

AFRICA CDC TODAY

Quarterly newsletter of the Africa Centres for Disease Control and Prevention

ISSUE 8 | June 2020

Optimizing contact tracing for COVID-19 in Africa



Healthcare workers deployed by Africa CDC are supporting contact tracing in Mali

Disease outbreaks occur frequently, and no two outbreaks are ever the same. There are always differences in magnitude and spread, and the ability to control and reduce fatality due to the outbreak will depend on the depth of scientific knowledge about the disease, availability of approved and well-known medical treatment, and the capacity of the healthcare system to put the disease under control.

Irrespective of the nature of an outbreak, testing and contact tracing are very critical to effectively break the transmission chain as quickly as possible. COVID-19 is a new disease with a different aetiology from previous types of coronavirus diseases already known to scientists. Given the scale of the COVID-19 pandemic, non-pharmaceutical actions appear to be the only practical and logical option in the absence of any known antiviral drug or vaccine.

"Since there is no vaccine or treatment for COVID-19, we have to use the standard age-old public health strategy. We must improve access to laboratory testing and the turnaround time for testing so we can quickly isolate positive cases and trace their contacts," says Dr John Nkengasong, Director of Africa CDC.

"Contact tracing aims to identify, list and closely monitor people who have been in contact with an infected person, even if they do not show symptoms. It helps the traced persons to receive care and treatment early if they test positive, and helps prevent further transmission of the virus," says Dr Moeketsi Modisenyane, Contact Tracing Workstream Lead, National Department of Health, South Africa.

Contact tracing is tedious and requires a lot of human, financial and material resources. For COVID-19, contact tracing has been a big challenge for many African countries because of the limited resources and because of the mode of transmission of the disease.

"With COVID-19, contacts are very hard to identify because transmission is primarily through respiratory droplets.

1 OPTIMIZING CONTACT TRACING FOR COVID-19 IN AFRICA

3 COVID-19 LABORATORY TESTING AND CONTACT TRACING: LESSONS FROM SOUTH AFRICA

8 HOW MOROCCO'S PREPAREDNESS AND RESPONSE PLANS HAVE HELPED MINIMIZE COVID-19 FATALITY

9 TWO EBOLA OUTBREAKS AND COVID-19: LESSONS FROM THE DEMOCRATIC REPUBLIC OF CONGO

11 HOW GABON IS RESPONDING TO THE COVID-19 PANDEMIC

So, you can get infected by SARS-CoV-2 on the bus, in a conference room, or in a classroom and you would not be able to know who in the classroom has been carrying the virus," says Prof. Jean-Jacques Muyembe-Tamfum, Director-General, National Institute for Biomedical Research, Democratic Republic of the Congo (DRC).

Some African Union Member States are drawing on their experience in dealing with disease outbreaks such as Ebola, listeriosis, cholera, rubella, yellow fever, and Lassa fever, but COVID-19 still requires some new out-of-the-box methods that will uniquely address key challenges in contact tracing at the community level. Some of the Member States have been using mobile phone location data to support their COVID-19 response, leveraging on existing mobile technology and infrastructure to optimize contact tracing and surveillance of known contacts of confirmed cases. However, this also requires money for data and requires caution to protect and safeguard individuals' data, prevent breach of data privacy rights as well as inappropriate use by law enforcement beyond the period of contact tracing and surveillance.

"The biggest difference between Ebola and COVID-19 is that COVID-19 starts in cities and spreads to provinces and rural areas while Ebola is the opposite, it starts in rural areas and then spreads to the cities. With social media, it is difficult to convince populations in the city because of the many contradictory messages that question the existence of COVID-19," says Prof. Muyembe-Tamfum.

Many other African countries are relying on data from testing and contact tracing to better understand the pandemic and refine their tracing strategy.

"Data from contact tracing has contributed to a better understanding of the epidemiology of COVID-19. It has provided valuable information on transmission and attack rates, and supporting identification of key settings where transmission is occurring. It is also facilitating a greater understanding of the effectiveness of different mitigation measures such as physical distancing," said Dr Moeketsi Modisenyane, Contact Tracing Workstream Lead, National Department of Health, South Africa.



Contact tracing by healthcare workers deployed by Africa CDC in Burkina Faso

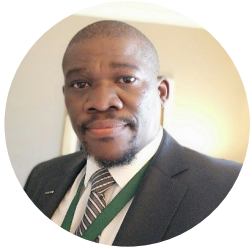
To strengthen contact tracing by African Union Member States, Africa CDC conducted some on-site training in February and March 2020, just before the lockdowns. Since the lockdown, Africa CDC has continued to provide training via virtual platforms and has been supporting in-country onsite training at the national and subnational level.

With community transmission of COVID-19 in most African countries, more community workers are needed to support contact tracing and other aspects of COVID-19 response. Contact tracing methods may differ from community to community but the principles remain the same: test suspected cases, isolate them, trace their contacts and test them, refer infected persons for treatment, and the cycle continues until the pandemic gets under control.

As Member States continue to find the best approach to contact tracing for COVID-19, Africa CDC, through the Partnership to Accelerate COVID-19 Testing (PACT): Test, Trace, Treat, is mobilizing resources and partnerships to support more training and deployment of community workers and community healthcare workers who will support contact tracing at the country level.

"We need to act fast in scaling up testing and contact tracing in Africa and that's why the Chairperson of the African Union Commission, H.E. Moussa Faki Mahamat, launched the PACT initiative and presented it to the Bureau of the African Union Heads of State for endorsement. If we don't want the virus to cede into vulnerable populations, we need to step up our testing and contact tracing strategy," says Dr John Nkengasong.

COVID-19 LABORATORY TESTING AND CONTACT TRACING: lessons from South Africa



Dr Moeketsi Modisenyane,
National Contact Tracing
Lead for COVID-19

South Africa is one of the African countries that have adopted large scale community testing to identify more cases of COVID-19. This testing is supported by large scale contact tracing. In this interview, Dr Moeketsi Modisenyane, Contact Tracing Workstream Lead, National Department of Health, South Africa, provides insight into the strategy South Africa is adopting to scale up contact tracing at the community level.

Question: South Africa is one of the African countries with a unique approach to laboratory testing for COVID-19, can you explain how you do this?

Answer: South Africa's National Health Laboratory Service (NHLS) has rapidly scaled-up its testing capacity. Testing is currently being conducted in 18 virology laboratories, equipped with more than four types of polymerase chain reaction (PCR) testing platforms. Diagnostic testing services in the country are provided by some public sector laboratories linked to the NHLS and private sector laboratories. The NHLS is the sole provider of diagnostic pathology services in the public sector and it serves 80% of the population through a network of over 230 laboratories across all the provinces of South Africa. Testing for SARS-CoV-2 in South Africa through the NHLS is done through a mix of traditional molecular tests and high-throughput platforms. A cumulative total of 634,996 tests have been conducted as of 26 May 2020 (Figure 1). Of these numbers, 155,018 (24%) were from community screening and testing (CST) and 479,978 (76%) from passive

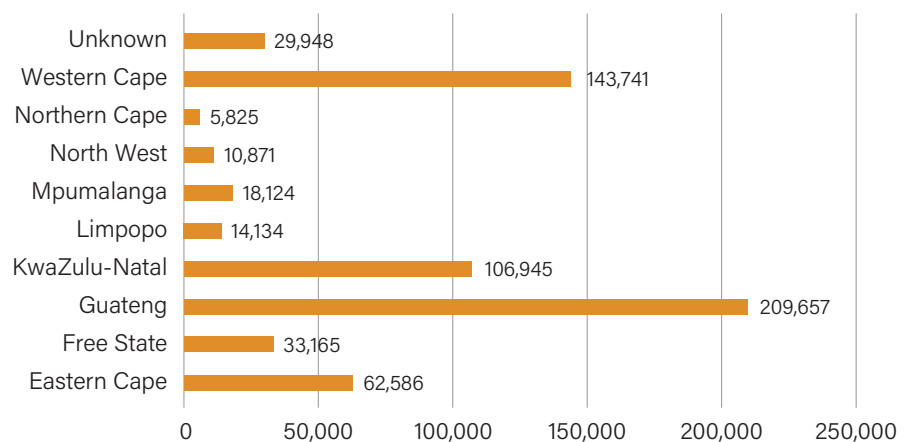
case finding. A total of 18,065 tests were conducted in public health institutions and 309,990 (49%) 325,006 (51%) in private health institutions.

However, due to the global supply-demand constraints, the NHLS has experienced challenges in the procurement of extraction and test kits for both traditional and high throughput platforms. Hence, South Africa has developed a revised guideline on targeted testing and contact tracing in COVID-19 hotspots across the country.

Question: We have also learnt that you use a special approach for contact tracing, what is this approach and how has it worked for the country?

Answer: South Africa has a policy of meticulous case and contact identification for COVID-19. The comprehensive strategy includes screening, testing, investigation and elicitation, tracing, quarantine or

Figure 1. Number of tests conducted by province in South Africa (public and private sector, 26 May 2020)



isolation, and follow-up, all aimed to reduce transmission and control the pandemic. South Africa's communicable disease control (CDC) system is highly decentralised with nine provincial CDC units (PCDC) and 52 district contact tracer teams taking responsibility for case and contact management, as well as the monitoring and evaluation of this work. PCDC units are staffed by public health nurses, medical officers and other personnel who are experienced in communicable diseases control. Their routine work includes contact tracing for illnesses and disease outbreaks. The type of information system used for outbreaks varies across different PCDCs and ranges from basic excel templates to purpose-built electronic clinical systems. The composition of the district contact tracer teams varies across all the 52 districts, but mainly includes a field epidemiologist, a registered nurse, a data recorder, a community healthcare worker, an environmental health practitioner, a health promoter, and a driver.

A hub, called the National Contact Tracing Workstream was established in the Department of Health of South Africa to coordinate the decentralized contact tracing system. In this new model, PCDC units continue to receive notifications of newly confirmed or suspected cases from laboratories and clinicians. Typically, the PCDC informs the case, arranges their home isolation and identifies close contacts. Close contacts who live with the index case are managed by both the PCDC units and the district contact tracing teams. If the PCDC unit is experiencing a heavy workload it may refer some of the cases to the national contact tracing team.

Initially, the list of close contacts is forwarded to the PCDC via entry into REDCap (an existing web-based database used by some PCDCs), secure file transfer, or by email. Some of the provinces have developed, piloted and implemented a contact tracing technology solution that helps store details of cases and contacts linked by exposure events, and supports contact management. It provides links to existing health information sources, primarily for sourcing contact details and the unique identifier. Training in the use of the new system was conducted by the provinces that use it.

Also, South Africa's National Institute for Communicable Diseases (NICD) established a national call centre staffed by a multidisciplinary team that was trained in the use of standardized scripts to guide their conversations. The call centre staff provide advice on self-isolation to close contacts and help them conduct a health and welfare check. Clinical supervision is provided onsite by experienced registered nurses who can also refer clinical questions to public health medicine physicians. Contacts that have more complex health questions are advised to contact their primary care provider for advice. Translation services are available at the call centres, and additional call centres have been established in all the nine provinces.

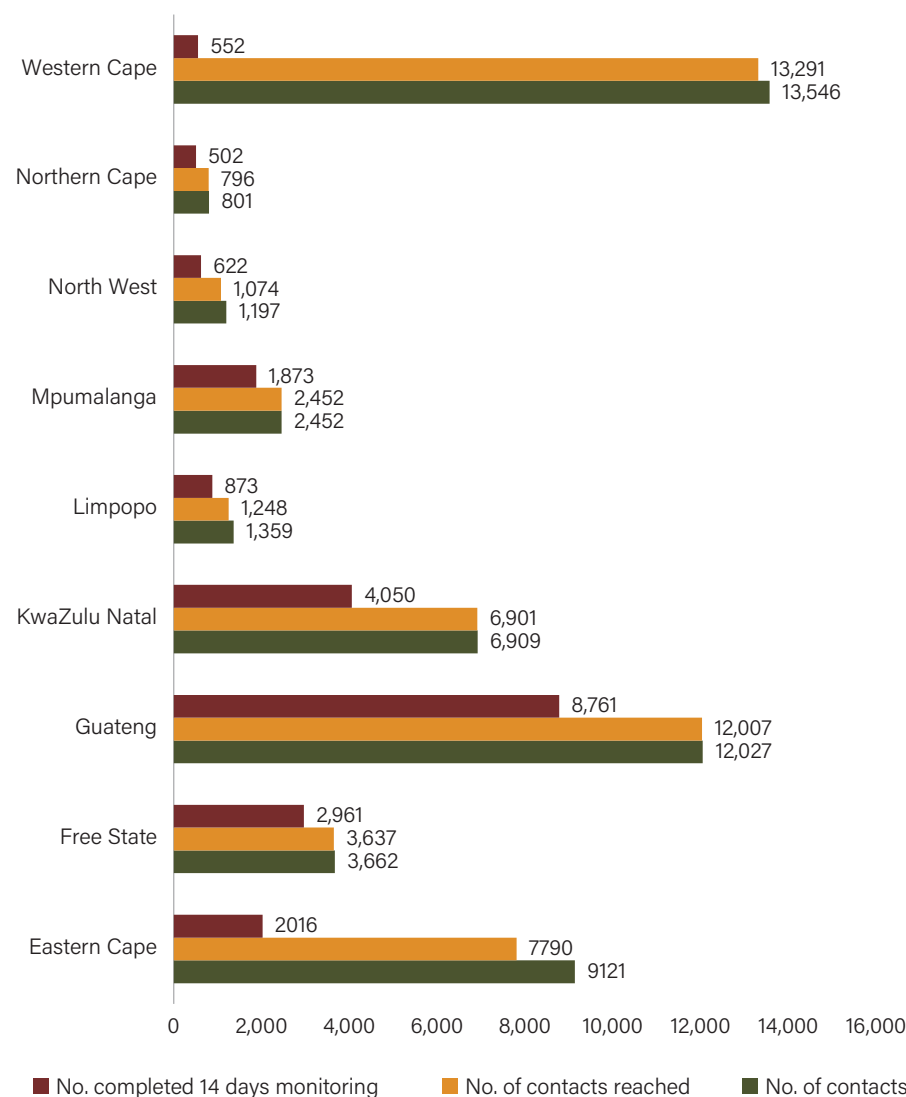
As of 23 May 2020, a total of 51,074 contacts have been identified in South Africa through contact tracing and

49,196 (96%) of them were monitored (Figure 2). Between 1% and 5% of the contacts were confirmed positive for COVID-19 through laboratory testing.

Why did you adopt these strategies, were they part of your preparedness plans for COVID-19?

South Africa worked hard to enhance its preparedness for COVID-19 with the available resources and capability. This included the establishment of a Multisector National Outbreak Response Team (MNORT), responsible for tracking and tracing the pandemic around the world, monitoring and analysing developments, advising relevant authorities on the response, and ensuring that the country was well

Figure 2. Status of contacts traced by province in South Africa, 23 May 2020





Sample collection from a contact for COVID-19 laboratory test

prepared. South Africa established a standard operating procedure for early detection, containment and management of the pandemic, including the capacitation of all ports of entry so they can screen incoming passengers, particularly from China and other affected countries. We prepared the tertiary institutions as referral centres for the isolation and management of COVID-19 patients and to take advantage of their research capabilities.

South Africa activated an Emergency Operation Centre (EOC) in the event of a WHO public health emergency announcement, including setting up a 24-hour clinician hotline and a working hours hotline for the public. The ministers of health, defence, home affairs, international relations and co-operation, justice, social development, and police formed an inter-ministerial committee to ensure coordinated collaboration across different departments and ensure that each department can respond directly to specific needs. All these were done as part of preparedness efforts. We also activated rapid response teams in all the 52 districts.

We prepared the health system and strengthened public health capacities to enable them to quickly shift from detecting suspected cases after symptom onset through to active case finding, self-reporting and entry screening. We attended to all suspected

cases and ensured that they received their test results within 24 hours of identification and sampling. We isolated all cases irrespective of the severity and origin, traced their close contacts and quarantined and monitored them for 14 days at specialized accommodation or self-quarantine facilities.

Experts are saying that COVID-19 would last longer than expected, do you think your current contact tracing strategy will still be helpful in the long-term or do you plan to change it?

The South African Government commissioned the development of an epidemic modelling to better understand the health and financial impact of COVID-19 in the country. The report shows that as cases increase, it would become increasingly challenging to trace all contacts and that other measures in addition to contract tracing would be required to control the pandemic. The point at which extensive contact tracing becomes unsustainable due to limited resources would vary for the different districts. We believe that there would still be value in tracing contacts even if we cannot trace all contacts. If we have large scale community transmission, we will prioritize the highest-risk exposure contacts for contact tracing and follow-up, which

are usually the easiest to find. These include healthcare workers or staff working with vulnerable populations, followed by as many as possible of the low-risk exposure contacts. South Africa is currently moving towards using well-trained junior or non-technical staff for some of its contact tracing instead of healthcare workers and public health specialists. This will help increase the current capacity.

Other measures being explored to help save resources include switching to self-monitoring for close contacts instead of daily calls, or the use of an app or other online tools for monitoring, such as the TelkomBCX solution. We are currently estimating the workforce and resources that would be needed for contact tracing, quarantine and monitoring in case of a larger-scale community transmission. Additional resources would be required for coordination and management of cases. South Africa has started investing more in testing highest-risk exposure contacts such as healthcare workers and their family members, children, and other high-risk groups. We are setting up hotlines to provide guidance and information to the public and expanding our surveillance systems.

Data from contact tracing has contributed to a better understanding of the epidemiology of COVID-19. It has provided valuable information about transmission and attack rates, thus



supporting the identification of key settings where transmission is occurring. It is facilitating a better understanding of the effectiveness of the public health measures, such as physical distancing. Different districts have adapted their public health response to match the local epidemiological situation and available resources. Active case finding, including contact tracing, is a priority even when lockdown restrictions are lifted, to reduce the risk of further disease escalation.

What aspects of your testing and contact tracing strategies would you recommend for other countries to adopt?

Countries should prepare their laboratory capacity to manage large-scale testing for COVID-19, either domestically or through arrangements with international reference laboratories. If they cannot test in local laboratories, they can send samples to regional or international reference laboratories with COVID-19 detection capacity. If large-scale community transmission occurs, testing strategies should shift towards monitoring high-risk individuals, and there should be surge plans to manage an increased number of cases.

I would recommend the following measures if the national laboratories are overwhelmed by increased testing demands:

- Prioritize testing for those with medical needs and for clinical diagnosis, such as suspected COVID-19 cases, and clinical diagnosis for patients with respiratory disease at healthcare facilities.
- Testing for high-risk individuals such as healthcare workers exposed to COVID-19 patients, contacts of confirmed cases exhibiting symptoms, asymptomatic direct and high-risk contacts of confirmed cases, in-patients, referrals from outpatient departments and primary healthcare facilities, and vulnerable groups in communities/clusters, including schools and workplaces.
- Targeted community screening and testing in outbreak hotspots such as screening for symptoms according to case definition, including vulnerable groups in communities (schools, workplaces, nursing homes, etc).
- Testing of critical frontline workers through daily screening for symptoms according to case definition for COVID-19, and testing suspected cases only.

Given the speed of COVID-19 transmission, the number of contacts

requiring follow-up can be expected to increase rapidly if sustained community transmission occurs. National, provincial and local authorities should use local data to guide their decision. The most appropriate strategy will depend on the phase of the epidemic.

The following strategies would be helpful:

- *Using non-public health staff and volunteers*, e.g. staff working in other areas of public service, or volunteers such as community healthcare workers, retired healthcare professionals, non-governmental organizations staff.
- *Re-purposing existing resources, for example*, using call centres or national hotlines that have been set up for other purposes.
- *Reducing the intensity of contacts follow-up*, for example, instead of an initial phone call, all or some contacts, including low-risk exposure contacts, can be notified by text message or pre-recorded voicemail, with full instructions on what to do and a phone number to call if they have questions.

We have realized in South Africa that to be effective testing, isolation, contact tracing and quarantine would require a shift from reliance on existing surveillance

networks to rapid, population-level active surveillance. In addition to active case finding in communities, healthcare facilities and points of entry, we encouraged the general population to practice self-surveillance. We encouraged individuals to self-report as a suspected case as soon as they have symptoms or signs and/or if they are a contact of a confirmed case. To achieve this, we understood that we needed to rapidly scale-up our workforce to find cases, including looking training and using non-public healthcare workers, and by using innovative technology such as phone applications for individuals to self-report.

How do you think COVID-19 will change contact tracing for disease outbreaks in Africa and globally?

We estimate that our public health workforce will need additional (paid or volunteer) contact tracers to assist with this large-scale effort. This workforce could be strategically deployed to areas of greatest need and managed through national and local public health agencies that are on the frontline of COVID-19 response. Emergency funding to local and provincial health departments will be needed. Here are six things needed to make contact tracing work in Africa and globally:

- *Hire sufficient army of contact tracers* – Once the countries begin to reopen, but before there is a vaccine or effective treatment, the primary way of preventing the spread of COVID-19 will be manual contact tracing. This is going to be a massive undertaking by all countries.
- *Protect privacy* – The use of technology like Bluetooth and GPS to automatically determine whether a person may have been exposed has been put in the spotlight as authorities around the world try to cope with the astonishing rate of COVID-19 infections. However, we should also ensure the privacy of patient information.
- *Ensure that contact tracing covers as many people as possible* – Countries building automated services are

keen to emphasize that they are not trying to replace manual tracing, they are trying to support it. They see digital tools as a complement and a way to scale-up human efforts. For example, smartphone alerts can help filter out those at low or no risk so that manual tracers can spend their time investigating genuine cases, people at higher risk, or those who are harder to contact. But even if a contact tracing app was downloaded by everyone who could legitimately use it, a major challenge is the fact that not everyone has a smartphone, especially in Africa.

- *Accept that technology alone cannot solve this problem* – A mix of high- and low-tech measures has been key. Many countries in Asia have leaned heavily on technology, but they also have thousands of human contact tracers making calls to patients and contacts, compiling data, and tracking others who are at risk. We must also mention the strict policies governing movement during lockdowns.
- *And do it all, now* – contact tracing is needed, it works, however, doing it effectively will not be easy. Contact tracing during disease outbreaks in Africa and globally needs to be strengthened if this outbreak spreads further. Even if automated services are implemented, thousands of healthcare and non-healthcare workers will be needed to conduct verified testing and follow-up.
- *Doing contact tracing effectively* to tackle large-scale disease outbreaks requires not just many people working manually or through automated efforts, but also a lot of resources and coordination. A test-trace-isolate programme requires knowing where the coverage gaps are, who is affected, what those people need, and what it takes to reach them.

What do you think is unique about the COVID-19 pandemic in South Africa and how is this of importance?

- A national effort to scale up and expand local, district and provincial

case investigation and management was necessary to ensure containment and mitigation strategies to reduce the spread of COVID-19. The Community Screening and Testing Program initiated on 7 April 2020 has *screened 10 million people (about 20% of the population) in six weeks.*

- The NHLS has rapidly scaled-up its testing capacity. Until date testing is being conducted in 18 virology laboratories, equipped with more than four types of PCR testing platforms. This is done in partnership with private sector laboratories.
- Together with Africa CDC, WHO and Roche Scientific, NICD hosted a training in February 2020 for representatives of 17 African Union Member States on laboratory diagnosis of SARS-CoV-2. The training had empowered participants to conduct diagnostic tests for SARSCoV-2 using molecular techniques.
- NICD is a WHO referral laboratory and has supported some African countries in conducting diagnostic tests and continues to provide guidance and support to healthcare professionals in South Africa and across the continent.
- Early implementation of non-medical containment and mitigation has alleviated the burden on health care systems in South Africa by 'buying time' for patients occupying hospital beds to recover, and by keeping the number of new patients to a manageable level.
- Since the beginning of the pandemic, South Africa has consistently reached more than 90 percent of contacts daily through its contact tracing system.
- Alternative methods have been piloted and are currently being used to increase the efficiency of contact tracing, such as using non-public-health staff and volunteers (such as community health workers), repurposing existing resources (such as the use of call centres or national hotline services that have already been set up for other purposes) and the use of technology to track and trace contacts.

HOW MOROCCO'S PREPAREDNESS and response plans have helped minimize COVID-19 fatality



Prof. Abderrahmane Maaroufi,
Director, Institut Pasteur, Morocco

Morocco's preparedness efforts began long before reporting its first case and these include strict surveillance measures that support early case detection, close monitoring of cases and tracing of contacts, and adoption of a standardized treatment protocol that allows control of the disease to significantly reduce case fatality.

Morocco continues to implement a screening strategy that helps detect asymptomatic cases, in addition to physical distancing, compulsory confinement and curfews. The progress chart shows key milestones in Morocco's response to COVID-19.

To gradually ease the lockdown and lift bans, Morocco is now implementing expanded laboratory testing to facilitate early detection of pre-symptomatic or asymptomatic cases. This is expected to prevent clusters emergence and reduce the likelihood of mass community transmission.

Morocco reported its first COVID-19 case on 3 March 2020 and since then the number of cases has been increasing. As of 30 June 2020, Morocco had reported 12,290 cases. Interestingly, however, Morocco is one of the African countries that have reported high recovery rates. A total of 8,833 of the 12,290 cases have recovered.





Active case finding by a contact tracing team in the Democratic Republic of Congo

TWO EBOLA OUTBREAKS AND COVID-19: lessons from the Democratic Republic of Congo



Prof. Jean-Jacques Muyembe-Tamfum

Fighting one disease outbreak is a big challenge to any country, but the Democratic Republic of Congo has had to respond to two Ebola outbreaks at the same time as the COVID-19 pandemic. Prof. Jean-Jacques Muyembe-Tamfum, Director-General, National Institute for Biomedical Research, Democratic Republic of the Congo, says contact tracing principles for both diseases are the same but there are differences in the approach.

The DRC has been responding to the Ebola virus disease (EVD) outbreak since August 2018 and there is now a new outbreak in Mbandaka, and the COVID-19 pandemic. How is the country managing these three outbreaks?

The DRC is very large and often faces various epidemics, but this year has been exceptional. We are facing the 11th Ebola virus disease outbreak while the 10th outbreak is not yet over. Now we are faced with the COVID-19 pandemic. All of these are weighing us down.

However, we can say that Ebola is no longer a very big public health challenge because we now have vaccines for it. We also have medicines to treat patients. So, we consider that the 11th EVD outbreak can be easily managed and controlled. We can deliver the diagnostics on site and that is what we are doing. We have people who have been trained to do this and the diagnostics (GeneXpert machines provided by Africa CDC) are available in the province where the 11th outbreak is occurring. This is a positive outcome of the training and health systems strengthening that the National Institute for Biomedical Research (INRB) and partners have undertaken in the past.

Please note that this interview was conducted before the 10th Ebola outbreak in the DRC was declared over.

How do you explain the resurgence of EVD in Mbandaka and what are you doing to contain it?

This resurgence is normal because our ecology is dominated by wildlife and wildlife is a major source of protein for the DRC population. Consuming wild animals is a major risk factor because people may get infected while handling them. This is why we will always have the resurgence of EVD in our country, especially in the forest regions of the Equator Province.

The chief medical officers of the health areas in the provinces have a very important role to play. We must continue to educate people, particularly the hunters, to increase awareness and get them to abstain from handling wild animals (monkeys, antelope and others) found dead in the forest. We know how the virus leaves its forest environment to settle in the human body. If each of us becomes aware of this, especially in rural areas, we would be able to prevent the transmission of the virus from forest animals to man.

Do you think your experience with Ebola has prepared you for a more effective response to COVID-19?

Yes and No. Yes, because we already have a lot of experience in EVD outbreak management. The strategies we used to fight EVD are similar to those we are using to respond to COVID-19 and we have almost the same governance structure for both diseases. We have a coordinator, an incident manager, and monitoring and management commissions, etc. The structures are basically the same. For the population, the same hygiene practices adopted to prevent Ebola continue to be recommended for COVID-19.

However, the main challenge still lies in communicating with the population and getting them to join and take ownership of the response.

The biggest difference between the two diseases is that COVID-19 starts in cities and spreads to provinces and rural areas while Ebola is the opposite, it starts in rural areas and then spreads to the cities. The big problem in the city is that with social media, it is difficult to convince the population because of the many contradictory messages that question the existence of COVID-19 pandemic. That is why we have a lot to do to raise public awareness and get people to accept the existence of the disease. Another difference is that with Ebola, we see the corpses, we see what happens, whereas with COVID-19, mortality is relatively lower. When people don't witness a widespread phenomenon or deaths in their own environment, they tend to deny the existence of the disease and claim that it is invented. This is why we are finding it difficult to get our message across and get people to wear face masks, to practice physical distancing, and to wash their hands.

Also, prevention and management of both diseases are different. With Ebola, we know that the disease is spread by direct contact with body fluids and even mere contact with the patient's skin. So, if you avoid any contact, there is no transmission. And as I told you, there is a treatment and we have seen how it worked in Eastern DRC.

With COVID-19, transmission is very easy and that is really a big problem. The serious cases we see are mostly respiratory and our hospitals have not been equipped or prepared for this kind of infection. At the beginning we had only 5D10 respirators and you cannot respond to this kind of epidemic with 10 respirators. That is a big problem we have been facing, but now our hospitals are becoming better equipped. The other problem is that we don't have a specific treatment for COVID-19. Every care and treatment methods we are using now are implemented just because they have been used in Europe and China. Nobody has proven the efficacy of combining chloroquine and Azithromycin. So the big problem lies in how to specifically treat this pneumonia that we are encountering in COVID-19 patients.

How is COVID-19 contact tracing different from contact tracing for EVD?

With Ebola, contacts are easier to trace and identify. For example, whoever attended a funeral, washed the corpse of an Ebola patient, etc. can be easily detected and tracked. With COVID-19 contacts are very hard to identify because transmission is primarily through respiratory droplets. So, you can get the disease on the bus, in a conference room, or in a classroom and you wouldn't be able to know who in the classroom has been carrying the virus. Many people, let us say 85 percent of those that are infected, do not show symptoms and these people spread the virus. This makes it much harder for us to claim that we can trace contacts. Well, maybe in a household we can say that contacts can be traced. But in the general population, it is very difficult. That is why confinement is very useful in COVID-19 prevention.

What do you do differently regarding contact tracing for COVID-19 and for EVD?

Not much. Our surveillance is based on alerts, i.e. communities, doctors, community relays, nurses, and even households. We receive calls to report cases showing symptoms that match COVID-19 case definition, i.e. fever, headache, cough, etc. These alerts are then confirmed by our teams who examine the patients, collect samples and test, and after that we get the results. This is followed by other actions.

Knowing that COVID-19 has lasted longer than we thought, how is DRC planning to fight it in the long-term?

I think COVID-19, our African COVID-19, is different from the one that is wreaking havoc in Europe. First of all, the virus entered DRC two months after the first cases were reported in China, we need to develop strategies that are specific to our environment, rather than replicating strategies being implemented in Europe, the United States, and other continents.

It is true that we are still finding our way around it, but at some point, we will control the situation. The only handicap at the moment is the lack of support from the populations and their non-compliance with public health measures recommended by local authorities. I think this is our weakness, and I am certain that in the days to come we will celebrate our victory over COVID-19.

What are your recommendations to other African countries based on the DRC experience?

We have always said that experience and knowledge should be shared. We have gained some experience, and if Africa CDC requests us to support any country with an outbreak, the DRC has sufficient resources to provide that support. We did it in 2014 during the Ebola outbreak in West Africa. I personally went to Côte d'Ivoire to share my experience with my colleagues there. I think this is the greatest support we can offer, sharing knowledge with our African colleagues.

To sum up, Africa CDC should continue its efforts to improve the health of African people and our scientists should support Africa CDC in helping Africa find its way out of the darkness and become responsible for the health of its people. We have seen what Africa CDC did for the outbreak in North Kivu, South Kivu and Ituri and it can continue to support laboratory systems and access to diagnostics. It can train laboratory staff, field epidemiologists and continue to support all cadres of on-site teams. I think Africa CDC is a good example of an African institution that supports on-site efforts.



Demonstration of physical distancing and wearing of face mask by two young people in Gabon

HOW GABON IS RESPONDING TO the COVID-19 pandemic



Dr Annick Mondjo

Gabon is implementing a COVID-19 preparedness and response strategy that is similar to other African countries. As of 30 June 2020, Gabon had reported 5394 cases, 42 deaths and 2420 recoveries. Follow Dr Annick Mondjo, Director, Infectious Diseases Programme at the Ministry of Health, Gabon, as she shares lessons from implementing the country's COVID-19 response strategy.

How prepared was Gabon before reporting its first case of COVID-19?

Gabon reported its first COVID-19 case on 12 March 2020. At that time, our country already had a budgeted response plan and the Ministers of Health of the Central African Economic and Monetary Community (CEMAC), of which Gabon is a Member State, had approved a sub-regional prevention and preparedness plan for the pandemic.

Gabon set up a steering committee, coordinated by the Prime Minister and Head of Government. Following instructions by the President of the Republic and Head of State, H.E. Ali Bongo Ondimba, Gabon enhanced surveillance at points of entry, particularly at the Leon Mba International Airport. We assessed the capacity of health facilities in Libreville to treat COVID-19 patients and procured equipment, medicines and various other essential health products. We produced some information materials on the disease for the public and designated an emergency telephone line to answer and respond to enquiries by the public.

Our representatives attended three training workshops organized for healthcare workers in the continent by Africa CDC and other partners. These focused on SARS-COV-2 virologic diagnosis in Dakar, surveillance at points of entry and infection prevention and control in Abuja, and public health risk communication and community engagement in Tunis. The laboratory training helped build the capacity of the Centre International de Recherches Médicales de Franceville to locally test and confirm COVID-19 cases using PCR. At the national level, we organized cascade training for healthcare workers at the national and regional levels and provided equipment to response teams at the provincial level.

What challenges did you encounter in preparing for COVID-19 and how did you address them?

When preparing for COVID-19 response in Gabon, there was some uncertainty because it was a new disease and we could not predict everything. Even now, we still encounter challenges, some of them are being addressed as they arise and some need to be studied for longer-term solutions. However, COVID-19 is a new phenomenon that reveals the existence of many vacuums in our healthcare systems.

For instance, steps were taken early to reduce the risk of importing the virus into Gabon. As early as 7 February 2020, the Gabonese authorities banned the entry of all foreign national coming from China and Gabonese nationals and residents were allowed entry on a case-by-case basis, with a 14-day compulsory quarantine in a dedicated facility and a COVID-19 screening test. Although

some travellers used alternative routes because of these measures, the restrictions helped delay entry and spread of the disease in Gabon. Later, the risk of importing the virus shifted to travellers from Europe, and shortly after the first COVID-19 case was reported in a Gabonese young man who had lived in France, all borders were closed as a precaution.

We also realized soon that the response committee, composed of ministers of the various departments involved in COVID-19 response, could not rely solely on the technical commission or its national and provincial sub-commissions in monitoring scientific and research on the disease nationally and globally. To meet this need, the country established a scientific committee that brought together our top research fellows, public health physicians and social anthropologists to support the response. With this we now have access to more information and knowledge about the science of the disease.

How has Gabon adapted its testing and contact tracing strategy to the changing nature of the pandemic?

Currently, Gabon is still in the ascending phase of the epidemic, despite the ongoing partial confinement, including closure of schools and universities, bars, hotels and places of worship, and despite recommendations on the adoption of personal protective measures. COVID-19 diagnosis still relies on PCR testing to confirm SARS-COV-2 infection. Diagnostic capacity has gradually increased thanks to the Centre de Recherches Médicales de Lambaréné, the establishment of new laboratory units in four health facilities

in Libreville and, more recently, the opening at the Palais des Sports de Libreville of the high-tech laboratory. The laboratory has the capacity to test up to 10,000 samples per day, if necessary. To increase coverage for COVID-19 virologic diagnostic services, we can use the GeneXpert laboratory network of the National Tuberculosis Programme to provide more laboratory services in hard-to-reach regions.

Our contact tracing strategy has been the same since the beginning. Each new COVID-19 case is requested to provide a list of family, professional and/or other contacts and these individuals are investigated by the commission overseeing epidemiological surveillance. These contacts are tested and ideally receive daily follow-up.

What unique lessons can other countries learn from the response to COVID-19 by Gabon?

In these times of shutdown and confinement, new information technologies are essential for enhancing response. We use various social media platforms to disseminate the daily epidemiologic updates and share briefings. The response commission's website provides populations with information in multiple formats and it's updated by the Gabonese Studies and Space Observations Agency (AGEOS). In addition to the semi-real-time mapping of new COVID-19 cases, AGEOS also performs contact mapping with visual data that can be used for better monitoring and planning.



Africa Centres for Disease Control and Prevention (Africa CDC), African Union Commission
Roosevelt Street W21 K19, Addis Ababa, Ethiopia

+251 11 551 7700

africadc@africa-union.org

www.africadc.org

[africadc](https://www.facebook.com/africadc)

[@AfricaCDC](https://twitter.com/AfricaCDC)