Humanitarian emergencies case study: Uganda

Preventing malaria in refugee populations

August 2022

Achievements

- The United Nations High Commission for Refugees (UNHCR) uses a phased approach which promotes health screening and provision of malaria commodities (insecticide treated nets – ITNs) for new refugees before integration into settlements and/or camps. This helps mitigate malaria transmission from the outset.
- UNHCR operates transit centres/communal shelters where refugees are hosted within the host communities before they are integrated into the settlements.
- Through both the continuous and Universal Coverage Campaign (UCC) ITN distribution approaches over 1.1 million ITNs have successfully been distributed to refugees through the established UNHCR structures.
- UNHCR has a solid collaboration with the Ministry of Health – National Malaria Control Division (MoH-NMCD), the Global Fund and the USAID-President's Malaria Initiative (US-PMI) to provide malaria interventions within the refugee and host communities.
- UNHCR raised funding to support 100 health facilities in the refugee settlements; 72 per cent of those facilities are public health facilities supported by the Government of Uganda which provides medical supplies and grants (wage and non-wage).
- Refugee camps used internal human resources and social mobilization structures to register and distribute ITNs.
- UNHCR, in collaboration with the Ministry of Health, developed the "Response Framework for Malaria in Complex Emergencies in Uganda" to guide and streamline all refugee malaria-related interventions.

Background

In recent years, Uganda has seen an influx of refugees due to conflicts in neighbouring South Sudan, Burundi and Democratic Republic of the Congo (DRC). One of the main services provided to incoming refugees is malaria prevention through the distribution of ITNs to ensure that the both the host communities and the refugees are protected. The distribution is carried out by different stakeholders, including MoH-NMCD, UNHCR and the Office of the Prime Minister (OPM) of Uganda.

In 2022, Uganda has 12 refugee settlement camps[1] and hosts approximately 1,549,368 refugees, the third highest number of refugees globally and the highest in sub-Saharan Africa (SSA). The most frequent country of origin is South Sudan with 944,000 refugees. There are an additional 549,051

[1] *Palabek, Adjumani, BidiBidi, Imvepi, Oruchinga, Kiryandongo, Kyaka II, Kyangwali, Nakivale, Pagirinya, Rhino, and Rwamwanja settlement camps*

refugees from DRC and 56,317 refugees from Burundi[2]. Figure 1 shows the locations of the refugee camps and origins of those residing in the camps.

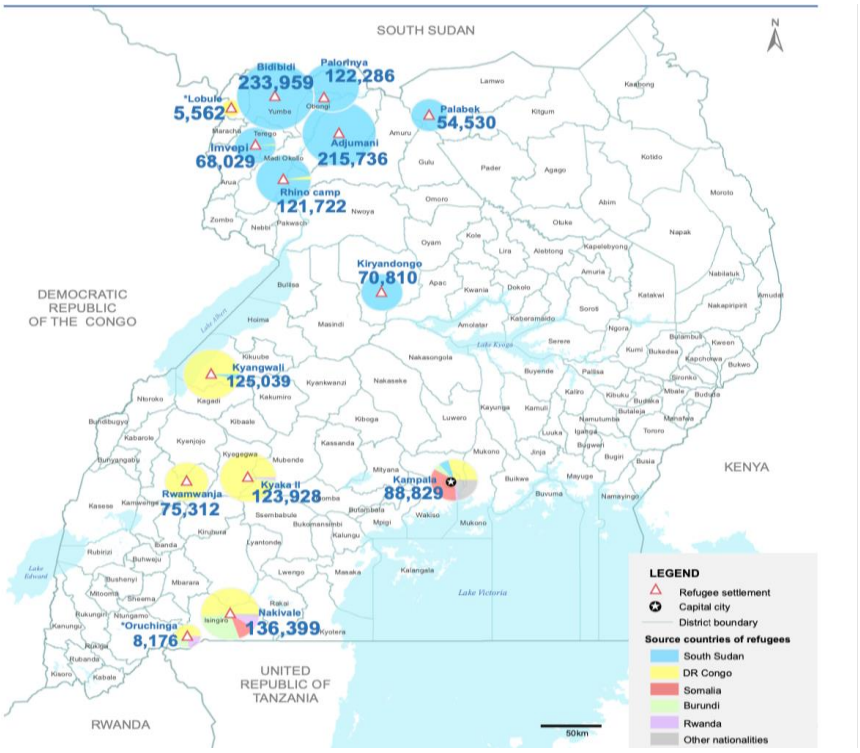


Figure 1: Map showing refugee populations in Uganda by refugee settlement (updated February 2022)

In most countries in SSA, including Uganda, malaria remains the number one public health challenge. According to the Uganda Malaria Indicator Survey (UMIS) 2018/19, malaria prevalence within refugee settlements was 13 per cent; 61 per cent of the refugee settlement household population had access to an ITN; 38 per cent of households in refugee settlements had at least one ITN for every two people in the household; and 60 per cent of refugee household members reported sleeping under an ITN the night before the UMIS.

Further, the 2021 UNHCR Health Report[3] cites malaria as the leading cause of morbidity which accounts for 38 per cent of outpatient consultations and 68 per cent of in-patient admissions which resulted in 701,281 cases of malaria and 129 deaths, representing 12 per cent of overall deaths among the refugees in Uganda.

MoH-NMCD oversees all malaria interventions in the country and works through UNHCR on the malaria response within refugee settlements; the Uganda refugee programme is managed under the OPM in partnership with UNHCR.

UNHCR uses a four phased approach to respond to malaria given the characteristics of refugee populations, including the process of settlement and movement below.

---

[2] *February 2022 figures. By June 2022, the figure has risen to 1.626 million refugees. In fact, about half of the world's 27.1 million refugees are hosted by just six countries, with Uganda being one of them. Source: World Bank.*

[3] https://drive.google.com/file/d/16YejWg3cXBCV3QTNjd2scy948kLwNeUZ/view?usp=sharing

Phase	Timeline	Detail of process
Phase 1: Collection point or entry	0 to 3 days	The high influx of refugees entering from non-defined border points may compromise the quality of malaria screening services at the collection point and may worsen the disease if not properly diagnosed. UNHCR registers newly arrived refugees, carries out health screening including clinical and parasitological test using a Rapid Diagnostic Test (RDT), and provides treatment when necessary.
Phase 2: Reception centre	3 to 21 days	Disease (malaria) surveillance is carried out during this period due to the change of environment, potential parasite behaviour and disease prevalence between the refugee's home country and Uganda. During this phase, dormitory-like accommodation is provided while settlement plots are being established.
Phase 3: Settlement phase I	21 to 90 days	In this phase, plots are allocated per family and temporary shelter materials provided to use before construction of proper housing facilities. At this stage, village health teams (VHTs) are also engaged to provide integrated community case management (iCCM) to the newly settled refugees.
Phase 4: Settlement phase II	90+ days	Lastly, refugees acquire their constructed huts and are properly integrated into the local communities where they can access health facilities. At this stage, vector control and case management are carried out through ITN hang-up promotions, indoor residual spraying (IRS) and larviciding (where possible), iCCM, and outreach from community health workers (CHWs).

Source: UNHCR Website- https://data2.unhcr.org/en/documents/details/84724

The 2020/2021 ITN Universal Coverage Campaign

The UCC held in 2020/2021 targeted host communities, refugees and internally displaced persons (IDPs) relocated due to floods[4]. The target included all 12 refugee settlements where a total of 805,555 ITNs were distributed to 1,400,218 refugees[5] allocating one ITN per two persons as recommended by the MoH for achieving universal coverage with malaria prevention.

UNHCR used a business continuity approach[6] which required priority activities to be implemented during the COVID-19 pandemic. UNHCR prepared a new arrival management guideline which was reviewed and approved by the MoH. Temporary holding shelters were set up for people with COVID-19 in the refugee settlements and where screening would take place for cases of malaria, tuberculosis, malnutrition and pneumonia.

To effectively respond to emerging health concerns among the refugee population, UNHCR implemented the Health Sector Integrated Refugee Response Plan (HSIRRP) - an addendum to the Health Sector Development Plan II (HSDPII) – an MoH initiative that guides the overall strategic direction and implementation of health services among refugees and host communities. Additionally, UNHCR, with support from WHO, used the Response Framework for Malaria in Complex Emergencies in Uganda

[4] In 2020 and 2021, more than one million people across Uganda were affected and displaced by severe floods, with over 300,000 struggling to find food, clean water, shelter and medical care. The MoH, together with the Ministry of Disaster Preparedness and Refugees, responded by empowering community health workers with malaria testing equipment and treatment.

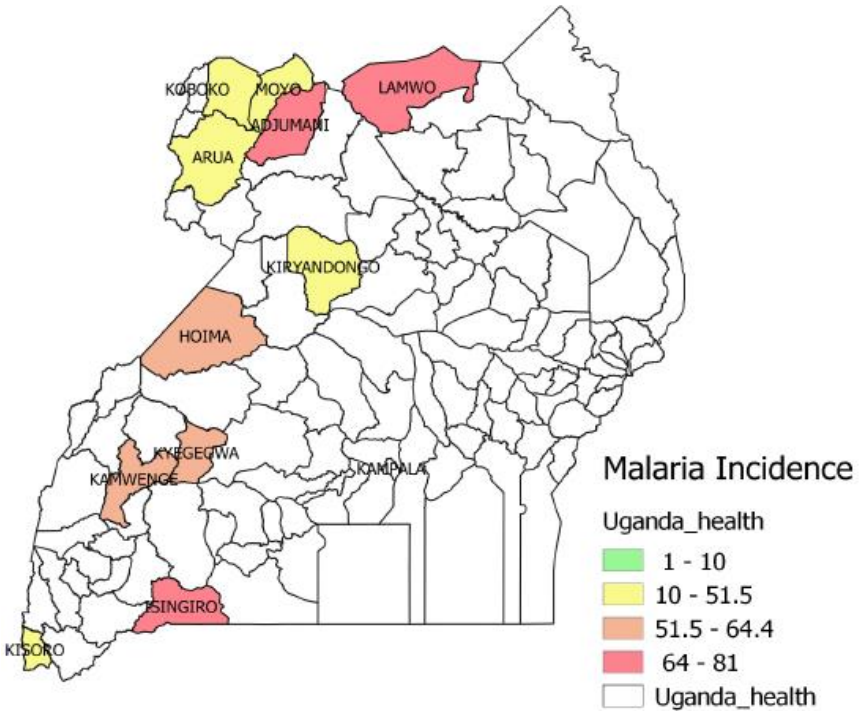
[5] The total number of refugees at the date of the UCC.

[6] This approach integrated COVID-19 response with continued refugee settlement activities.

to respond to malaria for 1.5 million refugees settled before COVID-19 and for newly arrived refugees during the pandemic.

Malaria interventions within the refugee settlements are in line with the national MoH guidelines. The challenges that refugees face include, but are not limited to, increased febrile illnesses and malaria cases, with implications for increased transmission since, in spite of screening at the border, they may import resistant and/or other types of parasites such as *Plasmodium vivax*.

Figure 2: Malaria Incidence in refugee communities by district



Source: Response Framework for Malaria in Complex Emergencies in Uganda

Malaria-related vulnerability and exposure risks for refugees include poor housing structures, settlement patterns, compromised immunity from hunger and malnutrition and survival priority resulting in frequent planned or unplanned movements – often short distances – which inhibit effective delivery of and prompt access to diagnosis, treatment and preventive interventions such as ITNs and iCCM.

Reasons for high malaria morbidity:

- Some new arrivals come with malaria and by the time they are diagnosed the disease is severe. Their health is further compromised due to other illnesses like pneumonia and diarrhoea.
- Transit centres/communal shelters (where refugees are accommodated within the host communities before they are integrated into the settlements) house about 100 refugees. These are temporary highly congested structures that increase chances of malaria transmission because the crowded conditions make it difficult to use ITNs effectively.
- Land that is allocated to refugees is not cleared making it amenable to reproduction of mosquito vectors. Refugees are also at increased risk due to outdoor sleeping.
- Stagnant water left after the construction of roads creates potential breeding sites.

- Farming increases the number of potential mosquito breeding sites during land tilling and sometimes after harvesting crops.

There are notable challenges with assessing whether any appropriate treatment was received in the country of departure, and the language barrier for those coming from Francophone countries (DRC and Burundi) reduces the effectiveness of interpersonal and group communication. The health system capacity to provide a comprehensive integrated package of health to the populace - including high-quality and timely medical interventions - is already overstretched and cannot focus on the refugees alone[7].

Malaria focus

UNHCR focuses on three malaria intervention areas[8] :

1. *Malaria prevention:*
    - On arrival, the refugees are given an ITN as part of relief items provided through collaboration with MoH-NMCD.
    - 300,000 ITNs were distributed to pregnant mothers and children under one year through routine distribution.
    - During the 2020/2021 UCC, 805,555 ITNs were distributed. Human resources such as data entry clerks and site commanders who collected data and distributed ITNs came from the refugee community; operational costs were provided by NMCD.

2. *Integrated community case management (iCCM):*

Adopted in 2010 by the MoH, UNHCR is implementing iCCM within the settlements with some support from the MoH and is providing training of VHTs or CHWs while financial partners provide commodities.

iCCM is currently implemented by 2,777 VHTs. This represents an important contribution to community health provision at 547 refugees per VHT, but is not in line with the national target of 250 population per VHT. VHTs provide home visits to ensure health promotion and disease prevention. In 2021, for example, VHTs visited 1,346,770 households, treated 203,000 people and referred 183,825 people to a health facility for further care.

3. *Case management:*

MoH supports UNHCR with artemisinin-based combination therapies (ACTs) and rapid diagnostic tests (RDTs) with UNHCR filling gaps when there are stock-outs. At the borders, UNHCR carries out malaria screening. The different parasites and vectors imported across the border, however, bring screening challenges as some RDTs cannot detect certain malaria parasites.

Reporting

The refugee health reporting system has been fully integrated into the national reporting system and aggregated health reports are available to all stakeholders. All the data collection and reporting tools used in health facilities in the refugee camps are MoH tools and some of the reports are captured by the DHIS2.

[7] Response Framework for Malaria in Complex Emergencies in Uganda (2017)
[8] Ibid.

The MoH, with support from Against Malaria Foundation (AMF), commissioned the Post Distribution Monitoring (PDM), a two-year intervention where ITN usage and condition is monitored at household level. This also targets refugee settlements and is utilized by UNHCR in their analysis, reporting and learning.

UNHCR is working with MoH Uganda to link the digital MoH database to the online UNHCR health information system. Electronic medical record systems have been introduced at health facilities within the refugee settlements to improve the data quality and reports from clinics. There is a plan in place to extend the system to all health facilities in line with the MoH transition to digitalized health information management.

Challenges

- Limitations in health worker housing and/or accommodation create a gap in care and support for admitted patients as some of the health workers operating in the settlement health facilities live far from the refugee settlements.
- Low lighting and electricity coverage within the camps limit health care provision and support for patients at night.
- Under iCCM, the CHWs do not have an adequate supply of health kits, bicycles and gloves to enable them to carry out their health service delivery mandate appropriately.
- Limited funds released by the MoH to the district local governments are not able to fully support all planned malaria interventions such as case management and to some extent iCCM.
- Due to the increased influx of refugees and seasonal rains, the quantification algorithm for determining commodity needs does not always reflect the need.

Lessons learned

- The settlement of refugees among host communities exacerbates the pressure on social services and amenities for local communities, exposes communities to competition for services and inhibits proper planning.
- In the context of limited health resources for host communities, a parallel health system for refugees is unsustainable and promotes inequitable access to health.
- The refugee camp leadership demonstrated that they could use internal human resources (data entry clerks [DECs] and health workers) to implement health-related activities at scale. For example, refugee camp leaders identified and used their own personnel to register and distribute ITNs during the UCC.
- UNHCR receives most of its Global Fund and other agency grants through sub-recipients and other third-party agencies. According to UNHCR staff, this limits their ability to plan, make budget projections or control budgets as they would desire.
- Integrated Vector Control and Management (IVCM) and malaria prevention approaches are feasible and desirable in refugee camps in Uganda given that case management remains very expensive due to its logistical and operational demands.