RBM Partnership
To End Malaria

Thematic brief

Global Health Security and Malaria

COVID-19 has served as a reminder of how interconnected the world is. Strong health systems, cross-border collaboration, sustained political will and significant and coordinated financial commitments to innovation and in public health are all needed to fight threats to global health, whether ancient like malaria or new like the COVID-19 pandemic. Investments in malaria serve a double-duty solution that contribute to pandemic preparedness and global health security capacities to reduce the risk of widespread health emergencies, while also enabling continued gains towards malaria eradication.

Key messages

Health systems that are overburdened by malaria can miss new infections before they are contained
Detecting, diagnosing and treating hundreds of thousands of malaria cases compromise countries' capacity to identify as many as 7,000 potential disease threats and to respond to disease outbreaks in a timely manner.

Fever hot spots can be the blind spots of the next pandemic[i]
Healthcare capacity to effectively diagnose fevers at the community level is critical to ensure that every fever is diagnosed. Unaddressed fevers in the most remote areas of the world – hotspots for zoonotic spillover events and malaria alike – put the entire world at risk of the emergence of the next pandemic threat.

Health emergencies and pandemics, such as COVID-19, put effective malaria interventions and services at risk.
Overwhelmed health systems, reductions in health seeking behaviour, illnesses among frontline workers, and procurement disruptions compromise malaria service delivery and access. Disruptions in access to life-saving malaria interventions can lead to a surge in malaria cases, causing greater stress on health systems, and even greater numbers of malaria deaths.

Investments in health system capacity to detect and treat febrile illnesses in a timely manner are critical to advance and achieve malaria elimination and strengthen global health security. These investments include maintaining real-time surveillance and reporting systems, strong laboratory networks, well-run supply chains, a multi-sectoral approach, cross-border networks to facilitate communication and collaboration, and a vast and well-trained community health workforce.

Global health security is more than pandemic preparedness. It includes protection from biological weapons, the spread of antimicrobial resistance or "superbugs", and from the epidemics the world is already facing like malaria, HIV/AIDS and tuberculosis.

The substantial economic costs of responding to malaria and infectious disease outbreaks are greater than the costs to prevent these threats. The Interational Monetary Fund forecasts that the financial impact on the world economy by the COVID-19 pandemic will amount to $22 trillion by 2025, with the pandemic recession causing a 3.5% contraction in the global economy[i]. Lost economic growth in malaria-endemic countries is estimated to be as high as 1.3% per year[ii].

The Malaria Fight Contributes to Global Health Security

For countries with weak global health security capacities, investments in preventing and controlling malaria can be an entry point for outbreak detection, data-driven targeted interventions, a whole-of-government response, and cross-border collaboration. Ending malaria and protecting the world's citizens from health threats requires collective action, disease detection, robust prevention and a rapid response. The recent emergence of Ebola, Zika and COVID-19 have tested global capacities in surveillance, diagnosis, treatment, and human resources for health —all core components of an effective malaria response.

High rates of malaria overburden health systems and their ability to identify common causes of febrile illness and respond to disease outbreaks in a timely manner. Eliminating malaria in areas at high risk for epidemic or pandemic outbreaks of febrile disease will prevent malaria surges, relieve competition for scarce healthcare resources, and free up capacity to be more focused and to mount effective responses to acute health emergencies.

Maintaining essential health services, including malaria treatment, is critical to minimize the compounding mortality associated with epidemics and pandemics. Pressures on health systems, diversion of resources from delivering essential health services, and costs to economies and livelihoods as a result of infectious disease threats can cause increases in morbidity and mortality, and in some cases, disease resurgence.

Investments in preventing and controlling malaria can simultaneously build resilient health systems and protect the world from current and emerging disease threats. Expanded investment is required to further scale up essential health infrastructure, which was built through investments in the malaria fight over the last two decades. Many of these investments have been repurposed to deal effectively with the current pandemics, including:

- Testing more than two billion fevers since 2010[iii];

- Training tens of thousands of community healthcare workers – particularly in remote areas – to conduct early diagnosis and treatment and integrated community case management of people with malaria/fevers;

- Increasing access to life-saving treatments, rapid diagnostics and preventive interventions;

- Building and digitizing data systems to improve real-time surveillance of infectious diseases;

- Improving supply chains and availability of effective medicines and medical equipment; and

- Building in-country laboratory capacity.

Community Case Management and Health Emergencies

Community case management is an effective method for reducing the burden on health systems during a health emergency and can be used to identify and refer non-malarial fevers. As health-seeking behavior may decrease during an epidemic due to fear, linking community platforms with the health system is critical to reinforce trust and access. Malaria action plans, co-created with communities, can serve as the foundation for enhanced community involvement during health emergencies. Investments in digitizing community case management at scale will be important to maximize opportunities for the fight against COVID-19, malaria and other diseases.

Outbreaks show us the essential value of community-based care. Lockdowns and other immediate mitigation tactics restrict access to health facilities, increasing the need for community-based care. Integrated community case management of malaria and other fevers by community health workers relieves pressure on overburdened health clinics and hospitals by allowing treatment of many malaria cases at the community level, referring only severe malaria cases and fever cases not caused by malaria to health centers.

Outbreaks threaten the first line of defense against malaria: healthcare workers. Healthcare workers are on the frontlines of malaria elimination and are vital in the fight against outbreaks; they are also some of the most vulnerable groups during outbreaks. Providing tools, such as adequate Personal Protection Equipment (PPE), to healthcare workers enables them to address outbreaks and protect themselves.

Spotlight: Malaria and the COVID-19 Pandemic

The COVID-19 pandemic has posed a major threat to the delivery of essential malaria services. COVID-19 disrupts the delivery of health services through supply chain disruptions, reductions in health-seeking behavior, overwhelming health systems, difficulty appropriately diagnosing febrile illness and risks to frontline health worker health. Early modelling indicated malaria deaths could have doubled in 2020 due to the impact of COVID-19 on malaria service delivery[iv], impacting decades of progress.

Thanks to a global call to action and the quick and innovative response of countries, governments and partners, more than 90% of preventive malaria programs delivered essential malaria interventions according to COVID safety guidelines. Throughout the pandemic, the World Health Organization, the RBM Partnership to End Malaria, UNICEF and partners provided new guidance for how to safely maintain core malaria services, worked with countries and partners to ensure continued availability and affordability of life-saving malaria commodities, and engaged with communities in malaria-affected countries to encourage care-seeking behavior. These efforts successfully avoided the worst-case scenario predicted, saved thousands of lives and created new efficiencies and programs that will have lasting impact.

However, malaria cases and deaths are expected to rise, and the full impact of COVID-19 on malaria responses may not be known for some time. Current modelling suggests that malaria deaths could increase 36% over the next five years due to malaria service interruptions caused by the COVID-19 pandemic[v].

The COVID-19 pandemic has provided several lessons learned for the mutual importance of global health security and the global fight against malaria. Recognizing that accelerated action on malaria relies on countries having stronger health systems and services, countries are taking an integrated approach to both the malaria fight and the COVID-19 response, guided by a triple response framework of technical, health systems and multilateral responses. The COVID-19 pandemic response is also reinforcing the importance of timely, accurate and geo-localized data and modelling for public health and for prioritizing and targeting limited resources.

Solutions:
Leveraging Malaria Interventions for Global Health Security

Rapid response to infectious disease threats – including the COVID-19 pandemic – must utilize and strengthen health programmes and infrastructure that are required to maintain essential health services, including those for malaria. Efforts to improve pandemic preparedness and response interventions through malaria investments could include:

- **Surging community health workforce in hard-to-reach areas:** Increasing the number and capacity of community health workers to enable detection and treatment of malaria and other febrile illnesses and vaccine distribution. District health units that have successful integrated community case management and community engagement models to deliver integrated malaria and other disease diagnosis and treatment can activate those systems to assist with outbreak response efforts[vi].

- **Strengthening of procurement and supply chain systems:** Maintaining supply of adequate levels of malaria commodities and addressing the increased costs due to COVID-19 disruptions to global supply chains.

- **Addressing anti-microbial and insecticide resistance:** Funding next generation anti-malarial medications and bed nets to combat the constant evolution of the malaria parasite and malaria-carrying mosquitoes.

- **Investing in early detection and real-time surveillance and data:** Strengthening real-time surveillance systems and tools for malaria can bolster essential infrastructure for early detection and response to emerging pandemics to help identify — in real-time — drivers of transmission and target interventions. The use of mobile technology and risk mapping can support efforts to enhance rapid reporting and contact-tracing. They also help to ensure that limited resources are prioritized and targeted to where they are needed most.

- **Extending the reach of laboratory systems – including the accompanying human resources, infrastructure, and commodities:** Laboratory capacity is essential to global health security allowing for rapid detection, diagnosis, and treatment.

Essential malaria services can adapt to continue safely during global health emergencies to prevent unnecessary morbidity and loss of life. While solutions to emerging infectious disease threats may be immediately unavailable, highly effective malaria prevention and treatment are well established. Malaria interventions should continue during health emergency threats to protect lives and ensure that gains in fighting malaria are not lost.

A coordinated and whole-of-government approach is essential for both successful malaria elimination and outbreak response. A multisectoral approach to malaria can be leveraged for emerging disease threats to propel a whole of government approach. Ensuring leadership from all ministries focuses on efforts to drive down malaria and other outbreaks provides the political will and resources needed to protect health in the face of emerging disease threats.

References

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