Sources Used in PERC Analysis

**Epidemiology**


Africa CDC provided epidemiological data on cases and deaths and testing data for the period 15 February 2020 to 19 August 2020. Data are updated twice a day (9am 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 national numbers and numbers published by Africa CDC. Cumulative incidence per capita is calculated by dividing the cumulative cases by the population, multiplied by 100,000. Case-fatality rate is calculated by dividing total deaths by total cases of that disease. The test per confirmed case ratio is the number of tests performed for every positive case (positive either by PCR or antigen test). Countries with a low number of tests per confirmed case (<10) may not be testing widely enough to find all cases. WHO recommends 10-30 tests per case as a benchmark of adequate testing. Due to mild and asymptomatic illness, insufficient testing capacity and limited health care access, reported cases and deaths do not represent actual cumulative COVID-19 incidence.

**Public Health and Social Measures**


The COVID-19 Government Measures Dataset compiles all 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 may have prevented ACAPS from identifying all available information. Some measures are 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.


OxCGRIT collects publicly available information on 17 indicators of government response. Data are collected from public sources by a team of over 100 Oxford University students and staff. Data gaps within the latest week are to be expected and retrospective changes may be made 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.

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Sources Used in PERC Analysis

Mobility


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 tracking their location history; data 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 mobility data available. The category for retail and recreation includes 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 conducted telephone interviews with 24,041 adults aged 18+ in 18 countries from 4-17 August. 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 interview feasibility and regional representation. Samples were drawn to be nationally representative of each Member State; weighting was applied by gender, urbanity and geographic region to align the final data with the population. The weighted national sample size in each of the surveyed Member States is 1,200 completed interviews.

Note that where referenced, income categories should be interpreted as indicative, as sample sizes vary and income reporting can be subject to bias.

Sources for questionnaire design:

• Coronavirus Anxiety Project. https://sites.google.com/cnu.edu/coronavirusanxietyproject/home


Media Monitoring and Analysis


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. Results were culled on the basis of relevance, resulting in a sample of 1,996 articles and 11,838 quotes from African media outlets from 1 May to 17 August 2020.
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. Results were culled on the basis of relevance, resulting in a sample of 6,849 Africa-focused Tweets from 1 May to 17 August 2020.

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. Results were culled on the basis of relevance, resulting in a sample of 8,048 Africa-focused Facebook posts and comments from 1 June to 17 August 2020.

Sentiment analysis of PHSM coverage: Analysis of PHSM coverage covers the period 1 May to 17 August. 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 3-17 August. 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 data are qualitative and are not intended to be representative of the views of the wider population.

Economic Impact and Relief Measures


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.


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


These data include all events “directly related” to COVID-19 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. Categories 1 and 2 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 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 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.