

2026 Ebola Outbreak: Mobility and Health System Vulnerabilities in Eastern DRC and Bordering Areas

29 May 2026 | Democratic Republic of Congo, Uganda, South Sudan

Key Messages

- Historical mobility data¹ from the DRC shows that five provinces not currently classified as high-risk - **Haut-Uele, Tshopo, Bas-Uele, Maniema, and Tanganyika as well as Health Zones in the greater Nord and Sud Kivu Provinces** - maintain regular population exchange with areas where cases have since been confirmed. Assuming mobility patterns did not change during the period of undetected transmission, these areas should also be considered for surveillance, Risk Communication and Community Engagement (RCCE) and preparedness activities.
- **The DRC-Uganda border sustains dense economic and social ties that drive daily movement on both sides.** Experience from past outbreaks shows that restrictions on formal crossings tend to shift movement toward informal and unmonitored routes, reducing transmission visibility, increasing protection risks, and adding significant stress to the livelihoods of border communities. As of 29 May, the border between DRC and Uganda is closed to all civilian traffic².
- **Yambio and Morobo in South Sudan are key areas receiving direct and indirect arrivals from DRC due to small trade activities, family movements, and healthcare seeking behaviors.** Health system capacity in both counties is limited, with high rates of unmet healthcare needs which may impact timeliness of case identification in the community.

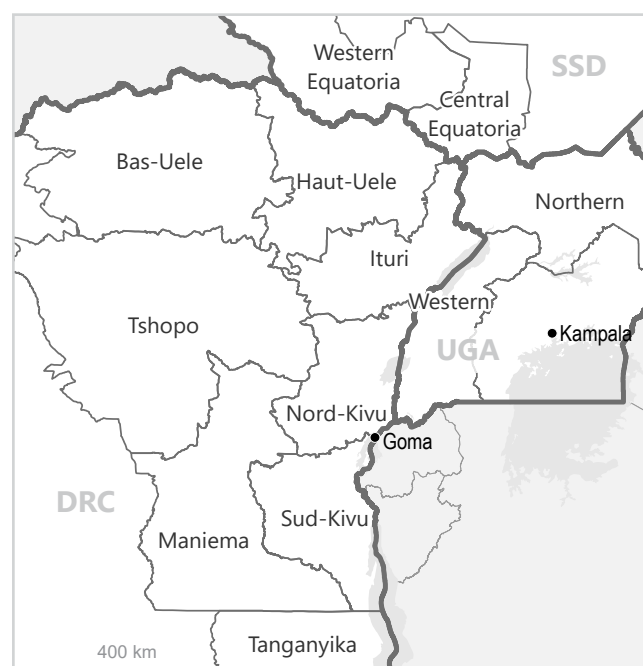
Context and rationale

On 15 May 2026, the Democratic Republic of the Congo (DRC) confirmed its 17th Ebola outbreak, caused by **Bundibugyo virus, a strain with no approved vaccine**³. WHO declared a Public Health Emergency of International Concern on 17 May⁴. **The outbreak originated in Mongbalu health zone, Djugu territory, Ituri province, an area characterised by high population mobility driven by insecurity, artisanal gold mining and cross-border trade**⁵. Cases have since been reported across **Ituri, North Kivu, and South Kivu** provinces⁶. Confirmed imported cases have been identified in **Uganda**⁷.

Evidence from past Ebola outbreaks consistently shows that the length of the initial period of undetected transmission⁸, and the level of population connectivity near the spillover site⁹ are key factors in determining transmission dynamics in the early phase of an outbreak. In this outbreak, a critical **four weeks detection gap** allowed the virus to spread¹⁰. During that period, **routine population movements are likely to have continued, acting as potential transmission routes.**

This brief synthesizes available mobility data and other secondary sources to provide further contextualisation of the mobility datasets currently available. It does not constitute a risk assessment nor a tool for response prioritization. Instead, it aims to inform them.

Map 1: Eastern DRC and bordering areas



Mobility patterns within the DRC eastern provinces

Pre-outbreak mobility patterns are likely to have shaped where the outbreak moved in its earliest, undetected phase.

A better understanding of these movements could provide additional insights to ongoing risk assessments. The mobility map on the next page illustrates these connectivity networks by showing which areas typically receive travellers from the locations where cases have been confirmed as of late May 2026. The affected region is characterised by **high-intensity population movements linked to trade, livelihoods, and social ties**¹¹.

Historical mobility data from the DRC shows that five provinces not currently classified as high-risk - **Haut-Uele, Tshopo, Bas-Uele, Maniema, and Tanganyika** - maintain regular population exchange with areas where cases have since been confirmed¹². During the weeks the outbreak went undetected, routine population movements are likely to have continued unaltered. Given the **combination of high movement connectivity from the epicenter and potential limited capacity in receiving areas**, surveillance, RCCE, and preparedness activities should also be considered for these areas.

Ebola spread may have followed normal labour migration patterns driven by the local mining economy. Most of the DRC's artisanal and small-scale gold mining takes place across Ituri, Haut-Uélé, North and South Kivu, Maniema and Tanganyika provinces, provinces connected by the trade routes that move gold, goods and people through the region¹³. The mining economy employs tens of thousands of miners across the region¹⁴.

The epicenter, Mongbalu, sits at the centre of the **Kilo-Moto gold belt**, one of the most important artisanal gold mining areas in eastern DRC. It is an economy characterised by high, **pendular mobility** of workers and goods across large geographical area. A pattern exacerbated by years of conflict disrupting alternative livelihoods like farming¹⁵. **Workers and traders move regularly** between forest-edge extraction sites, market towns such

as **Bunia and Kisangani (Tshopo)**, and home areas where families are settled¹⁶. For example, **the gold supply chain** links Ituri to **Haut-Uele's** mining zones, to **Butembo's commercial networks in North Kivu** and onward to Goma¹⁷.

Forced displacement and health-seeking behaviours represent two additional, overlapping mobility drivers that further complicate containment. As of December 2025, Ituri province alone hosted over 900,000 internally displaced persons (IDPs), with high numbers of IDPs concentrated in **Djugu territory, the outbreak epicentre**¹⁸. As of February 2026, **13% of the North Kivu's population was estimated to be IDPs**¹⁹.

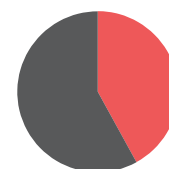
Alongside displacement, financial and non-financial barriers - including distance, cost of care, and conflict - limit access to health services in affected areas²⁰. Health facilities in the affected areas are already overstretched, and have reportedly limited capacity to detect and respond safely to new cases²¹. **Community mistrust of health authorities**, could further constrain early case identification beyond the current response perimeter²².

Available evidence from the 2018–2019 Ebola outbreak in this region suggests that livelihood-driven mobility tends to continue during an outbreak²³, as the economic pressures driving it do not diminish. Taken together, these factors point to a **mobility network that extends well beyond the current response perimeter**, into areas where detection capacity and conditions for timely case identification present additional challenges.

Top 5 arrival destinations (health zones in DRC with no confirmed cases as of 28/05/2026) from affected areas*²⁴

- 1 Nyiragongo (7553 journeys)
- 2 Musienene (5088 journeys)
- 3 Beni (4820 journeys)
- 4 Logo (4041 journeys)
- 5 Mandima (3726 journeys)

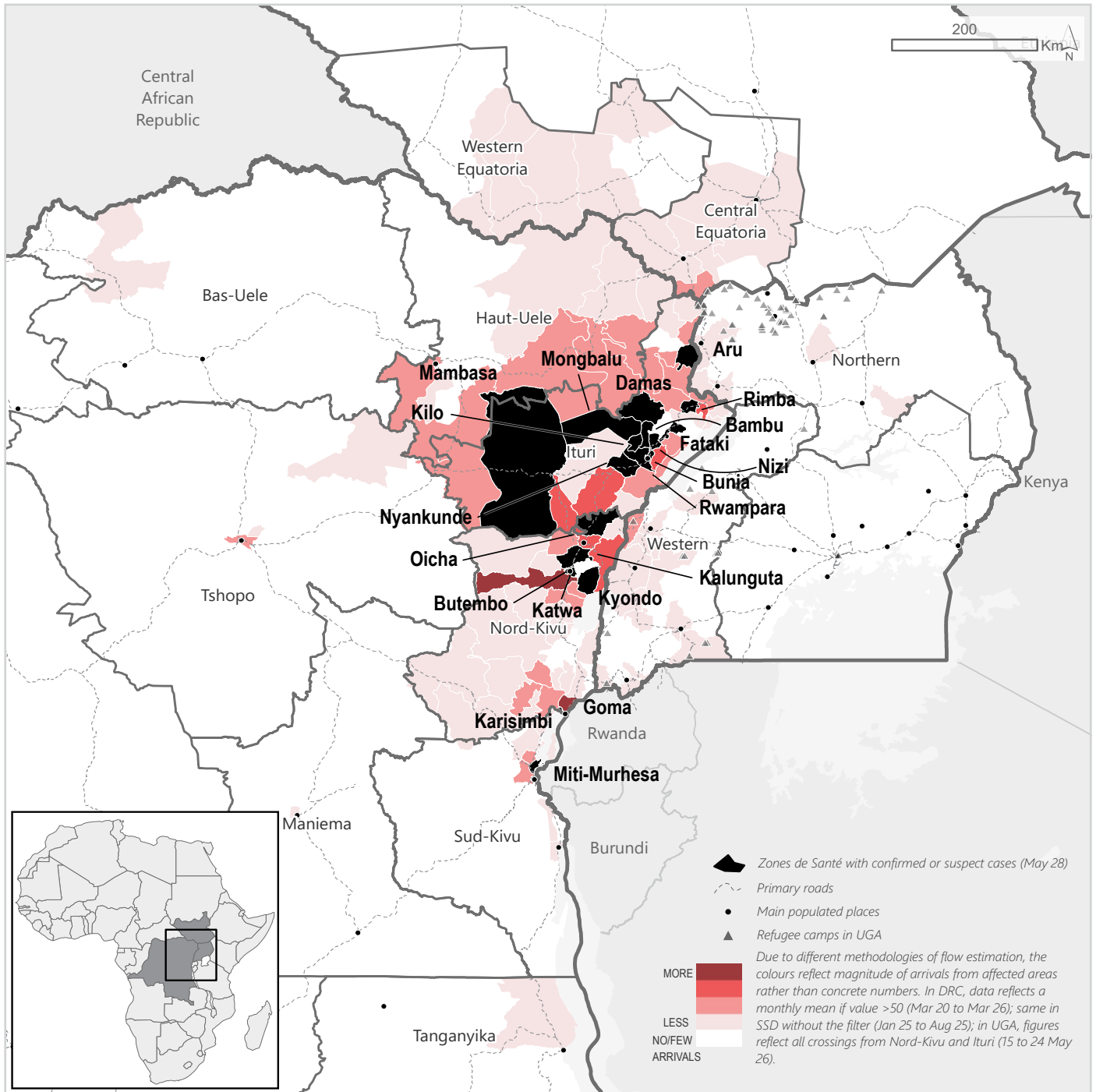
*areas are considered affected if at least one case was confirmed



42%

Nearly half of individuals with a healthcare need in Ituri reported being **unable to access healthcare when needed prior to the outbreak**²⁵

Map 2: Regional overview: mobility patterns from affected areas (last updated 28/05/2026)



Explanation:

Based on historical movement data, darker shading indicates areas more likely to receive travellers from currently affected locations. Nearby areas generally receive more travellers, although some important destinations outside the map extent (Kinshasa and Moanda) do also receive inflows. Due to different methodologies of flow estimation (see details in the legend), the colours are to be read as an **estimated magnitude of where people typically travel to** from affected areas in DRC and as such can support a better understanding of human mobility patterns in the outbreak epicenter.

Sources: Movement: Flowminder (DRC), DTM Flow Monitoring Registry (IOM SSD), DTM Flow Monitoring Registry (IOM UGA May 26) - Ebola data: Institut National de Santé Publique (INSP), Democratic Republic of the Congo SitRep MVE (maladie à virus Ebola), 2026 - Refugee camps: Refugee camps and other people of concern's locations (UNHCR GIS DATA) - Roads: OSM Contributors, HOTOSM - Administrative features: fieldmaps.io, OCHA, NaturalEarth - Populated places: NaturalEarth

Cross-border mobility patterns between DRC and Uganda and risk of onward mobility

As of 29 May, nine Ebola cases and one death have been confirmed in Uganda, including cases in Kampala that arrived before the outbreak was formally declared or border screening activated²⁶. Before the border was closed, IOM flow monitoring data collected during the outbreak (15–24 May) confirmed **substantial cross-border movement from DRC during this period**, with North Kivu being the largest province of departure²⁷. **On 27 May, Uganda closed its border with DRC to all civilian traffic**²⁸.

More broadly, the DRC-Uganda border area as a whole is characterised by **high porosity and large volumes of movement that are structurally difficult to monitor and control**²⁹. Experience from past outbreaks shows that when formal crossing points are restricted, movement does not stop but **shifts toward informal routes** that are more insecure and entirely unmonitored, increasing protection risks for people crossing and reducing the visibility of potential transmission³⁰. WHO has recently warned against border closure in the context of the current outbreak³¹.

Uganda's National Ebola Response Plan classifies 29 districts as **high or very high risk**, including the western border districts (Bundibugyo, Ntoroko, Kasese), Kampala, and the **northern districts of Arua, Adjumani, Yumbe, Lamwo, Moyo, Koboko, and Obongi**, all of which are already being actively monitored³². Uganda's stronger health system and Ebola response preparedness are likely to support earlier detection and more rapid response to cases.

The northern districts are connected to Ituri province through Aru territory and used to **sustain high levels of cross-border movement driven by trade, service-seeking, and deep familial ties**³³. They also host large refugee populations from both DRC and South Sudan³⁴. In addition, Adjumani district sits directly on the **Nimule-Elegu corridor** - the highest-volume trade route linking Kampala to Juba, South Sudan - making them potential **intermediary locations for onward transmission**. Before the closure of the border, Flowminder data documents regular population flows from affected health zones to northern bordering health zones in DRC

such as Ariwari and Aru - the latter already affected³⁵.

Before the border closure, crossing the DRC-Uganda border was part of many people's day-to-day life³⁶. Both pre-outbreak (February 2026) and outbreak-period (May 2026) flow monitoring data show that the majority of crossings were driven by economic activity and family ties, with most people intending to stay less than a week³⁷. **Eastern DRC towns are highly dependent on cross-border small-scale trade**, and large markets along the border are critical for the supply chains of bordering communities on both sides³⁸. Much of the gold extracted in Ituri is exported to Uganda³⁹. Both formal and informal trade are an **essential source of livelihoods and economic wellbeing** in border regions⁴⁰. This underscores **the importance of preparedness and response approaches that account for local livelihoods** and work through existing community structures with a wider reach.

Communities along the border also share ethnic and familial ties across both countries, and it was common to cross for social events such as weddings or funerals⁴¹. **Service-seeking also drives movement** as healthcare and other services are widely perceived as of higher quality on the Ugandan side⁴². **Refugee populations** further contribute to cross-border flows: major refugee settlements near the DRC border include **Rhino** (Arua district), **Kyangwali** (Hoima), **Kyaka II** (Hoima), and **Nakivale** (Isingiro)⁴³.

Uganda's northern districts are not only connected to DRC but also sit on the Nimule-Elegu route. According to flow monitoring data from February 2026, Ugandan districts with significant flows towards or from **South Sudan** include Adjumani, Amuru and Arua⁴⁴. The districts feeding this commercial corridor are the same ones connected to Ituri through Aru territory, meaning they sit at the junction of **two active cross-border systems**.

Beyond daily border crossing for economic activities such as trade, **these districts also host large South Sudanese refugee populations** who periodically return to South Sudan often using informal crossing points. **The largest settlements are in Yumbe, Moyo, Adjumani, and Arua districts**. Should transmission reach these districts, both the commercial corridor and refugee return movements could carry it into South Sudan through channels that largely bypass formal screening.

Top 3 destination districts in Uganda for arrivals from DRC over ten days (15–24 May 2026)⁴⁵:

- 1 Bundibugyo district (1,306 arrivals)
- 2 Kampala (1,129 arrivals)
- 3 Arua (168 arrivals)

Top 3 reasons for crossing from DRC into Uganda (15–24 May 2026)⁴⁶:

- 1 Economic reasons (33%)
- 2 Family reasons (19%)
- 3 Return to habitual residence (17%)

Cross-border mobility patterns between DRC and South Sudan

No Ebola cases have been confirmed in South Sudan as of 29 May 2026.

However, as a result of fluid mobility patterns between the two countries, active monitoring and preparedness measures should be considered. IOM DTM data from January to August 2025 recorded thousands of crossings from DRC into South Sudan across monitored Flow Monitoring Points (FMPs)⁴⁷. In March 2026, over 800 crossings from DRC were recorded⁴⁸. These figures capture only daytime traffic at monitored points; **actual volumes are likely higher given the border's documented porosity**⁴⁹.

The vast majority of movements from DRC during the first half of 2025 enter through **Western Equatoria** state, and more specifically through three FMPs near **Yambio** (Nabanga, Gangura, and Bazi)⁵⁰. Central Equatoria - particularly the **Morobo** area - received most of the remainder inflows⁵¹.

Small-scale cross-border trade is the primary driver of DRC arrivals into South Sudan, and it concentrates in the Yambio area⁵². Trade constitutes the majority of economic activity in borderland areas, with numerous cross-border markets where communities take advantage of historical trading relationships and loosely enforced trade rules. **The Yambio area functions**

as the main hub for this DRC-facing trade and it connects Uganda to Western Equatoria state via DRC territory.

As observed in other border regions, familial ties and healthcare-seeking create additional movement pathways with direct relevance to transmission⁵³. Communities along the DRC-South Sudan border share ethnic and familial ties, generating cross-border movement for family events⁵⁴.

Early detection capacity in the receiving areas is limited, increasing the risk of undetected transmission. The 2025 Intersectoral Needs Assessment data shows high rates of unmet healthcare needs and limited timely access to health facilities across the Equatoria states⁵⁵. Limited testing capacity adds additional challenges to timely detection.

Top 3 destination counties in South Sudan for arrivals from DRC (January - August 2025)⁵⁶:

- 1 Yambio (40%)
- 2 Morobo (25%)
- 3 Ibba (21%)

Top 3 reasons for crossing from DRC into South Sudan (January - August 2025)⁵⁷:

- 1 Economic reasons (46%)
- 2 Healthcare (16%)
- 3 Family reasons (12%)

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).

RESPONSE TO THE 2026 EBOLA

REACH teams in the DRC, Uganda, and South Sudan are mobilizing in support of the Ebola response, providing rapid analysis, information management, and targeted data collection to inform preparedness and response efforts. Current activities include **mapping mobility patterns** to identify areas connected to affected locations, **analysing vulnerabilities and health preparedness capacities** in potentially exposed areas, and preparing **knowledge, attitudes, and practices (KAP) assessments** to inform risk communication and community engagement efforts. REACH is also **supporting coordination mechanisms** and exploring additional contributions in areas such as accountability to affected populations, flow monitoring, and response monitoring as needs evolve.

Endnotes

- 1 Flowminder - [Democratic Republic of Congo: Population and Mobility Estimates \(1/03/2020 - 30/04/2026\)](#)
- 2 DW - [Ebola: Uganda closes border with DR Congo as virus spreads- 27/05/2026](#)
- 3 WHO/INSP - [Rapport de Situation de la 17ème épidémie de la Maladie à Virus Ebola/RDC : SitRep MVE SitRep N°012/MVB 26/2026 - - 29/05/2026](#)
- 4 *ibid.*
- 5 SSHAP - [Ituri Ebola Outbreak 2026 \(DRC\) – Summary overview of context - 28/05/2026](#)
- 6 *ibid.*
- 7 WHO - [First meeting of the IHR Emergency Committee regarding the epidemic of Ebola Bundibugyo virus disease in the Democratic Republic of the Congo and Uganda 2026 – Temporary recommendations- 22/05/2026](#)
- 8 Matson, M.J. et al. (2020) - [Delayed recognition of Ebola virus disease is associated with longer and larger outbreaks](#)
- 9 Gonzalez, A. et al. (2023) - [Human movement and transmission dynamics early in Ebola outbreaks](#)
- 10 Nature Africa - [Month-long detection gap complicates Ebola containment in DRC- 19/05/2026](#)
- 11 SSHAP - [Ituri Ebola Outbreak 2026 \(DRC\) – Summary overview of context - 28/05/2026](#)
- 12 Flowminder - [Democratic Republic of Congo: Population and Mobility Estimates \(1/03/2020 - 30/04/2026\)](#)
- 13 Delve - [Country Profile: Democratic Republic of Congo 2020](#)
- 14 IPIS - [Analysis of the interactive map of artisanal mining areas in eastern Democratic Republic of Congo \(2023 update\)](#)
- 15 FEWSNET - [Early onset of the lean season in conflict zones in the east- August 2023](#)
- 16 SSHAP - [Ituri Ebola Outbreak 2026 \(DRC\) – Summary overview of context - 28/05/2026](#)
- 17 *ibid.*
- 18 IOM DTM - RDC — Ituri: Suivi des mouvements, cycle 14 (décembre 2025)
- 19 IOM DTM - RDC — Nord Kivu: Suivi des mouvements, cycle 15 (janvier - février 2026)
- 20 SSHAP - [Ituri Ebola Outbreak 2026 \(DRC\) – Summary overview of context - 28/05/2026](#) and REACH - [DRC MSNA 2025](#)
- 21 SSHAP - [Ituri Ebola Outbreak 2026 \(DRC\) – Summary overview of context - 28/05/2026](#)
- 22 ACAPS - [DRC: Ebola outbreak 2026 - 22/05/2026](#)
- 23 SSHAP- [Key considerations: the context of North Kivu province, DRC - 2018](#)
- 24 Monthly mean from Flowminder data. Journeys refers to estimated monthly arrivals/movements/déplacements/etc
- 25 REACH - [DRC MSNA 2025](#)
- 26 UN - [Ebola: UN-Partners Uganda Emergency Appeal 2026- 27/05/2026](#)
- 27 IOM - [Uganda — Flow Monitoring– Ebola Virus Disease Outbreak- 27/05/2026](#)
- 28 DW - [Ebola: Uganda closes border with DR Congo as virus spreads- 27/05/2026](#)
- 29 ACAPS - [DRC: Ebola outbreak 2026 - 22/05/2026](#); ; SSHAP - [Ituri Ebola Outbreak 2026 \(DRC\) – Summary overview of context](#)
- 30 SSHAP - [Rwanda – DRC cross border dynamics - 2019](#) and WHO - [Epidemic of Ebola Disease caused by Bundibugyo virus in the Democratic Republic of the Congo and Uganda determined a public health emergency of international concern- 17/05/2026](#)
- 31 WHO - [Epidemic of Ebola Disease caused by Bundibugyo virus in the Democratic Republic of the Congo and Uganda determined a public health emergency of international concern- 17/05/2026](#)
- 32 UN - [Ebola: UN-Partners Uganda Emergency Appeal 2026- 27/05/2026](#)
- 33 SSHAP - [Rwanda – DRC cross border dynamics - 2019](#)
- 34 *ibid.*
- 35 Flowminder - [Democratic Republic of Congo: Population and Mobility Estimates \(1/03/2020 - 30/04/2026\)](#)
- 36 SSHAP - [Rwanda – DRC cross border dynamics - 2019](#)
- 37 IOM - [Uganda — Flow Monitoring– Ebola Virus Disease Outbreak- 27/05/2026](#) and IOM - [Uganda — Flow Monitoring Registry 8 \(1–28 February 2026\)](#)
- 38 UNDP - [Borderland Policy Briefing Series | Informal Cross-Border Trade along the DRC-Uganda Border- 2021](#)
- 39 *ibid.*
- 40 SSHAP - [Rwanda – DRC cross border dynamics - 2019](#); ACAPS - [DRC: Ebola outbreak 2026 - 22/05/2026](#)
- 41 SSHAP - [Rwanda – DRC cross border dynamics - 2019](#)
- 42 *ibid.*
- 43 *ibid.*
- 44 IOM - [Uganda — Flow Monitoring Registry 8 \(1–28 February 2026\)](#)
- 45 IOM - [Uganda — Flow Monitoring– Ebola Virus Disease Outbreak- 27/05/2026](#)
- 46 *ibid.*
- 47 IOM DTM [South Sudan, Flow Monitoring Registry, summary January–August 2025](#)
- 48 IOM DTM - [Flow Monitoring Registry – Cross Border Movement- April 2025](#)
- 49 SSHAP - [Cross-Border Dynamics Between South Sudan and DRC - 2019](#)
- 50 IOM DTM [South Sudan, Flow Monitoring Registry, summary January–August 2025](#)
- 51 *ibid.*
- 52 SSHAP - [Cross-Border Dynamics Between South Sudan and DRC - 2019](#)
- 53 *ibid.*
- 54 *ibid.*
- 55 IOM DTM - [INTERSECTORAL NEEDS ASSESSMENT \(ISNA\) 2025](#)
- 56 IOM DTM [South Sudan, Flow Monitoring Registry, summary January–August 2025](#)
- 57 *ibid.*