

## Africa has Avoided the Worst of the Coronavirus, But Why?

*(Sources: An article by Denise Chow for NBC News and an article from Science Magazine)*

When the coronavirus first began spreading around the world, there was near-universal concern among experts that countries in Africa could be adversely affected, with high rates of transmission that could quickly overwhelm healthcare systems. But roughly nine months into the pandemic, which has sickened over 40 million people and caused more than 1.2 million deaths worldwide, Africa has weathered the pandemic significantly better. The reason for this has yet to be determined. And while countries such as Ethiopia, Algeria and Nigeria have experienced significant outbreaks, the majority of African countries have succeeded thus far in containing the virus's spread.

Although Africa reported its millionth official COVID-19 case last week, statistics show that on the African continent, there are fewer than one case for every thousand individuals and just 23,000 deaths overall. What is puzzling is that several antibody surveys suggest far more Africans have been infected with the coronavirus. No one can determine why this is the case. As efforts begin to prepare for a possible second wave, scientists are trying to learn what African countries did right during the first phase of the pandemic.

In one investigative study involving more than 3,000 Kenyan blood donors, it was estimated that one in 20 Kenyans between the ages of 15 and 64 (approximately 1.6 million people) have antibodies to SARS-CoV-2 which is an indicator of a past infection. That would put Kenya on par with Spain in mid-May when that country was descending from its coronavirus peak with 27,000 official coronavirus deaths. Kenya's official death toll stood at 100 when the study ended. Also, Kenya's hospitals are not reporting huge numbers of people with COVID-19 symptoms.

Scientists also surveyed approximately 10,000 people in two northeastern cities in Mozambique. What they discovered was that in 3%-10% of participants, antibodies were present, with the highest percentage of those with antibodies being market vendors and health workers. Yet when compared with positive COVID-19 test rates in Nampula (which has approximately 750,000 citizens) there were only 300 infections and 16 confirmed deaths at the time of the survey.

What explains the sizeable gap between the antibody data and official COVID-19 cases and death counts? One explanation may be that there is far less testing which would mean many more missed cases. Kenya tests about one in every 10,000 daily for active SARS-CoV-2 infections, one-tenth of testing rates in Spain or Canada. Nigeria, Africa's most populous nation, tests one out of every 50,000 people daily. Even many people who die from the virus may never have received a proper diagnosis. However, you would still expect an overall rise in mortality, but this has not been

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## In Brief...

- ◆ **Walgreens Boots Alliance** (WBA) announced its 4th quarter and full-year financial results near the top of its projections due in part largely to its U.S. Walgreens operations. Net earnings decreased 44.9% to US\$373 million year-over-year attributed to adverse impacts of the COVID-19 pandemic, lower U.S. pharmacy gross profit and year-on-year bonus challenges. Operating income for the full year decreased 26% to US\$650 million. Additionally, the company continues to work towards turning around its **Boots U.K.** operations while expanding omnichannel efforts in the U.S., as well as expanding in China.

- ◆ Pharmaceutical companies are building up stockpiles of medicines to supply Northern Ireland due to widespread industry uncertainty over whether medicines will be allowed to move smoothly across the Irish Sea after Brexit. With less than three months until the Brexit transition period ends, the companies say they "just do not know" whether medicines crossing the Irish Sea will have to undergo costly and time-consuming checks according to Chief Executive of **The Association of the British Pharmaceutical Industry**, *Richard Torbett*.

- ◆ The **U.S. Centers for Disease Control**, the **U.S. Department of Health and Human Services**, and the Trump Administration have tapped **CVS Health** and **Walgreens Boots Alliance** to administer COVID-19 vaccines to long term care facilities in the U.S. The two companies will work to provide the vaccines to both residents and staff. Long term care residents comprise a population that is particularly vulnerable to the COVID-19 virus.

- ◆ The COVID-19 vaccine candidate under development by **Pfizer** and **BioNTech** will likely not be submitted for an

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## AstraZeneca Joins IFPW

IFPW is pleased to announce that AstraZeneca has joined IFPW as a manufacturer member.

AstraZeneca is a global, science-led biopharmaceutical company that focuses on the discovery, development and commercialization of prescription medicines, primarily for the treatment of diseases in three therapy areas - Oncology, Cardiovascular, Renal & Metabolism and Respiratory & Immunology. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide. For more information, please visit [www.astrazeneca-us.com](http://www.astrazeneca-us.com) and follow them on Twitter [@AstraZenecaUS](https://twitter.com/AstraZenecaUS).

IFPW welcomes the AstraZeneca team, and looks forward to their insights and perspectives on the issues and challenges facing the pharmaceutical industry.

## Africa (cont.)...

the case in Kenya.

If tens of millions of Africans have already been infected, that raises the question of whether the continent should attempt “herd immunity” without a vaccine. The controversial idea of letting the virus run its course to allow the population to become immune, perhaps while shielding the most vulnerable, might be preferable over control measures that cripple economies and could cause more harm in the long run. It is something to consider, given the continent’s low death to infection ratio.

But others say attempting herd immunity could be dangerous to base COVID-19 policies on antibody surveys. It isn’t clear whether antibodies actually confer immunity, and if so, how long immunity lasts.

Another possible reason for Africa’s success in battling coronavirus is that African countries are just better equipped to deal with infectious disease outbreaks given experiences with Ebola, malaria, and other deadly diseases. Some populations in Africa could have “cross-reactive immunities” from having been exposed to other coronaviruses as well. A hypothesis that is being explored is that Africans have had more exposure to other coronaviruses that cause little more than colds in humans, which may provide some defense against COVID-19 and priming the immune system to fight new pathogens, including SARS-CoV-2.

It is likely also that demographics and lifestyle play a significant part in Africa’s success with the virus. Approximately 3% of Africa’s population is over the age of 65, a segment that is considered vulnerable. Research shows that younger population groups are far more successful at battling COVID-19 without becoming severely ill. It has also been determined that the virus does not survive well outdoors. Given the fact that Africans spend far more time outside, this could affect transmission rates.

One thing is certain and that is scientists will continue to look to the African continent for ways to successfully contain

## Drug Shortages Remain a Top Priority

(Source: An article by Doug Long, Vice President of Industry Relations for IQVIA)

Addressing medicine shortages is a top priority in 2020 for the WHO, the EMA and the OECD. IQVIA’s new White Paper shows 11 representative European countries’ shortage data suffers from over-reporting, under-reporting, and different definitions of a shortage. The number of ‘true shortages’ is likely lower than the reported shortages which ranged from 120 to over 2,000 products as most shortages are multisource products.

Key conclusions from the paper note that shortage definitions are ambiguous and inconsistent across countries, meaning that a shortage in one country is rarely equivalent to a shortage in another. Analysis of reported shortage data sourced from national medical agency databases in Q4 2019 (prior to COVID-19) showed that few shortages exist throughout Europe, suggesting that medicines in shortage in one country could be sourced from another.

Another analysis showed that the majority of shortages are multi-source products with alternative manufacturers, meaning that in theory, patient harm could be limited for the majority of reported shortages by product substitution. Since the majority of shortages are generic products, it is unsurprising that the companies with the highest numbers of reported shortages are large generic manufacturers with broad portfolios. However, the onus cannot be

placed on generic manufacturers, particularly given the issues with under-reporting in other segments and the poor-quality of reported data. Alignment of shortage definitions and reporting standards, and better visibility of inventory is the first step to a clearer picture of the shortage issue in Europe.

The full paper can be downloaded from: <https://www.iqvia.com/library/white-papers/reporting-of-medicine-shortages-in-europe>.

## In Brief (cont.)...

Emergency Use Authorization (EUA) prior to late November of 2020, according to a letter submitted by Pfizer CEO *Albert Bourla*. Two companies, **Regeneron** and **Eli Lilly**, have applied for an Emergency Use Authorization (EUA) for their respective antibody treatments. Regeneron’s monoclonal antibody therapy *REGN-CoV2* was used to treat President Trump for COVID-19 and is credited for his quick recovery. Eli Lilly’s single use antibody therapy *LY-COV555* has shown positive results in reducing hospitalization for the virus. The U.S. Food and Drug Administration has already given **Abbott Lab’s** lab-based serology test named *AdviseDx SARS-CoV-2 IgM*. This is the latest of seven Abbott tests that have received an EUA.

- ◆ Global pharmaceutical manufacturer **Johnson & Johnson** has halted trials on its COVID-19 vaccine due to an unexplained illness experienced by a trial participant. This is the second trial hold to emerge after **AstraZeneca’s** September hold for its COVID vaccine trial.

- ◆ Biosimilar spending in the U.S. is expected to increase from US\$5.2 billion in 2019 to US\$27 billion in 2024, driven by increased market penetration and new biosimilar entries, including *Humira*, according to an **IQVIA Institute for Human Data Science** report released October 6, 2020. “The key message is that it seems like we have reached an inflection point in the U.S. with respect to biosimilars,” said Murray Aitkin, the Institute’s executive director. “Until now, we have been discussing them as something with potential and there has also been a discussion about whether biosimilars are a failed concept, but I think what we are bringing forward now shows that we’ve reached an important turning point.”

- ◆ As an increasing number of biopharmaceutical companies go all-in on artificial intelligence, **Takeda** has now committed to equipping each of its scientists with cloud-based research tools by the end of this decade. The Japanese drugmaker is launching a five-year transformation initiative—with help from **Accenture** and **Amazon Web Services**—to establish an in-house digital engine for rethinking how the company does its day-to-day work. Takeda plans to eventually move 80% of its drug development applications to the cloud, reducing its reliance on internal data centers and other unlinked programs. In addition, it aims to hire hundreds into new roles specialized in digital fields.

- ◆ The United Kingdom, Canada, Germany, Italy and Sweden pledged approximately US\$960 million to **GAVI’s** COVID-19 Vaccines Advance Market Commitment (COVAX AMC) bringing total commitments to nearly US\$1.7 billion. The facility will ensure equitable access to COVID vaccines to low- and middle-income countries.

(Sources: *Business Insider, Company Press Releases, Drug Store News, FiercePharma, and Scrip Intelligence*)