



Viewpoint

Bundibugyo ebolavirus emergence in eastern Democratic Republic of Congo: The critical role of risk communication and community engagement in strengthening health security in fragile and conflict-affected settings

Elie Kihanduka^a, Christian Tague^{a,*,}, Saralees Nadarajah^b, Excellent Rugendabanga^a, Aymar Akilimali^{a,*,}, Beni Muyisa^a, Nathan Mugenyi^c, Pauline Byakika-Kibwika^d

^a Department of Research, Medical Research Circle (MedReC), Goma, DR, Congo

^b Department of Mathematics, University of Manchester, Manchester, United Kingdom

^c Department of Community Health, Faculty of Health Sciences, Mbarara University of Science and Technology, Mbarara, Uganda

^d Office of the Vice Chancellor, Mbarara University of Science and Technology, Mbarara, Uganda

ARTICLE INFO

Keywords:

The 2026 bundibugyo Ebola virus disease
Risk communication and community engagement (RCCE)
Health security strengthening
Fragile and conflict-affected settings
Eastern democratic Republic of Congo

ABSTRACT

Since mid-May 2026, a rapidly evolving Ebola virus disease (EVD) outbreak caused by the Bundibugyo strain (*Orthoebolavirus bundibugyoense*) has been spreading in eastern Democratic Republic of Congo (Ituri, North and South Kivu provinces) and Uganda (Kampala and Wakiso areas). Uganda has so far reported 14 imported cases and 5 secondary transmissions according to the World Health Organization (WHO). As of 30 July 2026, 3605 confirmed cases, including 1587 deaths, have been reported in the Democratic Republic of the Congo. Unlike previous Zaire outbreaks, no specific licensed vaccine or antiviral treatment exists for the Bundibugyo strain, making behavioral and community-based interventions the only line of defense. However, armed conflict, chronic insecurity, massive population displacements (>2.1 million), and profound community distrust of health authorities are crippling the response. This article therefore argues that the current threat is a major warning sign for the Great Lakes region, and that investing in Risk Communication and Community Engagement (RCCE) such as involving community health workers, natives, and trusted leaders is the most urgent priority to avoid a regional health catastrophe. Without a humanitarian truce to guarantee access and a coordinated cross-border RCCE strategy, undetected transmission will continue to fuel this outbreak and future zoonotic emergencies.

This review highlights the critical threat of the 2026 Bundibugyo Ebola virus outbreak in eastern Democratic Republic of Congo (DRC) and to demonstrate that in the absence of strain-specific vaccines, Risk Communication and Community Engagement (RCCE) is not just a secondary activity but the central pillar for breaking virus transmission patterns and strengthening regional health security.

1. The 2026 bundibugyo outbreak: A new and dangerous warning sign

Ebola virus disease (EVD) remains a severely fatal public health emergency, particularly in economically and politically fragile nations like the Democratic Republic of Congo (DRC).¹ The current outbreak, caused by the Bundibugyo strain (for which fruit bats are the suspected natural reservoir), began in Ituri province (Bunia, Rwampara, and

Mongbwalu health zones) around mid-May 2026.² Initially only 8 laboratory-confirmed cases were reported by the National Institute of Biomedical Research; however, by June 6, 2026, WHO confirmed 515 cases and 91 deaths.³ As of the most recent situation update (5 August 2026), the outbreak had grown substantially to 4053 confirmed cases and 1850 deaths in the DRC, now the largest Ebola outbreak ever recorded in the country, surpassing the 2018-2020 North Kivu epidemic. Uganda reported 20 confirmed cases and 2 deaths and declared its outbreak over on 28 July 2026 after the last patient was discharged.⁴ Transmission has now been confirmed in Uganda, linked to cross-border movements from the DRC, with evidence of secondary transmission among contacts and healthcare workers.³

Unlike the 2018-2020 outbreak in North Kivu (which benefitted from the rVSV-ZEBOV vaccine), no specific vaccine or authorized antiviral treatment currently exists for the Bundibugyo strain⁵. Therefore, the

* Corresponding author.

E-mail address: aymarakilimali@gmail.com (A. Akilimali).

<https://doi.org/10.1016/j.jve.2026.100633>

Received 31 July 2026; Received in revised form 10 August 2026; Accepted 10 August 2026

Available online 11 August 2026

2055-6640/© 2026 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

2026 response relies entirely on behavioral change, community surveillance, infection prevention and control (IPC), and safe burials which depend on community trust as a critical factor.

2. Why this threat is a major warning sign for the Great Lakes region

The Great Lakes region (DRC, Rwanda, Uganda, Burundi) is highly vulnerable due to the following factors:

- Active armed conflict in Ituri and Kivu provinces, which has deteriorated the health system and disrupted surveillance⁶;
- High population mobility across busy mining and trade corridors, facilitating rapid cross-border spread and simultaneous epidemics.
- Communication overload: in 2025 alone, DRC faced 48,000 cholera cases, 17,000 Mpox cases, 36,000 measles cases, and 35 Ebola cases,⁷ causing message fatigue, resource diversion, and delayed recognition of Ebola symptoms among affected communities.

The WHO has declared this outbreak a Public Health Emergency of International Concern (PHEIC), and Africa CDC a Continental Health Security Emergency (PHECS).² However, without immediate operational changes, these declarations risk being purely symbolic.

3. Persistent weaknesses in epidemic surveillance and RCCE

In Ituri, community-based surveillance (CBS), which is the first line of early detection, is severely hampered by mistrust of health authorities.⁷ Displaced populations living in overcrowded camps with limited water, sanitation and hygiene (WASH) are difficult to reach. Key obstacles include: Language barrier due to linguistic diversity (Swahili, Lingala, Kinande and other local languages) requiring constant adaptation of messages; Armed group control of territories, limiting RCCE team access; Stigmatization of sick individuals and even healthcare workers, who are rejected by their own families.⁸ RCCE teams may also be viewed with suspicion or targeted by armed groups, necessitating the humanitarian truce proposed below.

Low adherence to IPC measures, avoidance of contact with sick individuals, and safe burial practices are directly linked to failures in risk communication. Spontaneous reporting of suspected cases and contact tracing compliance remain insufficient, leading to undetected transmission chains.

4. The central role of risk communication and community engagement (RCCE)

In the absence of a Bundibugyo-specific vaccine, RCCE is not a support activity; it is the core intervention. Effective RCCE must include:

a) Trusted Local Intermediaries

Religious leaders, traditional chiefs, and community radio stations possess social legitimacy that formal health institutions lack. Training these actors on Bundibugyo-specific prevention messages is an immediate operational priority.²

b) Multichannel Communication

Community radio (the most accessible channel in Ituri) must broadcast messages in local languages, counter disinformation, and promote safe behaviors. Freedom of communication for journalists and radio stations must be guaranteed, even under a humanitarian truce.⁹

c) Community Health Workers (CHWs)

Local CHWs are more effective at creating trust and encouraging

voluntary case reporting. They serve as daily vectors for tailored risk communication.

d) Healthcare Worker Protection and Information

Deaths among healthcare workers during the 2026 outbreak reveal failures in internal IPC communication. Urgent, regular training on IPC protocols, coupled with clear communication about rights and risks, is essential to reduce stigma and protect the workforce.

5. Cross-border risks and the need for harmonized RCCE

The spread to Uganda (with confirmed cases in Kampala and Wakiso areas among travelers from the DRC) demonstrates that national RCCE strategies are insufficient. We require: Harmonized risk communication messages between DRC, Uganda, Rwanda, Burundi, and Republic of Congo; RCCE at points of entry: cross-border markets, checkpoints, and mining areas are high-risk transmission zones but also strategic points for health information dissemination; A One Health approach integrating human, animal, and environmental health communication to address zoonotic risks (e.g., fruit bat contact) at the human-wildlife interface.¹⁰

6. Urgent priorities to avoid a regional health crisis

Based on lessons learned from previous Ebola outbreaks in DRC (2018-20, 2022) and the current 2026 data, we advocate for five immediate actions:

1. Declare and operationalize an “Ebola truce”: A time-limited, negotiated suspension of hostilities in Ituri and Kivu to guarantee safe access for RCCE teams, protection of health facilities, and freedom of communication.⁹
2. Emergency financing for community-based response: Dedicated funds to recruit CHWs, produce multilingual materials, equip radio stations, and conduct rapid Knowledge-Attitudes-Practices (KAP) surveys. RCCE must be funded at the same level as epidemiological surveillance and clinical care.
3. Integrate RCCE into cross-border preparedness: Establish joint DRC-Uganda-Rwanda community health committees and harmonize messaging for mobile populations.
4. Train healthcare workers in IPC and anti-stigma communication: Protect the workforce from infection and from social rejection.
5. Leverage the WHO/Africa CDC “One Team, One Plan, One Budget” architecture to explicitly elevate the Community-Based Response to Epidemics (CBE) pillar from rhetoric to frontline action.²

7. Investments needed to sustainably strengthen health security in central Africa

Beyond the acute outbreak, the DRC and its neighbors require sustained investment in: Decentralized diagnostic capacity (to reduce reliance on INRB in Kinshasa); Community surveillance networks that function during and between epidemics; RCCE as a permanent public health function, not an emergency add-on; One Health surveillance to detect zoonotic threats before they spill over into human populations.¹⁰

The 2026 Bundibugyo outbreak is not an isolated crisis. It is a stress test for a region already fractured by conflict, displacement, and simultaneous epidemics. The world's attention is currently focused on the numbers (over 4000 cases and 1800 deaths) but the true measure of success will be whether we can rebuild community trust quickly enough to break chains of transmission.

8. Conclusion

In the absence of a medical countermeasure for the Bundibugyo

strain, risk communication and community engagement are the only tools available to stop this outbreak. The 2026 Ebola crisis in eastern DRC starkly illustrates that health security in fragile states is not primarily a matter of vaccines or antivirals. Without a humanitarian truce, adequate RCCE financing, and cross-border coordination, this outbreak will inevitably expand, destabilize the Great Lakes region, and become the next preventable pandemic. The critical moment to act is now.

CRedit authorship contribution statement

Elie Kihanduka: Conceptualization, Data curation, Formal analysis, Project administration, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **Christian Tague:** Conceptualization, Methodology, Project administration, Writing – original draft, Writing – review & editing. **Saralees Nadarajah:** Conceptualization, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **Excellent Rugendabanga:** Conceptualization, Validation, Visualization, Writing – original draft, Writing – review & editing. **Aymar Akilimali:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **Beni Muyisa:** Conceptualization, Investigation, Visualization, Writing – original draft, Writing – review & editing. **Nathan Mugenyi:** Conceptualization, Formal analysis, Methodology, Project administration, Software, Supervision, Visualization, Writing – original draft, Writing – review & editing. **Pauline Byakika-Kibwika:** Conceptualization, Methodology, Project administration, Supervision, Validation, Writing – original draft, Writing – review & editing.

Declaration of competing interests

All authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

No data was used for the research described in the article.

References

1. World Health Organization. Ebola disease caused by Bundibugyo virus—Democratic Republic of the Congo. *Disease Outbreak News*; 2026. Available at: <https://www.who.int/emergencies/disease-outbreak-news/item/2026-DON614>. Cited August 9, 2026.
2. Ngongo N, Belizaire MR, Mercy K, et al. WHO and Africa CDC declare the 2026 Ebola disease outbreak a public health emergency. *Lancet*. 2026. [https://doi.org/10.1016/S0140-6736\(26\)01101-3](https://doi.org/10.1016/S0140-6736(26)01101-3). Published online June 5.
3. World Health Organization. Outbreak information bulletin; Bundibugyo virus disease, Democratic Republic of the Congo and Uganda. Available at: <https://www.who.int/emergencies/disease-outbreak/news/item/2026-DON606Cited15thJune2026>; 8 June 2026.
4. European Centre for Disease Prevention and Control. Ebola disease outbreak in the democratic Republic of the Congo and Uganda. *Situation update*; 6 August 2026. Available at: <https://www.ecdc.europa.eu/en/ebola-outbreak-democratic-republic-congo-and-uganda>. Cited August 9, 2026.
5. Houldcroft CJ. Bundibugyo virus outbreak: the role of genomics in Orthoebolavirus outbreaks. *Microb Genom*. 2026;12, 001754. <https://doi.org/10.1099/mgen.0.001754>, 2026.
6. André E, Ssengooba W, Berner-Rodoreda A, et al. Urgent call for an Ebola incident in DR Congo. *Lancet*. 2026;5. [https://doi.org/10.1016/S0140-6736\(26\)01102-5](https://doi.org/10.1016/S0140-6736(26)01102-5). Published online June.
7. Bepouka B, Kafua M, Matangi B, et al. Simultaneous outbreaks of Ebola, cholera, mpox, and measles in DR Congo in 2025. *Lancet*. 2025;406:2214–2215. [https://doi.org/10.1016/S0140-6736\(25\)02100-2](https://doi.org/10.1016/S0140-6736(25)02100-2).
8. Vinck P, Pham PN, Bindu KK, Bedford J, Nilles EJ. Institutional trust and misinformation in the response to the 2018-19 Ebola outbreak in North Kivu, DR Congo. *Lancet Infect Dis*. 2019;19:529–536. [https://doi.org/10.1016/S1473-3099\(19\)30063-5](https://doi.org/10.1016/S1473-3099(19)30063-5).
9. Abdallah EM, Selim S. When Ebola meets conflict: surveillance vulnerability in the Bundibugyo outbreak. *Infection*. 2026. <https://doi.org/10.1007/s15010-026-02864-1>.
10. Meakin S, Nsio J, Camacho A, et al. Effectiveness of rVSV-ZEBOV vaccination during the 2018-20 Ebola epidemic in DRC. *Lancet Infect Dis*. 2024;24(12):1357–1365. [https://doi.org/10.1016/S1473-3099\(24\)00419-5](https://doi.org/10.1016/S1473-3099(24)00419-5).