

IMPLEMENTATION PLAN

for the Memorandum of Understanding between the Government of the United States of America and the Government of Uganda

This MOU Implementation Plan (Implementation Plan) outlines the approach to execute the MOU made between the Government of the United States of America (USG) and the Government of Uganda (GOU). Included in the plan is a collaborative effort to enhance the Uganda People's Defense Force's (UPDF) sovereign force health readiness through targeted military to military assistance. By systematically strengthening the UPDF's independent medical, laboratory, surveillance and outbreak response, and integrated service delivery capabilities, this initiative invests in a resilient and effective security cooperation, reinforcing regional stability and advancing the mutual national security interests of both Uganda and the United States. The Implementation Plan will be endorsed by the Joint Health Steering Committee (JHSC) in April 2026.

MOU IMPLEMENTATION PERIOD: 1 April 2026 to 31 December 2030.

SECTION 1: OBJECTIVES

The implementation plan objectives and priority strategies to be achieved by the U.S. government in collaboration with GOU¹ are outlined below by health area. Overarching risks and mitigation plans will be continuously monitored and addressed by the JHSC, including:

- Execution and management of performance towards outcome metrics from the National to District and community level outlined in Section 1.1.
- Timely, transition of fit for purpose human resources from the USG to the GOU including establishment of human resources cadres not currently recognized by the GOU to enable human resources absorption, as outlined in Section 2.4.
- Consistent funding and clear accountability from both GOU and USG for the five-year period to implement planned activities, utilizing mitigation plans and audit measures outlined in Sections 3 and 4. This will include co-investment requirements outlined in section 4.4.2.

¹ Included in the plan is a collaborative effort to enhance the Uganda People's Defense Force's (UPDF) sovereign force health readiness through targeted military to military assistance. By systematically strengthening the UPDF's independent medical, laboratory, surveillance and outbreak response, and integrated service delivery capabilities, this initiative invests in a resilient and effective security partnership, reinforcing regional stability and advancing the mutual national security interests of both Uganda and the United States.

1.1. HIV/AIDS

Overall Objective: Achieve the HIV 95-95-95 targets and sustain epidemic control by 2030.

This section aims to achieve and sustain the HIV 95-95-95 targets by 2030 through three priority strategies: reducing new infections, expanding prevention of mother-to-child transmission, and improving treatment, retention, and viral suppression. U.S. Government support will focus on catalytic strategic assistance such as targeted testing, long-acting PrEP introduction, community and differentiated service delivery models, viral load and early infant diagnosis platforms, telementoring, and other strategic assistance that accelerates innovation and service integration. The Government of Uganda will lead service delivery through its workforce, antenatal and clinical platforms, supervision systems, and long-term stewardship of HIV prevention and treatment services. Over time, self-reliance will increase as prevention, maternal HIV services, and long-term treatment support are increasingly institutionalized within routine national and subnational systems, with government structures taking on a greater share of implementation, oversight, and workforce support. Working with Ministry of Health and other GOU institutions, the UPDF, operating across 160 health facilities serving both military personnel and surrounding civilian populations, will advance these national targets through targeted support for long-acting PrEP, viral load monitoring platforms, and community health worker support — directly contributing to force health readiness and epidemic control.

1.1.1.1: Priority Strategies for HIV

Strategy 1: Reduce New HIV Infections Among Adolescents and Adults

Rationale: New HIV diagnoses among adults remain high at 121,380 annually (2025 baseline), with persistently high incidence among adolescents, young women, and key populations (estimated 37,000 new HIV infections annually). Targeted testing strategies and expanded ARV-based prevention are critical to reducing transmission.

Key Activities and Timeline:

- Conduct risk-based targeted testing including index partner testing, hotspot testing, moonlight testing, and HIV self-testing (Quarterly, 2026-2030)
- Roll out long-acting injectable PrEP in 233 facilities, beginning April 2026; and by Q4 2027, roll out long-acting injectable PrEP in an additional 11 UPDF facility catchment areas to UPDF service members and communities
- Expand community PrEP initiation and refills in hard-to-reach areas (Annual targets through 2030)
- Conduct integrated PrEP outreaches (Quarterly, 2026-2030)
- Strengthen condom distribution and social behavior change communication campaigns (Continuous)

Resources:

- **MOU:** Strategic assistance for integrated service delivery, including community health worker support, risk-based testing commodities, and PrEP program scale-up
- **Government:** Health workforce deployment, supervision systems, facility infrastructure
- **Partners:** Global Fund for commodities and community mobilization; NGOs and community networks for outreach implementation

Expected Results: 95% of adolescents and adults know their HIV status; reduction in new HIV diagnoses among adults from 121,380 to 87,231 by 2030; increased PrEP uptake with 387,622 cumulative initiations and 155,049 persisting at 12 months by 2030.

Strategy 2: Expand Coverage of Mother-to-Child Transmission Prevention

Rationale: New pediatric infections (0-24 months) remain high at 4,733 (including 3,277 new diagnoses in their first 12 months of life) annually (2025 HIV Spectrum estimates).

Strengthening PMTCT services including PrEP, expanding maternal-child health integration, and scaling point-of-care diagnostics are essential to achieving elimination targets.

Key Activities and Timeline:

- Test 100% of pregnant women at first antenatal care visit (Annual, 2026-2030)
- Initiate all HIV-positive mothers on antiretroviral therapy (Continuous)
- Introduce long-acting PrEP in pregnant and breastfeeding women
- Conduct quarterly integrated maternal-child health and HIV outreaches (2026-2030)
- Scale up community early infant diagnosis testing and follow-up for HIV-exposed infants (Annual targets, 2026-2030)
- Conduct routine viral load testing for pregnant and breastfeeding mothers (Quarterly, 2026-2030)
- Improve antenatal care infrastructure at UPDF facilities
- Support the Regional Referral Hospitals to deliver continuing medical education sessions including mentorship for midwives and mentor mothers (Every 18 months, 2026-2030)

Resources:

- **MOU:** Strategic assistance for maternal-child health integration, community health worker capacity development, implementation science for lenacapavir in ANC, early infant diagnosis commodities and testing platforms, including leveraging immunization platforms.
- **Government:** Antenatal care infrastructure, maternal health workforce, supervision systems
- **Partners:** UNICEF and WHO for technical assistance on PMTCT protocols; Global Fund for commodities; local civil society organizations for community mobilization

Expected Results: Maintain 98% or higher ART coverage among pregnant and breastfeeding women; reduction in new HIV diagnoses among infants from 3,277 to 2,482 by 2030; improved retention of 119,737 mother-baby pairs through antenatal and postnatal care visits.

Strategy 3: Reduce AIDS Related Mortality, Optimize Quality of HIV Care, Treatment, and Retention

Rationale: Currently, treatment coverage (1,341,908 people living with HIV on ART in 2025) and viral suppression rates remain below the 95% target. AIDS-related mortality remains at 20,000 people annually. Gaps in treatment adherence support, retention in care, and integration with non-communicable disease and mental health services must be addressed to achieve sustained epidemic control.

Key Activities and Timeline:

- Utilizing recent survey data and predictive modeling, scale up differentiated ART delivery models including multi-month dispensing and community drug distribution (Continuous, 2026-2030)
- Conduct routine viral load monitoring for all eligible clients (Quarterly, 2026-2030)
- Improve clinical and laboratory infrastructure and capacity across 160 UPDF facilities to provide viral load monitoring, CD4, and other diagnostics (tiered procurements and installations of equipment, 2027-2030) in support of HIV care and treatment, warfighter and force health readiness
- Strengthen adherence counseling and psychosocial support through facility and community structures (Continuous)
- Integrate HIV care with non-communicable disease and mental health services (Continuous, 2026-2030)
- Scale up cervical cancer screening for HIV-positive women aged 25-49, expand ablative treatment of early-stage lesions, strengthen referral pathways for advanced disease, and improve HPV vaccination uptake among girls aged 10-14 (Continuous, 2026-2030) [pending availability of relevant commodities]
- Conduct facility-based continuing medical education on HIV care quality and retention strategies (Continuous, 2026-2030)
- Strengthen case finding for advanced HIV disease (AHD) and ensure that the package of care that reduces mortality for AHD is implemented.

Resources:

- **MOU:** Strategic assistance for differentiated service delivery models, continuous quality improvement, viral load testing platforms, procurement of necessary laboratory equipment, commodities and infrastructure improvements, community health worker support for adherence, telementoring to enhance skilled workforce.

- **Government:** Clinical workforce, health facility infrastructure, ART procurement and distribution
- **Partners:** Global Fund for treatment commodities; local NGOs for psychosocial support programs

Expected Results: Increase people living with HIV on ART from 1,341,908 to 1,451,189 by 2030 (95% coverage); achieve 95% viral suppression among those on treatment; improved retention and adherence across all age groups.

1.1.1.2. HIV Implementation Risks and Mitigation Plans

Risk 1: Gaps in HIV testing coverage and quality undermine achievement of 95-95-95 targets

Mitigation: Scale up differentiated HIV testing services including self-testing, social network strategy, index testing, and maternal retesting; strengthen certification and quality assurance systems for testers and testing sites; expand post-market surveillance of HIV test kits; ensure consistent commodity stock monitoring and supportive supervision at facility and community levels.

Risk 2: Limited uptake and lack of adherence on ARV-based prevention interventions undermines efforts to reduce new infections

Mitigation: Accredited and expand PrEP service delivery sites; roll out long-acting PrEP innovations including lenacapavir and cabotegravir long-acting injectable; strengthen clinical mentorship for providers; behavior change communication; operationalize prevention commodity logistics management information systems and total market approaches; ensure consistent procurement and distribution of prevention commodities. Conduct implementation science to enhance uptake and retention in care of latest PrEP interventions.

Risk 3: Inadequate linkage to care, retention support, and adherence interventions compromise treatment outcomes

Mitigation: Scale up electronic appointment reminder systems, institutionalize weekly data reviews at regional and district level using data analytics including viral load surge dashboards; strengthen collaboration with civil society organizations and networks of people living with HIV; expand peer support models including youth peer support and mentor mother programs; deploy digital dispensing machines and adherence tools; institutionalize telementoring and conduct targeted physical mentorships for poorly performing sites and priority populations including children and adolescents.

1.1.2 Tuberculosis

Overall Objective: Reduce TB deaths by 50% from 9,900 (2025) to 4,950 (2030), saving 4,950 lives through expanded case finding, improved treatment outcomes, and strengthened diagnostic and laboratory systems.

Uganda is one of the 30 high TB/HIV burden countries globally and HIV related tuberculosis is a major driver of the high observed TB incidence in Uganda. TB incidence remains high across the country with significant undetected disease burden fueling transmission. Current case detection rates remain below optimal levels, particularly among high-risk populations. Evidence demonstrates that systematic screening, geospatial hotspot targeting, and advanced diagnostic technologies substantially can increase case detection yield.

This section seeks to reduce TB deaths by 50 percent by 2030 through five priority strategies: active case finding, improved treatment coverage and success, stronger drug-resistant TB management, expanded access to quality diagnostics, and stronger surveillance and program learning. U.S. Government support will focus on strategic assistance in digital chest X-ray, molecular diagnostics, drug-resistant TB treatment capacity, digital adherence technologies, laboratory strengthening, surveillance systems, and targeted technical assistance. The Government of Uganda will provide leadership through the national TB program, district and facility supervisors, public laboratory and clinical infrastructure, workforce deployment, and integration of TB services across the health system. Government self-reliance will increase as diagnostic networks, treatment sites, surveillance systems, and supervision functions become more fully embedded in national institutions and routine service delivery, and externally managed systems decrease over time. The UPDF will contribute to national TB targets across its 160 health facilities, with specific support in AI-powered digital chest X-ray, MDR-TB isolation capacity, and clinical mentorship — prioritizing high-risk congregate settings including barracks and border areas.

1.1.2.1. Tuberculosis Priority Strategies

Strategy 1: Expand Active Case Finding and Transmission Interruption

Rationale: TB incidence remains high with significant undetected disease burden fueling transmission. Current case detection rates remain below optimal levels, particularly among high-risk populations. Evidence demonstrates that systematic screening, geospatial hotspot targeting, and advanced diagnostic technologies substantially increase case detection yield.

Key Activities and Timeline:

- Conduct systematic contact tracing for 95% or more of bacteriologically confirmed TB cases (Monthly at all TB treatment units, 2026-2030)
- Ensure that individuals with HIV and especially those with AHD are screened for TB.
- Implement geospatial hotspot testing in schools, prisons, and orphanages (Bi-annual, 2026-2030)
- Deploy artificial intelligence-powered digital chest X-ray with computer-aided detection systems in regional referral hospitals (Monthly systematic screening, 2026-2030)
- Review UPDF living arrangements and optimize air flow and space requirements in UPDF barracks to reduce exposure to TB (2026-2030).

- Conduct quarterly clinical mentorships on TB screening and diagnosis at public, private, and faith-based facilities (2026-2030)

Resources:

- **MOU:** Strategic assistance for TB diagnostic equipment and artificial intelligence systems, including procurement of digital X-ray technology and technical assistance, laboratory reagents and consumables, infrastructure improvements, community health worker capacity development for contact tracing
- **Government:** District TB and Leprosy Supervisors, facility-based TB focal persons, supervision and transport systems. The UPDF will parallel these activities including UPDF clinicians
- **Partners:** Global Fund for community case-finding activities

Expected Results: TB case notifications increase from 82,925 (2025 baseline) to 91,090 by 2030; TB mortality reduced by 50% from 9,900 deaths to 4,950 deaths by 2030.

Strategy 2: Increase Treatment Coverage and Success for All Forms of TB

Rationale: Treatment coverage stands at 90% and treatment success at 91.3%, both below the 95% targets. Missed opportunities in contact tracing, molecular testing accessibility, and adherence support contribute to gaps in treatment outcomes.

Key Activities and Timeline:

- Scale up differentiated service delivery models and digital adherence technologies (Quarterly expansion, 2026-2030)
- Functionalize critical care units for management of severely ill TB patients (Q4 2026 completion)
- Support accreditation of private health facilities as TB diagnostic and treatment units (Annual accreditation cycles, 2026-2030)
- Conduct quarterly clinical mentorships focused on TB mortality audits and quality improvement (2026-2030)

Resources:

- **MOU:** Strategic assistance for critical care infrastructure, digital adherence technology platforms, differentiated service delivery technical assistance, private sector engagement support
- **Government:** National TB Treatment and Care Framework implementation, District TB and Leprosy Supervisors, facility infrastructure
- **Partners:** Global Fund for treatment commodities; local NGOs for community treatment support

Expected Results: Achieve 95% or higher treatment coverage; improve treatment success to 93-95% overall (drug-susceptible TB above 95%, multidrug-resistant TB above 92%) by 2030; expanded access for children, adolescents, prisoners, and mobile populations.

Strategy 3: Strengthen Drug-Resistant TB Programmatic Management and Clinical Capacity

Rationale: Drug-resistant TB poses a major threat to TB control, with multidrug-resistant TB treatment success at 88.3%, well below the 92% target. Limited treatment sites, gaps in clinical capacity, and inadequate pharmacovigilance systems constrain outcomes.

Key Activities and Timeline:

- Establish 60 drug-resistant TB treatment sites at general hospitals (Q4 2026 completion)
- Develop UPDF isolation and treatment facility for MDR-TB (and other highly infectious diseases)
- Conduct quarterly clinical mentorships and harmonization meetings for District TB and Leprosy Supervisors and District Laboratory Focal Persons (2026-2030)
- Implement adverse drug reaction monitoring for 95% or more of drug-resistant TB patients (Monthly monitoring, 2026-2030)
- Provide transport support for drug-resistant TB patients to ensure 90% or higher treatment adherence (Continuous, 2026-2030)

Resources:

- **MOU:** Strategic assistance for drug-resistant TB treatment site establishment, procurement of necessary equipment, commodities and infrastructure improvements, clinical mentorship programs, pharmacovigilance system support and technical assistance, clinical capacity building and adverse event monitoring systems
- **Government:** General hospital infrastructure, clinical workforce, patient transport systems
- **Partners:** Global Fund for second-line TB drugs

Expected Results: Multidrug-resistant TB treatment success improves from 88.3% to above 92% by 2030; 95% or more of drug-resistant TB patients monitored monthly for adverse drug reactions; reduced TB mortality through improved drug-resistant TB clinical management.

Strategy 4: Expand Access to Quality TB Diagnostic Services

Rationale: Diagnostic capacity remains a major bottleneck, with gaps in molecular testing coverage, drug susceptibility testing access, and biosafety infrastructure. Only 22 sites currently provide Xpert MTB/XDR testing. Expanding diagnostic networks and laboratory workforce capacity is essential for early detection and appropriate treatment.

Key Activities and Timeline:

- Expand Xpert MTB/XDR testing sites from 22 to 348 facilities (2027 completion)
- Train laboratory personnel on new diagnostic assays including Xpert Ultra, Truenat, and lateral flow lipoarabinomannan (Annual capacity development cycles, 2026-2030)
- Procure reagents and consumables for drug susceptibility testing, whole genome sequencing, and biosafety equipment (Continuous procurement, 2026-2030)
- Ensure 95% or more of laboratories adopt updated TB laboratory diagnostic manuals (Q4 2026)

Resources:

- **MOU:** Strategic assistance for molecular diagnostic platform expansion, laboratory equipment and infrastructure and biosafety systems technical assistance, reagent procurement, laboratory workforce capacity development
- **Government:** Laboratory network infrastructure, biomedical personnel deployment, quality assurance systems
- **Partners:** Global Fund for diagnostic commodities and equipment

Expected Results: 90% or higher access to drug susceptibility testing for drug-resistant TB patients; expanded molecular diagnostic coverage across all regions; improved timeliness and accuracy of TB diagnosis supporting treatment initiation.

Strategy 5: Strengthen TB Surveillance and Operational Research

Rationale: TB awareness and care-seeking behavior remain low at 61%, limiting early case detection. Surveillance systems remain fragmented across multiple platforms, and operational research findings are underutilized for evidence-based programming and policy decisions.

Key Activities and Timeline:

- Conduct quarterly TB surveillance performance reviews and mortality audits (2026-2030); this includes reviews at UPDF facilities, with specific attention to transmission risks at the 58 non-standard border crossings staffed by UPDF where MOH surveillance is not present
- Ensure 100% of confirmed TB patients have documented HIV status
- Strengthen community engagement and social behavior change communication campaigns (Continuous, 2026-2030)
- Implement geospatial hotspot prediction system with quarterly updates (2026-2030)
- Conduct operational research studies to inform programmatic decision-making (Annual priority topics, 2026-2030)

Resources:

- **MOU:** Strategic assistance for surveillance systems integration, geospatial analysis platforms, operational research funding

- **Other USG Appropriations:** HHS/CDC - multi-country TB gaps research study and TB Trials Consortium Clinical Trial
Government: National TB and Leprosy Program coordination, surveillance workforce, data management systems
- **Partners:** Global Fund for community mobilization; academic institutions for operational research partnerships

Expected Results: Achieve 98% or higher reporting rates and 95% or higher timeliness of TB surveillance data; evidence-based programmatic decision-making institutionalized at national and subnational levels; strengthened community awareness and care-seeking behavior.

1.1.2.2. Tuberculosis Implementation Risks and Mitigation Plans

Risk 1: Health workforce shortages and uneven clinical capacity limit TB and drug-resistant TB service delivery

Mitigation: Expand cascaded clinical mentorship programs from regional referral hospitals to districts; strengthen health workforce recruitment and retention through improved working conditions; deploy telemedicine hubs for remote consultation support; integrate digital learning platforms for continuous professional development.

Risk 2: Limited diagnostic and laboratory infrastructure undermines timely disease detection and treatment initiation

Mitigation: Procure additional GeneXpert molecular diagnostic platforms and power backup systems; expand laboratory accreditation scope to include TB diagnostics; strengthen biosafety and biosecurity management systems; ensure routine external quality assessment participation and information technology support for laboratory data systems including the UPDF laboratory system.

Risk 3: Fragmented community engagement and weak surveillance systems reduce care-seeking and continuity of care

Mitigation: Intensify community engagement and social behavior change communication targeting populations at high risk; institutionalize quarterly performance reviews and data validation processes; scale up geographic information system-enabled surveillance dashboards; expand electronic case-based surveillance systems nationwide; strengthen community-facility referral feedback mechanisms and linkages to social protection services.

1.1.3 MALARIA

Overall Objective: Reduce malaria deaths by 62 percent from 15,945 (2025) to 6,014 (2030), saving 9,931 lives as well as to reduce annual deaths due to malaria from an estimated 15,045 (2025) to 6,014 (2030), through scaled-up indoor residual spraying, community case management for all age groups, and larval source management in high-burden districts, ensuring universal access to effective vector control across Uganda's most affected populations. The Government of Uganda has proposed to fund using its own resources and Global Fund resources

the other core malaria control interventions such as case management (diagnostics and drugs), routine bed nets for pregnant women, chemoprevention, and malaria surveillance. UPDF health facilities serve both military and civilian populations and will contribute to national malaria targets, with specific support for vector control for barracks and operational areas, entomological surveillance, and clinical mentorship across 160 UPDF facilities.

1.1.3.1. Malaria Priority Strategies

Strategy 1: Scale Up Indoor Residual Spraying in High-Burden Districts

Rationale: Indoor Residual Spraying is a high-impact intervention that reduces malaria incidence by up to 62% in endemic areas. West Nile IRS districts documented an 82% drop in malaria incidence (from 794 to 131 cases/1,000) between 2022 and 2025 following annual IRS campaigns. Despite this success, only 16 of Uganda's 66 high-burden districts currently implement IRS. Expanding IRS coverage is critical to interrupting transmission, reducing the adult vector population, and achieving the 50% death reduction target by 2028.

Key Activities and Timeline:

- Expand IRS from the 7 currently USG funded districts to 35 high-burden districts in year 1 and continue annually through 2030.
- Deploy indoor residual spraying in UPDF structures and barracks in high transmission areas (Annual campaigns beginning September 2027)
- Conduct annual district-level capacity development for 30 staff per district in 35 districts
- Train 849 spray team members at sub-county and parish levels annually in each district (2026-2030)
- Procure 36,585 insecticide bottles per district annually, implementing proactive insecticide rotation per the Insecticide Resistance Management plan (2026-2030)
- Conduct supervision by 15 district task force members and 7 sub-county team members for 25 days per district, plus 3 days by village teams (Ongoing, 2026-2030)
- Implement integrated approach combining IRS with malaria/HIV/TB community screening, testing, treatment, and referral (2026-2030)
- Conduct third party IRS monitoring for quality control and environmental safety
- Procure insecticide impregnated uniforms for UPDF staff serving in high transmission areas (annually starting in 2027)

Resources:

- **MOU:** Strategic assistance for insecticide procurement, personal protective equipment, spray pumps, capacity development programs, supervision systems, community mobilization, and quality assurance
- **Other U.S. Government Appropriations:** HHS/CDC/NCEZID technical assistance

- **Government:** District local government structures, community health extension workers (CHEWs), village health teams (VHTs), Ministry of Health stewardship, transport and logistics, DHIS2 data management systems. GOU using its own resources has proposed to scale up IRS to an additional 11 districts and to cover for the reduction in USG funds in the outer years and maintain spray operations in the 35 USG funded IRS districts.
- **Partners:** Global Fund support for 9 existing West Nile districts (plus 11 additional); coordination with existing IRS programs

Expected Results: 35 of 66 high-burden districts implementing IRS by 2027; 85% or higher of households sprayed annually in IRS districts; 82% reduction in malaria incidence sustained in IRS districts; WHO cone bioassay quality standards met; annual insecticide resistance monitoring completed at all surveillance sites; 62% reduction in malaria transmission in newly covered districts by 2030.

Strategy 2: Expand Community Case Management to All Age Groups

Rationale: Current community case management targets only children under 5 years and operates in 81 districts. Countries like Rwanda and Kenya that manage uncomplicated malaria cases at the community level demonstrate that community case management handles at least 60% of cases, reducing health facility workload and improving access to care. Expanding to all age groups in 66 high-transmission districts will facilitate timely access to treatment, reduce severe malaria cases and hospitalizations, decrease blood consumption, and accelerate achievement of the 50% death reduction target by 2028.

Key Activities and Timeline:

- Update and digitize community case management guidelines to include all age categories (2026-2027)
- Roll out malaria community case management for all ages in 66 high-transmission districts, including 39 implementing IRS, 9 Karamoja districts, and 18 hard-to-reach districts (2027-2030)
- Orient key resource persons on updated guidelines and tools (2027 completion)
- Provide orientation and mentorship to all CHEWs and VHTs in targeted districts (2027-2030)
- Implement peer-to-peer follow-up supervision and mentorships (Ongoing, 2027-2030)
- Conduct quarterly health facility performance review meetings with CHEWs and VHTs (Quarterly, 2026-2030)
 - Provide continuing education and mentorship to health care workers in 160 UPDF facilities to implement WHO competency assessment and certification for malaria laboratory diagnosis (2027) and strengthen referral systems, emergency care, and critical care services for severe malaria (2028)
- Conduct community test-and-treat outreaches in epidemic-prone settings (Annual campaigns, 2026-2030)

Resources:

- **MOU:** Strategic assistance for guideline development, capacity development programs, mentorship systems, commodity procurement, digital health information systems
- **Government:** Procure community case management commodities for 66 districts, Community health extension workers, village health teams, health facility structures, electronic Community Health Information Systems (eCHIS), and routine supervision systems
- **Partners:** Global Fund for rapid diagnostic tests and artemisinin-based combination therapies

Expected Results: Community case management for all ages operational in 66 high-burden districts by 2028; 60% or more of malaria cases managed at community level; reduced health facility workload; improved healthcare-seeking behavior; 99% of confirmed malaria cases receive first-line antimalarial treatment; 50% reduction in severe malaria hospitalizations; decreased blood consumption; community health systems needs assessment completed to identify performance gaps and impact by 2029.

Strategy 3: Scale Up Larval Source Management in Urban Areas and Karamoja Region

Rationale: Larval Source Management supplements IRS and community case management in settings where these interventions face operational challenges or require additional support. Urban areas, peri-urban zones, cities, the cattle corridor including Karamoja districts, and areas where IRS is not feasible due to housing structures require targeted larval source management. Currently implemented in only 12 districts, expanding Larval Source Management to 31 districts (including all cities, municipalities, and Karamoja) will reduce breeding sites and adult mosquito populations, contributing to the overall 75% reduction in malaria cases by 2030.

Key Activities and Timeline:

- Expand larviciding from 12 to 31 districts, including all cities and 9 Karamoja districts (2027-2030)
- Orient community health workers (CHEWs, VHTs, and LC1s) for one day: 468 trainees per district (2026-2027)
- Conduct two rounds of larviciding during each dry season (Biannual, 2026-2030)
- Map and characterize breeding sites, apply larvicides, and perform post-72-hour monitoring (Ongoing, 2026-2030)
- Procure 182 liters of larvicides per district per application round (4 rounds annually) (Annual, 2026-2030)
- Conduct supervision by 15 district task force members and 7 sub-county team members for 3 days, 4 times yearly (Quarterly, 2026-2030)
- Perform post-application monitoring of larval densities by vector control officers, CHEWs, and VHTs (Ongoing, 2026-2030)
- Leverage technology to improve efficiency and quality of larvicide application (2027-2030)

- Conduct entomological surveillance and resistance monitoring in UPDF healthcare facility catchment areas across the country (Bi-annual, 2026-2030)
- Map larval breeding sites in UPDF healthcare facility and operational areas (Annual mapping, 2026-2030)
- Train UPDF focal persons on larvicide application and support larvicide deployment (Annual, 2026-2030)

Resources:

- **MOU:** Strategic assistance for larvicide procurement, personal protective equipment (heavy-duty gloves, scoops), capacity development programs, supervision systems, mapping technology
- **Government:** Vector control officers at district level, community health extension workers, village health teams, Local Council structures, transport and logistics
- **Partners:** Coordination with urban health programs and Karamoja-specific health initiatives

Expected Results: 80% or more of identified breeding sites drained, filled, or managed by 2028; two larvicide application rounds completed per dry season in 31 districts; 60% or greater reduction in larval density; 50% or greater reduction in adult mosquito populations; 75% or higher community satisfaction with Larval Source Management activities; 75% reduction in malaria cases in targeted urban and Karamoja districts by 2030.

1.1.3.2. Implementation Risks and Mitigation Plans

Risk 1: Intervention refusals due to suboptimal community engagement and social behavior change communication undermine IRS and larviciding coverage

Mitigation: Strengthen community sensitization and mobilization campaigns through district political and technical teams; engage local council leaders (LC1s) and traditional authorities as IRS champions; conduct household-level advocacy visits prior to spray campaigns; address community concerns through transparent communication about insecticide safety and environmental compliance; integrate IRS delivery with other health promotion activities to build trust; conduct household surveys to assess acceptance levels and identify barriers; establish community feedback mechanisms to address adverse events promptly; leverage community health extension workers and village health teams for sustained engagement.

Risk 2: Late arrival and distribution of IRS chemicals and requisite equipment in-country delays campaign implementation and reduces impact

Mitigation: Initiate procurement processes 12-18 months in advance to account for production and shipping timelines; establish clear coordination protocols between Ministry of Health, National Medical Stores, and customs authorities to expedite inspection and clearance; secure adequate central warehouse storage capacity to prevent accumulation of demurrage charges at

holding entry ports; maintain buffer stocks of personal protective equipment and spray pumps that can be procured locally; develop contingency plans for alternative insecticide suppliers; implement phased deployment approach (15 districts in March, 15 in September) to distribute logistical demands; strengthen coordination with Global Fund-supported districts to share resources during supply constraints.

Risk 3: Emergence of insecticide resistance compromises vector control effectiveness and increases malaria transmission

Mitigation: Implement proactive insecticide rotation every 3 years according to the Insecticide Resistance Management plan; conduct annual insecticide susceptibility studies at pre-selected surveillance sites covering all insecticide classes; perform monthly entomological surveys to monitor vector density, species composition, sporozoite rates, and entomological inoculation rates; conduct WHO cone bioassays to evaluate IRS quality and residual efficacy; deploy integrated vector and parasite management approach combining next-generation long-lasting insecticidal nets, targeted IRS, and larval source management; pilot novel WHO-recommended vector control tools including spatial emanators in Karamoja, congregate settings, and refugee populations; adjust insecticide selection based on real-time resistance monitoring data; strengthen coordination between entomological surveillance and procurement planning.

Risk 4: Inadequate storage space at central warehouse level disrupts commodity distribution and increases operational costs

Mitigation: Conduct infrastructure assessment and expand central warehouse capacity prior to scale-up; establish regional commodity storage hubs in high-burden regions (West Nile, Lango, Acholi, Teso, Busoga, Bukedi) to reduce central storage burden; coordinate with National Medical Stores to identify alternative storage facilities; implement just-in-time delivery systems for districts with adequate local storage; negotiate extended storage arrangements at entry ports with reduced demurrage rates; prioritize procurement of reusable personal protective equipment to reduce storage volume requirements; digitize inventory management systems to optimize storage utilization and distribution planning.

Risk 5: Insufficient health workforce capacity and supervision quality compromise community case management and larviciding implementation

Mitigation: Provide comprehensive orientation and mentorship to all community health extension workers and village health teams in 66 targeted districts; update and digitize community case management guidelines to ensure clarity for all age categories; implement peer-to-peer follow-up supervision and mentorship systems; conduct quarterly health facility performance review meetings with community health workers; leverage electronic Community Health Information Systems (eCHIS) for real-time performance monitoring; establish continuous quality improvement processes for community case management; train vector control officers, community health workers, and LC1s in larviciding mapping, application, and post-72-hour

monitoring techniques; utilize technology to improve efficiency and quality of larvicide application; conduct community health systems needs assessments to identify performance gaps. For the UPDF, the major risk is that there is limited diagnostic and treatment capacity in the UPDF health facilities. The mitigation plan includes expanding capacity development and mentorship programs for laboratory and clinical personnel, including telementoring utilizing low dose high frequency methodology; strengthening diagnostic quality assurance systems including external quality assessment and competency certification; increase availability of rapid diagnostic tests, microscopes, and reagents through improved supply chain management; integrate simulation-based capacity development for severe malaria clinical care; expand genomic surveillance and therapeutic efficacy studies to guide treatment protocol updates.

Risk 6: Fragmented coordination between multiple implementing partners and funding sources creates inefficiencies and coverage gaps

Mitigation: Establish clear delineation of district responsibilities between USG-supported (30 districts), Global Fund-supported (13 West Nile districts), and Government of Uganda-supported areas and UPDF supported areas; conduct regular coordination meetings between Ministry of Health, Ministry of Defense and Veteran's Affairs (MoDVA), USG implementing partners, Global Fund principal recipients, and district local governments; utilize unified monitoring frameworks and DHIS2 reporting systems across all funding sources; implement decentralized approach leveraging local government structures to ensure community ownership and accountability; maintain transparent budget allocation and expenditure tracking; coordinate IRS timing to avoid overlap and maximize geographic coverage; share technical resources, capacity development materials, and best practices across implementing partners; align all activities with National Malaria Elimination Strategic Plan 2026-2030 priorities.

1.1.4 VACCINE-PREVENTABLE DISEASES (VPD)

Overall Objective: Reduce confirmed measles cases by 80% from 803 (2025) to 100 (2030) and increase non-polio acute flaccid paralysis (AFP) surveillance rate from 2.9 to 3.75 per 100,000 children under 15 years, while strengthening integrated immunization services, surveillance systems, and outbreak response capacity.

This section focuses on reducing measles cases, increasing AFP surveillance performance, and strengthening immunization and outbreak response through two priority strategies: catch-up vaccination and outreach and surveillance and cross-border coordination. U.S. Government support will concentrate on technical assistance, surveillance strengthening, Emergency Operations Center support, integrated outreach and logistics support, and selected assistance in cross-border coordination and outbreak response systems. The UPDF, through its unique presence at 58 non-standard border crossings and in districts hosting refugee populations, will contribute to cross-border VPD surveillance and support immunization coverage within its facility catchment areas. The Government of Uganda will lead routine immunization delivery,

workforce deployment, district and regional oversight, surveillance operations, and management of the Expanded Programme on Immunization. Over time, self-reliance will increase as outcomes improve, reducing the burden to the health system and as risk assessment, surveillance, outbreak response, and immunization planning are more consistently driven through government-led systems and regional management structures, with external support increasingly focused on targeted gaps rather than core delivery functions.

1.1.4.1. VPD Priority Strategies

Strategy 1: Expand Catch-Up Vaccination and Supplemental Immunization Activities (Budgeted under MNCH 3)

Rationale: Immunization coverage gaps persist for measles, polio, and other vaccine-preventable diseases, particularly among zero-dose and under-immunized children in hard-to-reach areas. Catch-up campaigns and integrated outreach services are critical to closing immunity gaps and preventing outbreaks.

Key Activities and Timeline:

- Conduct monthly integrated vaccination outreaches at health facilities (2026-2030)
- Implement bi-annual integrated community health preventive outreaches in April and October (2026-2030)

Resources:

- **MOU:** Strategic assistance for integrated outreach operations, supervision systems, logistics support
- **Other USG Appropriations:** HHS/CDC Global Immunization Division funding and technical assistance.
- **Government:** Health workforce deployment, facility infrastructure, routine immunization program coordination, Expanded Programme on Immunization (EPI)
- **Partners:** Gavi for vaccine procurement; UNICEF for vaccine supply chain support and social mobilization

Expected Results: 95% or higher vaccination coverage achieved during measles and polio campaigns in all districts; increased second-dose measles-rubella vaccine coverage nationally; reduced numbers of zero-dose and under-immunized children.

Strategy 2: Enhance Vaccine-Preventable Disease Surveillance and Cross-Border Coordination

Rationale: Surveillance performance indicators remain below global standards, with acute flaccid paralysis detection rate at 2.9 per 100,000 children under 15 years (target: 3.75). Cross-border transmission risks persist in refugee-hosting districts and at points of entry, requiring strengthened regional coordination.

Key Activities and Timeline:

- Conduct active surveillance for Acute Flaccid Paralysis in 535 highest and 617 high Priority health facilities (2026-2030)
- Leverage UPDF presence at 58 non-standard Points of Entry to strengthen cross-border VPD surveillance and specimen referral in areas where MOH screening facilities are not present

Resources:

- **MOU:** Strategic assistance for surveillance system enhancements, cross-border coordination mechanisms, specimen transport systems
- **Other USG Appropriations:** HHS/CDC - Global Immunization Division, Division of Global Health Protection for funding and technical assistance, and Division of Global Migration and Health for cross-border coordination support
- **Government:** District surveillance teams, health management information systems, specimen referral networks, Expanded Program on Immunization
- **Partners:** UNICEF for surveillance technical assistance and cross-border coordination support

Expected Results: Improved acute flaccid paralysis surveillance rate to 3.25 per 100,000 by 2028 and 3.75 by 2030; strengthened cross-border disease surveillance and outbreak coordination mechanisms; sustained and reliable vaccine-preventable disease specimen transportation systems.

1.1.4.2. VPD Implementation Risks and Mitigation Plans**Risk 1: Immunization coverage gaps in measles and polio campaigns leave population immunity gaps**

Mitigation: Intensify catch-up vaccination campaigns in low-coverage areas; strengthen integrated health outreach services; ensure adequate vaccine supply forecasting and cold chain management systems; expand social mobilization through community health workers and local leadership engagement.

Risk 2: Weak surveillance systems limit timely detection of vaccine-preventable disease cases and outbreaks

Mitigation: Train surveillance teams on electronic integrated disease surveillance and response systems; strengthen specimen collection and transport networks; expand cross-border surveillance coordination mechanisms; improve feedback loops between surveillance data collection and programmatic action.

Risk 3: Inadequate regional oversight and accountability reduce immunization program performance

Mitigation: Support regional Emergency Operations Centers with quarterly performance monitoring; institutionalize regional and district performance review meetings; strengthen adverse events following immunization detection and investigation capacity; improve data quality validation processes.

1.1.5 Maternal and Child Health

Overall Objective: Reduce maternal, neonatal, perinatal, and under-five mortality by 2030 through provision and scale-up of quality, integrated maternal, newborn and child health services using a health systems strengthening approach.

This section aims to reduce maternal, neonatal, perinatal, and under-five mortality by 2030 through four priority strategies: improving quality integrated MNCH services, strengthening data use and performance review, increasing community responsiveness and follow-up, and improving infrastructure, and equipment. U.S. Government support will emphasize strategic assistance for high-impact service delivery improvements, implementation of evidence-based interventions, selected equipment and infrastructure upgrades, data and accountability mechanisms, and targeted support for innovations that improve maternal and newborn outcomes. The UPDF will advance national MNCH goals through targeted strategic assistance in at least 18 UPDF health facilities, including procurement of delivery infrastructure, facility remodeling to improve patient flow and infection control, and integrated maternal-child health and HIV outreaches serving military families and surrounding communities. The Government of Uganda will lead through workforce deployment, supervision systems, facility and community service platforms, and co-financing of infrastructure and health system inputs. Government self-reliance will increase as maternal and neonatal mortality improves, and MNCH quality improvement, review systems, referral pathways, and service delivery platforms are integrated more fully into routine government operations and budgets, with external financing playing a more catalytic and targeted role over time.

1.1.5.1. MCH Priority Strategies

Strategy 1: Strengthen quality, integrated maternal, neonatal and child health (MNCH) services including HIV/TB and Malaria prevention and treatment, elimination of mother to child transmission of HIV (EMTCT) along the continuum of care

Rationale: Maternal and neonatal mortality remain high and are largely driven by preventable causes including hemorrhage, hypertensive disorders, birth asphyxia, prematurity, and sepsis. Low completion of the fourth or more antenatal care visit (ANC4) (54%), low postnatal care (PNC) coverage (<60%), and poor partograph utilization (<35%) indicate gaps in quality intrapartum and postpartum care. Strengthening integrated services across preconception, antepartum, intrapartum, postpartum, neonatal, and child health, including HIV, TB, Malaria, and EMTCT-early infant diagnosis (EID) integration is critical to achieving 2030 mortality targets.

Key Activities and Timeline:

- Scale up coverage of high impact intervention packages for improving maternal health outcomes along pre-conception, ANC, intrapartum and postpartum. The intervention packages include PET, EMOTIVE, ETOO+ basic surgical skills, goal-oriented ANC, midwifery models of care, birth preparedness, and group ANC. (2026-2030)
- Scale up coverage of high impact intervention packages for improving Neonatal & Child health outcomes. The intervention packages are in the newborn & child health strategy, accelerated newborn implementation plan, national malaria elimination plan (NEP) III, interventional framework for stillbirth & birth asphyxia, prematurity & sepsis) (2026-2030)
- Scale up identification, retention and referral of high-risk pregnancies for mothers, neonates and infants (Hypertension, Diabetes Mellitus, HIV, TB, malaria, SCD, and others) (2026-2030)
- Scale up point of care ultrasound scan trainings to facilitate early detection of obstetric and neonatal complications & effective clinical management (2026-2030)
- Strengthen midwifery & nursing-led care in the maternity & neonatal departments including responsiveness to risk mothers affected by HIV/TB and malaria (2026-2030)
- Develop and apply national MNCH quality-of-care standards to accredit birthing centers and neonatal care units using the STARS accreditation approach through the Integrated Care Systems across all 17 regions (2026-2027)
- Update and build capacity of health workers in didactic in-service capacity development for MNCH and modify the knowledge management portal to have self-paced learning. Update MNCH digital content and upload revised tools, guidelines, and resources to the digital health knowledge management portals (2026-2030)

Resources:

- **MOU:** Strategic assistance for scaling high impact intervention packages, quality of care
- **Government:** Health workers, essential maternal and newborn medicines/sundries
- **Partners:** The Beginnings Fund and World Bank are planning investments to strengthen maternal and newborn outcomes and will coordinate to prevent duplication.

Expected Results: Achieve 2030 targets:

- Maternal Mortality Ratio (MMR): 70 per 100,000 live births
- Neonatal Mortality Rate (NMR): 12 per 1,000 live births
- Institutional Maternal Mortality 45 per 100,000 deliveries
- Under-5 Mortality Rate: 26 per 1,000 live births
- Average number of antenatal care visits for pregnant women: 5.6 or higher

Strategy 2: Strengthen data use, program performance reviews and research at national, regional and district level.

Rationale: Insufficient use of routine data and use of Maternal Perinatal Death Surveillance and Response (MPDSR) findings for corrective action. Strengthening data systems and institutionalizing regular performance reviews is essential for improved integrated MNCH service delivery and reduce mortality.

Key Activities and Timeline:

- Institutionalize MNCH program performance reviews and support QI approaches to address service delivery gaps. (2026-2030)
- Strengthen maternal and perinatal death reviews and use of the action tracker to implement the smart recommendations. (2026-2030)

Resources:

- **MOU:** Strategic assistance for strengthening MPDSR
- **Government:** Health workers, the health management information system, the local maternity and neonatal system
- **Partners:** The Beginnings Fund and World Bank are planning investments to strengthen maternal and newborn outcomes and will coordinate to prevent duplication.

Expected Results: Institutionalized integrated MNCH performance review mechanisms. Increased use of MNCH Action Tracker. Improved evidence-based decision making that should translate to a reduction in maternal and newborn deaths

Strategy 3: Strengthen community responsiveness, uptake, tracking & follow-up for MNCH services

Rationale

Low ANC and overall maternal, newborn and child health (MNCH) service utilization suggests demand-side and follow-up gaps. Strengthened community engagement and accountability are needed to improve service uptake.

Key Activities and Timeline

- Conduct integrated MCH service delivery outreaches, including support for the biannual Integrated Child Health Days. This will target pregnant women, zero dose and under immunized children (2026-2030)

Resources:

- **MOU:** Strategic assistance for service delivery outreaches
- **Government:** Health workers, essential medicines and sundries
- **Partners:** Gavi for the integrated child health days

Expected Results: Improved coverage for maternal child health services, reductions in zero dose and under immunized children

Strategy 4: Strengthen Equipment, Infrastructure, MNCH Commodities and Supplies

Rationale: High mortality from obstructed labor, hemorrhage, eclampsia, sepsis, prematurity, and birth asphyxia indicates need for functional Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) facilities.

Key Activities and Timeline

- Refurbish and expand existing maternal and newborn health infrastructure to improve comprehensive obstetric and newborn care at selected regional referral hospitals, general hospitals, health center IVs, and health center IIIs (2026–2030)
- Refurbish and equip 2 NRH, 17 RRH, and high-volume general hospitals simulation laboratories to facilitate skilling of healthcare workers (2026–2030)
- Establish breastmilk storage areas and operational milk banks at all NRHs, RRHs, and 50% of General Hospitals with NCUs to improve nutrition outcomes for neonates in Level 2B, 3, and 4 neonatal care units (2026–2030)
- Strengthen emergency medical services for maternal newborn child health by equipping ambulances with neonatal emergency equipment [Type B, and C ambulances: Warm embraces, neonatal transporters, oxygen cylinders & CPAP]" (2026–2030)

Resources MOU: Strategic assistance for maternal child health, including equipment, infrastructure and optimal service delivery to reduce maternal, newborn and child mortality

- **Government:** Health workforce deployment, supervision systems, facility infrastructure (co-financing)
- **Partners:** Global Fund for commodities and community mobilization; Coordination with NGOs, CSOs, and UN partners working on a variety of capacity development and clinical care priorities

Expected Results Achieve 100 percent CEmONC functionality

1.1.5.2. Implementation Risks and Mitigation Plans

Risk 1: Funding limitations for integrated maternal, newborn, and child health programming undermine achievement of the MMR, NMR, perinatal and under 5 mortality 2030 targets.

Mitigation: Government to increase health budget and lobby other MNCH donor partners for financial support.

Risk 2: Delays in seeking care, reaching care, and receiving adequate treatment, which collectively contribute to maternal and neonatal mortality.

Mitigation:

- Increase community maternal, partner and household knowledge of MNCH/EMTCT services, improve early identification, tracking and referral of high-risk mother-infant pairs, and address negative cultural beliefs and norms to seeking timely care.
- Address transport and socio-economic barriers at all levels- family, district, regional and national to reaching care
- Prioritize commodity security and supply chain management for MNCH commodities, Strengthen MNCH staff capacity to offer timely and quality emergency obstetric maternal and newborn services
- Scale up integrated MNCH electronic appointment reminder systems, institutionalize weekly, quarterly MNCH/EMTCT data reviews at regional, district and facility level using available data analytics, institutionalize tele mentoring and conduct targeted physical mentorships for poorly performing sites and districts.

1.1.6 Outbreak Detection and Response

Overall Objective: Operate a nationally led, integrated surveillance and outbreak response system capable of detecting priority public health threats within seven days of emergence, notifying national authorities within 24 hours of detection, and initiating effective response actions within seven days by 2030.

This section aims to establish a nationally led outbreak detection and response system capable of meeting the 7-1-7 target by 2030 through five priority strategies: stronger surveillance and early detection, a sustainable outbreak workforce, improved border and point-of-entry surveillance, operational multisectoral coordination, and rapid surge financing and emergency response mechanisms. U.S. Government support will focus on surveillance system assessment and strengthening, Emergency Operations Center and digital platform support, epidemiology and laboratory leadership training, points-of-entry tools and infrastructure, multisectoral coordination support, and initial support for emergency financing mechanisms. The Government of Uganda will lead workforce absorption, national and district deployment structures, border health systems, legal and regulatory frameworks, emergency account capitalization, and long-term governance of surveillance and response systems. Self-reliance will increase as outbreak detection, emergency coordination, workforce financing, and rapid response capabilities are progressively financed, governed, and operated through Ugandan institutions, with external support increasingly focused on surge, innovation, and targeted technical support.

The UPDF's role in the national outbreak response is critical and has been institutionalized in the national response in the incident command articulated in the 2020 MoU between the MoDVA and the MoH. Importantly and uniquely, the UPDF staffs 58 informal border crossings and provides medical care in districts with high refugee populations. The UPDF and the MoH divide responsibility for the different border crossings; the UPDF operates at crossings that are not home to MoH screening facilities. Uganda hosts almost 2 million refugee and asylum seekers,

making it the largest refugee hosting country in Africa. This population is important for several public health activities and strengthening this area will substantially improve outbreak detection will provide additional control for HIV and TB in Uganda. Soldiers deployed in these areas provide a window to new potential outbreaks and zoonotic spillover. The UPDF's unique operational context — including deployment to forward posts and border zones — creates specific force protection requirements, including antimicrobial resistance surveillance to guide treatment of wound infections in operational areas, and biological threat detection and response capacity. With respect to HIV risk, refugee populations face heightened HIV vulnerability because of traumatic experiences, sexual violence, and limited access to appropriate HIV prevention, testing, and treatment services. The risk of TB spread in congregate settings is well established, and many refugees live in such settings.

1.1.6.1 Outbreak Detection and Response Priority Strategies

Strategy 1: Strengthen Integrated Disease Surveillance Systems and Early Detection Capacity

Rationale: An analysis of recent outbreak responses reveals significant variations in detection, reporting, and response timelines across different outbreak types, highlighting critical areas for health system strengthening and outbreak prediction gaps.

Viral Hemorrhagic Fevers such as Ebola and Marburg demonstrate detection timelines of 7-14 days, with reporting occurring within 24-72 hours of detection. Response initiation typically begins 7-10 days after initial detection. The primary lesson identified from these outbreaks is the need for better facility and community surveillance, including mortality surveillance, faster sample transport mechanisms and surge funding immediately available to enable rapid response when these high-consequence pathogens are detected.

Cholera outbreaks show somewhat faster detection timelines of 5-10 days, with reporting occurring within 24-48 hours. Response initiation for cholera typically begins 5-7 days after detection. Key lessons from cholera responses highlight gaps in Point of Entry (PoE) surveillance and the need for better coordination between water, sanitation, and hygiene (WASH) programs and disease surveillance systems.

COVID-19 response during the early phase presented unique challenges, with both detection and reporting timelines being variable due to the novel nature of the pathogen and evolving diagnostic capabilities. Response initiation was delayed during the early phase of the pandemic. The critical lesson identified was the importance of real-time data systems and emergency financing mechanisms that can be rapidly deployed when facing novel pathogens with uncertain characteristics.

Cross-border outbreak events consistently demonstrate delayed detection timelines, delayed reporting, and delayed response initiation. These delays underscore the need for stronger border health surveillance systems and improved coordination mechanisms between neighboring countries to ensure that outbreaks detected in one jurisdiction trigger appropriate preparedness measures in adjacent areas.

Key Activities and Timeline:

- Conduct comprehensive joint assessment of surveillance and outbreak response systems including Integrated Disease Surveillance and Response modules, event-based surveillance, mortality surveillance, laboratory support, and data use (2026-2027 completion) and develop targeted response plan based on findings.
- Ecological studies to predict locations of future outbreaks nationwide (2026-2027)
- Strengthen Integrated Disease Surveillance and Response implementation at national, regional, district, community, and points of entry levels, to include mortality surveillance in communities (Continuous, 2026-2030)
- Strengthen Emergency Operations and Surveillance Centers of Excellence through updated operational documents, disease-specific contingency plans, and enhanced digital platforms for real-time surveillance and analytics (2026-2028)
- Support regional Emergency Operations Centers through continuous quality improvement, supportive supervision, mentorship, and routine performance reviews (Quarterly, 2026-2030)
- Develop and implement costed five-year surveillance systems strengthening plan for significant public health threats in Uganda based on gap assessment findings (2027-2030 implementation)

UPDF-specific Key Activities include:

- Develop UPDF biological threat surveillance and response capacity, including biological risk mapping, procurement of Detection, Identification, and Monitoring (DIM) equipment, and capacity development of first responders, in coordination with national preparedness systems
- Define pathogen distribution and risk for deployed troops by enhancing border surveillance, improving lab capacity, and conducting novel screening methods such as wastewater surveillance, water purity, and sero-survey testing.
- Revise and digitize surveillance mechanisms for early pathogen detection, ensuring the system is interoperable with Ministry of Health (MOH) platforms for real-time reporting.
- Develop the Rear Public Health Laboratory (RPHL) into a central reference hub by equipping it and linking it to a network of 21 sentinel and satellite laboratories.
- Extend bio-surveillance to external labs and breeding centers, conduct joint monitoring, and sample for genetic variations to strengthen national biosecurity.
- Strengthen sample transportation from lower health UPDF facilities to reference laboratories.
- Roll out multi-resistant organisms' detection and surveillance activities (AMR) within UPDF health facilities.

Resources:

- **MOU:** Assessment of surveillance system and implementation of prioritized gaps, strengthening, digital platform development, Emergency Operations Center infrastructure, National One Health Technical Working Group, Centers of Excellence, and UPDF-specific

support for biological threat detection capacity and antimicrobial resistance surveillance at border and operational sites

- **Other U.S. Appropriations:** HHS/CDC Global Health Security funding and technical assistance for prediction, detection, response innovations
- **Government:** Training center for surveillance, detection and response workforce deployment, recruitment of epidemiologists, Emergency Response Fund, district health teams, Emergency Operations Center personnel
- **Partners:** Africa CDC

Expected Results: By 2030, >90 % of outbreaks notified within a day and initial response actions implemented within 7 days, >80 % reporting completeness and timeliness of IDSR data, <72 hours from sample collection to result for priority pathogens

Strategy 2: Build Sustainable Outbreak Response Workforce Capacity

Rationale: Uganda has established field epidemiology and laboratory leadership capacity development programs (FETP, LLP) and outbreak response cadres. **Current Workforce**

Baseline: Uganda has an established cadre of trained field epidemiologists, laboratory leaders, and outbreak response personnel deployed at national and subnational levels through the Field Epidemiology Training Program (FETP), Laboratory Leadership Program (LLP), Integrated Disease Surveillance and Response (IDSR), and multisectoral coordination initiatives. More than 700 have been trained in either advanced, intermediate or frontline field epidemiology. Over the past 10 years, 59 of the 119 FETP-Advanced graduates and all Laboratory Leadership Program graduates as well as intermediate and frontline remain part of the public service.

Key Activities and Timeline:

- Support continuous training across frontline, intermediate, and advanced field epidemiology levels, prioritizing government of Uganda personnel (Annual cohorts, 2026-2030)
- Deploy trained personnel to surveillance and outbreak response roles at national level, districts, regional Emergency Operations Centers, rapid response teams, and priority points of entry (Continuous deployment, 2026-2030)
- Transition trained epidemiologists and critical outbreak response personnel to Government of Uganda public service wage bill (Progressive absorption beginning FY 2027/28 through 2030)
- Provide ongoing mentorship and supportive supervision for deployed outbreak response teams (Quarterly, 2026-2030)

Resources:

- **MOU:** Capacity development programs for field epidemiologists, deployment support, emergency response account
- **Other U.S. Appropriations:** HHS/CDC Global Health Security funding and technical assistance for FETP and LLP

- **Government:** Public service wage bill absorption for outbreak response personnel, deployment structures, career development frameworks
- **Partners:** Local and regional implementing partners supporting outbreak response

Expected Results: 150 epidemiologists trained through the MOU by 2030, with 70% or more transitioned to Government of Uganda public service wage bill.

Strategy 3: Strengthen Border Health and Points of Entry Surveillance

Rationale: Points of entry represent critical interfaces for preventing cross-border transmission of public health threats.

Key Activities and Timeline:

- Conduct risk-based assessments of cross-border zones and priority points of entry (2026-2027)
- Equip priority points of entry with essential screening and information technology tools for systematic traveler screening and real-time reporting (2027-2029)
- Deploy trained screeners to support routine surveillance and surge needs during outbreaks (Continuous, 2026-2030)
- Conduct Population Connectivity Across Borders studies to inform risk-based surveillance strategies (2027-2028)
- Develop legislative frameworks including Regulations on Border Health and Points of Entry Surveillance (2026-2027)
- Conduct regular simulation exercises at priority points of entry (Annual, 2026-2030)
- Provide continuous supportive supervision and mentorship for border health teams (Quarterly, 2026-2030)
- Strengthen emergency medical services for referral and initial management of ill travelers (2027-2030)

Resources:

- **MOU:** POE infrastructure and equipment, screening tools, legislative development support, simulation exercise funding
- **Other U.S. Appropriations:** HHS/CDC Global Health Security funding and technical assistance along with Division of Global Migration and Quarantine technical assistance
- **Government:** Border health workforce, immigration/customs coordination, emergency medical services
- **Partners:** Africa CDC for cross-border coordination

Expected Results: 88 POE with functional surveillance by 2030, 100% of travelers screened at priority POE.

Strategy 4: Operationalize Multisectoral Coordination Approaches for Zoonotic Disease Surveillance

Rationale: Many emerging infectious disease threats originate at the human-animal-environment interface. Despite Uganda's progress in establishing national multisectoral coordination mechanisms and strategic frameworks, significant gaps and challenges persist in operationalizing this approach across the country. At the district level, One Health Teams are present but often lack clear roles, activation triggers, and well-defined outbreak response plans, resulting in inconsistent engagement during health emergencies. The sustainability of multisectoral coordination activities is threatened by a heavy reliance on donor funding, with few ring-fenced domestic budgets dedicated to zoonotic disease surveillance and response. Surveillance coverage remains uneven, as there are not enough trained community animal health workers, and reporting from private veterinarians and commercial farms is limited. Data systems across animal, human, and environmental health sectors are fragmented, hindering real-time analytics and coordinated decision-making. Multi-sector joint risk assessments and hotspot mapping are conducted irregularly, meaning that interventions are not always guided by the latest risk information. Laboratory capacity and sample referral systems also face challenges. Biosecure referral pathways for animal specimens are incomplete, and regional veterinary laboratories have uneven diagnostic panels and biosafety standards. At high-risk interfaces such as live-animal markets and value chains, biosecurity and hygiene enforcement is inconsistent, increasing the risk of zoonotic spillover.

Community engagement is another area that needs improvement. Messaging zoonotic risks is insufficiently tailored, and mechanisms to convert community rumors or reports into action are weak. Workforce shortages persist, with gaps in trained veterinarians, paravets, wildlife rangers, and joint epidemiology-laboratory teams. Finally, integration of veterinary roles and procedures within emergency operations centers is not fully standardized, and opportunities for joint exercises and after-action reviews with animal and environmental sectors are limited.

Key Activities and Timeline:

- Develop multisectoral coordination policy frameworks and implementation guidelines (2026-2027)
- Functionalize regional and district multisectoral coordination teams (2027-2028)
- Conduct joint human-animal-environmental risk assessments and regional prioritization of zoonotic diseases (Annual, 2026-2030)
- Strengthen animal and environmental surveillance tools and systems (2027-2030)
- Conduct ecological studies to enhance understanding of animal movement and spillover risks (Annual priority studies, 2026-2030)
- Establish interoperable surveillance systems linking human, animal, and environmental health data platforms (2028-2030)

Resources:

- **MOU:** One Health coordination platform support, ecological surveillance tools, interoperability system development
- **Other U.S. Appropriations:** HHS/CDC Global Health Security funding and technical assistance
- **Government:** Ministry of Health, Ministry of Agriculture Animal Industry and Fisheries coordination, environmental health teams, One Health secretariat
- **Partners:** FCDO, FAO, Korean Embassy in Uganda

Expected Results: Implementing comprehensive multisectoral coordination interventions in Uganda will lead to safer communities and a stronger, more resilient health system. By fostering collaboration across human, animal, and environmental sectors, Uganda will be able to detect, notify, and respond to outbreaks more rapidly—meeting the 7-1-7 target ; >80% of districts with functional One Health coordination teams; >80 % of animal specimens reaching referral labs within 72 hours.

Strategy 5: Establish Rapid Surge Financing and Emergency Response Coordination

Rationale: Timely access to financial resources is essential for effective outbreak response.

Key Activities and Timeline:

- Operationalize Public Health Emergency Account with clear governance structures and standard operating procedures (2026-2027)
- Establish mechanisms for rapid fund release within 24-72 hours of outbreak trigger (2027 completion)
- Secure Government of Uganda capitalization of emergency account (Annual contributions, 2027-2030)
- Establish partner surge contribution mechanisms for outbreak response (2026-2027 framework development)
- Strengthen integrated specimen sharing and pathogen data governance through designated liaison mechanisms, ethical pathways, and standardized operating procedures (2026-2028)

Resources:

- **MOU:** Emergency account initial capitalization support, surge financing framework development, specimen sharing infrastructure
- **Government:** Annual emergency account capitalization, governance oversight, specimen sharing regulatory frameworks
- **Partners:** TBD

Expected Results: Emergency account operational with fund release time of < 72 hours, 3,000,000 of GOU annual capitalization,

1.1.6.2. Implementation Risks and Mitigation Plans

Risk 1: Non operationalization of Emergency Account Fund

Mitigation: Prioritize the legal and regulatory components to establish the account with appropriate management and monitoring mechanisms with quarterly updates to JHSC

Risk 2: Rapid depletion of account due to multiple outbreaks.

Mitigation: Early design of triggers for depletion and replenishment of account

1.2: Metrics

1.2.1: Outcome Metrics2

Outcome Metric	Baseline	Baseline Source	2026			2027			2028			2029			2030		
			Target	Data Source	Data Availability Date	Target	Data Source	Data Availability Date	Target	Data Source	Data Availability Date	Target	Data Source	Data Availability Date	Target	Data Source	Data Availability Date
% People With HIV Who Know Their Status	94%	Spectrum	>95%	Spectrum	6/1/2027	>95%	Spectrum	6/1/2028	>95%	Outcome (continuous) survey*	TBD	>95%	Outcome (continuous) survey*	TBD	>95%	Outcome (continuous) survey*	TBD
% People Who Know Their HIV Status on Treatment	90%	Spectrum	>92%	Spectrum	6/1/2027	>94%	Spectrum	6/1/2028	>95%	Outcome (continuous) survey*	TBD	>95%	Outcome (continuous) survey*	TBD	>95%	Outcome (continuous) survey*	TBD
% People On Antiretroviral Treatment (ART) Who Are Virally Suppressed	96%	Spectrum	>95%	Spectrum	6/1/2027	>95%	Spectrum	6/1/2028	>95%	Outcome (continuous) survey*	TBD	>95%	Outcome (continuous) survey*	TBD	>95%	Outcome (continuous) survey*	TBD
# Malaria Deaths in Children Under 5	9,567	World Malaria Report Modeled estimates	6,912	World Malaria Report Modeled estimates	Annual	5,875	World Malaria Report Modeled estimates	Annual	4,994	World Malaria Report Modeled estimates	Annual	4,245	World Malaria Report Modeled estimates	Annual	3,608	World Malaria Report Modeled estimates	Annual
# Malaria Deaths	15,945	World Malaria Report Modeled estimates	11,520	World Malaria Report Modeled estimates	Annual	9,792	World Malaria Report Modeled estimates	Annual	8,323	World Malaria Report Modeled estimates	Annual	7,075	World Malaria Report Modeled estimates	Annual	6,014	World Malaria Report Modeled estimates	Annual
# TB Deaths	9,900	GTB report	8,910	GTB report	26-Nov	7920	GTB report	27-Nov	6930	GTB report	28-Nov	5940	GTB report	29-Nov	4950	GTB report	30-Nov

² Note that UPDF as well as private not for profit (faith-based organizations and centers of excellence) facility data are reported into national systems and contributes to all outcome metrics above.

**These numbers reflect updated figures from MOH and differ from the MOU but annual targets are still within / reflect achievement of MOU targets.

# Polio Cases (e.g., WPV, cVDPVB)	0	Case-based Surveillance data 2025	0	Case-based Surveillance Data 2026	Weekly	0	AFP/Polio Case-based Surveillance data	Weekly	0	AFP/Polio Case-based Surveillance data	Weekly	0	Measles Case-based Surveillance Data	Weekly	0	Case-based data Surveillance 2030	Weekly
Non-Polio Acute Flaccid Paralysis (NPAFP) Rate per 100,000 <15 Year Population	1.67	AFP/Polio Case-based Surveillance data	2	AFP/Polio Case-based Surveillance data		3	AFP/Polio Case-based Surveillance data		3	AFP/Polio Case-based Surveillance data		3	AFP/Polio Case-based Surveillance data		3	AFP/Polio Case-based Surveillance data	
# Measles Cases	1900	Measles case-based Surveillance data 2025	1,140	Measles Case-based Data 2026	Weekly	570	Case-based Surveillance data	Weekly	228	Case-based Surveillance data	Weekly	68	Measles Case-based Surveillance Data	Weekly	50	Measles case-based Surveillance Data 2030	Weekly
Maternal Mortality Ratio (Institutional)	69.1	Annual MNCH & MPDSR Report (FY 2024/2025)	66.5	Annual MNCH & MPDSR Report	October 31, 2026	64	Annual MNCH & MPDSR Report	October 31, 2027	61.5	Annual MNCH & MPDSR Report	October 31, 2028	59	Annual MNCH & MPDSR Report	October 31, 2029	56.5	Annual MNCH & MPDSR Report	October 31, 2030
Children Under-5 Mortality Rate	52	UDHS 2022	46	UDHS 2022	October 31, 2026	42	UDHS 2022	October 31, 2027	38	Outcome (continuous) survey*	TBD	34	Outcome (continuous) survey*	TBD	30	Outcome (continuous) survey*	TBD
Proposed addition: Inpatient Under-5 Death Rate (per 1,000 admissions)	12	DHIS2 (FY 2024/2025)	11.2	Annual MNCH & MPDSR Report	October 31, 2026	10.5	Annual MNCH & MPDSR Report	October 31, 2027	9.8	Annual MNCH & MPDSR Report	October 31, 2028	9.1	Annual MNCH & MPDSR Report	October 31, 2029	8.5	Annual MNCH & MPDSR Report	October 31, 2030

1.2.2: Process Metrics

Process Metric (1.2) (list optional indicators at bottom of table if any)	Indicator definition	Ability to collect as of April 1, 2026 (Yes or No)	Data Source (April 1)	% of health facilities (sites) reporting (including private sector and non-profit) (April 1)	% facilities with digital reporting (April 1)	% facilities with paper reporting (April 1)	Median Frequency of Data Collection from Paper Sites (April 1)	Expected Evolution of Data Reporting over MOU Period
# of people on ART	Number of people currently receiving antiretroviral therapy (ART)	Yes	DHIS2	84%	50%	50%	Quarterly	Following the roll out of digital reporting data can be collected daily and reported on weekly and monthly
# new HIV diagnoses among infants (0-12 mo)	Measures the number of HIV exposed infants (HEIs) 0-12 months tested HIV positive with a DNA/PCR test.	Yes	DHIS2	79%	50%	50%	Quarterly	Following the roll out of digital reporting data can be collected daily and reported on weekly and monthly
# new HIV diagnoses among children and adults (age 12 months or older)	Measures the number of individuals and HIV exposed Infants (HEIs) 12 months or older tested HIV positive with a DNA/PCR or rapid HIV test	Yes	DHIS2	79%	50%	50%	Quarterly	Following the roll out of digital reporting data can be collected daily and reported on weekly and monthly
% pregnant and breastfeeding women living with HIV who receive ART	Measures the proportion of HIV positive pregnant and breastfeeding (PBW) who received ART to reduce the risk of mother-to-child-transmission (MTCT) in ANC, MAT & PNC. It includes the known HIV+ and already on ART at entry into ANC, MAT & PNC. Numerator: Number of HIV+ pregnant and breastfeeding women living with HIV who received ART to reduce the risk of mother-to-child-transmission in ANC, L&D and PNC. Denominator: Total number of HIV positive pregnant & breastfeeding women registered in the reporting period	Yes	DHIS2	69%	50%	50%	Monthly	Following the roll out of digital reporting data can be collected daily and reported on weekly and monthly
% confirmed malaria cases that receive first-line antimalarial treatment	Numerator: Number of confirmed malaria cases that received first line antimalarial treatment Denominator: Number of confirmed malaria cases	Yes	DHIS2	100%	0%	100%	15th Day of every Month	Following the roll out of digital reporting data can be collected daily and reported on weekly and monthly
# insecticide-treated nets distributed to populations at risk of malaria	Number of ITNs given to pregnant women during 1st ANC visit, babies delivered at health facilities at Maternity Wards; Children U5 years who received vaccines	Yes	DHIS2	100%	0%	100%	15th Day of every Month	Following the roll out of digital reporting data can be collected daily and reported on weekly and monthly
# patients with TB notified (i.e., bacteriologically confirmed + clinically diagnosed)	The total number of new and relapse TB patients registered during a given period	Yes	DHIS2	95%	0%	100%	15th day of every month	Roll out of digital register to facilitate digital reporting by facilities
% patients with TB notified who completed treatment	The proportion of new and relapse TB patients registered 12 months ago who successfully completed TB treatment within the reporting period.	Yes	DHIS2	95%	0%	100%	15th day of every month	Roll out of digital register to facilitate digital reporting by facilities

% surviving infants with at least IPV1	Definition: The proportion of surviving infants (children under one year of age) who have received at least one dose of Inactivated Polio Vaccine (IPV1) during a specified reporting period. Numerator: Number of infants who received at least one dose of IPV (IPV1) before their first birthday during the reporting period Denominator: Estimated number of surviving infants (children aged <1 year) in the target population during the same reporting period	Yes	HMIS	100%	5%	96%	15th Day of every Month	Monthly, Quarterly, bi-annual and annually
% children 12-23 mo. with at least MCV1	Definition: The proportion of children aged 12–23 months who have received at least one dose of measles-containing vaccine (MCV1) by the time of assessment. Numerator: Number of children aged 12–23 months who received at least one dose of MCV1 (verified by vaccination card, register, or caregiver recall, depending on data source). Denominator: Total estimated number of children aged 12–23 months in the target population within the reporting period	Yes	HMIS	100%	5%	96%	15th Day of every Month	Monthly, Quarterly, bi-annual and annually
% of pregnant women with at least 4 ANC visits (15-49y)	The percentage of pregnant women in a specific area (catchment area, district, or national) who received at least 4 antenatal care visits during their pregnancy. Numerator: The total count of women who came to the facility for their 4th visit (ANC 4) within the reporting period (e.g., this month or this year). Denominator: The estimated number of pregnant women in the same catchment area for that same period.	Yes	HMIS/UBOS pop estimates	68%	39%	61%	Monthly, Quarterly	Monthly, Quarterly, bi-annual and annually
% of stock items with stock on hand equal to expected balance (physical equal to LMIS count)	% of stock items with stock on hand equal to expected balance Definition: The percentage of stock items for which the physical stock on hand at the end of the reporting period matches the expected balance (calculated as opening balance plus deliveries received minus quantities issued) for the same period. Numerator: Number of stock items where the physical count at the end of the reporting period equals the expected balance.	Yes	HMIS/Dispensing logs	85%	0%	100%	Monthly /Quarterly	Following the roll out of digital reporting, data can be collected daily and reported weekly and monthly

	Denominator: Total number of stock items counted at the end of the reporting period.							
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1.1.3 Infectious Disease Outbreak Response Metrics

Uganda will conduct joint After-Action Reviews following all outbreaks of national or international concern with epidemic or pandemic potential to systematically assess the effectiveness, timeliness, and quality of detection, notification, and response actions. These reviews will generate actionable recommendations to strengthen the national surveillance and outbreak response system and will be conducted collaboratively by the Ministry of Health and United States Government within 90 days of outbreak conclusion. As applicable, joint MOH-USG intra-action reviews may also be part of response activities.

Joint After-Action Review Framework

Governance Structure: After-Action Reviews will be led jointly by the Ministry of Health Surveillance and Outbreak Response Division and United States Government technical teams, with oversight by the Technical Management Team and Joint Health Steering Committee. Participants will include Ministry of Health technical departments, affected districts, reference laboratories, National Drug Authority (where applicable), One Health partners, United States Government technical teams, and other relevant stakeholders.

Methodology: Reviews will employ structured After-Action Review tools, timeline reconstruction, document review, and key informant debriefs to evaluate outbreak management across all response pillars. The methodology will align with Integrated Disease Surveillance and Response guidelines, National Action Plan for Health Security, Amended Public Health Act 2025, International Health Regulations (2005), and multisectoral coordination principles.

Evaluation of Outbreak Detection, Reporting, and Response Timelines: After-Action Reviews will evaluate outbreak performance using the 7-1-7 framework as the core benchmark: detection within 7 days, notification within 1 day, and response initiation within 7 days. The following metrics will guide evaluation:

Detection Metrics (7-day target)

- **Time to Detection:** For non-endemic diseases, days from symptom onset in the first case to detection by surveillance system. For endemic diseases, days from exceeding established baseline or threshold to detection. **Target:** 7 days or less by 2030.
- **Signal Sensitivity:** Ability of surveillance systems to detect unusual health events. **Target:** $\geq 90\%$ outbreaks detected through active surveillance systems by 2030.

Reporting and Notification Metrics (1-day target)

- **Time to National Notification:** Days from detection to notification of Ministry of Health leadership. **Target:** 24 hours or less.
- **Time to Partner Notification:** Days from detection to notification of United States Government and other critical partners. **Target:** 24 hours or less.

- **Completeness of Initial Report:** Proportion of required epidemiological, clinical, laboratory, and geographic data elements included in initial notification. **Target:** 80% or higher completeness to support informed response decisions.

Response Metrics (7-day target)

- **Time to Initial Response:** Days from notification to initiation of response actions including case investigation, contact tracing, risk communication, and rapid response team deployment. **Target:** 7 days or less.
- **Emergency Fund Release Time:** Time from funding request to disbursement from Public Health Emergency Account. **Target:** 72 hours or less.
- **Laboratory Turnaround Time:** Days from specimen collection to result for priority pathogens. **Target:** 72 hours or less for high-consequence pathogens.

Historical Outbreak Detection, Reporting, and Response Timelines

Based on prior national outbreak experience and existing assessments, Uganda's historical outbreak response performance demonstrates the following baseline timelines:

Outbreak Type	Detection Timeline	Reporting Timeline	Response Initiation	Key Lessons Identified
Viral Hemorrhagic Fevers (Ebola, Marburg)	7-14 days	24-72 hours	7-10 days	Weak facility and community surveillance, faster specimen transport and surge financing needed
Cholera Outbreaks	5-10 days	24-48 hours	5-7 days	Gaps in point of entry surveillance and water/sanitation coordination
COVID-19 (early phase)	Variable	Variable	Delayed in early phase	Importance of real-time data systems and emergency financing mechanisms
Cross-Border Events	Often delayed	Delayed	Delayed	Stronger border health surveillance required

After-Action Review Outputs and Implementation

Each After-Action Review will produce the following deliverables to ensure findings translate into system improvements:

- **After-Action Review Report:** Detailed analysis of response performance across all pillars (coordination, surveillance, laboratory, risk communication, case management, infection prevention and control, logistics, operations) with evidence-based recommendations.
- **Improvement Roadmap:** Time-bound action plan with assigned responsibilities to address identified gaps and strengthen system performance.
- **Policy and Standard Operating Procedure Updates:** Recommendations requiring policy revisions or operational procedure modifications to improve future response effectiveness.

- **Targeted Capacity Building Actions:** Capacity development programs and system strengthening support informed by After-Action Review findings.
- **Joint Health Steering Committee Endorsement:** Formal review and endorsement of After-Action Review findings and improvement roadmap to ensure accountability and implementation of recommendations.

Progress on implementing After-Action Review recommendations will be monitored through regular Joint Health Steering Committee meetings and annual MOU reviews, with updates provided on completion of improvement actions and measurable system performance gains.