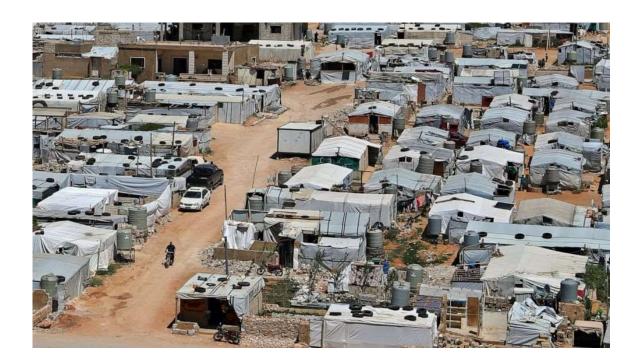
Emergency Response Plan for Vaccine-Preventable Disease Outbreaks in Refugee Camps

Lebanon



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Preface

Lebanon is home to nearly 1.5 million refugees, accounting for approximately one-quarter of their total population. They have more refugees per capita than any other country in the world. Due, in part, to their initial open-border policy, Lebanon has experienced several vaccine-preventable diseases (VPD) outbreaks linked to the influx of refugees into their country. The massive flow of refugees exacerbates the transmission of infectious diseases, and the disruption of routine immunization services further fuels the transmission of vaccine-preventable diseases. Many VPDs are now endemic in Lebanon, including measles and influenza; further outbreaks of these and other diseases present both a threat and opportunity for improvement in the public health of

Lebanon. In addition to the mass population movement, the COVID-19 pandemic also greatly contributed to the decline in vaccination coverage as resources were diverted toward the pandemic response.

The Lebanese Ministry of Public Health (MoPH) is dedicated to building "an integrated, people-centered, health system that promotes and sustains the highest attainable health status of the population, through ensuring universal health coverage, while addressing the social determinants of health."2 Various United Nations (UN) agencies including the UN High Commissioner for Refugees (UNHCR), the UN International Children's Emergency Fund (UNICEF), and the International Organization for Migration (IOM) are also dedicated to the support of refugees across They have joined non-governmental organizations (NGOs) to develop initiatives to boost vaccine awareness, decrease vaccine hesitancy, and assist in the registration process.3 However, unmet refugee needs are still dire as there are many challenges associated with financing and building awareness.



Figure 1: Map of Lebanon and the surrounding region

A recent survey by the MoPH has found that 37% of non-Lebanese respondents stated that they do not think the COVID-19 vaccine is safe.⁴ Common barriers to refusing to receive the COVID-19 vaccine include concerns over long-term side effects, shortened clinical trials, the effects of new technologies, and short-term side effects.⁴ Meanwhile, it was found that those with a higher knowledge scale, who live in an urban area, and received or wanted to receive an influenza vaccine, were positive predictors of COVID-19 vaccine acceptance.⁵ Therefore, it's necessary to improve the knowledge of COVID-19 vaccines through

education and awareness programs, especially in urban areas, to optimize vaccine acceptance and increase vaccination rates among both the Lebanese population and refugees.



Figure 2: Map of UNHCR Presence in Lebanon

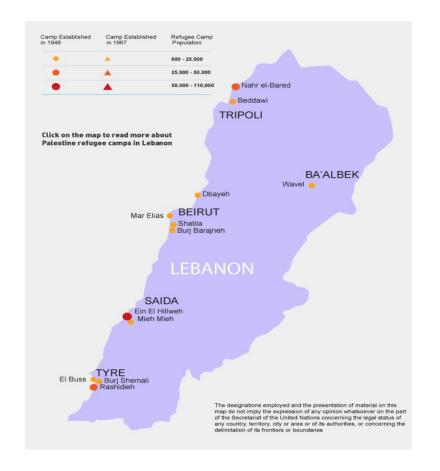


Figure 3: Map of Refugee Camps in Lebanon

Signature Page

UNHCR Field Officer 1	Date
UNHCR Field Officer 2	 Date
Representative, Lebanon Ministry of Health	Date
Representative, International Federation of Red Cross and Red Crescent Societies (IFRC)	Date
Representative, International Organization for Migration (IOM)	 Date
Field Liaison Officer, UNICEF Lebanon	

Mission Statement

The United Nations Refugees Agency, UNHCR, is mandated by the United Nations to lead and coordinate international action for the worldwide protection of refugees and the resolution of refugee problems.⁶ UNHCR's primary purpose is to safeguard the rights and well-being of refugees. In its efforts to achieve this objective, UNHCR strives to ensure that everyone can exercise the right to seek asylum and find safe refuge in another State, and to return home voluntarily.⁶ By assisting refugees to return to their own country or to settle permanently in another country, UNHCR also seeks lasting solutions to their plight.

Statement of Purpose

The purpose of this plan is to reduce the burden of vaccine-preventable diseases among refugees present in Lebanon, through vaccination campaigns designed to improve education and socio-cultural acceptance of vaccinations. Novel viruses are increasing in virulence and mutations as the COVID-19 pandemic continues, and large migrations of people provide a unique opportunity for such viruses to spread quickly, resulting in death or chronic conditions. In particular, the residents and refugees of the Bekaa and Mount Lebanon regions, including the capital of Beirut, (see *Figure 2*) are highly vulnerable populations, not only to the Sars-CoV-2 virus but also to other infectious viruses, such as Measles, Mumps, and Hepatitis A. This plan will guide public health organizations in creating vaccination campaigns to encourage these targeted populations to participate in vaccination programs. The campaign will consist of community education on viruses, including how they spread, information on vaccination safety and efficacy, and education about vaccination schedules and how to stay up to date on doses.

Authorities

Refugees in Lebanon are bound by the 1962 Law Regulating the Entry and Stay of Foreigners in Lebanon and their Exit from the Country. The law contains a limited number of provisions on the right to seek asylum and the issuance of identity cards but remains barely implemented. Due to Lebanon's fears and concerns surrounding the issue of permanent settlement generated by the Palestinian issue, Lebanon labels refugees as displaced persons and asserts that it is neither a country of asylum nor a final destination for refugees. ⁹

Definitions

Vaccine-preventable diseases (VPDs): An infectious disease that can be prevented with an existing vaccine. According to the World Health Organization, vaccine-preventable diseases include:

- Diphtheria
- Hemophilus influenzae type b (Hib)
- Hepatitis B
- Human papillomavirus (HPV)
- Influenza
- Measles and rubella
- Mumps
- Pertussis
- Pneumococcal disease
- Poliomyelitis (polio)
- Rotavirus
- Tetanus
- Tuberculosis

Refugee: a person who has been forced to flee their country of residence in order to escape war, violence, conflict, or persecution and has crossed an international border to find safety in another country

Endemic: The regular presence of a disease in a population within a geographic area.

Outbreak: A sudden increase of disease occurrences within a specific location and period of time.

United Nations High Commissioner for Refugees (UNHCR): A United Nations agency dedicated to protecting the rights of refugees, displaced communities, and stateless people.

United Nations International Children's Emergency Fund (UNICEF): A United Nations agency that provides humanitarian assistance to children worldwide.

International Organization for Migration (IOM): A United Nations agency that is committed to promoting humane and orderly migration for the benefit of all.

Non-Governmental Organizations (NGO): A not-for-profit organization independent from the government that promotes economic growth and development, human rights, and/or social progress.

Communications Plan

Internal Communication

The Lebanon Ministry of Public Health (MoPH) should follow the steps taken by the UNHCR during the COVID-19 pandemic response to increase awareness of VPDs, vaccine safety, and vaccination schedules among residents. They need to be transparent about the campaign and ensure that it's accessible to the population and communicated effectively. Social media, schools, and primary care providers should be utilized for community outreach. Public health volunteers can hold community training seminars regarding the dangers of VPD outbreaks among unvaccinated individuals, education on personal hygiene to reduce transmission of VPDs, and safety of vaccinations.

External Communication

The Lebanon MoPH should work with the UNHCR, UNICEF, Red Cross, and the International Organization for Migration to implement the aforementioned strategies among refugee populations. Communications within and across these organizations will ensure that vaccination sites can be set up at borders and in cities with the most refugees as well as ensure the allotment of vaccination supplies, such as the vaccines themselves, pamphlets about vaccine safety and schedules, and volunteers to distribute such information ¹⁰.



Figure 4: UNHCR COVID-19 Response in Lebanon

Mutual Aid Agreement

UNHCR's Executive Committee and the UN General Assembly have authorized involvement with other groups. These include former refugees who have returned to their homeland; internally displaced people; and people who are stateless or whose nationality is disputed. The Office seeks to reduce situations of forced displacement by encouraging states and other institutions to create conditions which are conducive to the protection of human rights and the peaceful resolution of disputes. In all of its activities, it pays particular attention to the needs of children and seeks to promote the equal rights of women and girls. The Office works in partnership with governments, regional organizations, international and non-governmental organizations. It is committed to the principle of participation, believing that refugees and others who benefit from the organization's activities should be consulted over decisions which affect their lives.

UNHCR maintains strategic partnerships with more than 900 partners including non-governmental organizations (NGOs), governmental institutions and United Nations agencies. About 40 percent of annual expenditure is entrusted to partners for undertaking programs or projects to provide protection and solutions to people forced to flee.

Immediate Supporting Agencies of this Agreement are

- 1. Lebanon Ministry of Health
- 2. International Federation of Red Cross and Red Crescent Societies (IFRC)
- 3. International Organization for Migration (IOM)
- 4. UNICEF Lebanon

Concept of Operations

Overview

This operational plan consists of preparation and response strategies to mitigate negative health outcomes in the event of vaccine-preventable disease (VPD) outbreaks and epidemics among refugee camps in Beirut, Lebanon. VPDs in the country have been linked to the migration of refugees into the cities, and due to poor public health infrastructure, the risk for outbreaks has been exacerbated by vaccine hesitancy and lack of education on the dangers of VPDs among Lebanon citizens as well as refugees. Recent surveys have concluded that more than one-third of non-Lebanese refugees feel the COVID-19 vaccine is unsafe, ⁴ while those who live in urban areas with higher knowledge scales and have received the influenza vaccine have accepted the COVID-19 vaccine. ⁵

Since the Syrian crisis in 2011, the frequency of VPD outbreaks in Lebanon has increased, with incident rates for both vaccine-preventable and not vaccine-preventable infectious diseases, including Hepatitis A, B, and C, Measles, Mumps, Salmonella, Brucellosis, Tuberculosis, and Leishmaniasis, increasing periodically with the influx of refugees. ⁹ For example, there had been less than 10 annual cases of measles in 2012 in Lebanon but 1,760 cases in 2013, with 13% of cases being Syrian refugees and children less than 10 years of age representing over three-

quarters of the cases.⁹ Immunization campaigns led by the Lebanon MoPH and UNICEF had temporarily prevented further outbreaks, but by 2018, the surge of measles cases resumed, highlighting the need for the continuation of vaccination campaigns, especially among children. Studies have noted that such outbreaks are not only due to the physical mass migration of people into a community but also because this overburdens the sanitary infrastructure and fragile public health system in the country.¹⁰

With more than 1.5 million refugees across Lebanon,¹ a complete operational plan that includes education about communicable diseases, preventive behaviors, and vaccines within refugee camps, as well as training of community healthcare workers and local organizations in VPD outbreak response, including their roles and responsibilities,¹¹ is necessary for reducing the risk for VPD outbreaks as well as protecting the most vulnerable populations, such as children, in the event of a VPD outbreak.

Preparation

Ongoing preparation and communication is essential in this plan, with the Lebanon MoPH working closely with the WHO and UNICEF, while local Red Cross agencies work to produce up-to-date information, education, and communication (IEC) materials, and the UNHCR helps coordinate meetings with public health officers (PHOs), who will assist in and report ongoing surveillance and community mobilization in the field.¹² Essentially, such activities constitute an outbreak contingency plan, which in this case, will be inclusive of the outbreak management plan.¹²

Outbreak Contingency Plan

Surveillance, Early Warning, and Response¹²

After coordination of the above organizations, the first part of the contingency plan is to train health workers of refugee camps as well as PHOs to engage in ongoing surveillance for VPDs. Healthcare staff should monitor the residents of refugee camps with body temperature checks at entry points, in which a fever would indicate that that person should be given medical attention instead of immediate entry to the camp. Prophylactic treatment will be provided to those who do not pass this checkpoint. Such activity will be documented by PHOs (Annex 4) as part of the management plan. Additionally, PHOs should communicate to the refugees about proper personal hygiene while living in close quarters, including proper handwashing, showering, and cleaning techniques (WASH). (citation). Lastly, to protect the clinical staff, personal protective equipment, such as masks and gloves, will be provided to them; refugees who are suspected of having a virus will also be given PPE to limit the spread.

Health facilities and health services planning¹²

Identifying the locations where an outbreak is probable to happen is essential in health facility planning. Because of the high proportion of refugees residing in the capital, Beirut is most vulnerable to the spread of VPDs, causing it to be one of the most likely cities to experience an outbreak.

Mobile health service units/clinics will be set up at high-travel locations in the city, such as roads with direct entry points to the city, parks, churches, and schools. Such units will serve as test-sites for the outbreak virus and treatment sites, including prophylactic treatment with steroids

and/or other medicine and vaccination. Additionally, these sites will serve as another route of education about the virus and vaccines.

In order for these sites to be beneficial and efficacious, community healthcare workers and PHOs must be trained properly. First, they need to be able to identify even the slightest signs and symptoms of the virus; these can present differently among the community, especially among different age groups, and it is imperative that the staff can identify all the different signs and symptoms. (citation). Second, they need to be trained on immediate treatment of the disease, especially in severe cases that may compromise the airway. Such training would include basic life support but also providing the correct dose and medicine to less severe cases. Third, the staff must be trained in administering vaccines safely and correctly as well as documenting this correctly. Lastly, because vaccine hesitancy is prevalent among refugees, PHOs and community healthcare workers must cooperate to provide the correct information to their patients about why they should receive the vaccine. Providing this education in this setting has the ability to increase quality and continuity of care, which are often bottlenecks in vaccination campaigns.

Hospital staffing and capacity plans

Although mobile clinics will be essential in extending health services, providing a plan for the overflow of patients to hospitals will also help mitigate negative outcomes due to the outbreak. The first part of this plan will provide a consistent way to triage patients. In prior outbreaks, incorrect triage has led to worse experiences for both patients and healthcare staff ¹¹. An infection severity measure must be created for VPDs prior to an outbreak. Identifying the severity level of infection will guide the triage patients. For example, severe cases should be given beds in intensive care units, moderate cases should be given beds in a wing of the hospital that has the least patients on a normal basis such that they do not overwhelm healthcare workers, and the least severe cases should be treated and discharged as quickly as possible. The same training provided to healthcare workers in mobile clinics will be provided to hospital staff.

Emergency Medical Supplies

Lastly, both the mobile clinics and hospitals will not be able to operate without a stockpile of essential medical supplies. Because an outbreak is likely to occur in Beirut, the Lebanon MoPH should collaborate with the WHO to obtain supplies that would be needed in surplus during an outbreak. Equipment supplies, such as PPE (for both staff and patients), ventilators, and basic hospital equipment (i.e. extra beds), and pharmaceutical supplies, such as antiviral drugs, steroids, antibiotics, and vaccines, will need to be procured prior to an outbreak such that viral transmission is controlled from the beginning of the outbreak.

In addition, the procurement of extra sanitation facilities, water, and food is essential during this outbreak (Annex 3). If the outbreak becomes an epidemic, the supply chain for such essential products may be disrupted. In addition, the need for a surplus of these supplies will grow with more infected individuals.

Social mobilization, health information, and education ¹²

In this section, the focus is now on the individuals who reside in Beirut - both permanent residents and refugees. Community training, or social mobilization, is another critical component in mitigating an outbreak. Community training, facilitated by PHOs, trusted community health

workers, local pediatricians, and MoPH staff, will take place via school assemblies, at places of worship, and recreation centers, with the main objective being education on ways to prevent VPD outbreaks (Annex 2). The topics discussed include a review of signs and symptoms of most common VPDs, a review of vaccinations, and a review of proper hygiene. This training is geared toward the community having a better understanding of how their behaviors greatly affect the risk for VPD outbreaks, as well as having a better understanding of vaccine safety.

Further, this training can be utilized to roll out the vaccination campaign at schools, especially among younger children who are at higher risk for infection.

In addition to the school-based campaign, VPD and vaccination information cards/pamphlets will be distributed throughout the community in various languages to engage as many people as possible. Such materials can be distributed at mobile clinics, refugee camp entrance points, schools, and places of worship. The materials will include information from the community training seminar, such as understanding VPDs and the importance of PPE, WASH, and vaccines.

Response

Outbreak Management Plan 12

Outbreak Alerts

Ongoing surveillance for VPDs is being conducted by community health care workers. An outbreak alert will be triggered as an early warning system by the community health care workers and clinical staff.

Activation of Outbreak Control Team

When an outbreak alert is triggered the Outbreak Control Team should be activated to respond. The activation control team consists of UNHCR, health educators, and community leaders with support from the Lebanese Ministry of Health, the International Federation of Red Cross and Red Crescent Societies (IFRC), the International Organization for Migration (IOM), and UNICEF Lebanon if needed. If additional experts including epidemiologists, microbiologists, clinicians, veterinarians, vector control, and water and sanitation engineers are required they will be contacted by the team.

Steps taken by the Outbreak Control Team

- Investigation, confirmation of the existence of an outbreak and confirmation of diagnosis will first be assessed by the Outbreak Control Team
- Establishing a confirmation of diagnosis
- Developing a case definition and counting cases
- Define the extent of the outbreak according to time, person and place
- Determine the population at risk
- Generate and evaluate a hypothesis
- Control the outbreak

Outbreak Control Measures

Control source

- Treatment of cases & carriers, isolation of cases, surveillance of suspects, control of animal reservoirs if applicable, notification of cases
- Protect susceptible people
 - Immunization. Chemoprophylaxis, personal protective equipment, hydration & nutrition
- Interpret transmission
 - Environmental hygiene, personal hygiene, vector control, disinfection & sterilization, restrict population movements
- Determine treatment protocols, patient care strategies, & patient isolation
- Determine short-term recovery needs (Annex 3)

Evaluation

Due to the densely populated conditions in refugee camps, it is crucial to have a disaster response plan that can address various VPDs such as measles, hepatitis, and cholera. Therefore, during the evaluation phase, the Ministry of Health and other health partners will carefully and continually assess the prevalence of diseases throughout refugee camps to determine the risk of these VPDs. Through surveillance and monitoring, stakeholders will be able to better assess potential threats and respond before it gets difficult to control. After the outbreak, reviewing epidemiological data and any further investigation is necessary to evaluate current prevention strategies and to make recommendations to prevent future VPD outbreaks.

Surveillance and Monitoring

The MoH must work to minimize the impact of VPD outbreaks through education and surveillance. There will be an early warning system for impending outbreaks which will improve disease detection and surveillance. The MoH and its partners will also facilitate annual check-ins to ensure the communication and response plans are up-to-date. At this time, they will also evaluate the infection prevention and control aspects within the camp. Lastly, the MoH and other stakeholders will design and implement monitoring systems to continuously measure the progress and effectiveness of the program. This data will then be used to revise efforts and improve the disaster response plan to better serve the refugee population for future VPD outbreaks.

Appendix

Annex 1: Lebanon THIRA

Threat and Hazards Assessment Table: Lebanon

Natural	Technological	Human-caused				
Resulting from acts of nature	Involves accidents or the failures of systems and structures	Caused by the intentional actions of an adversary				
Earthquakes The risk of earthquakes is present in Lebanon, especially in Beirut, as the country is located on a fault line. An earthquake struck near Jbeil in May 2014, leading to some material damage. Flooding Flooding Flooding in Lebanon is mainly caused by irregularities in rainfall patterns. The country experiences 1 to 2 cases of flooding annually, a number that is likely to rise with climate change. Drought About 10% of the Lebanese population is susceptible to drought. Increased surface runoff coupled with reduced precipitation is likely to increase with rising temperatures, leading to increased drought severity. Forest Fires The frequency of forest fires is expected to grow due to ongoing replacement of forest stands with fire-prone shrubs and the increased intensity and duration of drought periods.	Infrastructure Most buildings in the country do not conform to earthquake-resistant standards and several experts have stated that an earthquake with a magnitude of six or above in Beirut would destroy 25 percent of the city. Communicable Disease Tuberculosis, measles, mumps, leishmaniasis, and hepatitis A were the main communicable diseases that showed a sharp increase in the past 10 y. Measles outbreaks occurred in 2013 and 2018, leishmaniasis outbreak in 2013, and mumps and hepatitis A outbreaks in 2014. Power Outages As of August 2016, electricity generation capacity in Lebanon still did not meet the country's needs. The country suffers frequent blackouts, and many households and businesses rely on private diesel generators for electricity. Transportation Public transport in Lebanon is primarily provided by taxis and microbuses. An increased number of these vehicles are not adequately regulated, resulting in high operational and maintenance costs. These costs include fuel consumption, taxes, insurance, and car service.	Bombings The country has phased numerous bombing attacks from other countries. Political Unrest Local security authorities have noted a recent rise in violent crimes, including political violence. Multiple unsolved killings within the past 12 months in Lebanon are suspected to be politically motivated. Terrorism Lebanon witnessed deadly terror attacks in border towns along Lebanon's border with Syria, including episodic clashes between the Lebanese Army and Syrian-based violent extremist groups. 2017 Lebanese Army offensive expelled ISIS militants from territory along Lebanon's border with Syria. Violent Crimes Serious incidents of violent crimes such as robbery and assault are increasing due to collapsing living standards. Petty theft is increasingly common, notably in Beirut and Tripoli. Kidnapping The country has high number of reported kidnappings including involving ransom. Gun Violence 1 in 5 people believe the easy access to small arms has a significant effect on insecurity in Lebanon. Lebanon is ranked 28th out of 178 countries in the number of guns per capita, with 21 firearms per 100 residents.				

Annex 2: Drills and Exercises

Community Training Title: Vaccine-Preventable Disease Outbreaks - What can you do to prevent an outbreak?								
Objectives:	 Review signs, symptoms, and severe outcomes of most common VPDs (Measles, Influenza, COVID-19) Review vaccinations - how they work, safety, and schedules Review prevention and mitigation measures (WASH and PPE) 							
Estimate Length of Training:	75 minutes							
Target Audience and Max Size of Audience:	 Parents and children currently residing in Beirut Community leaders, faith-based leaders, school faculty and staff Refugees 							
Facilitators:	Community health workers who have been trained to administer education via the vaccination campaign, Lebanon MoPH staff, and pediatricians and other local physicians/healthcare providers as they may be trusted individuals in the communities that can increase vaccination uptake.							
Community Key Takeaways:	 Be aware of transmission pathways of VPDs and common signs and symptoms. Reduce misinformation and incorrect beliefs about vaccines. Improve personal hygiene practices. Identify, trust, and follow the direction of community healthcare workers, especially during outbreaks. Inform Lebanon MoPH if a VPD outbreak is likely occurring. 							
Strategies to Increase Community Uptake:	 Provide training in different settings - among students via school assemblies or health classes, among parents via student enrollment sessions, among the general community via common meeting places (churches, restaurants, parks) Offer free visits with a community healthcare worker or physician if infectious disease is suspected. Utilize trusted officials to spread word about free vaccines Set up mobile clinics at borders where refugees pass through and near refugee camps to engage refugees about VPDs 							

Annex 3: Short-term Recovery

Necessities	Possible Resources	Distribution Strategies
Water	 UNHCR Trucking in and pumping water from existing bodies of water such as nearby lakes and rivers. Donation of water from neighboring countries as per mutual aid agreements 	 UNHCR's strategy on water, sanitation and hygiene (WASH) targets the needs of refugees in Lebanese communities, through the implementation of water and wastewater projects that strengthen and/or rehabilitate existing infrastructure. Coordinate with the Ministry of Health to bring in water and UNHCR to store, treat, and distribute within the camp. Coordinate with UNHCR to ensure water quality - filtering, boiling, water purification tablets. Distribution: Distribute water containers Water taps located throughout the camp
Food	 The World Food Programme United Hands Relief The International Committee of the Red Cross (ICRC) 	 The WFP plays a role in ensuring that both vulnerable Lebanese and refugees have sufficient, nutritious food throughout the year. WFP also distributes daily nutritious snacks to vulnerable Lebanese and refugee school children in public schools across Lebanon. United Hands Relief carries out food parcels distribution in Lebanon to help displaced Syrian refugee families, as well as Lebanese families in most need. For the past few years the ICRC has tried to fill gaps not covered by other humanitarian organizations and assist those most vulnerable. In partnership with the Lebanese Red Cross they provide food to refugees and families hosting refugees.
Housing or Shelter	 Tents and plastic sheeting from the UNHCR Mosquito nets provided by UNHCR Available Lebanese hospitals specialized in providing care for refugees 	 Coordinate with the UNHCR to bring shelter supplies to camps for distribution. Priority recipients: Distribute to those needing isolation Distribute to medical facilities

Medical Care

- Vaccines and vaccine supplies
- Surplus medical supplies collected from donations and obtained from the WHO
- Engaging refugee families through an evidence-based targeted communication approach that includes the use of mass media, social media platforms, and interpersonal communication via field mobilizers, community influencers, and appropriate NGOs to combat vaccine hesitancy
- Distribution of vaccines and medical supplies through mobile clinics staffed with trained public health officers and community healthcare workers in this region

Priority recipients:

- Municipalities in regions which host large numbers of refugees
- Currently sick
- Children
- Elderly

Annex 4: Outbreak Patient Tracker Form

MEASLES LINE LISTING AND REPORTING FORM

COUNTRY: HOSPITAL: CAMP: EPI WEEK: DATE: from......to......

		ase ection	Patient characteristics							Illness history								Laboratory			
N _o ,	Date of case detection	Location of case detection	Name	Camp	Block	Age	Sex	Self-reported measles vaccine doses	Date of arrival in camp	Fever	Rash	Date of rash onset (If applicable)	Cough	Red eyes	Coryza (runny nose)	Decision	Outcome	Date of death (if applicable)	Lab specimen taken?	Date lab specimen taken	Final lab result
	dd/mm/yy	Community/ Outpatient/Inpatient	Person/ Caretaker		Location where person lives	# Years / Months (Specify)	Female/Male	# doses	dd/mm/yy	×/N	×	dd/mm/yy	X/N	Y/N	NX	Admitted/ Discharged	Alive/Dead	dd/mm/yy	×	dd/mm/yy	Positive/ Negative
1																					
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