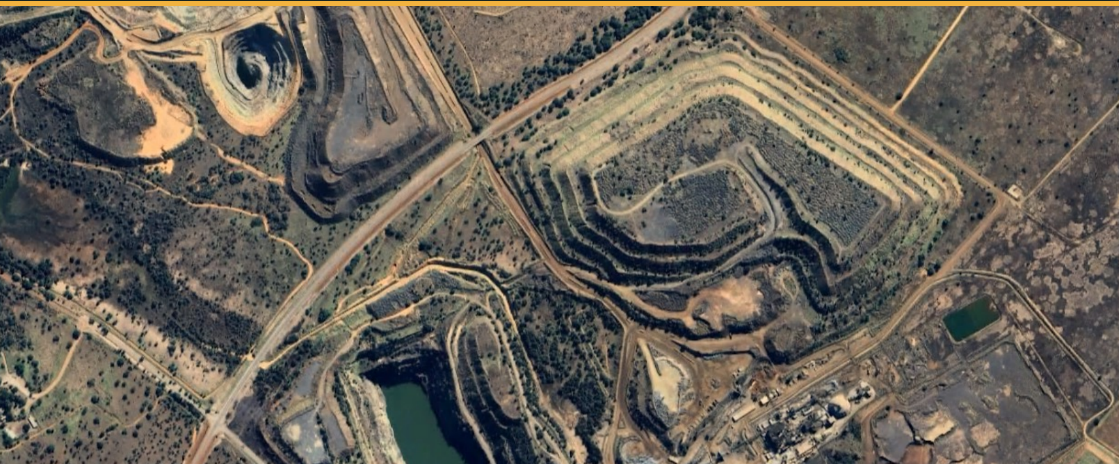
WHITE PAPER / DRC EXTRACTIVE INDUSTRIES

El Niño 2026/27

Health and operational outlook for DRC mining

From climate signals to site-specific operational decisions



RangeX

September 2026

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EXECUTIVE SUMMARY

From outlook to operational readiness

El Niño 2026/27 provides a strong global signal that climate conditions may shift. Its implications for individual sites remain uncertain: disease activity, affected workers and services, timing, and operational severity will vary by location. A regional outlook triggers site-level assessment and informs preparedness decisions. [1,6]

El Niño enters an operating environment in which production schedules, workforce arrangements, procurement plans, and budgets are already set. As rainfall, temperature, flooding, and water availability evolve, existing cholera and malaria pressures may change, with consequences for workforce availability, demand for care, critical supplies, and business continuity. The current Ebola outbreak represents a separate, concurrent risk whose drivers are assessed independently from El Niño. Together, these pressures require preparedness across multiple hazards.

Effective decisions require a combined view of site exposure, workforce vulnerability, operational dependencies, existing mitigation plans, and financial readiness. These elements often sit across separate corporate functions. Bringing them together clarifies where to invest, when to act, how quickly to mobilise cash and specialist support, and how to engage insurers, brokers, and other stakeholders.

This paper offers an operational outlook for El Niño 2026/27 and draws lessons from previous El Niño periods, public-health emergencies, and operational crises in the extractive industries. Three priorities emerge: test readiness in advance; adapt decisions and resources as evidence evolves; and connect internal information, external intelligence, financial mechanisms, and peer experience. Simulations, pre-agreed access to emergency finance, structured learning, and confidential peer comparison translate these lessons into effective operational practice and help identify best practice across comparable sites.

The immediate leadership priorities are to be ready, be adaptive, and be connected. In practice, this means identifying critical gaps, establishing decision thresholds and named owners, securing access to resources and finance, and learning systematically across sites and organisations.

ONE GLOBAL SIGNAL, DIFFERENT LOCAL PRESSURES

The World Meteorological Organization's update of 3 September 2026 describes El Niño as established and forecasts further strengthening, potentially to very strong intensity, before peaking late in 2026. Persistence through February 2027 is close to 100%. [1]

Confidence that El Niño is established and likely to strengthen further is high. Its site-specific consequences remain uncertain. El Niño influences distant regions through atmospheric circulation patterns, or teleconnections, whose expression varies with geography, seasonal timing, conditions in the Indian and Atlantic Oceans, and local environmental exposure.

A strong global signal establishes the potential for disruption. Regional forecasts indicate the most likely direction and timing of change. Site-specific intelligence establishes how those conditions intersect with operational exposure, existing controls, and decision thresholds. The combination of a very strong El Niño and an evolving regional outlook expands the range of plausible conditions facing mining operations and brings additional complexity to operational planning.

Historical context

The historical record provides two recent reference points. The 2023/24 El Niño was the most recent very strong event and ranked among the five strongest on record. Across Southern Africa, it coincided with severe drought, flooding, water shortages, and pressure on hydropower. In May 2024, the Southern African Development Community (SADC) launched an appeal for at least US$5.5 billion to support more than 61 million people affected by drought and floods across the region. [2,3]

The 2015/16 El Niño reached higher intensity and ranked alongside the 1982/83 and 1997/98 events among the strongest observed. During the corresponding 2015/16 rainfall season, Southern Africa experienced one of its driest seasons in more than 35 years. [4,5]

These events provide regional stress tests. Their relevance lies in the operational pressures and response demands they generated. Consequences for individual DRC mining sites depend on local conditions, operational dependencies, and preparedness.

SELECTED EL NIÑO EVENTS SINCE 2000

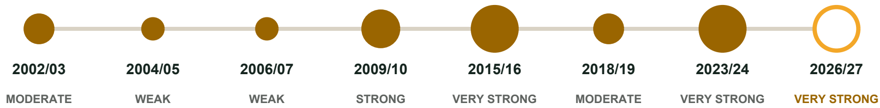


Figure 1. El Niño events since 2000, classified by relative strength using the US National Oceanic and Atmospheric Administration's (NOAA) historical Oceanic Niño Index. The 2026/27 outlook is presented separately as a forecast. Event strength describes the Pacific signal; local impacts vary by geography and exposure. [1,5]

Rainfall outlook around Lubumbashi

The SARCOF-33 outlook places the global El Niño signal within a regional and seasonal context. It presents the most likely rainfall categories across four overlapping periods from October 2026 to March 2027. Forecast conditions vary across the DRC and change as the rainfall season progresses. [6]

Around Lubumbashi, the most likely category moves from normal-to-above-normal rainfall between October and December 2026 to below-normal rainfall between January and March 2027. This progression supports staged preparedness and scheduled reassessment throughout the season.

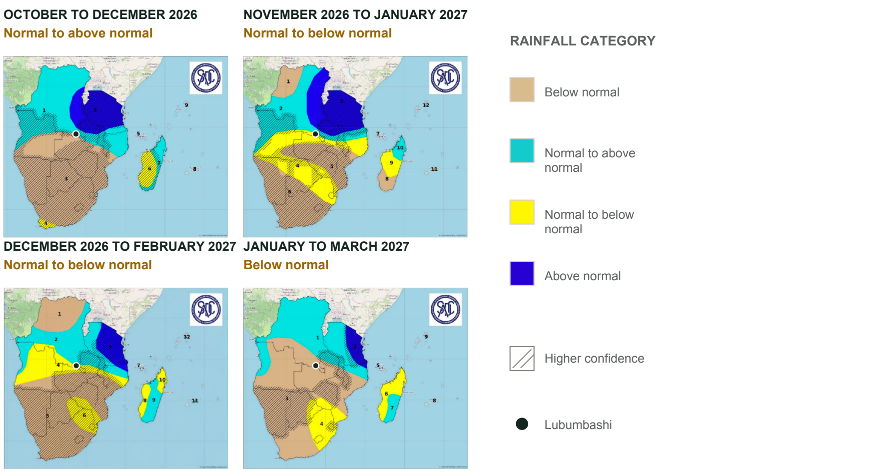


Figure 2. SARCOF-33 rainfall outlook, issued August 2026. Labels summarise the most likely forecast category around Lubumbashi for each overlapping period. Forecast boundaries represent transition areas. Maps adapted from the SADC Climate Services Centre's SARCOF-33 outlook. [6]

Planning across the October 2026 to March 2027 rainfall season

For extractive industries, including mining operations, this progression has implications for water availability, access routes, workforce exposure, clinic demand, preventive programmes, and supply planning. Seasonal categories describe prevailing conditions across several months. Shorter-duration, high-impact rainfall events may also occur within a below-normal period, making shorter-range forecasts and local observations essential throughout the season.

Management attention should focus on where these pressures are likely to interrupt operations, which existing controls may become inadequate, and how quickly additional resources can be mobilised. Each operation requires an assessment based on its forecast zone, operating context, existing controls, and response capacity.

The seasonal outlook defines a range of plausible operating conditions. The following sections examine how those conditions may interact with existing cholera and malaria risks.

Climate conditions reshape existing exposure

Past El Niño events have been associated with changes in the geographical distribution of cholera incidence across Africa. Recent research shows that annual incidence increased in some locations and decreased in others during El Niño years between 2000 and 2014. The evidence covers weak and moderate events, so it shows geographical sensitivity rather than the likely effects of a strong event. [7]

The analysis places eastern DRC at the edge of an East African cluster historically associated with increased incidence. This provides regional context for the current outlook. Its significance for an individual extractive site depends on local transmission, rainfall and water conditions, population movement, vaccination coverage, surveillance performance, and response capacity.

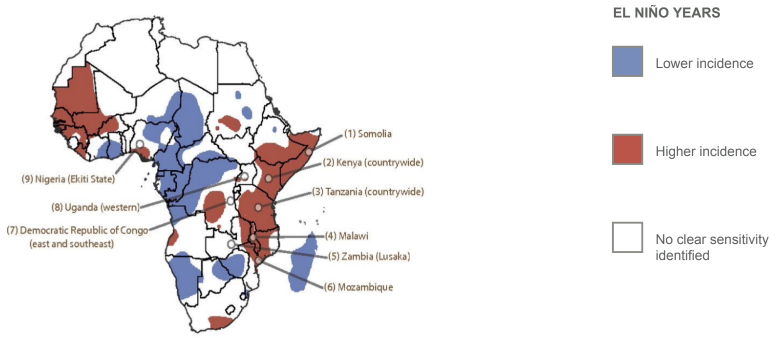


Figure 3. Modelled changes in cholera incidence during El Niño years compared with other years, based on observations across Africa between 2000 and 2014. Source: Moore et al. [7]

DRC continues to carry a high cholera burden

Between 1 January and 28 June 2026, DRC reported 32,193 cholera cases and 908 deaths, corresponding to a reported case-fatality ratio of 2.8%. 18 of the country's 26 provinces were affected. North Kivu accounted for 31% of reported cases, South Kivu for 19%, and Tanganyika for 13%. WHO described transmission as remaining high in the east, particularly in lakeside communities affected by limited access to safe water, inadequate sanitation, and population movement. [8]

These figures establish the scale and persistence of the national burden. Their operational significance varies by site according to transmission in connected health zones, workforce and community movement, transport routes, water dependencies, and the strength of existing controls.

> **DATA NOTE**
>
> Figures include reported suspected, rapid-diagnostic-test-positive, and culture-confirmed cases. Surveillance coverage, reporting delays, case definitions, and retrospective revisions affect their interpretation. Data cut-off: 28 June 2026. Source: WHO. [8]

Water systems shape operational exposure

Cholera risk emerges through the interaction of disease circulation and the systems through which people obtain, store, and use water. Heavy rainfall and flooding can contaminate water sources, overwhelm drainage and sanitation systems, and restrict access to affected communities. Lower rainfall and water scarcity can increase reliance on alternative sources with varying levels of safety and reliability.

At mining sites, exposure can arise through drinking-water systems, catering, accommodation, sanitation facilities, clinics, contractors, and movement between sites and surrounding communities. The operational consequences can include workforce illness and absence, increased clinical demand, additional water-treatment requirements, disruption of essential supplies, and pressure on critical functions.

Effective preparedness connects health, water and sanitation, operations, human resources, procurement, communications, and finance. Defined triggers, named decision owners, pre-qualified suppliers, and accessible contingency funding shorten the interval between an emerging signal and an operational response.

Vaccination provides targeted protection

DRC is expanding preventive oral cholera vaccination through a multi-year strategy focused on areas with persistent transmission. In 2026, 6.1 million doses were allocated to the country. A preventive campaign was implemented in endemic health zones of Haut-Lomami, where flooding disrupted the initial schedule and vaccination teams extended their deployment to reach the intended populations. [9]

Vaccination has also formed part of previous responses in the southeastern provinces. More than 1.4 million people were vaccinated in Haut-Katanga during campaigns conducted in 2021. In June 2025, a further reactive campaign was being planned for 11 health zones across Haut-Katanga, Tanganyika, Maniema, and Tshopo. [10,11]

These interventions can reduce susceptibility among the populations reached and contribute to interrupting transmission. National and provincial campaign figures provide essential context. For each site, assessment requires evidence of campaign coverage and uptake, workforce mobility, water and sanitation conditions, surveillance performance, and access to treatment. Vaccination, safe water, sanitation, early detection, and rapid response operate as complementary controls.

Operational interpretation: cholera

The operational significance of cholera at each site depends on transmission in connected health zones and communities, workforce mobility, water-system resilience, existing controls, and readiness to detect and manage cases.

The strong El Niño outlook adds planning uncertainty through changing rainfall and water conditions. The immediate priority is to monitor these factors together, test whether existing controls remain proportionate, and define the thresholds, owners, resources, and funding required for rapid action.

Cholera control depends on the whole system

Testing whether current cholera controls remain effective requires answers to several practical questions:

- Is current cholera activity in connected health zones and communities visible to site decision-makers?
- Are drinking-water, sanitation, catering, accommodation, and drainage controls performing as intended?
- Can surveillance, diagnostics, treatment, and referral arrangements detect and manage cases early?
- Are decision thresholds, named owners, critical supplies, and contingency funding ready for rapid action?

For extractive operations, the decision challenge is whether the timing, intensity, and operational consequences of malaria are changing faster than existing controls and planning assumptions.

Malaria is already material across the mining belt

WHO's latest country profile, published in February 2026 and based on 2024 data, estimates 35.2 million malaria cases and 67,700 deaths nationally. DRC reported its entire population within the broad WHO high-transmission category of more than one case per 1,000 people; this classification encompasses substantial variation between provinces and locations. [12]

The 2023–2024 DRC Demographic and Health Survey provides the most recent comparable provincial evidence. Rapid diagnostic tests were positive in 21% of children aged 6–59 months in Haut-Katanga and 50% in Lualaba, compared with 33% nationally. [13]

These figures measure community infection among young children, not workforce incidence. Their operational relevance lies in the substantial difference between two provinces within the mining belt. Site-level assessment requires evidence from site clinics, employees, contractors, and connected communities.

> **DATA NOTE**
>
> WHO's estimated national ranges are 26.6–45.6 million cases and 43,400–110,000 deaths. The survey prevalence figures concern children aged 6–59 months tested during the 2023–2024 survey and represent community infection prevalence rather than clinical incidence or workforce risk.

Climate can change the timing of pressure

Malaria transmission reflects the interaction of rainfall, temperature, mosquito habitat, land and water management, population movement, housing, vector control, immunity, diagnosis, and access to effective treatment.

DRC surveillance data from 2001 to 2019 show associations between malaria morbidity and rainfall, temperature, evaporation, and geographical location. These findings support the integration of climate and epidemiological information while preserving the distinction between statistical association and local prediction. [14]

Evidence from Haut-Katanga shows why timing matters operationally. Historical medical records from mining operations show seasonal peaks in March and April, while later records from Lubumbashi show peaks in January and February. The shift of approximately one to two months was associated with warmer minimum temperatures over the longer period. [15]

1930 TO 1946	2003 TO 2011
HISTORICAL MINING RECORDS	**LUBUMBASHI RECORDS**
SEASONAL PEAK	SEASONAL PEAK
MARCH AND APRIL	**JANUARY AND FEBRUARY**

Figure 4. Reported seasonal peaks in the historical mining and later Lubumbashi records. [15]

The study compares different periods, populations, interventions, and surveillance systems. It provides evidence that malaria seasonality in Haut-Katanga has shifted over time under longer-term climatic and operational change. Its relevance to 2026/27 lies in the planning lesson: prevention calendars based on historical timing may become misaligned with emerging conditions.

El Niño adds uncertainty to operational planning

The strong El Niño and the regional seasonal outlook create a credible reason to reassess malaria preparedness. The global event defines the wider planning context; local rainfall, temperature, drainage, breeding habitats, workforce mobility, and control performance determine the implications for each operation.

Malaria responses to changing conditions can also emerge after a time lag. Rainfall can create or remove breeding habitat, temperature affects mosquito and parasite development, and extreme conditions can disrupt access, supplies, housing, and vector-control activities. The direction, magnitude, and timing of these effects vary between locations and throughout the rainfall and transmission periods.

A strong El Niño signal consequently provides an early prompt for operational scrutiny rather than a site-level malaria forecast. The decision question is whether current controls, resources, and timelines remain proportionate as local evidence develops.

Climate can change malaria risk and weaken existing mitigation plans

Africa-wide modelling identifies two pathways through which climate conditions can affect malaria. Changes in rainfall and temperature can alter mosquito habitat and transmission suitability. Extreme weather can damage housing, interrupt vector-control activities, delay medical supplies, and restrict access to diagnosis and treatment. The model covers the 2024–2050 period at continental scale. Its relevance to the present outlook lies in these operational mechanisms.

Demand for malaria prevention, diagnosis, and treatment can increase at the same time as the systems required to deliver them come under pressure. [16]

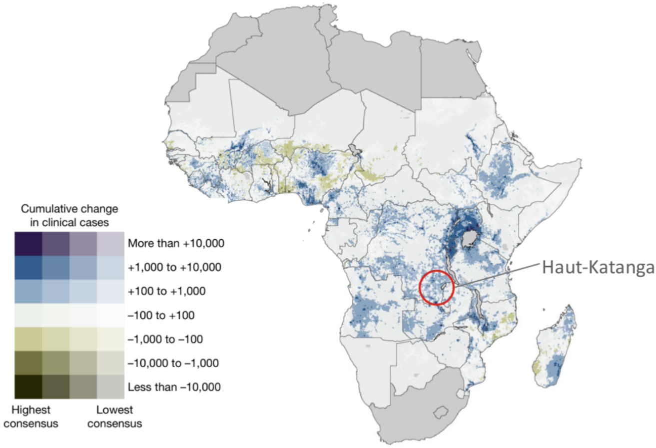


Figure 5. Modelled cumulative change in clinical malaria cases across Africa, 2024–2049, under SSP2-4.5. Long-term projection. Source: Symons et al. [16]

Control effectiveness matters as much as coverage

Assessing whether current mitigation plans remain effective requires answers to several practical questions:

- Is the prevention calendar aligned with current transmission patterns?
- Are vector-control investments targeted to the locations and populations with the greatest exposure?
- Do surveillance data reveal changes in test positivity, confirmed cases, severe illness, or workforce absence?
- Are diagnostics, medicines, clinic capacity, referral arrangements, and critical stocks sufficient for an earlier or larger increase?
- Can additional expenditure be authorised and deployed before operational options narrow?
- Can the company explain its exposure, controls, and residual risk clearly to leadership, insurers, and brokers?

Operational interpretation: malaria

The evidence establishes a high underlying malaria burden, significant variation between the principal mining provinces, and a historical shift in seasonal timing in Haut-Katanga. The strong El Niño outlook adds uncertainty concerning how climate, transmission, control effectiveness, and operational disruption may interact during 2026/27.

Effective preparedness connects external climate and epidemiological signals with site clinic data, workforce patterns, environmental conditions, control performance, supply readiness, and financial authority. This integrated picture allows each operation to determine whether risk is changing, whether spending is directed towards the right controls and locations, and when additional action and funding should be activated.

The operational priority is to keep each site's malaria mitigation plans, staffing, and supplies aligned with the timing and scale of risk.

EBOLA: A CONCURRENT EMERGENCY WITH SITE-SPECIFIC EXPOSURE

The current Bundibugyo virus disease outbreak is a concurrent health emergency affecting the operating context for DRC's extractive industries. Its drivers are independent of El Niño, so the outbreak requires a separate risk assessment.

As of 7 September 2026, DRC had reported 6,757 confirmed cases and 3,267 deaths, corresponding to a crude case-fatality ratio of 48.3%. 61 health zones across Bas-Uélé, Haut-Uélé, Ituri, North Kivu, South Kivu, and Tshopo had reported cases. 51 of these health zones had recorded at least one case during the preceding 21 days, indicating continuing transmission and geographical expansion. Ituri remained the epicentre, accounting for 5,406 confirmed cases. [17]

WHO's initial risk assessment described Mongbwalu, where the outbreak was first detected, as a rural gold-mining area. This description establishes the operating context rather than a causal attribution to mining activity. Population movement, informal settlements, constrained health services, and limited infection-prevention capacity create relevant exposure pathways around mining areas. [18]

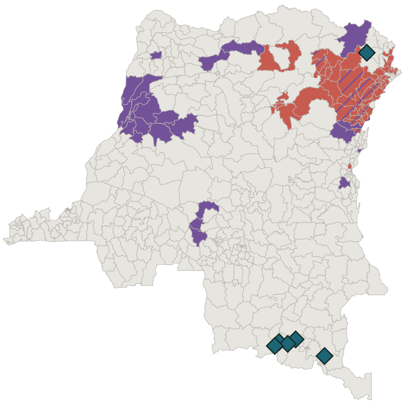


Figure 6. Current and historical Ebola-affected areas in relation to selected extractive sites. Diagonal shading identifies areas where current reporting overlaps with locations affected during previous outbreaks. Selected sites: Kibali, Kamoa-Kakula, KCC/Kamoto, Mutanda, Tenke Fungurume, and Kinsevere. Epidemiological cut-off: 7 September 2026. [17,19,20]

Operational interpretation: Ebola

Haut-Katanga and Lualaba remained outside the six affected provinces at the reporting cut-off. Direct geographical exposure for Kamoa-Kakula, KCC/Kamoto, Mutanda, Tenke Fungurume, and Kinsevere consequently remained limited.

Indirect exposure remains operationally relevant. Workers, contractors, visitors, aviation services, referral networks, and supply routes connect sites with other parts of DRC and neighbouring countries. Preparedness should reflect these movement patterns and the speed with which the outbreak geography can evolve.

The implications vary materially between operations. Southern sites currently require proportionate monitoring and safeguards around indirect exposure. Kibali requires closer surveillance and stronger readiness because it operates within an affected province. Regular reassessment allows each site to adjust its posture as the outbreak geography and operational context evolve.

Cholera, malaria, and Ebola differ epidemiologically, but they place pressure on many of the same operational dependencies. Their business significance emerges through the workforce, site clinics, water systems, transport routes, essential supplies, specialist capacity, and the ability to mobilise resources quickly.

The level of exposure varies between sites. The operational and financial consequences depend on where the threat is developing, how workers and communities are connected to it, how well existing measures perform, and how rapidly the organisation can adapt.

Different health threats converge on common operational dependencies

Health and environmental signals

Disease activity, climate conditions, water availability, workforce mobility, and community transmission.

Site-specific exposure

Workforce location and movement, accommodation, water systems, environmental conditions, existing mitigation measures, and clinical capacity.

Operational pressure

Workforce absence, increased clinical demand, constrained essential services, delayed supplies, and competition for specialist support.

Financial decisions

Reallocation of existing expenditure, release of contingency funding, additional procurement, workforce measures, and protection of operational continuity.

Workforce continuity

Health-related absence can affect production when it involves employees or contractors in essential roles. Connecting illness and absence patterns with shift coverage, specialist skills, replacement capacity, and production schedules allows leadership to identify which functions require additional cover, when staffing arrangements should change, and what funding is needed. Financial implications can include overtime, replacement personnel, transport, accommodation, and disruption to planned work.

Health and site services

Increased demand for care can place pressure on site clinics, referral arrangements, medical supplies, and clinical staff. Disruption to water, sanitation, power, or transport can further affect the services required to protect workers and sustain operations.

Site-level assessment should establish whether these services can meet changing demand, where additional capacity or resources are needed, and how quickly that support can be mobilised. Associated costs can include additional clinical capacity, referral and evacuation, emergency supplies, and temporary service arrangements.

Changing conditions can lengthen delivery times for diagnostics, medicines, water-treatment materials, protective equipment, and other essential supplies. Several operators seeking the same products, transport, or expertise can place further pressure on availability and cost. Supply-related costs can include urgent freight, procurement premiums, additional inventory, alternative suppliers, and mobilisation costs.

Portfolio concentration

A company managing several sites may face different health pressures at the same time. Shared clinics, suppliers, aircraft, specialists, and contingency budgets can then become portfolio constraints. Leadership must determine which sites require priority, which resources can be moved, and where additional capacity should be secured.

This makes aggregation important. A manageable exposure at one site can become material when several operations require support simultaneously.

Operational decisions precede complete certainty

A strong El Niño signal, an evolving seasonal outlook, and concurrent disease activity create a legitimate reason to prepare. Their local consequences remain variable. Leadership must decide where to act, which measures to advance, and how much funding to release while the evidence continues to develop.

Two financial risks require attention:

- Delayed action: supplier availability, transport options, clinical capacity, and time for implementation may narrow as pressure increases.
- Poorly targeted action: expenditure may be directed towards the wrong sites, interventions, populations, or periods when decisions rely on broad external signals alone.

Site-specific intelligence improves this allocation decision. It connects emerging external conditions with workforce data, clinic activity, environmental exposure, mitigation performance, procurement lead times, and operational priorities.

Illustrative portfolio scenario

Two mines enter a critical production period under the same regional climate outlook.

At the first site, the clinic records increasing malaria test positivity and rising absence among employees in essential roles. At the second, clinical activity remains stable, but heavy rainfall is affecting drainage, road access, and delivery times for medical supplies.

Each business function sees part of the situation:

- Medical sees cases, test results, and treatment demand.
- HSE sees environmental conditions and mitigation performance.
- Human Resources sees absence and critical-role coverage.
- Operations sees production dependencies and service constraints.
- Procurement sees availability, lead times, and cost.
- Finance sees expenditure requests, budgets, and financial exposure.

Leadership must decide which interventions to advance at each site, which resources to reallocate, how much contingency funding to release, and when action must begin.

The quality of that decision depends on connecting these perspectives before the available options narrow.

Financial readiness supports response speed

Operational readiness requires more than identifying a threat. Rapid action depends on defined thresholds, named decision owners, pre-qualified suppliers, agreed contractual arrangements, and accessible funding.

A clear distinction should be maintained between:

- routine prevention expenditure;
- incremental preparedness and response costs;
- workforce and service-continuity costs; and
- potential production and business-interruption exposure.

This distinction allows leadership to understand what is already funded, what additional expenditure may be required, and which costs arise from delayed or disrupted operations.

It also supports a more informed dialogue with insurers and brokers. A structured record of the signal, site exposure, mitigation measures, decisions, expenditure, and outcomes provides a stronger basis for discussing risk engineering, business-continuity assumptions, available assistance, and risk-financing arrangements.

Operational interpretation: financial readiness

The financial value of health intelligence lies in improving the timing and targeting of decisions. It helps leadership determine where exposure is developing, whether existing expenditure remains appropriate, which actions should be brought forward, and when additional funding should be released.

Connecting information across Medical, HSE, Human Resources, Operations, Procurement, Finance, and external health systems turns fragmented signals into a site-specific and portfolio-wide view of operational exposure. This creates the foundation for faster, proportionate, and financially defensible action.

Previous El Niño events, public-health emergencies, and operational crises in extractive industries provide practical lessons for managing uncertainty. Their relevance lies in how organisations interpreted emerging risks, tested preparedness, mobilised resources, and adapted as conditions changed.

Four lessons guide the present outlook: connect information around operational decisions; test readiness through simulations; secure the authority and funding required for rapid action; and turn events into stronger preparedness.

Lesson 1: Connect information around operational decisions

Public-health and climate information becomes operationally useful when assessed alongside workforce exposure, clinic activity, site conditions, and existing mitigation plans. Medical, HSE, Human Resources, Operations, Procurement, and Finance each contribute part of this assessment.

Bringing these perspectives together helps leadership identify where risk is changing, whether current spending remains appropriate, and which actions require attention. Coordination with public authorities, healthcare providers, and relevant technical partners strengthens the assessment and clarifies the support available.

Lesson 2: Test readiness through simulations

Simulations test whether preparedness arrangements can be implemented under operational pressure. They bring the relevant teams together to practise decisions, clarify responsibilities, and assess whether staff, suppliers, services, and funding can be mobilised within the required time.

For each site, the exercise should reflect its operating conditions and priority risks. Findings should lead to specific improvements, named owners, and deadlines, with follow-up testing to confirm that the changes work.

Lesson 3: Secure authority and funding for rapid action

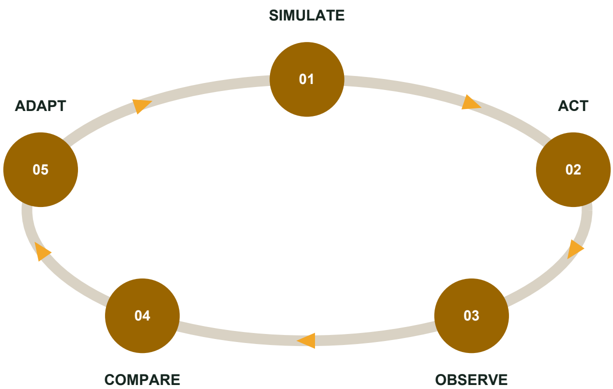
Preparedness requires clear decision authority and timely access to funding. Leadership should establish who can authorise additional expenditure, how contingency funds can be released, and which suppliers and specialist services can be activated as conditions change.

Engagement with insurers and brokers should clarify available assistance, policy conditions, notification requirements, and the arrangements for funding an immediate response. These decisions help align financial readiness with the speed of operational action.

Lesson 4: Turn events into stronger preparedness

Public-health emergencies, operational disruptions, and preparedness exercises provide evidence of which actions worked, what they cost, and where arrangements need to improve.

A structured review should examine what happened, why it happened, and how decisions affected outcomes. Common indicators and confidential, aggregated peer benchmarking allow sites to compare experience and use the findings to refine preparedness simulations and investment decisions.



Learning becomes operationally valuable when findings produce revised arrangements, named owners, implementation deadlines, and evidence that the changes work.

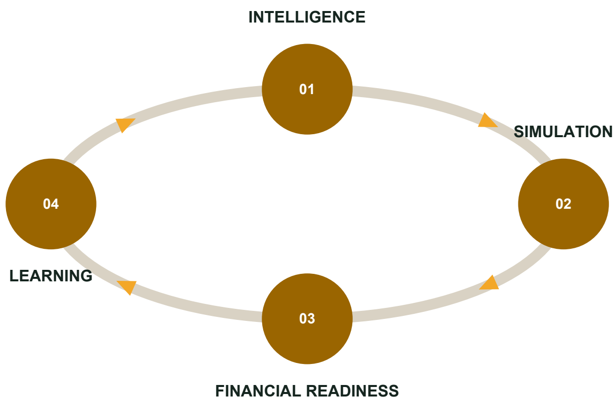
Together, these lessons define four connected requirements:

- integrate fragmented evidence into site-specific intelligence;
- test organisational readiness under pressure;
- enable timely decisions, funding, and implementation; and
- compare experience across sites so that each event improves the next decision.

Together, these requirements define a practical model for shared health-risk intelligence across DRC's extractive sector. The Health Risk Intelligence Network provides the structure for putting that model into practice.

The Network transforms complementary public-health, climate, environmental, workforce, operational, and financial sources into site-specific intelligence. Agreed indicators and clear governance determine which information remains within each organisation, which measures can be compared, and how confidential, aggregated peer benchmarks are produced.

The four capabilities follow directly from the four lessons: intelligence connects information to decisions; simulation tests readiness; financial readiness enables rapid action; and learning turns experience into stronger preparedness.



For operators, this supports site-specific decisions, workforce resilience, business continuity, and informed engagement with insurers and brokers. For public authorities, aggregated sector experience can strengthen situational awareness, coordination, and preparedness while protecting commercially sensitive information.

The Network responds directly to the challenge identified throughout this outlook: global and regional signals provide advance warning, while effective action depends on how those signals interact with the exposure, capabilities, and operational priorities of each site.

LEADERSHIP PRIORITIES FOR IMMEDIATE ACTION

A strong El Niño, a high underlying malaria burden, continuing cholera transmission, and a concurrent Ebola emergency create a complex planning environment for extractive operations in DRC.

The local consequences will vary between sites throughout the October 2026 to March 2027 rainfall period and the health-risk periods that follow. Leadership can act now to strengthen preparedness, preserve operational flexibility, and improve the evidence supporting resource decisions.

Be ready

Test readiness across the functions responsible for health, workforce continuity, operations, procurement, finance, security, and communications.

Address the gaps that could delay detection, decision-making, funding, supply, or implementation. For each priority, state the operational function or service being protected, the expected cost, and the assumptions supporting any potential financial benefit.

Be adaptive

Reassess priorities as climate, health, and operational conditions evolve. Define the indicators that support escalation, adjustment, or withdrawal and establish when leadership will review them.

Confirm which actions sites can initiate locally, which require corporate approval, and how contingency funds can be released. Resources and expenditure should adjust as the evidence changes.

Be connected

Connect site evidence with public-health intelligence, climate information, operational data, and financial perspectives.

Compare preparedness actions, expenditure, and outcomes across similar operations using common definitions and confidential, aggregated peer benchmarks. Shared learning can identify differences that require investigation and practices that merit testing elsewhere.

ABOUT RANGEX

RangeX works at the intersection of health risk and operational decision-making in complex, high-risk environments. The company combines expertise in global health, industrial operations, and risk to support extractive sites where workforce resilience and business continuity are critical.

RangeX connects public-health, climate, environmental, clinical, workforce, operational, and financial information to interpret risk in the context of each site. Its approach makes the evidence, uncertainty, and material gaps visible, linking them to business decisions, resource allocation, and accountable action.

Its capabilities cover:

- Health-risk intelligence: assessing changes in exposure, their operational relevance, and the adequacy of mitigation plans.
- Simulations: testing coordination, decision-making, resource mobilisation, and response arrangements under pressure.
- Operational support: providing senior expertise for preparedness, health programmes, emergency response, and continuity.

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