Situation Report: Ebola Virus Disease (Bundibugyo), DRC

PHEIC | WHO GRADE 3 | ACTIVE OUTBREAK | DAY 36 | 2026-05-30 16:09 UTC | Classification: Evidence Scan

1,025	119	243	2,417	36
TOTAL CASES (DRC)	CONFIRMED	DEATHS (ALL)	CONTACTS TRACED	PCR MACHINES

Executive Summary

An outbreak of Ebola virus disease caused by Bundibugyo ebolavirus (BDBV) continues to expand across 21 health zones in three provinces of the DRC (Ituri, Nord-Kivu, Sud-Kivu), with confirmed cross-border transmission to Uganda (9 cases, 1 death).

As of 2026-05-27, INSP reports 1,025 cumulative cases (119 confirmed, 906 suspected) and 243 deaths. The confirmation rate remains low at 11.6%, reflecting limited BDBV-specific diagnostic capacity.

The highest attack rates are concentrated in Rwampara (425.8/100,000; n=261) and Mongbalu (225.6/100,000; n=359). Rwampara has no PCR machines deployed -- the most critical diagnostic gap.

No approved vaccine, therapeutic, or rapid diagnostic test exists for BDBV. WHO expert consultation (2026-05-28) prioritised MBP134, Maftivimab, and remdesivir for clinical trials; none are yet operational.

Sixteen outbreak genomes (May 2026) are available on Pathoplexus. Preliminary phylogenetic analysis indicates a distinct clade relative to 2007 and 2012 BDBV lineages, consistent with a separate introduction. Genomic coverage is approximately 12% and geographically biased.

Contact tracing is active (2,417 contacts traced cumulative) but follow-up completion rates are not reported. Conflict and displacement in Ituri and Nord-Kivu constrain response access.

Data currency: Epidemiological data from INSP SitRep via INRB-UMIE (2026-05-14 to 2026-05-27). Uganda figures from Uganda MOH via Reuters (2026-05-29). Genomic data from Pathoplexus (accessed 2026-05-30). All figures are provisional. This is an evidence scan, not a systematic review.

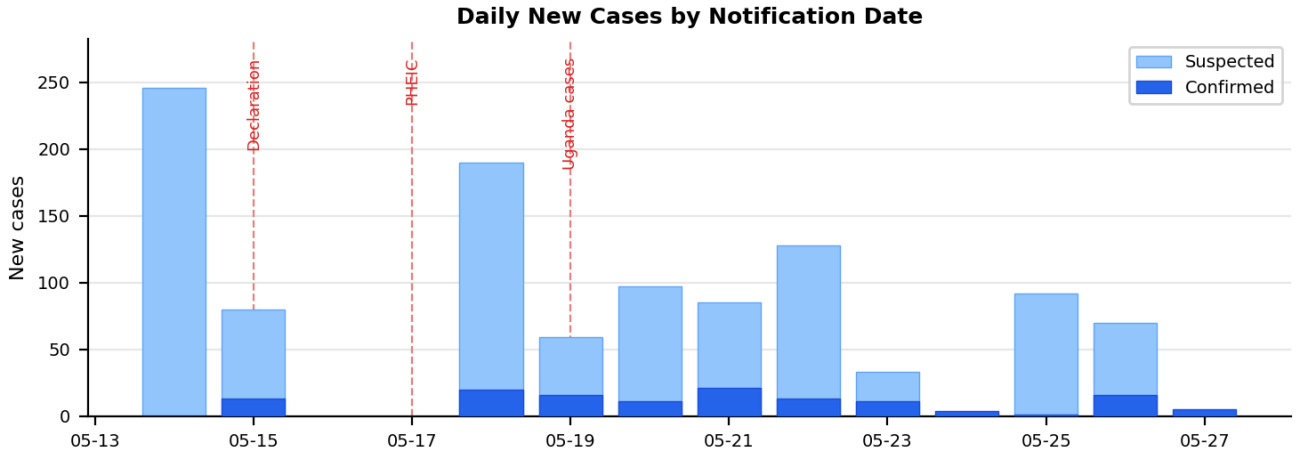
Epidemiological Situation

The outbreak was officially declared by the DRC Ministry of Health on 15 May 2026, with the index case -- a healthcare worker in Bunia, Ituri Province -- traced retrospectively to symptom onset on 24 April 2026. WHO declared a Public Health Emergency of International Concern (PHEIC) on 17 May 2026, two days after the national declaration.

Reported case accumulation remains rapid, although apparent changes between reporting dates are affected by reclassification and reporting lag. Between the first INSP SitRep (14 May) and the most recent available data (2026-05-27), cumulative confirmed cases increased from 0 to 119, while suspected cases reached 906. The low confirmation rate (11.6%) reflects the limited availability of BDBV-specific RT-PCR, with only 36 PCR machines deployed across 19 health zones.

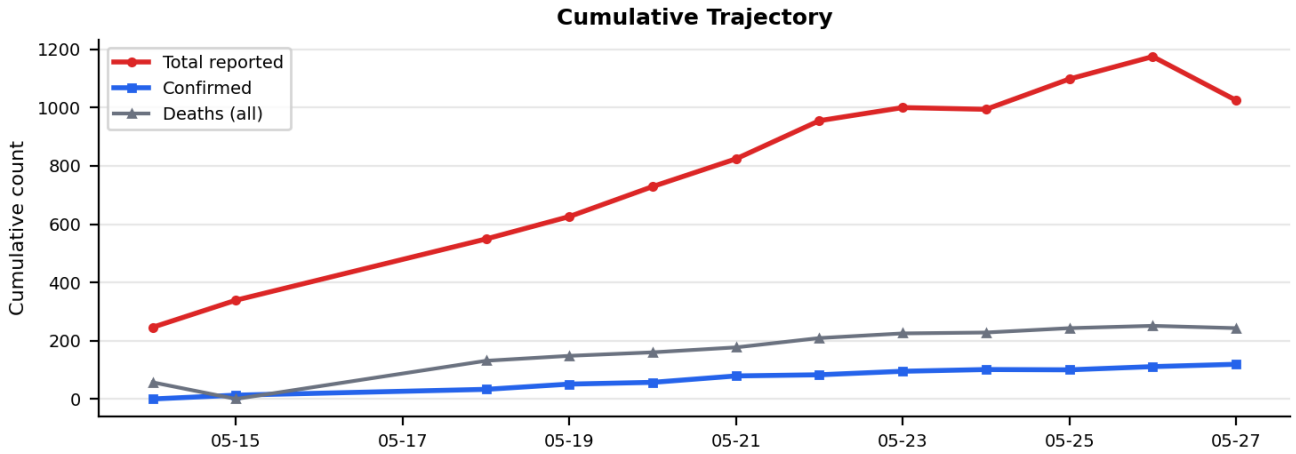
The raw confirmed-case death proportion is 5/119 (4.2%). This should not be interpreted as a finalised case fatality rate due to right-censoring and diagnostic lag. WHO has separately estimated 30-50% fatality among confirmed infections. The historical pooled BDBV CFR is 32.8% (95% CI 25.8-40.2%; PMC5124280).

Epidemic Curve



Source: INSP SitRep MVE 001-012 via INRB-UMIE GitHub. Notification date, not onset date. Daily fluctuations partly reflect batch reporting and weekend effects. Dashed lines indicate key events.

Cumulative Trajectory



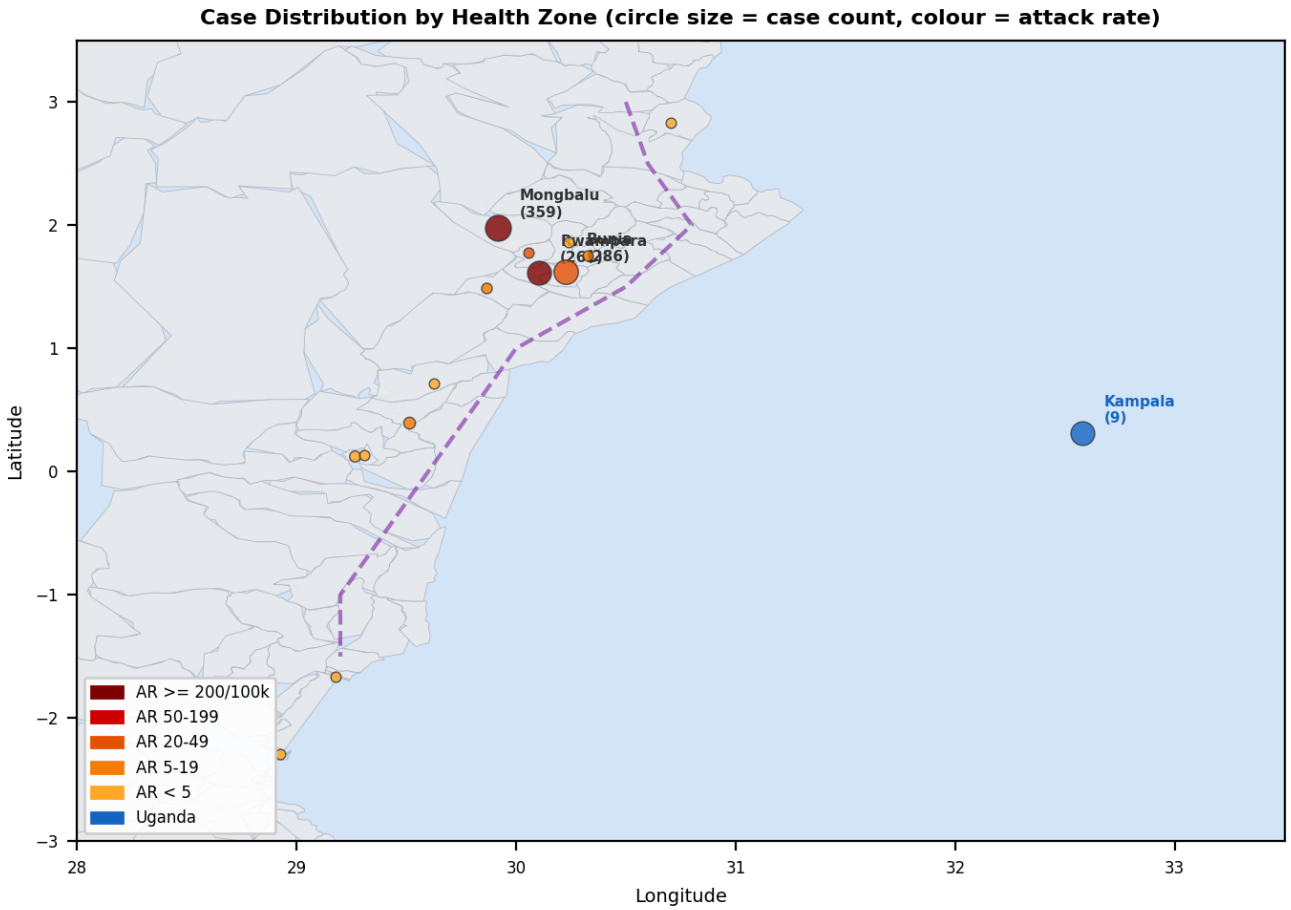
Source: INSP SitRep via INRB-UMIE. Apparent decreases in cumulative totals between dates reflect reclassification of suspected cases.

Geographic Distribution

The outbreak epicentre is Ituri Province, with the highest case concentrations in Mongbalu (359 cases), Bunia (286), and Rwampara (261). When adjusted for population using WorldPop estimates, Rwampara has the highest attack rate at 425.8 per 100,000 -- more than five times higher than Bunia (40.0/100,000) despite a smaller absolute case count, reflecting its small population denominator (61,295).

Nord-Kivu Province has confirmed cases in Butembo, Katwa, and Kalunguta. Goma-specific case status requires verification from DRC MOH/WHO subnational data; one case is recorded in the INSP SitRep but the city's epidemiological status should be treated with caution given its significance as a regional hub (~2 million population, international airport). Cross-border transmission to Uganda was confirmed on 19 May 2026, with 9 cases in Kampala, of which 6 are linked to DRC travel.

Case Distribution Map



Centroids from INRB-UMIE health zone shapefile (519 zones). Circle size proportional to case count; colour indicates attack rate per 100,000. Population: WorldPop. Province-level allocations are working estimates.

Health Zones by Attack Rate

HEALTH ZONE	CASES	POPULATION	AR /100K	PCR
Rwampara	261	61,295	**425.8**	0 (gap)
Mongbalu	359	159,146	**225.6**	2
Bunia	286	715,168	40.0	10
Kilo	9	38,313	23.5	0 (gap)
Nyakunde	10	94,512	10.6	2

Kalunguta	15	254,340	5.9	0 (gap)
Nizi	8	146,118	5.5	0 (gap)
Butembo	12	286,962	4.2	2
Bambu	6	142,109	4.2	0 (gap)
Aru	5	307,811	1.6	2
Miti-Murhesa	2	265,958	0.8	0
Oicha	2	276,790	0.7	0
Katwa	4	621,980	0.6	0
Goma	1	277,156	0.4	2
Nyankunde	45	0	--	0 (gap)

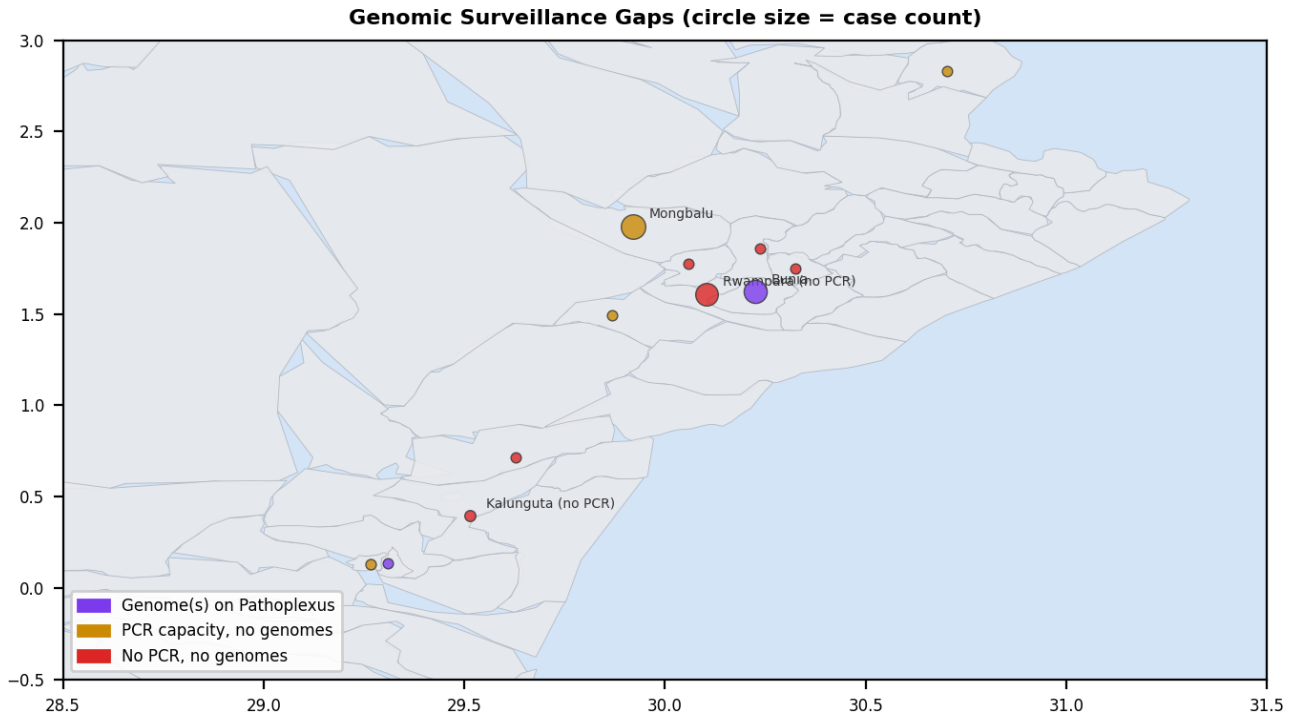
Attack rates use combined reported cases (confirmed + suspected) as numerator and WorldPop modelled population as denominator. Not adjusted for diagnostic confirmation or conflict-driven displacement. PCR machine count indicates deployment, not throughput capacity.

Genomic Surveillance

Sixteen BDBV genomes from the current outbreak (May 2026) are publicly available on Pathoplexus, released by INRB (DRC) and CPHL (Uganda) in three updates between 18 and 28 May 2026. Available genomes correspond to approximately 12% of confirmed cases (16/134 snapshot), though this should not be interpreted as representative sequencing coverage given geographic concentration in Ituri and temporal concentration in early May.

Preliminary phylogenetic analysis (Amuri-Aziza et al., Virological.org 2026; RACCOON pipeline: MAFFT + IQ-TREE2, HKY+gamma) indicates that 2026 genomes form a distinct clade relative to sampled 2007 Uganda and 2012 DRC historical lineages. The estimated tMRCA falls between late February and late April 2026, depending on evolutionary rate assumptions. This is consistent with a separate introduction; zoonotic origin is plausible for Ebola virus disease but cannot be directly demonstrated from human genome data alone. Evidence of host ADAR editing was observed in one genome (4 T-to-C mutations).

Sequencing Coverage Gaps



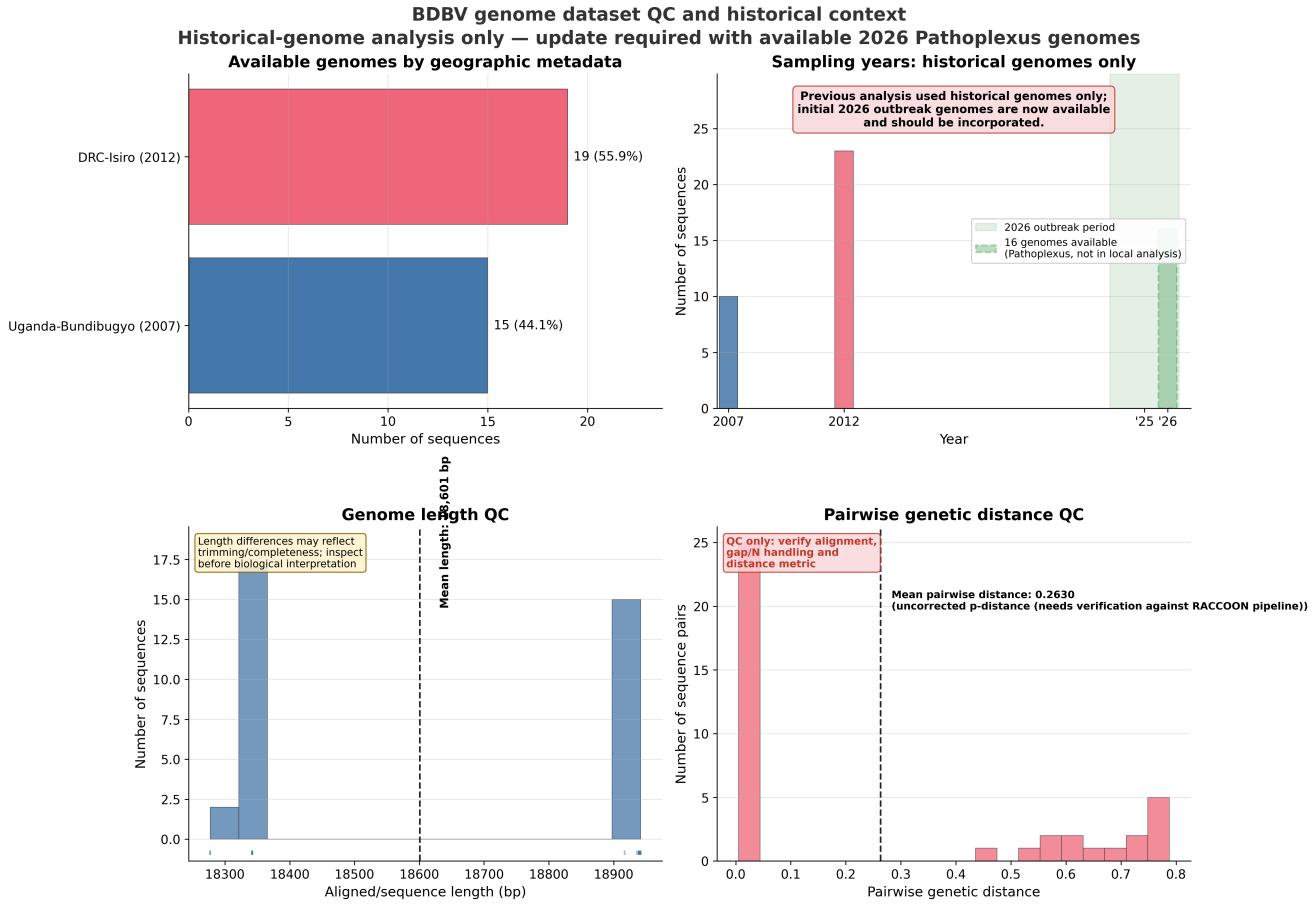
Purple: genome(s) available on Pathoplexus. Amber: PCR capacity but no genomes released. Red: no PCR, no genomes. Only 2 of 21 affected zones have genomes on Pathoplexus.

Selected Pathoplexus Accessions (2026 Outbreak)

ACCESSION	COUNTRY	LOCATION	DATE
PP_006XHL9.1	DRC	Bunia, Ituri	2026-05-03
PP_006XCJJ.1	Uganda	Kampala	2026-05-14
PP_006Y8NC.1	DRC	Katwa, Nord-Kivu	2026-05-06
PP_006Y8PA.1	DRC	Hoho, Ituri	2026-05-03
PP_006Y8Q8.1	DRC	Lumumba, Ituri	2026-05-03
+ 11 additional sequences (DRC Ituri, May 2026)			

Data use: Pathoplexus "Restricted" licence. Contact Prof. Mbala-Kingebeni (INRB) / Dr. Ssewanyana (CPHL) before publication use. Sequence counts are snapshot-dependent.

Historical Genome QC Assessment



Local Atlas analysis: 34 NCBI GenBank sequences (2007 Uganda, 2012 DRC-Isiro). Pathoplexus 2026 sequences not yet incorporated into local pipeline. QC only -- not evidence for current transmission patterns.

Laboratory Capacity

36 PCR machines are deployed across 19 health zones, with Bunia accounting for 10 machines (28% of total capacity). Standard Ebola RDTs (SD Bioline, OraQuick) target Zaire ebolavirus GP and do not reliably detect BDBV. The testing cascade (samples collected, pending, rejected) is not published in INSP SitRep data; only positive (confirmed) counts are available. Estimated sample-to-result turnaround is 3-7 days including transport.

Critical diagnostic gap: Rwampara (261 cases, highest attack rate) has zero PCR machines deployed. Two of 21 affected health zones lack any PCR capacity.

Countermeasure Status

Therapeutics

No approved BDBV therapeutic. WHO (2026-05-28) prioritised MBP134 (broad-spectrum mAb), Maftivimab (cross-reactive mAb), and remdesivir (antiviral) for clinical trials. Obeldesivir prioritised for post-exposure prophylaxis. Trials not yet operational.

Vaccines

No approved BDBV vaccine. Most advanced candidate: rVSVdeltaG/BDBV-GP (NHP survival benefit). Africa CDC estimates availability by end of 2026. Existing Ebola vaccines (Ervebo, Zabdeno/Mvabea) target Zaire ebolavirus and are not effective against BDBV.

Contact Tracing

DATE	CUM. TRACED	CUM. ISOLATED
2026-05-14	82	0
2026-05-15	0	0
2026-05-18	541	0
2026-05-19	847	0
2026-05-20	1,261	0
2026-05-21	1,427	0
2026-05-22	1,674	0
2026-05-23	1,817	0
2026-05-24	2,231	0
2026-05-25	2,231	0
2026-05-26	2,231	0
2026-05-27	2,417	0

INSP SitRep. Follow-up rates mostly ND. Contacts-to-case ratio: ~20:1.

Key Uncertainties and Data Gaps

CATEGORY	STATUS	IMPACT
True outbreak scale	11.6% confirmed	Case count likely underestimated
Rt / growth rate	Not published	Cannot assess whether response is reducing transmission
Onset-based epi curve	Not available	Notification-date curve distorted by reporting lag
Demographics	Not available	Cannot target by age, sex, occupation
Genomic coverage	~12% (biased)	Insufficient for transmission-chain inference
Contact follow-up rates	Mostly ND	Cannot assess tracing effectiveness
Linelist	Not accessible	All analysis from aggregate reports
Population denominators	WorldPop (modelled)	Conflict displacement makes attack rates approximate

Recommendations for Monitoring

1. Incorporate Pathoplexus 2026 genomes into local analysis for independent phylogenetic verification. 2. Track WHO situation reports for updated confirmed case counts. 3. Monitor Uganda -- Kampala is a regional air hub; further spread would broaden implications. 4. Follow clinical trial operationalisation (MBP134/Maftivimab/remdesivir). 5. Verify Goma-specific case status from DRC MOH subnational data. 6. Track diagnostic scale-up -- the confirmation rate is the key capacity indicator. 7. Assess conflict dynamics in Ituri/Nord-Kivu as the primary determinant of response effectiveness.

displacement. Genomic and sequence counts are snapshot-dependent. All figures are provisional and subject to revision.

Sources: INSP SitRep via INRB-UMIE (github.com/INRB-UMIE/Ebola_DRC_2026), WHO DON602/603, ECDC Threat Assessment Brief, Pathoplexus, Virological.org, WorldPop, Reuters/WHO briefing.

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