Powering the 17th Ebola outbreak Response (Bundibugyo strain)

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Data cutoff 31 October 2026 (SitRep 170)

National Epidemiological Snapshot: Oct. 31 (SitRep 170)

10,467	5,103	2,824	48.8%
Confirmed Cases	Confirmed Deaths	Recoveries	Case Fatality Ratio

Geographic Spread:
3 provinces with new cases;
8 affected historically



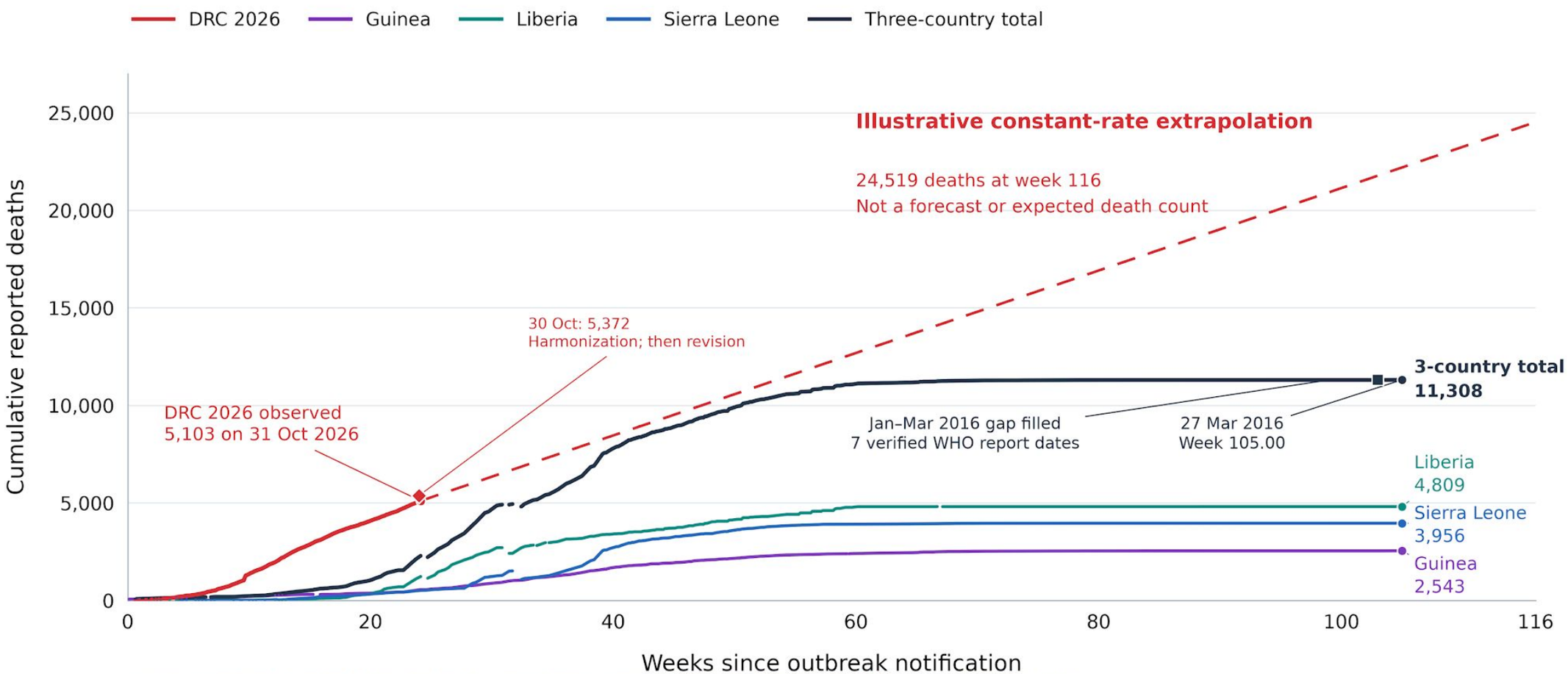
67/178
Health Zones
(37.6%)

- 24h Δ - Oct. 31, 2026
- 53 new confirmed cases
- 45 deaths total
- 26 community deaths
  - 19 intra-CTE deaths

Reported snapshot. SitRep169 deaths: 5,372; SitRep170: 5,103. Unresolved revision, not negative daily deaths.

DRC 2026 and the 2014–16 West African epidemic

Individual countries and their concurrent combined total



Origins: 23 Mar 2014 (West Africa) and 15 May 2026 (DRC). Historical observations through 27 Mar 2016; no tails padded.

Definitions differ: DRC 2026 confirmed deaths; historical countries confirmed + probable + suspected deaths.

Combined line sums the three countries on common calendar dates. Resurgence episodes added once; other countries excluded.

Gaps and downward revisions remain breaks. Illustration = 5,103 × 812 / 169 days; 30–31 Oct revision breaks retained.

Sources: INSP SitRep 170, pp 1–2 (31 Oct 2026; published 1 Nov); WHO/HDX; WHO situation reports 6 Jan–30 Mar 2016, Table 1; early WHO reports digitized by Caitlin Rivers.

10 response levers tracked in Situation Reports



Logistics & infrastructure

Deploys vehicles and supplies; builds and maintains response facilities.

Psychosocial support & safeguarding

Covers psychosocial care and PSEA prevention and reporting pathways.

Continuity of care

Assesses routine facility function and follows survivors after acute care.

Risk communication & community engagement

Uses outreach and feedback to address concerns and support safer action.

Vaccination

Identifies priority groups, delivers doses, and tracks rollout gaps.

Coordination & security

Aligns teams across provinces and arranges safe access for field work.

Surveillance & PoE/PoC

Verifies alerts, investigates suspects, follows contacts, and checks travelers.

Laboratory diagnosis

Processes samples and reports results that classify suspected infections.

Acute case management

Isolates and treats patients; tracks beds, admissions, and outcomes.

IPC, WASH & burials

Controls exposure in care and homes; conducts safe sampling and burials.

Health systems = people + infrastructure



On 7 September 2026, 22 people were reported recovered and discharged from the Isiro Ebola treatment center in Haut-Uélé, returning to their communities.

Photo reproduced from Beto.cd | Isiro, 7 Sep 2026

Contracting Ebola is not a guaranteed death sentence. With modern treatment and care, particularly fluid replacement and major organ stabilization support, **more than half** of patients have demonstrated resilience in recovering and returning to their communities.



200 blood bags ready for transportation and treatment

Source: SitRep 57 | 10 July 2026 | p.12

Safe and dignified burial response



Previous outbreaks have taught us that funerals can be super-spreader events.

Containing such events requires strict disinfection of spaces potentially exposed to contaminated fluids.

This requires significant coordination and cooperation with local communities who manage customary rites.

Source: SitRep 11 | 25 May 2026 | p.7

Vaccination — the race to test efficacy against the current ebola strain



Zaire Strain (previous outbreaks)

- The Guinea rVSV-ZEBOV ring trial estimated efficacy against Zaire Ebola: 100% (95% CI 68.9–100%) for disease with symptom onset at least 10 days after randomization.[1]

Bundibugyo Strain (current outbreak)

- We do not know Erverbo efficacy against Bundibugyo.
- TUMAINI Phase 2/3 began in Bunia on 23 October with Ervebo.
- Moderna and Oxford/SII BDBV-specific candidates were preparing to enter TUMAINI.

1. Doi: 10.1016/S0140-6736(15)61117-5

Vaccine status - what is known for Bundibugyo

Vaccine check: 2 November 2026

- Ervebo protects against Zaire Ebola. Protection against Bundibugyo remains unproven. TUMAINI began in Bunia on 23 October.
- WHO reported over 9,000 frontline personnel vaccinated nationally on 23 October.

Administered doses: SitRep 170, 31 October

- Ituri: 2,448 frontline personnel. Beni: 1,000 of 7,105 targeted (14.1%).

Cold-chain watch

- Beni ultra-cold chain activated. Bas-Uélé equipment still not operational. Documented Isiro cold-chain generator failure.

Human vaccine trials in DRC and beyond

DRC: participants already vaccinated

- TUMAINI first vaccinated a participant in Bunia on 23 October with Ervebo. The adaptive Phase 2/3 trial evaluates prevention in exposed contacts.
- Ring vaccination follows case investigation and contact identification. Symptomatic BVD is excluded at screening. The 3,620 enrollment target is not a doses-administered count.

Bundibugyo-specific candidates in human trials

- Oxford/SII: first UK dose 24 July, then Masaka, Uganda, 6 October. Moderna mRNA-1469: first dose in Canada, 3 August.

Evidence boundary

- The 23 October launch release says Oxford and Moderna were preparing to join TUMAINI. Their dosing in DRC is not yet verified. No Bundibugyo vaccine efficacy result is established.

Contact follow-up, 31 Oct: 31,621 of 36,517 seen (86.6%, below 95% target). INSP170 p5.
Contact-tracing counts and IPC rings are separate from vaccine doses and vaccination rings.

Powering the response: ICE vehicles, generators and fossil fuels



Left and bottom left: 10 vehicles allocated to response
SitRep 70 | 23 July 2026 | p.13

Top right: 2 generators allocated to the response
SitRep 66 | 19 July 2026 | p.13



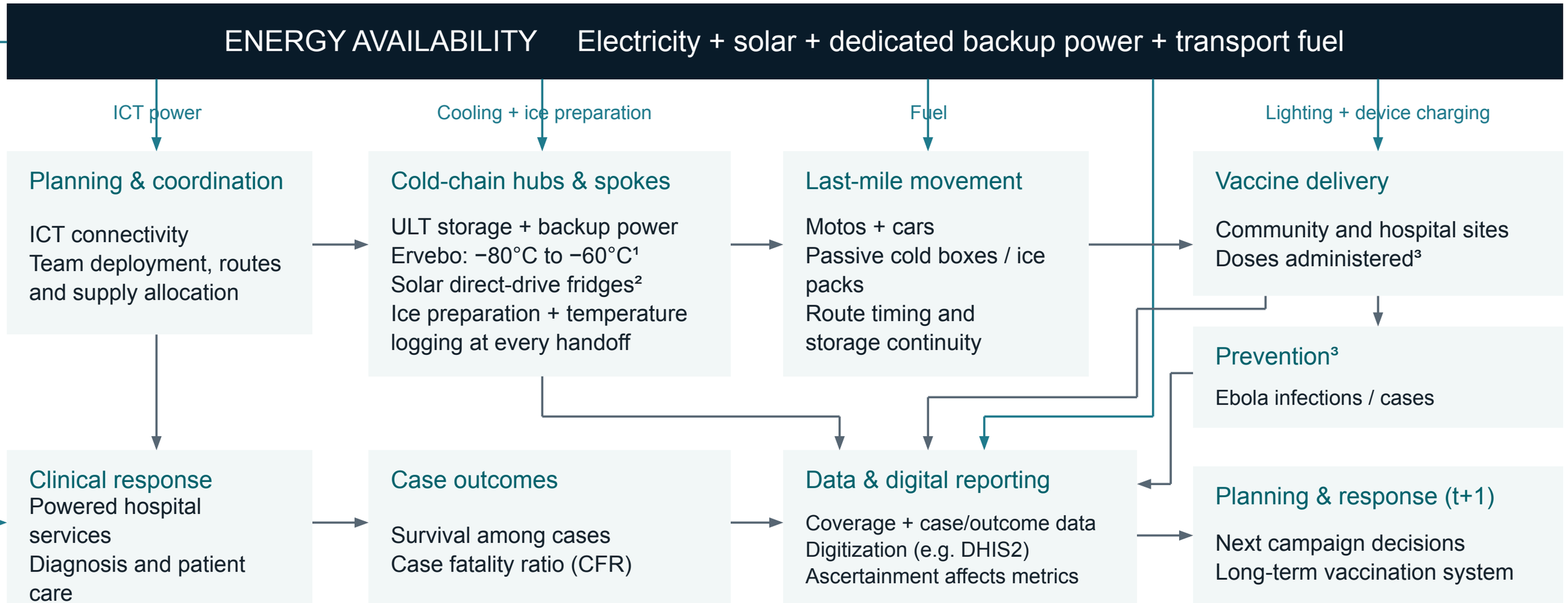


Bottom right: 18 motorcycles allocated to the response
SitRep 58 | 11 July 2026 | p.12



Energy links planning, vaccine delivery and response

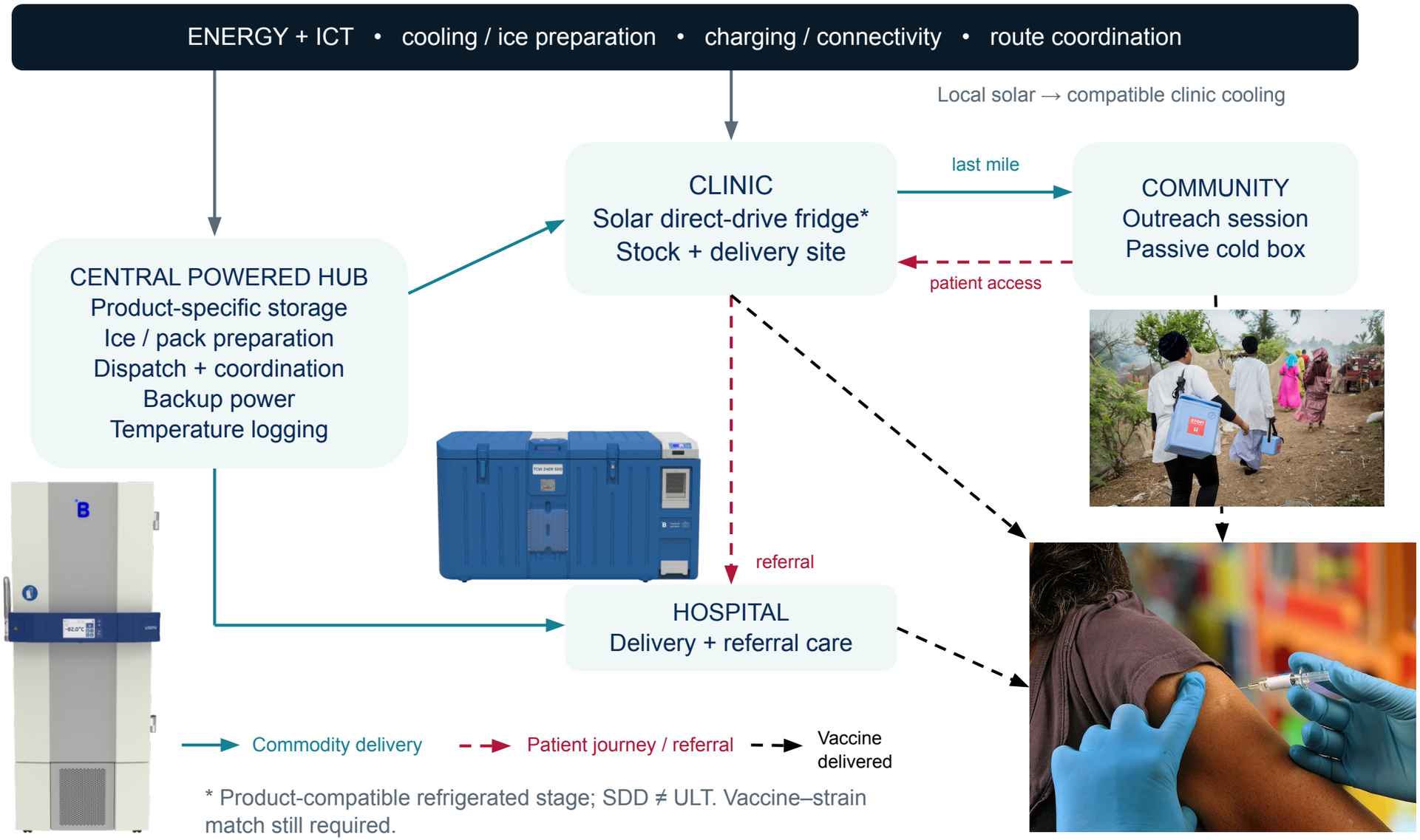
Conceptual DAG: operational dependencies at time t and learning for the next response



Arrows indicate enabling or information pathways, not effect sizes.

¹ Ervebo storage example (FDA). ² Refrigerated stage only, under the product protocol. ³ Prevention depends on vaccine–strain match and effectiveness. SitRep 144 (site power / reporting). Vaccination and clinical care affect different outcomes. Reporting changes measured cases and CFR.

Example of gap: no integrated monitoring of power for vaccine rollouts



Example of gap: systematic solarization of fuel supply chain

Electricity as a service for Humanitarian Orgs

Agencies pay for electricity used, instead of buying and maintaining systems.

Access 2 Energy Institute finances, builds and operates solar + batteries through local partners. Global Platform of Action supports agency partnerships; smart meters monitor performance.

First UN country-office system operating in N'Djamena, Chad; second site in development.

ZE-Gen reports ≥25% energy-cost savings; 73–85% projected decrease in generator runtime.

Ebola application: replace recurring diesel dependence

Assess treatment, laboratory and cold-chain sites as an energy-service portfolio. Meter critical loads, uptime and power quality; specify battery autonomy, backup and product-specific cooling requirements. In parallel, focus on non-vaccine treatment: uptime for medical oxygen, blood and fluid replacement.

Source: ZE-Gen / ZERO announcement, checked 2 Nov 2026. UK Ayrton Fund → TEA → ZE-Gen seed support; expansion funding sought.

Sources: Vaccine Deployment

SitRep 170 (31 Oct 2026): 10,467 cases; 5,103 deaths; 48.8% CFR; 2,824 recoveries. Ituri: 2,448 frontline workers vaccinated; Beni: 1,000/7,105 (14.1%). Partial provincial counts, not a national total. Death-total revisions remain unresolved.

- WHO. (2026, September 9). Ebola vaccines Q&A. No licensed vaccine exists for Bundibugyo virus disease; Ervebo is licensed for Zaire Ebola disease and WHO prioritizes research to establish protection against Bundibugyo.
- https://www.who.int/news-room/questions-and-answers/item/ebola-vaccines
- DRC INSP/MoH. SitRep 170/MVE-BDBV/31/10/2026 (published 1 November). Counts pp. 1–2; contacts p. 5; vaccines and power p. 7. Eight provinces; 67/178 health zones. Death revisions unresolved.
- https://ebola-tracker.org/reports/SITREP_MVE_170.pdf
- https://sante.gouv.cd/documents/sitreps
- WHO (23 October 2026). TUMAINI Phase 2/3 launched in Bunia.
- https://www.who.int/emergencies/disease-outbreak-news/item/2026-DON622
- CEPI (23 October 2026). Ervebo entered first; Moderna and Oxford/SII candidates preparing to enter. No approved Bundibugyo vaccine.
- https://cepi.net/first-participant-vaccinated-pivotal-phase-23-bundibugyo-vaccine-trial-drc
- SitRep 170: Bas-Uélé UCC not operational; Beni UCC activated. Earlier SitRep 166 reported the Isiro generator breakdown; persistence is unconfirmed. Provincial vaccine counts are not a national total.
- Added sources: WHO ULT power specification; WHO solar direct-drive guidance; WHO diagnostic guidance; B Medical U501V; B Medical TCW 240R SDD; WHO Ervebo product information. Recovery story: Beto.cd (10 Sep 2026), corroborated by ACP and Actualite.cd (8 Sep 2026)