



Keeping Africa abreast!

TRENDING TOPICS

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Cumulative Covid-19 cases Across 55 AU Member States Sept 13, 2020



Fig 1.

Confirmed cases 10 655,572

Cumulative Total Deaths from Covid-19 among 55 AU Member States

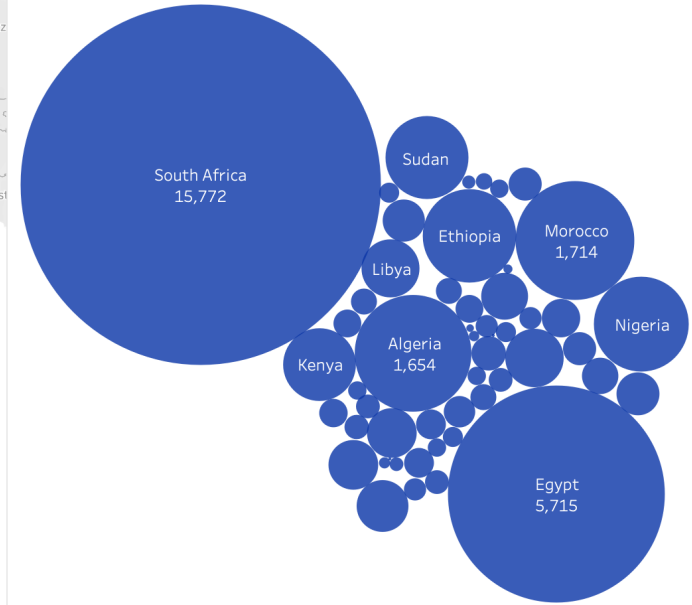
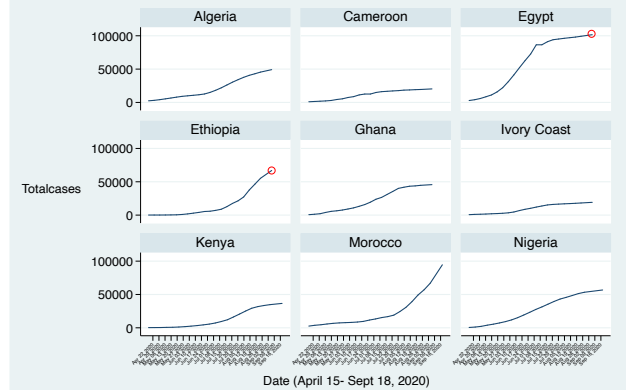


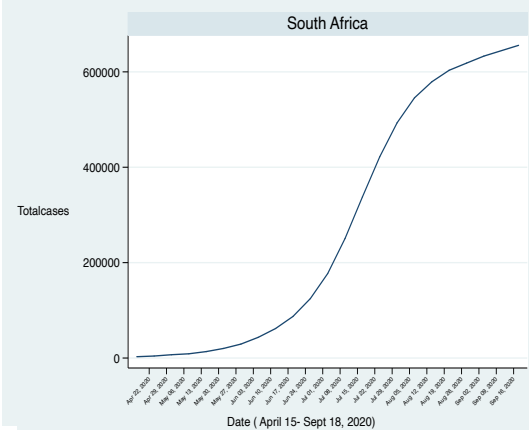
Fig 2.

Trend Analysis of Covid-19 Among AU Member States with Highest Number of Cases (April 15-Sept 18, 2020)

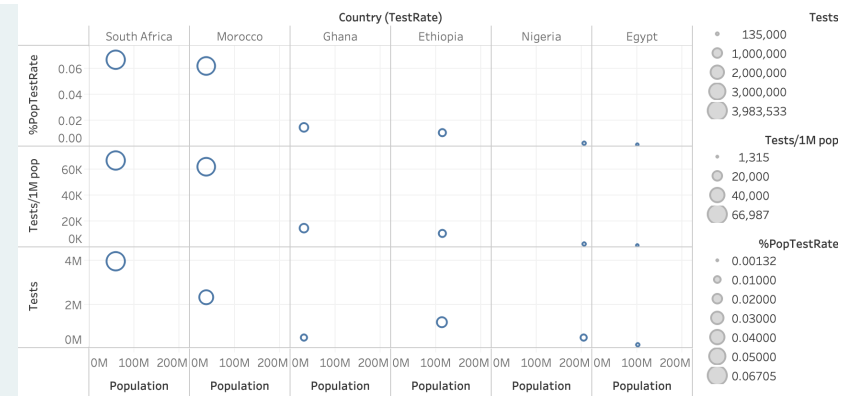


9 out of 10 countries

Fig 3.



Comparison of population, Number of Tests, Test rates and Test rates per 1 Million Population among Top 6 Populous AU countries, Sept 18, 2020



Sum of Population vs. sum of %PopTestRate, sum of Tests/1M pop and sum of Tests broken down by Country (TestRate). For pane Sum of %PopTestRate: Size shows sum of %PopTestRate. For pane Sum of Tests/1M pop: Size shows sum of Tests/1M pop. For pane Sum of Tests: Size shows sum of Tests.

Fig 4.

Fig 1: As of September 18- the novel coronavirus had infected more than 30 million and killed more than 950,000 people globally. In Africa, there are more than 1.3million confirmed cases and more than 33,000 deaths with highest in South Africa- 655,572 cases and 15, 772 deaths; both constituting more than 50% of cases and deaths within the Africa continent. Even though the virus is killing a small percentage of infected people (2.4%), it still adds up to a large number of deaths. The top ten countries impacted the most in terms of total cumulative cases in descending order are; South Africa, Egypt, Morocco, Nigeria, Ethiopia, Algeria, Ghana, Kenya, Cameroon and Côte d' Ivoire. Deaths were simultaneously higher among these countries but with Sudan making an entrance as seventh (7th) highest.

Fig 2: Among the 55 AU Member States, the top 8 countries with the highest number of deaths in descending order are South Africa, Egypt, Algeria, Morocco, Nigeria, Ethiopia, Sudan and Kenya.

Fig 3: This is a time series graph highlighting case trend in the top ten impacted member States in terms of weekly number of COVID-19 cases between April 15th and September 18th, 2020. Main spikes were observed for Morocco and Ethiopia where over a period of three weeks the total cumulative number of coronavirus cases doubled from an average of 24,000 to 48,000 cases in Morocco and from an average of 17,000 to more than 35,000 cases in Ethiopia

Fig 4: An analysis of the testing rates among 5 populous countries show disproportionate testing rates relative to country population with significantly higher rates in South Africa and Morocco (5-6%; 54000-63,000 tests/1 million population) compared to Egypt, Nigeria and Ethiopia, with 3 to 4 times the population in South Africa or Morocco, but less than 0.2% population test rate and a range of 1,300-8,400 tests per 1 million population. Notably, the number of tests conducted in Ethiopia between September 3 and 18, 2020 showed a 21% bump from 970,000 to 1, 176,252 tests over a two-week period.

© All graphs are originally generated using official data collated by Worldometer and analyzed by Health Maxima, LLC for AUDA-NEPAD

Accessing Diagnostic Kits

The US Food and Drug Administration on July 30 provided an emergency use authorization (EUA) for a saliva-based COVID-19 RT-PCR test that can be self-collected at home¹. The test is more sensitive and accurate than the standard anterior nasal swab test, according to the company that markets the test- Clinical Reference Laboratory. It announced that it will be increasing capacity for the test, aka CRL Rapid Response. Accessing these saliva-based home test kit would be beneficial to AU member States as it would allow them to rapidly expand coverage for testing and monitor more closely the pandemic.

Happily, AUDA-NEPAD continues to promote the African Medical Supplies Platform (AMSP) launched under the guidance of the Africa CDC and managed by the private sector as an emergency response measure to provide equitable and efficient access to certified medical equipment (diagnostic kits, PPE and clinical management devices) for the governments of African Union member States. [See more information in the July 2020 news release of the AMSP](#) and [Report of Africa Medical Devices Forum COVID-19 Task force](#). Guidance documents developed through the African Medical Device Forum (AMDF) committee to facilitate quotations, regulatory approvals, procurements, donations and manufacturing of PPEs and medical devices: can all be accessed at these sites.

Synergy and Partnerships

To augment COVID-19 containment measures implemented by the Africa CDC and governments of member States, AUDA-NEPAD is synergizing with partners to adapt and widely disseminate continental strategies, Guidelines and protocols. Under the Partnership for Accelerated COVID-19 Testing Initiative (PACT), the African Taskforce for COVID-19 Response (AFTCOR) and her technical working groups (TWGs) for Surveillance; Science; Standards and Regulation; and the Supply Chain Management, continue to develop these guidance documents to ensure standardization and adherence to globally recommended guidelines.

For quick access to resources developed through the task teams visit the AUDA-NEPAD website for publications and more resources https://www.nepad.org/publications?document_type=828&combine= . A full range of coronavirus related resources is available at www.africacdc.org

Personal Protective Equipment

Continental Seminar

Africa continues to make significant strides in creating portals for accessing validated supplies of PPEs. On September 3rd, 2020 the Africa Union Commission supported by the Africa CDC, COVID-19 Technical Working groups; organized a special workshop and tele-conference - "Promoting manufacturing of Personal Protective Equipment (PPE) in Africa". It is worth noting that keynote speakers representing Member States also attended the event. The milestones achieved in bridging the current gaps in PPE shortages and supplies were presented with key notes from His Excellency Otunba Adeniyi Adebayo- Minister of Industry, Trade and Investment, Nigeria; Dr. John Nkengasong (Director of Africa Centers for Disease Control, Africa CDC) and His Excellency Mr. Wamkele Mene- Secretary General, Africa Continental Free Trade Area (AfCFTA) Secretariat. For a complete edition of the workshop and more resources on PPE manufacturing and distribution in Africa, visit <https://africacdc.org/event/promoting-local-manufacturing-of-personal-protective-equipment-in-africa/>

PPE: Is it safe to re-use hospital face masks?

Long term mask shortage and ensuring PPE supply chain alternatives remain a theme of interest pivotal to the success of containing the COVID-19 pandemic. As cases continue to surge, the supply of personal protective equipment (PPE) is a concern especially among Africa countries, where the re-use of hospital face masks may greatly be considered and promoted. Recent evidence published in JAMA Internal Medicine indicate alternatives to new N95 respirators of the 29 different fitted facemask alternatives tested, expired N95 respirators with intact elastic straps and respirators subjected to hydrogen peroxide and ethylene oxide sterilization, fitted filtration efficiencies (FFEs) remained unchanged (>95%). Surgical face masks had 98.5% overall FFE (slightly lower than re-used N95 respirators) while procedural masks secured with elastic ear loops showed the lowest efficiency (38.1% overall FFE).

What does this mean? When new N95 respirators are unavailable; sterilized N95 past their expiration date or used, can be used as acceptable alternatives. Sickbert-Bennett, E. E., Samet, J. M., Clapp, P. W., Chen, H., Berntsen, J., Zeman, K. L., ... Bennett, W. D. (2020). Filtration Efficiency of Hospital Face Mask Alternatives Available for Use During the COVID-19 Pandemic. JAMA Internal Medicine. <https://doi.org/10.1001/jamainternmed.2020.4221>

Research and Development

Vaccine

Great news! More than 125 vaccines are currently in development, according to WHO². With vaccine development typically undergoing several rounds of testing in animals and man from months to years, very few will make it through clinical trials and be effective and safe for licensure. The prospective of a vaccine is glim and not expected until late 2021. Hence, it becomes increasingly clear that the return to normal- a time without social distancing, masks, quarantines and isolations- *will be a very long one*.

Clinical care and Testing

While a wide range of symptoms can accompany COVID -19, the US CDC published on Thursday August 6, 2020 the **three most common COVID-19 symptoms: fever, cough and shortness of breath**. Among the 164 people with confirmed coronavirus; 96% of patients had one of the three symptoms, while 45% had all three symptoms combined, with cough being the most common symptom (84%). Approximately half of the patients reported one or more GI symptoms, among which diarrhea was reported most frequently (38%)³. It is hoped that these findings will provide guidance on care and testing.

¹ https://www.medscape.com/viewarticle/934999?src=WNL_recln_200803_MSCPEDIT_publ&uac=323614CK&impID=2489317&faf=1

² www.jhsph.edu

³ https://www.medscape.com/viewarticle/934154?src=wnl_tp10n_200806_mscpedit&uac=323614CK&impID=2494173&faf=1

Real-Time" Antigen Test Approved- Point-of-care testing

The US Food and Drug Administration has approved the first diagnostic antigen test for SARS-CoV-2 that doesn't require a separate analyzer. Similar to a stick pregnancy test, the new assay displays one line for a negative result and two for a positive result. It can detect the virus in as little as 15 minutes. This test could be used at point-of-care settings, like a doctor's office, emergency room or some schools by school nurses. The FDA authorized its use in patients suspected of COVID-19 by their healthcare provider within seven days of symptom onset. Given the simple nature of this test, it is likely that 50 million tests could be made broadly available monthly by its manufacturer - Abbott in the U.S, at the beginning of October 2020.

Treatment Trial: AstraZeneca starts COVID-19 Antibody Treatment Trial- Aug 25, 2020.

Following the receipt of \$23.7 million in June 2020 from U.S government agencies, the British Pharma- AstraZeneca has successfully developed AZD7442; a combination of two monoclonal antibodies for the prevention and treatment of COVID-19. Trial began in 48 healthy participants between the ages of 18 and 55 to test its safety and tolerability. If successful, it would proceed to test it as both a preventive treatment and a medicine for COVID-19 patients. Globally renowned scientists suggest the "this may be a sure bet" against COVID-19. <https://www.medscape.com/viewarticle/936286>
https://www.reuters.com/article/us-health-coronavirus-astrazeneca-treatm/astrazeneca-starts-trial-of-covid-19-antibody-treatment-idUSKBN25L0KQ?utm_campaign=KHN%3A

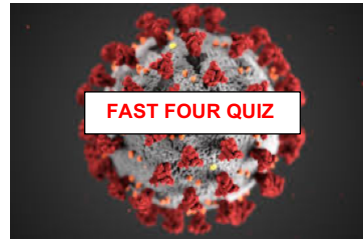
Testing: 'Sweet spot' for COVID-19 antibody test is 3 to 4 weeks after exposure.

Viral testing determines covid-19 infection, while antibody testing suggests past infection. The infectious Diseases Society of America (IDSA) suggests against testing patients for COVID-19 antibodies in the first 1 to 2 weeks after exposure. It was found that in the first 2 weeks after exposure, many patients have not yet developed the antibodies to be detected. Hence, if a patient has symptoms in the first 2 weeks after exposure, and the antibody test is negative, you really can't rule out the possibility the patient could still have COVID-19. Testing is therefore recommended 3 to 4 weeks post exposure to maximize specificity and sensitivity to detect past infection. This discovery requires member States to continue to monitor literature, issue updates and addendums to its existing guidelines on serological testing in response to evolving literature. <https://www.idsociety.org/practice-guideline/covid-19->

Obesity & COVID- 19: A stark link

New literature confirms people with excess body weight; obesity (body mass index {BMI} > 30kg/m²) face the greatest risk to be diagnosed with the novel coronavirus, undergo hospitalization and Intensive Care Unit (ICU) admission, and die. Obese patients are 113% likely higher to be hospitalized. The odds of ICU admission and death combined were 74% and 48% higher respectively. Additionally, obese individuals have higher COVID-19 viral load, for longer, becoming negative 5 days later than those with a BMI <25kg/m² (which by the way is considered a health weight). This may indicate that the ability of the virus to enter cells is further enhanced because of the excess adipose tissue and accompanying higher levels of ACE2 in the adipose⁴.

⁴ Popkin, B. M., Du, S., Green, W. D., Beck, M. A., Algaith, T., Herbst, C. H., ... Shekar, M. (2020). Individuals with obesity and COVID-19: A global perspective on the epidemiology and biological relationships. Obesity Reviews, obr.13128. <https://doi.org/10.1111/obr.13128>



Question 1/4

Which of the following has not been recognized as a significant risk factor for death in patients with COVID-19?

1. Older age
2. High Fever
3. Comorbidities (Diabetes, Hypertension, Obesity etc.)
4. Hunger.

Question 3/4

Which is the most commonly reported clinical finding

1. Sneezing
2. Cough
3. Fever
4. Diarrhea.

Question 2/4

Which of the following most accurately reflects the estimated incubation period of COVID-19?

1. More than a month
2. 3-4 weeks
3. 2 days to 2 weeks
4. 24 hours

Question 4/4

What type of sample is collected for COVID-19 testing?

1. Blood
2. Saliva
3. Oral/Nasal swab
4. Urine

Metrics to Mechanisms

An effective response to the COVID-19 pandemic requires epidemic intelligence- a dissemination of a set of validated metrics to influence public health actions and continental response by governments and allied organizations. Current metrics with soaring numbers of cases are suggestive of a combination of an abundance of misinformation about COVID-19, low capacity among frontline responders on workplace response and the need to booster local production and availability of diagnostics and medical devices; amidst others.

[A Counterattack on the 'Infodemic'](#)

Misinformation about COVID-19 is as contagious as the virus itself.

The many faces of misinformation about COVID-19 is often categorized into (i) **false cures** e.g. antimalaria drug hydroxychloroquine touted as a

“miracle drug” despite lack of reliable evidence supporting its efficacy against SARS-CoV2. (ii) **Conspiracy theories** of a biological attack originating from a bioweapon lab (iii) **Scapegoating** COVID-19 as a ‘Chinese virus (iv) An untrue underlay that ‘**Africans are immune**’ to COVID-19 despite the daily soaring numbers of cases. Fighting misinformation is as important as other steps taken to flatten the curve. To fight the Infodemic, we need to understand who people do and don’t trust, and ensure these messengers share clear, understandable information, and also share what they don’t know. The messages of political and social leaders need to remain consistent, and univocal in presenting the gravity of the COVID situation and the need to observe and obey rules and guidelines.

[Building capacity to lower the “COVID curve”](#)

The unexpected emergence of the current pandemic has triggered an accelerated process of capacity

building of various experts. More than 2,000 health care workers with high exposure risk and other essential service providers from 31 member States have been trained on COVID-19 workplace guidance response and oriented on [seven guidelines focused on Clinical Occupational Health; Health and Wellness of Health Workers; Mining Industries; Food and Retail Sector; Generic Risk assessment; and guidelines for the education sector.](#) These guidelines can be requested and accessed free on <https://www.nepad.org/publications>

Since social distancing is one of the key recommended actions to break the transmission, AUDA-NEPAD has resorted to webinars, with more than 2,100 participants in attendance at the ‘galvanizing African industrial capacity webinars’ aimed at familiarizing member State representatives with available channels for supply of pharmaceutical and medical products. For a comprehensive list of

COVID-19 NAT diagnostic tests; licensed domestic manufacturers of medical devices and PPEs (more than 374 medical devices and PPEs), authorised ventilators and masks; reporting form for substandard and falsified in vitro diagnostics and medical devices; you can visit <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

Africa's Epicenter: A close look at South Africa

Fifty percent (50%) of the over 1.2 million Confirmed cases in the Africa continent were detected in South Africa (SA). Irrespective of its existing high HIV and TB rates, this suggests SA has relatively higher testing capacity and a more robust surveillance systems in place. SA has been hit the hardest but testing smarter and capturing data better.

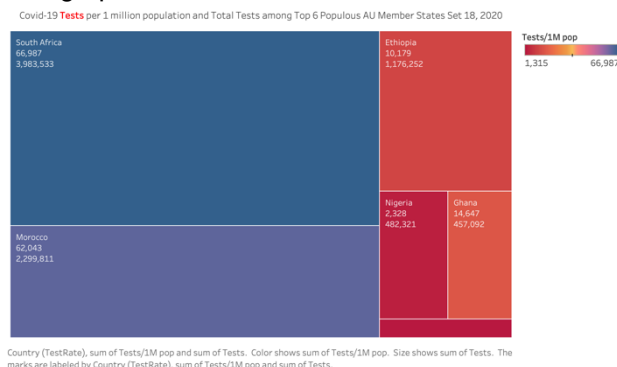
South Africa- Hit hardest, testing smarter and reporting better”



How well are we testing?

Growing body of evidence revealed testing rates are disproportionate among member States, with percentage of test rates ranging from as low as 0.01% to 6% of the country population. A close look at the six most populous African countries showed an inverse relationship such that far lower testing

rates is seen in the top 3 most populous- Nigeria and Egypt (1,315 and 2,328 tests per 1 million population), compared to Morocco and South Africa (with 54,105 and 63,044 tests per 1 million population). While the number of test conducted in Ethiopia increased by 21% within a two week period. See graph below.



It is therefore important to reiterate the dire consideration to **attain a context- specific and strategic minimum population test rate or test rate per 1 million population** in order to contain and suppress the surging spread of the covid-19 virus, while also ensuring basic steps for contact tracing for all confirmed cases is implemented.

3 Basic Steps for Contact Tracing

South Africa has by far the continent's largest COVID-19 caseload, with over half a million confirmed infections and more than 14,000 deaths. This soaring numbers of cases outstrips the health department's ability to trace the contacts of those infected; a necessary step to containing the virus. Unavoidably, contact tracers are stretched so thin, which would require government re-allocating funds to engage additional tracers.

Let us be reminded of the basic steps to break the transmission and limiting the amount of surge that we are currently experiencing in Africa. Contact tracing should be done in 3 basic steps;

(i) **Contact tracer calls** – the presumptive or confirmed COVID-19 cases and collects information about symptoms, underlying conditions, history of exposure, and recommends isolation for at least 10 days from onset of symptoms).

(ii) **Contact tracer collects names and contact information** of anyone that had close contact with confirmed or presumptive case i.e. within 6 feet for at least 15 minutes.

(iii) **Contact tracer uses phone calls, texts or email to connect** with close contacts while maintain privacy of index case. Each close contact is asked to quarantine for 14 days.

Whilst implementing these steps, patient privacy should be maintained.

Privacy in COVID-19 Pandemic”- Ethical issues

including health privacy, are especially important during a major pandemic as it often permits intrusive surveillance. Fundamentally, an ethical and policy challenge in public health is balancing individual versus public interest- a conflict between utilitarianism and Libertarianism. In recent times, governments of member States have mandated social distance to protect the public's health at the expense of individual liberty. Additionally, this conflict also exists between individual's interest in health privacy and public's interest in collection use and disclosure of health information. With this deadly pandemic and the infiltration of new technologies; an unprecedented level of private information is collected, aggregated, analyzed and disseminated. Hence, health information policies should be continually evaluated by policy makers in Member States using the following THREE criteria- <https://ajph.aphapublications.org/doi/10.2105/AJPH.2020.305849>

(i) **Necessity and effectiveness:** No public health intervention should be introduced if there is no clear evidence of its necessity and effectiveness. The use of thermal screening, oral questioning about symptoms and exposures for coronavirus still lack

evidence of effectiveness and necessity, but since it is nonintrusive, gives the impression that something is being done to protect people, symbolic and does not pose a significant threat to privacy; it's in wide use (ii) **Minimal infringement:** Data should be retained for the minimum amount of time necessary while also ensuring its disclosure in the least identifiable form (iii) **Purpose limitations:** Data collected for a specific purpose should not be 'repurposed' without the consent of the data sources, such as use of data from social media posts, cell phones, geolocation proximity data from mobile apps. For more resources, visit Mark A. Rothstein, 2020: Public Health and Privacy in the Pandemic American Journal of Public Health 110, 1374_1375, <https://doi.org/10.2105/AJPH.2020.305849>

<https://ajph.aphapublications.org/doi/10.2105/AJPH.2020.305849>

Back to School! Are we ready?

We are all heroes and children can be heroic as they return back to school! As schools open, comes a word of caution for leaders; do not ignore the risks of transmission!

Two dangerous threats to look out for are;

1. The tendency to become lax and let our guard down, allowing inter-mixing of students, peers and friends.
2. The lax adherence to recommended actions.

Therefore, 4 key actions necessary; **W²S²**

1. **W**ear a mask in communal areas
2. **W**ashing hands with alcohol-based hand rub, or soap and water
3. **S**ocial distancing
4. **S**elf-quarantine if sick, exposed to a confirmed case or exhibiting symptoms of COVID-19

These actions are well within our control... Children are heroes and can help curb transmission by acting responsibly.

...

Let's look out for one another.

The Life of Every African Counts!

Quiz Answers

1. Hunger
2. 2 days to 2 weeks⁵
3. Fever - Most common clinical finding from studies show fever (98%) cough (76%) and Fatigue (44%)⁶
4. Mouth/Buccal swab

⁵ Lauer, S. A., Grantz, K. H., Bi, Q., Jones, F. K., Zheng, Q., Meredith, H. R., ... Lessler, J. (2020). The incubation period of coronavirus disease 2019 (CoVID-19) from publicly reported confirmed cases: Estimation and application. *Annals of Internal Medicine*, 172(9), 577–582. <https://doi.org/10.7326/M20-0504>

⁶ Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., ... Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Www.TheLancet.Com*, 395, 497. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5)