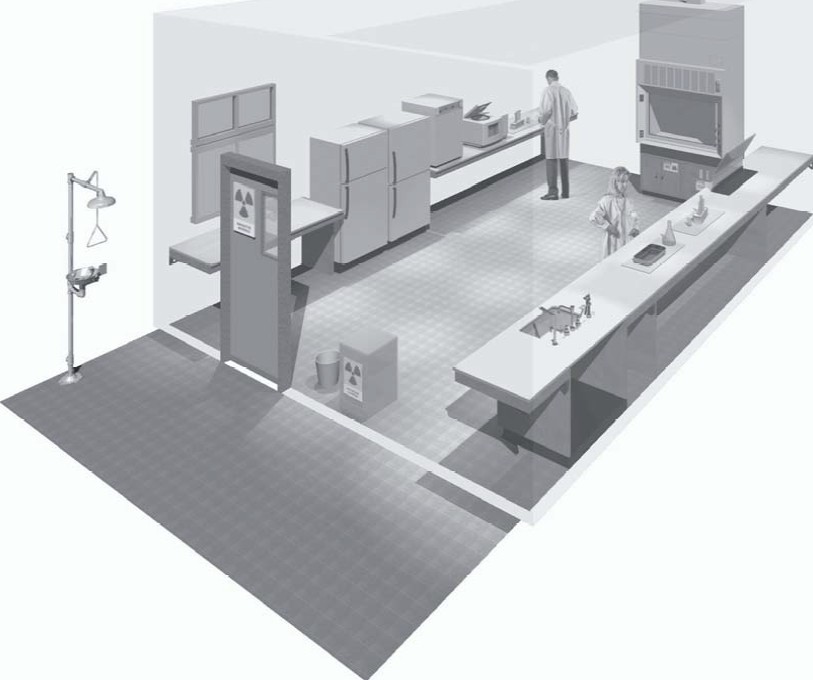
2. Walls, ceilings and floors should be smooth, easy to dean, impermeable to liquids and resistant to the chemicals and disinfectants normally used in the laboratory. Floors should be slip-resistant.

3. Bench tops should be impervious to water and resistant to disinfectants, acids, alkalis, organic solvents and moderate heat.

4. Illumination should be adequate for all activities. Undesirable reflections and glare should be avoided.

5. Laboratory furniture should be sturdy. Open spaces between and under benches, cabinets and equipment should be accessible for cleaning.

6. Storage space must be adequate to hold supplies for immediate use and thus prevent clutter on bench tops and in aisles. Additional long-term storage space, conveniently located outside the laboratory working areas, should also be provided.



*Figure 2.****A typical Biosafety Level 1 Laboratory***

*(graphics kindly provided by CUH2A, Princeton, NJ, USA)*

7. Space and facilities should be provided for the safe handling and storage of solvents, radioactive materials, and compressed and liquefied gases.

8. Facilities for storing outer garments and personal items should be provided outside the laboratory working areas.

9. Facilities for eating and drinking and for rest should be provided outside the laboratory working areas.

10.Hand-washing basins, with running water if possible, should be provided in each

laboratory room, preferably near the exit door.

11. Doors should have vision panels, appropriate fire ratings, and preferably be self­

closing.

12.At Biosafety Level2, an autoclave or other means of decontamination should be available in appropriate proximity to the laboratory.

13.Safety systems should cover fire, electrical emergencies, emergency shower and

eyewash facilities.

14.First-aid areas or rooms suitably equipped and readily accessible should be available

15.In the planning of new facilities, consideration should be given to the provision of mechanical ventilation systems that provide an inward flow of air without recirculation. If there is no mechanical ventilation, windows should be able to be opened and should be fitted with arthropod-proof screens.

16. A dependable supply of good quality water is essential. There should be no cross­ connections between sources of laboratory and drinking-water supplies. An anti- backflow device should be fitted to protect the public water system.

17.There should be a reliable and adequate electricity supply and emergency lighting

to permit safe exit. A stand-by generator is desirable for the support of essential equipment, such as incubators, biological safety cabinets, freezers, etc., and for the ventilation of animal cages.

18.There should be a reliable and adequate supply of gas. Good maintenance of the installation is mandatory.

19. Laboratories and animal houses are occasionally the targets of vandals. Physical and fire security must be considered. Strong doors, screened windows and restricted issue of keys are compulsory. Other measures should be considered and applied, as appropriate, to augment security (see Chapter 9).

**Laboratory equipment**

Together with good procedures and practices, the use of safety equipment will help to reduce risks when dealing with biosafety hazards. This section deals with basic principles related to equipment suitable for laboratories of all biosafety levels. Requirements for laboratory equipment pertinent to higher biosafety levels are dealt with in the relevant chapters.

The laboratory director should, after consultation with the biosafety officer and safety committee (if designated), ensure that adequate equipment is provided and that it is used properly. Equipment should be selected to take account of certain general principles, i.e. it should be:

1. Designed to prevent or limit contact between the operator and the infectious material

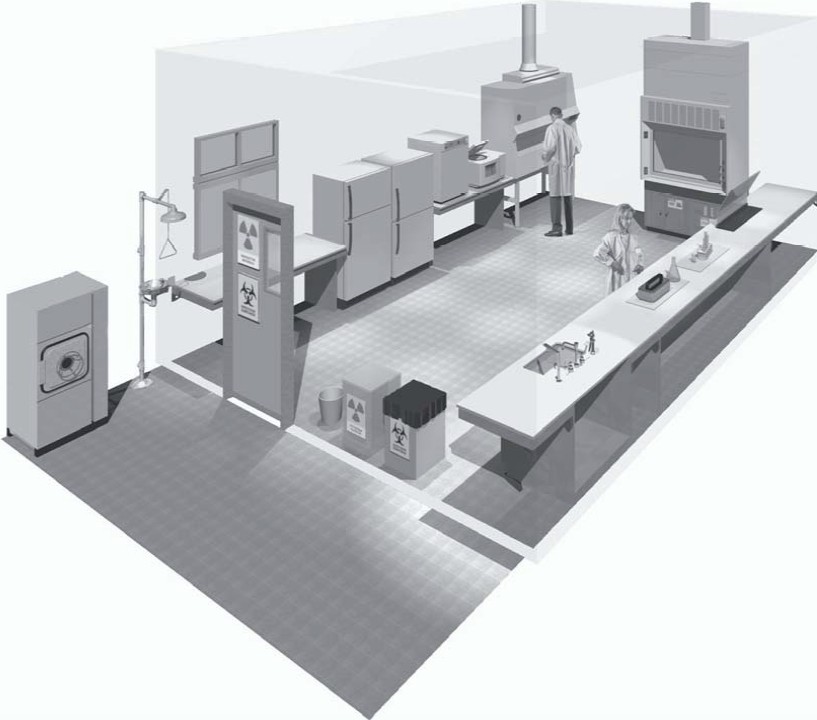
2. Constructed of materials that are impermeable to liquids, resistant to corrosion and meet structural requirements

3. Fabricated to be free of burrs, sharp edges and unguarded moving parts

4. Designed, constructed and installed to facilitate simple operation and provide for ease of maintenance, cleaning, decontamination and certification testing; glassware and other breakable materials should be avoided, whenever possible.

Detailed performance and construction specifications may need to be consulted to ensure that the equipment possesses the necessary safety features (see also Chapters

10 and 11).



*Figure 3.****A typical Biosafety Level 2 laboratory***

*(graphics kindly provided byCUH2A, Princeton, NJ USA). Procedures likely to generate*

*aerosols are performed within a biological safety cabinet. Doors are kept closed and*

*are posted with appropriate hazard signs. Potentially contaminated wastes are separated from the general waste stream.*

***Essential biosafety equipment***

1. Pipetting aids -to avoid mouth pipetting. Many different designs are available.

2. Biological safety cabinets, to be used whenever:

-infectious materials are handled; such materials may be centrifuged in the open laboratory if sealed centrifuge safety cups are used and if they are loaded and unloaded in a biological safety cabinet

-there is an increased risk of airborne infection

-procedures with a high potential for producing aerosols are used; these may include centrifugation, grinding, blending, vigorous shaking or mixing, sonic disruption, opening of containers of infectious materials whose internal pressure may be different from the ambient pressure, intranasal inoculation of animals, and harvesting of infectious tissues from animals and eggs.

3. Plastic disposable transfer loops. Alternatively, electric transfer loop incinerators

may be used inside the biological safety cabinet to reduce aerosol production.

4. Screw-capped tubes and bottles.

5. Autoclaves or other appropriate means to decontaminate infectious materials.

6. Plastic disposable Pasteur pipettes, whenever available, to avoid glass.

7. Equipment such as autoclaves and biological safety cabinets must be validated with appropriate methods before being taken into use. Recertification should take place at regular intervals, according to the manufacturer's instructions (see Chapter 7).

**Health and medical surveillance**

The employing authority, through the laboratory director, is responsible for ensuring that there is adequate surveillance of the health of laboratory personnel. The objective of such surveillance is to monitor for occupationally acquired diseases. Appropriate activities to achieve these objectives are:

1. Provision of active or passive immunization where indicated

2. Facilitation of the early detection of laboratory-acquired infections

3. Exclusion of highly susceptible individuals (e.g. pregnant women or immune

compromised individuals) from highly hazardous laboratory work

4. Provision of effective personal protective equipment and procedures.

***Guidelines for the surveillance of laboratory workers handling microorganisms at Biosafety Level1***

Historical evidence indicates that the microorganisms handled at this level are unlikely to cause human disease or animal disease of veterinary importance. Ideally, however, all laboratory workers should undergo a pre-employment health check at which their medical history is recorded. Prompt reporting of illnesses or laboratory accidents is desirable and all staff members should be made aware of the importance of maintaining GMT.

***Guidelines for the surveillance of laboratory workers handling microorganisms at Biosafety Level 2***

1. A pre-employment or preplacement health check is necessary. The person's medical history should be recorded and a targeted occupational health assessment performed.

2. Records of illness and absence should be kept by the laboratory management.

3. Women of childbearing age should be made aware of the risk to an unborn child of occupational exposure to certain microorganisms, e.g. rubella virus. The precise steps taken to protect the fetus will vary, depending on the microorganisms to which the women may be exposed.

**Training**

Human error and poor technique can compromise the best of safeguards to protect the laboratory worker. Thus, a safety-conscious staff, well informed about the recognition and control of laboratory hazards, is key to the prevention of laboratory-

acquired infections, incidents and accidents. For this reason, continuous in-service training in safety measures is essential. An effective safety programmer begins with the laboratory managers, who should ensure that safe laboratory practices and procedures are integrated into the basic training of employees. Training in safety measures should be an integral part of new employees ‘introduction to the laboratory. Employees should be introduced to the code of practice and to local guidelines, including the safety or operations manual. Measures to assure that employees have read and understood the guidelines, such as signature pages, should be adopted. Laboratory supervisors play the key role in training their immediate staff in good laboratory techniques. The biosafety officer can assist in training and with the development of training aids and documentation (see also Chapter 21).

Staff training should always include information on safe methods for highly hazardous procedures that are commonly encountered by all laboratory personnel and which involve:

1. Inhalation risks (i.e. Aerosol production) when using loops, streaking agar plates, pipetting, making smears, opening cultures, taking blood/serum samples, centrifuging, etc.

2. Ingestion risks when handling specimens, smears and cultures

3. Risks of percutaneous exposures when using syringes and needles

4. Bites and scratches when handling animals

5. Handling of blood and other potentially hazardous pathological materials

6. Decontamination and disposal of infectious material.

**Waste handling**

Waste is anything that is to be discarded.

In laboratories, decontamination of wastes and their ultimate disposal are closely interrelated. In terms of daily use, few if any contaminated materials will require actual removal from the laboratory or destruction. Most glassware, instruments and laboratory clothing will be reused or recycled. The overriding principle is that all infectious materials should be decontaminated, autoclaved or incinerated within the laboratory.

The principal questions to be asked before discharge of any objects or materials from laboratories that deal with potentially infectious microorganisms or animal tissues are:

1. Have the objects or materials been effectively decontaminated or disinfected by an approved procedure?

2. If not, have they been packaged in an approved manner for immediate on-site incineration or transfer to another facility with incineration capacity?

3. Does the disposal of the decontaminated objects or materials involve any additional potential hazards, biological or otherwise, to those who carry out the immediate disposal procedures or who might come into contact with discarded items outside the facility?

***Decontamination***

Steam autoclaving is the preferred method for all decontamination processes. Materials for decontamination and disposal should be placed in containers, e.g. autoclavable plastic bags, that are colour-coded according to whether the contents are to be autoclaved and/or incinerated. Alternative methods may be envisaged only if they remove and/or kill microorganisms (for more details see Chapter 14).

***Handling and disposal procedures for contaminated materials and wastes***

An identification and separation system for infectious materials and their containers should be adopted. National and international regulations must be followed. Categories should include:

1. Non-contaminated (non-infectious) waste that can be reused or recycled or disposed of as general, “household" waste

2. Contaminated (infectious) "sharps"- hypodermic needles, scalpels, knives and broken glass; these should always be collected in puncture-proof containers fitted with covers and treated as infectious

3. Contaminated material for decontamination by autoclaving and thereafter washing

and reuse or recycling

4. Contaminated material for autoclaving and disposal

5. Contaminated material for direct incineration.

*Sharps*

After use, hypodermic needles should not be recapped, clipped or removed from disposable syringes. The complete assembly should be placed in a sharps disposal container. Disposable syringes, used alone or with needles, should be placed in sharps disposal containers and incinerated, with prior autoclaving if required.

Sharps disposal containers must be puncture-proof/-resistant and must not be filled

to capacity. When they are three-quarters full they should be placed in "infectious waste “containers and incinerated, with prior autoclaving if laboratory practice requires it. Sharps disposal containers must not be discarded in landfills.

*Contaminated (potentially infectious) materials for autoclaving and reuse*

No preclearing should be attempted of any contaminated (potentially infectious) materials to be autoclaved and reused. Any necessary cleaning or repair must be done only after autoclaving or disinfection.

*Contaminated (potentially infectious) materials tor disposal*

Apart from sharps, which are dealt with above, all contaminated (potentially infectious) materials should be autoclaved in leak-proof containers, e.g. autoclavable, colour-coded plastic bags, before disposal. After autoclaving, the material may be placed in transfer containers for transport to the incinerator. If possible, materials deriving from health­ care activities should not be discarded in landfills even after decontamination. If an

incinerator is available on the laboratory site, autoclaving may be omitted: the contaminated waste should be placed in designated containers (e.g. colour-coded bags) and transported directly to the incinerator. Reusable transfer containers should be leak-proof and have tight-fitting covers. They should be disinfected and cleaned before they are returned to the laboratory for further use.

Discard containers, pans or jars, preferably unbreakable (e.g. plastic), should be placed at every work station. When disinfectants are used, waste materials should remain in intimate contact with the disinfectant (i.e. not protected by air bubbles) for the appropriate time, according to the disinfectant used (see Chapter 14). The discard containers should be decontaminated and washed before reuse.

Incineration of contaminated waste must meet with the approval of the public health

and air pollution authorities, as well as that of the laboratory biosafety officer (see section on Incineration in Chapter 14).

**Chemical, fire, electrical, radiation and equipment safety**

A breakdown in the containment of pathogenic organisms may be the indirect result of chemical, fire, electrical or radiation accidents. It is therefore essential to maintain high standards of safety in these fields in any microbiological laboratory. Statutory rules and regulations for each of these will normally be laid down by the competent national or local authority, whose assistance should be sought if necessary. Chemical, fire, electrical and radiation hazards are considered in greater detail in Part VI of this manual (Chapters 17 and 18).

Additional information regarding safety equipment is presented in Chapter 11.

## Annex C: Hospital Performance Contracting 2014- MOPH – Lebanon[[27]](#footnote-28)

The following factors have been chosen as measures of hospital performance in 2014 [[28]](#footnote-29), for use in setting tariffs for services provided by public and private hospitals contracted with the MOPH:

1. Accreditation

2. Patient satisfaction

3. Case-Mix Index (CMI)

4. Intensive Care Unit (ICU) admissions

5. Proportion of Surgical to Medical admissions

6. Deduction rate

The main purpose is to set a fair pricing system that reflects the complexity as well as the quality of services provided. Some indicators are integrated to provide incentives and disincentives for hospitals to promote good practice and discourage overuse and abuse of the system. The first two factors,

accreditation and patient satisfaction, are a reflection of quality, accounting for 40% and 10% respectively of the total contracting score. Factors 3 to 6 are a reflection of performance, and together account for 50% of the total contracting score.

The base data used for indicators of factors 3 to 5 is all regular stay (2-15 days) hospitalizations that took place under the MOPH’s coverage in public and private hospitals, between June 2012 and May 2013. This comprises 76% of all admissions in this period, and excludes short-stay (0-1 days; 22%) and long-stay (>15 days; 2%) to enable the calculation of an accurate CMI, a similar practice used in other systems such as the US Centers for Medicare and Medicaid Services (CMS).

**1. Accreditation**

The results of the 2012 accreditation round of hospitals have been used in developing the contracting score. Accreditation was given a weight of 40% in this score relative to other factors. All hospitals with no reservation result were given an incentive of 5%, by including a multiplier of 1.05, while all hospitals with a simple reservation result had a neutral multiplier of 1.

**2. Patient satisfaction**

A phone call survey conducted by a professional and independent firm is conducted on a randomly selected sample of 25 patients per hospital. The results of the survey have a weight of 10% of the total contracting score. Therefore, accreditation and patient satisfaction together comprise 50% of the total contracting score.

**3. Case-Mix Index (CMI)**

Case-Mix Index was first calculated separately for medical and surgical admissions, using discharge diagnosis ICD10 and CPT code respectively. We also excluded mixed admissions that comprise only 4% of hospitalizations, to enable a more accurate CMI calculation. The methodology is similar to that detailed in the article “Ammar W., Khalife J., El-Jardali F., Romanos J., Harb H., Hamadeh G., Dimassi H. (2013). Hospital accreditation, reimbursement and case mix: links and insights for contractual systems.

BMC Health Services Research 13:505”, and using a similar formula as that used by the US Centers for Medicare and Medicaid Services and various other national systems throughout the past three decades.

To increase the accuracy of the weights used in calculation of medical CMI, we used cost data based on all admissions from June 2011 to May 2013 (2 years). This is useful as medical admissions, unlike surgical admissions, have non-flat rates and therefore more affected by outliers when the number of admissions is small for certain conditions. A similar reasoning is also behind the exclusion of gastric bypass and cochlear implant in the calculation of surgical CMI, as these were ill-regulated expensive procedures that are performed in very few hospitals, thereby over-influencing their results. Unspecified neurotic disorders, unspecified hemiplegia and unspecified respiratory disorders were similarly excluded, as their distribution was skewed as a result of miscoding.

Once a medical CMI and surgical CMI were calculated for each hospital, they were used to develop a

‘combined’ CMI by giving each figure a weight based on the relative proportions of medical and surgical

admissions to the specific hospital. For example, a hospital with medical CMI of 1.0 and surgical CMI of

1.6, and 100 medical admissions and 200 surgical admissions, would have a combined CMI of 1.4 (i.e. medical CMI is given 33% weight (100/300) and surgical CMI 67% weight (200/300).

Combined CMI was given a weight of 35% in the final contracting score relative to other factors.

**4. Intensive Care Unit (ICU) admissions**

The proportion of admissions to Intensive Care Units (ICU, CCU, NCO, PCU) out of all admissions was calculated for all hospitals. Each hospital admitting more than the average ICU admissions for all hospitals (6.8%) received the full score of the 5% dedicated to the ICU indicators in the final contracting score. Hospitals admitting below this average received a half-score (i.e. 2.5%).

**5. Proportion of surgical to medical admissions**

The proportion of surgical to medical admissions was calculated for each hospital, using the same data set of regular stay (2-15 days) admissions used in CMI calculation. This included 82,901 medical admissions and 95,990 surgical admissions, i.e. 54% of regular stays are surgical admissions. Hospitals in the highest quartile of surgical to medical admissions received a 5% incentive by using a multiplier of 1.05, while the three remaining quartiles had a neutral multiplier of 1.00. The quartiles were defined separately among public and private hospitals. Penalizing the lowest quartile remains a possibility to be considered in the future.

**6. Deduction proportion**

The deduction proportion of each hospital as calculated by the MOPH Auditing Committee has been used as a proportion of total amount billed by the individual hospital. Hospitals with more than 15% deduction are given a -5% disincentive; those between 5.1 and 14.9% are neither given an incentive nor disincentive (neutral); and those with less than 5% deduction are given an incentive of 5% to the final contracting score. It is planned to lower in the future the upper cutoff point to 10% instead of 15%.

**Contracting Score**

The final contracting score may be expressed as below:

**Contracting Score = Accreditation + Patient Satisfaction + Case-Mix Index + Intensive Care Unit proportion + Surgical/Medical proportion + Deduction proportion**

**CS = Acd + PS + CMI + ICU + Surg/Med + D**

These are weighted as follows: 40% Acd, 10% PS, 35% CMI, 5% ICU, 5% Surg/Med and 5% D.

Mean and standard deviation of contracting scores for all hospitals were calculated, and used in a z-score to express the distance of each hospital from the mean. This was done separately for public and private hospitals. Among private hospitals, those with a z-score above 0.00 (i.e. 0 or more standard deviations above the mean) were given highest tariff 1; those between 0 and -0.50 were given middle tariff 2; and those below -0.50 were given lowest tariff 3. Among public hospitals, those with a z-score above 0 were given highest tariff 1; those between 0 and -0.50 were given middle tariff 2; and those below -0.50 were given lowest tariff 3.

This resulted in the below distribution of hospitals:

|  |  |  |
| --- | --- | --- |
| **TARIFF** | **Private** | **Public** |
| T1 | 29 | 9 |
| T2 | 45 | 6 |
| T3 | 31 | 9 |
| Total | 105 | 24 |

**Future Contracting Outlook**

We anticipate that the evaluation of hospital performance for contracting with MOPH in 2015 will include a greater emphasis on intensive care unit admissions, utilization of respirators, and the deduction proportion from the MOPH auditing committee.

## Annex D: Summary of COVID-19 Vaccination Readiness Assessment

1. *Planning and Coordination*: With Word Bank support, the COVID-19 vaccination readiness assessment using the integrated VIRAT/VRAF 2.0 instrument has been completed to inform the planning process for the COVID-19 vaccination program. A National COVID-19 Vaccine Committee and seven Technical Working Groups have been formed to prepare the National COVID-19 Vaccine Deployment Plan (NCVDP). The World Bank is represented in the National Committee and Working Groups. MOPH will share the draft sub-plan for the Pfizer vaccine deployment within the next two days; however, the key elements of the plan have already been identified.

2. *Costing and Financing:* The full costing of NCVDP will be done after the plan has been finalized. In the meantime, the costs of deploying Pfizer and COVAX Facility vaccines to 11%[[29]](#footnote-30) and 20% of the total population respectively have been estimated and details are available in the VRAF/VIRAT 2.0 readiness assessment. Other than the $4.3 million down payment to the COVAX Facility using the routine vaccination budget (which too needs to be replenished as it will affect routine immunization program next year), the GOL has no budget for COVID-19 vaccination. For the Pfizer $18 million contract, the GOL has requested the use of LHRP project funds.

3. *Regulations:* MOPH issued an emergency use authorization (EUA) for the Pfizer vaccine on December 16, 2020. The World Bank recommends a legal advisor be consulted for the regulatory measures related to the COVID-19 vaccine. The legal framework to protect data privacy is nascent and needs strengthening. The GOL also needs to put in place regulatory pathways for: (i) expedited custom clearance and release of the COVID-19 vaccines at the port-of-entry; (ii) data protection and data governance to ensure appropriate use of vaccination data; (iii) accommodating requests for no-fault liability funds and any related regulatory requirements; (iv) consent to vaccinations, the process for agreeing to or refusing to be vaccinated, and measures to protect those that refuse to be vaccinated; and (v) personnel who will be carrying out vaccinations and include requirements relating to chemical, physical and biological substances, not engaging in sexual exploitation and abuse and sexual harassment, participation in training, reporting and non-retaliation.

4. *Prioritization, Targeting and COVID-19 Surveillance:* The GOL identifies healthcare workers (HCWs), adults above 60 years of age (who constitute around 20% of the population) and adults with co-morbidities as priority groups for vaccination. In the first batches of Pfizer vaccine, 50,000 HCWs and individuals with comorbidities (determined based on top causes of mortality[[30]](#footnote-31)) will be vaccinated. Elderly without comorbidities will be included subsequent batches. People under 16 years and pregnant and lactating women have been excluded for now and will be reviewed for inclusion later as more information on vaccine safety and efficacy among them become available. The GOL will use pre-registration to establish the database of eligible priority population. Health workers are already in the process of filling out pre-registration forms with private professional syndicates and Order of Physicians and Nurses and health facilities. For the elderly, municipalities will undertake a census and pre-register them. The MOPH is also exploring mechanisms to identify and target people with co-morbidities based on physician registers and through municipalities.

5. *Service Delivery:* The MOPH has identified the criteria for the selection of the vaccination sites, accounting for geographic location, cold chain, logistics, and enhanced Infection Prevention and Control (IPC) procedures. For the Pfizer vaccine roll out, MOPH plans to establish 10 sites in Q1; 25 in Q2 and 40 in Q3 and after. In addition, 10 mobile units have been earmarked for emergency vaccination in outbreak areas. Vaccinators will include HCWs in public hospitals, volunteers from NGOs like Red Cross and possibly the military. MOPH is currently assessing the capacity of vaccinators in the public sector and the military. Per the World Bank team’s estimates, 178 HCWs are needed to deliver the procured doses of Pfizer vaccine based on the assumption that: (i) one vaccinator can vaccinate six persons per hour and (ii) one administrative staff is needed per vaccination site. The estimates will be updated as the MOPH finalizes the NCVDP.

6. *Training and Supervision:* For the Pfizer vaccine, Pfizer has offered support to provide training for the vaccinators by (i) making vaccination training materials available online and (ii) supporting training sessions through videoconferencing. For the COVAX Facility vaccine, WHO will provide two versions of a comprehensive curriculum with training materials for all aspects of COVID-19 vaccination (online and face-to-face training versions). MOPH has not determined the training modality. In the interim, the World Bank team has calculated the budget for face-to-face training based on cost estimates provided by MOPH. Supervisory focal points at each vaccination site have not yet been identified; however, nine public health officers are needed to oversee COVID-19 immunization activities at the district as per the Expanded Program of Immunization (EPI) human resources plan.

7. *Monitoring and Evaluation (M&E):* The M&E Technical Working Group is still developing a framework for NCVDP. As part of the M&E framework, an information system will be established to monitor vaccine coverage and follow-up. The MOPH has multiple channels for grievance reporting, including a hotline, a mobile application, and the MOPH website. In addition to these channels, the MOPH has also launched two alternative numbers dedicated to COVID-19 related grievances as part of its COVID-19 response. MOPH is planning to add a new hotline for COVID-19 vaccine related grievances.

8. *Vaccine, Cold Chain, Logistics and Infrastructure:* The procurement plan for ancillary supplies and PPEs has not yet been developed. Based on the expected number of doses, the World Bank team (in consultation with MOPH) has prepared a draft estimate of the quantities and costs of vaccines and ancillary supplies (syringes, diluents, safety boxes, alcohol swabs, hand hygiene, and adrenaline/epinephrine).

9. As discussed above, the Pfizer vaccine requires ultra-cold chain. WHO had previously procured and installed 15 Ultra Low Temperature (ULT) freezers at 12 sentinel sites (6 private hospitals and 6 public hospitals) in all eight governorates (as part of the influenza pandemic preparedness between 2015 and 2017). Per a rapid assessment of the ULT freezers by MOPH, the ULT freezers are still functional although some require minor maintenance. In addition, MOPH has sent an official request to WHO to procure additional 6 ULT freezers. The MOPH has developed a distribution strategy for the Pfizer vaccine. The main storage facility will be Rafic Hariri University Hospital in Beirut, and two more can be added as needed. The vaccine will be transported from the storage facilities to vaccination sites every other day. At the vaccination sites, MOPH has two options:

(i) vaccines will be stored in 2-8℃ refrigerators for a maximum of five days. Since each tray includes up to 975 doses of vaccines, a minimum of 200 doses should be administered daily to use up one tray in five days; or

(ii) vaccines will be stored temporarily in the thermal shippers provided by Pfizer for up to 15 days. These shippers should be replenished with dry ice (up to 3 replenishments; 2 kg of dry ice per thermal shipper). With every replenishment of dry ice, the thermal shipper can maintain ULT for five days, with 2 openings per day. Around 100 vaccines should be administered daily to be able to complete a tray of 975 doses. Local dry ice suppliers will need to be contracted for the procurement of dry ice.

10. Pfizer vaccine price includes shipment and insurance to a maximum of 5 storage facilities. Transportation from the point-of-entry to the storage facilities will be managed by Pfizer and will be included in the vaccine's cost.

11. For regular cold chain required for COVID-19 vaccines, UNICEF (given its immunization expertise) and MOPH will be conducting a gap analysis at the national and subnational levels to assess the existing cold chain's delivery and storage capacity as part of the Effective Vaccine Management (EVM) assessment, using the supply chain sizing tool. The Karantina central warehouse, which includes the cold rooms, was damaged following the Beirut port explosion. Rehabilitation of the warehouse is expected to be completed by May-June 2021. The existing seven cold rooms are already used in full capacity for routine vaccines, and an expansion is being discussed with the MOPH to purchase additional 4-5 new cold rooms, which can store 1.2 million doses of vaccines (one cold room costs about $30,000). One of the options discussed by the MOPH is renting cold chain equipment from private medical centers and labs in the interim.

12. *Traceability*: As more than one COVID-19 vaccine will be deployed, it is vital to develop a product-specific system to trace (i) different types of vaccine and (ii) the people have been vaccinated. Pfizer vaccine trays have bar codes that can be tracked to the facility level. Individual vials however cannot be tracked. MOPH’s IT team is developing an online platform for (i) pre-registration of patients, (ii) sending SMS to patients on date and location for vaccination, (iii) sending reminder SMS for the second dose, (iv) issuing online vaccination certification, and (v) creating a central database for vaccine and reporting on adverse events (Pharmacovigilance). Pfizer has offered support for the development of this system as needed for their vaccines. Individuals will have to submit their national IDs to pre-register (ID number will be used as a unique identifier for each patient). MOPH has also confirmed that vaccination cards will be issued to the people who have received the vaccines.

13. MOPH has not yet identified specific safeguard measures to protect (i) vaccine at central and sub-national levels (in storage facilities to which Pfizer will deliver and while in transit to vaccination points) and (ii) vaccination personnel. The SOPs for vaccine waste management (previously developed by UNICEF) are available. The SOPs should be revised based on the specifics of COVID-19 vaccine. As noted, MOPH is considering using the military for security.

14. *Safety Surveillance:* Through its National Vaccination Program, MOPH has a national pharmacovigilance system to monitor and report Adverse Events following Immunization (AEFI). This system will be adapted to include the COVID-19 vaccine. This will also be complemented by Pfizer’s online platform for health workers to report adverse events and MOPH’s online platform for patients to report adverse events.

15. *Demand Generation and Communication:* Communication activities will be implemented through the Ministry of Information. An outline for the external communication and community engagement and accountability plan has been developed. A list of Q&A will also be prepared by the technical group. In addition, MOPH is planning to expand the existing call center (adding new hotline) for COVID-19 vaccine related grievances and address public queries. For Pfizer vaccine, Pfizer will be supporting the communication campaign for which materials have already been developed.

## Annex E: COVID-19 vaccination training Report by MOPH- February 2021

**Background and Rational**

Rabies, one of the most feared and oldest infections on record, continues to be an invariably fatal disease[1]. The estimated global incidence is around 35000–50000 cases per year [2]. The infectious agent, rabies virus, belongs to the Lyssavirus genus of the Rhabdoviridae family. It is a bullet-shaped, single stranded, negative-sense, non-segmented RNA virus, consisting of a nucleocapsid containing the nucleic acid, and covered by an outer lipid-containing envelope. It is found in both domestic and wild animals, and is transmitted to humans through close contact with animal saliva [3]. Human-to-human transmission has been reported to occur through corneal grafts.

In December 2019, Wuhan city, the capital of Hubei province in China, became the center of an outbreak of pneumonia of unknown cause. By January 2020, Chinese scientists had isolated a novel coronavirus, severe acute respiratory syndrome coronavirus from patients infected with viral pneumonia, which was later designated coronavirus disease 2019 (COVID-19) by the WHO (Zhou et al, 2020). Although the outbreak likely started from a zoonotic transmission, associated with a large seafood market that also traded live wild animals, it soon became clear that efficient person-to-person transmission was also occurring (Liet al, 2020). By March 2020, COVID-19 had been declared a global pandemic and since then affected tens of millions of people globally (Polack et al, 2020).

Older adults, persons with certain coexisting conditions and front-line workers are at highest risk for the disease and its complications (Polack et al, 2020). Recent data also shows increasing rates of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and COVID-19 in other populations, including younger adults (CDC, 2020). As with other respiratory pathogens, including flu and rhinovirus, the transmission is believed to occur through respiratory droplets (particles >5-10 μm in diameter) from coughing and sneezing (Cascella et al, 2020). Aerosol transmission is also possible in case of protracted exposure to elevated aerosol concentrations in closed spaces (Cascella et al, 2020). Analysis of data related to the spread of SARS-CoV-2 seems to indicate that close contact between individuals is necessary. Of note, pre- and asymptomatic individuals may contribute to up 80% of COVID-19 transmission (Cascella et al, 2020).

The SARS-CoV-2 virus primarily affects the respiratory system, although other organ systems are also involved (Yuki, Fujiogi and Koutsogiannaki, 2020). Lower respiratory tract infection related symptoms including fever, dry cough and dyspnea were reported in the initial case series from Wuhan (Huang et al, 2019). In addition, headache, dizziness, generalized weakness, vomiting and diarrhea were also observed (Shi et al, 2020). It is now widely recognized however that respiratory symptoms of COVID-19 are extremely heterogeneous, ranging from minimal symptoms to significant hypoxia with acute respiratory stress disorder (Yuki, Fujiogi and Koutsogiannaki, 2020). The time between the onset of symptoms and the development of ARDS may be as short as 9 days, suggesting that respiratory symptoms could progress rapidly and the disease could be fatal (Yuki, Fujiogi and Koutsogiannaki, 2020). Epidemiological studies have shown that mortalities higher in elder population (Zhou et al, 2020) and the incidence lower in children (Zhang et al, 2020). Current medical management is largely supportive with no targeted therapy available (Yuki, Fujiogi and Koutsogiannaki, 2020). Several drugs including lopinavir-ritonavir, remdesivir, hydroxychloroquine, and azithromycin have been tested in clinical trials, but none of them were proven to be a definite therapy. Other therapies are still being tested in clinical trials. As a response to the pandemic, a large number of countries have implemented social distancing and lockdown to mitigate the further spread of the virus (Yuki, Fujiogi and Koutsogiannaki, 2020), meanwhile safe and effective prophylactic vaccines are urgently needed to contain the pandemic which has had devastating medical, economic, and social consequences (Polack et al, 2020).

Due to the urgent need to combat COVID-19, diverse SARS-CoV-2 several vaccine types are currently under development, including inactivated vaccines, nucleic acid vaccines, adenovirus-based vector vaccines, and recombinant subunits vaccines (Dong et al. 2020). The development of Pfizer-BioNTechBNT162b2 mRNA COVID-19 vaccine was initiated on January 2020 when the SARS-CoV-2 genetic sequence was released by the Chinese Center for Disease Control (Polack et al, 2020). The vaccine received emergency use authorization from FDA and EMA in December 2020 and by mid-January 2021 the Ministry of Public Health in Lebanon had signed a contact with Pfizer to deliver the BNT162b2 mRNA COVID-19 vaccine to the country.

**Training Objectives**

Educate healthcare professionals, responsible for the storage, handling, preparation and administration of Pfizer-BioNTech COVID-19 mRNA vaccine of its stringent quality requirements for safe handling and use. Training objectives include:

* Literature Evidence on Pfizer-BioNTechCOVID-19 mRNA Vaccine
* Safe Receipt, Handling and Unpacking of Vaccine Thermal Shipping Containers at Site of Storage
* Utilization of Shipment Data Loggers and Quality Clearance of Vaccines Vials for Use
* Appropriate Storage and Transportation Conditions of Vaccine Vials
* Preparation of Vials for Administration
* Understanding Personal Protective Equipment and Ancillary Supply Requirements

**Methods and Materials**

**Target Audience**

Healthcare professionals including physicians, hospital pharmacists, nurses and administrative staff who are responsible for receiving, handling, storing, preparing and administering Pfizer-BioNTechCOVID-19 mRNA vaccines in both public and private hospitals and points of vaccination and storage in Lebanon.

**Number of Sessions:**

* 35 Sessions

**Training Methodology**

* Interactive sessions with power point presentation
* Awareness pamphlets, leaflets and instructional material
* Participants to share experience, concerns and inquiries with trainer

**Training Organization**

The training session will be conducted by Pfizer in coordination with Ministry of Public Health

**Draft Training Agenda**

|  |  |
| --- | --- |
| **Time** | **Details** |
| 9:00AM–9:10AM | Registration |
| 9:10AM–9:30AM | Medical Training |
| 9:30AM–10:30AM | Supply and Quality Training |
| 10:30AM–11:00AM | Q&A Session |

**Financial Costs**

None Identified

**Training Calendar, Preparation and Execution**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **COVID 19 Vaccine Training Schedule** | | | | | |
| **Date** | **Day** | **Hospital** | **Location (Training)** | **Number of Sessions** | **Expected Number of Participants** |
| 20-1-2021 | Wednesday | MOPH | 1PM | 1 | 75 |
| 21-1-2021 | Thursday | SGHUMC | 11AM | 1 | 25 |
| 22-1-2021 | Friday | HDF | 9AM | 1 | 25 |
| 22-1-2021 | Friday | RHUH | 12:30PM | 1 | 25 |
| 25-1-2021 | Monday | AUBMC | 10AM | 1 | 25 |
| 25-1-2021 | Monday | LAUMCRH | 1PM | 1 | 25 |
| 26-1-2021 | Tuesday | Rassoul el Aazam | 1PM | 1 | 25 |

**References:**

1. Zhou et al. Clinical Course and Risk Factors for Mortality of Adult Inpatients with COVID-19 in Wuhan, China: A Retrospective Cohort Study. Lancet. 2020; 395:1054-62.
2. Li et al. Early transmission dynamics in Wuhan, China, of Novel Coronavirus-infected pneumonia, The New England Journal of Medicine. 2020; 382:1199–1207.
3. Polack et al. Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine. The New England Journal of Medicine. 2020; 383:2603-2615.
4. Center of Disease Control and Prevention. COVID-19 information page (https://www.cdc .gov/coronavirus/2019-ncov/index.html).
5. Cascella M, Rajnik M, Cuomo A, et al. Features, Evaluation, and Treatment of Coronavirus. StatPearls Publishing. 2020.
6. Yuki, K., Fujiogi, M. and Koutsogiannaki, S. COVID-19 Pathophysiology: A Review. Clinical Immunology. 2020.
7. Huang et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet. 2020; 395:497–506.
8. Shi et al. Radiological ﬁndings from 81 patients with COVID-19 pneumonia in Wuhan, China: a descriptive study, Lancet Infectious Diseases. 2020; 20:425–434.
9. Dong et al. A Systemic Review of SARS-Cov-2 Vaccines Candidates. Signal Transduction and Targeted Therapy. 2020; 5:37

## Annex F: Standard Operating Procedure for COVID-19 Immunization prepared by the Primary Healthcare Department at the MOPH

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**Standard Operating Procedure for COVID 19 Immunization**

**1 Scope**

This document outlines the standard operating procedure for COVID 19 immunization services provided to all eligible residents of Lebanon, including Lebanese and non-Lebanese citizens. **Abidance by this SOP is mandatory to every provider delivering COVID 19 immunization services both in the public and private sectors.** Considering the rapidly changing situation of the pandemic and recommendations regarding immunization for COVID 19, updated versions of this guidance will be developed as updates arise.

* 1. **Leadership and governance:**

The national COVID 19 immunization initiative is led by the MOPH of Lebanon with technical and operational support from the Parliamentarian Health Committee, the National COVID 19 Technical Committee and UN agencies, mainly the WHO and UNICEF. All vaccines to be procured and made available on the Lebanese territories are certified, licensed and cleared by the MOPH and the technical committees.

* 1. **Implementation:**

Public immunization services will be provided free of charge for all eligible beneficiaries registered on the national COVID 19 vaccine registry at the identified public immunization sites. Prioritization based on clinical vulnerability criteria will be implemented.

The private sector will utilize the same eligibility criteria to provide immunization services for individuals who prefer immunization in the identified private outlets.

All recipients of the vaccine, in the public and private sector have to be registered in the National COVID 19 Vaccine registry.

* 1. **Vaccination sites:**

**Public sector:** In the public sector the immunization sites will be hosted in public and private hospitals that are equipped with appropriate cold chain. A total of 40 vaccination sites will be functional in the first phase.

**Private sector:**

COVID 19 immunization will also take place in the private sector and all vaccination data and information will be included on the national COVID-19 vaccination registry.

**2- Preparation for vaccination sites**

2.1 Physical setting and supplies

**Physical setting**

In the public sector the vaccination unit will consist of a waiting, vaccination and observation room.

The area of the setting needs to allow for physical distancing measures (1.5m between each individual), especially in the waiting room, although crowding is not expected since all vaccine recipients will be admitted based on pre scheduled appointments.

The waiting room will have a waiting/ registration area, the vaccination room will be appropriately equipped for the provision of immunization services including the required furniture, cold chain, hand washing stations and consumables whereas the observation room will consist of a resting area for vaccine recipients.

In the private sector, the vaccination patient flow will follow the vaccination site’s regular flow while respecting physical distancing measures.

**Supplies required**

All Infection Prevention Measures have to be respected at all times to ensure the safety of healthcare providers and vaccine recipients during the COVID 19 pandemic.

The below list of consumables are mandatory at all vaccination sites:

* Personal Protective Equipment:

i. Surgical masks: 4 masks per health care provider per day

ii. Face shields: 1 face shield per health care provider per day

iii. Surgical gloves (non-sterile): one pair for each healthcare provider per vaccinate recipient

iv. Disposable gowns: 1 gown per health care provider per day

* Infection Prevention and Control supplies essential for ensuring the disinfection of surfaces and hand sanitation in the COVID-19 immunization clinic:

i. The recommended product for surface disinfection is 70% alcohol or sodium hypochlorite solution 0.1 %

ii. The recommended product for hand sanitization is alcohol based hand sanitizing solution (60% alcohol), with one in the waiting room and one in the vaccination clinic.

* Vaccination consumables, all items needed to safely provide immunization to the beneficiaries including the below:

i. Syringes procured for dilution (2 or 3mL) to withdraw the diluent and 1 ml low dead-volume syringe for administration

ii. Alcohol swabs to the skin at the injection site

iii. Adhesive bandage to cover the injection site

iv. Diluents to reconstitute the COVID 19 vaccine

* Miscellaneous

i. Plastic waste bags (yellow for infectious medical waste, black for regular and noninfectious medical waste)

ii. Sharps containers (one dedicated for syringes, one for used/empty vials)

**Waste management**

Waste resulting from the immunization process will be segregated and considered as medical waste (infectious and noninfectious) and handled according to national policies on the management of medical waste.

Types of medical waste:

* ***Medical waste/ Non-Infectious:*** includes waste which does not come in contact with the beneficiary or any bodily fluids such as syringe wraps and plastic covers, packaging of the alcohol swabs...etc. This type of waste is discarded in black plastic bags.
* ***Medical waste/ Infectious:*** any item or consumable used in immunization that comes in contact with the patient and his/her bodily fluids such as alcohol swabs, adhesive bandage. In addition to PPEs worn by the healthcare provider, including gloves, masks, disposable gowns…. This type of waste is discarded in yellow plastic bags.
* ***Sharps’ containers:*** syringes used for dilution and vaccine administration will be discarded in one sharps’ container. Used vials empty or with traces of the vaccine will be discarded in a separate sharps container.

The waste will be collected at the vaccination site in color coded waste bags in dedicated clearly marked containers. Non-infectious medical waste will be discarded with regular waste. Infectious medical waste will be collected on a daily basis and stored in a dedicated cold chain.

In the public sector, the contracted NGO, specialized and licensed to manage infectious waste.

Private providers need to abide by the waste segregation and storage guidelines and make their own arrangements by contracting a licensed medical waste management organization.

2.2 Human Resources in Public COVID-19 Vaccination Clinic

Vaccination services in the public sector will be provided by a team of trained healthcare providers composed of one physician and 8 or more vaccinator nurses, who will be supported by non-clinical staff including the center director or senior administrator, two administrative clerks, and one non-clinical observer/security officer. All staff will abide by primary preventive measures for COVID-19 by wearing appropriate PPEs.

Table 1 provides a brief description of team members qualifications and duties.

*Job description and ToRs of HR in the COVID-19 vaccination clinic will be developed.*

*Table 1. Team composition, qualifications and duties*

|  |  |  |
| --- | --- | --- |
| **Role** | **Qualifications** | **Duties** |
| **Administrative clerk/data operator** | Non- clinical, admin | Ensures paperwork/electronic data is complete, validates name on schedule, reminds recipient on future dose, enters data from vaccine administration and handling of certification |
| **Center Director (senior administrator or physician)** | Clinical and/or admin | Monitors all activities, communicate with MOPH, collaborates with NCVC |
| **Physician** | Attending or resident physician (ACLS trained) | Physical assessment of vaccine candidates, administers screening checklist, responds to emergencies (ie: anaphylaxis shock) and oversees vaccination processes. |
| **Vaccinator Nurse** | Clinical nurse (meets Order of Nurses vaccinator criteria) (Annex 1) | Physical assessment of vaccine candidates, administers screening checklists, removes vaccine from cold storage, dilutes, draws up doses from multi dose vials, labels vaccine, administers vaccine and responds to emergencies (i.e.: anaphylaxis shock) and provides education on AEFI, signs off on 15 minutes well assessment |
| **Non-clinical Observer/ security officer** | Security officer | Monitors and secures vaccination storage and administration area and flow of individuals |

2.3 COVID 19 Vaccine Recipient Journey in the Public Sector

**Pre-vaccination**

* Patient fills pre-registration form via the designated online application OR via phone call submitted to MOPH call center
* Patient stratified by risk according to national prioritization scheme
* Patient contacted either by phone call or SMS to schedule date, time and place of vaccination (place to be fixed by MOPH to reduce traffic on certain centers)
* Patient alerted of booking date few days beforehand with designated ID number

**Arrival at Vaccination Site**

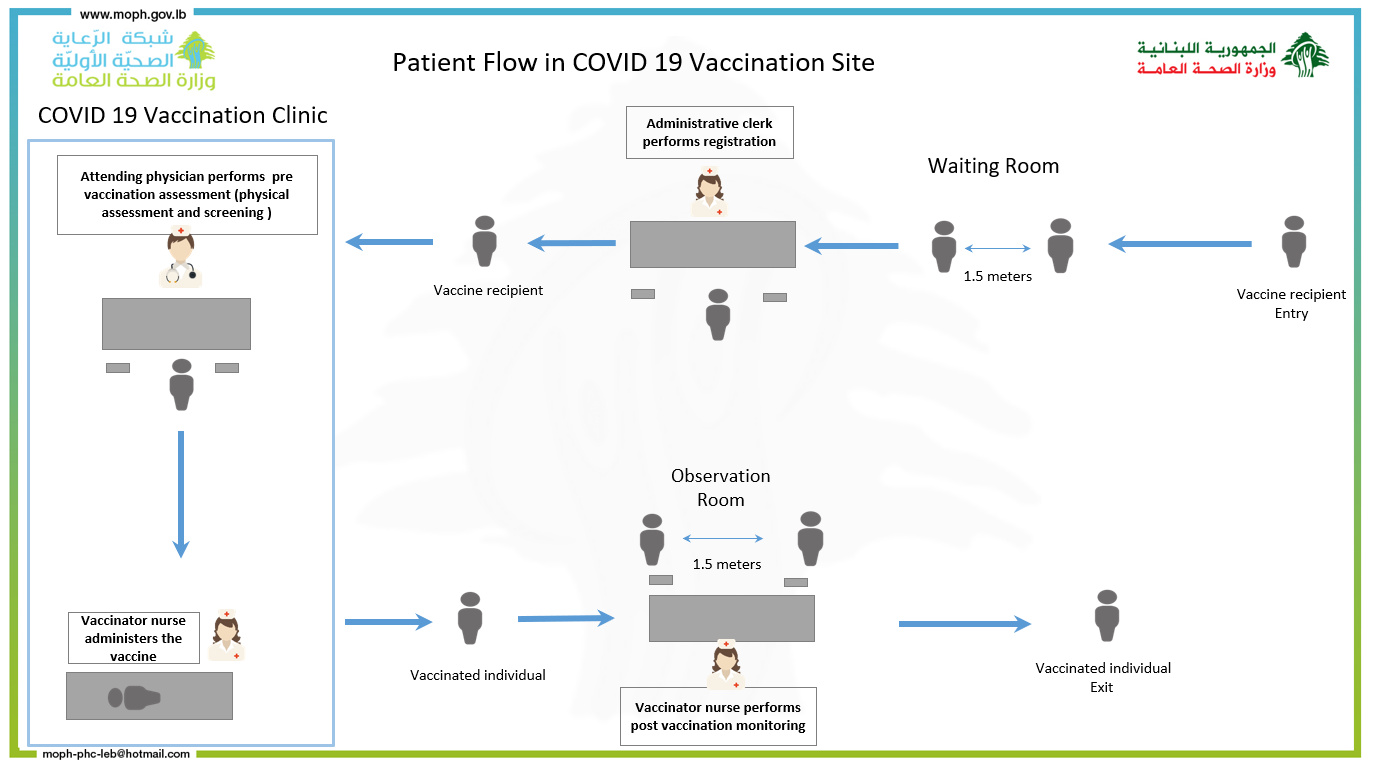
* Patient arrives during specified time-slot (5min capacity for early/late arrivals)
* Traffic flow managed by administrator clerk
* Patient directed to hand sanitizing station by entrance
* Administrator clerk verifies patient information data, registers patient and directs him/her to designated seat in the waiting area

**Vaccination**

* Patient called in the immunization clinic
* Patient confirms details with personnel (triple verification: Full name, individual ID and ID provided by SMS from the MOPH) while vaccinator prepares the vaccine
* Patient undergoes physical assessment and screening
* Patient vaccinated
* **Patient is provided with a vaccination card**
* Patient instructed to move to observation area

**Post- Vaccination**

* Patient is counseled by nurse on expected side effects
* Once patient passes the 15 minutes waiting time, he/she is cleared to depart vaccination center
* Follow up alerts from application OR follow up phone call from MOPH to be conducted daily for 7 days after vaccination (AEFI follow up)
* Follow up text or call to confirm date of subsequent injection



*Figure 1. Patient Flow in COVID-19 Vaccination Site*

**3 Patient Eligibility to receive the COVID-19 vaccine**

The National Prioritization Scheme will be adopted at the MOPH level through a risk and age-based approach for prioritization of COVID-19 vaccine target groups according to international guidelines in 5 stages (the WHO SAGE values framework, WHO SAGE prioritization roadmap and the fair allocation mechanism for COVID-19 vaccines through the COVAX Facility.

**Eligibility criteria:**

* Name of patient and appointed registered in the system
* Patient registered on the backup list
* Patient present both individual ID and system-based ID (ID number)

**Exclusion criteria for COVID-19 vaccination:**

* Individuals who had a severe allergic reaction after a previous dose of this vaccine
* Individuals who had a severe allergic reaction to any ingredient of this vaccine.
* Pregnant/breastfeeding females
* Individuals between the age of 16-17 without parental consent
* Children under the age of 16

**4 COVID-19 Vaccines and Supplies Inventory**

4.1 COVID-19 Vaccines Dosing Schedule

Vaccines that will be deployed will be accompanied by the pertinent information regarding storage, dosage and administration, this document will be updated to include all vaccines which receive import license from the MOPH. Below is a table with some of the COVID-19 vaccines that are either currently being marketed under the FDA’s emergency authorization or are under final clinical stages.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COVID-19 Vaccine Manufacturer** | **COVAX R&D Candidate** | **Platform** | **Type** | **Number of doses** | **Dosing Interval** | **Route of administration** | **Storage Consideration** | **Clinical Phases** |
| University of Oxford/ Astrazeneca | Yes | Non-replicating viral vector | ChAdOX1-S | 2 | 28 days | IM | 2-8 degree | UK approval |
| Moderna | Yes | mRNA | LNP-encapsulated mRNA | 2 | 28 days | IM | -20 degrees | FDA emergency approval |
| Pfizer/BioNtech |  | mRNA | 3 NLP- mRNAs | 2 | 28 days | IM | -70 degrees | FDA emergency approval |
| Novavax | Yes | Matric M Adjuvant | Recombinant protein nanoparticle | 2 | 21 days | IM | 2-8 degrees | Phase 3 |
| Curevac | Yes | mRNA | mRNA | 2 | 28 days | IM | 2-8 degrees | Phase 2 |

4.2 Vaccine Specific Information

4.2.1 **Pfizer/BioNTech Vaccine BNT162b2**

On December 11, 2020, the U.S. Food and Drug Administration issued the first emergency use authorization (EUA) for a vaccine for the prevention of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in individuals 16 years of age and older. The emergency use authorization allows the Pfizer-BioNTech COVID-19 Vaccine to be distributed.

The following information has been extracted from the BNT162b2 FDA approved leaflet for providers administering the vaccine.

1. **Storage and handling:**

**Pfizer Vaccine shipped in Ultra Low Temperature Freezing Storage Container**

Vaccine arrives ultra-frozen at vaccination center

Vaccine arrives refrigerated at vaccination center

Stays in deep freeze until time to thaw

Vaccine must be used within 5 days

During storage, minimize exposure to room light, and avoid exposure to direct sunlight and ultraviolet light.

**Do not refreeze thawed vials.**

**Frozen Vials**

Prior to Use Cartons of Pfizer-BioNTech COVID-19 Vaccine Multiple Dose Vials arrive in thermal containers with dry ice.

Once received, remove the vial cartons immediately from the thermal container and store in an ultra-low temperature freezer between -80ºC to -60ºC (-112ºF to -76ºF).

Vials must be kept frozen between -80ºC to -60ºC (-112ºF to -76ºF) and protected from light until ready to use.

**Thawed Vials** **Before Dilution**

* ***Thawed Under Refrigeration***

Thaw and then store undiluted vials in the refrigerator [2ºC to 8ºC (35ºF to 46ºF)] for up to 5 days (120 hours).

A carton of 25 vials or 195 vials may take up to 2 or 3 hours, respectively, to thaw in the refrigerator, whereas a fewer number of vials will thaw in less time.

* ***Thawed at Room Temperature***

For immediate use, thaw undiluted vials at room temperature [up to 25ºC (77ºF)] for 30 minutes. Thawed vials can be handled in room light conditions.

Vials must reach room temperature before dilution.

Undiluted vials may be stored at room temperature for no more than 2 hours.

**Vials After Dilution**

* After dilution, store vials between 2°C to 25°C (35°F to 77°F) and with a 6 hours’ window for usage from the time of dilution.
* During storage, minimize exposure to room light, and avoid exposure to direct sunlight and ultraviolet light.
* Any vaccine remaining in vials must be discarded after 6 hours
* Do not refreeze vials

**B- Dosing and Schedule**

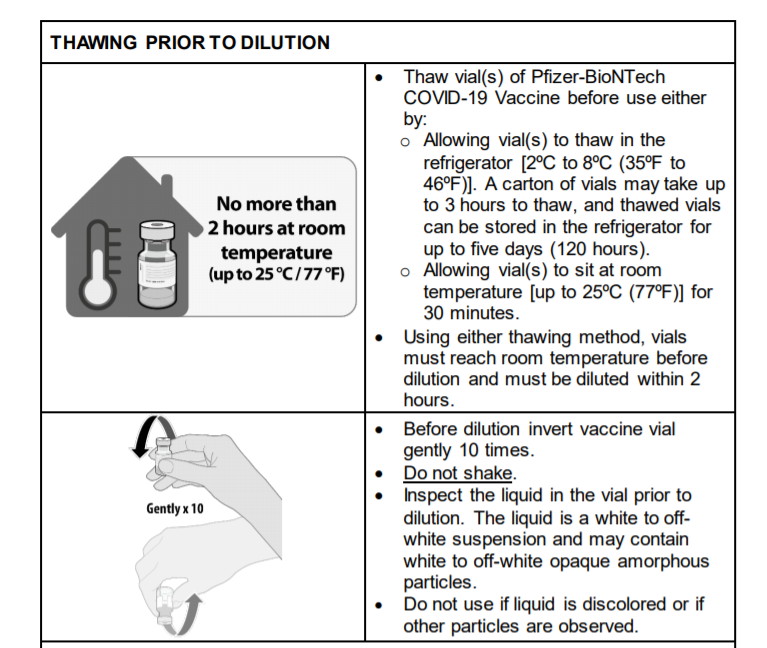
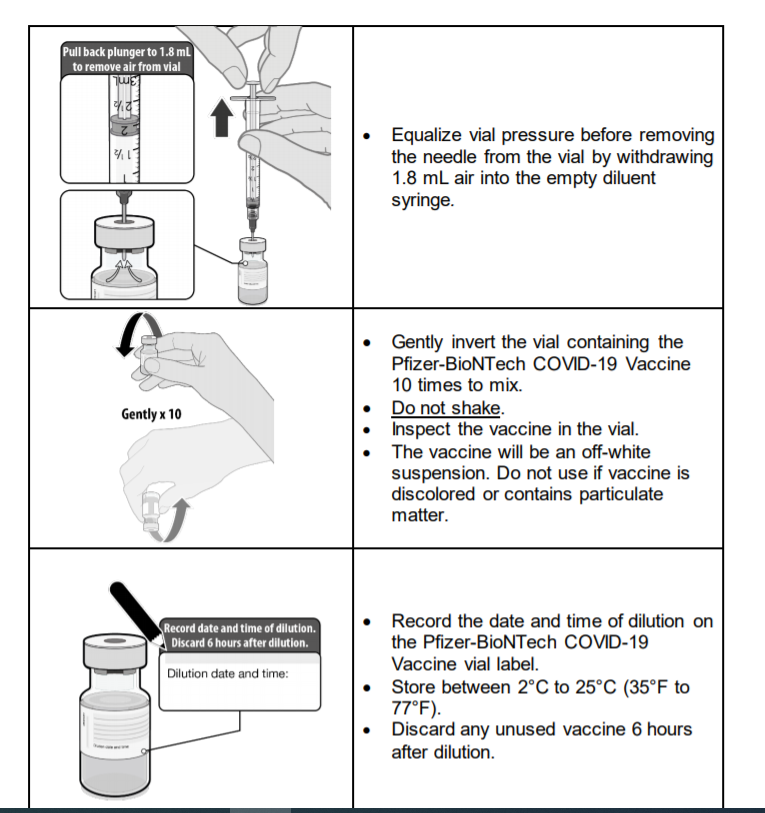
The Pfizer-BioNTech COVID-19 Vaccine is administered intramuscularly as a series of two doses (0.3 mL each) 3 weeks apart.

There is no data available on the interchangeability of the Pfizer-BioNTech COVID-19 Vaccine with other COVID-19 vaccines to complete the vaccination series.

Individuals who have received one dose of Pfizer-BioNTech COVID-19 Vaccine should receive a second dose of Pfizer-BioNTech COVID-19 Vaccine to complete the vaccination series.

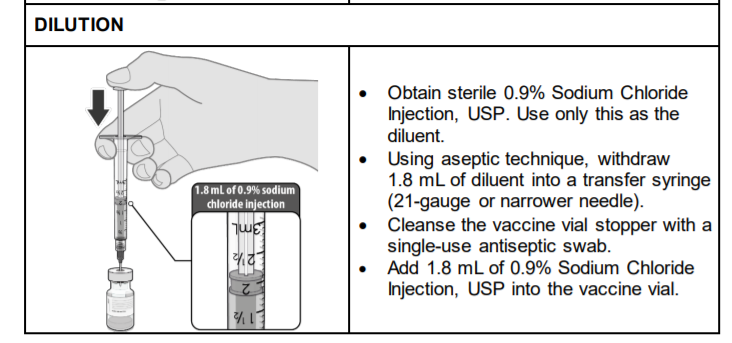
***Dose Preparation Prior to Dilution***

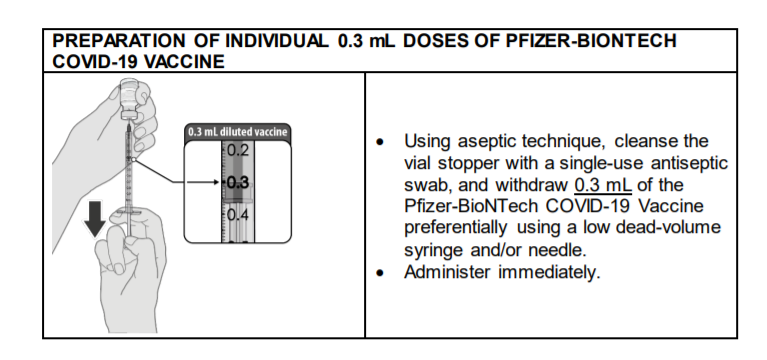
* The Pfizer-BioNTech COVID-19 Vaccine Multiple Dose Vial contains a volume of 0.45 mL, supplied as a frozen suspension that does not contain preservative.
* Each vial must be thawed and diluted prior to administration.
* Vials may be thawed in the refrigerator [2ºC to 8ºC (35ºF to 46ºF)] or at room temperature [up to 25ºC (77ºF)] (see Storage and Handling).
* Refer to thawing instructions in the panels below.



**C- Dilution**

* Dilute the vial contents using 1.8 mL of 0.9% Sodium Chloride Injection, USP **(not provided)** to dilute the Pfizer-BioNTech COVID-19 Vaccine.
* ONLY use 0.9% Sodium Chloride Injection, USP as the diluent, as it is the only approved diluent per the vaccine leaflet
* Do not use bacteriostatic 0.9% Sodium Chloride Injection or any other diluent.
* Do not add more than 1.8 mL of diluent.
* After dilution, one vial produces only 6 doses of 0.3 mL single doses of the vaccine.
* Gently invert the vaccine vial 10 times. **Do not shake.**
* Vial labels and cartons may state that after dilution, a vial contains 5 doses of 0.3 mL.
* The information in this Fact Sheet regarding the number of doses per vial after dilution supersedes the number of doses stated on vial labels and cartons.
* Refer to dilution and dose preparation instructions in the panels below.





**D- Administration**

* Visually inspect each dose in the dosing syringe prior to administration. The vaccine will be an off-white suspension.
* During the visual inspection, monitor the following:
  + Verify the final dosing volume of 0.3 mL.
  + Confirm there are no particles and that no discoloration is observed.
  + Do not administer if the vaccine is discolored or contains particulate matter.
* Administer the Pfizer-BioNTech COVID-19 Vaccine intramuscularly.
* After dilution, vials of Pfizer-BioNTech COVID-19 Vaccine contain up to six doses of 0.3mL.
* Low dead-volume syringes and/or needles can be used to extract up to six doses from a single vial.
* If standard syringes and needles are used, there may not be sufficient volume to extract a sixth dose from a single vial.
* Irrespective of the type of syringe and needle:
  + Each dose must contain 0.3 mL of vaccine.
  + If the amount of vaccine remaining in the vial cannot provide a full dose of 0.3 mL, discard the vial and content.
  + Do not pool excess vaccines from multiple vials.

5 Vaccine administration

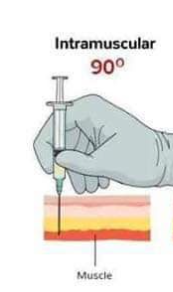
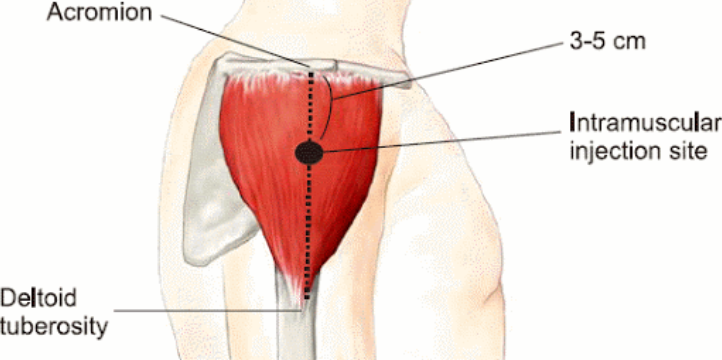
Both the vaccinator nurse in the public sector and the pharmacist in the private sector, will follow the below steps to ensure proper and safe administration of the COVID 19 Vaccine as administration of lipid containing vaccines are directly correlated to their efficacy.

* 1. **Administration of IM vaccine in the Deltoid muscle:**

1. Prepare all the needed supplies for vaccination.
2. Sanitize hands according to ICP (hand washing is preferable in settings where it is not possible to use alcohol based hand sanitizer).
3. Put on gloves.
4. Explain the procedure to the vaccine recipient and ask about preferred arms for vaccine administration since the site might be sore.
5. Ask the vaccine recipient to sit with both feet on the ground in order to avoid falls in case of syncope (in recipients has fear of injections)
6. Make sure the Deltoid muscle is relaxed
7. Find the injection site by first locating the acromion process, once found measure about 2 fingers widths below this area, this will be the injection site.
8. Clean the site with an alcohol swab in a clockwise motion and then wait for the site to dry completely
9. Quickly insert the needle at a 90-degree angle into the skin.

* Steady the needle by using the thumb and forefinger of the non-dominant hand. This prevents potential damage to the muscle or surrounding tissues along with accidental displacement of medication.
* Use the dominant hand to inject the solution at a rate of 10 seconds per mL.
* Once the solution is injected completely, wait 10 seconds before removing the needle. Remove the needle at the same angle it was inserted (90’ degrees).

1. Discard the syringe and needle it in the sharps container.
2. Apply light pressure if bleeding occurs.
3. Place adhesive bandage on the vaccination site.
4. Remove gloves
5. Sanitize hands
6. Document vaccination details on the MERA and the recipient immunization card
7. Provide patient with immunization card and mark a follow up vaccination date
8. Guide the patient to the monitoring area for observation and education



**5.2 Anaphylaxis management**

In case of Anaphylactic shock post COVID 19 immunization, the following steps need to be taken by the attending physician:

* Rapidly assess airway, breathing, circulation, and mentation (mental activity).
* Call for emergency support from the ER department at the hospital.
* Place the patient in a supine position (face up), with feet elevated, unless upper airway obstruction is present or the patient is vomiting.
* Epinephrine[[31]](#footnote-32) (1 mg/ml aqueous solution [1:1000 dilutions]) should be administered immediately.
  + In adults, administer a 0.3 mg intramuscular dose using a premeasured or prefilled syringe
  + The maximum adult dose is 0.5 mg per dose.
  + Epinephrine dose may be repeated every 5-15 minutes (or more often) as needed to control symptoms while waiting for emergency medical services.
  + Because of the acute, life-threatening nature of anaphylaxis, there are no contraindications to epinephrine administration

The following supplies should be made available at the vaccination site for cases of anaphylactic shock2:

|  |  |
| --- | --- |
| **Mandatory supplies available at all vaccination sites** | **Supplies available only if feasible (not mandatory)** |
| Epinephrine prefilled syringe or auto injector | Pulse oximeter |
| H1 Antihistamine (diphenhydramine) | Oxygen |
| Blood pressure cuff | Bronchodilator (albuterol) |
| Stethoscope | H2 Antihistamine (famotidine, cimetidine) |
| Timing device to assess pulse | IV fluids (normal saline) |
|  | Rapid intubation kit |
|  | Adult-sized pocket mask with one-way valve (also known as cardiopulmonary resuscitation (CPR) mask) |

**6 Vaccine recipient education**

The vaccinator nurse will provide each vaccine recipient with education regarding any possible AEFI, how to manage them, when and where to seek care and the way to report any adverse event on the National COVID-19 Registry including the importance of zero reporting.

**7 Appointment, arrival, check-in and informed consent if available**

**8 Post vaccination observation:**

Every vaccine recipient will be asked to wait for 15 minutes in the waiting room post vaccination. During this time the registered nurse will monitor the patient for any symptoms of AEFI especially anaphylaxis symptoms and will provide post vaccination education. In case any symptoms appear, the registered nurse will inform the attending physician.

**9 Record management:**

All patient records will be documented on the National COVID-19 Registry including the consent form (if available), documentation of pre vaccination screening and assessment, post vaccination monitoring. All vaccine recipients will receive a hard copy vaccination card, filled and signed by the vaccinator nurse.

**10 Vaccination in special settings**

Vaccinator teams deployed for provision of immunization services out of the vaccination sites, in long term healthcare facilities (elderly homes, Rehab centers) and prisons, will abide by the vaccine administration protocol, Infection Prevention and Control measures, and waste management processes detailed in this document.

Annex 1. Qualifications requirements for vaccinator nurses



Annex 2. Audit tools

The following audit tools will be used to guide and develop the electronic software to be used:

* Temperature Humidity Monitoring Checklist
* Receiving Checklist
* Inventory sheet
* Censor Calibration Log
* Adverse reaction form
* Audit Checklist
* Quarantine log
* Pest Rodent Control log
* Cleaning checklist

## Annex G: Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings

With the outbreak and spread of COVID-19, people have been advised, or may be mandated by national or local law, to exercise social distancing, and specifically to avoid public gatherings to prevent and reduce the risk of the virus transmission. Countries have taken various restrictive measures, some imposing strict restrictions on public gatherings, meetings and people’s movement, and others advising against public group events. At the same time, the general public has become increasingly aware and concerned about the risks of transmission, particularly through social interactions at large gatherings.

These restrictions have implications for World Bank-supported operations. In particular, they will affect Bank requirements for public consultation and stakeholder engagement in projects, both under implementation and preparation. WHO has issued technical guidance in dealing with COVID-19, including: (i) Risk Communication and Community Engagement (RCCE) Action Plan Guidance Preparedness and Response; (ii) Risk Communication and Community engagement (RCCE) readiness and response; (iii) COVID-19 risk communication package for healthcare facilities; (iv) Getting your workplace ready for COVID-19; and (v) a guide to preventing and addressing social stigma associated with COVID-19. All these documents are available on the WHO website through the following link: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>.

This Note offers suggestions to World Bank task teams for advising counterpart agencies on managing public consultation and stakeholder engagement in their projects, with the recognition that the situation is developing rapidly and careful regard needs to be given to national requirements and any updated guidance issued by WHO. It is important that the alternative ways of managing consultation and stakeholder engagement discussed with clients are in accordance with the local applicable laws and policies, especially those related to media and communication. The suggestions set out below are subject to confirmation that they are in accordance with existing laws and regulations applying to the project.

**Investment projects under implementation**. All projects under implementation are likely to have public consultation and stakeholder engagement activities planned and committed as part of project design. These activities may be described in different project documents, and will involve a variety of stakeholders. Commonly planned avenues of such engagement are public hearings, community meetings, focus group discussions, field surveys and individual interviews. With growing concern about the risk of virus spread, there is an urgent need to adjust the approach and methodology for continuing stakeholder consultation and engagement. Taking into account the importance of confirming compliance with national law requirements, below are some suggestions for task teams’ consideration while advising their clients:

Task teams will need to review their project, jointly with the PMUs, and should:

* Identify and review planned activities under the project requiring stakeholder engagement and public consultations.
* Assess the level of proposed direct engagement with stakeholders, including location and size of proposed gatherings, frequency of engagement, categories of stakeholders (international, national, local) etc.
* Assess the level of risks of the virus transmission for these engagements, and how restrictions that are in effect in the country / project area would affect these engagements.
* Identify project activities for which consultation/engagement is critical and cannot be postponed without having significant impact on project timelines. For example, selection of resettlement options by affected people during project implementation. Reflecting the specific activity, consider viable means of achieving the necessary input from stakeholders (see further below).
* Assess the level of ICT penetration among key stakeholder groups, to identify the type of communication channels that can be effectively used in the project context.

Based on the above, task teams should discuss and agree with PMUs the specific channels of communication that should be used while conducting stakeholder consultation and engagement activities. The following are some considerations while selecting channels of communication, in light of the current COVID-19 situation:

* Avoid public gatherings (taking into account national restrictions), including public hearings, workshops and community meetings;
* If smaller meetings are permitted, conduct consultations in small-group sessions, such as focus group meetings If not permitted, make all reasonable efforts to conduct meetings through online channels, including WebEx, zoom and skype;
* Diversify means of communication and rely more on social media and online channels. Where possible and appropriate, create dedicated online platforms and chat groups appropriate for the purpose, based on the type and category of stakeholders;
* Employ traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, and mail) when stakeholders to do not have access to online channels or do not use them frequently. Traditional channels can also be highly effective in conveying relevant information to stakeholders, and allow them to provide their feedback and suggestions;
* Where direct engagement with project affected people or beneficiaries is necessary, such as would be the case for Resettlement Action Plans or Indigenous Peoples Plans preparation and implementation, identify channels for direct communication with each affected household via a context specific combination of email messages, mail, online platforms, dedicated phone lines with knowledgeable operators;
* Each of the proposed channels of engagement should clearly specify how feedback and suggestions can be provided by stakeholders;
* An appropriate approach to conducting stakeholder engagement can be developed in most contexts and situations. However, in situations where none of the above means of communication are considered adequate for required consultations with stakeholders, the team should discuss with the PMU whether the project activity can be rescheduled to a later time, when meaningful stakeholder engagement is possible. Where it is not possible to postpone the activity (such as in the case of ongoing resettlement) or where the postponement is likely to be for more than a few weeks, the task team should consult with the OESRC to obtain advice and guidance.

**Investment projects under preparation**. Where projects are under preparation and stakeholder engagement is about to commence or is ongoing, such as in the project E&S planning process, stakeholder consultation and engagement activities should not be deferred, but rather designed to be fit for purpose to ensure effective and meaningful consultations to meet project and stakeholder needs.  Some suggestions for advising clients on stakeholder engagement in such situations are given below. These suggestions are subject to the coronavirus situation in country, and restrictions put in place by governments. The task team and the PMU should:

* Review the country COVID-19 spread situation in the project area, and the restrictions put in place by the government to contain virus spread;
* Review the draft Stakeholder Engagement Plan (SEP, if it exists) or other agreed stakeholder engagement arrangements, particularly the approach, methods and forms of engagement proposed, and assess the associated potential risks of virus transmission in conducting various engagement activities;
* Be sure that all task team and PIU members articulate and express their understandings on social behavior and good hygiene practices, and that any stakeholder engagement events be preceded with the procedure of articulating such hygienic practices.
* Avoid public gatherings (taking into account national restrictions), including public hearings, workshops and community meetings, and minimize direct interaction between project agencies and beneficiaries / affected people;
* If smaller meetings are permitted, conduct consultations in small-group sessions, such as focus group meetings. If not permitted, make all reasonable efforts to conduct meetings through online channels, including WebEx, zoom and skype meetings;
* Diversify means of communication and rely more on social media and online channels. Where possible and appropriate, create dedicated online platforms and chat groups appropriate for the purpose, based on the type and category of stakeholders;
* Employ traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, public announcements and mail) when stakeholders do not have access to online channels or do not use them frequently. Such channels can also be highly effective in conveying relevant information to stakeholders, and allow them to provide their feedback and suggestions;
* Employ online communication tools to design virtual workshops in situations where large meetings and workshops are essential, given the preparatory stage of the project. WebEx, Skype, and in low ICT capacity situations, audio meetings, can be effective tools to design virtual workshops. The format of such workshops could include the following steps:
  + *Virtual registration of participants*: Participants can register online through a dedicated platform.
  + *Distribution of workshop materials to participants, including agenda, project documents, presentations, questionnaires and discussion topics*: These can be distributed online to participants.
  + *Review of distributed information materials*: Participants are given a scheduled duration for this, prior to scheduling a discussion on the information provided.
  + *Discussion, feedback collection and sharing*:
    - Participants can be organized and assigned to different topic groups, teams or virtual “tables” provided they agree to this.
    - Group, team and table discussions can be organized through social media means, such as WebEx, skype or zoom, or through written feedback in the form of an electronic questionnaire or feedback forms that can be emailed back.
  + *Conclusion and summary:* The chair of the workshop will summarize the virtual workshop discussion, formulate conclusions and share electronically with all participants.
* In situations where online interaction is challenging, information can be disseminated through digital platform (where available) like Facebook, Twitter, WhatsApp groups, Project web links/ websites, and traditional means of communications (TV, newspaper, radio, phone calls and mails with clear description of mechanisms for providing feedback via mail and / or dedicated telephone lines. All channels of communication need to clearly specify how stakeholders can provide their feedback and suggestions.
* *Engagement with direct stakeholders for household surveys*: There may be planning activities that require direct stakeholder engagement, particularly in the field. One example is resettlement planning where surveys need to be conducted to ascertain socioeconomic status of affected people, take inventory of their affected assets, and facilitate discussions related to relocation and livelihood planning. Such survey activities require active participation of local stakeholders, particularly the potentially adversely affected communities. However, there may be situations involving indigenous communities, or other communities that may not have access to the digital platforms or means of communication, teams should develop specially tailored stakeholder engagement approaches that will be appropriate in the specific setting. The teams should reach out to the regional PMs for ENB and Social Development or to the ESSA for the respective region, in case they need additional support to develop such tailored approaches.
* In situations where it is determined that meaningful consultations that are critical to the conduct of a specific project activity cannot be conducted in spite of all reasonable efforts on the part of the client supported by the Bank, the task team should discuss with the client whether the proposed project activities can be postponed by a few weeks in view of the virus spread risks. This would depend on the COVID-19 situation in the country, and the government policy requirements to contain the virus spread. Where it is not possible to postpone the activity (such as in the case of ongoing resettlement) or where the postponement is likely to be for more than a few weeks, the task team should consult with the OESRC to obtain advice and guidance.

## Annex H: Technical note: Use of Military Forces to Assist in COVID-19 Operations Suggestions on how to mitigate risks – Version 1- March 25, 2020

It is common practice for Governments to utilize military or security personnel during public health emergencies. The ability to do this, and the requirements relating to such mobilization, are often set out in executive orders or instructions. A ‘*public health emergency*’ will usually be defined under national law. For example, the US Department of Defence (DoD Instruction 6200.03, March 28, 2019) defines a public health emergency to include *“the occurrence or imminent threat of an illness or health condition that poses a high probability of a significant number of deaths, serious or long-term disabilities, widespread exposure to an infectious or toxic agent, overwhelmed health care resources, or severe degradation of mission capabilities”.*

For the reasons set out in section 1 below, it is expected that military or security forces will be utilized in different ways in response to COVID-19. They may be used directly to carry out activities in a World Bank- supported project. Or they may be mobilized more generally to implement Government programs, which are also supported by the Bank. Where military/security forces are utilized, either directly or indirectly, in connection with Bank-supported operations, questions will arise about the risk of the operation. Is it automatically high or are there effective ways of mitigating the risk? This guidance sets out suggestions for due diligence and mitigation measures to address the risk.

**1. WHAT ARE THE POSITIVE ASPECTS ABOUT USING THE MILITARY?**

Where relevant, consider the following and document relevant details:

• **Human rights:** Depending on the country, military personnel may be aware of the need to respect human rights and received relevant training.

• **“NBC” capabilities**: Many military forces have nuclear, biological and chemical capabilities. They may have existing biological defense capabilities e.g. ability to deploy with personal protective equipment (PPE); training in decontamination; procedures or advice on how to carry out relevant activities.

• **Medical expertise:** Medical and other professionals within the military are likely to be trained to deal with medical emergencies, and therefore may be better able to cope in situations in which there may be mass casualties.

• **Disciplined response:** Generally, military personnel are expected to respond in a disciplined manner to commands and will have capabilities which will be useful in these types of emergencies (medical, engineering, construction).

• **Civic action programs:** Military may also have specific civic action programs and infrastructure to support these (e.g. mobile clinics/communication procedures).

**2. WHAT ARE THE THINGS TO WATCH FOR?**

(a) **Diversion of materials, aid and assistance:** Diversion can take the form of confiscations and re- use, misappropriation and theft. While a certain level of diversion may be inevitable in certain circumstances, this issue is likely to present reputational issues (especially when the crisis dissipates).

(b) **Allegations of human rights violations:** This will be a risk, including as it relates to Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH), and the Bank needs to be clear and transparent about what measures are being adopted to minimize these risks. Tools that should be considered include the ESF Good Practice Note (GPN) on [Use of Security Forces,](http://documents.worldbank.org/curated/en/692931540325377520/Environment-and-Social-Framework-ESF-Good-Practice-Note-on-Security-Personnel-English.pdf)  on [SEA/SH,](http://pubdocs.worldbank.org/en/632511583165318586/ESF-GPN-SEASH-in-major-civil-works.pdf) and the IFC Good Practice Handbook on the [Use of Security Forces: Assessing and Managing Risks and Impacts.](https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_securityforces)

(c) **Putting World Bank staff at risk:** This is particularly a concern where military/security forces are likely to be undisciplined. The risk may be heightened when Bank staff are trying to address the risk of diversion referred to above. While staff may try to address this risk by avoiding direct interaction with the military, this is not likely to be feasible in a project setting.

(d) **International media comment and reaction:** This will be a challenge, and it may not be possible to avoid negative comment entirely. It is important to be transparent about the activities the World Bank is supporting and the mitigation measures that are being implemented to address risks.

**3. WHAT ARE THE WAYS TO ADDRESS THE RISKS?**

(a) **Get a view of the reputation and capability of the military:** Talk to those who might have up to date and accurate information: e.g. the Defense Attaché at the relevant Embassy; the US or UK Government; refer to Jane’s Defence Weekly.

(b) **Identify the structure under which the military will be operating:** While they will continue to abide by their own rules and procedures, it is likely that the military will also be subject to relevant national requirements relating to the public health emergency and the specific activities that they are required to carry out e.g. instructions issued by public health officials. In the context of a Bank- supported operation, it is good practice to document (as far as possible) the structure under which the military are operating, including the chain of command, with specific reference to the activities they will or are likely to carry out (see paragraph (i) below).

(c) **Clarify who is responsible for human rights issues nationally:** Many countries have a Human Rights Commission. If such commissions do not exist, there is usually an Ombudsman, Human Rights office or inspector general at the national level with jurisdiction to deal with such issues. Identify the relevant parties and consider whether it would be appropriate to consult them for advice.

(d) ***Identify other specialized parties and ask for advice***: There are both national and international NGOs which follow and support these issues (e.g. Human Rights Watch (HRW), Amnesty). There is also the International Committee of the Red Cross (ICRC) and the International Crisis Group. Identify relevant parties, with reference to the context and nature of the operations, who may be in a position to provide valuable advice.

(e) **As required under the ESF, cooperate with relevant stakeholders on a risk assessment:** Carry out a risk assessment to identify the specific risks associated with the proposed use of military. This assessment needs to be conducted with those that are involved in the operation, including Government counterparts, to ensure that an accurate picture of the risks emerge, that appropriate mitigation measures are identified and that both the risk assessment and the mitigation measures are owned by the project and the Government.

(f) **Be transparent about what the World Bank is requiring to mitigate the risks:** Document this, setting out key aspects in the ESRS and other project documentation. Consider the following:

* procedures relating to: e.g. risk assessment; how allegations of HR/SEA/SH violations will be dealt with, including through the project Grievance Mechanism (GM); preventing diversion of materials, aid and assistance (build on existing requirements)
* presence of World Bank representatives/third party monitors on the ground
* cooperation with specialist institutions/NGOs/Government agencies
* specific obligations set out in the legal agreement and (if possible and appropriate) a
* Memorandum of Understanding (see paragraph (k) below)
* monitoring and reporting

(g) **Consider asking a credible party to act as an observer/third party monitor:** This can be considered under the ESF provisions for third party monitoring as noted in ESS1 and ESS10, as well as the ESF Good Practice Note on Third Party Monitoring. Relevant groups with experience in this field will depend on the context, and may include the parties referred to in paragraph (d) above.

(h) **Establish a procedure to be followed in cases of allegations of HR/SEA/SH violations or misbehavior:** This should reflect the ESF Good Practice Note on SEA/SH and may include reference to the institutions referred to in paragraph (c) above. Include a specific HR and SEA/SH procedure in the project GM to address these allegations and identify specific individuals who have the expertise to address such allegations credibly. Understanding relevant Code of Conduct (CoC) requirements pertaining to such behavior is important, and, where necessary, improving the form and substance of such CoC.

(i) **Be clear on what the military will do: Identify the activities and set them out clearly in the legal agreement:** e.g. construction, enforcing quarantine restrictions, distribution of medical supplies or vaccines, distribution of other supplies. This will support a more accurate risk assessment. Note that in some circumstances, what could otherwise be viewed as inappropriate behavior by the military (or at an extreme, a possible abuse of rights) may be authorized and necessary in situations of a public health emergency. This will depend on the activities that the military is required to carry out and will be particularly relevant where they are required to enforce public order or quarantine restrictions.

(j) ***Set out specific requirements as covenants in the legal agreement and in the Environmental and Social Commitment Plan (ESCP) as appropriate:*** The provisions should set out the ‘ground rules’ for military engagement, including: (i) requirements to comply with ESS4 (see Annex attached); (ii) reporting obligations (specify on what, how often, to whom); (iii) specific prohibitions e.g. no child labor, no forced labor, restrictions on what military personnel under the age of 18 can do (if anything); (iv) health and safety requirements; (v) Code of Conduct (CoC) type obligations; (vi) requirements for the GM; (vii) training required and how often (specify on what – e.g. Voluntary Principles on Security and Human Rights, interactions with the community, operation of the GM, use of personal protective equipment (PPE), CoC).

**(k) Where possible, and if not already covered by applicable law/regulation, the Government should consider executing a Memorandum of Understanding (MoU) with the military**: This should reflect the ‘ground rules’ set out in the legal agreement (see paragraph (j) above). An example of a MoU is available in the IFC Good Practice Handbook on the [Use of Security Forces: Assessing and Managing Risks and Impacts.](https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_securityforces)  Even where it is not possible for individual military personnel to sign a CoC, the requirements should be set out in the MoU, and training should cover these obligations (amongst others).

**ANNEX**

**Set out below is suggested wording on HR/SEA/SH:**

1. Prior to deploying military or security personnel, the [Borrower/Recipient] shall take measures to ensure that such personnel are:

* 1. screened to confirm that they have not engaged in past unlawful or abusive behavior, including sexual exploitation and abuse (SEA), sexual harassment (SH) or excessive use of force;
  2. adequately instructed and trained, on a regular basis, on the use of force and appropriate behavior and conduct (including in relation to SEA and SH), as set out in the [*Training Procedure*, *Project Operational Manual, ESMF, Security Management Plan, MoU*]; and
  3. deployed in a manner consistent with applicable national law.

2. The [Borrower/Recipient] shall promptly review all allegations of unlawful or abusive acts of any military/security personnel, take action (or request appropriate parties to take action) to prevent recurrence and, where necessary, report unlawful and abusive acts to the relevant authorities.

**Set out below is suggested wording on reporting:** Frequency of reporting will depend on the context and the risks associated with the activities the military is carrying out, and may be required monthly, weekly or even daily. Requirements should include:

* Immediate reporting (within 24 hours) of any serious incident
* A written weekly or monthly report (depending on the risk) covering
* status of activities being conducted by the military
* training conducted (specifying subject matter)
* current status of review of serious incidents (if any) and any relevant reporting
* a summary of any minor (but reportable) issues, suspected incidents or potential issues
* details of any incidents involving use of force or weapons
* details of upcoming activities which may pose a risk (e.g. distribution of supplies) and measures being put in place to reduce such risk
* lessons learnt, to inform conduct of future activities

**Other reference documentation**: [The International Code of Conduct under the Montreux Document.](http://www.icoca.ch/en/the_icoc) While this relates to private security, it contains useful material.

## Annex I: Form on Adverse Event Following Immunization Reporting Form for COVID-19 Vaccine(s)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | | | ***Quality Management System*** | | | | | | | | | | | | | | | | | |  | | | | | | **QMS-PV-F-06** | | | | | | | |
| **Adverse Event Following Immunization**  **Reporting Form for COVID-19 Vaccine(s)** | | | | | | | | | | | | | | | | | | **Edition 1** | | | | | | | |
| **Date of reception at PV Center**  **… / … / …** | | | | | | | |
| **LNPVC2021 …** | | | | | | | |
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| ***Reporter, beneficiary & institution identities will remain confidential / Questions with an asterisk(\*) sign are mandatory*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| □ **First Report** | | | | | | | | | | | | | | | | | □ **Follow Up Report** | | | | | | | | | | | | | | | | | |
| **1) Beneficiary Details \*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Name (or initials)** | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Gender** | | | | | | | | | | | | | | | □ Male | | | | | | | | □ Female | | | | | | | □Pregnant | | | | |
| □ Lactating | | | | |
| **Date of birth** | | | |  | | | | | **Weight (kg)** | | | | | |  | | | | | | | | **Height (cm)** | | | | | | |  | | | | |
| **Age at onset** | | | |  | | | | |
| **2) Risk Factors \*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| □ Renal disease | | | | | | | | | | | | | | | | | | | □ Hepatic disease | | | | | | | | | □ Cardiac disease | | | | | | |
| □ Smoker  □ Occasional □ Frequent | | | | | | | | | | | | | | | | | | | □ Supplement use/ Specify: | | | | | | | | | □ Other medical condition/ Specify: | | | | | | |
| □ Alcohol intake  □ Occasional □ Frequent | | | | | | | | | | | | | | | | | | | □ Allergy/ Specify: | | | | | | | | |
| **3) Vaccine(s)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Health Facility / Vaccination Center Name & Address**  **\*** | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | |
| **Name of**  **Vaccine** | **Manufacturer**  **Name** | | | | | | **Expiry**  **Date** | | | **Batch**  **Number** | | **Dose (1st,**  **2nd, etc.)** | | | | | | **Date of**  **Vaccination** | | **Time of**  **Vaccination** | | | | | **Route of**  **Administration** | | | | | | | **Site of**  **Injection** | | |
|  |  | | | | | |  | | |  | |  | | | | | |  | |  | | | | |  | | | | | | |  | | |
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| **Diluent(s) (if applicable)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Name of Diluent** | | | | | **Expiry Date** | | | | | | | | **Batch Number** | | | | | | | | | **Date & Time of Reconstitution** | | | | | | | | | | | | | |
|  | | | | |  | | | | | | | |  | | | | | | | | |  | | | | | | | | | | | | | |
|  | | | | |  | | | | | | | |  | | | | | | | | |  | | | | | | | | | | | | | |
| **Concomitant medicine(s) (if applicable)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Medicine**  **Brand**  **Name + Active Ingredient** | | **Indication** | | | | **Off Label**  **Use** | | | | | **Batch**  **Number** | | | **Expiry**  **Date** | | **Dose, Frequency, Dosage Form & Route of Administration** | | | | | | **Started on** | | | | | | | **Stopped on** | | | | |
|  | |  | | | |  | | | | |  | | |  | |  | | | | | | **Day** | | **Month** | | **Year** | | | **Day** | | **Month** | | **Year** |
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|  | ***Quality Management System*** |  | **QMS-PV-F-06** |
| **Adverse Event Following Immunization**  **Reporting Form for COVID-19 Vaccine(s)** | **Edition 1** |
| **Date of reception at PV Center**  **… / … / …** |
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|  |  |  | |  | |  | | |  | | | | **Day** | **Month** | | **Year** | | **Day** | | **Month** | **Year** | |
|  |  | |  | |  | |  |  | |
| **4) Adverse Event Following Immunization** | | | | | | | | | | | | | | | | | | | | | |
| **Country of occurrence** | | |  | | | | | | | | | | | | | | | | | | |
| **Suspected Adverse Event Following**  **Immunization** | | | **Onset Date** | | | | | | | | | **Recovery Date (if applicable)** | | | | | | | | | |
| **Time**  **(Hr and Min)** | | **Day** | | | **Month** | | **Year** | | **Time**  **(Hr and Min)** | | | **Day** | | **Month** | | **Year** | | |
| Local Reaction  (Redness, □ Swelling) | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Fever ≥ 38 C □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Allergy □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Fatigue □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Headache □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Pain at the □  injection site | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Febrile Seizure □ Afebrile Seizure □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Abscess □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Sepsis □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Encephalopathy □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Toxic Shock □ Syndrome | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Thrombocytopenia □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Anaphylaxis □ | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| Other/ Specify: | | |  | |  | | |  | |  | |  | | |  | |  | |  | | |
| **Adverse Event Following Immunization Description / Case Narrative (Development, Symptoms, Management, etc.)** | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | |
| **Relevant Laboratory and Diagnostic Test**  **Performed** | | | **Date** | | | | | | | | | | | | **Result** | | | | | | |
|  | | | **Day** | | | | **Month** | | | | **Year** | | | |  | | | | | | |
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|  | ***Quality Management System*** |  | **QMS-PV-F-06** |
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| **Date of reception at PV Center**  **… / … / …** |
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|  | |  |  |  |  | |
| **5) Seriousness of Adverse Event Following Immunization \*** | | | | | | |
| **Serious** | □ Yes  □ No | **If yes, please indicate why** | | | | |
| **The Adverse Event led to:** | | | | |
| □ Death | | | **Date of Death** |  |
| **Cause of**  **Death** |  |
| □ Life Threatening Situation | | | | |
| □ Hospitalization | | | | |
| □ Prolongation of Hospitalization | | | **Specify Additional Duration** |  |
| □ Surgical Intervention | | | | |
| □ Congenital Anomaly | | | | |
| □ Persistent or Significant Disability or Incapacity | | | | |
| □ Other Serious Consequences | | | | |

|  |  |  |
| --- | --- | --- |
| **6) Outcome of Adverse Event Following Immunization\*** | | |
| **Actual Status of Beneficiary** | □ Recovered | |
| □ Recovered with Sequelea | |
| **Specify**  **Sequelea** |  |
| □ Is Recovering | |
| □ No Improvement | |
| □ Fatal | |
| □ Unknown | |

|  |  |  |
| --- | --- | --- |
| **7) Possible Cause(s) of Adverse Event Following Immunization** | | |
| **Questions** | **Yes** | **No** |
| **Can the Adverse Event Following Immunization be due to:** | | |
| o **Vaccine Product-Related**  **Reaction** | □ Yes | □ No |

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|  | ***Quality Management System*** |  | **QMS-PV-F-06** |
| **Adverse Event Following Immunization**  **Reporting Form for COVID-19 Vaccine(s)** | **Edition 1** |
| **Date of reception at PV Center**  **… / … / …** |
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| o **Vaccine Quality Defect- Reaction** | □ Yes | □ No |
| o **Immunization Error-Related**  **Reaction** | □ Yes | □ No |
| o **Immunization Anxiety- Related Reaction** | □ Yes | □ No |
| o **Coincidental Event** | □ Yes | □ No |

**Additional Note**

*Tell us more about any extra relevant information/complementary investigation not mentioned in the previous questions*

|  |  |  |  |  |  |
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| **8) Reporter \*** | | | | | |
| **Who are you?** | | | | | |
| **Beneficiary**  □ | **Vaccinator**  □ | **Other Healthcare**  **Professional**  □ | **Responsible Party for**  **Pharmaceutical Products**  □ | **Drug**  **Distributor**  □ | **Others (Beneficiary’s**  **Relatives, Neighbors, etc.)**  □ |
| Name (or initials) | |  | | | |
| Profession or Specialty | |  | | | |
| Professional Address | |  | | | |
| Email Address | |  | | | |
| Phone Number | |  | | | |
| Signature | |  | | | |
| Date | |  | | | |
| **Please send the completed form filled electronically or manually to the following email:** [**pv@moph.gov.lb**](mailto:pv@moph.gov.lb) **or** [**phvg.phar@ul.edu.lb**](mailto:phvg.phar@ul.edu.lb)  **For any additional information, you may contact 01/830255 o**r  **01/830254** | | | | | |

## Annex J: Infection Control and Health Care Waste Management Plan Template

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

* Type: E.g. general hospital, clinics, inpatient/outpatient facility, medical laboratory, quarantine or isolation centers;
* *Special type of HCF in response to COVID-19: E.g. existing assets may be acquired to hold yet-to-confirm cases for medical observation or isolation;*
* Functions and requirement for the level infection control, e.g. biosafety levels;
* Location and associated facilities, including access, water supply, power supply;
* Capacity: beds

1. Describe the design requirements of the HCF, which may include specifications for general design and safety, separation of wards, heating, ventilation and air conditioning (HVAC), autoclave, and waste management facilities.
2. **Infection Control and Waste Management**

**2.1** Overview of infection control and waste management in the HCF

* Type, source and volume of healthcare waste (HCW) generated in the HCF, including solid, liquid and air emissions (if significant)
* Classify and quantify the HCW (infectious waste, pathological waste, sharps, liquid and non-hazardous) following WBG [EHS Guidelines](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
* Describe institutional arrangement, roles and responsibilities in the HCF for infection control and waste management

**2.2** Management Measures

* Waste minimization, reuse and recycling: HCF should consider practices and procedures to minimize waste generation, without sacrificing patient hygiene and safety considerations.
* Delivery and storage of specimen, samples, reagents, pharmaceuticals and medical supplies: HCF should adopt practice and procedures to minimize risks associated with delivering, receiving and storage of hazardous medical goods.
* Waste segregation, packaging, color coding and labeling: HCF should strictly conduct waste segregation at the point of generation. Internationally adopted method for packaging, color coding and labeling the wastes should be followed.
* Onsite collection and transport: HCF should adopt practices and procedures to timely remove properly packaged and labelled wastes using designated trolleys/carts and routes. Disinfection of pertaining tools and spaces should be routinely conducted. Hygiene and safety of involved supporting medical workers such as cleaners should be ensured.
* Waste storage: A HCF should have multiple waste storage areas designed for different types of wastes. Their functions and sizes are determined at design stage. Proper maintenance and disinfection of the storage areas should be carried out. Existing reports suggest that during the COVID-19 outbreak, infectious wastes should be removed from HCF’s storage area for disposal within 24 hours.
* Onsite waste treatment and disposal (e.g. an incinerator): Many HCFs have their own waste incineration facilities installed onsite. Due diligence of an existing incinerator should be conducted to examine its technical adequacy, process capacity, performance record, and operator’s capacity. In case any gaps are discovered, corrective measures should be recommended. For new HCF financed by the project, waste disposal facilities should be integrated into the overall design and ESIA developed. Good design, operational practices and internationally adopted emission standards for healthcare waste incinerators can be found in pertaining EHS Guidelines and GIIP.
* Transportation and disposal at offsite waste management facilities: Not all HCF has adequate or well-performed incinerator onsite. Not all healthcare wastes are suitable for incineration. An onsite incinerator produces residuals after incineration. Hence offsite waste disposal facilities provided by local government, or the private sector are probably needed. These offsite waste management facilities may include incinerators, hazardous wastes landfill. In the same vein, due diligence of such external waste management facilities should be conducted to examine its technical adequacy, process capacity, performance record, and operator’s capacity. In case any gaps are discovered, corrective measures should be recommended and agreed with the government or the private sector operators.
* Wastewater treatment: HCF wastewater is related to hazardous waste management practices. Proper waste segregation and handling as discussed above should be conducted to minimize entry of solid waste into the wastewater stream. In case wastewater is discharged into municipal sewer sewerage system, the HCF should ensure that wastewater effluent comply with all applicable permits and standards, and the municipal wastewater treatment plant (WWTP) is capable of handling the type of effluent discharged. In cases where municipal sewage system is not in place, HCF should build and properly operate onsite primary and secondary wastewater treatment works, including disinfection. Residuals of the onsite wastewater treatment works, such as sludge, should be properly disposed of as well. There’re also cases where HCF wastewater is transported by trucks to a municipal wastewater treatment plant for treatment. Requirements on safe transportation, due diligence of WWTP in terms of its capacity and performance should be conducted.

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).

As per the provision of the ESCP, promptly notify the Bank of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers [including, inter alia, any COVID outbreak in the Project area]. Provide sufficient details regarding the incident or accident, indicating immediate measures taken or that are planned to be taken to address it and any information provided by any contractor and supervising entity, as appropriate. Subsequently, as per the Bank/’s request, prepare a report on the incident or accident and propose any measures to prevent its recurrence.

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.
* Training will be required for the LRC staff, on specific aspects of environmental & social risk management as per the ESF including on stakeholder engagement, OHS, grievance mechanism, SEA/SH, fair, equitable and inclusive access and allocation of Project benefits including with regards to vaccines.
* The trainings will be organized observing the COVID-19 preventive measures as recommended by the MOPH, the guidance by WHO and any other good international practices.
* Ensure that all Project workers are adequately instructed and trained, on a regular basis, on prevention and reporting procedures available for SEA/SH as set out in ESMF and SEP.

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 be allowed.

As discussed above, the HCF chief takes overall responsibility, leads an intra-departmental team and regularly reviews issues and performance of the infection control and waste management practices in the HCF. Internal reporting and filing systems should be in place.

Externally, reporting should be conducted per government and World Bank requirements and timelines.

## Annex K: General Outline of an ESMP

• **Executive summary**

• **Table of content**

• **Introduction.** Includes a project description, name of owner, name of expert or firm, doing the EIA and a brief description of the project toe, location and size

• **Policy and legal framework** relevant to the project

• **Description of the proposed HC establishment**. The description should include drawings, maps and pictures. It should also include the size, operations schedule, services and period of operation of the project.

• **Description of the surrounding physical, chemical, biological, social and economic environment** and expected changes before the beginning of the project and in the future.

• **Environmental and Social risks and impacts** of the project positive or negative, direct and indirect, short or long term.

• **Environmental and social management plan** to include mitigation measures, monitoring tools, institutional measures to be undertaken all over the different phases of the project to remove or reduce environmental and social impacts to acceptable levels and finally the cost of the ESMP

• **Summary of impacts**: Predicted adverse environmental impacts and their relationship to social impacts (and any uncertainties about their effects) for which mitigation is necessary should be identified and summarized.

• **Description of mitigation measures**: Each measure should be briefly described in relation to the impact(s) and conditions under which it is required. These should be accompanied by, or referenced to, designs, development activities (including equipment descriptions) and operating procedures and implementation responsibilities. Public consultation should be clearly described and justified.

• **Description of monitoring program**: The ESMP identifies monitoring objectives and specifies the type of monitoring required; it also describes environmental performance indicators which provide linkages between impacts and mitigation measures identified in the ESIA/IEE report - parameters to be measured, methods to be used, sampling location and frequency of measurements, detection limits (as appropriate) and definition of thresholds to signal the need for corrective actions. Monitoring and supervision arrangements should ensure timely detection of conditions requiring remedial measures in keeping with good practice; furnish information and the progress and results of mitigation and institutional strengthening measures; and, assess compliance with national and Bank safeguard policies. Such arrangements should be clearly specified in the project implementation/operations manual to reinforce project supervision.

• For projects involving rehabilitation, upgrading, expansion, or privatization of existing facilities, remediation of existing environmental problems may be more important than mitigation and monitoring of expected impacts. For such projects, the management plan focuses on cost-effective measures to remediate and manage these problems.

• **Legal requirements and bidding and contract documents**: The incorporation of detailed mitigation, monitoring and supervision arrangements into legal conditions and covenants is essential. It is good practice to ensure that implementation of major environmental requirements is linked to disbursement conditions. It is important to translate ESMP requirements into bidding and contract documents to ensure that obligations are clearly communicated to contractors.

• **Institutional arrangements**: Responsibilities for mitigation and monitoring should be defined along with arrangements for information flow, especially for coordination between agencies responsible for mitigation. In particular, the ESMP specifies who is responsible for undertaking the mitigating and monitoring measures, e.g., for enforcement of remedial actions, monitoring of implementation, training, financing, and reporting. Institutional arrangements should also be crafted to maintain support for agreed enforcement measures for environmental protection. Where necessary, the ESMP should propose strengthening the relevant agencies through such actions as: establishment of appropriate organizational arrangements; training; appointment of key staff and consultants; and, arrangements for counterpart funding and on-lending. For projects having significant environmental implications, it is particularly important that there be in the implementing ministry or agency an in-house environmental unit with adequate budget and professional staffing strong in expertise relevant to the project.

• **Implementation schedule**: The timing, frequency and duration of mitigation measures and monitoring should be included in an implementation schedule, showing phasing and coordination with procedures in the overall project implementation/operations manual. Linkages should be specified where implementation of mitigation measures is tied to institutional strengthening and to the project legal agreements, e.g., as conditions for loan effectiveness or disbursement.

• **Reporting**: Procedures for providing information on the progress and results of mitigation and monitoring measures should also be clearly stated. Recipients of such information should include those with responsibility for ensuring timely implementation of mitigation measures and for undertaking remedial actions. In addition, the structure, content and timing of reporting to the Bank should be designed to facilitate supervision and should establish arrangements for the timely receipt of monitoring reports and their forwarding to the Bank’s environment specialists for review and comment.

• **Cost estimates:** These should be specified for both the initial investment and recurring expenses for implementing all measures defined in the ESMP, integrated into the total project costs and factored into financing negotiations. As mitigating costs may occur at points during project implementation or operations, indications of cash flow should be provided. It is important to capture all costs – including administrative, consultancy, and operational and maintenance costs – resulting from meeting required standards or modifying project design.

## Annex L: Labor Management Procedures

## OVERVIEW OF LABOR USE ON THE PROJECT

The project “Supporting Lebanon’s COVID-19 Vaccination and Response for Vulnerable Groups” aims to contribute to the roll out of Lebanon’s National Deployment and Vaccination Plan (NDVP) for COVID-19 vaccines. The LRC, in coordination with the PRCS-Lebanon) and other stakeholders, will foresee activities in all 3 components of the project:

1. Vaccine Awareness and Registration
2. Vaccine Deployment
3. COVID-19 Response

With the aim of increasing the access of vulnerable populations residing in various governorates to information and registration means, under the 1st component, **LRC and PRCS-Lebanon volunteers** will provide door-to-door support with COVID19 preventive measures in place and outreach to disseminate key messages on COVID-19 vaccination. This will allow the registration of Syrian and non-Syrian refugees as well as host community to the vaccination platform online. As part of this project, the LRC will operate the mass vaccination site in Maten area (one mass vaccination site, located in the City Mall – Dora, Metn); thus, providing an improved access to COVID-19 vaccines for the designated period of 2 months (August-September), which operates from 8 AM to 5 PM from Mondays to Fridays, and on weekends when Vaccination Marathons are organized.

Furthermore, in order to enhance accessibility to COVID-19 vaccines, especially for Syrian refugees and non-Syrian refugees, the LRC will deploy mobile vaccination units to various Informal Tented Settlements (ITSs). Moreover, they will be supported by personnel and ambulances from LRC EMS that can assist in post-vaccination monitoring and transportation to hospitals in case any of the beneficiaries develop adverse effects following vaccination. 5 Mobile Vaccination Units (MVUs) will operate 3 times per week from 9 AM to 2 PM conducting 840 campaigns dedicated for refugees and vulnerable communities. Each MVU consists of a driver, 1 doctor, 1 RN, 1 midwife, 1 daily worker, 1 social worker and 1 community volunteer, all of whom are above the age of 18. All the above-mentioned teams are supported by a Project Manager, Environmental and Social Specialist, Financial Manager, Procurement Officer, and a Project Officer.

In terms of COVID-19 response, 4 dispatchers will support the LRC dispatch centers in taking and screening urgent and non-urgent calls, detecting suspected and confirmed COVID-19 cases, and dispatching ambulances during the project period. Additional 15 COVID-19 ambulance teams distributed over all governorates; thus decreasing response times for suspected and confirmed COVID-19 cases from 35 minutes to 25 minutes. In the case of the Palestinian refugees, the LRC ambulance teams and the PRCS-Lebanon hospital and ambulance teams will be coordinated and relay to cover all Palestine camps.

Arcenciel (AEC) is supporting LRC regularly in collecting used PPEs and hazardous, infectious healthcare wastes such as sharps and equipment in order to manage this waste, thus protecting the public health and the environment. Contracts with suppliers for food, PPE, IT and Medical Equipment as well as office supplies and cleaning services have been signed. LRC has an active agreement with AEC regarding the waste management and if needed it will be updated to include the vaccine center and others.

***Number of Project Workers***:

ESS 2 categorizes the workers into: direct workers, contracted workers, community workers and primary supply workers. “Supporting Lebanon’s COVID-19 Vaccination and Response for Vulnerable LRC Groups” would encompass the following categories of workers: direct workers (including community volunteers), contracted workers, and primary supply workers. Community workers are not relevant, because communities are not expected to provide labor as a contribution to the project.

Table 4: Overview of labor use in the Project

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Focus** | **Number of workers** | **Comments** |
| Direct Workers | Project Management Unit | 9 | * 1 Project Manager * 1 Social and Environmental Specialist * 1 Financial Manager * 1 Procurement officer * 1 Monitoring Evaluation and Reporting Officer * 4 Project officers |
| Vaccine Awareness & registration | 375 | * 250 for supporting in registration and awareness in local community * 125 for awareness in the Syrian ITSs |
| Emergency Medical Services | 49 | * 15 ambulance crews each composed of 3 workers * 4 dispatchers |
| Vaccine deployment | 300 | The contracted workers will fill the following positions and will alternate over shifts   * 2 Vaccination Site Supervisors * 4 Information Desk Officers * 6 Emergency Medical Services Teams, each consisting of 3 EMTs * 6 Workflow Facilitators * 20 Registration-Desk: Clerical Staff * 20 Pre-Checklist: Medical Housestaff * 12 Vaccination Station Nurses * 2 Pharmacists (Vaccination Preparation) * 2 Technicians (Vaccination Preparation) * 2 Monitoring Medical Doctors (MDs) * 6 Monitoring Registered Nurses (RNs) * 2 IT technicians * 5 Vaccine outreach crews each consisting of 1 doctor, 1 RN, 1 midwife, 1 daily worker, 1 social worker and 1 community volunteer |
| Contracted Workers | Vaccination center | 10-20 | * Security Guards (Hired by the mall where the vaccination center is located at) * Cleaners (Hired by the mall where the vaccination center is located at) * Waste Management via arc en ciel |
| Primary Supply workers |  | Cannot be determined at this stage | * PPE suppliers |

***Characteristics of Project Workers***: To the extent possible, a broad description and an indication of the likely characteristics of the project workers e.g. local workers, civil servants, national or international migrants, female workers, workers between the minimum age and 18. See section 7 on Age of Employment. The project will implement labor standards and working conditions as per the national law particularly where it applies to equal opportunities and non-discrimination. The employment of Project workers will be based on the principle of equal opportunity and fair treatment, and there will be no discrimination with respect to any aspects of the employment relationship including but not limited to: recruitment requirements; training opportunities; termination of employment; inappropriate treatment or harassment including sexual harassment. Where disabled persons are hired, accessibility will be ensured in terms of provision of wheelchair ramps or elevators, or alternative formats of communication, etc. Men and women will be given equal opportunities relating to all recruitment opportunities under the project. This will apply to hiring of all project workers, in particular the project will ensure equal access to women, men, girls and boys by ensuring that field teams have both male and female members to address the different needs per gender of the beneficiaries.

***Timing of Labor Requirements***:

Direct workers in the project management. The maximum duration of work per week is 48 hours (or equivalent to 8 hours per day based on 6 working days per week) except for agricultural corporations.

In case of emergency, it is permissible to raise the duration of work to 12 hours per day on the condition that the wage or salary for the overtime provided by the wage-earner or salary-earner is 50% higher than the rate of normal hours

***Contracted Workers***: The anticipated or known contracting structure for the project, with numbers and types of contractors/subcontractors and the likely number of project workers to be employed or engaged by each contractor/subcontractor. If it is likely that project workers will be engaged through brokers, intermediaries or agents, this fact should be noted together with an estimate of how many workers are expected to be recruited in this way

## ASSESSMENT OF KEY POTENTIAL LABOR RISKS

***Project activities***:

The Projects activities can be summarized as provide below:

**1st Component: Vaccine Awareness and Registration (coordination between LRC and PRCS Lebanon)**

* Hold community consultations with community leaders and relevant beneficiaries
* Design and disseminate various Risk Communication and Community Engagement (RCCE) interventions
* Develop interactive information dissemination material
* Build the capacity of assigned community members on the registration process
* Establish a feedback mechanism
* Provide door-to-door support and outreach making sure COVID19 preventive measures are incorporated to disseminate key messages on COVID-19 vaccination
* Distribute hygiene kits, flyers and brochures of COVID-19 information, provide awareness sessions to the communities in small groups in cooperation with UNICEF and other NGOs, and make the centers available for the vaccine registration online through providing awareness and guidance for Palestinian refugees in camps (PRCS-Lebanon)

**2nd Component: Vaccine Deployment (LRC)**

* Operate one mass vaccination site for 2 months
* Make use of 5 Mobile Medical Units (MMUs) and transform them into MVUs in 5 ITSs to enhance accessibility to COVID-19 vaccines
* Support vaccination campaigns that are done outside hospitals

**3rd Component: COVID-19 Response**

* Provide prehospital care and transportation to hospitals via LRC EMS teams (LRC)
* Provide treatment of Palestinian refugees COVID-19 patients in their own two hospitals in South and North (PRCS-Lebanon)

***General Key Labor Risks:***

The key potential risks associated with the Project are provided in the Table below.

Table 5: Key Potential Labor Risks associated with the Project

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Risk** | **Key Potential Labor Risks** | **Component** | | | **Likelihood** | | | **Significance** | | |
| **1** | **2** | **3** | **Low** | **Moderate** | **High** | **Low** | **Moderate** | **High** |
| Biological Risk | COVID-19 Infection | x | x | x |  | x |  |  |  | x |
| Exposure to Blood Transmitted Infections |  | x | x | x |  |  | x |  |  |
| Electrical Risk | Improper use of electrical material, unprotected lights |  | x |  |  | x |  |  |  | x |
| Physical Risk | Ergonomic Risks that may result from manual material handling | x | x | x |  | x |  | x |  |  |
| Falls and Slips | x | x | x |  | x |  | x |  |  |
| Safety Risk | Car Accidents | x |  | x |  | x |  |  | x |  |
| Protests and Road Blocks | x | x | x |  |  | x |  | x |  |
| Occupational Health and Safety (OHS) Risks | x | x | x |  | x |  |  | x |  |
| Unfair and/or unclear contract terms and conditions | x | x | x | x |  |  |  |  | x |
| Irregular payment of salaries | x | x | x |  | x |  |  | x |  |
| Discrimination and non-equal opportunities | x | x |  | x |  |  |  | x |  |
| Non-payment, disparity in wages and/or denial of benefits | x | x | x | x |  |  | x |  |  |
| GBV/sexual exploitation and abuse (SEA) | x | x | x | x |  |  |  | x |  |
| Risk of unresolved complaints | x | x | x | x |  |  |  | x |  |
| Personal Disputes with Beneficiaries | x | x | x | x |  |  | x |  |  |

## BRIEF OVERVIEW OF LABOR LEGISLATION: TERMS AND CONDITIONS

The national labor legislation is governed by **the Labor Law No.23 dated September 1946** and its modifications that will apply to all the Project workers. A brief overview of the legislation is summarized below:

**On employment of children:**

* It is absolutely forbidden to set to work adolescents who have not yet completed their thirteenth year of age. An adolescent may only begin to work after a medical examination to ascertain that he can carry out the work for which he was hired.
* It is forbidden to set adolescent to work in jobs too strenuous or detrimental to health before they have completed their fifteenth year of age. It is also forbidden to set work adolescents before they have completed their sixteenth year of age in jobs of a dangerous nature, or which represent a threat to life, health or public morals of the circumstances in which they are carried out.
* Every adolescent employed in an establishment for at least one year shall be entitled to an annual holiday of 21 days with full pay.

A child over 14 and under 18 may be employed provided the following conditions apply:

* The work does not jeopardize the health, safety, or morals of the children.
* An appropriate risk assessment is conducted prior to the work commencing.
* The employer conducts regular monitoring of health, working conditions, and hours of work and other requirements of the ESS2.

**As per ESS2, the minimum age of employment or engagement in connection with the project shall be 14 but within the context of the COVID-19 pandemic, the minimum age that shall be required under the Project is 18 years.**

**On employment of women:**

* The employer may not discriminate between working men and women with regards to: type of work, amount of wage or salary, employment, promotion, professional qualification, and apparel.
* Pregnant women working in all categories are entitled to a delivery holiday of seven weeks, comprising the periods before and after delivery, on presentation of a medical certificate stating the presumed date of delivery. The wage or salary shall be paid in full during the delivery holiday.
* It is forbidden to dismiss or to serve notice of dismissal on an expectant woman and woman on maternity leave, unless she is convicted of having been employed elsewhere in the course of the maternity leave.

**On hours of works and overtime**

* The maximum duration of work per week is 48 hours (or equivalent to 8 hours per day based on 6 working days per week) except for agricultural corporations.
* In case of emergency, it is permissible to raise the duration of work to 12 hours per day on the condition that the wage or salary for the overtime provided by the wage-earner or salary-earner is 50% higher than the rate of normal hours.

**On Wages and benefits**

* The minimum pay must be sufficient to meet the essential needs of the wage-earner or salary-earner and his family. Pay is not to be less than the official minimum pays.

**On leaves and rest per week**

* Every wage-earner or salary-earner employed in an establishment for at least one year is entitled to an annual leave of 15 days with full pay.
* Every wage-earner or salary-earner is entitled to a sick leave in accordance with his period of service. The wage-earner or salary-earner may not be dismissed during sick leave.
* Whenever the duration of work exceeds six non-stop hours for men and five non-stop hours for women, the employer is required to allow these wage-earners and salary-earners in the middle of the day, a rest-time which is not to be under one hour. A rest-time of unbroken nine hours is to be allowed wage-earners and salary-earners every twenty-four hours, except in cases where the circumstances of work compel otherwise.
* All wage-earners and salary earners are to be granted a weekly rest which must not be under thirty-six unbroken hours. The employer is to select the day of this rest or distribute it among wage-earners and salary-earners in sympathy with the requirements of the work.

**On termination of employment**

* The employer and the worker shall each have a right to terminate at any time the work of unspecified duration concluded between them. The aggrieved party shall be entitled to claim indemnity.
* The dismissal notice may not be served on the expectant mother, the woman on delivery leave and any wage-earner or salary-earner on ordinary holiday or on sick leave.

**On workers’ organizations**

* In every category of professions, employers on one hand, and wage-earners or salary-earners may set up a special trade union. This trade union is of juridical entity and is qualified to initiate legal proceedings.
* Any employer or wage-earner is free to adhere to a trade union or not.
* The trade union management can be set up as indicated in the national Law

**On prevention of sexual harassment**

* A standalone Law no. 205 criminalizing sexual harassment was passed in December 2020. This law targets all types of sexual harassment, in any setting, and especially in the workplace.
* Per the law, perpetrators can be sentenced to up to two years in prison and fined up to 20 times the value of the minimum wage, which stands at 675,000 Lebanese pounds, according to Lebanese rights group Legal Agenda.
* The punishment increases between six months and two years in prison and a fine of between 10 and 20 times the minimum wage if there is a “relationship of dependency” or work between the perpetrator and the victim; if the perpetrator uses their position of power over a colleague; or if the harassment occurs at a range of state institutions, universities, schools or on transport services.
* Maximum penalties are reserved for harassment in the workplace, public institutions or educational facilities.
* In additions, relevant measures as per the World Bank’s Good Practice Note on addressing sexual exploitation and abuse and sexual harassment (SEA/SH)[[32]](#footnote-33) will be implemented as per the provisions in the ESCP.

**On access to toilet and restroom**

All workers will have access to toilet and restroom facilities – they are either the LRC staff or the contracted workers which include:

* Security Guards (Hired by the mall where the vaccination center is located at)
* Cleaners (Hired by the mall where the vaccination center is located at)
* Waste Management via arc en ciel

## BRIEF OVERVIEW OF LABOR LEGISLATION: OCCUPATIONAL HEALTH AND SAFETY

Decree No. 11802 dated 2003 is pursuant to the International Labour Organization (ILO) Conventions that has been signed by the Government of Lebanon. It sets out the key aspects regulating occupational prevention, safety and Health in all enterprises subject to the Code of Labour. The Decree comprises the following chapters:

* Chapter 1: Prevention and safety
* Chapter 2: Health
* Chapter 3: Safe use of chemicals at work
* Chapter 4: Prevention from the dangers of working with benzene
* Chapter 5: General provisions

The said decree sets that the employer should:

* Install safety provisions and measures to prevent any risks to the health and safety of the workers and limits the maximum time allowed to workers’ exposure to din, noise and vibrations and limit the period of exposure as per the limits set in the said Decree.
* The employer shall provide the workers with the appropriate personal prevention and protection uniforms and gears, ensure their maintenance and preserve them in good conditions for later use (if applicable), without the workers being liable to pay any costs.
* The employer shall take the general measures of health protection in the workplace, especially in relation to safety, lighting, ventilation, aeration, drinking water, lavatories, evacuation of dust and smoke, and hygiene measures to protect workers from pollution by pathological biological factors.
* Workers shall be given sufficient and appropriate information on the risks related to their work.

**COVID-19 Specific OHS Measures**

These provisions will apply for all categories of project workers:

* The health conditions of the workers will be assessed prior to engaging them in the Project, and sick workers will be refused entry to the workplaces.
* Adherence to the most recent Government and WHO protocols guidelines related to COVID-19.
* Trainings for workers on hygiene and other preventative measures will be carried out, and a communication strategy for regular updates on COVID-19.
* Adjustments will be made to work practices to reduce the number of workers and increase social distancing following the government and WHO guidelines procedure if a worker becomes sick.
* Adequate supplies of Personal Protective Equipment (such as masks); hand washing facility, soap and/or alcohol-based sanitizer, will be made available at the worksites.

While preparing the OHS plans involving labor, the following World Health Organization (WHO) guidance materials will be used:

* WHO IPC interim guidance: For guidance on Infection Prevention and Control (IPC) strategies for use when COVID-19 is suspected. <https://www.who.int/publications/i/item/10665-331495>.
* WHO interim guidance on use of PPE for COVID-19: For rational use of Personal Protective Equipment (PPE). <https://www.who.int/publications/i/item/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages>.
* WHO guidance getting your workplace ready for COVID-19: <https://www.who.int/docs/default-source/coronaviruse/getting-workplace-ready-for-covid-19.pdf>.
* WHO interim guidance: For guidance on water, sanitation and health care waste relevant to viruses, including COVID-19. <https://apps.who.int/iris/bitstream/handle/10665/331846/WHO-2019-nCoV-IPC_WASH-2020.3-eng.pdf>.

LRC will ensure the day-to-day compliance with National OHS legislations, WB OHS requirements[[33]](#footnote-34) and COVID-19 specific OHS measures (as per above) and notify the Bank within 48 hours after learning of the incident or accident. A report would be provided within a timeframe acceptable to the Bank, as requested (no more than 10 working days after incident notification). This notification/reporting system shall remain in place throughout Project as detailed in the cleared and disclosed ESCP.

## RESPONSIBLE STAFF

The project “Supporting Lebanon's COVID-19 Vaccination and Response for Vulnerable Groups” is managed by a Project Manager over the whole period (16 months) of implementation who is supported by an Environmental and Social Specialist, a Financial Manager, a Procurement Officer and 3 Project Officers. Note that these specialists will be established before project activities start and will be maintained throughout the project’s duration.

Table 6: Key Staff and Relevant role

|  |  |
| --- | --- |
| **Position** | **Main Role** |
| Project Manager | Plans and oversees project implementation, coordinates, reallocates resources, monitors the progress of the project, reports to stakeholders and prepares budget with the support of the financial manager |
| Environmental and Social Specialist | Provides technical support to ensure quality implementation and capacity building to the team. Monitors environmental risks and impacts throughout project implementation, and develops a set of risk mitigation action plans |
| Financial Manager | Prepares the budget of the project, analyzes project financial activities, reviews, prepares and shares financial reports, and conducts financial monitoring of project spending |
| Procurement Officer | Controls and monitors expenses against approved budgets, sets and plans payment terms, negotiates with vendors and suppliers, reviews and updates the inventory |
| Monitoring Evaluation and Reporting Officer | Ensures proper monitoring of the project activities and coordinate with relevant staff and volunteers to prepare timely reports |
| Project Officers | Plans and coordinates project activities under the supervision of the project manager, supports the project manager in the monitoring, reporting, administrative functions of the project. |

## POLICIES AND PROCEDURES

1. **Occupational Health and Safety (OHS) Risks**: As mentioned in chapter 2, the main OHS risk is COVID-19 infection risk. The project will ensure that the World Health Organization (WHO) COVID-19 safety measures and the national requirements announced and published on COVID-19 preventive measures are adhered to by all project workers.
2. **Unfair and/or unclear contract terms and conditions** **including wages, overtime, compensation, benefits and working hours**. All Direct Workers will be provided with clear and understandable terms and conditions of employment in writing. For the Contracted workers, clauses will be included in all project procurement documents to ensure that terms and conditions of employment are being provided according to the requirements of ESS2 and/or national law. This includes providing them with signed contracts stating clearly the duration of the contract, leave entitlements, conditions of contract termination including receiving written notices of termination, disciplinary procedures that are applicable, housing and accommodation provisions and allowance where applicable, payment, their rights related to hours of work, fair wages, overtime, compensation, benefits as stated in the national law as well as those arising from the requirements of ESS2. Workers will be presented with details of grievance procedures, including the different channels they can resort to and the processes for escalation where necessary (refer to section 9 for details about the workers’ GRM which will be adopted). Where necessary, the project will ensure that working conditions and terms of employment are orally communicated and explained.
3. **Irregular payment of salaries:** Monitoring systems will be put in place to ensure that all types of Project workers will be properly paid on a regular basis and compensated for longer working hours and certain shifts which may need to be paid at a higher hourly rate as per applicable legislation (e.g. night shifts). Workers will also be presented with details of grievance procedures, including the different channels they can resort to and the processes for escalation where necessary.
4. **Discrimination and non-equal opportunities:** The project will implement labor standards and working conditions as per the national law particularly where it applies to equal opportunities and non-discrimination. The employment of Project workers will be based on the principle of equal opportunity and fair treatment, and there will be no discrimination with respect to any aspects of the employment relationship including but not limited to recruitment requirements; training opportunities; termination of employment; inappropriate treatment or harassment including sexual harassment. Where disabled persons are hired, accessibility will be ensured in terms of provision of wheelchair ramps or elevators, or alternative formats of communication, etc. Men and women will be given equal opportunities relating to all recruitment opportunities under the project. This will apply to hiring of all project workers. The workforce GRM will be communicated to all workers as detailed in section 9 and will be used for noncompliance monitoring. The project will also provide all measures necessary for protecting vulnerable groups of workers such as the disabled, and women. Codes of conduct will be developed which will include provisions on sexual exploitation and abuse and sexual harassment and safety. Induction trainings and refresher trainings will be provided for all workers.
5. **Non-payment, disparity in wages and/or denial of benefits**: Workers will be provided with signed contracts stating clearly the duration of the contract and the terms and conditions of the contract including payment, their rights related to hours of work, fair wages, overtime, compensation, benefits as stated in the national law as well as those arising from the requirements of ESS2. Workers will also be presented with details of grievance procedures, including the different channels they can resort to and the processes for escalation where necessary.
6. **GBV/sexual exploitation and abuse (SEA):** Codes of conduct (CoC) will be developed which will include provisions on Sexual and gender-based violence (SGBV) and safety. Induction trainings and refresher trainings will be provided for all workers on the purpose of the CoC and the importance of adhering to it. Workers will be presented with details of grievance procedures, including the referral pathways in the event of SEA/SH related complaints. Project workers will also be made aware of the serious consequences in the event that the CoCs are violated, up to and including dismissal, or referral to legal authorities (refer to section 9 for details about the GRM).
7. **Risk of unresolved complaints:** The project will ensure that an efficient GRM system is in place. The GRM should be well-communicated and easily accessible for all project workers to raise any concerns. Further details in the GRM system are described in section 9.

The procurement of needed PPE is planned beforehand, based on LRC needs, for the proper implementation of activities. Additional stock is available in order not to run out during operations. Moreover, the design of the project prioritizes the provision of vaccines to vulnerable individuals as per the project proposal in vulnerable areas in Lebanon. Additionally, the vaccination roll-out plan has been set by the MOPH and is communicated to beneficiaries throughout awareness sessions and on public social media platforms. LRC staff and volunteers regularly receive guidance and trainings on advice and recommendations on the specific of COVID-19 response and vaccination in order to provide the best quality of service. Furthermore, the medical staff is trained on the vaccine storage, handling, administration and waste management processes.

Through door-to-door and group awareness sessions, LRC and PRCS-Lebanon staff and volunteers will reach communities in fragile settings targeting all age, sex, disabilities and nationality groups in order to contribute to greater awareness on vaccination programs.

In coordination with the MOPH, standards have been set and are abided by LRC Focal people in site/space management in order to ensure abidance by safety checklists and to reduce the risk of infection. Further coordination with the MOPH on receiving and transporting vaccines has been set. LRC will also be responsible for the collection of vaccine samples from determined locations and will ensure implementation of immunization practices as required by national legislation. The proposal also highlights the communication component set for the response such as, visual materials, information education and communication materials, as well as complaints and feedback mechanisms that will be utilized for efficient two-way communication.

**Please refer to the below attached zip file:**

1. Emergency Medical Services Policy
2. Blood Transfusion Services Policy
3. Medico-Social Services Policy
4. Disaster Management Sector Policy

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## AGE OF EMPLOYMENT

As per LRC employment processes, the minimum age of employment of workers is 18 years old and ID is requested, provided and verified during the recruitment process for employees and volunteers. Moreover, the LRC also has a Code of Conduct (COC) for Child Protection to ensure safety and the safeguarding of children’s rights, especially in hazardous environments.



## TERMS AND CONDITIONS

The employments of workers shall follow the terms and conditions set by the Lebanese Labour Law No. 23 dated September 1946 described in section 3 above and the following conditions. In case of discrepancy, the following conditions will prevail, being more stringent. Where the national legislation diverges from ESS2, the Project shall abide by the requirement of ESS2 and by the terms and conditions provided below.

* + - All the Project workers should be informed on the hours of work per days and their wages before the start of their works. Provisions in any contract must be added that project workers should not be asked to work more than 48 hours per week, in line with Lebanese labour law.
* All the Project workers will be paid above the minimum wages under national law as per their respective qualifications and positions, including migrants and refugees.
  + - Any discrimination on the basis of personal characteristics unrelated to inherent job requirements, in particularly with regards to compensation, recruitment, working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices is prohibited.
    - Recruitment procedures will transparent, public and non-discriminatory with respect to ethnicity, religion, sexual orientation, disability, and gender.
* Any discrimination on the basis of gender is prohibited and adopted measures on harassment include:
  + The adoption of a zero-harassment policy for all the Project workers. The zero-harassment policy can be part of the workers Code of Conduct developed by the project. This policy should be communicated to all workers through various mediums and formats.
  + A requirement that the project will provide extra induction for female workers to ensure they are aware of the project’s policies on harassment and intimidation.
  + A requirement for the establishment of a GM and / or confidential advisor to be used specifically for allegations of sexual harassment.
    - The Project will not restrict project workers who are not entitled to form unions under national law to form other committees to represent their interests.
    - All project contracts with contractors and subcontractors will contain the requirement that all workers must be of the age of 18 or more.
    - The Project will make sure a workers’ GM is in place and it will include:
  + Procedure to receive grievances such as comment/complaint form, suggestion boxes, email, and telephone line,
  + Stipulated timeframes to respond to grievances,
  + A register to record and track the timely resolution of grievances, and
  + Responsible office/department to receive, record and track resolution of grievances.

It is to be noted that there is a general complaint form on the LRC website, but a complaint form specific for the grievances of the workers will be developed before the start of the implementation activities.

All the above-mentioned requirements should be cascaded to participating hospitals and vaccination centers.

LRC’s E&S Specialist will monitor on the proper implementation of the terms and conditions

## GRIEVANCE MECHANISM

Complaints from all project workers identified and subject to this LMP will be managed through two main mechanisms as indicated below:

1. Call Center - The existing call center with the designated hotline 1760 was put in service to cover the COVID-19 related issues as well as answering questions and receiving complaints. This same call center will also be designated to receive complaints and grievances from Project’s workers.
2. LRC Emergency Medical Services Complaint Management Policy

LRC shall maintain, throughout the Project implementation, and publicize the availability of a GM, in form and substance satisfactory to the WB, to hear and determine fairly and in good faith all complaints raised by the Project’s workers in relation to the Project and take all measures necessary to implement the determinations made by such mechanism in a manner satisfactory to the Bank. The GM should be widely communicated to all workers, listed in Annex L – Section 1 at the time of recruitment. The 1760 hotline shall be adapted in a way to be inclusive to all workers.

The adaptation of the 1760 hotline to receive Project worker’s complaints and grievances comprises:

* Facilitation of the process to allow all workers’ levels (LRC direct workers, contracted workers and primary supply workers listed in Annex L section 1) to raise complaints. The GM should have a channel accessible to all the categories of workers.
* Creation of different GM logs specific for the Project workers’ grievances and all workers’ complaints will be documented in this GM log
* The complainants should be given the possibility to remain anonymous if they do not wish to reveal their identity. Anonymous grievances will be treated equally as other grievances, whose origin is known. There will be no discrimination against those who express grievances, and any grievance will be treated confidentially.
* The aim is to resolve or respond to the enquiries within 5 days. Where more follow up is required and for written enquiries, the endeavor is to reply within 15 days from the 1st call. Where more time is required or for complex enquiries, the enquirer will be kept updated on the progress.
* When a worker’s related complaint is received by the operator of the call center, it should be directly elevated to the CFO to gather, record and examine the case. The respondents (operators and CFO) shall be regularly trained on how to handle the worker’s grievances.
* The first resolution attempt shall be at Line manager-employee level. If the grievance is not resolved, then it shall be escalated to the HR. A mediation should take place that should result in a resolution. In the event when the complainant is not satisfied with the resolution, he can escalate it to the LRC Director General Mr. Georges Kettaneh ([georges.kettaneh@redcross.org.lb)](mailto:georges.kettaneh@redcross.org.lb)). Once all possible means to resolve the complaint have been proposed and if the complainant is still not satisfied, then they should be advised of his right to legal recourse.
* During implementation of the Project, a summary of the grievances received will be included in the bi-annual report to the WB.
* LRC is working on a referral system with other NGOs for some specific complaints such as SEA/SH. In fact, the LRC has an existing referral mechanism for sensitive complaints especially SEA and SH. LRC’s PSEA/H focal persons have established procedures to handle any SEA/SH complaint. These focal persons have access to updated referral pathways of the existing organizations in Lebanon and are responsible for referring and linking the survivors to the different service providers in a timely and safe manner.
* Workers will also be linked with the referral pathway after obtaining their consent based on the principles of confidentiality and anonymity and survivor centric approach for SEA/SH. In the event of such incidents, the bank will need to be informed within 48 hours as per the cleared and disclosed ESCP.
* The CFO shall coordinate with the PMU E&S specialist and provide him/her with all details necessary for monitoring and reporting purposes.

## CONTRACTOR MANAGEMENT

LRC will make sure that contractual provisions related to the management of labor issues, including OHS are put in place for the participating hospitals, vaccination centers and waste management contractor and that all Project workers are informed about LRC GM.

LRC’s E&S Specialist will manage and monitor the implementation of E&S mitigation measures and the performance of the participating hospitals and vaccination centers in this regard.

## COMMUNITY WORKERS

Within this project, LRC will not hire community workers.

## PRIMARY SUPPLY WORKERS

LRC will be responsible for including the same conditions on EHSG with its primary suppliers. These conditions shall be added to their agreements with the LRC. The primary suppliers include and are not limited to food suppliers, PPE, IT, and Medical Equipment as well as office supplies and cleaning services.

## Annex M: Agreement for Medical Waste Collection between PRCS and Arcenciel





1. https://www.moph.gov.lb/userfiles/files/Prevention/COVID-19%20Vaccine/Lebanon%20NDVP-%20Feb%2016%202021.pdf [↑](#footnote-ref-2)
2. https://ourworldindata.org/covid-vaccinations?country=OWID\_WRL [↑](#footnote-ref-3)
3. [Assessment of Groundwater Resources of Lebanon | UNDP in Lebanon](https://www.lb.undp.org/content/lebanon/en/home/library/environment_energy/assessment-of-groundwater-resources-of-lebanon.html) [↑](#footnote-ref-4)
4. MoE, UNHCR, UNICEF, UNDP (2020), SOER Report, Lebanon State of the Environment and Future Outlook Turning the Crises into opportunities [↑](#footnote-ref-5)
5. MoE, UNHCR, UNICEF, UNDP (2020), SOER Report, Lebanon State of the Environment and Future Outlook Turning the Crises into opportunities [↑](#footnote-ref-6)
6. Abi Saleh et al., 1996 [↑](#footnote-ref-7)
7. <https://www.dandc.eu/en/article/syrians-living-lebanons-informal-refugee-settlements-lack-proper-infrastructure> and <https://www.unhcr.org/lb/wp-content/uploads/sites/16/2018/01/VASyR-2017.pdf> and <https://www.unrwa.org/where-we-work/lebanon> [↑](#footnote-ref-8)
8. CAS and the World Bank (2022), Lebanon Multidimensional Poverty Index 2019 available on <http://www.cas.gov.lb/images/PDFs/Poverty/Lebanon%20MPI%202019%20Report%20%20EN.pdf> [↑](#footnote-ref-9)
9. [NDVP Lebanon (moph.gov.lb)](https://www.moph.gov.lb/userfiles/files/Prevention/COVID-19%20Vaccine/Lebanon%20NDVP-%20Feb%2016%202021.pdf) [↑](#footnote-ref-10)
10. https://www.worldbank.org/en/news/feature/2021/06/18/vaccinating-refugees-lessons-from-the-inclusive-lebanon-vaccine-roll-out-experience [↑](#footnote-ref-11)
11. Idem [↑](#footnote-ref-12)
12. https://www.MOPHMOPH.gov.lb/en/Pages/3/20553/accreditation-standards-for-hospitals-in-lebanon-january2019#/en/view/20553/accreditation-standards-for-hospitals-in-lebanon-january-2019 [↑](#footnote-ref-13)
13. https://ourworldindata.org/covid-vaccinations?country=OWID\_WRL [↑](#footnote-ref-14)
14. https://www.worldbank.org/en/news/feature/2021/06/18/vaccinating-refugees-lessons-from-the-inclusive-lebanon-vaccine-roll-out-experience [↑](#footnote-ref-15)
15. https://climateknowledgeportal.worldbank.org/country/lebanon/climate-data-historical#:~:text=Lebanon%20has%20a%20Mediterranean%2Dtype,35%C2%B0C%20in%20August. [↑](#footnote-ref-16)
16. MoE, UNHCR, UNICEF, UNDP (2020), SOER Report, Lebanon State of the Environment and Future Outlook Turning the Crises into opportunities [↑](#footnote-ref-17)
17. MoE, UNHCR, UNICEF, UNDP (2020), SOER Report, Lebanon State of the Environment and Future Outlook Turning the Crises into opportunities [↑](#footnote-ref-18)
18. [SNC Book 2.indd (moe.gov.lb)](https://climatechange.moe.gov.lb/viewfile.aspx?id=67) [↑](#footnote-ref-19)
19. <https://www.dandc.eu/en/article/syrians-living-lebanons-informal-refugee-settlements-lack-proper-infrastructure> and <https://www.unhcr.org/lb/wp-content/uploads/sites/16/2018/01/VASyR-2017.pdf> and <https://www.unrwa.org/where-we-work/lebanon> [↑](#footnote-ref-20)
20. CAS and the World Bank (2022), Lebanon Multidimensional Poverty Index 2019 available on <http://www.cas.gov.lb/images/PDFs/Poverty/Lebanon%20MPI%202019%20Report%20%20EN.pdf> [↑](#footnote-ref-21)
21. https://reliefweb.int/report/lebanon/impact-covid-19-sgbv-situation-lebanon-inter-agency-sgbv-task-force-lebanon-may-2020 [↑](#footnote-ref-22)
22. Some wastewater treatment plants in the Country are operational and efficient and other are not. The assessment of the situation and alternative mitigation measures to address this issue are beyond the scope of this Project [↑](#footnote-ref-23)
23. [https://www.MOPHMOPH.gov.lb/userfiles/files/Prevention/COVID-19%20Vaccine/Lebanon%20NDVP-%20Feb%2016%202021.pdf](https://www.moph.gov.lb/userfiles/files/Prevention/COVID-19%20Vaccine/Lebanon%20NDVP-%20Feb%2016%202021.pdf) [↑](#footnote-ref-24)
24. https://www.unescwa.org/news/escwa-warns-three-quarters-lebanon%E2%80%99s-residents-plunge-poverty [↑](#footnote-ref-25)
25. https://communityengagementhub.org/resource/study-on-perceptions-of-risk-communication-and-community-engagement-for-covid-19-in-lebanon/ [↑](#footnote-ref-26)
26. Available on https://www.moph.gov.lb/userfiles/files/News/Leb%20nCoV%20Strategic%20Response%20Plan%20MARCH%202020-converted.pdf [↑](#footnote-ref-27)
27. Proposal submitted on April 15th 2014 by the three committees of the ESPISP-II project, financed by the World Bank. Ref.: <https://www.MOPHMOPH.gov.lb/userfiles/files/Programs%26Projects/ESPISP%20II/HospitalPerformanceContracting2014.pdf>. This id the most recent document available in this regard [↑](#footnote-ref-28)
28. The results mentioned in this document are transitory and will be updated upon completion of the patient satisfaction survey. [↑](#footnote-ref-29)
29. Pfizer’s proposed donation of the 600,000 doses for registered refugees living in Lebanon will likely use similar deployment mechanisms with slight variations, but the costing of this modality is yet to be conducted as the details are still to be worked out. [↑](#footnote-ref-30)
30. One working group is specifically assigned this task. [↑](#footnote-ref-31)
31. Or any pharmacologic alternative [↑](#footnote-ref-32)
32. World Bank Good Practice Note on Sexual Exploitation and Abuse and Sexual Harassment available at this link [↑](#footnote-ref-33)
33. <https://www.ifc.org/wps/wcm/connect/1d19c1ab-3ef8-42d4-bd6b-cb79648af3fe/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=ls62x8l> [↑](#footnote-ref-34)