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4-6-2020

# 2020-04-06 DAILY UNM GLOBAL HEALTH COVID-19 BRIEFING

Christophe G. Lambert

Shawn Stoicu

Anastasiya Nestsiarovich

Praveen Kumar

Hannah Groves

See next page for additional authors

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#### **Recommended Citation**

Lambert, Christophe G.; Shawn Stoicu; Anastasiya Nestsiarovich; Praveen Kumar; Hannah Groves; Rachel D. King; Estefania Montanez; Andrew S. Rowland; Orrin Myers; Kristine Tollestrup; and Douglas J. Perkins. "2020-04-06 DAILY UNM GLOBAL HEALTH COVID-19 BRIEFING." (2020). https://digitalrepository.unm.edu/hsc\_covid19\_briefings/1

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Authors	
Christophe G. Lambert, Shawn Stoicu, Anastasiya Nestsiarovich, Praveen Kumar, Hannah Groves, Rache D. King, Estefania Montanez, Andrew S. Rowland, Orrin Myers, Kristine Tollestrup, and Douglas J. Perkins	

#### DAILY UNM GLOBAL HEALTH COVID-19 BRIEFING

April 6, 2020

#### **Executive Summary**

NM case updates. Several NM policy and legislative actions. Federal vs. state conflict over medical supply lines. Healthcare workers sleep in cars to prevent family exposure. Same-day in-house testing at Cedars-Sinai. Debate over hydroxychloroquine Tx. Death rate differences: Germany and Italy. African innovations. Testing recommended with mild symptoms. CDC guidelines for law enforcement PPE. New WHO first responder training and CDC sign language resources. COVID-19 droplets can travel up to 27 feet. Transmission from the asymptomatic. Humidifiers help. Drug and vaccine progress.

#### New Mexico Highlights

- NMDOH has announced 62 additional cases of COVID-19 in the state, bringing the total to 686

  No new deaths were reported today. The New Mexico Department of Health reports that 48 individuals are currently being hospitalized for COVID-19 and 133 individuals have recovered from the virus. 16 new cases in Bernalillo County.
- Santa Fe mayor issues emergency order for grocery stores
   Santa Fe Mayor Alan Webber issued emergency restrictions Monday for all grocery stores, supermarkets and farmers markets to help prevent the spread of coronavirus, including banning reusable bags and limiting the number of shoppers. On related note, Kroger and Walmart test out one-way aisles to minimize contact.
- Santa Fe city government ramping up to take on the COVID-10 crisis

  Santa Fe City government started using the old college dorm rooms on the city-owned Midtown Campus to quarantine homeless COVID-19 people. The facility can house as many as 150 people. The city has appropriated \$500,000 for programs during the virus crisis. The Santa Fe Public Schools also began distance learning programs for students staying at home.
- More than 25,000 health care professionals in New Mexico are prepared for COVID-19 crisis

  Presbyterian, UNM Health and Lovelace, in collaboration with state officials, are pulling together to address this health crisis.

  Here in New Mexico, more than 25,000 health care professionals have drilled and prepared for this moment, but still need public's help.
- The state of NM has waived employer's payroll tax due to coronavirus crisis.
   The portion of payroll tax usually assessed based on number of people laid off and file for unemployment is being waived, according to the New Mexico Department of Workforce Solutions.
- CYFD gets additional funding during the COVID-19 public health crisis

  Gov. Michelle Lujan Grisham has made an additional \$750,000 available to Children, Youth, and Families Department during the public health emergency to help support families.
- <u>City Councilman Pat Davis introduced new legislation for \$1 million in emergency grants</u>

  Grants will be for community organizations that help feed, house, and support people in need during the coronavirus pandemic. The Coronavirus Community Support and Recovery Act will provide funds for nonprofit groups, including faith-based organizations. The bill will be introduced during the Monday city council meeting. A vote for the legislation is scheduled for April 20.

#### **US Highlights**

• The Federal Government has been using the Defense Production Act to block States from receiving lifesaving medical supplies and redirecting those orders to the federal stock pile instead States have complained that what happens next in the distribution of medical supplies is not transparent and the process seems to have been politicized. Ethicists have raised concerns that States are being forced to compete against each other and with the Federal government. It does not appear that a rational and coordinated process is being used to allocate medical supplies to the areas of highest need.

- New York EMS responders are working in 'battlefield conditions,', sleeping in cars and hotels

  First responders in New York City are in "battlefield conditions," forced to treat a rising number of cardiac arrests in "triage mode" and sleeping in cars and hotels to avoid exposing their own families to Covid-19. When EMS responders are going on call and not getting a return of circulation after 20 minutes, they are terminating CPR efforts and not transporting sick individuals.
- LA is preparing to COVID surge. In-home testing with same-day results is developed by Cedars-Sinai.

  Doctors of 2 LA hospitals shared that they are delaying even needed surgeries in order to clear beds. Cedars-Sinai has developed its own in-house testing and can get same-day results. During the surge, LA County emergency management officials say they plan to spread patients among all the county's acute care hospitals. No one requiring hospitalization for Covid-19 will be turned away based on lack of insurance or inability to pay, state and federal officials have said. Most of LA positive tests came from wealthy communities, perhaps due to residents' overseas travel.
- Heated debate within US administration over promotion of hydroxychloroquine treatment

  President Donald Trump and members of his administration are growing emphatic in promoting an anti-malaria drug not yet officially approved for fighting COVID-19 and scientists say more safety and effectiveness testing is needed.

## International Highlights

- Why is German Covid Death Rate So Low? Can we learn from their experience?

  Germany has 91,000 cases of Covid but Germany's death rate is 1.3 % compared to 12% in Italy, and 10% in Spain, France and Britain. Block testing health care workers should be explored as method to extend limited testing resources and keeping health workers and patients safe. Exploring whether interventions to identify patients in their homes who are beginning a downward spiral as a way to save lives urgently deserves further investigation.
- Italy's experience in fighting with critical COVID-19 cases. WHO leads "SOLIDARITY" global trial alliance.

  The multicenter report from Italy Feb 20-March 18 showed that of the 1,591 predominantly older, male patients with comorbid conditions admitted to ICUs 26% of died while 58% remained in the ICU. The median ICU length of stay was 9 days. Older patients appeared to have the worst outcomes. Both China and Italy reported male sex, older age, and hypertension as risk factors for severe COVID-19 disease. WHO-led trial "SOLIDARITY" is a new adaptive randomized global trials platform.
- African innovators pioneer creative local solutions to the COVID-19 pandemic in 'hackathon' Eight focus groups were tasked with developing an innovative and scalable concept aligned with one of the eight pillars of WHO's current COVID-19 response strategy. The winning proposed solution uses a mobile platform that incorporates screening at the community level, mass testing and validation, as well as the mapping of risk levels in different areas.
- Nigeria is utilizing their previous Polio infrastructure to respond to Covid-19
   The Nigerian Ministry of Health is utilizing the Nigeria polio program to address the CoVid-19 crisis. Dr Onyibe, who has worked with the Polio Eradication Initiative for more than 10 years in South West Nigeria, mobilized existing polio personnel to track contacts and facilitate follow-up visits of CoVid-19 patients, and to bolster the capacity of healthcare personnel and infection prevention and control.

## Epidemiology Highlights

• Sentinel surveillance in CA confirms need to test patients with mild flu-like symptoms for COVID-19

Prior to this publication, only patients with severe lower respiratory symptoms were recommended for COVID-19 testing.

However, sentinel surveillance in Santa Clara County, CA, took a convenience sample of specimens from 226 patients who had respiratory symptoms, but no known risk for COVID-19 and tested them for influenza, and 23% were positive. Of the

remaining specimens, 79 were tested for SARS-CoV-2, and 11% were positive. This confirms community transmission, as well as identifies the need for SARS-CoV-2 testing of individuals with mild flu-like symptoms, but who test negative for influenza.

• CDC report shows % deaths due to pneumonia not associated with flu has increased sharply

Despite the elevated number of visits to doctors and emergency departments for symptom presentation of fever and cough, there is little influenza virus in circulation. Deaths attributed to pneumonia and influenza have increased above the epidemic threshold. The percent of deaths due to pneumonia has dramatically increased since the end of February, while those due to influenza only modestly increased—likely reflecting pneumonia associated with COVID-19.

### Policy, Economics, Workforce, Supply Chain, PPE Highlights

- CDC recommends PPE and decontamination of duty belt/gear for law enforcement professionals
  In addition to standard precautions, the CDC recommends: disposable gloves, disposable isolation gowns/coveralls, NIOSH-approved particulate respirator, and eye protection when in contact with someone who may have COVID-19. They also recommend disinfecting duty belt and gear and proper clothing laundering if close contact occurs.
- WHO launches online training for CoVid-19 responders

The WHO Regional Office for Africa successfully launched the first online training for CoVid-19 emergency responders utilizing a video link that reached 500 participants. The 2-hour training focused on identifying symptoms, triage strategies, treating complications, managing severely ill patients, and laboratory testing and quarantine strategies.

- CDC provides American Sign Language COVID-19 video series
  - Do you or does someone you know communicate using American Sign Language? Watch videos on coronavirus disease 2019 #COVID19, part of the #ASL video series on the CDC Streaming Health YouTube channel.
- WHO and UNICEF agree to work together through historic COVID-19 Solidarity Response Fund
   Powered by the United Nations Foundation and Swiss Philanthropy Foundation, the COVID-19 Solidarity Response Fund has
   more than \$127 million to help countries expand healthcare capacities and mitigate the impact on vulnerable populations.
   These funds will be used to promote research and the development of vaccines and treatments with respect to Covid-19.
- Deaths due to COVID-19 may be misclassified as pneumonia

Deaths due to COVID-19 may be misclassified as pneumonia deaths in the absence of positive test results, and pneumonia may appear on death certificates as a comorbid condition.

## Science, Drugs, Therapeutics, Testing Highlights

• MIT researcher found that COVID droplets can travel up to 27 feet.

The measures called for by CDC and WHO call for 6 and 3 feet of space, respectively. The peak exhalation speeds can reach 33 to 100 feet per second and "surgical and N95 masks are not tested for these potential characteristics of respiratory emissions". "There's an urgency in revising the guidelines currently being given by the WHO and the CDC on the needs for protective equipment, particularly for the frontline health care workers". However, the biggest threat is the large droplets, say other scientists.

- The environment inside the buildings matters for COVID spread. Humidifiers might help.
  - Winter's cold, dry air makes respiratory viruses a triple threat. Warm, dry air also dampens the ability of cilia, that line airways, to expel viral particles. The immune system's ability to respond to pathogens is suppressed in drier environments. Humidifiers during the winter in buildings are recommended.
- SARS-CoV-2 RNA detected in 4 blood donations from asymptomatic individuals in Wuhan

  A total of 7,425 donations were tested for viral RNA using RT-PCR, 4 of which were positive. The donors were asymptomatic at the time of donation, 2 of the donors later developed a fever. Plasma from each of the 4 donors was later tested for IgG and IgM antibodies to SARS-CoV-2 by ELISA; results were negative, indicating the possibility of infection in the early stage and the need for follow-up.
- COVID transmission: <1 week between cases and > 10% infected by asymptomatic people

It takes 4 days for COVID symptoms to appear. More than 1 in 10 infections were from people who had the virus but did not yet feel sick. Extensive control measures are warranted.

- A vaccine candidate against the SARS-CoV-2 coronavirus is designed

  Australian researchers used computer models of the spike protein and its human receptor, ACE2, to identify how the virus was infecting human cells, and then were able to design a vaccine to block this process. The vaccine has progressed into animal testing in the US.
- A trial drug blocks the entry point for SARS-CoV-2 in organoids and can be a potential treatment.

  A drug APN01 (hrsACE2) has inhibited the coronavirus load by a factor of 1,000-5,000 in vitro, and will soon be tested in clinical trials. The study shows the virus can directly infect and duplicate itself in stem cells-grown blood vessels and kidneys.

**Contributing team members:** Christophe G. Lambert, Shawn Stoicu, Anastasiya Nestsiarovich, Praveen Kumar, Hannah Groves, Rachel D. King, Estefania Montanez, Andrew S. Rowland, Orrin Myers, Kristine Tollestrup, Douglas J. Perkins.