



GENERAL POPULATION

Location	Cases	Deaths	Recovery	Cases per 1000	Fatality rate (%)
World	225,538,979	4,645,334	202,139,409	28.9	2.06
USA	41,853,362	677,988	31,871,868	126.2	1.62
Texas	3,827,856	60,467	3,425,807	178.2	1.58
Bexar County	296,573	4,035	278,394	201.8	1.36

Last updated 5:00 AM 9/13/2021

*In comparison to our last report, red, yellow, and green highlight correspond to higher, similar, and lower fatality rates/cases per 1000 respectively.

Metropolitan Health Department July 2021 Epidemiological Report (Released 08/18/2021)

<https://covid19.sanantonio.gov/About-COVID-19/Dashboards-Data/Epidemiological-Reports>

- Increase in New Cases & Positivity Rate
 - Bexar County reported 15,183 new cases (plus a 905 case backlog), 1903 new COVID-19 associated hospitalizations, and 35 deaths.
 - Positivity rate had a high of 19.9% in the last week of July— the highest positivity rate seen since the beginning of January 2021.
- Hospitalizations and Deaths
 - Hospitalizations increased through July, with an average of 833 patients per day.
 - The average number in the ICU has also increased by 385% from the end of June 2021 to the end of July 2021.
 - Total deaths through the end of July are 3,637. Case fatality is at 1.5%. The risk of death increases with age at COVID-19 onset, and is greater for males than females.
- Breakthrough Cases
 - Since the beginning of 2021, roughly 2% of cases, 2% of hospitalized COVID-19 cases, and about 1% of deceased cases were fully vaccinated.



MEDICALLY AT-RISK POPULATIONS

LATINX POPULATION

- As of August 12, 2021, Hispanic and Latino people were 2.8 times more likely than non-Hispanic white people to be hospitalized and 2.3 times more likely to die from COVID-19 infection.
- Disparities are attributed to co-morbidities, smaller living spaces, working frontline jobs, language barrier, loss of health insurance, and fear of losing immigration status. Diabetes, heart disease, and cirrhosis are co-morbidities and have an increased prevalence in Hispanic populations compared to other racial and ethnic groups.

Recommendation: Despite increasing data on racial and ethnic epidemiology, more data is needed to fully characterize the effects of COVID-19 on Latinx population, including the consideration of sex and race on hospitalization rates. Evidence suggests that disparity may be worsening due to lack of education and health awareness for Latinx people. National programs (such as CDC's REACH program) and local programs (such as Penn State Project ECHO) are being implemented to increase education and resources dedicated to the Latinx community. These community programs and partnerships are particularly effective at connecting Latinx communities with testing services and increasing the trust that Latinx communities have with said services. More programs at local, state, and national levels should be implemented to educate Latinos by translating information into Spanish and increasing outreach. As vaccination efforts continue across the United States, the racial and ethnic data of those receiving vaccines should be reported to ensure that disparities in vaccination are rapidly identified and addressed.

AFRICAN AMERICAN POPULATION

- In 2020, there were about 1,000 additional deaths per 100,000 person-years among Black and Hispanic people over 65 years, compared to the number of deaths projected.
- In the US, African Americans make up 30% of the (ESKD) population, who experience worse morbidity and mortality outcomes as a result of COVID-19 infection as compared to patients without kidney failure.

Recommendation: Documenting racial/ethnic variations in testing and treatment is essential. Public health officials must prioritize prevention activities in Black communities. Prioritizing access to early testing and equitably applied interventions (including vaccine administration and novel treatments) may alleviate the disparity of disease burden. The relationship between systemic racism and social determinants of health must be examined to increase health outcomes for historically underserved populations as well as to prepare for future infectious disease circumstances.



INCARCERATED POPULATION

- As of March 3, 2021, over 620,000 confirmed cases of people incarcerated in US prisons and detention centers were reported. Incarcerated individuals are 5.5 times as likely to be infected as the general population and 3 times more likely to die from Covid-19 infection. The mean age of death attributable to COVID-19 in ICE detention centers in 2020 was 56.9 years, compared to the overall U.S. mean of 78 years. Over a third of all incarcerated individuals have underlying conditions that make them high-risk for infection, hospitalization, and death. Over 81,000 incarcerated individuals are older than 60 years.
 - The SARS-CoV-2 basic reproduction number in large U.S. urban prisons is 8.44, which exceeds the threshold for which the effectiveness of vaccination is significantly diminished.
 - A COVID-19 outbreak from August 14 to October 22, 2021, at a Wisconsin correctional facility was investigated and found that risk for transmission increases when incarcerated people are transferred to facilities together. At the facility, 79% of people who were incarcerated and 23% of staff members tested positive for COVID-19, highlighting that transfers increase the risk of wider transmission.

Recommendation: Prevention efforts in incarcerated settings should prioritize both decarceration and vaccination. Due to overcrowding, poor sanitation, and poor ventilation in correctional facilities, vaccination alone may not be effective in protecting vulnerable subpopulations from infection, hospitalization, and death from COVID-19 infection. Decarceration efforts early on in the pandemic have shown effectiveness in minimizing transmission of infection in prisons.

PEDIATRIC POPULATION

- From June to August 2021, as the Delta variant became the predominant strain...increased almost fivefold. Although severe illness remained the same before and after Delta, hospitalization rates among unvaccinated adolescents were ten times greater than among fully vaccinated adolescents.

Recommendation: Clinicians should monitor for progression of illness in children, especially in infants, and children with pre-existing conditions. Public health efforts should ensure equitable allocation of testing and culturally appropriate prevention education. More research is needed to determine the modifiable reasons for disparities in COVID infection rates and hospitalizations. Schools will need to have adequate preventive measures (distancing, sanitization, and air ventilation and filtration) to reopen safely. Close contact sports in which mask wearing is not safe should be postponed due to increase in transmission rates.

MALE POPULATION

- Males face a greater incidence, longer clinical course, and mortality than women.
- Disparities might be due to prevalence of co-morbidities and higher presence of angiotensin-converting enzyme 2 (ACE-2) in males.

Recommendation: The sex and gender disparities observed in COVID-19 vulnerability emphasize the need to better understand the impact of sex and gender on incidence and case fatality of the disease and to tailor treatment according to sex and gender. Clinical suspicion, accompanied by a relevant epidemiological history, should be followed by early imaging and a virological assay.

PREGNANT POPULATION

- There is minimal evidence of vertical transmission and no evidence of transmission through breastfeeding. Risk for pregnancy related complications is inconclusive, but there is evidence of increased risk of preeclampsia, caesarian delivery, and pre-term birth.

Recommendation: Systematic screening of potential COVID-19 infection during pregnancy and extensive intensive follow-up for confirmed mothers and their fetuses is recommended. Breastfeeding can be continued if the parent is COVID-19 positive but precautions (hand washing before touching the infant and mask wearing) should be taken. There is still uncertainty if COVID-19 can cross the placenta in-utero but study suggest low rates of vertical transmission of COVID-19 during the third trimester. Ensuring proper social distancing, handwashing, and mask-wearing might decrease COVID transmission to pregnant women, which could lower hospitalized and COVID-related illness.

LGBTQ+ POPULATION

- Specific data is not collected on COVID-19 incidence, hospitalizations, or mortality in the LGBTQ+ population.
- The pandemic has exacerbated social and economic stressors on this population, increasing unemployment and poor mental health status, while decreasing access to routine care, medication and mental health services.

Recommendation: Telehealth and a mailed specimen self-collection services should be developed to ensure continued access to mental health care (including to address the mental health impacts of social distancing) and HIV/STI prevention and treatment. To avoid exacerbating health disparities, large-scale seroprevalence studies must be deployed to better understand the potential co-morbidity of HIV and SARS-CoV-2 among MSM. LGBTQ individuals may also benefit from periodic home-calls from healthcare providers. This is to ensure that these individuals are not in any dangerous/unfavorable situations at home while under stay-at-home orders. These home-calls should include a multidisciplinary team of providers who can provide care in different aspects of the individual's life. While home-calls can be beneficence, those who are living in homes where their LGBTQ status is unknown or not supported at home, a secure text-based support may provide a better way to ensure the individuals privacy and safety.