



GENERAL POPULATION

GLOBALLY

- As of 5/12/2020, there have been a total of 4,256,991 cases reported (**Cases/1,000~0.54** based on a population of 7.8 billion), 1,488,870 patients recovered, and 291,487 fatalities (**6.85% fatality rate**) from COVID-19.

UNITED STATES

- As of 5/12/2020, there have been a total of 1,342,594 cases reported (**Cases/1,000~4.09** based on a population of 328.2 million), 230,287 patients recovered, and 80,820 fatalities (**6.02% fatality rate**) from COVID-19. A total of 9,655,039 tests have been performed.

TEXAS

- As of 5/12/2020, there have been a total of 41,048 cases reported (**Cases/1,000~1.34**), 22,674 patients recovered and 1,133 fatalities (**2.76% fatality rate**) from COVID-19. There is currently an estimate of 17,241 active cases with a total of 538,172 tests performed.

SAN ANTONIO

- Bexar County: As of 5/11/2020, there have been a total of 1,920 cases reported (**Cases/1,000~0.93**), 1,037 patients recovered and 57 fatalities (**3% fatality rate**) from COVID-19. There is currently an estimate of 883 active cases with a total of 39,734 tests performed.



MARGINALIZED POPULATIONS

AFRICAN AMERICAN POPULATION

- In the United States, the infection rate is more than 3-fold higher and the death rate is 6-fold higher in predominantly black counties than that in predominantly white counties.
- Some reports suggest the COVID-19 discrepancy is due to a higher rate of comorbidities in the African American population, but systematic and structural factors such as implicit bias from providers need to be further investigated.
- Recommendation: In view of a specific medical code for COVID-19, documenting racial/ethnic variations in testing and treatment is essential. Public health officials need to ensure that prevention activities prioritize communities and racial/ethnic groups most affected by COVID-19.

LGBTQ POPULATION

- The LGBTQ Population may be more at risk for COVID-19 due to increased tobacco rates usage (50% greater than general population), higher rates of HIV and cancer, and health disparities (both pre-existing and current).
- A large survey (n=1051) of men who have sex with men (MSM) population found that 25.4% of participants reported decreased access to STI testing or treatment.
- Recommendation: To avert increased HIV and STI incidence, steps need to be taken immediately to improve access to HIV prevention and treatment services, such as telehealth and mailed self-collection of specimens.
- To avoid exacerbating health disparities, we must also make rapid progress on deploying large-scale seroprevalence studies to better understand potential co-morbidity of HIV and SARS-CoV-2 among MSM from across the US.

EPIDEMIOLOGY ON LATINX POPULATION TO COME!



MEDICALLY AT RISK POPULATIONS

MALE POPULATION

- A greater incidence of disease and mortality as well as a longer clinical course for COVID-19 infection in the male versus female population has been documented.
- The strongest support for the COVID-19 discrepancy in males is linked to the pathophysiology of the virus. Angiotensin-converting enzyme 2 (ACE2) is a functional receptor for coronaviruses and is highly expressed in the heart, lungs, kidneys and testis. Levels are generally higher in males versus females.
- Comorbidities may also play a factor in the COVID-19 discrepancy.
- Recommendation: Clinical suspicion, accompanied by a relevant epidemiological history, should be followed by early imaging and a virological assay.

ELDERLY POPULATION

- Male sex, age ≥ 60 years, delay in diagnosis and severe pneumonia have been associated with an increased CFR (Case Fatality Rate).
- In China, the CFR was 3.6, 1.3 and 0.4 for those greater than or equal to 80, 70-79 and 60-69 years of age, respectively, versus a CFR of 0.4 in those aged 30-59 years old.
- Recommendation: Preventive measures (e.g., social distancing, respiratory hygiene, and wearing face coverings in public settings where social distancing measures are difficult to maintain) should be continued to protect older adults and persons with underlying medical conditions.

PREGNANT POPULATION

- To date, there is no evidence of vertical transmission of COVID-19 barring 1 case study in Peru.
- In terms of clinical outcomes, data is still limited and conflicting. One systematic review found that COVID-19 infection was associated with a relatively higher rate of preterm birth, preeclampsia, cesarean, and perinatal death, while another systematic review could not support poor maternal or perinatal outcomes.
- Recommendation: Systematic screening of any suspected 2019-nCoV infection during pregnancy and extensive intensive follow-up for confirmed mothers and their fetuses is recommended.