

From Unilateral Response to Coordinated Action

How Can Mobility Systems in Sub-Saharan Africa Adapt to the Public-Health Challenges of COVID-19?

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Executive Summary

As in almost every part of the world, the COVID-19 pandemic has severely disrupted migration and mobility throughout sub-Saharan Africa. In March and April 2020, many governments in the region moved quickly to close their borders and impose travel restrictions to control the spread of infection, substantially curbing (although not entirely halting) movement. The speed of these actions caught many unawares, with hundreds of thousands of migrants left stranded across the region. Like the large numbers of people affected by lockdown measures, those whose livelihoods rely on cross-border trade or travel face significant economic uncertainty. While some of these restrictions have since been revised or phased out in favor of more targeted measures (e.g., testing), the emergence of several concerning new variants of SARS-CoV-2 (the virus causing the disease COVID-19) has led some governments to reintroduce additional travel restrictions.

While many countries in sub-Saharan Africa have experience dealing with infectious disease outbreaks (including Ebola, cholera, measles, and yellow fever), COVID-19 forced governments to rethink some of their public-health strategies. For example, rapid and widespread transmission has made it difficult to geographically confine the spread of the disease. Further, asymptomatic and presymptomatic trans-

mission is a common feature of SARS-CoV-2, reducing the effectiveness of common screening tools such as temperature checks and strategies such as symptom-based isolation.

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Instead, governments have relied on a combination of screening, testing, and quarantine requirements along the migration continuum to try to reduce the risk of cross-border transmission and lay the groundwork for reopening borders more fully. Introducing some of these measures (e.g., to administer and process COVID-19 tests, or to expand public-health surveillance to track and analyze the spread of COVID-19 and its population impacts) has required significant resources and support from international actors such as the Africa Centres for Disease Control and Prevention and the International Organization for Migration. But gaps remain. Public-health measures have been applied unevenly and inconsistently across the region, reflecting limited capacity and weak border management and public-health infrastructure. An over-reliance on border closures and

mobility restrictions as the public-health tools of choice has exacerbated and compounded the economic disruption caused by the pandemic, not just in sub-Saharan Africa, but globally.

Reflecting on the first year of the COVID-19 response in sub-Saharan Africa offers several lessons. Investments in strengthening health systems, surveillance, and local capacity are necessary for a robust public-health response. Public-health and migration actors will need to work together more closely to ensure that cross-border trade and travel can restart or continue safely, and that response plans are informed by the best available evidence and take into account the needs of migrant and refugee populations. Governments also need to coordinate closely when planning, introducing, and lifting public-health measures, and where possible, harmonize these requirements across countries. Containment measures such as border restrictions can carry significant costs for local populations, especially if they are not rolled out thoughtfully and with sufficient investments in livelihood and social protection supports, capacity building, and public and interagency communication. Efforts to improve coordination at the regional level (for example, through the Economic Community of West African States and the East African Community) can help to lay the groundwork for developing common standards, sharing information, and working together to build capacity.

COVID-19 knows no borders, and thus by its very nature, an effective public-health response requires global and regional coordination. The pandemic has challenged public-health infrastructure as never before, exposing how out of sync it is with the realities of migration and mobility. Learning from experiences gathered over the last year is key, not just for containing and mitigating the spread of this virus but in order to adequately prepare and respond to future public-health emergencies.

1 Introduction

The arrival of COVID-19 during the first quarter of 2020 upended migration and mobility in sub-Saharan Africa, as it did around the world. Many governments in the region moved quickly to close their borders and introduce travel and mobility restrictions to try to prevent the spread of SARS-CoV-2 and give themselves time to fortify their response to the pandemic.¹ By June 2020, nearly all countries in Africa had suspended international flights, and the majority had also closed their land borders (38 countries) and maritime borders (17 countries).² While some migration has continued informally due to porous land borders, its volume has fallen significantly even within areas of free movement, such as the Economic Community of West African States (ECOWAS).

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Since then, governments have invested in public-health measures, such as enhanced hygiene, physical distancing, and screening protocols at the border and post-arrival quarantine requirements, which in some cases have replaced border closures or travel restrictions.³ However, the COVID-19 pandemic has forced governments to reassess their strategies for monitoring and addressing infectious disease outbreaks. For example, the high proportion of asymptomatic and presymptomatic transmission has rendered some established public-health tools (such as temperature checks) relatively less effective.

The crisis has also illustrated how public-health responses can be slow to take the complex realities of migration in the region into account. For example, border closures have come with unintended con-

sequences, stranding large numbers of people, imperiling the supply of essential goods and services, and cutting off income for border communities and prospective migrants. These economic impacts are closely linked to public-health impacts, due to the negative effects they can have on a population's health, the functioning of health systems, and the broader pandemic response. Introducing new containment and mitigation measures has also required navigating weak border management capacity and often overstretched health-care systems in the region, with implications for how quickly such measures can be rolled out or effectively scaled.

Going forward, the challenge for policymakers lies in how to adapt mobility systems in the region to effectively reduce the risks of COVID-19 transmission while minimizing the disruption to cross-border trade and movement. Public-health measures will need to be tailored to the realities of a region with porous borders, under-resourced health-care and migration management systems, and limited safety nets for people who lose their livelihoods (especially for migrants and all people who work in the informal sector). This policy brief will explore how governments in the region can navigate these challenges and the role that the international community can play in supporting these efforts.

2 Understanding the Challenges COVID-19 Poses for Mobility Systems

The public-health toolkit used to respond to infectious disease outbreaks includes both containment and mitigation measures. Containment measures (including border controls, isolation, quarantine, rapid case identification, and contact tracing) aim to limit and end an outbreak.⁴ Mitigation measures

(such as hand hygiene, travel restrictions, lockdowns, school closures, the wearing of masks, and physical distancing) aim to slow disease spread and reduce pressures on health-care systems—that is, to “flatten the curve.”⁵ According to expert consensus and evidence from past pandemics, including the 1918 influenza, early government action and rigorous mitigation measures are required to slow down transmission.⁶

Along the migration continuum, governments typically use a combination of containment and mitigation measures to try to prevent the spread of infectious disease. For example, predeparture interventions can include sharing information about the latest travel restrictions and public-health requirements; interventions at the border can include health screenings or testing; and post-entry requirements can include self-isolation or quarantine measures or contact tracing (as will be described in more depth in the next section).

Compared to other coronaviruses that have caused recent pandemics or pandemic threats, such as the Severe Acute Respiratory Syndrome (SARS) pandemic in 2002–03 and the Middle East Respiratory Syndrome (MERS), first detected in 2012,⁷ SARS-CoV-2 is less deadly, on average, but it is more transmissible, with a higher average basic reproduction number (R_0 , a measure of a disease's ability to spread). The reported case fatality rate varies widely by country, due to factors such as demographics, prevalence of underlying conditions, access to health care, and levels of testing.⁸

Community transmission is a major driver of COVID-19 cases, including among asymptomatic individuals, adding to the challenges of controlling it.⁹ The virus is believed to primarily spread between people through exposure to respiratory droplets during close contact and, less commonly, through aerosol transmission or contact with contaminated surfaces.¹⁰ A September 2020 review reported that

asymptomatic individuals account for around 40 percent to 45 percent of COVID-19 cases,¹¹ while modeling studies have estimated that silent (asymptomatic and presymptomatic) transmission accounts for more than 50 percent of COVID-19 transmission.¹² By comparison, an estimated 25 percent to 30 percent of influenza cases are attributed to silent transmission.¹³

Finally, while COVID-19 presents substantial challenges to societies and health systems everywhere, these challenges are especially pronounced in low- and middle-income countries. Much of sub-Saharan Africa is characterized by fragile health-care systems, a high population disease burden, and limited access to health care—all factors that will likely compound the impact of the pandemic.¹⁴ Health-care systems in sub-Saharan Africa are often overburdened by health needs (including sexual and reproductive health, mental health, routine childhood immunization, and care for chronic diseases) and endemic diseases (such as HIV, TB, malaria, and measles) and easily overwhelmed, particularly during large-scale outbreaks.¹⁵ Over the past decade, outbreaks of major communicable disease, including Ebola, cholera, measles, and yellow fever, have strained health systems, economies, and public-health infrastructure.¹⁶ Shortages of health-care workers, particularly intensive care professionals and other specialists, pose a critical challenge in the pandemic response in the region; existing shortages have been exacerbated by COVID-19, which has disproportionately affected health-care workers.¹⁷ There are only 0.2 physicians per 1,000 inhabitants across sub-Saharan Africa, compared to 3.7 in Europe and 2.6 in North America.¹⁸ Weak health-care infrastructure (for example, limited intensive care unit beds and ventilators) is another important challenge.¹⁹ These realities may help explain why the region enacted such extensive internal and international travel restrictions in the first quarter of 2020.

At the same time, Africa's young demographic profile may mitigate some of the worst impacts of COVID-19, since the risk of death increases steeply with age.²⁰ In addition, many sub-Saharan African countries have experience dealing with previous infectious disease outbreaks, including the 2014–16 Ebola epidemic in western Africa, which led governments to put in place infrastructure and action plans that likely facilitated COVID-19 preparedness and response.²¹

Significant rates of asymptomatic or presymptomatic transmission make it difficult to quickly identify, isolate, and trace the contacts of infected individuals, or to implement effective containment measures.

In the early months of the pandemic, it quickly became clear that many of the established tools in the public-health toolkit were less effective against COVID-19. The window of opportunity to quarantine or isolate individuals with confirmed or suspected SARS-CoV-2 infection and effectively reduce transmission is limited, as a person is often most contagious early in the disease course, including before symptoms appear.²² Moreover, significant rates of asymptomatic or presymptomatic transmission make it difficult to quickly identify, isolate, and trace the contacts of infected individuals, or to implement effective containment measures, including symptom-based health screening at borders. While temperature measurement was used widely at borders during recent outbreaks of Ebola, SARS, and H1N1 influenza, it is less effective as a screening tool for COVID-19, due to the significant disease spread caused by asymptomatic or presymptomatic individuals who do not have a fever.²³

Given these limitations, interim World Health Organization (WHO) guidance regarding international

travel in the context of COVID-19, issued in December 2020, advises considering screening based on visual observation of respiratory symptoms in departing and arriving travelers; verbal or written inquiry about symptoms, travel history, or recent exposure (e.g., health declaration forms); and collection of contact information for contact tracing purposes.²⁴ This obviously raises important questions regarding the training, capacity, and public-health surveillance infrastructure that needs to be in place not just at airports and other points of entry, but in the country more broadly.

Many countries are choosing to rely on SARS-CoV-2 testing in connection to travel, including at the Beitbridge border between South Africa and Zimbabwe, Africa's busiest border crossing.²⁵ While COVID-19 testing technology and test availability are rapidly improving, currently available diagnostic tests have limitations and trade-offs that are important to consider when making decisions in the context of mobility, as summarized in Box 1.²⁶

BOX 1 COVID-19 Testing in the Context of Mobility

There are two main types of diagnostic tests used to detect current COVID-19 infection. These are known as nucleic acid amplification tests (NAATs), which include reverse transcriptase polymerase chain reaction (RT-PCR) tests, or PCR tests, and rapid antigen tests, also called antigen tests and antigen-detecting rapid diagnostic tests. Both types detect part of the novel coronavirus, SARS-CoV-2, and have certain shortcomings and limitations. The usefulness of any SARS-CoV-2 testing strategy depends on the correct use and interpretation of accurate tests, conducted at the appropriate time. For example, a person infected with SARS-CoV-2 may receive a negative result if the test was taken before the virus reached detectable levels in the body. In the context of mobility, testing availability, ease of use, timeliness of results, and the need for repeat testing are important considerations as well. It is also important that testing be supported by provisions for safe quarantine or isolation for people who require it.

NAATs are considered the gold standard for identifying cases of COVID-19. However, these tests are expensive, generally require advanced laboratory capacity, have a slower turnaround time (typically one to seven days, although some rapid NAATs can return results within 15 minutes), are not practical for testing large numbers of people, and their availability may be limited. The Africa Centres for Disease Control and Prevention (CDC) reported on December 16, 2020, that countries in the region possess limited capacity to conduct NAATs. Also, a turnaround time of more than two days limits their usefulness for screening at points of departure or entry.

Rapid antigen tests are cheaper, easier to use, more widely available, and can provide results at the point of care in 15–30 minutes, making them an attractive option when timely results are needed for decision-making. As such, the Africa CDC interim guidance recommends the use of rapid antigen tests for screening travelers at borders or points of entry, and in contexts where NAATs are unavailable or their turnaround times are unlikely to be clinically helpful. However, rapid antigen tests are less sensitive than NAATs (meaning that they are more likely to produce false negative results), and in “healthy traveler populations with low expected prevalence of disease,” there is also a higher likelihood of false positive results. For this reason, the Africa CDC recommends repeat testing, preferably with NAATs, or alternatively with another rapid antigen test, to verify results in these situations. The World Health Organization (WHO) adopts a slightly different position, discouraging the use of rapid antigen tests in these populations unless NAATs are readily available to confirm the results of rapid antigen tests, where required.

Sources: WHO, “COVID-19 Diagnostic Testing in the Context of International Travel” (guidance document, December 16, 2020); Africa CDC, “Interim Guidance on the Use of Rapid Antigen Tests for COVID-19 Response” (guidance document, December 16, 2020).

BOX 2 New Variants of Novel Coronavirus Bring New Challenges

The emergence of three fast-spreading COVID-19 viral strains, first detected in the United Kingdom, South Africa, and Brazil, in late 2020 triggered reflexive border closures, heightened public-health restrictions, and chaotic scenes at borders around the world, including in sub-Saharan Africa. As of early February 2021, the variant first identified in South Africa, known as 20H/501Y.V2 or B.1.351, was reported in a total of 41 countries across four of the six WHO regions.

Evidence of the new variants' transmissibility, severity, and implications for currently available diagnostics, treatments, and vaccines, as well as the pandemic's trajectory, is still preliminary, and much remains uncertain. The appearance of new viral strains is not unexpected or a cause for concern in itself, but public-health officials and authorities are concerned that these three variants may be more transmissible than the original SARS-CoV-2 strain and that some currently available vaccines may provide less protection against them. At the time of publication, the new variant first detected in South Africa was driving a surge of cases in the country and spreading regionally, raising concerns about health-care capacity and the possibility of more severe subsequent waves in Africa. While the effects of the new variants on disease severity remain unclear, they may strain hospital systems and result in more hospitalizations and deaths simply by driving up COVID-19 case rates.

The new variants have also complicated planned vaccine rollouts. The manufacturer of the Novavax vaccine reported that its vaccine is substantially less efficacious against the B.1.351 variant. In February 2021, South Africa suspended a drive to vaccinate health-care workers with the Oxford-AstraZeneca vaccine amidst reports of low vaccine efficacy against mild-to-moderate disease associated with the same variant, while Moderna and Pfizer are reformulating their vaccines to create booster shots to account for the new disease variants.

Genomic surveillance is necessary to understand and characterize the virus and track the emergence and spread of new variants. WHO and Africa CDC jointly launched a network of 12 laboratories in September 2020 to strengthen SARS-CoV-2 genomic sequencing capabilities in the region. However, as of December 2020, Africa represented just 2 percent of all the SARS-CoV-2 genetic sequences completed globally, and most of these were conducted in South Africa.

Note: In interim guidance released on February 10, 2021, a WHO panel continued to recommend the use of the Oxford-AstraZeneca vaccine according to guidelines, even if variants are present in a country, noting that "the known and potential benefits" outweigh the risks, and that the advice may be updated as new evidence comes to light.

Sources: WHO Regional Office for Africa, "[WHO Urges Greater Surveillance As New COVID-19 Variants Emerge](#)" (news release, December 30, 2020); U.S. Centers for Disease Control and Prevention, "[Genomic Surveillance for SARS-CoV-2 Variants](#)," updated February 2, 2021; Michaeleen Doucleff, "[Why Scientists Are Very Worried about the Variant from Brazil](#)," NPR, January 27, 2021; Matthew Herper, "[J&J One-Dose Covid Vaccine Is 66% Effective, a Weapon but Not a Knockout Punch](#)," Stat News, January 29, 2021; WHO, "[Weekly Epidemiological Update](#)," updated February 2, 2021; Munyaradzi Makoni, "[South Africa Responds to New SARS-CoV-2 Variant](#)," *The Lancet*, January 23, 2021; Andrew Harding, "[COVID-19 in South Africa: Scientists Seek to Understand New Variant](#)," BBC News, January 4, 2021; Rumbi Chakamba, "[Concerns Mount That a New COVID-19 Variant Could Be Spreading in Africa](#)," Devex, January 14, 2021; WHO, "[Interim Recommendations for Use of the AZD1222 \(ChAdOx1-S \[recombinant\]\) Vaccine against COVID-19 Developed by Oxford University and AstraZeneca](#)" (interim guidance document, February 10, 2021); Novavax, "[Novavax Confirms High Levels of Efficacy Against Original and Variant COVID-19 Strains in United Kingdom and South Africa Trials](#)" (press release, March 11, 2021); South African Government, "[Minister Zweli Mkhize on the Outcomes of the Coronavirus COVID-19 Vaccine Efficacy Studies](#)" (press release, February 10, 2021).

As a new disease, much remains uncertain about COVID-19, and the related science, public-health guidance, diagnostics, vaccines, and therapeutics are rapidly evolving. Further complicating the picture, multiple fast-spreading SARS-CoV-2 variants of concern, first detected in late 2020, had been reported in countries across all six WHO regions as of early February 2021, with uncertain implications for the pandemic's trajectory and the efficacy and effectiveness of current vaccines (see Box 2).²⁷ A variant first detected in South Africa in December 2020 is driving a surge of cases in the country and spreading regionally, raising concerns about strain on health-care capacity and possibly more severe subsequent waves in Africa.²⁸ As discussed below, it has also led to a new wave of border closures and travel restrictions in the region, reversing some of the progress made in reopening borders in mid to late 2020.

3 How Have Governments in Sub-Saharan Africa Adapted Their Mobility Systems?

Africa confirmed its first case of COVID-19 in Egypt on February 14, 2020, more than a month after the first reported case in Wuhan, China. Given past experiences with Ebola, and the continent's extensive trade and travel ties with China, leaders on the continent were alert to the risks of this new infectious disease, with some countries (such as Côte d'Ivoire) already taking steps in January to screen and monitor passengers who had recently traveled to China. Between March and May 2020, most governments in sub-Saharan Africa moved quickly to close their borders and introduce other travel restrictions, with more than 90 percent of African Union members introducing border closures by the start of April.²⁹ Initially, measures focused on arrivals from countries deemed high risk (such as China and much of

Europe) through targeted entry bans or by pausing visa processing, halting flights to/from high-risk areas, or introducing mandatory quarantine requirements.³⁰ But as cases started to rise, these targeted measures were replaced by more far-reaching policies, such as border closures and blanket bans on international flights.³¹

From a public-health standpoint, the rationale for introducing curbs on mobility at an early stage was clear: reducing the risk of transmission while the number of domestic cases remained very low to buy time to develop an effective response to the pandemic. By acting decisively to curb mobility early in the pandemic, the region likely secured valuable time, allowing governments to strengthen their emergency coordination, improve surveillance, and establish and equip treatment centers, among other pandemic preparedness and response measures. But implementing these measures involved confronting logistical challenges, such as the reality of highly porous borders throughout the region and prevalent irregular migration, and the high costs of border closures and travel restrictions, including stranded populations and significant disruptions to livelihoods.³²

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Studies also suggest that the effectiveness of travel restrictions falls as local case numbers rise and community transmission sets in.³³ Finally, while border closures and mitigation measures (such as restrictions on movement, public gatherings, and school closures) may have had an important public-health rationale early on in the pandemic, their benefits

must be weighed against their substantial impacts on supply chains, health services, economic activity, and the well-being of migrants and host communities, as discussed later in this section. For example, in April 2020, the head of WHO’s emergency operations in Africa warned that the suspension of international flights was preventing WHO from sending medical equipment and experts to support their COVID-19 response, requiring the introduction of “air bridges.”³⁴

Since June 2020, governments in the region have made some progress to phase out universal border closures or travel restrictions in favor of making entry conditional on meeting certain screening or quarantine requirements (such as requiring a recent negative PCR test).³⁵ Some of these measures have been introduced predeparture, while others apply on arrival (such as requiring a health screening or a test on arrival) or post-arrival (such as a quarantine period). As of April 2021, almost all countries in the region required passengers to present negative test results on arrival, while some imposed additional requirements such as health screening, a repeat COVID-19 test on arrival or after a period of quarantine, or quarantine on arrival.³⁶

But progress toward restarting mobility has been uneven. While these measures have led to the resumption of air travel into many countries, albeit under new conditions, many land borders either remain closed to most people or subject to delays and backlogs.³⁷ The International Organization for Migration (IOM) has been recording travel restrictions and border closures at different points of entry, and as of April 2021, its data for sub-Saharan Africa indicate that most airports (82 percent) and maritime points of entry (67 percent) are fully operational, but a majority of land points of entry remain either fully closed (34 percent) or only partly operational (29 percent).³⁸ Critics point to a class and wealth disparity: those who can afford to take journeys by plane are generally subject to fewer or less burden-

some requirements than their peers who cross land borders.³⁹ And, as detailed above, surges in cases since the fourth quarter of 2020 (linked in part to the emergence of several new variants) have caused some countries to reintroduce more wide-ranging travel restrictions and public-health measures, including new lockdowns.⁴⁰

This section takes stock of how governments in the region have adapted their mobility systems to respond to COVID-19, exploring what measures have been put in place along the migration continuum and their results to date.

A. *Predeparture Interventions*

Governments and other stakeholders are investing in predeparture public-health measures, whether to provide accurate information about new travel conditions or to screen travelers in advance. The need for better information-sharing has been apparent since the introduction of the first border closures and other travel restrictions. In West Africa, for example, border closures were contested by migrants skeptical about COVID-19 and its risks, and dismayed at the disruption to their livelihoods, while efforts to introduce public-health measures were complicated by public perceptions of COVID-19 as an “elite” virus.⁴¹ Beyond media briefings and updating government websites, stakeholders have also invested in outreach to local communities and migrants themselves. For example, IOM utilized its Migrants as Messengers network in West Africa to share accurate information about COVID-19 and accompanying restrictions.⁴²

Most predeparture interventions have focused on screening would-be travelers, primarily by requiring them to present recent negative COVID-19 test results. At the time of writing, this is a requirement for almost all sub-Saharan African countries, sometimes in conjunction with a quarantine period.⁴³ Like other containment measures, successful implementation

relies on close coordination between countries of destination and origin (for example, on how to collect and share these data) and ready access to these tests in both countries. For example, challenges obtaining negative PCR test results prior to departure stranded more than 2,000 Nigerian migrants in Libya in the early months of the pandemic.⁴⁴ These types of requirements are also easier to roll out for people traveling by air than by land, as airlines are already responsible for collecting passenger information and verifying travel documents prior to departure, whereas the onus for assessing all new requirements at land borders falls on national authorities.

Digital technologies are starting to play a role in streamlining these processes, both by providing up-to-date travel information and by providing a means of verifying public-health documentation. For example, the TrustedTravel portal and accompanying My COVID Pass app of the Africa Centres for Disease Control and Prevention (CDC) seek to harmonize COVID-19 testing and certification for border crossings throughout the region, by providing access to a database with travel requirements and authorized laboratories, collecting passengers' travel and testing information, and enabling digital verification.⁴⁵

Digital technologies will also likely be expanded to incorporate documentation of vaccines, as discussed in Box 3. The authorization and rollout of high-efficacy COVID-19 vaccines, beginning in late 2020, is a promising new development in the fight against COVID-19, with important implications for public health and mobility. However, much uncertainty remains regarding the timeline for vaccine rollout in sub-Saharan Africa, whether migrants will be accounted for in national vaccine plans, and how the availability of vaccines and related documentation will influence mobility systems.

B. *Interventions at the Border*

In response to the pandemic, governments throughout the region have applied an array of new measures at borders. These have ranged from border closures to new health screening or testing requirements. Applying these measures has proved to be challenging, especially in a context of porous borders. Unlike air travel, where airlines can deny passage to those who do not meet public-health requirements, the scale of land and sea borders and the limited border management capacity of many sub-Saharan African governments mean that irregular migration is common along certain routes.⁴⁶ In this context, closing formal border crossings risks undermining public-health goals by simply diverting migration, and potentially compelling migrants to use the services of smugglers to get around new restrictions.⁴⁷

WHO has repeatedly urged caution when considering border closures, warning that such measures may be counter-productive during a pandemic. Guidance from WHO and early evidence from modeling studies suggest that the role of border closures in controlling disease is modest; their value is greatest early in a pandemic, in the absence of community transmission; and their implementation and continuation should be determined through careful risk assessments and cost-benefit analyses.⁴⁸

In the longer term, border closures, particularly when poorly managed, can incur significant social and economic costs and hamper an effective, swift, and coordinated pandemic response.

BOX 3**COVID-19 Vaccines in the Sub-Saharan African Context: Promises and Pitfalls**

The authorization and rollout of SARS-CoV-2 vaccines in several countries, beginning in late 2020, has renewed hope in the global fight against COVID-19. However, “Africa’s largest ever mass vaccination campaign,” as it has been described by the WHO Regional Office for Africa, must first confront substantial social, political, logistical, and financial challenges before populations in the region can widely benefit.

To date, the global distribution and rollout of vaccines has been neither inclusive nor equitable. As of late April 2021, more than 81 percent of 890 million COVID-19 vaccine doses have been administered in high- and upper-middle-income countries, with low-income countries receiving just 0.3 percent of the global share. January 2021 projections suggest that low-income countries, including those in sub-Saharan Africa, will not have widespread access to vaccines for the virus before 2023. The COVAX Global Vaccine Facility, a financing mechanism jointly led by WHO, Gavi, and the Coalition for Epidemic Preparedness Innovations, aims to enable most African countries and other low- and middle-income countries to increase COVID-19 vaccine coverage. Ghana was the first country to receive vaccines through COVAX on February 24. However, COVAX’s 2021 targets may cover 20 percent of participating countries’ populations, at most. The Africa CDC estimates it would take 1.5 billion doses to vaccinate 60 percent of the continent’s 1.3 billion people with a two-dose vaccine, at an estimated cost of U.S. \$12 billion. Currently, vaccines for populations in Africa will be procured through COVAX (targeting 600 million doses by the end of 2021), Africa Union mechanisms (a total of 670 million doses by 2022, including an initial 400 million doses of the Oxford-AstraZeneca vaccine), and bilateral negotiations, notably with China and Russia. Vaccine campaigns will be funded through a combination of the COVAX Donor Initiative, World Bank, direct donors, and the African Export-Import Bank. A proposal to reduce costs by waiving intellectual property rights to COVID-19 vaccines has been blocked.

Other hurdles remain. Countries in sub-Saharan Africa must urgently strengthen vaccine infrastructure, cold chain systems, and distribution capacity; harmonize regulatory processes; and address diminishing public trust in health systems and vaccines. As of February 2021, 320,000 doses of the Pfizer-BioNTech vaccine had been allocated to four countries in Africa (Cabo Verde, Rwanda, South Africa, and Tunisia), but this vaccine requires the ability to store and distribute doses at minus 70 degrees Celsius, which many countries in the region lack. Emerging evidence about new variants of the virus is also shaping vaccine strategies in the region. Until February 2021, the vast majority of vaccine doses procured for use in Africa were of the Oxford-AstraZeneca vaccine, which is cheaper and easier to store. However, uncertainty about the Oxford-AstraZeneca vaccine’s efficacy against new variants led South Africa to suspend its rollout to health workers in February and switch to a different vaccine. Expressing concerns about new strains, WHO and public-health experts in Africa have emphasized the urgent need for a rapid, equitable global vaccine rollout that includes marginalized and mobile populations.

Challenges for Mobile Populations

Against a backdrop of global inequality in vaccine access, mobile populations are likely to confront additional challenges. A joint guidance note issued by the UN Committee on Migrant Workers, the Office of the High Commissioner for Human Rights, the Special Rapporteur on the human rights of migrants, and regional human rights experts urged all countries to ensure “equitable access to COVID-19 vaccination for all migrants and their families on a nondiscriminatory basis, regardless of their nationality and migration status.”

As of March 2021, the Office of the UN High Commissioner for Refugees reported that 106 countries had explicitly included refugees in their national vaccination policies, and 33 countries were making plans to do so. Rwanda was one of the first African countries to start vaccinating refugees, as part of a national COVID-19 vaccination program that includes all refugees and asylum seekers. The COVAX Global Vaccine Facility includes a small humanitarian buffer, which sets aside 5 percent of total COVID-19 vaccine doses for “acute outbreaks” or humanitarian use, including for refugee populations. It is easy to see how “acute outbreaks,” which are likely to persist in areas with low vaccine coverage, could rapidly deplete the humanitarian buffer, leaving little reserve for refugee populations. Many African states’ policies on

BOX 3 (cont.)**COVID-19 Vaccines in the Sub-Saharan African Context: Promises and Pitfalls**

vaccinating people on the move remain unclear, and regional experts have expressed concerns about discrimination (in policy or practice) against irregular migrants. For example, South Africa's president stated that vaccines will be available regardless of citizenship or immigration status; however, the country's health minister stated that the government did not have the capacity to assist foreign nationals without legal status. Barriers to accessing health-care services, discrimination, mistrust, and ensuring follow-up for vaccines that require a second dose will also be important challenges for mobile populations, particularly those who lack legal status.

Possible Mobility Implications of COVID-19 Vaccines

Requirements to show proof of vaccination to cross international borders date back decades, including certificates for smallpox vaccines (phased out in 1981) and yellow fever vaccines (ongoing). Due to the prevalence of counterfeit certificates for yellow fever vaccination, several African countries developed digital verification systems. Nigeria and Zimbabwe released QR-code-based digital immunization verification systems in 2019 and 2020, respectively. Zimbabwe's system has been used to verify COVID-19 testing certificates and may be expanded for use across the 15 members of the South African Development Community.

Dozens of countries and companies have proposed travel requirements related to proof of COVID-19 vaccination. Most propose using smartphone-based digital certificates—such as the International Air Transport Association's Travel Pass, IBM's Digital Health Pass, iProov, and the Common Pass—that generate unique QR codes, allowing border officials to verify vaccination status without sharing personal health information. The Vaccine Credential Initiative is developing a standard model for digital access to vaccination records.

Sources: Harding, "Covid-19 in South Africa"; *The New York Times*, "Tracking Coronavirus Vaccinations Around the World," updated March 23, 2021; Andrew Meldrum, "In Switch, South Africa to Give Health Workers J & J Vaccine," Associated Press, February 10, 2021; WHO Africa, "WHO Urges African Countries to Ramp Up Readiness for COVID-19 Vaccination Drive" (news release, November 26, 2020); *The Lancet*, "An African Plan to Control COVID-19 Is Urgently Needed," *The Lancet* 396, no. 10265 (December 5, 2020): P1777; UN News, "Dispatch of Millions of COVID-19 Vaccines to Africa Expected to Start in February: WHO" (news release, February 5, 2021); GAVI, the Vaccine Alliance, "COVAX," accessed April 15, 2021; WHO, "In the COVID-19 Vaccine Race, We Either Win Together or Lose Together" (news release, February 10, 2021); African Union, "MTN Partners with African Union on COVID-19 Vaccinations in Africa" (press release, January 28, 2021); Cara Anna, "Africa Secures Another 400 Million COVID-19 Vaccine Doses," Associated Press, January 28, 2021; WHO, "COVAX Expects to Start Sending Millions of COVID-19 Vaccines to Africa in February" (press release, February 4, 2021); Samantha Kiernan, Priyanka Sethy, Kailey Shanks, and Serena Tohme, "Vaccine Spheres of Influence Tracker," *Council on Foreign Relations*, February 18, 2021; The Economist Intelligence Unit, "More than 85 Poor Countries Will Not Have Widespread Access to Coronavirus Vaccines before 2023," *The Economist*, January 27, 2021; Danielle Paquette and Emily Rauhala, "First Vaccine Doses Distributed by Covax Land in West African Nation of Ghana," *Washington Post*, February 24, 2021; Africa CDC, "Guidance on Emergency Expedited Regulatory Authorisation and Access to COVID-19 Vaccines in Africa" (guidance document, January 27, 2021); African Union, "Statement on AU Vaccines Financing Strategy" (press release, November 8, 2020); GAVI, "The COVAX Facility: Interim Distribution Forecast," updated February 3, 2021; Ministry of Foreign Affairs of the People's Republic of China, "Foreign Ministry Spokesperson Wang Wenbin's Regular Press Conference on February 1, 2021" (press release, February 1, 2021); Africanews, "Guinea's President Conde Receives Russian COVID Vaccine," Africanews, January 16, 2021; Ann Danaiya Usher, "South Africa and India Push for COVID-19 Patents Ban," *The Lancet* 396, no. 10265 (December 5, 2020); Andrew Green, "In Brief: Rich Countries Block Waiver on COVID-19 Vaccine IP," Devex, February 4, 2021; Perrer Tosso and Skhumbuzo Ngozwana, "Opinion: A Call to Boost African Manufacturing for COVID-19 and Other Vaccines," Devex, December 16, 2020; WHO Regional Office for Africa, "The African Vaccine Regulatory Forum," accessed February 26, 2021; Andrew Meldrum and Sylvia Hui, "South Africa Suspends AstraZeneca Vaccine Drive," Associated Press, February 7, 2021; The Presidency of the Republic of South Africa, "Statement by President Cyril Ramaphosa on Progress in the National Effort to Contain the Covid-19 Pandemic," February 1, 2021; SABC News, "Only South African Citizens to Receive Vaccine: Mkhize," SABC News, January 30, 2021; Seth Berkley, "COVAX Explained," GAVI, September 3, 2020; U.S. Department of State, Diplomatic Security, "Nigeria's eYellow Card Rollout" (fact sheet, July 11, 2019); Louisa Wright, "COVID-19: WHO Races to Develop Vaccination Card," *Deutsche Welle*, January 27, 2021; WHO Zimbabwe, "Fighting Fake Immunization Travel Certificates with Frontier Technologies" (news release, October 30, 2020); Kate Connolly, "Freedom and Fairness: Covid Vaccine Passport Plans Cause Global Unease," *The Guardian*, February 7, 2021; Anastasia Moloney and Nita Bhalla, "'Invisible' Migrants Risk Being Last in Line for COVID-19 Vaccination," Thomson Reuters Foundation, January 21, 2021; Eugene Sibomana, "First Refugees Receive COVID-19 Vaccinations in Rwanda" (news release, March 12, 2021); United Nations, "Joint Guidance Note on Equitable Access to COVID-19 Vaccines for All Migrants" (guidance document, March 8, 2021); Alexandre de Figueiredo et al., "Mapping Global Trends In Vaccine Confidence and Investigating Barriers to Vaccine Uptake: A Large-Scale Retrospective Temporal Modelling Study," *The Lancet* 396 (September 2020): 898–908; Tedros Adhanom Ghebreyesus, "I Run the W.H.O., and I Know That Rich Countries Must Make a Choice," *The New York Times*, April 22, 2021.

While border closures can be a useful public-health measure while local cases remain low, in the longer term, border closures, particularly when poorly managed, can incur significant social and economic costs and hamper an effective, swift, and coordinated pandemic response, without substantially contributing to mitigation. For example, closed borders have created significant disruption for border communities and other groups whose livelihoods rely on cross-border movement (such as pastoralists, traders, and truckers), especially in the absence of any economic safety net (see Box 4).⁴⁹ In these contexts, border closures can have devastating impacts on the individuals living and working on both sides of the border. Border crossings—for example, from Tanzania to Rwanda or Uganda—are also often vital

economic arteries for the states concerned. Systems that strive to preserve cross-border movement are not about sustaining mobility as an abstract concept, but rather are integral to preserving livelihoods and economies, which, in turn, are critical for health and resilience. Border closures and other measures (such as new testing requirements) have had a significant impact on trade, much of which is informal,⁵⁰ raising concerns about the implications for food prices, the passage of medical supplies and personnel, and humanitarian aid.⁵¹

In situations where governments implemented border closures and other travel restrictions without adequate coordination, a common result was stranded migrants who were unable to return home.⁵² As of

BOX 4

Impacts of COVID-19 and the Pandemic Response on Migrants' Livelihoods

Curbs on mobility have disrupted the livelihoods of migrants and their communities. Lockdown measures have led to job losses and even business closures, carrying potential implications for their ability to stay in a country legally (but with limited avenues to return). Studies suggest that migrants in the region are concentrated in more precarious and informal roles, leaving them especially vulnerable to job losses without access to a safety net. While their working (and sometimes living) conditions can place them at greater risk of COVID-19 transmission, migrants may be barred from accessing health care and other public services. During the first few months of the pandemic, migrants were often excluded from the limited safety nets made available to those affected by the virus and in turn from governments' economic recovery plans. In addition, curbs on mobility have affected the livelihoods of prospective migrants seeking to move to neighboring countries or even other regions (such as the Gulf) in search of work.

The pandemic has also affected remittance flows, reflecting both a fall in income among remittance senders (for example, linked to rising unemployment and lockdowns) and challenges accessing remittances in countries of origin (for example, due to the closure of money transfer facilities). The World Bank has predicted an average decline of 7.5 percent in 2021 across all corridors, although available data so far suggests that some corridors (such as between Canada and the Philippines, and the United States and Mexico) have proved more resilient to the impacts of the pandemic than others. Another mitigating factor may be lockdowns prompting a shift toward formal remittance channels that are included in these data. With remittances outstripping foreign direct investment and official development assistance in 2019, a sustained drop in remittances would have significant implications for development outcomes.

Sources: Migration Policy Institute and Columbia University closed-door roundtable "How Can Mobility Systems in Sub-Saharan Africa Meet the Public Health Challenges Posed by COVID-19?," November 12, 2020; Food and Agricultural Organization of the United Nations (FAO), "Migrant Workers and Remittances in the Context of COVID-19 in Sub-Saharan Africa" (policy brief, FAO, Rome, July 2020); Dilip Ratha, "Staying the Course on Global Governance of Migration through the COVID-19 and Economic Crises," *International Migration* 59, no. 1 (February 14, 2021): 285–88; CBC Radio, "Canada's Filipino Communities Sent \$1B to Family and Friends in the Philippines Last Year despite COVID-19," CBC Radio, January 31, 2021; Lizbeth Diaz and Abraham Gonzalez, "Mexicans Defy Pandemic Blues with Record Remittance Surge," Reuters, February 1, 2021; Jason Gagnon, "Inequalities and International Migration: Securing Benefits for All Post COVID-19," Organization for Economic Cooperation and Development (OECD) Development Matters blog, January 18, 2021.

mid-July 2020, IOM reported that it was aware of nearly 100,000 migrants stranded in southern Africa, and thousands of migrants stranded in Burkina Faso, Cameroon, Djibouti, Egypt, and Mauritania, for example.⁵³ This population included migrants who were planning to return home but were unable to (due to border closures, escalating costs of travel, or lacking travel documents) and those migrants (and in some cases, even displaced populations) who chose to return after losing their jobs and being unable to access any support but who became stuck in transit.⁵⁴ The situation was especially dire for irregular migrants, whose more precarious jobs and poorly regulated working and living conditions left them especially vulnerable both to the economic downturn and COVID-19 risks.⁵⁵ Limited repatriation options, instability, and the risk of arrest and detention in the Gulf has led to some East African migrants paying smugglers to repatriate them from Yemen, for example.⁵⁶

Since the third quarter of 2020, governments in the region have started to move away from blanket border closures in favor of public-health measures at the border, such as requiring travelers to undergo health screening or COVID-19 testing (or to produce a recent negative test result) or investments in surveillance and data collection.⁵⁷ These measures have allowed some borders to reopen to some traffic, although the emergence of several new variants has led to the introduction of new measures (see Box 2).

The introduction of new screening and testing requirements is one of the most noticeable developments. Debate remains about whether travelers, who are generally considered a low-risk population, should be a priority group for testing, particularly in resource-constrained settings where community transmission is occurring and where testing capacity may not meet the needs of local populations.⁵⁸ An effective testing program for travelers will require significant investments in testing infrastructure and trained personnel and must also be supported by

robust public-health measures, including contact tracing and quarantine. WHO cautions that “testing at borders is not a substitute for other public-health measures” and may lead to a false sense of security among travelers and in destination countries and communities, or reduce adherence to public-health and social measures.⁵⁹ But these measures have nonetheless allowed some borders to reopen conditionally, especially to air travel.

Building this capacity to conduct testing and screening at the border takes time and has relied on cooperation at the bilateral and regional level. When WHO declared COVID-19 a public-health emergency of international concern on January 30, 2020, just two countries in Africa (South Africa and Senegal) had the ability to test for SARS-CoV-2.⁶⁰ By March 2020, when WHO declared COVID-19 a pandemic, most African countries had acquired testing ability (at the national level at least),⁶¹ with coordination support from the Africa Task Force for Novel Coronavirus (see discussion in Section 4). However, testing rates remain low overall across the region, with only eight countries exceeding a “critical testing benchmark” in December 2020.⁶² The distribution of testing capacity is also skewed. At the end of December 2020, ten countries (Cameroon, Egypt, Ethiopia, Ghana, Kenya, Morocco, Nigeria, Rwanda, South Africa, and Uganda) accounted for more than 70 percent of tests conducted on the continent.⁶³ Moreover, the diversion of resources to COVID-19 testing has hampered countries’ ability to maintain other important health services, such as TB diagnosis. Populations also face barriers to accessing health-care services, including COVID-19 testing and treatment, with one study finding that nearly 16 percent of people ages 60 or older in sub-Saharan Africa were located more than two hours from any health facility.⁶⁴

Problems can arise from public-health requirements at busy borders, especially when there is insufficient cross-border coordination between neighboring countries. For example, substantial delays at the

Beitbridge border crossing between South Africa and Zimbabwe over the December 2020-January 2021 holiday period were partly attributed to new COVID-19 testing requirements. The crisis, during which several migrants were reported to have died after waiting for several days to cross,⁶⁵ was sparked by a combination of high numbers of people trying to cross the border, curfews, and a poorly coordinated rollout of testing requirements (including for a rapid COVID-19 test administered on site). Officials and media reported issues with falsified test results, results expiring due to excessive delays, and limited capacity to run tests at the border.⁶⁶

The East African Community has developed harmonized systems for testing truck drivers and certifying and sharing health information.

Close coordination between countries, with an eye both to capacity and managing rollout, is key. For example, the East African Community (EAC) has developed harmonized systems for testing truck drivers and certifying and sharing health information in response to significant disruptions in May and June 2020, when a number of positive cases among truckers from Tanzania led to several countries closing their borders and major backlogs at the border.⁶⁷ The result is a system of double testing of truckers, where they may drive through the EAC provided they test negative in their country of origin and at the border of their final destination. EAC leaders have also established mobile laboratories and laboratories with rapid processing capacity to speed up testing at borders; agreed to adopt a common system for certifying and sharing COVID-19 test results, with support from the Africa CDC; and are using an app to track the COVID-19 status of many truck drivers in the region.⁶⁸ However, there continue to be sporadic border delays and concerns about the reliability of the tests (particularly those generated in Tanzania) and the potential of corruption to subvert the system.⁶⁹

Beyond testing, governments in the region have also increased investment in surveillance and outreach beyond formal border crossings. In East Africa, for example, border officers on motorcycles have been monitoring informal crossing points and raising awareness of COVID-19 infection prevention and control measures among migrants and locals in border communities.⁷⁰ Governments in the region have also made efforts to close informal border crossings, albeit with mixed results.⁷¹ International organizations such as IOM and the Office of the UN High Commissioner for Refugees (UNHCR) are also playing a role. For example, IOM is monitoring borders and points of entry through its Displacement Tracking Matrix and helping government agencies build their data collection and sharing capacity, while UNHCR has added staff to provide health screenings (and referrals, where needed) at informal points of entry such as those between Chad, Cameroon, Niger, and Nigeria.⁷²

C. *Post-Entry Interventions*

Alongside measures introduced prior to and at the border, governments in the region have also introduced a number of post-entry public-health measures, such as quarantine requirements and contact tracing. Contact tracing is a critical public-health tool to control the spread of infection, when combined with self-isolation or quarantine measures, but it requires investment in capacity and data systems to collect and share travelers' personal health data securely, and in cases where these data are shared between countries, standardized health and border operating procedures.⁷³ Countries with experience dealing with recent public-health crises (such as Nigeria) were poised to start using contact-tracing strategies early on, but integrated systems to share and analyze these data remain a weak link, as has been the case in other regions.⁷⁴

Quarantine and isolation are key components of the response to COVID-19, with many countries requir-

ing such measures for new arrivals, either at home or in a designated facility, often in tandem with testing prior to release. Such measures need to be implemented strategically, based on the most current scientific evidence, and with appropriate safeguards, to minimize disruptions to supply chains and the entry of essential workers and to protect the rights, health, and safety of people who are required to quarantine. Experience in the region shows that quarantine programs can be detrimental to public-health goals when they are poorly managed or fail to address the needs and rights of individuals. For example, unsafe and unsanitary conditions caused returnees to flee Zimbabwe's mandatory government-run quarantine facilities and to evade quarantine requirements by entering the country through unofficial entry points, likely facilitating viral spread in rural communities.⁷⁵ Following criticism of overcrowded and unhygienic government-run quarantine facilities, Kenyan authorities allowed the option of self-isolation at home for certain individuals.⁷⁶ In January 2021, Malawian migrant workers returning from South Africa rioted while protesting sub-standard living conditions in mandatory quarantine centers.⁷⁷

Countries with experience dealing with recent public-health crises (such as Nigeria) were poised to start using contact-tracing strategies early on, but integrated systems to share and analyze these data remain a weak link.

Governments also need to ensure that recent arrivals are able to quarantine effectively—for example, by providing access to facilities if migrants are unable to safely isolate at home.⁷⁸ In some cases involving displaced populations or returning migrants, international organizations such as IOM and UNHCR

have stepped in to help provide facilities and services to those required to quarantine.⁷⁹ For instance, IOM operates 14 quarantine facilities for migrants across Ethiopia, where authorities had initially denied repatriation of their citizens from Yemen, citing limited quarantine capacity.⁸⁰ Another issue is cost: with many governments assigning the costs of quarantine to the traveler, this may render travel unaffordable for many migrants and incentivize non-compliance.

Finally, another challenge is ensuring that migrants have access to health care and other forms of support, both during and after their journey.⁸¹ Even when migrants are afforded access to health-care systems by law, they can encounter obstacles in practice, including prohibitive costs, overstretched services, and cultural and linguistic barriers.⁸² When it comes to COVID-19, migrants may also lack access to accurate, timely information on the virus (including how to protect themselves and others, how to recognize symptoms, and where to seek care) or be deterred from seeking testing or treatment due to stigma, discrimination, and fears related to COVID-19 transmission risks or disclosure of their legal status.⁸³ Stigma has affected returning migrants and people returning to home villages from urban areas, with experience from past pandemics suggesting that migrants, truck drivers, and sex workers are among the groups at particular risk.⁸⁴ While international and multilateral organizations have played an important role in plugging these gaps, the pandemic has revealed the holes in current social protection systems (see Box 4).⁸⁵ Unless steps are taken to address these challenges, barriers to accessing health services will likely hinder an effective public-health response (including the vaccine rollout) among displaced populations (see Box 3).

4 What Role Can Cooperation on Mobility and Public Health Play Going Forward?

The complex challenges of the COVID-19 pandemic demand a comprehensive and coordinated public-health response. Like many countries around the world, countries in sub-Saharan Africa have clung to the allure of borders as a defense against COVID-19, even when border closures cease to serve public-health goals and when the harmful impacts of such closures outweigh their potential benefits. While SARS-CoV-2 variants detected in late 2020 and early 2021 triggered sweeping border closures around the world, they have also demonstrated the limitations of such measures, which are often implemented too late and with too many exceptions to effectively curb the spread of disease.⁸⁶ As it is not possible to seal borders completely against infectious disease threats, governments should look to strengthen their ability to prevent, mitigate, and respond to such threats across the migration continuum. This is particularly important on a continent where borders are porous and most migration is intra-Africa.⁸⁷

Since pandemics know no borders, global, regional, and bilateral cooperation is key to an effective response.⁸⁸ The Africa CDC has played an important role in mobilizing and coordinating a continent-wide response to the pandemic, convening the Africa Task Force for Novel Coronavirus to oversee preparedness and response in February 2020, before any cases were diagnosed on the continent. Training by the Africa CDC was instrumental in scaling up testing and diagnostic capacity in the first few months of the pandemic response, going from centers in two

countries in February 2020 to centers in 43 countries in May 2020.⁸⁹ The World Bank's Regional Disease Surveillance Systems Enhancement Program in West Africa, first launched in 2016 to help respond to Ebola and other epidemics, has also played a role in the COVID-19 response by mobilizing funds to build capacity in areas such as infection prevention and control, surveillance, and testing capacity.⁹⁰

Sub-regional bodies such as the EAC, ECOWAS, and the West African Monetary and Economic Union have served as important fora for troubleshooting and cross-border coordination around public health and mobility. Despite early missteps, as discussed above, there has been promising progress toward more regional approaches to cross-border testing and coordination of border closures. For example, ECOWAS has been striving to create a unified approach to testing across the sub-region, putting out a January 2021 communiqué that set a cap on prices for testing and approved a joint procurement approach for vaccinations.⁹¹ It is notable that in sub-Saharan African countries that had previously responded to Ebola and had existing infrastructure, the response to COVID-19 (including activation of emergency operation centers and swift adoption of border screening and other public-health measures) was perceived as more coordinated and effective.⁹² This highlights the importance of investments in pandemic preparedness, public-health infrastructure, human capital, and fora to facilitate dialogue and promote a common approach. Even in these contexts, however, there have been notable blind spots; for example, the inability to reach agreement on establishing a humanitarian corridor between Nigeria and Niger.

At the same time, progress in other regions has been slower. These gaps fall into a couple of different categories, as will be discussed in the remainder of the section.

A. *Gaps in Cross-Border Coordination and the Need for Mobility-Competent Responses*

Developing an effective public-health response requires recognition that mobility is inevitable, even during a pandemic. Public-health interventions in the region need to take into account the context of porous borders, high rates of irregular migration, and a long tradition of cross-border travel, trade, and exchange, as well as new pandemic-related drivers of mobility. This requires a holistic understanding of how (and why) people move and the health risks they face along the migration continuum, potentially building on new mapping efforts by actors such as IOM and the Mixed Migration Monitoring Mechanism Initiative (4Mi), as appropriate.

Developing an effective public-health response requires recognition that mobility is inevitable, even during a pandemic.

While the reality of porous land borders has been recognized and reinforced by free movement protocols in different sub-regions such as ECOWAS and the EAC, public-health surveillance and response systems have been slow to adapt to the complex realities of mobility. Borders anchor international law and public policy; however, they are less consequential in the face of pandemic threats. Effective public-health responses in these contexts require a multifaceted approach that strengthens systems and identifies, mitigates, and responds to risks on both sides of a border, rather than viewing its crossing as an epidemiologically salient event.

Air points of entry have traditionally received the lion's share of resources and attention when it comes to public-health surveillance, as is the case during the current pandemic. While states wisely fortified public-health surveillance measures at airports, there is a need for commensurate investment in robust preparedness, mitigation, and surveillance measures at land borders, where much essential travel takes place and where often long-standing and strong ethnic, cultural, tribal, and trading relationships transcend physical borders.

Internal and international coordination has enabled important advances in the COVID-19 response. For example, efforts to facilitate cross-border trade in the EAC initially struggled to gain traction with all six members, with a lack of trust in Tanzania's testing contributing to border closures and the ensuing chaos from May to July 2020. Since then, regional actors have stepped in to address these needs. The Africa CDC played an important role in ramping up testing capacity on the continent and in resolving challenges at East African border crossings. And the severe cross-border congestion that ensued in East Africa following COVID-19 testing delays spurred the sharing of test results through a harmonized EAC system. Testing requirements are likely to become more commonplace and to remain in effect indefinitely (or at least for an extended period of time) at both land and air points of entry—but their successful implementation relies on testing protocols, processes, and health information systems that are evidence based, transparent, trusted, and ideally harmonized on both sides of a border. Efforts at regional coordination, as trialed in the EAC, offer an opportunity to achieve greater harmonization and, in the longer term, lay the groundwork for accelerating regional integration and facilitating mobility in the region.

B. A Need for Greater Community Engagement and for Migrant Inclusion in Pandemic Plans, Health Care, and Social Protection Systems

A key lesson from epidemics including Ebola and HIV is the important role of civil society in fostering trust, disseminating information, promoting adherence to public-health measures, and combating the spread of disease.⁹³ Yet, the COVID-19 response in many regions of the world, including in sub-Saharan Africa, has been criticized for being top-down and inadequately leveraging these vital community resources. Engaging communities—for example, through the Migrants as Messengers initiative described in Section 3.A. or the IOM toolkit for countering stigma and misinformation⁹⁴—is critical for identifying and implementing effective public-health and social measures. Greater investments in community engagement, health education, and risk communication are required, tailored to both migrants and receiving communities. Community-based health surveillance systems, including those involving community health workers, can also play a crucial role, particularly where they are integrated with and supported by the formal public health infrastructure.⁹⁵ Leveraging community resources and building community resilience are important for addressing the multiple crises and heavy burden on formal health systems in many parts of the continent.

In sub-Saharan Africa, a context characterized by scarce resources, fragile health systems, and a high disease burden, strengthening health systems and investing in human capital remain urgent priorities that were under-supported even before the added strain of the pandemic. As discussed above, testing rates are below benchmarks in most countries and are uneven across the region, genomic sequencing capabilities need to be strengthened, and there are

gaps in quarantine capacity that have been only partially filled by IOM and other organizations in several countries. Capacity for COVID-19 testing, genomic sequencing, contacting tracing, treatment, quarantine, and isolation must be ramped up, and these services must be available to everyone, regardless of migration status, to be effective in combatting the public-health crisis.⁹⁶

A number of African countries have granted refugees and migrants access to national public sector medical services, on paper at least.⁹⁷ In a context of limited resources, however, access may not materialize, and discrimination and fears of deportation or disclosing legal status may deter migrants from seeking the care they need.⁹⁸ A September 2020 analysis found that between 38 percent and 52 percent of migrants and refugees surveyed in Burkina Faso, Mali, and Niger lacked the ability to pay for health care.⁹⁹ More broadly, migrant workers, many of whom operate in the informal economy, have been largely shut out of national social protection systems and left to fend for themselves, increasing health risks and negative coping mechanisms. Since “no-one is safe unless everyone is safe”¹⁰⁰ during a pandemic, investing in inclusive national health care and social protection systems is vital. In addition, efforts to counter stigma and discrimination; greater inclusion of migrants and displaced communities in the evaluation, development, and delivery of health-care services; and firewalls between health services (including COVID-19 testing and treatment) and immigration enforcement will be important for improving health-care access and utilization.

5 Conclusion and Recommendations

COVID-19 has significantly disrupted mobility in sub-Saharan Africa, curtailing most opportunities to migrate legally. The region moved quickly to close borders, restrict travel, and implement public-health

measures to slow the spread of COVID-19, and to shore up pandemic preparedness and response efforts. Since then, governments have started to phase out blanket border closures and travel restrictions in favor of public-health-related entry requirements (such as presenting negative COVID-19 test results, undergoing health screening[s], and mandatory quarantine). However, public-health measures have been unevenly and inconsistently applied across the region, and to different modes of travel, with progress on reopening land borders lagging behind efforts to restart air travel. While there have been innovations and promising progress at a sub-regional level, cross-border coordination and health-system capacity remain weak overall. Moreover, the emergence of new variants of SARS-CoV-2 that may be more contagious has complicated the public-health response, including vaccine rollouts, and threatens to reverse progress in restarting mobility.

Managing mobility and protecting public health, while minimizing disruptions to cross-border trade and movement, requires understanding and carefully weighing the trade-offs presented by the pandemic. Comprehensive, coordinated, and evidence-based public-health measures are necessary to control the pandemic, yet travel restrictions and testing, screening, or quarantine requirements can render migration and mobility impractical, inaccessible, and/or unaffordable for many people. Such measures will likely disproportionately burden or exclude those who most depend on mobility for their safety and survival, including refugees and asylum seekers, and those who depend on mobility for their livelihoods, including migrant workers and other mobile populations who lack a safety net. When formal border crossings become inaccessible, such needs may drive people to enter countries irregularly and/or to utilize the services of smugglers, making the public-health response far more challenging.

There is an urgent need to develop policy responses and mobility systems that integrate public-health,

migration, and economic development perspectives to safely manage mobility, beyond the immediate emergency phase and in the medium and longer term. For example, discussions of containment measures must take into account both the public-health benefits and the social and economic interests of communities (which are often intimately inter-linked), while the collection of public-health data in the context of migration must also address ethical and privacy concerns.

There is an urgent need to develop policy responses and mobility systems that integrate public-health, migration, and economic development perspectives to safely manage mobility.

Another lesson from the pandemic's first year is the central role for cooperation at the bilateral, regional, and multilateral levels in efforts to restart migration and mobility. Governments in the region have tapped their bilateral relationships and used regional fora (such as ECOWAS, the EAC, and the Southern African Development Community) and institutions (such as the Africa CDC) to better coordinate their policy responses. But more work needs to be done to ensure the smooth rollout of new public-health measures, including to increase transparency and build trust among countries in one another's capabilities and to boost capacity where needed.

Predictability and transparency are key ingredients in fostering effective international and regional coordination. Legal frameworks play a central role in this regard in that they delineate—in advance—the parameters for how states should respond to public-health emergencies. The 2005 International Health Regulations embody a vision in which global cooperation is essential to safeguarding collective health and well-being. While the unilateral action

that has characterized much of the global response to the COVID-19 pandemic has dealt this framework a real blow, it will have to be revived in some way going forward. Similarly, international human rights and refugee laws set important benchmarks for how individuals must be treated, irrespective of their immigration status, in the context of pandemic responses, whether they are asylum seekers, migrant workers, or students or travelers stranded outside their own country. Adherence to these norms is the first step in constructing a rational, coordinated, and principled response to any public-health emergency.

Looking ahead, this policy brief offers two sets of recommendations:

1 Policymakers should coordinate closely when planning, implementing, and lifting public-health measures.

The pandemic offers a cautionary tale against imposing border closures and travel restrictions on a unilateral, uncoordinated, and often open-ended basis. Coordination and cooperation can help mitigate some of the negative impacts of these measures. At the bilateral level, for example, this cooperation can include sharing information about new public-health requirements; ensuring there is sufficient capacity in place at borders to avoid backlogs associated with health screening or testing measures; and working quickly to repatriate stranded migrants or accommodate displaced populations. At the regional level, this cooperation can include harmonizing or streamlining requirements, such as ECOWAS's common standards for facilitating air travel or the EAC's regional approach to validating truck drivers' COVID-19 test results, to avoid duplication and speed up border procedures.¹⁰¹ Going forward, policymakers should consider the following priorities for cooperation:

- **Reinforce efforts to harmonize public-health entry requirements, paying greater attention to land borders, where most journeys in the region take place.** Public-health measures should be applied without discrimination and should be accessible regardless of migration status (for example, by building capacity to administer high-quality tests quickly and affordably and to deliver on other critical interventions such as contact tracing, genome sequencing, and effective quarantine and isolation).
- **Align public-health surveillance systems at borders more closely with understanding of mobility and migration patterns.** Such data are necessary to understand where people are moving and the health and protection risks they face, and to guide the allocation of scarce public-health resources at and between points of entry.
- **Build capacity to meet common standards for travel at both a regional and international level.** As different regions develop their own standards and requirements for migration and mobility, governments in sub-Saharan Africa should work closely with one another and strengthen regional and multilateral efforts to share information, harmonize existing measures, and develop common standards for new measures (such as vaccination records). Where appropriate, policymakers should also advocate for financial and technical assistance

to ensure that countries with weaker border and public-health infrastructure do not get left behind in the global race to restart travel safely.

- **Anticipate and put in place mechanisms to facilitate the safe and timely return of migrants.** It is the right of every person to be able to return to their home country. Greater coordination on the rollout of new restrictions can reduce the risk of stranding migrants and put in place resources to help returning migrants meet public-health requirements (such as support to secure tests and quarantine as needed).

- 2 **Governments in the region should prioritize strengthening national health-care systems and public-health capacity and incorporate a “migration lens” when doing so.** Cross-border trade and travel are foundational to many communities in the region, and as a result, it is vital to improve coordination between migration/border management and public-health authorities along the migration continuum, both to respond to the ongoing pandemic and to meet the health needs of migrants going forward. This integration is needed at several stages:

- **Migrants and refugees should be included in COVID-19 prevention, preparedness, and response plans.** Governments need to ensure that migrants and refugees are included fully in COVID-19 prevention, preparedness, and response plans; public-health policies; and health-care services. IOM and UNHCR have called on governments around the

world to ensure that migrants and refugees are included in national vaccination and public-health strategies.¹⁰² Good public-health practice and an effective pandemic response require that these services be inclusive of all individuals currently within the territory of a country, instead of basing access on nationality or immigration status. Governments should expand national economic recovery plans and social protection systems to include migrants, where possible, to avoid further exacerbating their vulnerability.

- **Preparedness efforts should factor in migration routes and the particular health and protection needs of mobile populations.** Such efforts should be supported by additional investments in data collection (including between points of entry) and analysis and integration (for example, by including mobility indicators in health information systems). To ensure reliable, high-quality data and foster trust in these processes, policymakers should ensure there are effective firewalls between information collected for public-health purposes and immigration enforcement.
- **National health-care systems should be strengthened to enable them to better respond to the challenges of COVID-19, while continuing to meet important health needs.** In settings with weak health systems and multiple health priorities, the additional strains on

health systems caused by a pandemic can result in illnesses and deaths from other common health conditions that exceed the toll caused directly by the disease. Investments to strengthen health systems should focus on health infrastructure, human resources, capacity building, and maintaining essential health services, and they should build upon the valuable knowledge and response mechanisms established during previous outbreaks, including of Ebola.

→ **Risk communication and meaningful engagement of communities that both send and receive migrants are critical for an effective and coordinated response.** Past outbreaks have clearly shown the importance of inclusive public outreach. Initiatives such as Migrants as Messengers and efforts that leverage community-based health-care workers to address the needs of migrant communities are

important strategies. Identifying trusted interlocutors who can relay timely, accurate information about COVID-19, containment and mitigation measures, and how to access essential health services is critical, especially in a context where borders are porous and the pandemic trajectory and response can shift quickly. Migrant communities may also participate in the development of migrant-sensitive public-health interventions and health-care services that take into account their unique needs and circumstances.

The COVID-19 pandemic has starkly highlighted the reality that viruses do not recognize borders, and that internal and cross-border mobility are critical to the vibrancy of economies around the world. Building public-health systems that integrate and address the realities of mobility, alongside strengthened regional and global cooperation and coordination, are key to ensuring an effective public-health response today and to adequately preparing for the pandemics of the future.

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Endnotes

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