About this report

This report distills key insights from PERC’s third survey conducted in February 2021. The survey asked people in 19 African Union (AU) Member States about their perceptions of public health and social measures (PHSMs), vaccines, access to health care, food and income while living through the COVID-19 pandemic.

Findings from this survey are compared to those from an identical survey implemented in August 2020, alongside the changing epidemiological, political and social contexts, to help identify key findings, policy actions and tools that can be used to strengthen both outbreak response and preparedness.

The Partnership for Evidence-Based Response to COVID-19 (PERC) is a public-private partnership that supports evidence-based measures to reduce the impact of COVID-19 on AU Member States. PERC collects social, economic, epidemiological, population movement and security data from Member States to help determine the acceptability, impact and effectiveness of public health and social measures for COVID-19.
About the Survey

The PERC survey was conducted by phone with approximately 24,000 people across 19 Member States in five geographical regions (Table 1) between 5-19 February 2021. Countries were selected to balance regional representation and ease of survey implementation. Trend data in this report compares findings from the current survey (February 2021) to the previous survey conducted in August 2020. All trend comparisons exclude Morocco, which was not surveyed in August 2020. The weighted national sample size in each of the surveyed Member States in August 2020 and in February 2021 was 1,200 completed interviews (see Table 2 for weighted survey sample by key socio-demographic factors).

Key findings and themes were identified by considering the PERC survey data alongside epidemiological data, mobility data and data from traditional news and social media.

Survey data were analyzed using primarily descriptive and bivariate methods, such as two-tailed t-tests of significance or chi-square tests where p < 0.05. Further qualitative analysis provided important socio-political and epidemiological context. Although some statistical findings did not reach the level of formal statistical significance, they remained instructive and are included in the overall analysis.

Phone surveys cannot perfectly represent a given population because only households with access to a landline or mobile phone can participate. As such, it is likely that people with higher income and educational achievement were overrepresented. Further detail on survey methods and limitations may be found at www.preventepidemics.org/perc.

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**TABLE 1.** African Union Member States surveyed in February 2021, by region

<table>
<thead>
<tr>
<th>Central</th>
<th>Eastern</th>
<th>Northern</th>
<th>Southern</th>
<th>Western</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRC Cameroan</td>
<td>Ethiopia</td>
<td>Egypt Morocco* Tunisia</td>
<td>Mozambique South Africa Zambia Zimbabwe</td>
<td>Côte d’Ivoire Ghana Guinea Liberia Nigeria Senegal</td>
</tr>
</tbody>
</table>

*Note: Morocco was surveyed in February 2021, but not in August 2020. As such, it is excluded from trend analysis in this report.

**TABLE 2.** Weighted survey sample by key socio-demographic factors, by region

<table>
<thead>
<tr>
<th>Weighted base</th>
<th>Central</th>
<th>Eastern</th>
<th>Northern</th>
<th>Southern</th>
<th>Western</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted base</td>
<td>2400</td>
<td>4800</td>
<td>3600</td>
<td>4800</td>
<td>7200</td>
</tr>
<tr>
<td>Urban</td>
<td>50%</td>
<td>26%</td>
<td>61%</td>
<td>39%</td>
<td>46%</td>
</tr>
<tr>
<td>Age (Mean age, standard deviation)</td>
<td>31 (9)</td>
<td>32 (11)</td>
<td>40 (14)</td>
<td>33 (11)</td>
<td>31 (10)</td>
</tr>
<tr>
<td>Women</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>51%</td>
<td>50%</td>
</tr>
<tr>
<td>Households with children under age five</td>
<td>41%</td>
<td>51%</td>
<td>34%</td>
<td>48%</td>
<td>53%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incomplete secondary or less</td>
<td>15%</td>
<td>42%</td>
<td>54%</td>
<td>21%</td>
<td>38%</td>
</tr>
<tr>
<td>Completed secondary</td>
<td>21%</td>
<td>17%</td>
<td>16%</td>
<td>36%</td>
<td>22%</td>
</tr>
<tr>
<td>Some university or more</td>
<td>60%</td>
<td>39%</td>
<td>28%</td>
<td>40%</td>
<td>39%</td>
</tr>
<tr>
<td>Refused to respond</td>
<td>4%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Summary of Key Findings and Calls to Action

CONTEXT

At the time of the PERC survey in February 2021, Africa had just emerged from a second COVID-19 wave (about double the size of its first in July 2020) and variants of concern had been detected, though caseload remained at only 3% of global transmission. Some countries that had previously been able to limit transmission (e.g., India, Mongolia and Uruguay) are currently overwhelmed with COVID-19 cases and deaths brought on by new variants and loosening of public health and social measures (PHSMs). Throughout the pandemic, many African Union (AU) Member States had effectively implemented, and subsequently loosened, PHSMs. As of April 2021, the supply and administration of vaccines remains critically limited in Africa, particularly in contrast to the vaccination progress made in wealthier countries. Only a few Member States were able to launch vaccination efforts, starting with small numbers of health care workers.∗

1. Limitations in testing capacity and surveillance are likely masking the true severity of COVID-19 on the African continent. As cases and deaths brought on by new variants and loosening PHSMs continue to overwhelm countries and cause suffering, the global community and Member States must remain vigilant to avoid a third, even more severe, COVID-19 wave across the continent.
   • As each wave of COVID-19 reaches new peaks in cases, hospitalizations and deaths, shortfalls in case detection and reporting have led to significant underestimation of the extent of the continent’s devastation from COVID-19. This underestimation contributes to the dangerous global myth that some Member States have not experienced severe hardship due to the pandemic.
   • Beyond calamitous health outcomes from COVID-19 itself, the pandemic has inflicted significant economic, social and nutritional damage that have harmed populations already at risk of malnutrition and poor health outcomes. Income loss remains widespread and continues to worsen, exacerbating lack of access to food and health care services, particularly for more vulnerable groups.
   • With vaccines years away from reaching a substantial number of people in Africa, testing and genomic surveillance must be improved in the face of new, more transmissible variants. Member States must remain vigilant to respond rapidly to any change in disease pattern. If the global community does not intercede, the damage wrought in Africa by COVID-19 could be generational.

CALL TO ACTION

Africa needs greater access to vaccines as quickly as possible, and the global community must step up to increase production, ensure equitable allocation and rapidly share technology and expertise with Member States to allow regional production. This will be necessary to not only to quell COVID-19 in Africa, but also to end the pandemic globally. Wealthier nations’ bilateral agreements with manufacturers have undermined global

∗Health care workers are all people engaged in work actions whose primary intent is to improve health, including doctors, nurses, lab technicians, cleaning staff, drivers, social workers, and administrators, among others.” WHO Charter – Health worker safety: a priority for patient safety. Students and volunteers should also be included.
initiatives and the sharing of vaccine technology with low- and middle-income countries has not materialized.

That said, vaccination is not a panacea; there is an immediate need to increase the situational awareness of Member States regarding changing epidemiological conditions. Member States should take urgent steps to increase capacity to detect, test, sequence and trace cases and new variants to mount effective COVID-19 responses and implement targeted PHSMs.

2. Although self-reported mask use remained encouragingly high overall—above 85%—it varied considerably by Member State. Adherence to the most restrictive containment strategies, such as avoiding social gatherings and limiting travel from home, has fallen. While this makes sense in the context of decreasing caseloads and relaxed PHSMs at the time of the survey, Member States are currently at risk for another surge in cases if PHSM loosening is not done strategically.

- Nearly nine in 10 respondents reported using masks when near others in February 2021—almost identical to findings six months before. This demonstrates the effectiveness of ongoing mask use campaigns in motivating compliance where usage was up. However, in some of the most populous and hard hit member states, such as South Africa and Ethiopia, self-reported mask trended downward in February, suggesting the need to redouble efforts in this low-cost and effective intervention in these areas.

- Adherence to other measures—such as avoiding religious gatherings or minimizing trips to market—has decreased in the same timeframe, in line with relaxing of PHSMs. Rather than relying on severe and broad restrictions, governments have implemented more targeted measures while emphasizing mask use.

- In addition to differing levels of adherence to PHSMs among Member States (based on the epidemiological and policy context in each), the survey indicated three factors influencing peoples’ adherence to PHSMs: belief that such measures are necessary; perception of personal risk of contracting COVID-19; and satisfaction with the government’s handling of the pandemic. Adherence also differed by key sociodemographics—for example, men and younger adults (age 18-35) were less likely to follow PHSMs than their female and older counterparts.

**CALL TO ACTION**

With vaccine rollout proceeding slowly, targeting PHSMs to the areas most affected by COVID-19 will be key to ensuring continued adherence in the coming months and years. Continued emphasis on individual measures—wearing face masks near others, hand-washing and maintaining physical distance—will be necessary for keeping transmission low while economies remain open. When indoor gatherings are allowed, making them as safe as possible will help limit COVID-19 transmission. Focused PHSMs will maximize adherence for the long haul, while minimizing their secondary burdens. In this way, governments can prevent surges before they start and limit the need for the most restrictive measures.

Analysis of influencing factors also shows that in Member States where governments have maintained trust with the community and clear communication around risk perception, adherence to PHSMs is more robust. While many governments have loosened restrictions to alleviate heavy secondary burdens, those able to maintain trust and transparency through clear communication are able to reinstate measures more smoothly when and if required.
3. **COVID-19** and accompanying response measures have posed sizable barriers to accessing other essential health services in Africa, threatening the hard-won gains in linking people to health care over the past several decades.

   • Addressing **gaps in service delivery** and demand for care is not only critical for detecting, treating and slowing transmission of COVID-19, but also for addressing concurrent health crises, from outbreaks of Ebola in Guinea and the Democratic Republic of the Congo, to yellow fever in Nigeria; as well as malaria, HIV and tuberculosis and maintaining maternal care and immunization.

   • **Fear of contracting COVID-19** from health facilities—and the widespread belief that health care workers should be avoided because you can catch COVID-19 from them—was a key reason that people did not seek health services.

   • **Affordability** (i.e., cost of services or travel for care) was another key reason that people did not seek health services, and was likely related to significant loss of income due to the pandemic.

**CALL TO ACTION**

Prioritize vaccinating health care workers and strategically communicate to the public that seeking care at health facilities is safe. Adequate personal protective equipment (PPE) for all health care workers must continue to be a priority for governments, as well as fair compensation, paid sick leave and access to mental health care. This will not only protect health care workers’ physical and mental health, but will improve the public’s trust and confidence in the health system, ultimately encouraging uptake of health services.

4. Income loss associated with COVID-19 response measures is exacerbating challenges with access to food and health care services, a crisis that is worsening as the pandemic continues.

   • **Lower-income households** are the most affected by food insecurity and lack of access to health care and the least reached by social protection programs (where such programs exist at all). The effects of the current economic downturn will likely be felt for years to come and could have lasting impacts on nutrition, health, education and gender equality.

   • Aligned with urgent warnings from the World Food Programme about the magnitude of **severe food insecurity** across the globe, PERC survey findings showed that more than 80% of respondents reported issues accessing food in the previous week.

**CALL TO ACTION**

Member States and other stakeholders should continue using an evidence-based approach to identify and offer relief to high-risk populations by using right-sized interventions to prevent transmission while minimizing secondary burdens. Action should be taken to limit the impact of COVID-19 on access to food and income as well as provide adequate social protection and support for communities most in need to alleviate challenges pertaining to income generation, food security and access to essential health services.
5. Public willingness to take a vaccine when it becomes available was relatively high—underscoring the crucial role of meaningful community engagement—but people cannot take vaccines until the global community delivers them.

- The continent relies upon other countries and mechanisms to secure vaccine supplies due to limited domestic manufacturing infrastructure. Therefore, widespread vaccine access will be slow—months and even years away in some Member States.

- While the PERC survey found vaccine acceptance was encouragingly high, these findings coincide with a period where most respondents did not yet have access to vaccines or much information about the specific vaccines rolling out in the region. Furthermore, recent news about vaccine side-effects is likely to have eroded vaccine confidence. Acceptance patterns clearly vary among countries and may also vary sub-nationally by region or district.

- The delay in vaccine supply does present an opportunity to ramp up vaccine acceptance campaigns and logistics for efficient vaccine roll-out—and to continually monitor and address vaccine confidence—before vaccines arrive in country.

**CALL TO ACTION**

The global community must deliver vaccines to Member States as soon as possible. Meanwhile, Member States should maintain and strengthen sustained and targeted information campaigns to bolster vaccine confidence and build trust in the sources of that message.
Key Findings In Depth

KEY FINDING 1: EPIDEMIOLOGY

Limitations in testing capacity and surveillance are likely masking the true severity of COVID-19 on the African continent. As cases and deaths brought on by new variants and loosening PHSMs continue to overwhelm countries and cause suffering, the global community and Member States must remain vigilant to avoid a third, even more severe, COVID-19 wave across the continent.

When the February 2021 PERC survey was fielded, a majority of the surveyed Member States had recently emerged from second waves of reported COVID-19 cases that far exceeded the reported case counts of their previous waves. Though South Africa continued to report the highest COVID-19 caseload, reported COVID-19 cases were more widespread across the continent during the second wave, likely due to a combination of loosened PHSMs and the emergence of new, more transmissible variants (Figure 1). In Mozambique, Zambia and Zimbabwe, average daily cases reported at the peak of the second wave were more than four times higher than during their first waves.

**FIGURE 1.** South Africa continues to drive reported COVID-19 cases in Africa; however, reported cases increased significantly in all African Union Member States during the second COVID-19 wave compared to the first.

Given the high COVID-19 test positivity rates in many Member States, it is likely that many cases have been missed.
The rising caseload, which started in November and lasted through February in most Member States, occurred following a loosening of PHSMs across the continent. Starting in August 2020, most Member States reopened schools, allowed religious gatherings to occur and permitted restaurants and bars to reopen with capacity restrictions.

A number of Member States subsequently reinstated PHSMs—but with a more targeted approach, focused on the areas of highest transmission risk, rather than the national lockdowns common in the early days of the pandemic. Governments discouraged end-of-year holiday travel to regions with high rates of transmission and where new variants had been detected. Even so, about one-fourth of survey respondents reported that they had traveled outside their city or town for the holidays, which likely exacerbated transmission.

Variant strains B.1.1.7 and B.1.351—now understood to be more transmissible and potentially more severe—were discovered in a number of Member States, contributing to the size and scale of the second wave of reported COVID-19 cases. As of 29 April, variants of concern have been detected in 22 Member States across the continent. On 3 May, the Moroccan Ministry of Health announced the detection of two new COVID-19 cases infected with the B.1.617 variant first detected in India and responded with swift travel restrictions to curb further spread. Genomic surveillance hubs are starting to be established across the continent to monitor the spread and continuing evolution of the virus.

The lack of comprehensive testing and timely reporting continues to hinder a true understanding of the full scope of COVID-19 incidence on the African continent. Though the number of daily tests performed has increased over the course of the pandemic across the continent, as of 13 April the test positivity rate remained significantly above the 5% maximum recommended by the World Health Organization (WHO) (Figure 2) and testing strategies have remained variable across Member States. At the height of the second wave in Africa, the test positivity rate was notably high in most Member States, indicating that many cases were missed, likely due to a combination of lab capacity constraints and the overall relationship between test availability and willingness to seek a test. Testing strategies will need to be adapted to the changing local epidemiology, with the help of tools like rapid antigen testing and effective contract tracing.

**FIGURE 2.** Though the number of tests performed during the second COVID-19 wave in Africa increased, the test positivity rate was above 10%, indicating many cases were being missed. Some Member States may be missing more cases than others.

*WHO guidance is that a positivity rate of less than 5% indicates the epidemic is under control; a positivity rate above 5% indicates cases may be going undetected. The higher the positivity rate, the more likely cases are being missed.*
BOX 1
PIECING TOGETHER DIFFERENT DATA SOURCES TO DETERMINE THE REAL SCOPE OF COVID-19 INFECTION

Considering the challenges in routine COVID-19 testing and reporting, other data sources offer clues on the disease situation and reasons for underreporting in each Member State.

Seroprevalence
Seroprevalence studies, in which the proportion of the population with antibodies to SARS-CoV-2 is measured, can provide an alternative measure of the percentage of the population that has been infected. Although estimates of the number of COVID-19 infections derived using seroprevalence may be limited by the representativeness of the population sampled, serological studies of blood donors in several African countries suggest that infection rates are higher than reported in some geographical areas, and the few population-representative studies that have been done corroborate this. For example, pre-print studies in Kenya and South Sudan show seroprevalence at over 20% in their capital cities. More work is needed to investigate seroprevalence in Member States.

Excess Mortality
Excess mortality—the number of deaths from all causes during a crisis above and beyond what is expected under ‘normal’ conditions—may also be useful where limited testing is available. Excess mortality includes confirmed COVID-19 deaths that were not correctly diagnosed or reported as well as deaths from other causes that may be attributable to the overall crisis conditions, such as shortages of treatment for other diseases. In Tunisia and Egypt, mortality may have increased by as much as 60-80% during pandemic peaks. However, mortality data in most Member States are not sufficiently complete to reliably estimate excess mortality, and in some cases COVID-19 has disrupted vital registration. In these settings, reports of more than typical numbers of funerals or burials also may suggest that excess mortality has occurred.

PERC Survey Results
The percentage of PERC respondents reporting they or someone in their household had COVID-19 more than doubled from 3% in August 2020 to 7% in February 2021. While South Africa has by far the largest officially reported incidence of COVID-19, a substantially larger percentage of respondents from Tunisia (22%) self-reported incidence compared with respondents from South Africa (14%). The survey also indicated that people may not be seeking care for potential COVID-19 symptoms; more than 20% of respondents that reported missing health care services said they experienced symptoms which may overlap with COVID-19 (i.e., respiratory problems, fever/chills and fatigue/body pain).

Monitoring news and social media
Monitoring news and social media can also identify where disease burden may be concentrated, cases underreported and health systems overwhelmed. PERC has collected and analyzed qualitative data from news articles and social media posts across Africa to determine the public’s support for and adherence to PHSMs, as well as their ability to access comprehensive testing and treatment for COVID-19. In addition to high test positivity rates, reports on social media that people are unable to access COVID-19 tests can also serve as a valuable indicator of underreporting. Social media reports of oxygen shortages and people being turned away from hospitals are further signs of overwhelmed health systems, even where this is not evident from reported cases and testing numbers.

In Kenya, for example, social media posts highlighting overcrowded hospitals, diminished oxygen supplies, ICU bed shortages and inadequate PPE increased during its COVID-19 waves in July 2020, November 2020 and March 2021 (Figure 3). The prohibitively high cost of COVID-19 testing and...
Hospital care was a key theme in posts on social media. The high number of COVID-19 cases among healthcare workers was also a central narrative in news and on social media, with people calling for the government to do more to protect them. [See detailed summary report for Kenya.]

**FIGURE 3.** At the start of the pandemic, and then during each of Kenya’s three COVID-19 waves, news articles and social media posts about health system capacity increased—with reports often highlighting health care worker infections and a lack of oxygen.

The lack of vaccine supply is the largest obstacle to quelling the COVID-19 pandemic in Africa. **Demand for vaccines alone will not resolve the crisis.** Unless the global community rapidly makes a sufficient supply of vaccine available, Africa could face prolonged economic and public health crises that would undo years of hard-won progress toward social and economic stability. Initiatives such as the COVAX facility and African Vaccine Acquisition Task Team (AVATT) have made commendable progress in securing funding and contracts for vaccine doses in Africa, but with only 17.9 million doses reportedly administered as of 27 April 2021, achieving herd immunity for Africa’s population of 1.2 billion remains a distant goal.

Limited global production capacity, reluctance to transfer technology and share know-how, restrictions on vaccine exports from India and hoarding of vaccines by wealthier nations, as well as safety concerns around the AstraZeneca vaccine, have further hampered access to doses across the continent. The inadequacy of vaccine manufacturing infrastructure in Africa has made the continent dependent on other countries and collective mechanisms for vaccine supply. Without expedited access to vaccines, as well as the on-boarding of existing and additional manufacturers through technology transfer and the sharing of expertise, high vaccination coverage across Africa remains years away while more transmissible and deadly virus variants evolve, including those that may be able to evade the immunity conferred by existing vaccines.
KEY FINDING 2: ADHERENCE TO PUBLIC HEALTH AND SOCIAL MEASURES

Although self-reported mask use remained encouragingly high overall—above 85%—it varied considerably by Member State. Adherence to the most restrictive containment strategies, such as avoiding social gatherings and limiting travel from home, has fallen. While this makes sense in the context of decreasing caseloads and relaxed PHSMs at the time of the survey, Member States are currently at risk for another surge in cases if PHSM loosening is not done strategically.

Overall, respondents reported high adherence to individual measures to prevent COVID-19, particularly face mask use—an encouraging finding, as masks are low cost and high impact. However, adherence to measures restricting social gatherings and mobility decreased between August 2020 and February 2021 in most Member States surveyed, in line with governments loosening PHSMs (Figure 4). There was considerable variability in reported adherence to measures between and within Member States, consistent with differences in PHSM implementation and enforcement, as well as differing epidemiological contexts at the time of the survey.

Figure 5 uses boxplots to display the distribution of adherence by Member States surveyed in August and February. Data points that fall within the shaded box represent the second and third quartiles (or middle range) and are divided by the median data point. Data points that fall above the box on the line represent the top quartile, while those that fall below the box, but on the line, represent the bottom quartile. Those that fall outside the box and the line are considered outliers and are labeled in this graphic.
While mask mandates have been in place in most Member States since the beginning of the pandemic and self-reported adherence to mask use remained high overall, it varied by Member State, with some showing room for improvement. Kenya (96%) and Zimbabwe (97%) reported the highest rates of mask use, while Cameroon (62%) and Guinea (74%) reported the lowest.

Self-reported adherence to measures (reducing trips to market, staying home) was low among respondents in surveyed Member States (33%) and had decreased significantly since August, in line with overall loosening of measures restricting mobility. Staying home received the lowest levels of adherence (24%). Respondents in the Southern Region (Mozambique, South Africa, Zambia and Zimbabwe) were more likely to report adherence to measures that restricted social gatherings and movement than those in other regions; these Member States had stricter measures in place at the time of the survey, reported more severe second waves, and had higher risk-perception due to the detection of new variants.

**BOX 2**

**USING DATA ON ADHERENCE TO COVID-19 PREVENTIVE MEASURES TO PREDICT FUTURE COVID-19 WAVES**

At the time of the February survey, reported new cases were increasing in Cameroon, Guinea and Ethiopia. Respondents in these three Member States also reported lower adherence to public health measures than the continental average, which likely contributed to increasing caseloads. While about half of all respondents (46%) reported avoiding religious services across the 19 Member States surveyed, less than one-third did so in Cameroon (30%), Guinea (25%) and Ethiopia (27%). Similarly, about 40% of all respondents reported staying home from regular activities, while less than one-fourth did so in Cameroon (24%) and Guinea (22%); just over one-third did so in Ethiopia (34%).

Reported adherence to avoiding religious services (29%) and staying home from regular activities (26%) was also much lower in Kenya than the average among all respondents. Cases were not yet increasing rapidly at the time of the survey in Kenya, but it reported a third, severe wave of cases in the weeks following the survey—peaking in early April at more than 1,000 reported COVID-19 cases per day. The low adherence to PHSMs identified in the survey may have contributed to the subsequent increase in cases.

The survey uncovered potential factors influencing adherence to COVID-19 preventive measures, including level of support for PHSMs, perception of COVID-19 risk, satisfaction with the government and key sociodemographic characteristics. Understanding these influences may inform governments’ COVID-19 response strategies.

1. **Support for PHSMs**

   Support for all PHSMs (measured by asking respondents whether they thought a specific PHSM was absolutely/somewhat necessary to prevent the spread of COVID-19, or not necessary at all) decreased between PERC’s August 2020 and February 2021 surveys (Figure 5). In both the August and February surveys, support was higher than reported adherence to PHSMs for all measures. Drops in support closely mirrored those in adherence, allowing for some important interpretations.
Respondents who supported PHSMs were much more likely to report adherence to them than those who disapproved (Figure 6); support may be a necessary prerequisite for adherence, and implementing PHSMs with low support will likely lead to low adherence. Monitoring support for PHSMs is critical for understanding the likelihood of adherence, and what the barriers to adherence may be—whether risk perception, knowledge gaps, economic necessity or even cultural or religious priorities.

FIGURE 5. Respondent support for PHSMs — along with self-reported adherence to them — decreased significantly between PERC’s August 2020 and February 2021 surveys. Support for individual measures remained higher than for measures restricting social gatherings and movement.

FIGURE 6. Self-reported adherence to PHSMs was much higher among people who expressed support for those PHSMs.

BOX 3
PUBLIC HEALTH AND SOCIAL MEASURES AND CONFLICT

The COVID-19 pandemic has compounded the impact of existing conflicts in many Member States, which may be influencing the decline in support for and adherence to PHSMs. Excessive enforcement of PHSMs and the use of restrictive measures as a tool to limit political freedom and restrict liberties became more pronounced as the pandemic progressed and many countries held elections.

For example, January 2021 elections in Uganda became violent as the sitting president cracked down on protests from the opposing party under the auspices of “COVID-19...
2. Perception of COVID-19 risk

About one in four respondents (28%) reported that they thought their risk of contracting COVID-19 was high or very high. These respondents—defined in this report as those with high COVID-19 risk perception—were more likely to report adherence to COVID-19 prevention measures than respondents who thought their risk of contracting COVID-19 was low or very low (Figure 7). For instance, more than four in ten (45%) respondents with high risk perception reported avoiding social gatherings compared to about one-third (34%) of respondents with low risk perception—an 11 percentage point difference.

High risk perception was particularly common in the Southern Region, where 40% of respondents thought they were at high risk of contracting COVID-19; respondent support for and adherence to PHSMs was also higher in the Southern Region than in other regions—likely due to the large second wave in the region, as well as recent reports of variants driving increased transmission.

In some Member States where risk perception was low, people were less likely to adhere to measures even if they were mandatory. For instance, although South Africa and Guinea both had mandatory restrictions on public gatherings at the time of the survey, reported adherence to the measures diverged; respondents from South Africa reported the highest adherence to avoiding gatherings (87%) while those from Guinea reported the lowest adherence (45%) among all surveyed Member States. This difference may be explained by the fact that about half (49%) of respondents in South Africa thought they were at high risk of contracting COVID-19, compared to less than one-fifth (15%) in Guinea.

3. Satisfaction with the government

Respondents who reported being very satisfied or somewhat satisfied with their government’s COVID-19 response (74% overall) were more likely to report adherence to PHSMs than those who expressed dissatisfaction (Figure 8). Similarly, adherence was higher among respondents who trusted their Ministry of Health and their president (either a “great deal” or a “fair amount”). Differences in adherence by satisfaction were most pronounced for individual measures; adherence to all individual measures was 14 percentage points higher among people satisfied with the government’s COVID-19 response compared to those who were not.
Satisfaction with the government’s COVID-19 response ranged from a high of 91% in Guinea to a low of 46% in Tunisia. In Tunisia, satisfaction decreased by 15 percentage points between August and February (61% to 46%). Respondents aged 18-35 in Tunisia were among the least satisfied, aligning with media reports of increasing unrest among young people about the government’s response and economic deterioration exacerbated by the pandemic. This same age group reported much lower adherence to PHSMs than those aged 36 and older (40% satisfied versus 50%). (See detailed summary report for Tunisia.)

### 4. Sociodemographic factors: gender and age

Women and respondents aged 36 and older were more likely to report adherence to PHSMs compared to men and younger respondents (Figures 9 and 10). The differences in adherence by gender were most pronounced for measures restricting mobility, with women 28% more likely to report adherence than men. While family and employment dynamics could confound these results, women were also more likely to support all measures, including staying home.

Differences in behavior by age included troubling, although less surprising, findings. Those aged 36 years and older were more likely to report avoiding social gatherings and staying home (22%) than those under the age of 35 (19%). Younger people were slightly less likely to report wearing masks (85% versus 89%)—a concerning finding, particularly when coupled with a higher likelihood of attending social gatherings.

Lower PHSM adherence among young people may be explained by the widespread understanding that older adults are at greater risk of severe COVID-19. The survey found that people ages 56 and older were much more likely to think their health would be seriously affected by COVID-19; however, differences in risk perception between other age groups were minimal. The finding calls for further exploration, particularly pertaining to how to improve mask use among younger populations.
There has been significant disruption to health service delivery since the start of the pandemic, including during Africa's second COVID-19 wave (Figure 11). More than four in 10 (43%) respondents reported that COVID-19 had made it more difficult for them or someone in their household to obtain required medication in the previous three months (between November 2020 and February 2021). Among respondents that reported they or someone in their household required a health care visit, almost one in four (23%) reported missing or skipping services since November 2020 and more than four in 10 (42%) since the start of the pandemic (Figure 12). As in the August 2020 survey, the degree of disruption varied significantly between and within Member States surveyed. (For more information, see PERC’s special report on disruption to essential health services.) Addressing these gaps in health care access is not just critical for detecting, treating and slowing transmission of COVID-19, but also for addressing concurrent health crises, from outbreaks of Ebola in Guinea and the Democratic Republic of the Congo (DRC) to yellow fever in Nigeria; as well as malaria, HIV, tuberculosis and maternal health issues.

Reports of missed health visits were more common among urban households and among respondents with longstanding, chronic conditions. In addition, reports of missed health visits in the past six months were more common among households that reported losing all of their income since the start of the pandemic (42%) than among those that reported losing some income (33%) and those without any income loss (20%). The findings highlight how economic challenges are exacerbating issues with access to health care.

**KEY FINDING 3: ESSENTIAL HEALTH SERVICES**

COVID-19 and accompanying response measures have posed sizable barriers to accessing other essential health services in Africa, threatening the hard-won gains in linking people to health care over the past several decades.
As was the case in August, people that missed care were most likely to report delaying or missing a visit for routine check-ups (34%); however, missed care for more critical services also persisted (Figure 13). About one-fourth missed health visits for diagnostic services or because they were experiencing symptoms of illness, many of which overlapped with COVID-19 symptoms. For instance, 10% of all households that missed care reported skipping a visit for fever/chills, ranging from about 1% in Ethiopia and Tunisia to 30% in DRC. Missed visits for antenatal care and pregnancy problems were notably high in Ghana (22%), Ethiopia (19%) and Uganda (16%). Similar to the results from August’s survey, missed visits for diabetes and cardiovascular issues were high in the Northern Region, while missed visits for malaria were highest in Central and Eastern Regions. While 3% of all respondents missed a vaccination service, this was particularly high in South Africa (14%) and Ghana (10%).

Fear of catching COVID-19—either at a health facility or when leaving home—was the most common reason for missing care (Figure 14). It was cited most often in the Northern Region (50% in Egypt, Morocco and Tunisia versus 27% among all respondents) and more often by urban respondents than rural (30% versus 23%); likely associated with higher incidence of COVID-19 in the Northern Region and in urban areas.

Health facility disruptions (e.g., staff shortages and hospital closures) and affordability of care (including cost of travel to health facilities) also continued to be major contributors to missed health care. One-fifth of respondents identified affordability as a key barrier to accessing health care in the past six months.
BOX 4

STIGMATIZATION OF HEALTH CARE WORKERS

More than half (51%) of respondents agreed with the statement that “health care workers should be avoided because you might catch COVID-19 from them” (i.e., they reported the statement was definitely/probably true)—ranging from a high of 85% in Sudan, to a low of 28% in Ghana. Sudan also reported the highest rate of missed services among those in need of care (61%) of any Member State surveyed. Belief in such narratives may lead to stigmatization of health care workers and prevent people from seeking essential health care.

The findings point to an immediate need to prioritize the vaccination of health care workers and to improve their access to appropriate personal protective equipment (PPE). In many Member States, health care workers still face high infection rates, and there have been reports of PPE shortages; these realities may further fuel fear of health care workers and discourage care-seeking. To restore people’s confidence in health facilities and reduce the stigma of health care workers, governments and leaders will need to actively communicate the reduced risk.
KEY FINDING 4: INCOME LOSS
Income loss associated with COVID-19 response measures is exacerbating challenges with access to food and health care services, a crisis that is worsening as the pandemic continues.

Income loss and challenges accessing food were pervasive across all Member States surveyed. More than three quarters of all respondents (77%) reported losing some or all of their income since the start of the pandemic, ranging from 61% in Mozambique to 93% in Uganda (Figure 15). More than 80% of respondents reported challenges accessing food in the previous week, an increase of 8 percentage points since August 2020; while nearly half (48%) reported having to reduce the number or size of meals in the past week.

Income loss was a primary barrier to food access (Figure 16) and a primary driver of decisions to skip or delay essential health services. Our findings support other reports in identifying considerable economic and food security challenges during the course of the pandemic.

FIGURE 15. Income loss in households is severe, but wide ranging between Member States.

FIGURE 16. Among households missing meals in the previous week, reduced income was reported among the primary barriers to food access.

<table>
<thead>
<tr>
<th>Reason</th>
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<tr>
<td>Prices too high</td>
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<tr>
<td>Income dropped</td>
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<tr>
<td>Shortages in the food markets</td>
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<tr>
<td>Food markets closed</td>
<td>38%</td>
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<td>Mobility restrictions imposed by the govern</td>
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Percentage of all households reporting the reason for missing a meal in the previous week

*Denominator excludes those reporting not missing a meal in the previous week.
BOX 5

WARNING OF FAMINE AND FOOD INSECURITY

Calls from the United Nations and World Food Programme (WFP) show that the socioeconomic effects of the COVID-19 pandemic, along with climate change and conflict, are increasingly exacerbating food insecurity in more than 20 countries, 16 of which are in Africa. According to WFP data, more than 34 million people are facing acute hunger, with the scale of the emergency continuing to grow. Key drivers of food insecurity, particularly in the context of COVID-19, are rising food prices (aligned with the PERC survey findings) and decreased access to food markets.

Infectious diseases, such as COVID-19, and malnutrition form part of a vicious cycle that increases morbidity and mortality for whole communities. Action should be taken to limit the impact of COVID-19 measures on access to food, improve social safety nets and promote food security in at-risk areas to avoid a double crisis on the continent.

More vulnerable populations—particularly those with lower reported household income—reported higher rates of complete income loss and barriers to accessing food. Lower-income households were more likely to report complete income loss (81% versus 73% in higher-income households) as well as barriers accessing food (85% versus 77% in higher-income households). This trend is particularly concerning given that lower-income households are less likely to have substantive savings and more likely to rely on the informal sector, which has been hard-hit by COVID-19, for income. The high percentage of respondents across all income levels that reported income loss underscores widespread socioeconomic vulnerability, even among higher-income groups.

Social protection programs have not adequately reached the most vulnerable in order to lessen the economic burdens experienced during the pandemic. Only 13% of all respondents reported receiving any support from the government in the past month (ranging from 44% of respondents in Ghana to less than 5% in Cameroon, Kenya, Sudan, Morocco, Tunisia and Mozambique). Among households that reported receiving government support, lower income groups were no more likely receive benefits than the higher income groups, suggesting that further efforts are needed to target the most vulnerable populations.
KEY FINDING 5: VACCINE UPTAKE

Public willingness to take a vaccine when it becomes available was relatively high—underscoring the crucial role of meaningful community engagement—but people cannot take vaccines until the global community delivers them.

Demand for vaccines was high, with significant differences between Member States. Overall, about two thirds (67%) of respondents said they would definitely or probably get a vaccine when it becomes available; this is consistent with other findings from Africa CDC. However, responses varied considerably between Member States, ranging from 91% in Morocco to 35% in Tunisia and Cameroon (Figure 17). Differences in vaccine interest based on sociodemographic characteristics were less pronounced; interest was only slightly higher among women compared to men (67% versus 64%); ages 36 and older compared to ages 18-35 (70% versus 65%); and rural compared to urban (68% versus 63%).

COVID-19 risk perception and satisfaction with the government’s COVID-19 response were important elements influencing intent to get vaccinated. Those who thought their risk of contracting COVID-19 was high were more likely to report interest in getting a vaccine than those who thought their risk of contracting COVID-19 was low (70% vs 62%). Associations between vaccination intent and satisfaction with the government’s COVID-19 response were even stronger; more than 70% of respondents who were satisfied with the government response reported interest in vaccination, compared to only half of those who were not satisfied with the government—a 21 percentage point difference.

Vaccine hesitancy seems to be driven largely by a lack of information. Overall, the leading reason (31%) cited for hesitancy was not knowing enough about the vaccine to make a decision (Figure 18). Other common reasons included not feeling at risk of catching COVID-19 (22%) and the mistaken belief that vaccines can transmit COVID-19 (18%). Taken together, these reasons suggest that sustained and targeted information and education campaigns could meaningfully improve vaccine confidence.
### BOX 6

**TIMELINE OF VACCINE EFFORTS IN AFRICA**

At the time of the survey, only seven of the 19 surveyed Member States had begun administering COVID-19 vaccines, with distribution limited to health care workers. Data on vaccine acceptance can be misleading in the absence of a viable supply, so survey results should be interpreted with caution. In addition, due to the few reports of adverse effects of vaccines, at the time of the survey, there was little concern explicitly noted by respondents. This data should be monitored continuously as supply increases throughout the region.

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Conclusion

A Path Forward

The pandemic will remain a serious threat on the African continent for the foreseeable future, as wealthier nations hoard vaccines and fail to share critical technology and expertise to enable distributed manufacturing, and new, more transmissible variants spread across the globe. Variants have caused havoc in countries previously managing to keep COVID-19 under control—a warning to Member States and the global community to be vigilant and adaptive to the changing epidemiology. Despite several positive examples of Member States effectively managing the pandemic's impact so far, secondary impacts from use of broad PHSM’s and competing crises threaten to undermine the sustained public health response required to beat COVID-19 in Africa.

Yes, Africa needs greater access to vaccines as quickly as possible, and the global community must step up to increase production, ensure equitable allocation, and share technology with Member States. But, vaccines are not a silver bullet. Global resources are also needed to increase the Member States’ capacity to detect, test, sequence and trace cases to mount effective COVID-19 responses and target PHSMs. At this time, the nature and scale of many Member States' COVID-19 epidemics have been widely underestimated—downplayed by limited surveillance capacity.

Underreporting has fueled the dangerous myth that many Member States have been unscathed by COVID-19. In reality, they have suffered calamitous health outcomes from COVID-19, in addition to severe economic, social, and nutritional distress. Without sufficient social protection programs, hardships are likely to continue, and people's ability to adhere to PHSMs may wane.

In the coming months or years, and even as vaccines become more widely available, governments must continue to monitor COVID-19 so they can balance implementing PHSMs to keep transmission low with minimizing the socioeconomic disruption such measures provoke. Maintaining this balance and targeting communications appropriately will likely encourage adherence to COVID-19 prevention measures when they are needed. Individual PHSMs, particularly mask use, will continue to remain critical in the fight against the pandemic, and governments will need to maintain the trust of their communities in order to meet the ongoing challenges that COVID-19 will present.
For in-depth, country-level data and analysis for the 19 AU Member States included in the PERC survey, visit https://preventepidemics.org/covid19/perc/