PERC

Partnership for Evidence-Based Response to COVID-19

Updated March 2021

ABOUT PERC

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 African Union Member States. PERC member organizations are: Africa Centres for Disease Control and Prevention; Resolve to Save Lives, an initiative of Vital Strategies; the World Health Organization; the UK Public Health Rapid Support Team; and the World Economic Forum. Ipsos and Novetta Mission Analytics bring market research expertise and years of data analytic support to the partnership.

Sources Used in PERC Analysis

Epidemiology

Africa Centers for Disease Control and Prevention (Africa CDC) 2020. https://africacdc.org/covid-19/ Accessed: <February 26, 2020>.

Africa CDC provided epidemiological data on cases and deaths and testing data for the period 15 February 2020 to 26 February 2021. Data are updated twice a day (8am and 5pm EAT) and contain the latest available public data on COVID-19. National updates are published at different times and in different time zones. Data are subject to retrospective corrections; corrected datasets are released as soon as processing of updated national data has been completed. This, and the time Africa CDC needs to process these data, might lead to discrepancies between the national numbers and the numbers published by Africa CDC.

- **Cumulative incidence** is calculated by dividing the cumulative cases reported by the 2020 population, multiplied by 100,000.
- **Test positivity** is the percentage of COVID-19 tests (molecular and rapid antigen) conducted with a positive result among all tests conducted. WHO offered guidance that a positivity rate of less than 5% averaged over a period of 7 or 14 days is an indicator that the epidemic is under control. When the positivity rate is above 5%, cases may be going undetected.
- **Total confirmed COVID-19 deaths** are all deaths attributed in vital statistics to SARS-COV-2 infection.
- **Case-fatality ratio** is the proportion of total reported deaths among all people reported as testing positive COVID-19.

Public Health and Social Measures

ACAPS. *COVID-19 Government Measures Dataset.* https://www.acaps.org/covid19-government-measures-dataset Accessed: <February 26, 2021>.

The COVID19 Government Measures Dataset compiles all the measures implemented by governments worldwide in response to the COVID-19 pandemic. Data collection includes secondary data review. Data are subject to retrospective additions and corrections. Linguistic barriers also might have prevented ACAPS from identifying all available information. Some measures are also extremely nuanced, so ACAPS relies on expert judgement for coding. The dataset may not include all measures enacted and dates of implementation may not be precise.

Oxford. *Coronavirus Government Response Tracker (OxGRT).* https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker <February 26, 2021>.

OxCGRT collects publicly available information on 17 indicators of government responses. Data are collected from public sources by a team of over 100 Oxford University students and staff. Gaps within the latest week are expected as data is captured and retrospective changes may happen as data are reviewed. Most data entries do not receive secondary review. The dataset may not include all measures enacted and dates of implementation may not be precise.

Mobility

Google LLC *"Google COVID-19 Community Mobility Reports."* https://www.google.com/covid19/mobility/ Accessed: ‹Februrary 26, 2021›.

The dataset shows how visits and lengths of stay at different types of locations have changed compared to a baseline. The baseline is the median value, for the corresponding day of the week, during the 5-week period 3 January to 6 February, 2020, before the widespread onset of the pandemic. The data come from Google users who have opted-in to location history for their account; this may or may not represent the exact behavior of a wider population. The data do not control for seasonality or holidays and only include analysis of countries with available mobility data available. The category for retail and recreation includes mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters. The categorization of locations varies from region to region.

Survey Data

Ipsos. *"Responding to COVID-19 in African Countries"* February 2020.

Ipsos conducted telephone interviews with 25,640 adults aged 18+ in 19 countries from February 11 to 24, 2021. The questionnaire was developed by Resolve to Save Lives, Ipsos and members of the PERC consortium. The polling program was approved by local review boards and all respondents gave explicit permission to participate in the research. Countries were selected for inclusion based on several factors including feasibility for interviewing and regional representation. A Computer-Assisted Telephone Interviewing (CATI) data collection methodology, rather than face-to- face, was utilized for a combination of speed of data collection and to remove health risks associated with personal contact between interviewers and respondents during the pandemic. Samples were therefore representative of all adults with access to a landline or cell phone in each Member State. Prior to fieldwork, the most recent national statistics from published national census data in each Member State was used to identify targets for the sample proportionally by region ('region', 'county', etc.), by urbanity (urban; rural) within region, and by gender into quotas. As expected, there is always some variation between the achieved sample profile and the target population. To address this, weighting was applied after fieldwork to further adjust the distribution by gender and urbanity to align the final data with the published national census data. The weighted national sample size in each of the surveyed Member States is 1,200 completed interviews.

- Regional comparisons were conducted as per the following categories: East Africa (Ethiopia, Kenya, Uganda, Sudan); West 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).
- Two-tailed t-tests to compare two categories, and chi-square tests to compare more than two categories were conducted to assess whether there were statistical differences. An asterisk (*) indicates statistical significance where $p < 0.05$.
- Income classifications were based on existing data on publicly available income distributions in each Member State. Respondents self-selected into one of the income classifications. For the purposes of analysis, three or four income bands were created depending on the sample distribution of self-reported income.

Sources for questionnaire design:

- Coronavirus Anxiety Project. https://sites.google.com/cnu.edu/coronavirusanxietyproject/home
- FinMark Trust. COVID-19 Tracking Survey. https://covid19tracker.africa/
- Innovations for Poverty Action's Research for Effective COVID-19 Responses (RECOVR) Surveys. https://www.poverty-action.org/recovr/recovr-survey
- WHO Europe. COVID-19 Survey Tool and Guidance. https://www.euro.who.int/__data/assets/pdf_file/0007/436705/COVID-19-survey-tool-and-guidance.pdf
- WHO. Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response. https://www.who.int/publications/i/item/risk-communication-and-community-engagement-(rcce)-action-plan-guidance

- European Union. Minorities and Discrimination Survey Questionnaire 2016. https://fra.europa.eu/sites/default/files/fra_uploads/eumidis-ii-survey-questionnaire_en.pdf
- Performance Monitoring for Action (PMA): https://www.pmadata.org

Media Monitoring and Analysis

Novetta Mission Analytics. *"PHSM Social Analytics"* 17 August 2020 – 26 February 2021.

Traditional news media analysis: Research was conducted using African media, as well as human-curated aggregation of open source content from a variety of key African sources. Article and quote-level metadata were added in the framework of Novetta Mission Analytics. Data was culled on the basis of relevance, resulting in a sample of 8,597 articles and 65,565 quotes from African media outlets from 17 August 2020 – 26 February 2021.

Twitter analysis: Research for this report was conducted using geo-located African Twitter sources. Quote-level metadata were added in the framework of Novetta Mission Analytics. Data was culled on the basis of relevance, resulting in a sample of 83,155 Africa-focused Tweets from 17 August 2020 – 26 February 2021.

Facebook analysis: Research for this report was conducted using geo-located African Facebook sources. Post and comment level metadata were added in the framework of Novetta Mission Analytics. Data was culled on the basis of relevance, resulting in a sample of 18,463 Africa-focused Facebook posts and comments from 17 August 2020 to February 26 2021.

Sentiment analysis of PHSM coverage: Analysis of PHSM coverage covers the period 17 August 2020 – 26 February 2021. Content is categorized according to the speaker's perception of PHSMs as positive, negative, or neutral. Coverage categorized as 'positive' may warn about the risk of COVID-19, encourage adherence to PHSMs, or express support for the government's efforts to limit transmission. 'Neutral' coverage is more factual reporting on COVID-19 and PHSMs (e.g., announcements about PHSMs). 'Negative' coverage typically discourages adherence, downplays COVID-19 risk, or is critical of government efforts (e.g., reports on government corruption or support for misinformation narratives).

Risk perception analysis: Analysis of risk and severity perceptions covers the period from 17 August 2020 – 26 February 2021. Content is coded through human enrichment (rather than using an algorithm) according to the speaker's perception of risk and severity of COVID-19 in the identified country, including both explicit and implicit perceptions of risk. Risk/severity can be coded as high, low, or N/A.

Burden analysis: Content related to economic burdens/livelihoods, basic needs (water, food, electricity, housing), and security are tagged as coverage of burdens, based on the speaker's perception of burden or an obstacle to the implementation of/adherence to PHSMs.

Note: Media monitoring and analysis captures the views and opinions expressed by a subset of the population that is actively engaged in public debates and discussion through online and social media. These qualitative data reflect public narratives in online media sources and among social media users. Quotes have been edited where necessary for clarity, with modified text in brackets. Content from social media sources in the public domain should be interpreted with caution given that views reflected might be extreme in nature and are not representative of the population of a given country or demographic.

Economic Impact and Relief Measures

Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures. Gentilini, U., Almenfi, M., Dale, P., Lopez, and Zafar, U. Living Paper, version 12 (10 July, 2020). https://openknowledge.worldbank.org/handle/10986/33635 Accessed: <Februrary 26, 2021>.

This "living paper" and accompanying Excel database provide a description of social assistance, social insurance and labor market measures used by governments worldwide to respond to the COVID-19 crisis. Data are preliminary, continuously updated and subject to change.

World Food Programme (WFP). HungerMap https://hungermap.wfp.org/ <Februrary 26, 2021>.

The World Food Programme (WFP) conducts continuous food security monitoring via computer assisted telephone interviewing (CATI) through call centers. Data are collected on a rolling basis and updated daily. The following countries are currently covered by surveys: Burkina Faso, Cameroon, Central African Republic, Chad, DRC, Malawi, Mali, Mozambique, Niger, Nigeria, Tanzania and Somalia. For countries where daily updated survey data is not available, the prevalence of people with poor or borderline food consumption score (FCS) is estimated with a predictive model. People with insufficient food consumption refer to those with poor or borderline food consumption, according to the Food Consumption Score (FCS). WFP uses the FCS as a proxy indicator for food security that measures the diversity of household diets, and how frequently food is consumed. The FCS is calculated using the frequency of consumption of eight food groups by a household during the seven days before the survey using standardized weights for each of the food groups reflecting its respective nutrient density, and then classifies households as having "poor," "borderline" or "acceptable" food consumption.

Security Incidents

Armed Conflict Location & Event Data Project (ACLED). "Coronavirus-Related Events in the ACLED Dataset" https://www.acleddata.com Accessed: <Februrary 26, 2021 >.

These data include all "directly related" events to coronavirus based on the item description provided in the 'notes' column of the full ACLED dataset as of August 2020. Any observations under the heading "Strategic interactions" that are official state policies are omitted, as they are covered elsewhere as PHSM implementations.

Resolve to Save Lives conducted independent analysis using the ACLED data. Each relevant observation is hand-coded into one of five major categories by motive and actor:

1. Crowd control/enforcement action: The enforcement of PHSMs by state actors (military, police, or specially-appointed coronavirus task forces), frequently resulting in the intentional or unintentional harm of civilians.
2. Anti-enforcement: protest action (violent or non-violent) by civilians against PHSMs or against violence committed by state actors in the course of enforcing PHSMs. These two categories frequently overlap.
3. Demand for state support/economic hardship: Demonstrations by any group demanding state action to address the burdens of PHSMs, or to raise awareness of economic hardships caused by PHSMs.
4. Health worker safety/compensation: Organized protests by health care workers (including doctors, nurses, and paramedics) demanding better working conditions. These demands may include more personal protective equipment, protection from violence, or better compensation.

Other, less numerous incidents are combined into the catch-all "Other." Observations are then coded into "violent" and "non-violent" based on ACLED's 'event_type' field supplemented with information from the 'notes' column. Incidents that originate with civilians (for instance, protests and extra-judicial enforcement of PHSMs) are classified as violent or non-violent based on the civilians involved, even if their actions provoked a forceful response from the state (i.e., from military or police actors). Actions originating with state actors are always classified as "crowd control/enforcement action" and can similarly be violent or non-violent, although in general, most incidents that recorded in the database are violent. An action is coded as "violent" if there was any mention of police use of force (beatings, tear gas, live ammunition, rubber bullets, etc.) outside of the dispersal or arrest of protestors without mentioned violence. Some incidents contain elements of both state and non-state action, for instance, a crowd control action to enforce a PHSM that directly and immediately caused an anti-enforcement protest. These are coded these according to the characteristics of whichever action was reported to happen first. This data was used until 1 August 2020, when ACLED when on a data pause for the month of August. All data that was collected during the month of August was based on ad-hoc media reports.