

COVID-19 Pandemic Updates - May 11, 2021

Ft. Bend Co. RISK LEVEL: Low/Mod *	Prior Reporting Period (as of 5/4/21)	Current Reporting Period (as of 5/11/21)
Total Confirmed Cases	57,701	58,095
Deaths in FBC	612	633
Case Fatality Rate	1.06%	1.06%
Test % Positive Rate: NOTE: Due to insufficient testing numbers, FBC-HHS is unable to calculate a reliable test positivity rate that represents the level of community spread occurring FBC *Goal is to sustain a rate of <5% for at least 14 days	---	---
SETRAC / FBC Hospital Data (Current as of 5/11/2021)		
FBC General Bed Usage	73	64
FBC ICU Bed Usage	16	10
% FBC ICU bed occupied by COVID+ Pts	14.4%	9.4%
TMC Data § (week of 5/3/2021)		
Effective Reproduction Rate R(t) <i>R(t) >1: indicates increasing viral transmission</i> <i>R(t) <1: indicates viral transmission is slowing down</i>	1.0	0.86
TMC % Positive Rate	4.2%	4.1%
% TMC ICU beds occupied by COVID+ Pts	14%	11%
TMC ICU Capacity (non-pandemic, Phase 1)	99%	100%
TMC ICU Capacity (combined, Phase 1&2)	--%	78%

***as of April 13, 2021**

§ TMC is seeing limited daily changes and will now be reporting on a weekly basis. They will change back, should the need arise.

Assessment/Comments

- COVID-19 cases and hospitalizations continue to decline.
- Case Fatality Rate remains flat.

COVID-19 and Vaccination Updates

- On May 10, 2021 the FDA expanded the Emergency Use Authorization (EUA) granted to Pfizer-BioNTech, permitting the administration of their two-dose COVID-19 vaccine in children 12-15 years old.
- The WHO is classifying the triple-mutant SARS-CoV-2 variant widely circulating in India as a global "variant of concern." (CNBC)
- As of Tuesday at 8:00 a.m. EDT, the unofficial U.S. COVID-19 toll reached 32,744,471 cases and 582,162 deaths, increases of 36,478 and 407, respectively, since this time yesterday.
- Weekly cases have now dropped for a month straight, with last week's count representing the lowest total since September, and weekly deaths have declined to July levels. (Reuters)
- CDC Update on SARS-CoV-2 Transmission (May 7, 2021)

- SARS-CoV-2 can be transmitted by both large and small aerosol particles (aerosolization being the main mechanism of transmission)
- Poor ventilation in a closed space can enhance transmission, underscoring the importance of adequate ventilation
- Transmission of SARS-CoV-2 can occur from inhalation of virus in air farther than 6 feet from source

Vaccines are Safe and Effective (AND necessary to put the brakes on this pandemic). Here's the data:

- There was a recent Israeli study published May 2021, investigating the impact and effectiveness of mRNA Pfizer vaccine against SARS-COV-2 infections and COVID-19 cases, hospitalizations, and deaths following a nationwide vaccination campaign in Israel. This observational study revealed that 2 doses of the vaccine were highly effective across all age groups, 16 years and older, in preventing symptomatic and asymptomatic SARS-COV-2 infections. The study also showed that the 2 doses of vaccine were highly effective in SARS-COV-2 infections and COVID-19-related hospitalizations, severe disease, and death, including those caused by the B.1.1.7 SARS-COV-2 variant, and that there were marked and sustained declines in SARS-COV-2 incidents corresponding to increasing vaccine coverage, suggesting that COVID-19 vaccination can help to control the pandemic.
- Recent study released by the CDC in April 2021, revealed the current vaccinations were 90% effective in blocking infections, both symptomatic and asymptomatic, and people who had 2 doses of vaccine, and 80% effective in people who had 1 dose. This suggests that not only are the vaccines protecting against severe disease, but also there appears to be a reduction in viral transmission. None of the vaccines are 100% effective at preventing infections, but then again, what vaccination is? 90% sounds good to me.
- Clinical studies continue to show the benefits of getting the COVID-19 vaccine far outweigh any risks. Both the FDA and the CDC continue to report that the currently available vaccines are safe and very effective. Recently, the FDA and the CDC have conducted a very thorough investigation of the Johnson & Johnson vaccine, which recently was felt to be associated with forming blood clots. They have concluded that this blood clot adverse event was extremely rare and is now being recommended once again.

Comments on school re-opening face-to face instruction

- It is now clear that schools can (and should) safely open for in-person learning, with very few exceptions, provided appropriate mitigation strategies (NPIs) are followed - NPIs (non-pharmaceutical interventions) such as physical distancing, wearing masks, hand hygiene, adequate ventilation. [COVID-19 1 infections among students and staff in New York City Public schools. Pediatrics volume 147, No. 5, May 2021]
- Need to recognize disruption in learning and the negative impact on children's health and their families who are disproportionately affected [JAMA Network Open, published online April 29, 2021]:
 - Increased suicide rates in children
 - Children with disabilities and English language learner's
 - Children who live in poverty
 - Mothers of young children whose employment rates still remain low compared to pre-pandemic levels
- **Challenges Ahead...**
 - Uncertainty of SARS-COV-2 mutations (variants), both locally and globally, their rate of transmission; certain age groups affected (especially children!); the degree of current vaccine effectiveness
 - Relaxation of NPIs such as physical distancing, wearing masks, hand hygiene, etc.
 - Decreased vaccination rates:
 1. Vaccination hesitancy – Approx. 30% of the U.S. population reluctant to get vaccinated; recent concerns with Johnson & Johnson vaccine causing blood clotting adverse reactions; misinformation or lack of clear straightforward messaging, distrust of government health agencies
 2. People skipping second dose of the 2-dose vaccinations

- The need for better public health messaging to encourage high vaccination coverage and compliance with pandemic safety measures (NPIs), which are essential in controlling COVID-19 and prevent surges in hospitalizations and deaths in the coming months (CDC)