

Rapid and flexible funding enables countries to save lives by detecting and controlling outbreaks in a timely manner

Background

Early detection and control of infectious disease outbreaks save lives and prevent significant economic and social disruption. But in many countries, a lack of flexible and accessible emergency funding delays the response.

In 2018, Resolve to Save Lives (RTSL) observed that their partners at Nigeria Centre for Disease Control (NCDC) were faced with a new outbreak nearly every month, and often needed to make standalone financial requests to partners or the government for each outbreak before they could deploy response teams. As a result, response time for most events was more than a week, and in one case, more than a month. Recognizing the threat of delayed outbreak response to Nigerian lives and global health security (“an outbreak anywhere is an outbreak everywhere”), RTSL established a dedicated outbreak investigation fund in Nigeria in 2019. This emergency financing mechanism enabled NCDC to release funds using an expedited approval process that allowed for flexible, rapid disbursement and financial accountability through an external partner, the African Field Epidemiology Network (AFENET).

RTSL and its partners were prepared to leverage the potential of rapid, flexible outbreak response funds when COVID-19 cases first reached Africa. In early 2020, RTSL acted quickly to establish dedicated COVID-19 response funds across Africa to support catalytic response components, including basic operations, accelerating vaccine rollout, strengthening risk communications and community engagement and supporting case investigation and contract tracing activities. To ensure accountability and impact, funds are distributed via local partners, including AFENET, PATH, and the World Health Organization.

To date, RTSL—with the support of several generous donors including Bloomberg Philanthropies—has provided over US\$6 million in flexible funds to COVID-19 incident management teams in 34 countries in Africa, disbursing them as quickly as 24 hours from the time of request. For more details on key accomplishments and impact, see Annex 1.

Objective

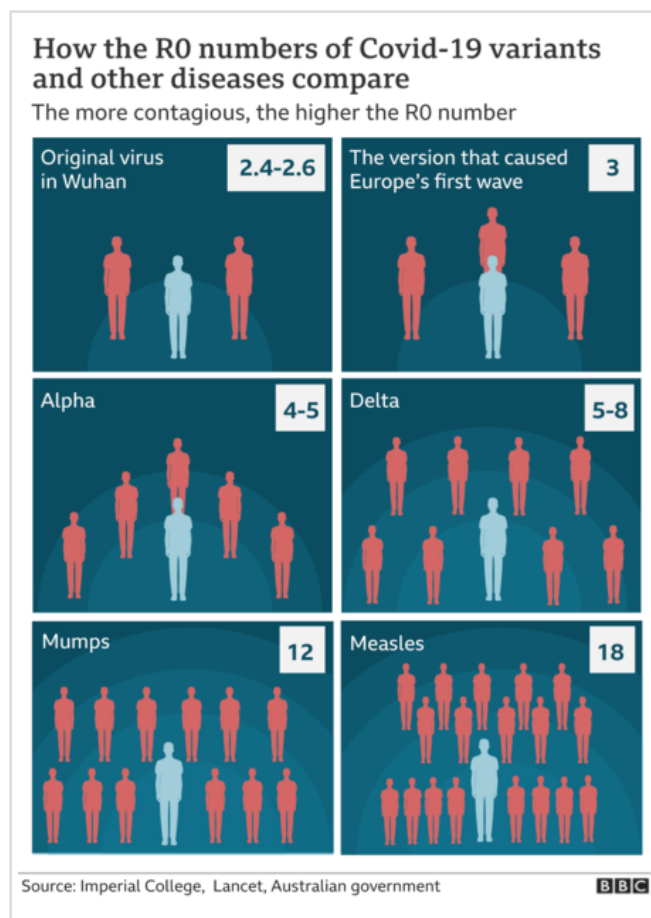
To save lives through early detection and early response to infectious disease outbreaks, including COVID-19, by strategically providing countries with a rapid, flexible outbreak response funding mechanism.



Problem Statement

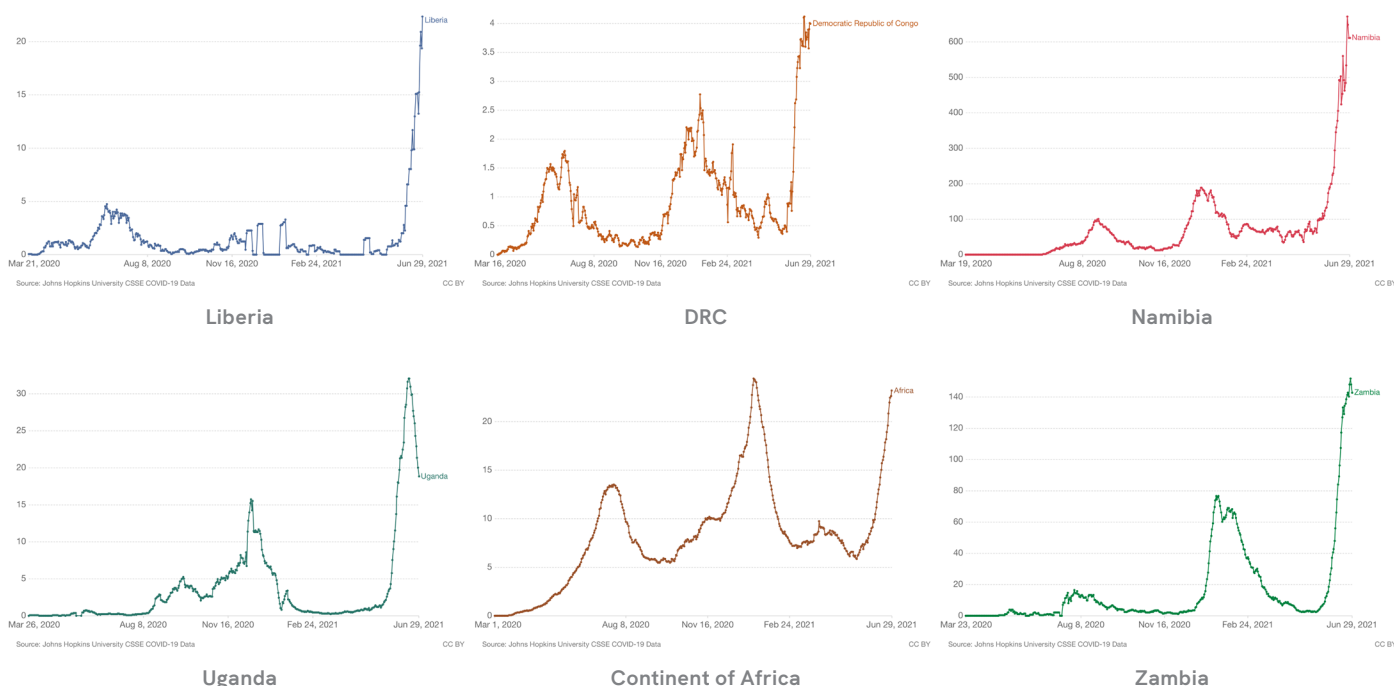
The speed, scale, and protracted nature of the COVID-19 pandemic continue to pose severe challenges on top of those that public health officials routinely face from other infectious diseases. And although over 1.5 billion vaccine doses have been administered globally to date, only 42 million doses have been administered in Africa, with less than 1% of the continent's 1.3 billion people fully vaccinated. Vaccination efforts have been hindered by lack of global supply, and estimates suggest that Africa will not reach widespread vaccine immunity against COVID-19 until 2023 or 2024.

The global proliferation of more transmissible and severe COVID-19 variants, such as the Delta variant, is increasing the risk and potential impact of ongoing COVID-19 transmission and driving unprecedented surges in transmission in many African countries. Strains of the virus common early in the pandemic, including the one that spread in New York City in early 2020, had a reproductive number of approximately three—enough to cause thousands of cases and overwhelm health systems. The Delta variant's reproductive number is estimated to be as high as eight, with a doubling time as low as two to three days. This creates the almost vertical disease curves as seen in Figure 2 and significantly shortens lead time for response.



Daily new confirmed COVID-19 cases per million people

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing. (Adapted from Our World in Data, ourworldindata.org)



Rapid Response Funds

In the early days of the pandemic, RTSL's model of dedicated outbreak investigation funds was effective at initiating early responses and providing a bridge to larger, more sustainable international and domestic financing for emergency response. Rapid, flexible funding enabled RTSL's partners in Africa to swiftly respond to COVID-19 long before other funding mechanisms were made available: in Nigeria, the established fund was the only dedicated financial support available to NCDC for COVID-19 response until May 2020

More recently (and driven in part by RTSL advocacy efforts), larger and longer-term COVID-19 response funding sources have begun flowing to countries from international organizations including the World Bank and Global Fund (e.g., COVID-19 Response Mechanism). However, there have been bottlenecks in the release of these funds, and

even when available, they are often heavily programmed and less flexible in fulfilling the urgent, unanticipated needs created by surges in COVID-19 transmission. These large grants often underestimate the basic operational support countries require to run emergency operations, including consumables such as fuel, phone credit, per diems and retraining costs, and surge capacity needs such as extra car hire, staffing or risk communication material. These costs are not insignificant, and without them response can grind to a halt.

Even 15 months into the pandemic, rapid response funds still play a critical role in ensuring response teams have the flexibility to surge quickly, adapting to new contexts while leveraging and connecting to the larger sources of funding required to maintain COVID-19 response.

Scope

The recent surge of cases in Africa in May and June 2021 has resulted in a new wave of requests for support. The types of requests fall into three categories of critical needs.

Response Area	Typical Amount (per country/request, USD)	Examples
Operational and logistical support	\$50,000	<ul style="list-style-type: none"> Deploying and paying response staff Vehicle rental, fuel Internet and phone credit
Initiating and improving case investigation, contact tracing	\$100,000 – 200,000	<ul style="list-style-type: none"> Risk communication and community engagement Strengthening surveillance & laboratory capacity Training and supporting response staff
Increasing early vaccination capacity	\$50,000 – \$200,000	<ul style="list-style-type: none"> Response to sudden delivery of additional vaccine Early planning, training, scaling of vaccination Risk communication and demand generation Urgent deployment of unanticipated vaccine doses

Request

RTSL requests additional financial resources to provide rapid and flexible support to approximately 10 countries to meet immediate, urgent COVID-19 response needs including rapid distribution of vaccine, surge support to country response teams and ongoing risk communication and rumor management activities.



Annex 1

Rapid Response Funds Review: Accomplishments, Lessons, and Impact

Key accomplishments across the AFRO region:

- Investigated over 30,000 cases and traced over 60,000 contacts
- Trained 4,144 staff in disease surveillance, lab, infection prevention and control
- Supported verification of COVID-19 alerts and incentives for 375 call center staff
- Transported 73,000 laboratory samples
- Disseminated 141,470 banners and leaflets for risk communication and visited 52,575 households to share information
- Mobilized US \$1.2M to support vaccine planning and distribution
- 23 countries in Africa developed National Deployment and Vaccination Plans (NVDPs), all of which were approved by the COVAX facility. The World Health Organization (WHO) acknowledged RTSL's early, rapid support for on-the-ground technical assistance as a major contributor to the high quality of NVDPs from the African region.
- 16 countries received additional support for vaccine rollout in the areas of microplanning and logistics, risk communication campaigns, and training of healthcare personnel in vaccine administration.

Country highlights:

Democratic Republic of Congo (Partner: PATH)

Funded 26,000 liters of fuel and deployment of 200 rapid response staff and clinicians across several provinces. Now 92% of alerts are investigated within 24 hours. Improved follow-up of contacts from 18% to 92% over three months in one region. In addition, trained health promoters to increase community awareness about the pandemic (reached 400,000 people) and used technology to amplify reliable information about COVID-19 (sent 60 million text messages).

Mauritania (Partner: WHO Mauritania)

Trained and deployed 84 field epidemiologists. The WHO Representative attributed increased case detection directly to RTSL support: before the training, the country had only detected nine cases; one month later it had detected over 1000 cases. See full story here.

Guinea (Partner: AFENET)

30% of cases in the country have been investigated by teams supported by RTSL rapid response funding.

Sierra Leone (Partner: AFENET)

In one district over just two weeks, the country increased the number of contacts monitored from 51% to 95%.

Ethiopia (Partner: Ethiopian Public Health Institute)

Supported protocol development and training to enhance response to COVID-19, enabling deployment of 50 rapid response teams and 36 contact tracing teams. Disseminated 50,000 informational posters and trained 160 community leaders in COVID-19 prevention and control.

Burkina Faso (Partner: AFENET)

Provided incentives to 37 staff in the emergency operations call center who have answered 778,000 calls from health facilities and the community and conducted alert investigation and verification.

Mali (Partner: Muso)

Provided funding to hire and train 39 contract tracers and 92 contract monitors, who have together been able to trace almost 700 contacts. 100% of districts in Mali with confirmed COVID-19 cases now have functioning contract tracing systems and 100% of contacts identified are quarantined.

Lessons learned:

- **Rapid, flexible outbreak investigation funds are an effective mechanism to control disease outbreaks** by initiating early responses and providing a bridge to larger or more sustainable international and domestic financing.
- **Clear guidelines governing the response fund operation must be jointly developed by the government and fiscal agent** to ensure timeliness and accountability, while also allowing the high level of flexibility necessary for effective response funds
- **Flexible funding is key** in a context with so many unknowns around how to effectively respond to COVID-19.
- **RTSL response funds are not capacitated to sustain long-term support for procurement and response staff salaries and incentives**, even though they are relied upon for these purposes when other funds are not readily available.
- **Countries continue to face immense challenges in sustaining the surge support required for COVID-19**, including motivating volunteer response staff as the pandemic response spans many months. This further underscores the importance of both domestic and international financing to supplement and replenish outbreak response funds.
- **Advocacy, legal, and financing efforts are necessary to institutionalize the outbreak investigation funds set up in Nigeria, Ethiopia, DRC and Uganda** as part of the core epidemic preparedness functions to build stronger health security. Sustainability can be achieved through institutionalization of rapid response funds within the government bureaucracy, including at the sub-national level in large or federated countries.

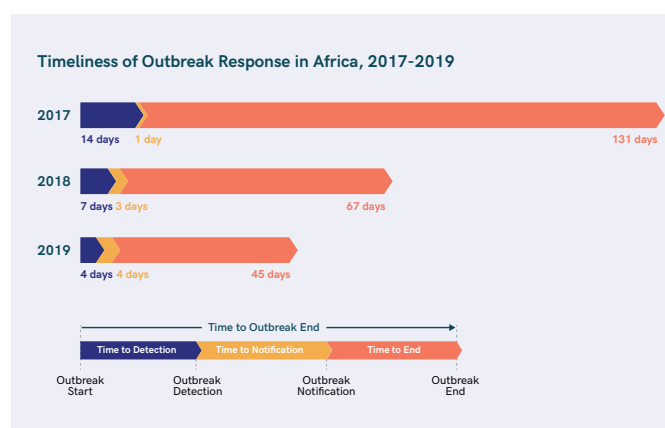
Measuring impact:

In Nigeria, evidence of success and impact of the response fund is already clear. The median time for outbreak verification was reduced from six days before establishing the fund, to just two days after the fund's implementation (manuscript in submission, additional details in this OpEd and success story).

Such timeliness metrics have been proposed as critical impact metrics to measure a country's ability to detect, notify, verify and respond to disease outbreaks, and thus can be effective in capturing the impact of rapid response funds. These metrics include the time intervals from outbreak start to detection to notification and intervention. Speed in intervals plays a major role in the ability to contain an outbreak and avoid preventable deaths and socioeconomic costs.

A recent journal article from WHO presents striking improvements in timeliness metrics for countries in the WHO African Region from 2017–2019 (see Figure XX below). The article cites several factors supporting these improvements, including lessons learned from frequent outbreaks and support from WHO and partners.

Timeliness can serve not only as an impact metric but also as a performance management tool. Regular review of national and sub-national timeliness performance can help countries identify and address their bottlenecks. Delays indicate areas for targeted intervention.



Timeliness should be measured by every country to allow uniform comparison and highlight areas for improvement. As such, WHO, with RTSL support, has integrated timeliness metrics into the monitoring framework for their 13th General Program of Work (GPW 13) to assess progress toward the target of one billion people better protected from health emergencies.

RTSL has also proposed “7-1-7”, a clear set of timeliness targets that provide easy-to-understand, objectively verifiable benchmarks to help stakeholders assess and achieve timely response to infectious disease threats: seven days to detect and recognize any new suspected outbreak, one day to notify public health authorities and start the initial investigations, and seven days to mount an effective response. Rapid response funds are key to achieving GPW 13 and 7-1-7 targets.