Hibbs Brief

Hibbs Institute for Business & Economic Research

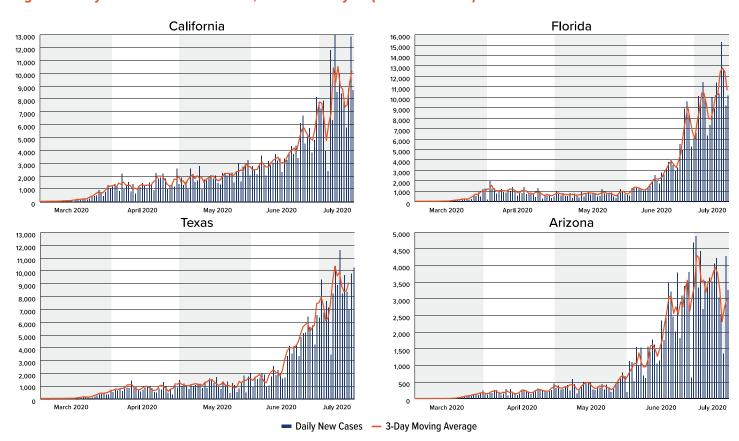
COVID-19 Numbers in Texas, in the Second Wave

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In this issue of the *Hibbs Brief*, statistics during the *second wave*¹ of the COVID-19 pandemic in Texas and other states are discussed. Complementary data focusing on East Texas are also provided.

The second wave of coronavirus emerged in the US in June. While new daily cases in California grew gradually from 115,000 on June 1, to 355,000 (an over 200 percent increase), states such as Arizona, Florida and Texas experienced a second wave of COVID-19 cases that have grown exponentially in only six weeks. Arizona, Florida and Texas have emerged as the latest epicenters of the pandemic, showing record numbers of new infections reported in the past six weeks (an average of 2,475; 5,450; and 5,000, respectively). See Figure 1. Arizona experienced a 560 percent increase in total cases (from 20,000 to 131,000 cases); Florida 430 percent increase (from 57,000 to 302,000 cases); and Texas nearly 350 percent increase (from 65,000 to 290,000 cases). Although the recent surges of COVID-19 cases came a few weeks after state reopenings, the *Hibbs Institute* finds it difficult to determine in what magnitude this second wave is linked to the increased economic activity or the mass protests regarding race and police brutality that erupted in June.

Figure 1. Daily New Cases of COVID-19, March 1 – July 15 (Selected States)



Source: John Hopkins University.

The total number of COVID-19 cases has increased dramatically in the past six weeks in Texas. However, *fatality rates*³ in the state remain relatively low compared to states that were severely impacted during the first wave of the pandemic in March and April. **Table 1** shows a comparison of COVID-19 statistics between Texas and New York at five different points in time. While total cases in New York increased dramatically at the beginning of the pandemic in April, the cases in Texas remained relatively low for several months, until June and July when the cases increased substantially. Although the number of cases in Texas as of mid-July is growing rapidly and approaching the New York numbers, total deaths in Texas are not nearly as close to the number of fatalities in New York. The fatality rates in Texas have remained below 3 percent, while New York's have stabilized at around 8 percent for several months.

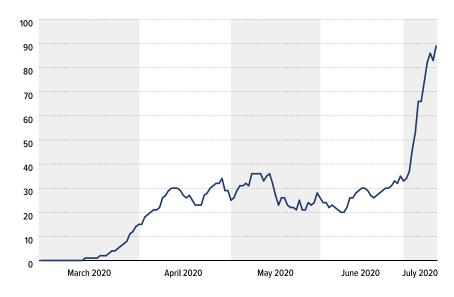
The pandemic in Texas has not reached the severity that has been experienced by New Yorkers for several months. But, the number of deaths associated with COVID-19 in Texas increases every day (Figure 2). The healthcare capacity in New York was surpassed due to the large number of infected people requiring medical aid at the same time, which costed many lives. The healthcare capacity in several locations in Texas is close to their limit. In order to help decrease the spread of the virus in our community, it is important to practice the recommended measures, such as wearing masks in certain public settings, being vigilant about washing hands and surfaces, and implementing personal spacing when applicable.

Table 1. COVID-19 Statistics in Texas and New York

Date	Total Cases		Total Deaths		Cumulative Tests		Fatality Rate	
	Texas	New York	Texas	New York	Texas	New York	Texas	New York
March 31	3,809	75,833	54	3,244	NA	220,934	1.4%	4.3%
April 30	28,727	304,372	812	24,552	330,300	927,438	2.8%	8.1%
May 31	64,652	370,770	1,675	30,489	1,073,491	2,113,777	2.6%	8.2%
June 30	163,060	393,454	2,455	32,032	2,119,036	3,971,648	1.5%	8.1%
July 15	289,837	404,006	3,498	32,427	2,924,288	4,724,882	1.2%	8.0%

Sources: John Hopkins University (cases and deaths); Texas Department of State Health Services and New York State Department of Health (cumulative tests); fatality rate calculated by the Hibbs Institute.

Figure 2. Daily Deaths Associated with COVID-19 in Texas March 1—July 15 (7-Day Moving Average)



Source: Texas Department of State Health Services.

Tables 2 and 3 provide some complementary data regarding COVID-19 statistics at the county level. Table 2 details total cases, deaths, active cases and the calculated fatality rates for the 20 counties with the largest count of infected people in Texas. Harris County, a densely populated county in the Houston Metro area, ranks first of all Texas counties with over 55,000 confirmed cases (through July 20), with more than 35,000 active cases and over 1,000 new cases every day (2,001 on July 14). Although total deaths in the Houston Metro area and most of the state remain relatively low with fatality rates below 3 percent (compared to other states in the nation with over 4 percent), the rampant number of new cases every day (14,916 in Texas on July 17) and people requiring medical aid may overload the healthcare system capacity if COVID-19 cases continue to grow at the current rate.

Table 2. COVID-19 Statistics in Texas Counties (20 Largest Case Count)

Ranking	County (Metro Area)	Total Cases	Total Deaths	Active Cases	Cumulative Tests	Fatality Rate
1	Harris (Houston)	55,769	535	35,784	408,886	1.0%
2	Dallas (Dallas-Fort Worth)	41,266	525	17,283	255,738	1.3%
3	Bexar (San Antonio)	26,491	257	13,982	125,546	1.0%
4	Tarrant (Dallas-Fort Worth)	21,617	298	10,520	143,092	1.4%
5	Travis (Austin)	17,646	203	3,192	90,980	1.2%
6	Hidalgo (McAllen)	12,263	284	5,518	61,049	2.3%
7	El Paso (El Paso)	11,769	184	3,778	46,648	1.6%
8	Nueces (Corpus Christi)	8,579	95	7,242	15,072	1.1%
9	Galveston (Houston)	7,125	65	4,912	66,923	0.9%
10	Fort Bend (Houston)	5,979	71	3,816	128,502	1.2%
11	Cameron (Brownsville)	5,891	96	2,964	62,334	1.6%
12	Collin (Dallas-Fort Worth)	5,374	64	833	53,070	1.2%
13	Denton (Dallas-Fort Worth)	4,968	42	2,109	30,160	0.8%
14	Williamson (Austin)	4,792	72	955	30,077	1.5%
15	Brazoria (Houston)	4,767	34	2,334	19,490	0.7%
16	Montgomery (Houston)	4,721	46	2,298	21,654	1.0%
17	Lubbock (Lubbock)	4,482	65	2,145	25,471	1.5%
18	Jefferson (Beaumont)	4,260	47	2,542	27,747	1.1%
19	Hays (Austin)	3,865	17	3,018	18,020	0.4%
20	McLennan (Waco)	3,413	24	1,346	42,920	0.7%

Note: Data through July 20, 2020. Source: Texas Department of State Health Services.

Please visit our charts regarding COVID-19 total cases for various areas:

The US by State: https://public.flourish.studio/visualisation/3244012/

East Texas by County: https://public.flourish.studio/visualisation/3244032/

Texas by County: https://public.flourish.studio/visualisation/3244051/

Texas by MSA: https://public.flourish.studio/visualisation/3244041/

Table 3 details total cases, deaths, active cases, and the calculated fatality rates for the East Texas counties in alphabetical order. The total number of confirmed COVID-19 cases in East Texas was 10,121, with 5,771 active cases (through July 20). Although Anderson County ranks first with 2,015 cases, the case count increased nearly 10-fold on June 16 (from 102 to 989) after local prison cases were added to the count. Five prisons are located in Anderson County. Smith County has the second-largest case count with 1,762 total cases and over 1,200 active cases. Smith County shows a dramatic change within seven weeks with 204 total cases and 23 active cases on June 1.

Harrison and Panola counties have the largest death count with 33 and 24 deceased people, respectively. Several counties in East Texas show relatively high fatality rates compared to other counties in Texas, which predominantly are below 3 percent. Although these rates are worthwhile to be considered, it may be because the number of tests performed in these locations is low proportionally to their total population. If this is the case, performing more tests would reduce the fatality rates, but would increase the total confirmed cases. Since the fatality rates are calculated by dividing deaths over total confirmed cases, the resultant quotient increases as the denominator (total cases) is larger.

Table 3. COVID-19 Statistics in East Texas Counties

County / (Largest City)	Total Cases	Total Deaths	Active Cases	Cumulative Tests	Fatality Rate
Anderson (Palestine)	2,015	4	1,917	15,888	0.2%
Bowie (Texarkana)	626	17	139	9,185	2.7%
Camp (Pittsburg)	167	2	37	471	1.2%
Cass (Atlanta)	90	3	37	1,109	3.3%
Cherokee (Jacksonville)	516	2	380	3,482	0.4%
Delta (Cooper)	11	0	4	167	0.0%
Franklin (Mount Vernon)	67	1	18	357	1.5%
Gregg (Longview)	1,008	15	756	5,740	1.5%
Harrison (Marshall)	513	33	121	6,673	6.4%
Henderson (Athens)	380	5	276	2,539	1.3%
Hopkins (Sulphur Springs)	129	0	54	1,137	0.0%
Lamar (Paris)	470	15	165	1,811	3.2%
Marion (Jefferson)	108	2	37	178	1.9%
Morris (Daingerfield)	64	0	15	372	0.0%
Panola (Carthage)	248	24	21	907	9.7%
Rains (Emory)	25	1	17	209	4.0%
Red River (Clarksville)	130	12	10	656	9.2%
Rusk (Henderson)	260	3	84	4,827	1.2%
Smith (Tyler)	1,762	10	1,241	12,968	0.6%
Titus (Mount Pleasant)	984	6	132	3,560	0.6%
Upshur (Gladewater)	130	0	47	841	0.0%
Van Zandt (Canton)	244	3	189	2,181	1.2%
Wood (Mineola)	174	5	74	1,346	2.9%
Total	10,121	163	5,771	76,604	1.6%

Note: Data through July 20, 2020. Source: Texas Department of State Health Services.

- ¹The current increase in new daily COVID-19 cases in the nation, after the first stage of the spread was relatively contained is typically referred as "second wave."
- ² Data through July 15. John Hopkins University. https://github.com/CSSEGISandData/COVID-19
- ³ The fatality rate or case fatality rate is a metric frequently used to gauge the severity of the pandemic in an area. It measures the percentage of people deceased from the number of people infected at a specific location Unfortunately, it is difficult to measure the number of people infected with total accuracy. The number of people currently diagnosed with COVID-19 is not equal to the actual number of people infected with the virus. Thus, the number of tests performed in an area may considerably affect the fatality rate if they are too low. An alternative metric is the death rate, which measures the percentage of people deceased from the general population or a fraction of the general population, infected or not (e.g. 25 deaths per 100,000 people).
- 4 "County's official COVID count surges almost 10-fold." *Palestine Herald-Press.* Jeffery Gerritt, Editor. June 16, 2020. https://www.palestineherald.com/covid-19/countys-official-covid-count-surges-almost-10-fold/article_481f9144-b02b-11ea-99d2-fb1fa582672f.html

