

COVID-19 Scientific and Public Health Policy Update – (02 June 2020)

In addition to our weekly brief on the spread of COVID-19 and the actions that Africa CDC is taking to help member states, Africa CDC has begun to share a weekly brief detailing the latest changes in scientific knowledge and public health policy changes, as well as updates to the latest guidance from WHO and others. Contents of this document are not intended to serve as recommendations from the Africa CDC; rather, it is a summary of the fact base to help inform 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 continue to provide regular updates to ensure member states are informed of the most critical developments in these areas.

A. Executive summary

- Two studies this week report on detection of SARS-CoV-2 RNA in sewage samples. The first reported detection in 50% of the sewage samples collected in Milan and Rome. One of the positive results was obtained in a Milan wastewater sample collected a few days after the first notified Italian COVID-19 case. A secondary study in New Haven reports that the primary sewage sludge assay's peak of SARS-CoV-2 detection preceded the peak of COVID-19 hospital admissions by three days and the peak of COVID-19 cases by a full week.
- A population-based, observational study in France reports a transient two-times increase in out-of-hospital cardiac arrest (OHCA) incidence, coupled with a reduction in survival, observed during the period of the pandemic.
- A double-blind, randomized, placebo-controlled trial of intravenous remdesivir in 1,063 adults hospitalized with COVID-19 with evidence of lower respiratory tract involvement, reports remdesivir shortened the time to recovery in adults by 4 days.
- A randomized controlled phase II trial of 43 hospitalized patients diagnosed with severe COVID-19 in Wuhan were treated with ruxolitinib suggest that ruxolitinib recipients had a numerically faster clinical improvement.
- The French government has revoked the decree authorizing the use of hydroxychloroquine to treat COVID-19.
- Africa CDC has published a number of guidelines, one providing guidelines on considerations for Member States when easing their lockdowns.
- As of 30 May, there are 41 registered clinical trials being conducted in Africa. To note, the Kenya Medical Research Institute (KEMRI), in Kilifi, Kenya has announced the phase I/II clinical trial to determine the safety, immunogenicity and efficacy of the candidate COVID-19 vaccine ChAdOx1 nCoV-19, developed by the University of Oxford, among 400 adults aged ≥18 years.

B. New guidelines and resources

- Since 23 May 2020, Africa CDC has published new guidance and resources on: [Health Advisory: Multisystem Inflammatory Syndrome in children and adolescents temporally related to COVID-19](#); [COVID-19 guidance for educational settings](#); [Guidance on easing lockdown](#); [COVID-19 guidance for the transportation sector](#); [Guidance for the continuation of essential health services during COVID-19 pandemic](#); [Guidance for mental health and psychosocial support for COVID-19](#); [COVID-19 Guidance on use of personal protective equipment for different clinical settings and activities](#); [Position Statement on the use of disinfection tunnels or disinfectant spraying of humans](#)
- WHO has published new and updated guidance and resources on: [Q&A: Hydroxychloroquine and COVID-19](#); [Controlling the spread of COVID-19 at ground crossings](#); [Surveillance protocol for SARS-CoV-2 infection among health workers](#); [Ethical considerations to guide the use of digital proximity tracking technologies for COVID-19 contact tracing](#); [Smoking and COVID-19](#); [Assessment of risk factors for coronavirus disease 2019 \(COVID-19\) in health workers: protocol for a case-control study](#); [Clinical management of COVID-19](#)
- US CDC has published new and updated guidance and resources on: [Guidance for Pharmacies](#), [Interim Guidelines for COVID-19 Antibody Testing](#); [Cleaning and Disinfection for Households](#); [Guidance for Direct Service Providers, Caregivers, Parents, and People with Developmental and Behavioral Disorders](#); [CDC Interim Guidance for General Population Disaster Shelters During the COVID-19 Pandemic](#); [Criteria for Return to Work for Healthcare Personnel with Suspected or Confirmed COVID-19 \(Interim Guidance\)](#); [Symptom-Based Strategy to Discontinue Isolation for Persons with COVID-19](#); [Households Living in Close Quarters: How to Protect Those That Are Most Vulnerable](#); [Test for Past Infection \(Antibody Test\)](#)
- ECDC has issued new resource on: [Considerations for travel-related measures to reduce spread of COVID-19 in the EU/EEA](#); [Projected baselines of COVID-19 in the EU/EEA and the UK for assessing the impact of de-escalation of measures](#); [Methodology for estimating point prevalence of SARS-CoV-2 infection by pooled RT-PCR testing](#)
- FDA has issued press releases on: [FDA Takes Steps to Streamline Development of Tests With At-Home Sample Collection](#); [FDA Provides New Tool to Aid Development and Evaluation of Diagnostic Tests That Detect SARS-CoV-2 Infection](#); [EUA Authorized Serology Test Performance](#)
- PHE has issued updated guidance and resources on: [Guidance for contacts of people with possible or confirmed coronavirus \(COVID-19\) infection who do not live with the person](#)

- 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 (virology, immunology, pathogenesis)

- This study provides insights into the animal models for SARS-CoV-2 and animal management for COVID-19 control findings suggest [SARS-CoV-2 replicates poorly in dogs, pigs, chickens, and ducks, but ferrets and cats are permissive to infection](#). Additionally, cats are susceptible to airborne transmission.
- In a cross-sectional study in airborne infection isolation rooms (AIIRs) in Singapore environmental sampling was conducted in three airborne infection isolation rooms (AIIRs) in the ICU and 27 AIIRs in the general ward. 56.7% of rooms had at least one environmental surface contaminated. [Air sampling was performed in three of the 27 AIIRs in the general ward, and detected SARS-CoV-2 PCR-positive particles of sizes >4 µm and 1–4 µm in two rooms](#), despite these rooms having 12 air changes per hour.

Epidemiology

- This study reports SARS-CoV-2 RNA detection in volumes of 250 ml of wastewaters collected in areas of high (Milan) and low (Rome) epidemic circulation in Italy. Overall, [50% of the sewage samples were positive](#). One of the positive results was obtained in a Milan wastewater sample collected a few days after the first notified Italian case of autochthonous SARS-CoV-2.
- A study monitoring the time course of SARS-CoV-2 RNA concentrations in New Haven's sewage system reports that the [primary sewage sludge assay's peak of SARS-CoV-2 detection preceded the peak of COVID-19 hospital admissions by three days and the peak of COVID-19 cases by a full week](#). Findings suggest that monitoring viral shedding in sewage can detect the early phases of SARS-CoV-2 spread in a community. *Non-peer-reviewed preprint*.
- Using the International Severe Acute Respiratory and emerging Infections Consortium (ISARIC) [World Health Organization \(WHO\) Clinical Characterisation Protocol](#), a prospective cohort study of 20,133 COVID-19 hospitalised patients in 208 acute care hospitals in England, Wales, and Scotland reports high mortality, independent risk factors were increasing age, male, and chronic comorbidity, including obesity.
- A prospective cohort study of 5,279 patients in New York City and Long Island reports that [age and comorbidities were found to be strong predictors of hospital admission](#) and to a lesser extent of critical illness and mortality in people with COVID-19; however, impairment of oxygen on admission and markers of inflammation were most strongly associated with critical illness and mortality.
- A population-based, observational study in France reports a [transient two-times increase in out-of-hospital cardiac arrest \(OHCA\) incidence, coupled with a reduction in survival](#), observed during the specified time period of the pandemic when compared with the

equivalent time period in previous years with no pandemic. Findings suggest this may be partly related to COVID-19 infections, indirect effects associated with lockdown and adjustment of health-care services to the pandemic are probable.

Diagnostics

- A retrospective case-control study of 989 patients who visited the Fever Clinic in Wuhan suggests that [combination of eosinopenia and elevated hs-CRP can effectively triage suspected COVID-19 patients from other patients attending the fever clinic with COVID-19-like initial symptoms](#). This finding would be particularly useful for designing triage strategies in an epidemic region having a large number of patients with COVID-19 and other respiratory diseases while limited medical resources for nucleic acid tests and radiographic examination.

Care and Treatment

- A double-blind, randomized, placebo-controlled trial of intravenous remdesivir in 1,063 adults hospitalized with COVID-19 with evidence of lower respiratory tract involvement, reports [remdesivir was superior to placebo in shortening the time to recovery in adults 11 days as compared with 15 days](#) in those who received placebo. No significant difference in overall survival was found.
- A randomized, open-label, phase III trial involving 397 hospitalized patients with severe COVID-19 not requiring mechanical ventilation. Findings suggest [there is no significant difference in efficacy between a 5-day course and a 10-day course of intravenous remdesivir treatment](#) in patients with severe COVID-19.
- A prospective, multicenter, randomized controlled phase II trial of 43 hospitalized patients diagnosed with severe COVID-19 in Wuhan were treated with ruxolitinib . Results suggest [ruxolitinib recipients had a numerically faster clinical improvement, significant chest CT improvement](#), a faster recovery from lymphopenia and favorable side-effect profile in ruxolitinib group were encouraging and informative to future trials to test.
- [Taiwan's government has approved Gilead Sciences' remdesivir](#), to treat patients with COVID-19.
- The Minister of Solidarity and Health of France and the High Council for Public Health have revised the recommendation relating to the hospital override prescription of hydroxychloroquine in hospitals. Consequently, the Minister of Solidarity and Health signed a decree modifying the derogatory conditions of prescription of [hydroxychloroquine: whether in town or in hospital, this molecule should not be prescribed for COVID-19 patients](#).

Others

- A rapid review of guidelines published early in the COVID- 19 pandemic evaluated the quality of the COVID-19 guidelines and compared with recent clinical guidelines for MERS and SARS. Findings suggest [guidelines available early in the COVID-19](#)

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[pandemic had methodological weaknesses and neglected vulnerable groups such as older people.](#) A framework for development of clinical guidelines during public health emergencies is needed to ensure rigorous methods and the inclusion of vulnerable populations.

- A survey conducted interviewing 101 clinical staff and 13 administrators across 13 hospitals in Malawi highlights the crucial gaps in resources needed to treat patients with SARS-CoV-2 infection in Malawi. [Oxygen was reported as adequately available in 38% of outpatient or emergency departments, 77% of general medical wards, and 88% of ICU or high-dependency units.](#) Isolation rooms were available in 54% medical wards but 8% outpatient or emergency department, and none of the ICUs or high-dependency units. Findings report adequate availability of gloves but not eye protection or N95 masks. This analysis shows crucial gaps in resources needed to treat patients with SARS-CoV-2 infection in Malawi.

E. Summary of travel restrictions implemented by Member States

Contents of this section include only publicly announced public health policies. Sources of this section include official government communique, embassy alerts and press search.



- 1 Some countries still allow cargo, freight and emergency transport into and out of the country; Some MSs will still allow citizens and residents to enter but all borders are essentially closed
- 2 Banning entry or exit of citizens or suspending visa issuance to specific countries

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

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F. Summary of physical distancing measures implemented by Member States

Contents of this section include only publicly announced public health policies. Sources of this section include official government communique and press search. (as of 30 May 2020)



Movement restriction



of Member States that ■ Have implemented ■ Have not implemented

*Source of information based on official reports, embassy alerts and press scanning

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

G. Clinical Trials for COVID-19

As of 29th May 2020, there were 41 clinical trials registered in Africa.

Key updates:

- On 18th May 2020, the NIH led [Accelerating COVID-19 Therapeutic Interventions and Vaccines \(ACTIV\)](#) initiative was announced. ACTIV brings together biopharmaceutical companies, the Health and Human Services Office of the US Assistant Secretary for Preparedness and Response, US CDC, the U.S. Food and Drug Administration and the European Medicines Agency to streamline clinical trials, coordinating regulatory processes and leverage assets to rapidly respond to the COVID-19.
- On 25th May 2020 the Executive group of the WHO led SOLIDARITY trial [announced a temporary pause of the hydroxychloroquine \(HCQ\) arm](#) within the trial while the safety data is reviewed by the Data Safety Monitoring Board and to review a comprehensive analysis and critical appraisal of all evidence available globally.
- On 27th May 2020, [WHO vaccine candidates landscape](#) was updated: 10 candidates vaccines are at the clinical evaluation stage (phase I and II) and 115 candidates at the preclinical stage. In Africa, the Kenya Medical Research Institute (KEMRI), in Kilifi, Kenya has announced the [phase I/II clinical trial to determine the safety, immunogenicity and efficacy of the candidate COVID-19 vaccine ChAdOx1 nCoV-19](#), developed by the University of Oxford, among 400 adults aged ≥18 years.
- On 28th May 2020, WHO published the [Guidance for research ethics committees for rapid review of research during public health emergencies](#).
- On may 29th, WHO Director General and the President of Costa Rica announced the [Solidarity Call to Action To realize equitable global access to COVID-19 health technologies through pooling of knowledge, intellectual property and data](#). In Africa, Mozambique, South Africa and Zimbabwe indicated that they were joining this call to action.

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List of registered interventional clinical trials in Africa

Location	Title	Interventions	Sponsor/Collaborators	Phases	Enrolment target	Start date
Egypt	Efficacy of Faviprevir in COVID-19 Treatment	Drug: Favipiravir Drug: Placebos	Tanta University	II/III	40	17 April 2020
	Angiotensin Converting Enzyme Inhibitors in Treatment of Covid 19	Drug: ACEIs Drug: Conventional treatment	Tanta University	III	60	15 April 2020
	A Real-life Experience on Treatment of Patients With COVID 19	Drug: Chloroquine Drug: Favipiravir Drug: Nitazoxanide Drug: Ivermectin Drug: Niclosamide	Tanta University	II/III	100	15 April 2020
	The Efficacy of Ivermectin and Nitazoxanide in COVID-19 Treatment	Drug: Chloroquine Drug: Nitazoxanide Drug: Ivermectin	Tanta University	II/III	60	17 April 2020
	Efficacy of Natural Honey Treatment in Patients With Novel Coronavirus	Dietary Supplement: Natural Honey Other: Standard Care	Misr University for Science and Technology	III	1000	25 March 2020
	Administration of Chlorpromazine as a Treatment for COVID-19	Drug: Chlorpromazine Injection	Cairo University	I/II	60	01 May 2020
	PRA-001 Plasma Rich Antibodies From Recovered Patients From COVID19	Other: Antibody-Rich Plasma from COVID-19 recovered patients	Ain Shams University	NA	20	20 April 2020

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	FAV-001 Efficacy and Safety of Favipiravir in Management of COVID-19	Drug: favipiravir Drug: Standard of care therapy	Ain Shams University	III	100	20 April 2020
	Levamisole and Isoprinosine in Immune-prophylaxis of Egyptian Healthcare Workers Facing COVID-19	Drug: Levamisole Drug: Isoprinosine Drug: Levamisole and Isoprinosine	Ain Shams University	III	100	20 April 2020
	Application of BCG Vaccine for Immune-prophylaxis Among Egyptian Healthcare Workers During the Pandemic of COVID-19	Biological: intradermal injection of BCG Vaccine Other: placebo	Ain Shams University	III	900	20 April 2020
	Efficacy of Chloroquine in COVID-19 Treatment	Drug: Chloroquine	Tanta University	II/III	40	17 April 2020
	Isotretinoin Assessment the Activity Value of 13- Cis-Retinoic Acid(Isotretinoin) in the Treatment of COVID-19	Drug: Isotretinoin (13 cis retinoic acid) capsules+standard treatment Drug: Standard treatment	Kafrelsheikh University	III	45	01 April 2020
	MV-COVID19 Measles Vaccine in HCW	Drug: Measles-Mumps-Rubella Vaccine	Kasr El Aini Hospital	III	200	01 May 2020
	Management of Covid-19 Patients During Home Isolation	Device: Oxygen Therapy Procedure: Physical Therapy	Cairo University	NA	60	15 March 2020

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	COVID-19 Exchange Transfusion Versus Plasma From Convalescent Patients With Methylene Blue in Patients With COVID-19	Biological: exchange blood transfusion from normal donor Biological: plasma from convalescent patients with COVID-19 Drug: Methylene Blue 5 MG/ML	Ain Shams University	II	15	05 May 2020
	Inhalable Sodium Bicarbonate: A Possible Adjuvant Treatment of Patients With Novel COVID-19	Drug: Sodium Bicarbonate	Mansoura University	Early I	20	01 April 2020
	COVID-19 Unplanned Shifting to Online Distance Learning: Nursing Students' Perception and Achievement	Other: implementing Online Distance Learning	Kasr El Aini Hospital	NA	180	01 Feb 2020
	SnPPIX Efficacy of Sn-protoporphyrin IX (SnPPIX) and Sulfonatoporphyrin(TPPS) Against Covid-19	Drug: SnPP Protoporphyrin Drug: Sulfonatoporphyrin(TPPS)	Kafrelsheikh University	I	56	01 May 2020
	SCOPE Silymarin in COVID-19 Pneumonia	Drug: Silymarin Drug: Placebo	Cairo University	III	50	01 June 2020
	New Antiviral Drugs for Treatment of COVID-19	Drug: Nitazoxanide, Ribavirin and Ivermectin	Mansoura University	III	100	May 2020
	Ivermectin and Doxycycline in COVID-19 Treatment	Drug: Ivermectin Drug: Doxycycline Drug: Chloroquine	Tanta University	II/III	40	01 June 2020

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	Using PRP and Cord Blood in Treatment of Covid -19	Combination Product: stem cells	Aljazeera Hospital	NA	100	25 May 2020
	Folic acid: A new suggested prevention and treatment of COVID-19 infection	Drug: folic acid Other: standard care	Faculty of Medicine Cairo university	II	60	20 April 2020
Ghana	PROTECT Sur Preventing Pulmonary Complications in Surgical Patients at Risk of COVID-19	Drug: Hydroxychloroquine Drug: Lopinavir/Ritonavir Drug: Hydroxychloroquine + Lopinavir/Ritonavir Drug: standard of care	National Institute of Health Research, UK University for Development Studies School of Medicine and Health Sciences Tamale Teaching Hospital	III	6,400	25 April 2020
Kenya	A study to determine if a new COVID-19 vaccine safely generates protective immune responses in adults in Kenya	Single dose of ChAdOx1 nCoV-19 vaccine Vs Verorab (rabies vaccine)	University of Oxford	I/II	400	31 May 2020
	LACCTT Lagos COVID-19 Chloroquine Treatment Trial	Drug : Chloroquine phosphate Drug : Hydroxychloroquine sulphate	Lagos State Government Nigerian Institute of Medical Research	NA	600	17 April 2020
Nigeria	CRASH-19 Coronavirus Response - Active Support for Hospitalised Covid-19 Patients	Drug: Aspirin Drug: Losartan Drug: Simvastatin	London School of Hygiene and Tropical Medicine	III	10,000	01 April 2020
	IHP Detox tea trial Efficacy and safety of IHP Detox Tea for treatment of Corona virus disease 2019: a pilot placebo-controlled randomized trial	IHP Detox Tea (a special blend of Andrographis paniculata, Garcinia kola and Psidium guajava)	Neimeth International Pharmaceuticals Plc	NA	72	01 May 2020

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	IVERCOVID Does ivermectin cure and/or prevent COVID-19?	Drug: ivermectin 6 mg Drug: ivermectin 12 mg Drug: placebo	Lagos University Teaching Hospital	III	45	23 April 2020
Senegal	SEN-CoV-Fadj Efficacy and Safety Evaluation of Treatment Regimens in Adult COVID-19 Patients in Senegal	Drug: Hydroxychloroquine Drug: Hydroxychloroquine + Azithromycin	Institut Pasteur de Dakar Fann Hospital, Senegal Ministry of Health, Senegal Diamniadio Children Hospital, Senegal Dalal Jamm Hospital, Senegal Epicentre, Paris, France	III	258	01 June 2020
	ESHAZ Trial Hydroxychloroquine, Azithromycin and Zinc for the treatment of SARS-Cov2 infection in Senegal. COVID-19	Drug: Hydrochloroquine 600 mg plus Azythromycine Drug: Hydrochloroquine 400 mg plus Azythromycine Drug: Zinc	Faculty of Medicine University Cheikh Anta Diop of Dakar Senegal.	III	384	01 June 2020
South Sudan	GA&COVID19 Potential Role of Gum Arabic as Immunomodulatory Agent Among COVID 19 Patients	Dietary Supplement: Acacia Senegal Dietary Supplement: Pectin	Al-Neelain University University of Khartoum	II/III	110	01 June 2020
South Africa	CQOTE Chloroquine Outpatient Treatment Evaluation for HIV-Covid-19	Drug: Chloroquine or hydroxychloroquine	University of Cape Town	III	560	01 May 2020
	BCG Vaccination for Healthcare Workers in COVID-19 Pandemic	Biological: Bacille Calmette-Guerin (BCG) Other: Placebo Comparator	TASK Applied Science (University of Cape Town)	III	500	04 May 2020

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Tunisia	COVID_2Pro Assessment of the Efficacy and Safety of (HCQ) as a Prophylaxis for COVID19 for Health Professionals	Drug: Hydroxychloroquine (HCQ) Drug: Placebo oral tablet	Abderrahmane Mami Hospital Eshmoun Clinical Research Centre	III	530	15 April 2020
	COVID+PA Assessment of Efficacy and Safety of HCQ and Antibiotics Administrated to Patients COVID19(+)	Drug: Hydroxychloroquine Drug: Azithromycin	Abderrahmane Mami Hospital Eshmoun Clinical Research Centre	IV	400	15 April 2020
	TRONCHER Assessment of Efficacy and Safety of Tocilizumab Compared to DeferOXamine, Associated With Standards Treatments in COVID-19 (+) Patients Hospitalized In Intensive Care in Tunisia	Drug: Tocilizumab Injection Drug: Deferoxamine	Abderrahmane Mami Hospital Eshmoun Clinical Research Centre Datamatrix	III	260	04 May 2020
	COVID-Milit A Study of Hydroxychloroquine and Zinc in the Prevention of COVID-19 Infection in Military Healthcare Workers	Drug: Hydroxychloroquine Drug: Hydroxychloroquine (placebo) Drug: Zinc Drug: Zinc (Placebo)	Military Hospital of Tunis UR17DN02 : Autoimmune Diseases Research Unit Dacima Consulting	III	660	04 May 2020
	Hydroxychloroquine and Nitazoxanide Combination Therapy for COVID-19	Combination Product: Hydroxychloroquine plus Nitazoxanide Other: Standard care	Tanta University	II/III	100	May 2020
Kenya and South Africa	SOLIDARITY Public health emergency SOLIDARITY trial of treatments for COVID-19 infection in hospitalized patients	1. Local standard of care alone OR local standard of care plus one of 2. Remdesivir 3. Chloroquine or hydroxychloroquine 4. Lopinavir + ritonavir 5. Lopinavir + ritonavir plus interferon-beta	WHO	III	10,000	01 March 2020

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<p>Cameroon, Ghana, Uganda, South Africa, Zambia and Zimbabwe</p>	<p>CROWN CORONATION: Chloroquine Repurposing to healthWorkers for Novel CORONAVirus mitigaTION</p>	<p>Drug: Low-dose chloroquine/hydroxychloroquine Drug: Mid dose chloroquine or hydroxychloroquine Drug: High does chloroquine or hydroxychloroquine Drug: Placebo</p>	<p>Washington University School of Medicine Bill and Melinda Gates Foundation</p>	<p>III</p>	<p>55,000</p>	<p>01 April 2020</p>
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