

# COVID-19 Scientific and Public Health Policy Update<sup>1</sup> – (17 November 2020)

*In addition to our Weekly Outbreak Brief on the spread of COVID-19 and the actions that Africa CDC is taking to help African Union Member States. Africa CDC shares a weekly brief detailing the latest developments in scientific knowledge and public health policy from around the world, as well as updates to the latest guidance from WHO and other public health agencies. Contents of this document are not intended to serve as recommendations from the Africa CDC; rather, it is a summary of the scientific information available in the public space to Member States. It is important to note that the outbreak is evolving rapidly and that the nature of this information will continue to change. We will provide regular updates to ensure Member States are informed of the most critical developments in these areas.*

## A. Executive summary

- A sero-prevalence study of anti-SARS-CoV-2 IgG among blood donors in Kenya in April-June 2020. Findings report crude seroprevalence as 5.6% (174/3,098). Population-weighted, test-performance-adjusted national seroprevalence was 4.3% and was highest in urban counties, Mombasa (8.0%), Nairobi (7.3%) and Kisumu (5.5%).
- A study highlights that many patients who recovered from COVID-19 may be still positive (albeit at lower levels) for SARS-CoV-2 RNA, but only a minority of the patients may carry a replicating SARS-CoV-2 in the respiratory tract. Results indicate that 18.2% of patients with COVID-19 became RT-PCR positive for SARS-CoV-2 RNA after clinical recovery and previous negative results.
- The US Food and Drug Administration issued an emergency use authorization (EUA) for the investigational monoclonal antibody therapy bamlanivimab for the treatment of mild-to-moderate COVID-19 in adult and pediatric patients.
- Aspen Pharmacare, announced a preliminary agreement with Johnson & Johnson, for the technical transfer and commercial manufacture of their COVID-19 vaccine candidate, Ad26.COVS, if it is approved in South Africa and internationally.
- Two mRNA-based vaccine candidates, Pfizer/BioNTech and Moderna, report a vaccine efficacy of more than 90%.

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<sup>1</sup> This update compiled for use by Africa CDC and African Union Member States and is developed in collaboration with the World Health Organization - Regional Office for Africa. **This is a preliminary summary of information and not considered policy, guidance, or final conclusions of the Africa CDC or the African Union.**

## B. New guidelines and resources

Since 03 November 2020,

- Africa CDC has published new guidance and resources on:
  - [Statement on COVID-19 and the training of healthcare professionals in Africa](#)
  - [IPC guidelines for ambulances transferring known or suspected COVID-19 cases](#)
  
- US CDC has published new guidance and resources on:
  - [Operational Considerations for Immunization Services During COVID-19 in Non-US Settings Focusing on Low-Middle Income Countries](#)
  - [Interim Additional Guidance for Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed COVID-19 in Outpatient Hemodialysis Facilities](#)
  - [Interim U.S. Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to COVID-19](#)
  - [Screening K-12 Students for Symptoms of COVID-19: Limitations and Considerations](#)
  - [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for COVID-19](#)
  - [Interim Operational Considerations for Public Health Management of Healthcare Workers Exposed to or with Suspected or Confirmed COVID-19: non-U.S. Healthcare Settings](#)
  - [Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 \(COVID-19\) Pandemic](#)
  - [Considerations for Optimizing the Supply of Powered Air-Purifying Respirators \(PAPRs\)](#)
  - [Interim Guidance for Homeless Service Providers to Plan and Respond to Coronavirus Disease 2019 \(COVID-19\)](#)
  - [Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease \(COVID-19\)](#)
  - [Collection and Submission of Postmortem Specimens from Deceased Persons with Known or Suspected COVID-19](#)
  
- WHO has published new guidance and resources on:
  - [Immunization as an essential health service: guiding principles for immunization activities during the COVID-19 pandemic and other times of severe disruption](#)
  - [Emergency Global Supply Chain System \(COVID-19\) catalogue](#)
  - [Readiness for influenza during the COVID-19 pandemic](#)

- [WHO-convened Global Study of the Origins of SARS-CoV-2](#)
  - [Considerations for implementing and adjusting public health and social measures in the context of COVID-19](#)
  - [Critical preparedness, readiness and response actions for COVID-19](#)
  - [Harmonized health service capacity assessments in the context of the COVID-19 pandemic](#)
- FDA has issued press releases on:
    - [FDA authorized 288 tests under Emergency Use Authorizations \(EUAs\); these include 223 molecular tests, 58 antibody tests and 7 antigen tests as of November 12, 2020. The FDA continues to monitor authorized tests and emerging scientific evidence and may revise or revoke an EUA, when appropriate, including when a test's benefits no longer outweigh its risks. The FDA provides continuous updates to make clear which tests have been issued EUAs by the agency, and which tests should not be used](#)
    - [Guidance to Enhance Diversity in Clinical Trials, Encourage Inclusivity in Medical Product Development](#)
    - [FDA issued an emergency use authorization \(EUA\) for the investigational monoclonal antibody therapy bamlanivimab for the treatment of mild-to-moderate COVID-19 in adult and pediatric patients. Bamlanivimab is authorized for patients with positive results of direct SARS-CoV-2 viral testing who are 12 years of age and older weighing at least 40 kilograms \(about 88 pounds\), and who are at high risk for progressing to severe COVID-19 and/or hospitalization. This includes those who are 65 years of age or older, or who have certain chronic medical conditions. While the safety and effectiveness of this investigational therapy continues to be evaluated, bamlanivimab was shown in clinical trials to reduce COVID-19-related hospitalization or emergency room visits in patients at high risk for disease progression within 28 days after treatment when compared to placebo. Bamlanivimab is not authorized for patients who are hospitalized due to COVID-19 or require oxygen therapy due to COVID-19.](#)
    - [FDA issued GenScript USA Inc. an EUA for its cPass SARS-CoV-2 Neutralization Antibody Detection Kit, which is the first serology test authorized to detect neutralizing antibodies from recent or prior COVID-19 infection. Neutralizing antibodies are antibodies that bind to a specific part of a pathogen and have been observed in a laboratory setting to decrease, in this case, SARS-CoV-2 viral infection of cells. However, the effect of neutralizing antibodies on SARS-CoV-2 in humans is still being researched.](#)
  - ECDC has issued new resource on:

- [Detection of new SARS-CoV-2 variants related to mink](#)
- [Heating, ventilation and air-conditioning systems in the context of COVID-19: first update](#)

The full list of latest guidance and resources from WHO and other public health institutions can be found in this [link](#).

## C. Scientific updates

### Basic Science

- This study investigates the effects of previous SARS-CoV infection on the ability to recognize and neutralize SARS-CoV-2 by analysing 20 convalescent serum samples collected from individuals infected with SARS-CoV during the 2003 SARS outbreak. [Findings suggest that all patient sera reacted strongly with the S1 subunit and receptor binding domain \(RBD\) of SARS-CoV; cross-reacted with the S ectodomain, S1, RBD, and S2 proteins of SARS-CoV-2; and neutralized both SARS-CoV and SARS-CoV-2 S protein-driven infections.](#)
- This study used x-ray crystallography and biochemical approaches to show that the S1 CendR motif directly bound NRP1. Blocking this interaction by RNA interference or selective inhibitors reduced SARS-CoV-2 entry and infectivity in cell culture. [NRP1 thus serves as a host factor for SARS-CoV-2 infection and may potentially provide a therapeutic target for COVID-19.](#) This study demonstrates that N439K S protein has enhanced binding affinity to the hACE2 receptor, and that N439K virus has similar clinical outcomes and in vitro replication fitness as compared to wild-type. [Researchers observed that the N439K mutation resulted in immune escape from a panel of neutralizing monoclonal antibodies, including one in clinical trials, as well as from polyclonal sera from a sizeable fraction of persons recovered from infection.](#) Immune evasion mutations that maintain virulence and fitness such as N439K can emerge within SARS-CoV-2 S. (*Not peer reviewed*)

### Epidemiology

- This sero-prevalence of anti-SARS-CoV-2 IgG among blood donors in Kenya in April-June 2020. [Findings report crude seroprevalence as 5.6% \(174/3098\). Population-weighted, test-performance-adjusted national seroprevalence was 4.3% and was highest in urban counties, Mombasa \(8.0%\), Nairobi \(7.3%\) and Kisumu \(5.5%\).](#)
- Findings from a prospective UK population-based cohort study of babies with confirmed SARS-CoV-2 infection in the first 28 days of life, [suggest neonatal SARS-CoV-2 infection is uncommon in babies admitted to hospital. Infection with neonatal admission following birth to a mother with perinatal SARS-CoV-2 infection was unlikely, and possible vertical transmission rare, supporting international guidance to avoid separation of mother and baby.](#)
- This study presents findings from molecular epidemiological study of the first twenty-one SARS-CoV-2 whole genomes sampled. [Findings demonstrate that early transmission in Kwazulu-Natal province in South Africa was associated with multiple international introductions and dominated by](#)

lineages B1 and B and provide evidence for locally acquired infections in a hospital in Durban within the first month of the epidemic.

- A case report of a 45-year-old man with a long-standing autoimmune disorder receiving powerful immuno suppressants, highlights the potential for persistent infection and accelerated viral evolution associated with an immunocompromised state. Phylogenetic analysis was consistent with persistent infection and accelerated viral evolution. This case highlights the potential for persistent infection and accelerated viral evolution associated with an immunocompromised state.
- A mutated variant of SARS-CoV-2, infecting humans has been identified in Denmark associated with farmed minks. The strain of mutated SARS-CoV-2, found in 12 humans in Denmark, appeared in laboratory tests to exhibit “decreased susceptibility” to antibodies from previously infected people, in a preliminary report by State Serum Institute. Further scientific and laboratory-based studies are required to verify preliminary findings reported and to understand any potential implications of this finding in terms of diagnostics, therapeutics and vaccines in development.
- This study investigated RT-PCR retested positive nasal/oropharyngeal swab (NOS) samples from recovered patients with COVID-19 with prior negative results for the presence of replicative SARS-CoV-2 RNA. Results indicate that 18.2% of patients with COVID-19 became RT-PCR positive for SARS-CoV-2 RNA after clinical recovery and previous negative results. This study highlights that many patients who recovered from COVID-19 may be still positive (albeit at lower levels) for SARS-CoV-2 RNA, but only a minority of the patients may carry a replicating SARS-CoV-2 in the respiratory tract. Further studies are needed to verify whether such patients can transmit the virus.

### Care and Treatment

- The US Food and Drug Administration issued an emergency use authorization (EUA) for the investigational monoclonal antibody therapy bamlanivimab for the treatment of mild-to-moderate COVID-19 in adult and pediatric patients. Bamlanivimab is authorized for patients with positive results of direct SARS-CoV-2 viral testing who are 12 years of age and older, and who are at high risk for progressing to severe COVID-19 and/or hospitalization.
- A pre-specified observational, population-based cohort study using national primary care data and linked death registrations in the OpenSAFELY platform, found no evidence of a difference in COVID-19 mortality among people who received hydroxychloroquine for treatment of rheumatological disease such as rheumatoid arthritis or systemic lupus erythematosus, before the COVID-19 outbreak in England.
- A randomised, double-blind, placebo-controlled, phase 2 pilot trial at nine UK sites, with adults admitted to hospital with COVID-19 symptoms were randomly assigned (1:1) to receive SNG001 (6 MIU) or placebo by inhalation via a mouthpiece daily for 14 days. Findings suggest patients who received inhaled nebulised interferon beta-1a SNG001 had greater odds of improvement and recovered more rapidly from SARS-CoV-2 infection than patients who received placebo, providing a strong rationale for further trials.

- A double-blind, randomized, fully remote clinical trial determined whether fluvoxamine, given during mild COVID-19 illness, prevents clinical deterioration and decreases the severity of disease. [Results indicate that patients treated with fluvoxamine, compared with placebo, had a lower likelihood of clinical deterioration over 15 days.](#) However, the study is limited by a small sample size and short follow-up duration, and determination of clinical efficacy would require larger randomized trials with more definitive outcome measures.
- This quasi experimental, interventional study with 100 moderate to severe COVID-19 patients, 35 patients received dexamethasone and 65 were kept in methylprednisolone receiving group. [Findings suggest that dexamethasone and methylprednisolone were equally effective in treating moderate to severe COVID-19 disease.](#)

### Non-pharmaceutical

- This retrospective cohort study involved all close contacts of confirmed COVID-19 cases in Singapore, identified between 23 January and 3 April 2020 reports that the secondary clinical attack rate was 5.9% for 1,779 household contacts, 1.3% for 2,231 work contacts, and 1.3% for 3,508 social contacts. [Findings suggest the need for targeted community measures such as physical distancing, minimising verbal interactions and testing of all household contacts, including asymptomatic individuals.](#)
- A simple epidemiological model using anonymized location data from mobile-phone apps mapped how people moved in and out of 57,000 neighbourhoods to points of interest (POIs), such as restaurants, churches, gyms, hotels, car dealers and sporting-goods stores for 2 months starting in March 2020. [The model predicts that a small minority of “superspreader” POIs account for a large majority of infections and that restricting maximum occupancy at each POI is more effective than uniformly reducing mobility.](#)

### Diagnostics

- This study compares the sensitivity of different respiratory specimens by retrospectively analyzed using 3,552 clinical samples from 410 confirmed COVID-19 patients in China. [Except for broncho alveolar lavage fluid \(BALF\), the sputum possessed the highest positive rate \(73.4%-87.5%\), followed by nasal swabs \(53.1%-85.3%\) during the first 14 days after illness onset \(d.a.o\).](#) Viral shedding profiles of the upper and lower respiratory tract were significantly different between severe and mild cases. Detection of viral RNAs in BALF improves diagnostic accuracy in severe cases.

### Infection Prevention and Control

- This study was done to determine whether the low-temperature-steam-2%-formaldehyde (LTSF) sterilisation process is effective, preserves the properties of filtering facepiece (FFP) respirators and allows safe reuse. [Findings suggest that one and two sterilisation cycles using LTSF do not alter the structure of most \(11/14\) respirators tested and did not degrade the](#)

[fit or filtration capacity of any of the analysed respirators.](#) The residual formaldehyde levels comply with the EN 14180 standard.

- This study conducted longitudinal swab sampling of 348 high-touch non-porous surfaces in a Massachusetts town during a COVID-19 outbreak from April to June 2020. [8.3 % surface samples were positive for SARS-CoV-2, findings suggest environmental surveillance of SARS-CoV-2 RNA on high-touch surfaces could be a useful tool to provide early warning of COVID-19 case trends.](#) (Not peer reviewed)

#### Economic studies

- This study compared different combinations of five public health interventions: health-care testing alone; contact tracing in households of cases; isolation centres, for cases not requiring hospital admission; mass symptom screening and molecular testing for symptomatic individuals by community health-care workers; and quarantine centres, for household contacts who test negative. [In South Africa, strategies involving household contact tracing, isolation, mass symptom screening, and quarantining household contacts who test negative would substantially reduce COVID-19 mortality and would be cost-effective.](#)

## D. Clinical Trials Updates

### Key updates:

#### Vaccine trials:

- On 2<sup>nd</sup> November 2020, [Aspen Pharmacare a pharmaceutical firm based in Durban, South Africa, announced](#) a preliminary agreement with Johnson & Johnson, for the technical transfer and commercial manufacture of their COVID-19 vaccine candidate, Ad26.COVID-S, if it is approved in South Africa and internationally. Aspen would ensure formulation, filling and secondary packaging of the vaccine. The Ad26.COVID-S vaccine candidate (also known as JNJ-78436735), is currently undergoing clinical trials internationally, including **South Africa**, as part of the ENSEMBLE phase III trial ([NCT04505722](#)), evaluating the safety and efficacy of a single dose regimen of the vaccine, as well as the ENSEMBLE 2 Phase III trial ([NCT04614948](#)), [launched on 15<sup>th</sup> November 2020](#), which will evaluate a two-dose vaccine regimen to prevent COVID-19 in up to 30,000 participants worldwide.
- On 2<sup>nd</sup> November 2020, the [Canadian biotech company Symvivo announced](#) it had launched in Australia the Phase I trial to evaluate the safety, tolerability and immunogenicity of its oral bacTRL-Spike vaccine candidate for the prevention of COVID-19 ([NCT04334980](#)). Unlike other vaccine candidates, the bacTRL-Spike could be taken orally, providing the potential for self-administration rather than requiring assistance from a trained medical professional.
- On 9<sup>th</sup> November 2020, [Pfizer and BioNTech announced](#) that interim efficacy analysis data from the phase III trial ([NCT04368728](#)) of their BNT162b2 mRNA COVID-19 vaccine candidate indicated that it was more than 90% effective in preventing COVID-19 in participants without evidence of prior SARS-CoV-2 infection. The Phase III trial which began in July, is taking place in more than 150 sites worldwide; including **South Africa**, and has enrolled 43,538 subjects of racially and ethnically diverse background thus far with 38,955 of them given a second dose of the vaccine. The interim analysis was performed after 94 confirmed cases of COVID-19 had accrued in trial. No serious safety concerns have been observed; and safety and additional efficacy data continue to be collected through the final analysis when a total of 164 confirmed Covid-19 cases have accrued. It is anticipated that submission for emergency use authorization

(EUA) to the U.S. Food and Drug Administration (FDA) will be submitted by the third week of November

- On 10<sup>th</sup> November 2020, the [government of Morocco announced the launch of a national COVID19 vaccination campaign](#) planned in the coming weeks, [reportedly using a COVID-19 vaccine developed by the Chinese pharmaceutical company Sinopharm](#) with a two-injection vaccination schedule. The campaign will first target frontline workers aged above 18 followed by people at risk, including people aged above 65 and those diagnosed with chronic diseases. On the 13<sup>th</sup> November, it was further specified that a [communication campaign will be organized](#) to inform the public opinion.
- On 11<sup>th</sup> November 2020, [the Gamaleya National Research Center for Epidemiology and Microbiology and the Russian Direct Investment Fund \(RDIF\) announced](#) that the interim analysis of the phase III trial of the Sputnik V recombinant adenoviral vector platform vaccine candidate against COVID-19, conducted after [only 20 confirmed cases of coronavirus had accrued](#) (split between vaccinated individuals and those who received the placebo), indicated an efficacy rate of 92% after the second dose. Further, no unexpected adverse events have yet been identified during the phase II trials, with more than 20,000 participants having received the first dose of the vaccine and over 16,000 both the first and the second dose. It has been indicated that observation of study participants will continue for six months after which the final report will be presented.
- On 16<sup>th</sup> November 2020; [Moderna biotechnology company announced](#) that according to the first interim analysis of the Phase III COVE trial of its mRNA-1273 vaccine candidate against COVID-19, performed after 95 participants with confirmed cases of COVID-19 had accrued (90 cases in the placebo group versus 5 cases in the mRNA vaccinated group), a vaccine efficacy of 94.5% has been demonstrated and no significant safety concerns have been reported. The COVE trial, ([NCT04470427](#)), conducted by National Institute of Allergy and Infectious Diseases (NIAID) and the Biomedical Advanced Research and Development Authority (BARDA), has enrolled more than 30,000 participants in the USA.

#### Therapeutics trials:

- On 6<sup>th</sup> and 13<sup>th</sup> November 2020, [Celltrion group, based in South Korea, announced](#) that the interim results of the Phase I trial ([NCT04525079](#)) of its monoclonal antibody CT-P59 in participants with mild symptoms of COVID-19 demonstrated a promising safety, tolerability, antiviral effect and efficacy profile, [resulting in 44% reduced mean clinical recovery time in patients who received the treatment compared to those who received the placebo](#). CT-P59 was found to neutralize the SARS-CoV-2 and variants such as the mutated G-variant strain (D614G). The Korean Ministry of Food and Drug Safety (MFDS) plans to conduct further global Phase II and III trials in 500 patients from 12 countries including Korea, and a Phase III post-exposure prophylaxis clinical trial of CT-P59 to evaluate the candidate as a protective treatment in individuals who have been in contact with confirmed SARS-CoV-2 infected patients.
- On 6<sup>th</sup> November 2020, [Humanigen, a US based biopharmaceutical company, announced](#) that interim results of the Phase III randomized, placebo-controlled, double-blinded trial of its investigational treatment lenzilumab, evaluated as a frontline option to prevent and treat cytokine-mediated immunopathology in patients hospitalized with COVID-19, appear to show the drug aided recovery from COVID-19, with 37% more recoveries seen in patients taking lenzilumab compared with standard of care.
- On 12<sup>th</sup> November, 2020, [Washington University School of Medicine announced](#) the results of the Phase II trial of Fluvoxamine, a repurposed anti-depressant drug that has been evaluated as a COVID-19 therapeutic in 152 outpatients, 18 years old and older, with mild symptoms of COVID-19 ([NCT04342663](#)). Results, which have been [published](#) in JAMA, indicate that compared to the placebo, fluvoxamine seemed to prevent clinical deterioration and make hospitalization and the need for supplemental oxygen less likely.

- On 12<sup>th</sup> November 2020, [AstraZeneca announced](#) that the CALAVI Phase II trials evaluating the efficacy and safety of *Calquence* (acalabrutinib) against best supportive care in patients hospitalized with respiratory symptoms of COVID-19 had not meet the primary efficacy endpoint. Acalabrutinib, a Bruton's tyrosine kinase inhibitor, used to treat mantle cell lymphoma (MCL) and chronic lymphocytic leukemia (CLL), was evaluated in CALAVI trials based on preclinical and [early clinical evidence](#) that it could decrease the hyper-inflammatory immune response and improve clinical outcomes in hospitalized COVID-19 patients. CALAVI trials were conducted in the United States ([NCT04380688](#)) and internationally ([NCT04346199](#)) including in **South Africa**.

#### Immunotherapy trials:

- On 6 November, Novartis [announced](#) that interim data analysis of the CAN-COVID Phase III trial of Ilaris (canakinumab), a monoclonal antibody that targets interleukin (IL)-1 $\beta$ , a cytokine which [has been observed](#) to be elevated in COVID-19 patients during cytokine release syndrome, indicated it had not met its primary endpoint a greater chance of patient survival without the need for invasive mechanical ventilation, or the secondary endpoint of reduced COVID-19 mortality.
- The Institute of Human Virology-Nigeria (IHVN) in Abuja, **Nigeria** has been listed as one of the upcoming site for the Inpatient Treatment With Anti-Coronavirus Immunoglobulin (ITAC) multi-centric phase III trial ([NCT04546581](#)) which compares hyperimmune intravenous immunoglobulin (hIVIG) with matched placebo, when added to standard of care (SOC), for preventing further disease progression and mortality related to COVID-19. SOC includes remdesivir unless contraindicated for an individual patient.

#### Other trials:

- Democratic Republic of Congo, Kenya and Zambia** have been listed as upcoming sites for the multi-centric Azithromycin-Prevention in Labor Use Study (A-PLUS) phase 3 clinical trial ([NCT0387149](#)) aiming to evaluate a single, prophylactic intrapartum oral dose of 2 g azithromycin versus placebo to reduce maternal and neonatal sepsis and mortality. The study, [supported by the National Institutes of Health \(NIH\) and the Bill & Melinda Gates Foundation](#), is conducted by researchers from the National Institute of Child Health and Human Development (NICHD). Azithromycin and other antibiotics are not effective against COVID-19. However, in response to the coronavirus pandemic, research sites will also collect data on COVID-19 signs/symptoms, diagnosis, and treatment in order to estimate the incidence of infection and evaluate the impact of the pandemic on the target population.

For further detailed information for each country, refer to the full table [here](#)

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Reporting period: 28 October - 10 November

## Biweekly Report

The Partnership for Evidence-Based Response to COVID-19 (PERC) [released a brief on 13 November](#) that delves deeper into findings from its 24,000-person survey conducted in 18 African Union (AU) Member States on disruptions to essential health services since the start of the pandemic. As governments across Africa start to reinstitute more restrictive public health and social measures (PHSMs) to respond to the continent’s second wave, ensuring continued access to health care services will be critical in preventing morbidity and mortality not only from the virus itself, but from other infectious diseases. Although some vaccination campaigns have resumed, the World Health Organization (WHO) estimates that millions of children have been left unvaccinated and are at increased risk for tuberculosis, measles and malaria, among other diseases.

### Disease Situation (28 October – 10 November)

- In Africa, new cases and deaths increased by 20% and 26%, respectively, between 28 October – 10 November compared to the previous two-week reporting period (14-27 October). **Morocco, South Africa, Tunisia, Kenya** and **Libya** accounted for more than three-fourths of new cases and deaths. The test per case ratio remains below the recommended range in 15 AU Member States (see table below).<sup>1</sup> Three-fourths of AU Member States are reporting community transmission.
- Morocco** (61,432 new cases) continues to be at the epicenter of Africa’s second wave, reporting nearly three-fold the number of cases South Africa (22,403 new cases) reported between 28 October – 10 November. **Kenya** [reported](#) its highest number of new daily COVID-19 cases, and a 50% increase in new deaths during this reporting period.
- Algeria, Benin, Ghana, Somalia** and **Sudan** saw new cases increase by more than 100% in this reporting period. **Sudan** [reported](#) a 665% increase in cases (574 new cases) and 279 new deaths in this reporting period, compared to only 77 new cases and 1 new death between 14-27 October. The test per case ratio remained below the recommended range in **Algeria, Sudan** and **Somalia**, at less than 7 tests per case, indicating many cases are likely going undetected.
- Uganda**, which saw an 84% increase in new cases, reported 39 tests per case, which is within the recommended range.<sup>1</sup> However, despite the recent rise in cases, the government [moved](#) to loosen restrictions on public gatherings in an effort to restore the economy.
- In **Kenya**, the media continued to [report](#) on rising cases among health care workers, with the increase attributed to a lack of personal protective equipment (PPE) available at hospitals. A large referral hospital in rural **Kenya** [closed](#) after 8 health care workers tested positive on 5 November.

Africa Total Reported Cases	New Cases (28 October – 10 November)	Total Reported Deaths	New deaths (28 October – 10 November)	AU Member states where test per case <10 <sup>2</sup>	Total reported cases among health care workers (HCW) <sup>3</sup>
1,907,066	166,752 <i>(20% increase since 14-27 October)</i>	46,048	4,078 <i>(26% increase since 14-27 October)</i>	Algeria, CAR, Congo, DRC, Egypt, Eswatini, Gambia, Libya, Madagascar, Sao Tome and Principe, Somalia, South Africa, Sudan, Tanzania and Tunisia	60,229 <i>(2% increase in total HCW cases since 27 October)</i>

<sup>2</sup> Countries with a low number of tests per case (<10) may not be testing widely enough to find all cases. Africa CDC recommends 10-30 tests per case, as a benchmark of adequate testing.

<sup>3</sup> Data compiled from WHO AFRO where available, as well as reports from Ministries of Health and other government-affiliated organizations. Reporting on health care worker cases is inconsistent across Africa, and the current numbers may be an underestimate.

For more information on the disease situation, PHSM implementation and adherence in Africa, as well as PERC Survey findings, please visit the PERC [dashboard](#) and [website](#).

## TOP 5 COUNTRY HIGHLIGHTS<sup>4</sup>

Countries with the largest increase in new cases when comparing 28 October – 10 November to 14-27 October	
Sudan	+665% (574 new cases reported)
Somalia	+368% (360 new cases reported)
Benin	+184% (224 new cases reported)
Algeria	+133% (7,027 new cases reported)
Ghana	+105% (1,753 new cases reported)

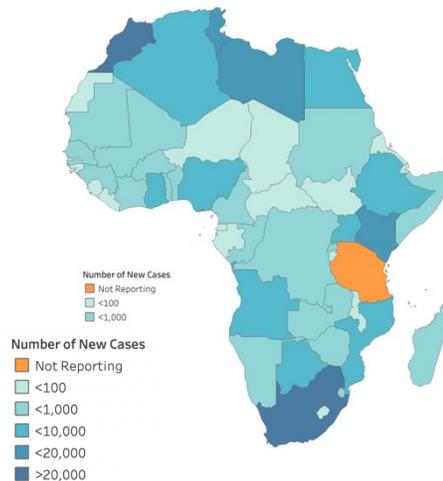


Figure 1. Increase in new cases between 28 October – 10 November. Data source: Africa Centres for Disease Control and Prevention

## PHSM Implementation

As cases continue to rise across regions, AU Member States have started to reinstate public health and social measures (PHSMs) or continue to extend existing measures. However, pressure to avoid complete economic shutdowns is high, especially as people continue to suffer from loss of income and increased food insecurity.

### PHSM HIGHLIGHTS

#### National lockdowns/curfews

##### Tightening

- On 4 November, **Kenya** [extended](#) its national curfew until 3 January 2021 and suspended all political rallies and gatherings for at least 2 months.
- All 24 provincial governors were [authorized](#) to implement curfews in **Tunisia**, and new national capacity limitations were announced for indoor venues.
- Morocco** [extended](#) its emergency decree until 10 December.
- Algeria** [extended](#) its curfew through 10 November in 20 provinces, and [recognized](#) on 3 November that its president tested positive for the virus.
- The state of health emergency was [extended](#) in the **Congo** until 27 November.

##### Loosening

- Uganda** [announced](#) loosened of PHSMs, including permitting up to 200 people to attend mass gatherings for prayers, political rallies, meetings and weddings. However, closure of bars will remain.

#### Mobility (air travel; public transportation)

- All travel, except for absolute and exceptional emergencies, is banned between provinces in **Tunisia**.
- On 5 November, **Rwanda** [announced](#) that it would partially reopen land borders with DRC's city of Goma to ease small cross border business. The border has been closed since March.
- Burundi** [reopened](#) its international airport on 8 November, requiring travelers to show a negative test for entry.

#### School reopenings/closures

- On 28 October, **Tunisia** announced new school closures.

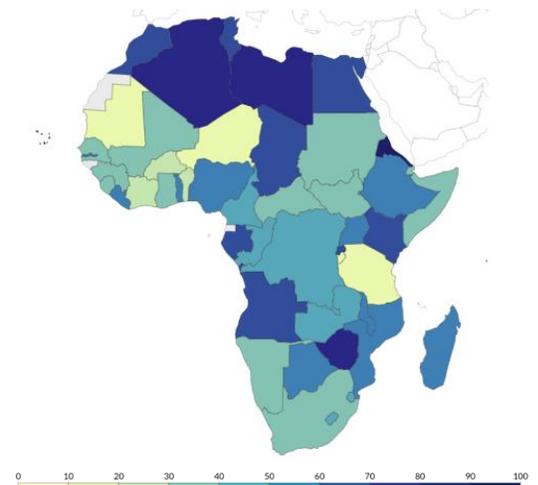


Figure 2. PHSM stringency index as of 5 November. Data Source: The Oxford Stringency Index is a composite measure based on nine indicators, which include school closures, workplace closures, and travel bans, which are rescaled to a value from 0 to 100 (100 = strictest). Countries that are not shaded are missing data.

<sup>4</sup> Countries with greatest % increase in new cases and with cases >200 (to rule out increase of smaller outbreaks)

## Secondary burdens of COVID-19 and PHSMs

### 1. Essential health services

- PERC released a new [brief](#) on how access to essential health services have been disrupted during the pandemic, building on its September 2020 “Responding to COVID-19 in Africa: Using Data to Find a Balance” [report](#). Key findings from the brief include:
  - More than half of respondents reported that mobility restrictions, coupled with health facility disruptions, contributed to their missing or delaying services. Safety concerns and affordability of care were also key barriers to access reported.
  - The proportion of respondents that reported missing health visits for potentially life-threatening conditions was concerningly high. People most at risk for missing health services included those that lived in cities and those that reported having longstanding illnesses or health problems.
  - Almost one-third of respondents report that COVID-19 is contributing to mental health issues, such as increased stress or anxiety. People with mental health issues were also more likely to report missing or delaying health services.
- WHO [reported](#) in a preliminary analysis that there has been a sharp decline in overall use of essential health services in 14 countries in Africa, with the most disruption occurring between May-July (when PHSMs were most strict). More than a million children have missed vaccinations protecting against TB (1.37 million) and measles (1.32 million).
  - In Nigeria alone, an estimated 367,000 pregnant women missed antenatal care and 97,000 gave birth away from health facilities since the start of the pandemic. In August, there were 310 maternal deaths reported at Nigerian health facilities, which is nearly double the amount recorded in August 2019.
- In a new [study](#), WHO and the U.S. Centers for Diseases Control and Prevention reported that, globally, there were 867,770 measles cases reported in 2019, which is the highest number reported in 23 years. Deaths related to measles climbed by nearly 50% between 2016-2019. The authors of the paper attribute the increase to vaccination failures and warn that vaccination disruptions due to COVID-19 could exacerbate the current crisis.
- An [assessment](#) conducted of 200 vaccination sites in Libya found that TB vaccines were out of stock in all sites, and only limited quantities were available of hexavalent vaccine, which protects against multiple infectious diseases. South Sudan [confirmed](#) an outbreak of measles in five regional states on 11 November. In Nigeria, an [outbreak](#) of Yellow Fever has claimed the lives of at least 50 people since September in Enugu and Delta states.

### 2. Economic and social burden

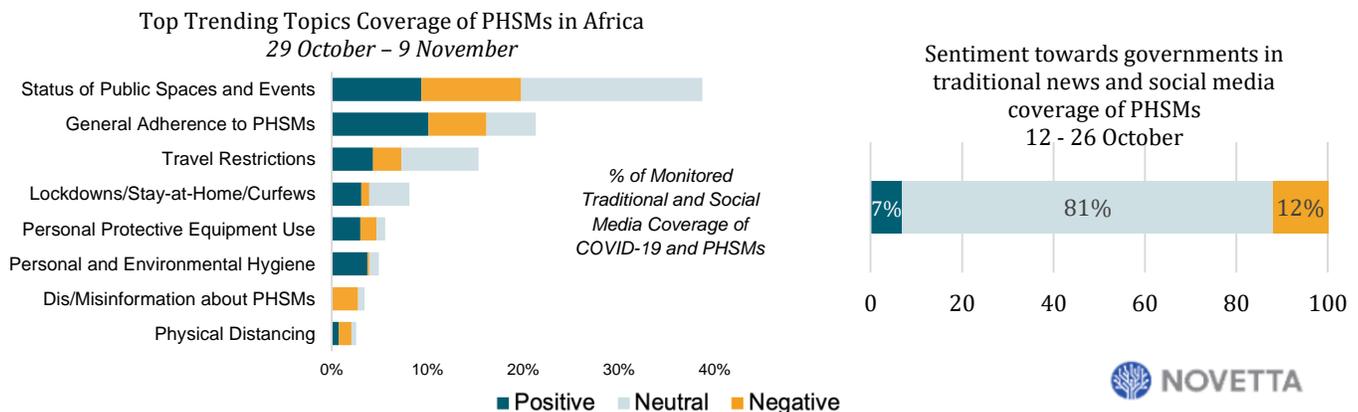
- In a 6 November [report](#), the United Nations warned that regions in Burkina Faso, West Africa’s Sahel region, northeastern Nigeria, and South Sudan were at heightened famine alert due to conflict compounded by economic decline, climate extremes and the pandemic.
- With the help of World Food Programme, the Kenyan government is [rolling out aid](#) to more than 400,000 urban poor households in Nairobi and Mombasa, many of whom work in the informal sector and have seen their incomes drop considerably since the start of the pandemic.
- On 29 October, the Nigerian president warned that the country could not afford to let cases increase again because its “economy is too fragile to bear another lockdown.” However, on 8 November, Nigeria [recorded](#) its highest daily tally of cases since August. [Reports](#) of people raiding warehouses for food aid continued.
- A 9 November [report](#) from the International Organization for Migration and the World Food Programme highlights that the world’s 164 million migrant workers, and the people that they support, are some of the worst hit by the

pandemic. The World Bank reports that the pandemic will cause a likely 14% drop in remittances to low- and middle-income countries by 2021.

## Public sentiment in news articles and on social media (Facebook and Twitter)

### 1. Sentiment towards PHSMs and government response

- The majority of posts on social media and citizen quotes in news articles continue to support PHSMs across Africa. However, country and regional differences in tone persist. Coverage expressing support for PHSMs accounted for 18% in Northern Africa, but less than 7% in other regions (notably, only 1% of coverage was positive towards PHSMs in Eastern Africa).
  - Messaging from government officials, including domestic health authorities, drove positive coverage of PHSMs in Northern Africa. Social media users amplified government messages on COVID-19 in tweets and Facebook posts. However, in Egypt, there were growing reports in news and on social media that people were not adhering to PHSMs.
- Following the announcement that the Algerian president was diagnosed with COVID-19, coverage of COVID-19 and PHSMs in Algeria nearly doubled between 29 October – 9 November, compared to the previous two weeks. Coverage was largely supportive of PHSMs in Algeria, with posts reflecting high-risk perception.
- While the Ugandan and Kenyan governments have cooperated to provide efficient and affordable tests to truck drivers at border crossings, social media users as well as truckers cited in traditional media, claimed that the prices remained high (\$50 USD). The article claims that the high price has forced some into buying counterfeit COVID-19 certificates in order to cross the border between the two countries for trade.



### 2. Coverage of adherence to and politicization of PHSMs

- In Africa – and globally – adherence to PHSMs has increasingly become politicized as cases continue to rise and elected government officials weigh reinstating PHSMs against the potential impact on their electability.
  - In Nigeria, following reports of people wearing politically-branded face masks, the government banned political face masks at all polling units for the gubernatorial elections that took place in September and October.
  - An October [article](#) from *Ghana News Agency* reported that only 4% of a sample of 50 market-goers in Accra wore masks, noting that some traders told reporters they did not believe that the virus existed.

Media have [reported](#) that the leading political parties in Ghana have used PHSMs as a political tool in different ways.

- In Uganda, there have been [reports](#) that the leading political parties have used PHSMs, and face masks in particular, for political gain. The report notes that residents in Kampala often own three masks, one for each political party, and alternate them depending on where they are going.

## Science update

- New research [published](#) on 7 November suggests that populations in Africa have likely been pre-exposed to coronaviruses prior to the COVID-19 pandemic, which may partially explain the lower incidence of COVID-19 cases and deaths across Africa, compared to other regions of the world.
- An [assessment](#) of government COVID-19 vaccine purchasing agreements shows that high-income countries have already purchased nearly 3.8 billion doses and will be able to vaccinate nearly their entire populations before billions are vaccinated in low-income countries. It concludes that some people in low-income countries may be waiting until 2024 for a vaccine at the current state.
- Oxford's COVID-19 vaccine [kicked-off clinical trials](#) with 40 frontline health care workers in Kilifi County, **Kenya**. Researchers noted that 360 volunteers will be added to the trial once the efficacy and safety is established.
- **Morocco** [announced](#) that it will receive upwards of 10 million doses of China's vaccine by mid-December and launch a national vaccination campaign, focused on health care workers and groups most at risk.

## Other key items

- A global [report](#) from Insecurity Insight published on 2 November found that COVID-19-related violence against health care workers (HCWs) spiked during the initial lockdown phase in March- May, but has since declined from June- August 2020. Violence against HCWs was often due to people fearing that they would spread COVID-19 and political opposition to state-imposed PHSMs. The report also noted that kidnappings of HCWs increased in **Nigeria** in August and conflict-related violence remains a major concern for HCWs in the DRC and **Libya**.
- **Egypt** [warned](#) citizens that a national lockdown may be in store if cases continue to rise and announced fines of up to \$250 USD for people found not wearing masks, urging people to adhere to PHSMs. And, a new law [announced](#) in **Ethiopia** could put people in jail for up to two years for refusing to wear a mask.