

MONTHLY SCIENTIFIC REVIEW **ON BUNDIBUGYO EBOLAVIRUS**

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All informations comes from a valid and credible source.

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Situation at a glance

- On 5 May 2026, the World Health Organization (WHO) was alerted to a high-mortality outbreak in Ituri Province, Democratic Republic of the Congo, with the pathogen identified on 15 May as the Bundibugyo Ebola virus.
- On 17 May 2026, WHO declared that the Ebola virus disease outbreak caused by the Bundibugyo virus in the Democratic Republic of the Congo and Uganda constitutes a “Public Health Emergency of International Concern,” although without pandemic risk at this stage.
- As of 21 August 2026, the DRC has reported 5,290 confirmed cases and 2,516 deaths across 56 health zones. This is now the second-largest Ebola outbreak ever recorded, progressing more rapidly than any previous one.
- At the end of August, Uganda declared the end of its Ebola outbreak after completing the 42-day countdown without any new confirmed case. During the outbreak, Uganda reported 20 confirmed cases of Ebola virus disease caused by the Bundibugyo virus following the declaration of the outbreak on 15 May 2026.

Scientific articles

This section presents relevant articles published on peer-reviewed scientific journals or pre-print platforms.

2026-07-17

AI-Driven Discovery and BSL-4 Validation of Cross-Filovirus Ebola-Marburg Inhibitors and their Synergistic Combinations.

Journal: bioRxiv

Authors: Holli-Joi Martin, Marcus Tullius Scotti, Sankalp Jain, Laura K McMullan, Payel Chatterjee, Cleber Melo-Filo, Maximilian Caza, Alexander Tropsha, Hsiu-Ling Lin, Michael Flint, Emily Lee, Michael K Lo, Alexey V Zakharov, Eugene N Muratov

A computational platform using QSAR models screened 142,382 compounds, identifying 23 broad-spectrum filovirus inhibitors with low micromolar potency and low cytotoxicity, targeting conserved VP35 and L proteins. Synergistic combinations, including NCGC00113249-01 and NCG

[See details](#)

2026-06-05

Cross-reactive Bundibugyo antibody responses after licensed Ebola vaccines.

Journal: medRxiv

Authors: Edouard Lhomme, Aurélie Wiedemann, Ahidjo Ayoub, Safaa Ben-Farhat, Guillaume Thaurignac, Céline Roy, Abdoul Habib Beavogui, Seydou Doumbia, Mark Kieh, Bailah Leigh, Samba Sow, Stephen A Migueles, Deborah Watson-Jones, Yazdan Yazdanpanah, Rodolphe Thiébaud, Martine Peeters, Laura Richert, Yves Levy

Licensed Ebola vaccines (rVSVΔG-ZEBOV-GP and Ad26.ZEBOV/MVA-BN-Filo) induced detectable but lower cross-reactive antibody responses against Bundibugyo virus (BDBV) compared to homologous EBOV antigens, as shown in a multiplex Luminex assay of PREVAC trial sera. Responses

[See details](#)

2026-06-29

A Single-Dose Bundibugyo Virus Vaccine Protects Macaques Within 3 Days.

Journal: bioRxiv

Authors: Kyle L O'Donnell, Jil A Haase, Corey W Henderson, B Ryder Gathright, Paige Fletcher, Joseph F Rhoderick, Chad S Clancy, Shilpi Jain, César Albariño, Brian J Smith, Andrea Marzi

A single-dose VSV-BDBV vaccine conferred complete protection against Bundibugyo virus challenge in macaques within 3 days, with rapid innate and adaptive immune responses, minimal clinical signs, no viremia, and protection correlated with neutralizing antibodies and Fc effector function. This supports its potential for rapid outbreak response.

[See details](#)

2026-07-24

Development and Characterization of a Recombinant Bundibugyo Virus Expressing a Fluorescent Reporter Protein.

Journal: Emerg Microbes Infect

Authors: Shilpi Jain, Éric Bergeron, Mike Flint, Joel M Montgomery, Christina F Spiropoulou, César G Albariño

A recombinant Bundibugyo virus expressing ZsGreen (rBDBV-ZsG) was developed to enable antiviral and neutralization studies. It exhibited comparable antiviral sensitivity to wild-type BDBV and demonstrated robust performance in neutralization assays with monoclonal antibodies and convalescent sera, providing a critical tool for BDBV research and therapeutic development.

[See details](#)

2026-05-27

Bundibugyo Ebola: why preparedness still fails at the point of detection.

Journal: Lancet Infect Dis

Authors: Thirumalaisamy P Velavan, Peter G Kremsner, Francine Ntoumi

[See details](#)

2026-06-10

Ebola outbreak caused by Bundibugyo virus: challenges and priorities for epidemic preparedness and response.

Journal: Lancet

Authors: Jean B Nachega, Placide Mbala-Kingebeni, Sabue Mulangu, Nicaise Ndembi, Wolfgang Preiser, Donald Skinner, Nadia A Sam-Agudu, Francine Ntoumi, Houriiyah Tegally, Cheryl Baxter, Tulio de Oliveira, Henry Kyobe Bosa, Pontiano Kaleebu, Oscar Kallay, Olalekan A Uthman, Edward J Mills, Philip J Rosenthal, Alimuddin Zumla, Jean-Jacques Muyembe-Tamfum

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2026-07-03

Research priorities for characterising Bundibugyo virus.

Journal: Lancet

Authors: Audrey Geoffroy, Diana Jeang, Amrish Y Baidjoe, Michael Casera, Rebecca M Coulborn, Henry Kyobe Bosa, Kyeng Mercy, Patrick D M C Katoto

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2026-06-30

Bundibugyo virus and the cognition gap: rethinking epidemic preparedness in the era of regionalised outbreaks.

Journal: Lancet Glob Health

Authors: Francesco Branda, Mohamed Mustaf Ahmed, Zhinya Kawa Othman, Fabio Scarpa, Massimo Ciccozzi, Giancarlo Ceccarelli, Ntuli A Kapologwe

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2026-06-24

Clinical Characteristics of Patients Infected with Bundibugyo Virus, DRC 2026.

Journal: N Engl J Med

Authors: Pierre Akilimali, Dav M Ebengo, Samuel V Scarpino, Adrienne Amuri-Aziza, Tony Wawina-Bokalanga, Placide Matondo-Mbundu, Benjamin Kanku, Eddy Kinganda-Lusamaki, Jean-Claude Makangara, Daniel Mukadi-Bamuleka, Amanda Rojek, Moritz U G Kraemer, Christian Ngandu, Dieudonné Mwamba, Placide Mbala-Kingebeni

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Relevant news

This section presents official reports from health agencies, manufacturers and press releases with reliable sources.

2026-07-17

Scientific update on Bundibugyo MCM research and development

Source: WHO

A virtual scientific update meeting on Bundibugyo virus R&D will be held on 17 July 2026, led by ANRS-MIE, Africa CDC, and WHO R&D Blueprint, to review outbreak response progress, share epidemiological and clinical data, update on diagnostics, vaccines, and the EboPep project, and coordinate global research efforts.

[See details](#)

2026-07-27

First volunteer vaccinated in Ebola vaccine trial

Source: CIDRAP

First volunteer vaccinated in phase 1 trial of ChAdOx1 BDBV, an investigational vaccine against Bundibugyo ebolavirus, developed by Oxford Vaccine Group with support from Serum Institute of India and CEPI. Trial assesses safety and immune response in 50 healthy adults. Bu

[See details](#)

2026-07-14

Gilead launches Ebola antiviral trial in DR Congo as cases near 2,000

Source: CIDRAP

Gilead's EBO-PEP trial in Ituri, DRC, enrolls nearly 1,000 asymptomatic individuals exposed to Bundibugyo Ebola to test obeldesivir as post-exposure prophylaxis. With 1,984 cases and 721 deaths, including 1,772 cases and 608 deaths in Ituri, and no approved treatments or

[See details](#)

2026-06-01

Three Ebola vaccine candidates fast-tracked as African outbreak continues

Source: CIDRAP

CEPI fast-tracks three Ebola Bundibugyo vaccine candidates from Oxford, Moderna, and IAVI amid an expanding outbreak in DRC and Uganda, with no licensed vaccines or therapeutics. Moderna receives up to \$50M for mRNA vaccine development; IAVI gets \$3.2M for rVSV platform;

[See details](#)

2026-07-02

Clinical trial for Ebola therapies begins in DR Congo

Source: CIDRAP

A randomized platform trial in DRC evaluates MBP134 and remdesivir, alone or combined, for Bundibugyo virus (Ebola), with no licensed therapies available. Led by DRC's National Institute for Biomedical Research, Oxford, and Belgium's Institute of Tropical Medicine, the tr

[See details](#)

2026-07-23

Existing vaccines induce antibody response against the Ebolavirus that's driving Congo outbreak

Source: CIDRAP

Existing Zaire Ebola vaccines induce cross-reactive antibodies against Bundibugyo virus, though 6-8 fold lower than against Zaire. While not definitive proof of protection, these findings support urgent evaluation of stockpiled vaccines during the ongoing DRC outbreak, gi

[See details](#)

2026-08-27

Uganda ends Ebola outbreak following completion of 42-day countdown

Source: AFRO WHO

Uganda has declared the end of its Bundibugyo Ebola outbreak after 42 days without new cases, confirming no remaining transmission. Strong leadership, rapid detection, contact tracing, isolation, and community engagement halted spread, with 20 cases reported and 2 deaths. WHO and Africa CDC urge continued preparedness as transmission persists in the DRC and regional importation risk remains.

[See details](#)

2026-08-25

The deadliest Bundibugyo Ebola outbreak can be stopped

Source: WHO

The Bundibugyo Ebola outbreak in the DRC is the second-largest ever, driven by insecurity and strained health systems. Communities are key to stopping transmission, alongside strong national leadership. Frontline workers need protection, resources and funding. Surveillance, care, infection control and cross-border coordination must be scaled up. With rapid detection and community engagement, the outbreak can be stopped.

[See details](#)

Clinical Studies

This section presents relevant clinical trials.

Guidelines and practical information

This section lists official manuals of recommendations for clinical practice or public health policy published by leading health organizations.

CDC	Ebola Disease Outbreak in the Democratic Republic of the Congo and Uganda
ECDC	Threat assessment brief: Ebola disease outbreak caused by Bundibugyo virus - Democratic Republic of the Congo and Uganda - 2026
CDC	Clinical Guidance for Ebola Disease
CDC	Infection prevention and control guideline for Ebola and Marburg diseases
CDC	Public Health Guidance for Ebola Disease

Fact sheets

Brief description of Ebola virus disease

Phylogeny

Ebola virus disease is caused by viruses belonging to the genus *Orthoebolavirus* within the *Filoviridae* family. Six species are currently identified, three of which are responsible for major outbreaks in humans: Ebola virus (EBOV), Sudan virus (SUDV) and Bundibugyo virus (BDBV). The Bundibugyo virus (BDBV) was first identified in 2007–2008 in Bundibugyo District, Uganda, and later during a 2012 outbreak in the DRC. The two previously reported outbreaks had case-fatality rates of 31% and 34%.

Transmission

Initial transmission to humans is thought to occur through close contact with infected animals, alive or dead, particularly bats or non-human primates. Human-to-human transmission occurs through direct contact with blood or bodily fluids of infected individuals, living or deceased, or through contact with contaminated surfaces. Infected individuals are not contagious before symptom onset. They become contagious as soon as symptoms begin.

Diagnosis

Diagnosis relies primarily on detection of viral RNA by RT-PCR during the acute phase, performed in laboratories with appropriate biosafety capacity. Rapid antigen tests may be used as first-line tools in remote areas but require PCR confirmation. Serological tests (IgM/IgG) are used for seroprevalence studies or to document past infections but are not suitable for early diagnosis.

Symptoms

The incubation period ranges from 2 to 21 days. Illness usually begins with non-specific symptoms such as fever, fatigue, headache and myalgia, followed by gastrointestinal signs including vomiting, diarrhea and abdominal pain. Hemorrhagic manifestations may occur in some cases, along with multiorgan failure. The observed fatality rate is lower than that of outbreaks caused by Ebola virus (Zaire), but the disease remains severe and requires intensive care.

Treatment & Vaccination

To date, no specific antiviral treatment or approved vaccine exists for Bundibugyo virus.