
Ebola at end-2014: ‘Getting to Zero’

Special Session of the Executive Board on the Ebola Emergency

Definition: this Ebola outbreak will be over when 42 days have passed since the last case has twice tested negative for the virus.

Context: in response to the unprecedented nature of this outbreak, with over 20,000 cases and 9 countries on 3 continents having reported transmission, the United Nations launched its ‘STEPP Plan’¹ and on 18 September 2014 established the UN Mission for Emergency Ebola Response (UNMEER). The strategy² underpinning the Plan envisaged a phased operation³ in the areas of the most intense transmission, with the initial emphasis on a rapid scale-up of treatment facilities, burial capacity, and behaviour change to quickly slow the exponential increase in new cases, as more rigorous case finding and contact tracing capacity was built to interrupt residual transmission chains.

Progress to Date: led by national governments, an overarching operational plan was developed, emergency operations centres established, an air bridge launched and mass communications enhanced. The number of Ebola treatment beds and safe burial teams more than doubled. At end-2014, the exponential growth in cases had stopped, though progress was very uneven. In countries with importations, emergency Ebola control measures stopped outbreaks, though preparedness in some countries remained weak.

Next Steps: building on the progress and lessons to date, especially the critical role of communities, and the promise of new Ebola vaccines and diagnostics, the operational aspects of the response are being refined under the leadership of national governments, with the more substantive adjustments as follows:

¹ Ebola Virus Disease Outbreak: overview of needs and requirements, United Nations, September 2014.

² Ebola Response Roadmap, World Health Organization; 28 August 2014.

³ Phase 1 emphasized the rapid scale-up of capacities and infrastructure with the goal of slowing transmission; Phase 2 emphasizes the full utilization of those capacities to stop the remaining transmission.

Major Areas of New Emphasis:

- (i) *District-specific, Integrated Emergency Plans and Presence:* plans are now being adapted to the local context, the intensity of transmission (no cases, moderate/low, high) and the capacity to implement the 4 lines of action.¹ This requires functional Emergency Operations Centres in each district, county and prefecture, local health teams playing a key leadership role, sufficient partner staff/personnel, and strengthening of logistics capacities (transport, communications, connectivity) throughout the affected areas.
- (ii) *Active Surveillance and Epidemiology Capacity at Field Level:* substantial additional national staff and international technical expert deployments are needed for supervision, analytic epidemiology and case investigations. The information systems that manage and link all epidemiologic and laboratory data will be enhanced, with overall performance tracked by the proportion of newly confirmed cases that can be linked to a contact list.
- (iii) *Anthropology and Community Ownership:* the mapping and full engagement of local influencers – political, tribal, religious, women, youth – is required for real community ownership and behaviour change to optimize utilization of the new response capacities. This work will be guided through more widespread use of anthropologists. Key outcomes such as community ‘resistance’ and security incidents will be monitored weekly.
- (iv) *Rapid Response Capacity:* in newly infected areas community leaders must be rapidly engaged and case isolation, burial and contact tracing activities implemented. Specific protocols are being established for this purpose, with dedicated human and material resources pre-positioned at the national and subnational levels.
- (v) *Ebola Vaccines:* two vaccines are in clinical trials, with preliminary safety and immunogenicity data due by end-January 2015. Trials in the 1st quarter of 2015 will confirm dosing, immunogenicity and safety in several African Countries, and assess efficacy in Guinea, Liberia and Sierra Leone. Depending on those results and the vaccine quantities, there will be a stepped approach to the use of these products for responders, health care workers, high-risk contacts, containment and/or mass campaigns. Vaccines would supplement, not replace, the existing approach.
- (vi) *New Diagnostics:* rapid, self-contained, real-time PCR candidate tests could simplify testing in existing laboratories and further decentralize testing, including to regular health facilities. New immunoassays are being evaluated and may provide rapid mechanisms for testing bodies, identifying and managing the most infectious patients in transit facilities and community care centres, and triaging patients at regular health facilities.
- (vii) *Safe Reactivation of Health and Other Essential Services:* work will be accelerated to expand safe access to essential health services through patient triaging, protocols for managing suspected Ebola cases, appropriate infection prevention and control guidance (especially for invasive procedures), reliable referral mechanisms, and proper remuneration of staff. Similar attention will be given to ensuring the safe reopening of schools and other services.

¹ Community engagement, case finding and contact tracing, case management, safe and dignified burials.

Major Areas of Continued Emphasis:

- (i) *Information Management, Analysis and Use:* gaps in the collection, analysis and sharing of fundamental information on cases, laboratory results, contacts and response monitoring will be addressed urgently to enhance understanding of the drivers of transmission in each area and to guide the local response. Each lead agency¹ will be empowered to consolidate relevant information, and lead efforts to implement standardized tools for its collection and sharing.
- (ii) *Optimized Case Management, Laboratory and Burial Capacities:* the 64 planned Ebola Treatment Centres (ETCs)² must be completed and their size adjusted to ensure geographic coverage, optimize utilization and improve survival. Community Care Centres will continue to be an important adjunct. Triage and treatment protocols will continue to be assessed as new information becomes available. The timeliness of laboratory results will be closely monitored and improved. Safe burial capacity will be further aligned with disease burden.
- (iii) *Cross-border Coordination and Communications:* to reduce and respond to importations, recent initiatives will be built on for cross-border information sharing and response activities across the 3 most affected countries, and Mali, Senegal, Cote d'Ivoire and Guinea-Bissau. Improved contact tracing also provides the opportunity to enhance the efficacy of exit screening to further reduce new exportations.
- (iv) *Health Care Worker Infections:* health care workers (HCWs) are 25 times more likely to be infected than the general population. Efforts to train, equip, and supply HCWs in infection prevention and control will be increased substantially, especially at private health facilities, pharmacies and traditional healers, where transmission risks appear to be highest.
- (v) *Preparedness in Border Areas:* with the increasing number of infected prefectures in Guinea the risk of exportations is growing. Although preparedness assessment missions have found gaps in most countries, areas with land borders are at particular risk and will be prioritized for international assistance. The establishment of active surveillance in bordering areas of Mali, Senegal, Guinea-Bissau and Cote d'Ivoire is a particular priority.

Resource Implications: the number of personnel skilled in surveillance, epidemiology, infection prevention and control, and community engagement will be substantially scaled-up, particularly at the subnational level. Processes are being strengthened to source, train and deploy such personnel and to ensure the timely payment of national workers. The expanded subnational presence, border area operations, subnational operations centres, and new vaccines and diagnostics will have budget implications. These costs will be incremental on the existing budget and the estimates refined by end-January 2015.

Link to Early Recovery: these further investments build on those to date in contributing to the early recovery agenda. The emphasis on subnational capacities, surveillance, community ownership, field epidemiology, essential health services, IPC and information management will build national

¹ The overall lead agencies for each line of action are WHO on case management and case finding/contact tracing, UNICEF on social mobilization, and IFRC on safe and dignified burials. In each country other partners play key coordinating roles.

² As of 31 December 2014. This figure will continue to be adjusted as national plans and needs evolve.

capacities that can be applied directly to broader health services and the management of future health emergencies, including through a functional integrated disease surveillance system. As transmission stops, other human and material response capacities will be repurposed to recovery.

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