FACT SHEET

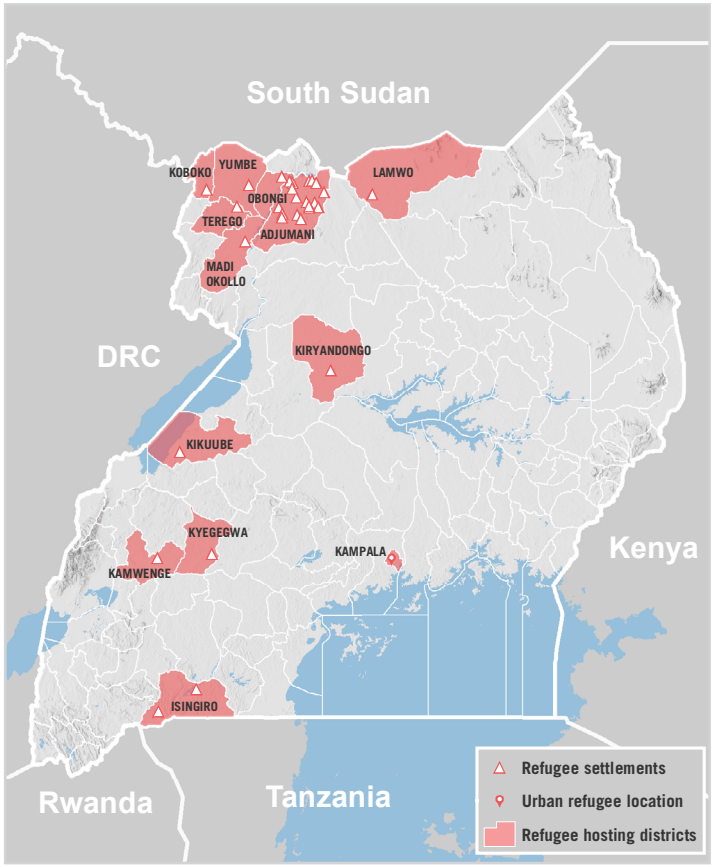
Rapid Knowledge, Attitudes, and Practices (KAP) assessment on the 2022 Ebola Virus Disease (EVD) outbreak

CONTEXT & RATIONALE

Uganda's most recent EVD outbreak, caused by the deadly Sudan ebolavirus (SUDV), was declared on September 20, 2022 by the Ministry of Health.[1] It reportedly originated in the district of Mubende and spread to the more densely populated capital of Kampala where the first related death was recorded on October 11.[2] On November 7, about two weeks prior to the start of data collection for this assessment, the cumulative death toll had reached 53 confirmed deaths, 21 probable cases, and 136 cumulative cases.[3] As of October 26, the case fatality ratio of SUDV among confirmed cases in Uganda has been of 27.8%.[4] There are currently no approved vaccines against the Sudan ebolavirus, although trials are ongoing.[5] While Uganda has experienced several EVD outbreaks since 2000, the 2022 outbreak is the first in which the virus has reached the capital and has been the largest geographic spread the country has ever known.[6]

The end of the EVD outbreak was officially declared on January 11, 2023.[7] This study has intended to identify some of the gaps in knowledge, attitudes, and practices of refugees in settlements and in Kampala regarding the virus, the outbreak, and the response. The results bring to light possible barriers to and enablers of behaviour change. Taking these into account could support the correction of health-related knowledge and the prevention and response mechanisms among the refugee population. The findings of this assessment can inform preparedness and response activities for a potential future outbreak.

Map 1: Refugee-hosting districts and refugee settlements in Uganda in 2022.



KEY HIGHLIGHTS

- **There appears to be a general lack of knowledge regarding the geographical coverage of the outbreak, EVD symptoms, modes of transmission, and prevention methods. The results also point towards the presence of misconceptions, discriminatory attitudes towards survivors, and a distrust of EVD treatment centers.**

- Refugees aware of the EVD outbreak in Uganda but living in districts (12) unaffected by EVD (between **5%** and **29%** of the respondents per assessed settlement) had reportedly heard of confirmed, suspected, recovery, or deceased cases in their district when none were recorded according to official sources. This seems to point at the **presence of misinformation in the settlements of all non-affected refugee hosting districts**.

- **10%** (103) of respondents was not able to name a single symptom. The results could be indicative of a **lack of awareness regarding the most common EVD symptoms as well as on the full range of the possible symptoms**.

- **The most frequently reported correct transmission mode was sleeping in the same bed as a symptomatic person**. Even so, it was only reported by **35%** (379) of respondents who knew of EVD (n=1071). Overall, **16%** **(170) of respondents could not identify any transmission mode.** Several misconceptions were also reported, such as the possibility of EVD spreading through air (13%, 144), through curses (7%, 71), and through healthy (asymptomatic) persons (6%, 60).

- At least **40%** of respondents for each location failed to report "**washing or touching a person who had died of Ebola"** as a mode of transmission. Additionally, the low response rate regarding contact with bodily fluids and the handling of the deceased seems to indicate **a low uptake of EVD-specific prevention knowledge.**

- The **lack of awareness and knowledge** regarding EVD in the refugee communities as well as **misinformation and distrust** of treatment centers **may need to be addressed prior or at the early stages of a new outbreak.**

METHODOLOGY OVERVIEW

The study consisted of a quantitative household survey. In early November, REACH Initiative was about to launch a remote data-collection for the United Nations High Commission for Refugees (UNHCR) Information Management Support Assessment through a call centre in Kampala. In order to collect timely information on the EVD outbreak, REACH included an additional section to the existing survey. The methodology in terms of data collection are aligned with the Information Management Support Assessment Terms of Reference (ToR).

In total, **1098 refugees** were interviewed across **all 13 refugee settlements and Kampala** between **23 November and 5 December 2022**. The structured survey was administered remotely from the Kampala call centre, due to the EVD-related measures in place at the time of data collection (limited movement and social distancing). Respondents (not necessarily the head of household) were randomly sampled by UNHCR based on a phone number list per location/settlement.

Phone number lists may not have been complete, considering for example new arrivals in the settlements, and refugees with no access to a phone or living in areas with poor network coverage. As a result, **findings are not statistically representative and should be considered as indicative only**. The figures represented in this factsheet are **presented at the national and location/settlement levels, unless stated otherwise.**

The KAP survey aims to elicit the understanding of potential health-related knowledge gaps, cultural beliefs, and behavioural patterns, with each question feeding into at least one of these categories. **A more detailed methodology can be found in the ToR. The complete dataset and analysis can be found here.**

Unless specified otherwise, answer choices were not read out to the respondents.

Figure 1. Number of refugees interviewed per location

Adjumani	Bidi Bidi	Imvepi	Kampala	Kiryandongo	Kyaka II	Kyangwali	Lobule	Nakivale	Oruchinga	Palabek	Palorinya	Rhino Camp	Rwamwanja
75	80	81	81	81	78	77	76	74	75	70	82	79	80

Figure 2. Number of refugees interviewed per country of nationality

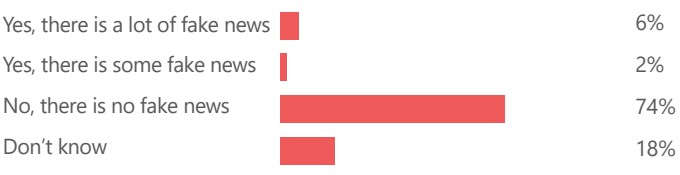
South Sudan	Democratic Republic of the Congo	Burundi	Rwanda	Eritrea	Somalia	Kenya	Other
556	414	37	31	24	21	1	5

Knowledge of the outbreak

98% (1071) of the total interviewed refugees (1089) had **heard of EVD** (the virus or any outbreak) at least once, regardless of the year or geographic location. However, **3%** (29) were **not aware of the 2022 EVD outbreak** in Uganda.

Kampala and Kyegegwa are the only two districts out of the 13 refugee-hosting districts and the district of Kampala to have had confirmed, suspected, recovery, or deceased EVD cases up until the end of the data collection. However, **the majority of the interviewed refugees in Kyegegwa settlement (83%, 65) and Kampala (64%, 52) were unaware of any confirmed, suspected, recovery, or deceased EVD cases in their district at the time of the survey.**

Figure 3: % of interviewed refugees that are aware of the 2022 outbreak (1038), per perception of the incidence of misinformation/fake news regarding EVD in Uganda.



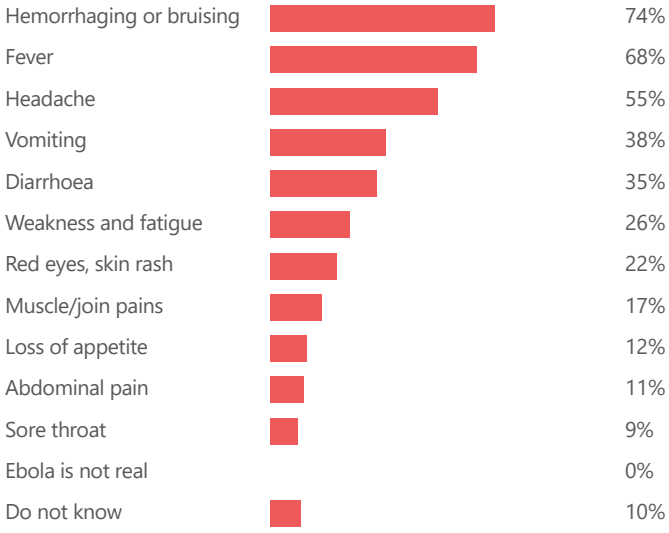
On the other hand, respondents aware of the EVD outbreak but living in refugee-hosting districts (12) not directly affected by EVD (ranging between **5%** and **29%** of refugees per assessed settlement) had reportedly heard of confirmed, suspected, recovery, or deceased cases in their district when none were recorded by official sources. The result was highest in the settlements of Rwamwanja (**29%**, 23), Kyangwali (**17%**, 13), Nakivale (**16%**, 12), and Oruchinga (**16%**, 12). This could point at the **presence of misinformation in the settlements of all non-affected refugee hosting districts**.

In case it is suspected that misinformation and fake news are circulating in the settlements, then it may be worth also considering that **over half** the respondents in each assessed settlement/location did not believe there was any misinformation/fake news about EVD in Uganda, suggesting a **lack of awareness regarding the validity of information and/or its sources**.

For more information on the 2022 EVD outbreak in Uganda, please visit the dedicated web page of the World Health Organisation (WHO).

Knowledge of EVD symptoms

Figure 4: % of total interviewed refugees (1089), per reportedly known symptom.[8,9]



None of the options were read out the respondents. Respondents were asked to report on as many symptoms as they knew.

The most reported symptoms were "unexplained hemorrhaging, bleeding, or bruising", followed by "fever", and "headache" (see figure 3). **Less than 50%** of respondents were able to name the other symptoms and **10%** (103) was not able to name a single symptom. The results could be indicative of a **lack of awareness of EVD symptoms, including the most common ones.** This, in turn, could considerably hamper health seeking behaviour and individual preventive measures (such as self-isolation and social distancing), thereby further spreading the virus.

Figure 5: % of interviewed refugees who reported the symptoms of hemorrhaging, fever and/or headache, per settlement.

	Hemorrhaging	Fever	Headache
Bidi Bidi	90%	74%	69%
Kyaka II	82%	73%	62%
Imvepi	80%	60%	56%
Kiryandongo	78%	53%	43%
Palabek	76%	54%	33%
Rhino Camp	76%	75%	58%
Palorinya	74%	60%	41%
Oruchinga	64%	72%	64%
Adjumani	64%	65%	41%
Rwamwanja	63%	70%	46%
Kyangwali	61%	68%	60%
Nakivale	59%	62%	45%
Lobule	58%	39%	39%
Kampala	57%	81%	69%

Figure 6: Reported types of advice respondents who knew about EVD (regardless of their knowledge of the current outbreak, n=1071) would provide to someone with suspected EVD, per % of interviewed refugees

Go to the nearest health facility	91%
Go to an official Ebola treatment centre	36%
Call the Ebola hotline	31%
Report to the community leader	18%
Report to a health non-governmental organisation (NGO)	15%
Report to the Office of the Prime Minister (OPM)	12%
Report to the police	7%
Isolate / avoid contacts with family and friends for 21 days	5%
Travel outside the location to go to a bigger/better health facility	3%
Report to the traditional healer/witch doctor	1%
Hide the sickness/symptoms from others Go into hiding so they cannot be found (in their house or elsewhere) Do not take any action/behave as usual	0%
Don't know, Don't want to say, Other (specify)	4%

None of the options were read out the respondents. Respondents could select multiple answers.

91% of respondents would recommend going to the nearest health facility, which **could further increase the spread of EVD**. When asked why respondents would not recommend someone suspected of having EVD to visit the nearest health facilities, **some respondents answered they wanted to avoid being brought to an Ebola treatment centre (15%, 14).**

Participants who did **not** respond that they would recommend an acquaintance of going to an **EVD treatment centre** (**64%**, 688) justified their answer by explaining that they would recommend someone to seek help at the nearest health facility instead (**76%**, 524).

81% (597) of respondents who did **not** report that they would recommend calling the hotline explained that they **did not know about a hotline**, and **12%** (89) knew about the hotline but not its number.

Knowledge of EVD transmission modes

Figure 7: % of interviewed refugees who know of EVD, regardless of their knowledge of the current outbreak (1071), per reported mode of transmission.

I can get Ebola from sleeping in the same bed as a symptomatic person	35%
I can get Ebola from touching a dead person who died of Ebola	34%
I can get Ebola from sharing a spoon/fork with a symptomatic person	33%
I can get Ebola from cleaning up vomit from a symptomatic person	25%
I can get Ebola from kissing a symptomatic person	25%
I can get Ebola from having sex with a symptomatic person, even if I wear a condom	24%
I can get Ebola from eating bush meat	21%
I can get Ebola from washing a dead person who died of Ebola	20%
I can get Ebola from cleaning up pee or poop from a symptomatic person	17%
Ebola is transmitted by air	13%
I can get Ebola from cleaning the sheets from a funeral of an Ebola patient	11%
I can get Ebola if someone puts a curse/spell on me	7%
I can get Ebola from a healthy (asymptomatic) person	6%
A baby can get Ebola from breastfeeding from a symptomatic mother	5%
The Ebola pandemic in Uganda is not real, therefore there are no transmissions	1%
Ebola is transmitted by mosquitos	0%
Ebola is god's punishment	0%
Other (specify)	3%
Don't know	16%
Don't want to say	1%

None of the options were read out the respondents. Respondents could select multiple answers.

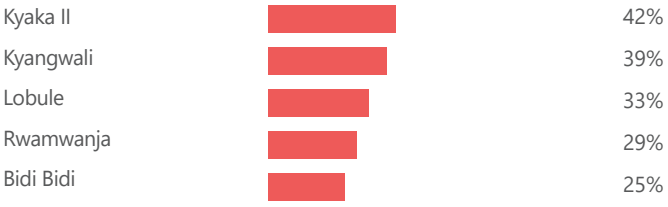
The most frequently reported correct transmission mode was sleeping in the same bed as a symptomatic person. Even so, it was only reported by **35%** of respondents who knew of EVD. **16% (170) failed to think of at least one transmission mode.**

Additionally, the respondents believed in several **misconceptions**, such as the possibility of EVD spreading through **air** (**13%**, 144), through **curses** (**7%**, 71), and through **healthy** (asymptomatic) persons (**6%**, 60).

Transmission through air was almost twice as often reported by South Sudanese respondents compared to Congolese respondents (**17%**, 95 vs **9%**, 38), and was mainly reported in the settlements of Kiryandongo (**30%**, 24), Imvepi (**30%**, 24), and Palabek (**23%**, 16).

Overall, at least 40% of respondents in each location failed to report washing or touching a person who had died of EVD as a mode of transmission. Transmission through washing or touching a person who had died of EVD was least commonly identified by respondents of **Lobule** (**82%**, 59), **Oruchinga** (**77%**, 57), and **Rhino Camp** (**73%**, 57).

Figure 8: TOP 5 settlements where interviewed refugees who know of EVD, regardless of their knowledge of the current outbreak (1071), did NOT select "I can get Ebola from eating bush meat*" as a mode of transmission.



*Bushmeat could be infected with germs that can cause sickness in people, including EVD. EVD infections in people have been associated with handling and eating infected animals.[10]

Knowledge of EVD prevention modes

Figure 9: Reported prevention methods, by % of interviewed refugees who reported knowing of EVD, regardless of their knowledge of the current outbreak (1071).

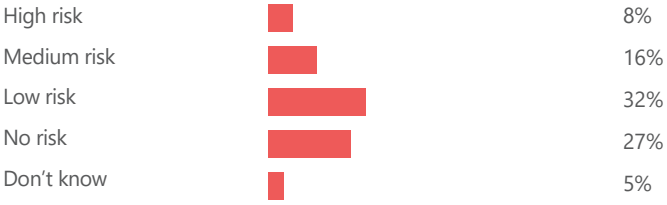
Washing hands regularly with soap	80%
Avoiding crowded spaces	74%
Avoid other people's bodily fluids from contaminated people (sweat, saliva, blood, sperm, faeces, urine)	44%
Avoid touching the dead if they died with symptoms/were confirmed cases	30%
Immediate/early treatment in health facility reduces chances of spreading	17%
Bathing can prevent Ebola	9%
Traditional/herbal/natural treatments can prevent Ebola	0%
Religious treatments/spells/rituals/prayers can prevent Ebola	0%
Ebola is God's punishment, there is no preventing	0%
Other (specify)	3%
I don't know	7%
Do not want to say	0%

The comparatively higher response rate regarding the washing of hands and avoiding crowded spaces might be related to ingrained prevention methods following outbreaks such as COVID-19. The low proportion of respondents reporting EVD-specific methods, such as avoiding handling bodily fluids and avoiding contact with deceased/symptomatic persons, might indicate a **low awareness and uptake of such EVD-specific prevention methods.**

⚠ **All** the options for the indicators on this page were **read out** to the respondents.

Attitude towards the outbreak

Figure 10: Reported perception of risk of contracting EVD, by % of respondents who reported being aware of the 2022 EVD outbreak (1038).



90% (967) of interviewed refugees who know of EVD (regardless of whether they are aware of the current outbreak in Uganda) (1071) reported **being willing to get vaccinated freely against EVD** should a vaccine be available. Considering that the COVID-19 vaccine hesitancy was 58.6% (611 Ugandan adults),[11] further research would need to be conducted to confirm these findings.

29% (305) of interviewed refugees who are aware of the 2022 outbreak (1038) **believe that one cannot survive EVD**. Respondents who believe in this misconception might not be inclined to seek early treatment or other rapid response methods. Despite reportedly believing this false information, **88%** (269) responded they would get vaccinated.

Attitude towards survivors

33% (342) of interviewed refugees who reportedly were aware of the 2022 outbreak (1038) reported **believing that survivors certified to be cured of EVD could still infect others** through casual contact (e.g., hugging or shaking hands).

22% (226) of interviewed refugees who reportedly were aware of the 2022 outbreak (1038) reported they **would not buy fresh vegetables from survivors** certified by the government to be cured of EVD.

⚠ **All** the options for the indicators on this page were **read out** to the respondents.

Perception of official EVD treatment centres

Figure 11: % of interviewed refugees that are aware of the 2022 outbreak (1038), per perception of official EVD treatment facilities.

If you are in an official Ebola treatment facility, you cannot see your family	**51%**
There is not enough food in official Ebola treatment facilities	**17%**
If you are in an official Ebola treatment facility, you have even more chances of getting Ebola and/or dying (not just from Ebola)	**15%**

While these perceptions (Figure 11) do not necessarily reflect reality, these findings are corroborated by other sources, according to which some of the main challenges during this outbreak are the misinformation, misconceptions, and mistrust pertaining to the outbreak and its response as well as fears of the treatment centres.[12]

Funeral practices and attitudes

Figure 12: % of total interviewed refugees (1089) in agreement with the following statements read out to them.

57% Would accept only **observing** the burial from a safe **distance**

54% Would accept a special **Ebola burial team** if the family member died of suspected Ebola

27% Would accept **sharing the location** of the burial site with Ebola response teams/ the government

24% Would **wash or touch the body** if a family member died, if we are sure the person **was not sick** with Ebola

19% Would provide a **name plate** at the burial site

11% Would **accept alternatives to traditional** burials that do not involve physical contact with the corpse if a family member died of suspected Ebola

5% Would **wash or touch** the body if their family member died of **suspected/confirmed Ebola**

ENDNOTES

1 IFRC, Uganda, Africa: Ebola Virus Disease Emergency Appeal No. MDRUG047, 30 September 2022.
2 BBC, Uganda Ebola outbreak: First death recorded in capital Kampala, 11 October 2022.
3 WHO, Ebola disease caused by Sudan ebolavirus – Uganda, 10 November 2022.
4 WHO, Ebola Disease caused by Sudan virus - Uganda, 28 October 2022.
5 WHO, Ebola trial candidate vaccines arrive in Uganda in record 79 days after outbreak declared, 9 December 2022.
6 MSF, Ebola: 3 questions for an MSF epidemiologist, 13 December 2022.
7 WHO, Uganda declares end of Ebola disease outbreak, 11 January 2023.
8 Symptoms were not read out loud by the interviewer.
9 The complete list of symptoms as described by the World Health Organisation (WHO) can be found here.
10 CDC, Bushmeat, 31 October 2022.
11 International Journal of General Medicine, Factors Associated with COVID-19 Vaccine Hesitancy in Uganda: A Population-Based Cross-Sectional Survey, 27 August 2022.
12 IFRC, Uganda, Africa: Ebola Virus Disease Emergency Appeal No. MDRUG047, 30 September 2022.

ABOUT REACH

REACH Initiative facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery and development contexts. The methodologies used by REACH include primary data collection and in-depth analysis, and all activities are conducted through inter-agency aid coordination mechanisms. REACH is a joint initiative of IMPACT Initiatives, ACTED and the United Nations Institute for Training and Research - Operational Satellite Applications Programme (UNITAR-UNOSAT).