Finding the Balance: Public health and social measures in Senegal

This report describes findings from a telephone survey with 1,290 people conducted in September 2021, alongside local epidemiological and secondary data. The survey was approved by the National Ethics Committee for Health Research, Ministry of Health and Social Action to examine experiences and responses to public health and social measures (PHSMs) to prevent COVID-19 transmission. This is the fourth PERC report since the pandemic began (see the first, second and third reports).

What are the highlights from this report?

Situational Awareness
Senegal’s third wave of new infections peaked in late July 2021 shortly after the first detection of the Delta variant, reaching 1,000 new reported daily cases. More than twice as large as the previous wave in early 2021, the surge overwhelmed hospitals and health services, especially in Dakar.

PHSM Support and Self-Reported Adherence
While support for individual measures (such as hand-washing and mask-wearing) remained high, support for measures restricting social gatherings and movement continued to decline from previous surveys. Self-reported adherence to these measures was particularly low, likely the result of limited PHSMs in place.

Information and Risk Perception
Respondents in Senegal reported low COVID-19 risk perception, with only two in 10 believing they were personally at risk of infection. Access to income and employment (66%) and access to food (52%) dominated respondents’ top concerns. The share of respondents reporting satisfaction with the government’s handling of the pandemic decreased from 79% to 69% since February 2021.

Vaccine Beliefs and Uptake
Six in 10 respondents from Senegal reported either receiving at least one dose or planning to get the vaccine, lagging behind other African Union Member States in the region, but nonetheless representing potential unmet demand beyond current 8% coverage. Among those unlikely to get vaccinated, information gaps and lack of COVID-19 risk perception were the top two reasons given.

Secondary Burdens
Eight out of 10 respondents reported having lost income over the course of the pandemic — slightly lower than February 2021 — while reports of missed meals fell by half since February. Loss of income and increased food prices were reported as major barriers to accessing food.

What are the key trends from this survey?

In spite of a sharp increase in COVID-19 cases, personal risk perception decreased, along with support for staying home.
Situational Awareness

What is the situational context influencing COVID-19 response?

Note: Compared to the February 2021 survey, a smaller share of respondents reported they were in the lowest household income category (15% in September vs. 26% in February), as well as the highest income category (8% in September vs. 18% in February), with most respondents claiming income in the middle category (72%). This may affect trends in survey measures over time.

Senegal’s third and largest wave of new COVID-19 infections began in June 2021 and peaked in late July at approximately 1,000 cases per day. The peak was more than twice as severe as the previous wave in February and March 2021, and overwhelmed hospitals, especially in Dakar. No new PHSMs were enacted during the third wave of new infections, nor since the government ended a state of health emergency that had been enacted in Dakar and Thies in March 2021. The Delta variant was first detected on 8 Jun 2021 and likely drove the recent wave of infections, along with increased mobility after the lifting of the state of emergency, which surpassed pre-pandemic levels for the first time in late May (see graphic below).

Testing is freely available and encouraged in Senegal. According to the World Bank, Senegal ranks number one regionally in the number of tests provided. Test positivity nevertheless reached 30% at the peak of the third wave, highlighting a strain on testing capacity and suggesting that many cases went undetected. The Institut Pasteur de Dakar has started clinical trials on a low-cost rapid test it aims to commercialize for mass distribution in 2022, that will increase diagnostic capacity even further.

Senegal’s vaccination program started in February 2021 with the arrival of Sinopharm and AstraZeneca vaccines. However, like other Member States, Senegal has continued to experience shortages in vaccine supply, and only 8% of the population has received at least one dose. Three vaccines are currently in use in Senegal: AstraZeneca, Sinopharm and Johnson & Johnson. Additionally, the government recently signed a deal with BioNTech to partner with Institut Pasteur to eventually become (along with Rwanda) the first start-to-finish factories in Africa to produce mRNA vaccines at scale.

After localized states of emergency were lifted in March 2021, no new PHSMs were implemented during the third wave of new infections. Mobility increased and, alongside the emergence of the Delta variant, likely contributed to the third wave.

![Graph showing the Covid-19 response measures in Senegal from Mar 20 to Sep 21]
PHSM Support and Self-Reported Adherence

Do people support and follow measures?

What the data say

In Senegal, support for individual measures to limit the spread of COVID-19, such as mask-wearing and hand-washing, has remained consistently high (at or above 90%) across each survey round. However, support for and self-reported adherence to measures restricting social gatherings and movement have steadily declined, reaching new lows in September 2021. Self-reported adherence was particularly low for these measures relative to other surveyed Member States, despite Senegal recently emerging from the worst wave of new infections to date.

- Compared to men, women reported higher levels of support and adherence to every type of measure, with the largest differences in self-reported adherence to avoiding public gatherings (90% vs. 80%) and reducing trips to the market (72% vs. 58%).
- Respondents reporting high levels of personal risk perception reported considerably higher levels of adherence to all measures except avoiding places of worship. Those expressing high levels of risk perception reported higher levels of adherence to staying home (32% vs. 22%), avoiding gatherings (61% vs. 47%) and mask-wearing (95% vs. 82%).

Individual measures

Support for individual measures remained high in September 2021, while self-reported adherence has declined by nearly 30 percentage points since August 2020.

Measures restricting social gatherings

Both support for and self-reported adherence to avoiding places of worship were considerably lower than for avoiding gatherings and entertainment, highlighting the important role religious institutions play in Senegal.

Measures restricting movement

Support for staying home and reducing trips to the market each fell by more than 10 percentage points since February 2021 (56% vs. 45% and 77% vs. 65%, respectively). Self-reported adherence dropped by at least 15 percentage points for each measure in that timeframe (42% vs. 26% and 46% vs. 31%).
Information and Risk Perception

How do people understand risk?

What the data say

Six in 10 respondents reported believing that COVID-19 would affect many people in their country, and four in 10 listed the virus as one of their top three concerns. However, perception of personal risk from infection was low (19%), falling 13 percentage points since February 2021 (32%) despite the recent surge in new infections. Income and employment was the most commonly cited concern in Senegal, with two in three listing it as a top concern, followed by access to food (52%).

- Compared to those with high personal risk perception, respondents with low risk perception reported lower levels of support for and adherence to all PHSMs. While personal risk perception was not directly associated with respondents’ reported likelihood of getting a vaccine, low risk perception was listed among the top reasons for vaccine hesitancy among the 36% of respondents reporting being unlikely to get vaccinated.
- Respondents with long-standing illnesses expressed higher levels of personal risk perception (24% vs. 18%) and concern that their health would be seriously affected by COVID-19 (26% vs. 16%) than those without, suggesting that information about the risks of comorbidities are reaching some among this particularly vulnerable population.

How do people understand the risk of COVID-19?

- **59% believe that COVID-19 will affect many people in their country**
  - Senegal: 59%
  - Region: 55%

- **19% believe that their personal risk of being infected with COVID-19 is high**
  - Senegal: 19%
  - Region: 20%

- **18% believe that their health would be seriously affected by COVID-19**
  - Senegal: 18%
  - Region: 43%

How concerned are people about COVID-19?

- **41% report COVID-19 as being a top concern**
  - Senegal: 41%
  - Region: 32%

- **44% are anxious about resuming normal activities**
  - Overall: 44%
  - Urban: 49%
  - Rural: 41%

- **Access to income/work/unemployment** 66%
- **Access to food** 52%
- **COVID-19 pandemic** 41%

The issues most concerning to people

Percentage of people reporting concern about a particular issue
Information and Risk Perception

Whom do people trust?

What the data say
Respondents from Senegal reported low satisfaction with the government’s handling of the pandemic (69%), second only to Nigeria (62%) in the Western region. It was ten percentage points lower than in February 2021 (79%), perhaps reflecting the recent third wave of new COVID-19 infections, by far the worst to date. Levels of trust in the president (63%) and Ministry of Health’s (74%) handling of the COVID-19 response were also low by regional standards and lower than in February (down 11 and eight percentage points, respectively). The diminishing levels of trust in the government are especially concerning given this metric’s strong association with reported likelihood of getting a vaccine.

- A larger share of those expressing trust in the response of the president and Ministry of Health reported they would likely get vaccinated (73% vs. 46% and 71% vs. 42%, respectively), as well as those expressing satisfaction with the government’s pandemic response more generally (71% vs. 47%).
- Satisfaction with the government’s response was also associated with support for every type of PHSM, suggesting that diminishing levels of satisfaction may pose a barrier if the government were to enact new PHSMs in the future.

In addition to local television and health centers, religious leaders were listed as highly trusted both as sources of COVID-19 information and in their handling of the pandemic. This underscores the role religious institutions play in respondents’ day-to-day lives and the importance of continued engagement with religious leaders to help dispel myths and promote accurate health information.

- Social media platforms, such as Facebook, WhatsApp and Twitter, were the least trusted sources of COVID-19 information; however, roughly a third of respondents reported using WhatsApp (31%) and Facebook (28%), presenting an opportunity for the government to continue to use these platforms to disseminate accurate health information.

What do people think about their country’s institutions?
Satisfaction with the government’s pandemic response was lowest among people under 35 years old (averaging 67%), likely reflecting the disproportionately large role that youth have played in protests and opposition to the government this year. Satisfaction increased with each ascending age group, with 81% of respondents aged 56 and older reporting satisfaction.

69% are satisfied with the government’s pandemic response

<table>
<thead>
<tr>
<th>Region</th>
<th>Satisfaction with the government’s pandemic response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>69%</td>
</tr>
<tr>
<td>Region</td>
<td>74%</td>
</tr>
</tbody>
</table>

Do people believe accurate information?
Compared to other Member States in the Western region, the survey in Senegal revealed high levels of understanding that infected people may experience lags in showing symptoms (84% vs. 74%). One in four (also lower than the regional average of 38%) believed they should avoid health care workers, which may lead to stigma against them. Approximately half of respondents believed that herbal remedies can cure COVID-19. Since local television and health care workers/centers were highly trusted for COVID-19 information, policymakers should continue efforts to use these platforms to share accurate information about COVID-19 therapies and preventive measures.

80% understand that infected people may never show symptoms but could still infect others.
84% understand that infected people may not show symptoms for five to 14 days.
45% believe that COVID-19 can be cured with herbal remedies.
24% think they should avoid health care workers because they could get COVID-19 from them.

Most trusted sources of information
Percentage of people reporting trust in information sources about COVID-19

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local television</td>
<td>63%</td>
</tr>
<tr>
<td>Health center/health workers</td>
<td>62%</td>
</tr>
<tr>
<td>Local religious leaders</td>
<td>61%</td>
</tr>
</tbody>
</table>

Top three most trusted institutions and individuals
Percentage of people reporting trust in each person’s or institution’s approach to the pandemic

<table>
<thead>
<tr>
<th>Institution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals/health centers</td>
<td>83%</td>
</tr>
<tr>
<td>Religious institutions</td>
<td>80%</td>
</tr>
<tr>
<td>Ministry of Health</td>
<td>74%</td>
</tr>
</tbody>
</table>
Vaccine Beliefs and Uptake

Do people want to get the COVID-19 vaccine?

These survey questions aim to describe the available market for COVID-19 vaccine uptake and target populations for information campaigns. We therefore show those reporting being vaccinated or likely to get vaccinated, and those unlikely to get vaccinated. The survey does not seek to validate COVID-19 vaccine coverage.

What the data say

Two in three respondents in Senegal reported that they were either vaccinated or likely to get the COVID-19 vaccine, the lowest share in the Western region and similar to results from February 2021. At 8% reported coverage to date, survey results suggest potential unmet demand. Upcoming vaccine pushes should be accompanied by information campaigns to educate those already interested and to help motivate those not currently planning to get vaccinated, half of whom cited insufficient information as a reason for hesitancy.

- A larger share of older respondents were reported being likely to get the vaccine than younger respondents, with three in four respondents over the age of 46 reporting either having received the vaccine or likely to do so, true for only half of those 18 to 25 years.
- Respondents reported wanting more information about different vaccine types, as well as information about eligibility, timing and access. Meanwhile, those unlikely to get vaccinated cited both information gaps and lack of COVID-19 risk perception as the top two reasons. Given levels of trust in religious leaders and their direct contact with their communities, policymakers should continue to directly engage them to support vaccine campaigns.

How many people reported getting or planning to get the COVID-19 vaccine?

Fewer than 5% of respondents reported being unsure about COVID-19 vaccine uptake and are therefore not shown. Percentages reported are among the entire sample.

<table>
<thead>
<tr>
<th>63% are vaccinated or are likely to get vaccinated</th>
<th>36% are unlikely to get vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>63</td>
</tr>
<tr>
<td>Region</td>
<td>74</td>
</tr>
<tr>
<td>Higher income</td>
<td>63</td>
</tr>
<tr>
<td>Lower income</td>
<td>66</td>
</tr>
<tr>
<td>18-25 years</td>
<td>55</td>
</tr>
<tr>
<td>26-35 years</td>
<td>61</td>
</tr>
<tr>
<td>36-45 years</td>
<td>68</td>
</tr>
<tr>
<td>46-55 years</td>
<td>73</td>
</tr>
<tr>
<td>56+ years</td>
<td>77</td>
</tr>
</tbody>
</table>

What do people think about COVID-19 vaccines?

Top information wanted about vaccines

Percentage of people reporting each type of information

- What types of vaccines are there, what are they made of and how do they work? 44%
- How safe is the vaccine? 42%
- How effective is the vaccine? 42%

Top reasons people would not get the vaccine

Among people who were not planning to get vaccinated, their reasons were:

- I do not yet know enough about the vaccine to make a decision 51%
- I do not feel I am at risk of catching the virus 21%
- The vaccine was rushed/not thoroughly tested 21%
**Secondary Burdens**

**Are people skipping or delaying health care?**

**What the data say**
Among those who reported needing health care, respondents in Senegal reported the lowest levels in the Western region of both missed or delayed health visits in the past six months (9%), and difficulty accessing medicine in the past three months (25%). Furthermore, reports of both missed health visits and difficulty accessing medication fell from February 2021.

- Reasons for missing health visits should be interpreted with caution given the small number of respondents reporting missing health visits (n<100). However, among those who did, they were largely attributed to fear of catching COVID-19, along with health facility disruption and caretaker responsibilities.

**Difficulty getting medicines**
Respondents needing medication were 16 percentage points less likely to report difficulty accessing medicines than the Western regional average (40%).

**Skipping or delaying health visits**
The share of respondents missing needed health visits was 11 percentage points lower than in February 2021. Despite small sample sizes, there were no major differences between urban and rural or lower- and higher-income respondents.

**Reasons for skipping or delaying visits**
People could choose multiple responses

- Worried about catching COVID-19: 20%
- Health facility disruption: 17%
- Caretaker responsibilities: 17%
- Cost/affordability: 11%
- Mobility restrictions/transport challenges: 3%

Interpret proportions cautiously due to small sample size (N<100)

**Types of health visits that were skipped or delayed**
People could choose multiple responses

- General/routine check-up: 49%
- Diagnostic services/symptoms: 40%
- Noncommunicable diseases: 18%
- Communicable diseases: 11%
- Reproductive, maternal, newborn, child health: 10%

Interpret proportions cautiously due to small sample size (N<100)
Secondary Burdens

Are people experiencing income loss or food insecurity?

**What the data say**

More than eight in 10 respondents indicated that they had lost some or all of their income since the start of the pandemic, seven percentage points higher than the Western regional average and slightly lower than in February 2021 (86%). The share of respondents reporting having to reduce or limit the size of their meals, however, was among the lowest of all surveyed Member States, and down nearly half from February (40%).

- Higher food prices were listed as a barrier to food access by seven in 10, followed by lower incomes, both representing trends seen across the region. Unsurprisingly, given the lack of PHSMs in place, few (9%) reported mobility restrictions as a barrier to food access.
- Analysis of food security pressures across the region finds that conflict, declines in production and COVID-19 restrictions are major factors for increasing food prices and decreased supply.
- The share of respondents who reported receiving government assistance beyond what they received before the pandemic has continued to fall from two in three — among the highest levels among surveyed Member States in August 2020 — to one in six in September 2021.

### Reported barriers to food access

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Percentage of people reporting each barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less income</td>
<td>60%</td>
</tr>
<tr>
<td>Higher food prices</td>
<td>69%</td>
</tr>
<tr>
<td>Food markets closed</td>
<td>10%</td>
</tr>
<tr>
<td>Mobility restrictions</td>
<td>9%</td>
</tr>
<tr>
<td>Food market supply shortages</td>
<td>38%</td>
</tr>
</tbody>
</table>

### Missing meals

#### Percentage of households *missing meals* by category

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Percentage of households missing meals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>22%</td>
</tr>
<tr>
<td>≤80,000 CFA</td>
<td>35%</td>
</tr>
<tr>
<td>80,001 - 1,000,000</td>
<td>19%</td>
</tr>
<tr>
<td>≥1,000,001 CFA</td>
<td>26%</td>
</tr>
</tbody>
</table>

#### Percentage of households *missing meals* over time

- Feb 2021: 40%
- Sep 2021: 22%

Note: Data on missing meals were not collected in Aug 2020.

### Income loss and receiving government assistance

#### Percentage of households experiencing *income loss* by category

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Percentage of households experiencing income loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>81%</td>
</tr>
<tr>
<td>≤80,000 CFA</td>
<td>79%</td>
</tr>
<tr>
<td>80,001 - 1,000,000</td>
<td>83%</td>
</tr>
<tr>
<td>≥1,000,001 CFA</td>
<td>71%</td>
</tr>
</tbody>
</table>

#### Percentage of households receiving *government assistance* over time

- Aug 2020: 63%
- Feb 2021: 17%
Appendix

Endnotes

Report notes
Regional comparisons were conducted as per the following categories: Eastern Africa (Ethiopia, Kenya, Uganda, Sudan); Western Africa (Ghana, Nigeria, Liberia, Guinea Conakry, Senegal, Côte d’Ivoire); Northern Africa (Tunisia, Morocco, Egypt); Central Africa (Cameroon, Democratic Republic of Congo); and Southern Africa (Mozambique, South Africa, Zambia, Zimbabwe).

The epidemiology curves on pages one and two of the report shows the 7-day rolling average of new cases from March 2020 to October 2021. Where epidemiology or mobility data are missing, the data are unavailable.

Full survey results are available here and on the PERC online dashboard. For full details on data sources, methods and limitations, see preventepidemics.org/perc.

- Ipsos conducted a telephone survey of a nationally representative sample of households with access to a landline or cell phone. Results should be interpreted with caution as populations without access to a phone are not represented in the findings. The percentages reported in Ipsos charts may be different from percentages reported in other PERC products and communication of these data. Differences may be reconciled by investigating the denominator and/or weights used.
- Africa Centres for Disease Control and Prevention (Africa CDC) provides epidemiological data daily for African Union (AU) Member States. Africa CDC receives case, death and testing data from each AU Member State. Because not all AU Member States report daily, numbers could be delayed, especially for testing data which are more commonly reported late, or in periodic batches (e.g., weekly).
- Other data are drawn from publicly available sources.

Findings reflect the latest available information from listed sources at the time of analysis, and may not reflect more recent developments or data from other sources. Data vary in completeness, representativeness, and timeliness.

Country notes
The survey sampled from Senegal consisted of 1,290 adults (584 urban, 696 rural), collected between 18 Sep and 3 Oct 2021.

Income classifications were based on existing data on local income distributions, which were used to create four income bands, defined as:

- Low income: Monthly household income 80,000 XOF and below
- Middle income: Monthly household income 80,001 XOF - 100,000 XOF
- High income: Monthly household income 100,001 XOF and above