EBOLA VIRUS DISEASE CLINICAL GUIDE

Evidence-Based Reference for Healthcare Workers

For Healthcare Workers

Bacha Khan Medical Complex (BKMC), Swabi KP

Department of Infectious Diseases

Khyber Pakhtunkhwa, Pakistan

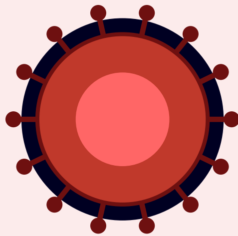
WHO · CDC · ECDC · NIH Pakistan | Bundibugyo Virus Outbreak · May 2026

CHAPTER 1
Outbreak Overview & Virology

1

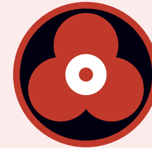
Active PHEIC — 17 May 2026

- Pathogen: Bundibugyo ebolavirus (BDBV) — distinct from Zaire ebolavirus
- Epicentre: Ituri Province, DRC (Mongwalu, Rwampara, Bunia health zones)
- 246 suspected cases · 80 suspected deaths (WHO, 16 May 2026)
- Two confirmed travel-related cases in Uganda
- CFR ~25–50%; NO licensed vaccine or specific antiviral for BDBV
- Ervebo, Zabdeno-Mvabea, mAb114, REGN-EB3 are Zaire-specific — do NOT use for BDBV



Bundibugyo Virus
RNA virus Bunyaviridae family

Incubation 2–21 days
Average 8–10 days. Not infectious in incubation.



Transmission
Contact with blood or body fluids ONLY

KEY CLINICAL DIFFERENCES: BDBV VS ZAIRE

Feature	Bundibugyo (Current)	Zaire ebolavirus
CFR	~25–50%	~50–90%
Vaccine	**NONE licensed**	Ervebo (FDA-approved)
mAb therapy	None effective	mAb114, REGN-EB3
Haemorrhage	Less pronounced	More common
Last major outbreak	Uganda 2007–08	W.Africa 2014–16

CHAPTER 2

Clinical Presentation

2

Disease timeline

Phase	Timing	Features	Action
Incubation	2–21 days (avg 8–10)	None	None — not infectious
Early (Days 1–3)	Abrupt onset	Fever >38.5°C, severe headache, myalgia, arthralgia, fatigue, anorexia, sore throat	Isolate immediately
GI Phase (Days 3–7)	High-risk	Vomiting, diarrhoea, abdominal pain, hiccups, dysphagia — rapid dehydration	IV fluids; strict IPC
Severe (Days 7–14)	Critical	Haemorrhage, organ failure, encephalopathy, shock, DIC	ICU-level support; full PPE
Recovery	Day 9+	Improvement; semen infectious ≥6 months; sequelae: arthralgia, uveitis, PTSD	Survivor follow-up programme

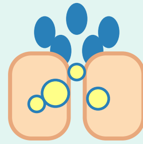
WHO 2024 Case Definitions

Suspect: Sudden fever + ≥3 of: headache, lethargy, anorexia, myalgia/arthralgia, abdominal pain, dysphagia, vomiting, dyspnoea, diarrhoea, hiccups. OR: deceased with compatible illness.

Confirmed: Suspect case + RT-PCR positive for Bundibugyo virus. BSL-4 reference lab required.

IPC & PPE Guidance

Full Barrier PPE
Mandatory for all EVD care



Hand Hygiene
At all 5 moments; soap > ABHR

Dedicated EVD Unit
Negative pressure room preferred

PPE COMPONENTS & SEQUENCE

■ DONNING (put on)

Hand hygiene → Gown → Inner gloves → Head cover → Boots → Apron → Face shield/goggles → Outer gloves → Buddy verification

■ DOFFING (remove)

Outer gloves → Apron → Face shield → Boots → Gown → Head cover → Inner gloves → Hand hygiene. ALWAYS with a trained observer.

■ AGP Procedures

Intubation, suctioning, bronchoscopy: N95/FFP3 + PAPR preferred. Full barrier PPE mandatory. Minimise aerosol-generating procedures.

■ Sharps safety

Safety-engineered devices. No recapping. Immediate disposal in puncture-resistant containers.

NIH Pakistan IPC Requirements (EVD)

- Isolate suspect/confirmed cases immediately in single room with private bathroom
- Standard + Contact + Droplet precautions minimum; full barrier for direct care
- All waste = Category A (UN2814). Autoclave or incinerate. No municipal disposal.
- 0.5% sodium hypochlorite for environmental decontamination (freshly prepared)
- All HCWs entering room must be logged. Buddy system mandatory for PPE removal.

CHAPTER 4

Treatment & Laboratory

4

CLINICAL MANAGEMENT

■ Aggressive supportive care — cornerstone

IV fluid resuscitation and electrolyte correction. Paracetamol (avoid NSAIDs/aspirin). Antiemetics, antidiarrhoeals. Empiric antimalarials. Broad-spectrum antibiotics for secondary infection. Treat hypotension, respiratory failure, bleeding complications promptly.

■ No licensed vaccine or antiviral for BDBV

Ervebo/Zabdeno-Mvabea and mAb therapies (mAb114, REGN-EB3) are Zaire-specific ONLY. Do NOT administer to BDBV patients. WHO and partners are evaluating investigational options. Enrol in any available RCT where possible.

■ Survivor care

Viral shedding in semen ≥6 months post-recovery. Screen monthly. Safe sex counselling. Watch for post-Ebola syndrome: uveitis, arthralgia, hearing loss, PTSD.

LABORATORY — NIH PAKISTAN PROTOCOL

BEFORE ANY SAMPLING — notify NIH NHL Islamabad: +92-51-9255112

- Acute phase: Whole blood in EDTA (RT-PCR — primary diagnostic method)
- Convalescent: Serum for IgM/IgG ELISA (supplementary)
- ALL specimens = Category A infectious substance (UN2814). Triple packaging mandatory.
- Do NOT process locally without BSL-3+ capability. BSL-4 required for virus isolation.
- Antigen detection available as supplementary test at NIH NHL.

CHAPTER 5

NIH Pakistan Recommendations & Reporting

5

1

Report within 1 hour

ALL suspect EVD cases must be reported to NIH Pakistan DSRU within 1 hour of clinical suspicion. Do NOT wait for lab confirmation. Hotline: +92-51-9255110 (24/7). Complete NIH VHF Notification Form immediately.

2

HCW post-exposure monitoring

All HCWs with potential EVD exposure must monitor temperature TWICE DAILY for 21 days. Any fever >38°C or symptoms → immediate self-isolation + notify infection control + call NIH DSRU. No specific PEP available for BDBV — monitoring only.

3

Contact tracing within 24 hours

Identify all healthcare and household contacts within 21-day window. Contacts should self-monitor and report any fever or symptoms. NIH Pakistan will coordinate contact tracing with provincial authorities.

4

Safe burial protocol

NIH Pakistan prohibits traditional burial practices for EVD cases. Trained safe burial teams (full PPE) mandatory. No post-mortem without NIH/PHA approval. Bodies remain highly infectious. Community engagement essential.

EMERGENCY CONTACTS

Contact	Number
NIH Pakistan DSRU (24/7)	+92-51-9255110
NIH National Health Lab	+92-51-9255112 | nih.org.pk
CDC Emergency Operations	+1-770-488-7100
WHO GOARN	+41-22-791-2111
ECDC Duty Officer	+46-8-5860-1200

Sources: WHO IPC Guideline Ebola & Marburg (2025) · WHO Ebola Toolbox (2024) · CDC HAN #530 (17 May 2026) · ECDC Threat Assessment Brief (19 May 2026) · WHO PHEIC Declaration (17 May 2026) · NIH Pakistan EVD Guidelines (Aug 2014) · NIH Pakistan National IPC Guidelines 2020. FOR CLINICAL ORIENTATION ONLY — consult full guidelines for patient management.

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