

The Dallas County COVID-19 Crisis

A perspective from the DCMS President

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2020 Dallas County Medical Society President

BUMC Internal Medicine Grand Rounds

August 18, 2020



BaylorScott&White
HEALTH

Disclosure

No financial relationships
to disclose.

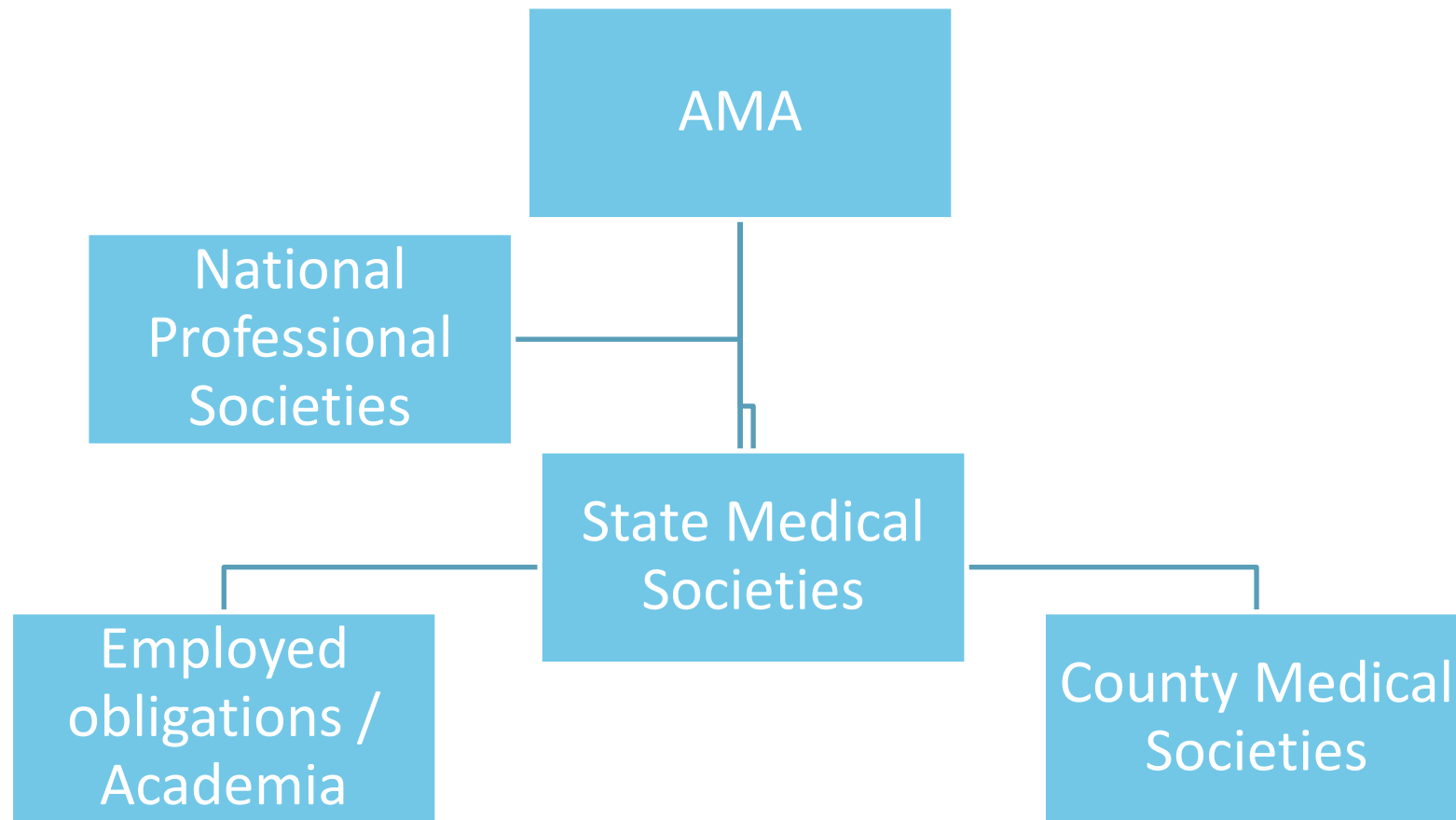


Objectives

- Explore the history of Organized Medicine (DCMS and TMA) as it relates to public health crises.
- Discuss the unique role of Leadership, within Medicine, during times of crisis, and how this can manifest.
- Review the COVID-19 journey in Dallas County, as well as the state of health affairs prior to the pandemic.
- Discuss ongoing leadership activities, including advocacy for ways to improve our state of health affairs.

What do we mean when we discuss “Organized Medicine?”

Organized medicine



Organized Medicine in Texas

- Texas Medical Association was established in 1853.
- 54,000 members
- Vision: To improve the health of all Texans.
- Mission: TMA stands up for Texas physicians by providing distinctive solutions to the challenges they encounter in the care of patients.



Dallas County Medical Society

- Founded in 1876, by 30 Dallas County physicians.
- Current membership is at 8,400.
- 2nd largest County Medical Society in Texas.
- Larger than 32 state medical societies.
- Vision: A healthy community.
- Mission: Promote public health, advocate for physicians and their relationships with patients, while upholding professionalism in the practice of medicine.

“Advocacy for Public Health” – DCMS in Action

- Hurricane relief efforts: Katrina, Rita, Gustav, Ike
- West Nile Virus
- Zika Virus
- Ebola Virus

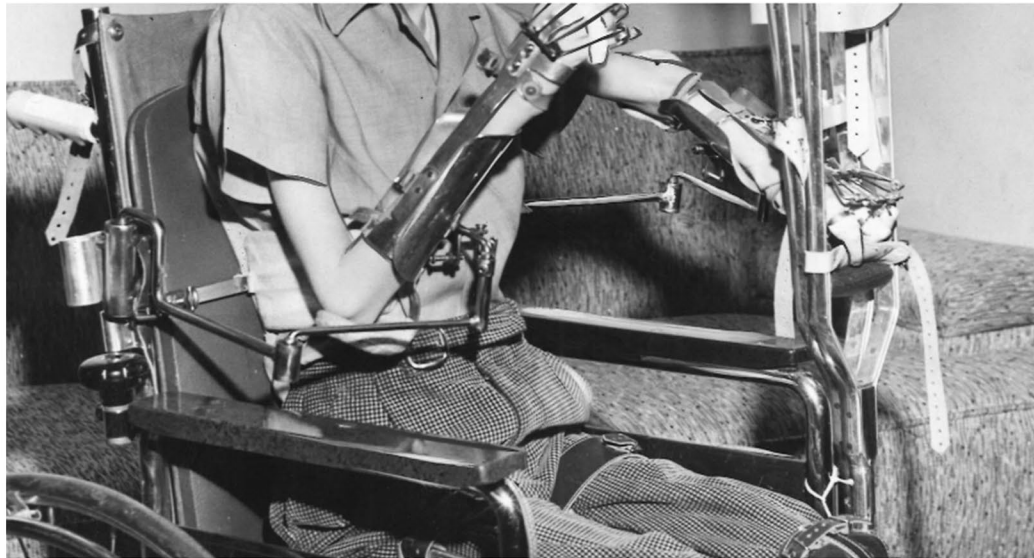


This is not our first rodeo!

History of DCMS involvement with the Polio pandemic.

How Dallas dealt polio a massive blow by vaccinating 900,000 people in two days

The mutual trust that brought government officials, the public and the medical community together seems unfathomable in today's polarized environment.



A Dallas boy with polio is shown in February 1958. (File Photo/Staff)

By [David Tarrant](#)

6:00 AM on Jul 30, 2017 CDT



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“I wanted a million.” – Dr. Percy Luecke, Jr.

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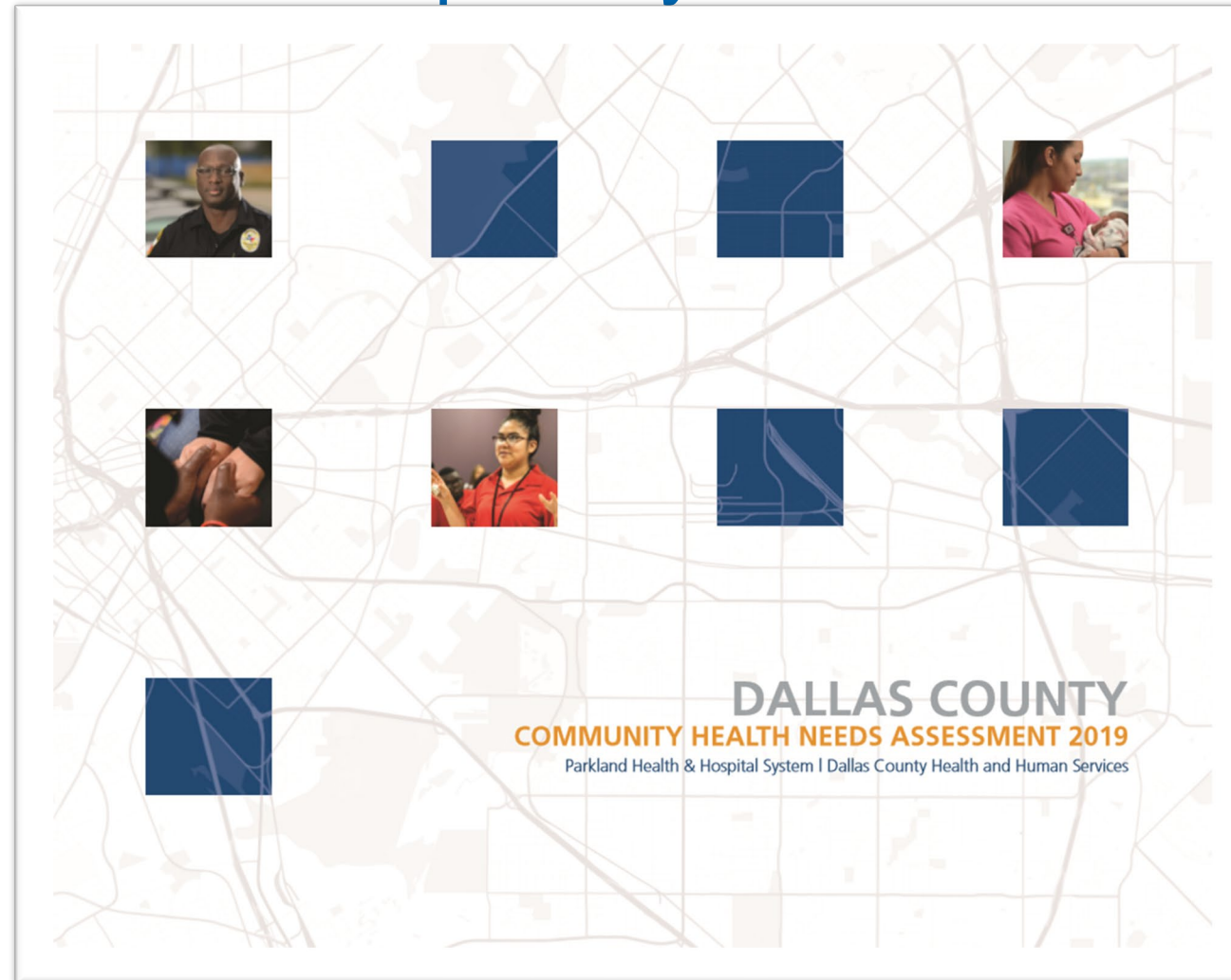
**BY THE DALLAS COUNTY
MEDICAL SOCIETY.**

950,000 = >90% Immunization rate

What was the state of health affairs in Dallas County in January 2020 (PC)?

Dallas County Community Health Needs Assessment 2019

– Parkland Health & Hospital System / DCHHS



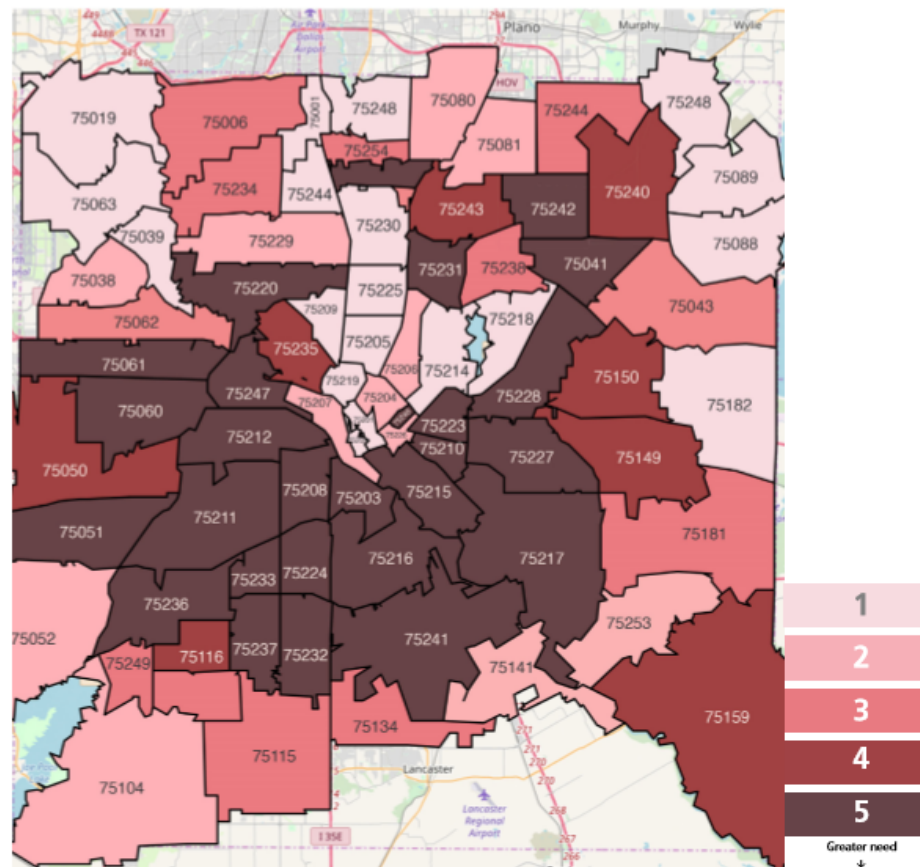
Sept 28, 2019

SocioNeeds Index for Dallas County (The Crescent)

FIGURE 4. SocioNeeds Index Map, Dallas County, 2019

While much of Dallas County benefits from a strong economy, there are several geographic areas that struggle with severe poverty or pockets of economic instability and the social ills that accompany a lack of resources including significant health disparities. Many of the ZIP codes within these underserved areas have suffered from these disparities for decades.

This CHNA uses a SocioNeeds Index (SNI) score to identify zip codes that offer the greatest challenges and opportunities for addressing health disparities. SNI is a measure of socio-economic need based on ZIP Code data and is calculated from 6 indicators: poverty, income, unemployment, occupation, education and language. The indicators are weighted to maximize the correlation of the index with premature death rates and preventable hospitalization rates. Zip codes are given an index score ranging from 0 (lowest need) to 100 (highest need) which is then ranked from 1 (lowest need) to 5 (highest need).⁴ The darkest area in the Dallas County (SNI) map⁵ reveals an expansive geographic area with high socio-economic need and where health disparities are more likely to be present.

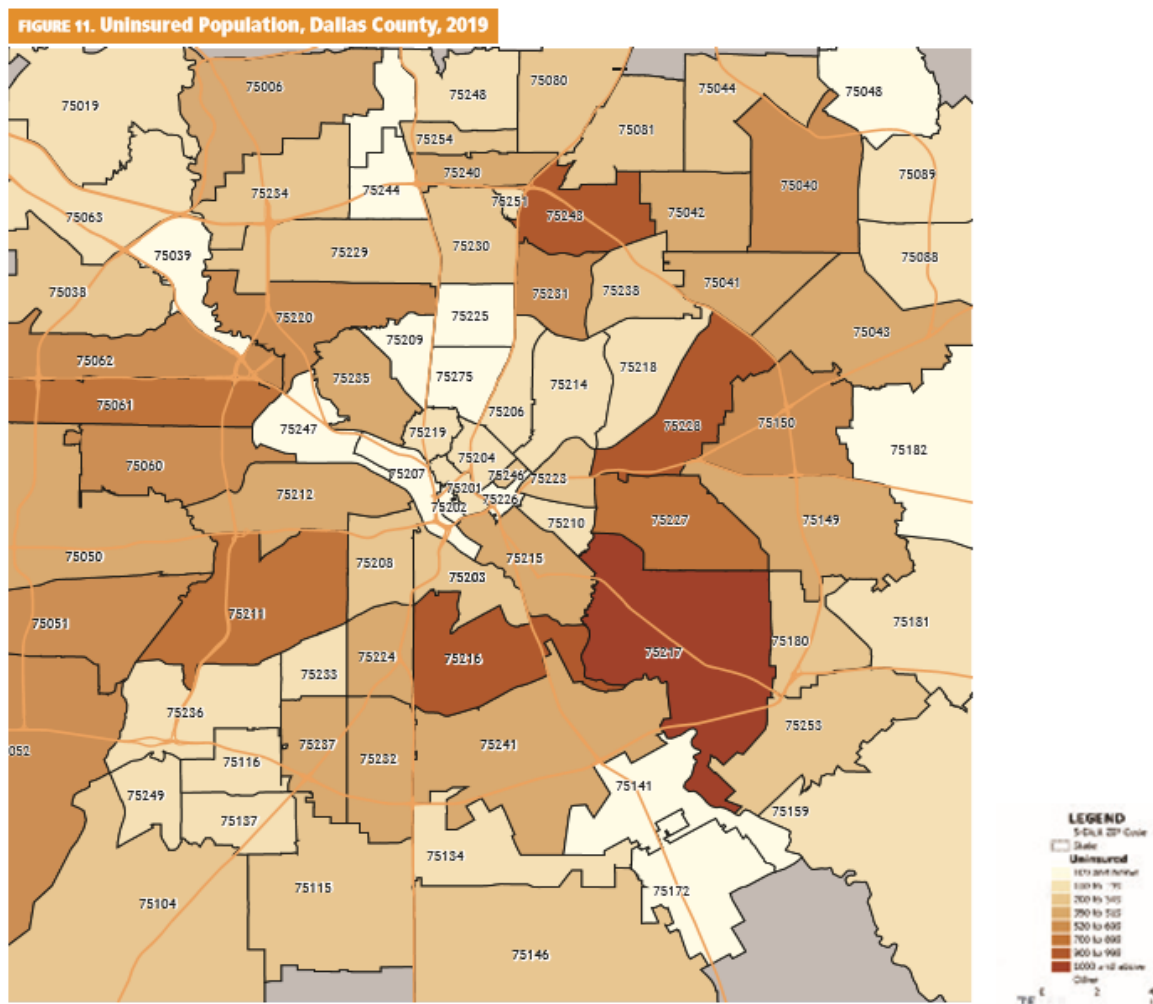


Adopted from DFWHC Foundation, Healthy North Texas SocioNeeds Index.

⁴ Conduent. Community Health, Health and Hospital Systems. Available at: <https://www.conduent.com/solution/community-population-health/community-health-assessment/>

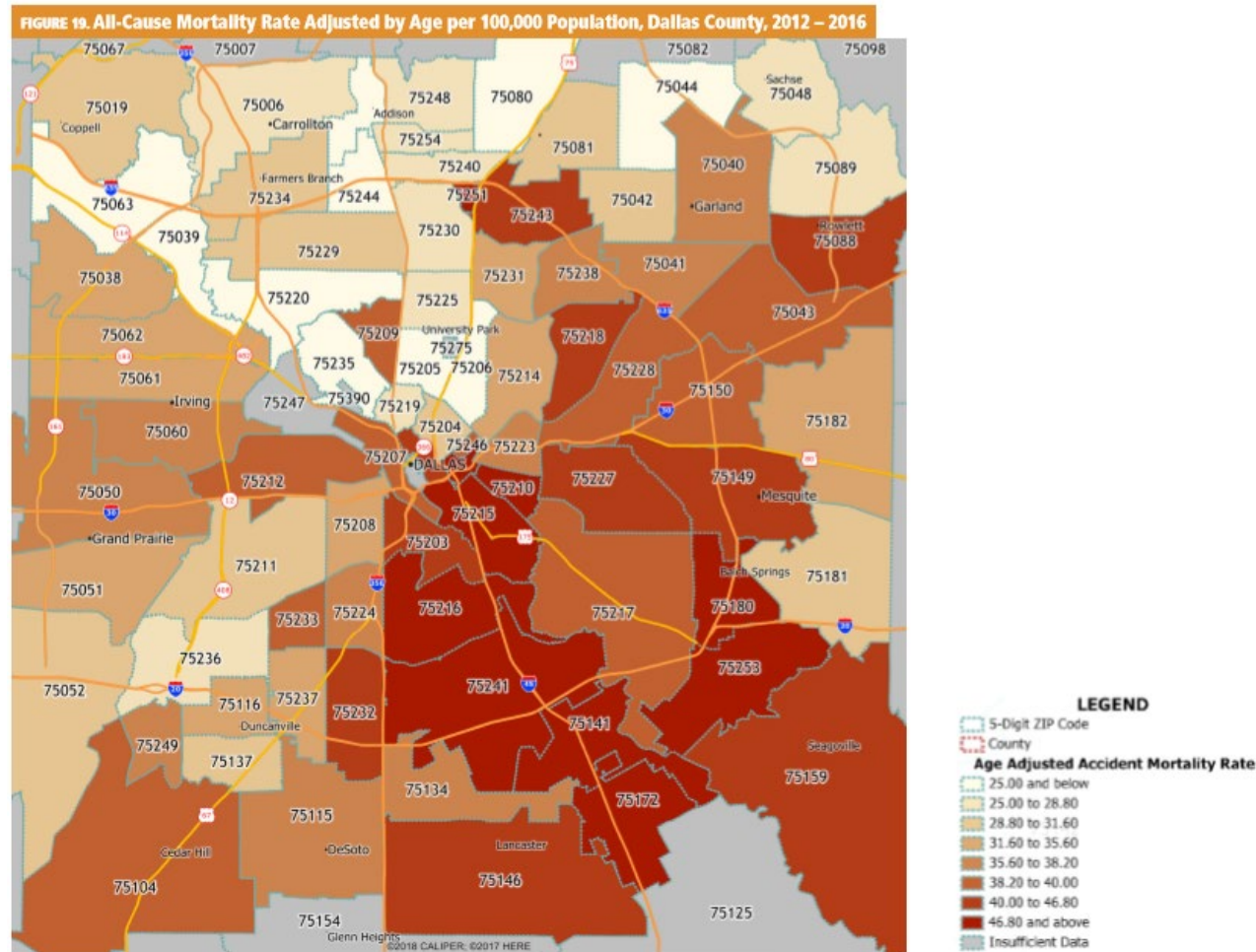
⁵ Health North Texas. SocioNeeds Index. Available at: <http://www.healthynorthtexas.org/index.php?module=indicators&controller=index&action=socioneeds>

Uninsured Population



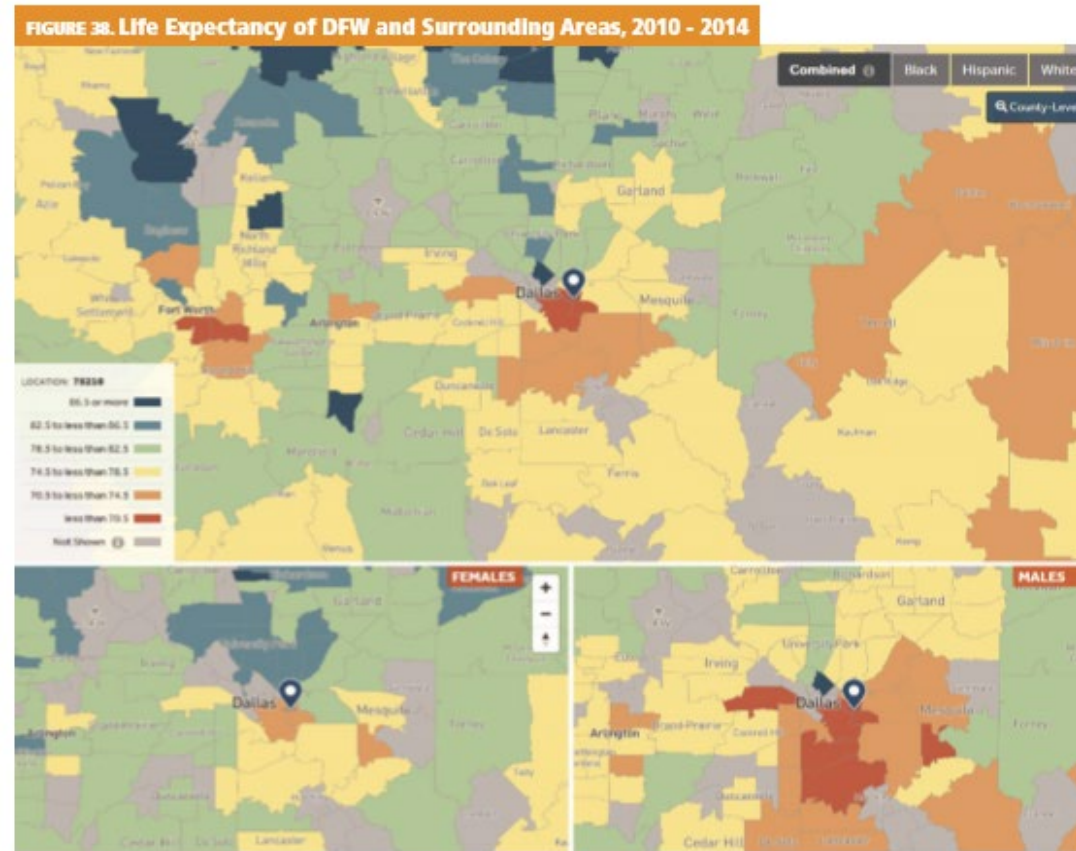
Data Source: IBM Watson/Truven Health Analytics 2019

All-Cause Mortality Rate Adjusted by Age



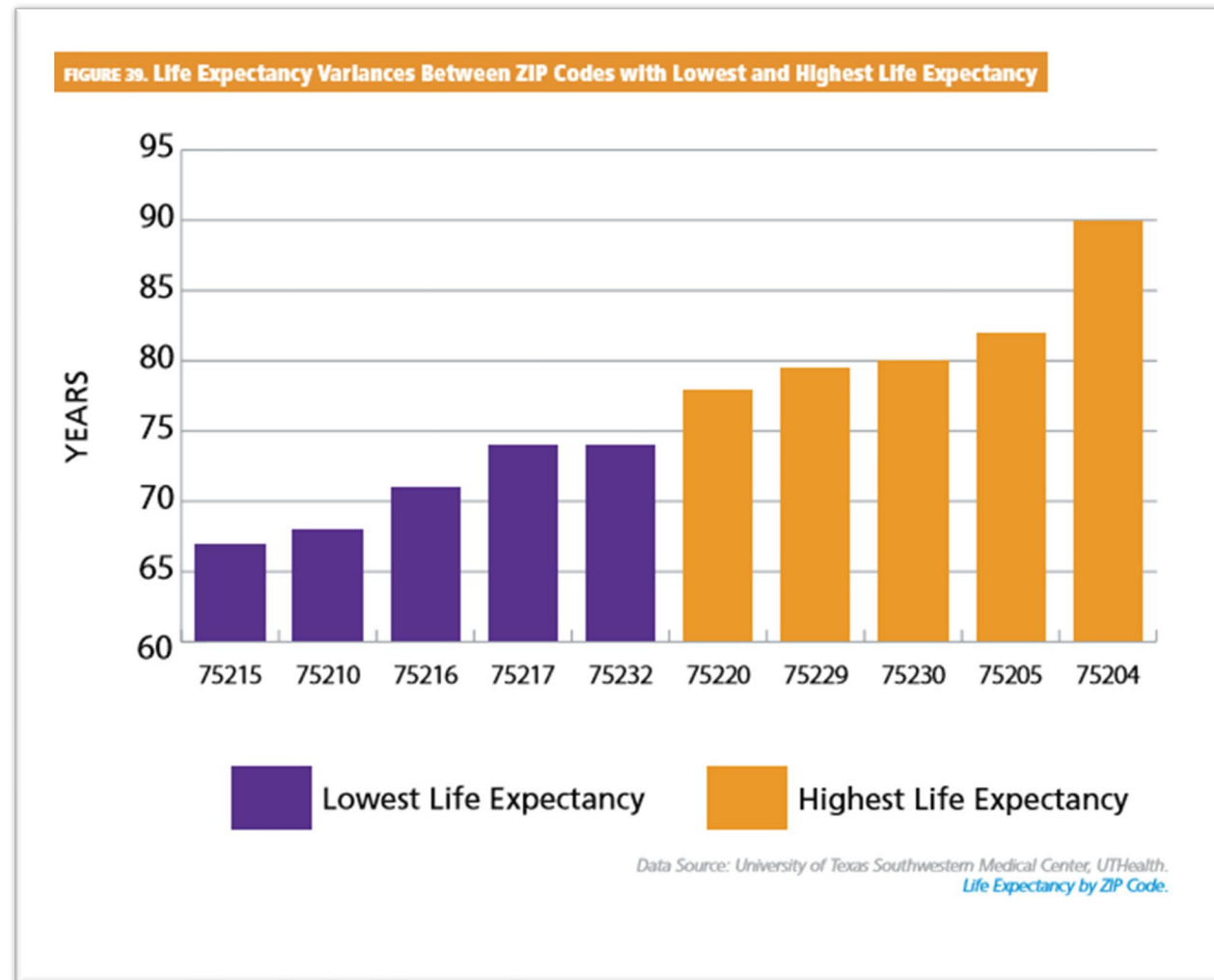
Age Adjustment uses 2000 Standard Population
Data Source: Texas Department of State Health Services

Life Expectancy of DFW

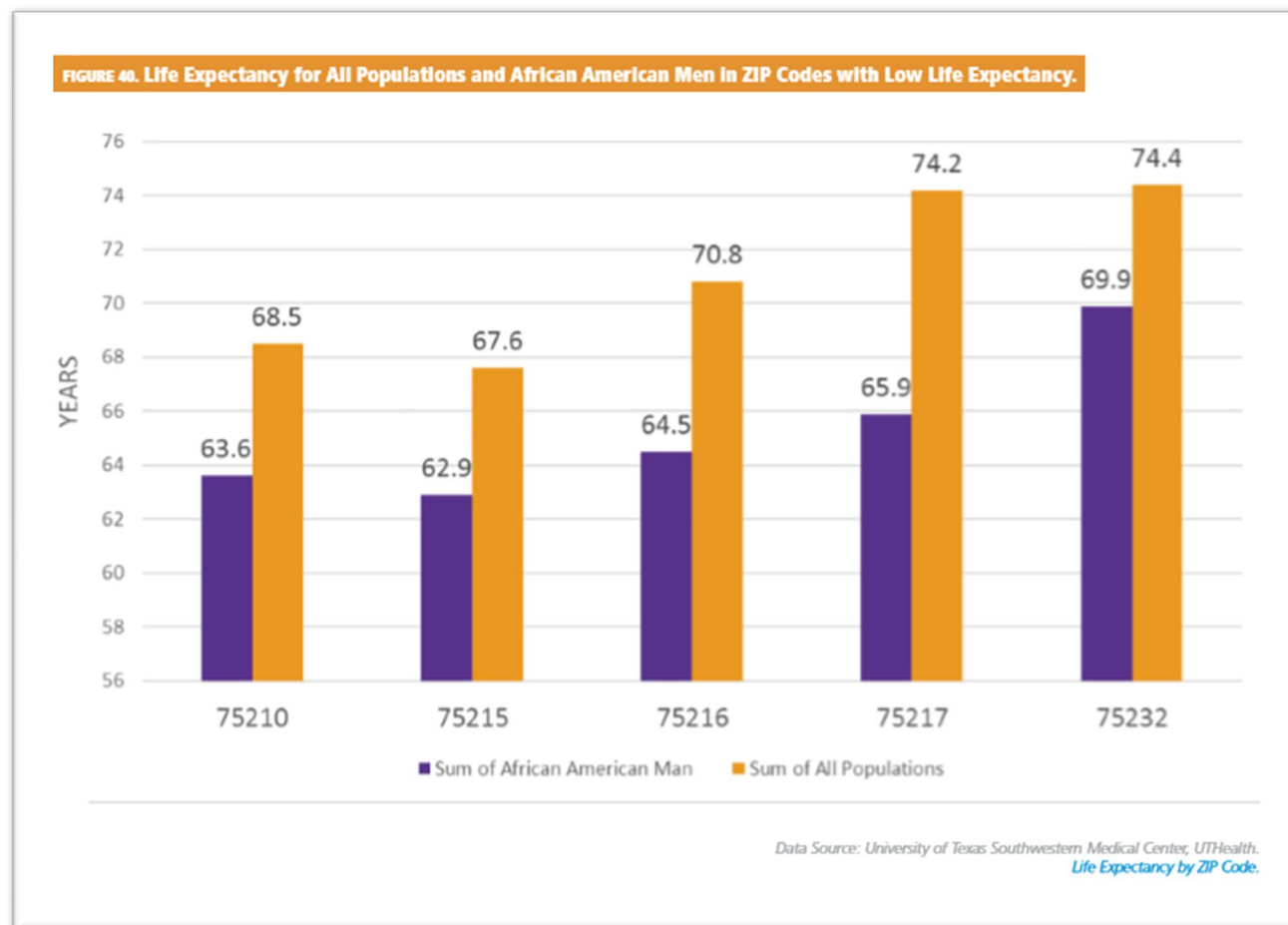


²² U.S. Centers for Disease Control and Prevention. Mortality in the United States, 2017. Available at: <https://www.cdc.gov/nchs/products/databriefs/db328.htm>

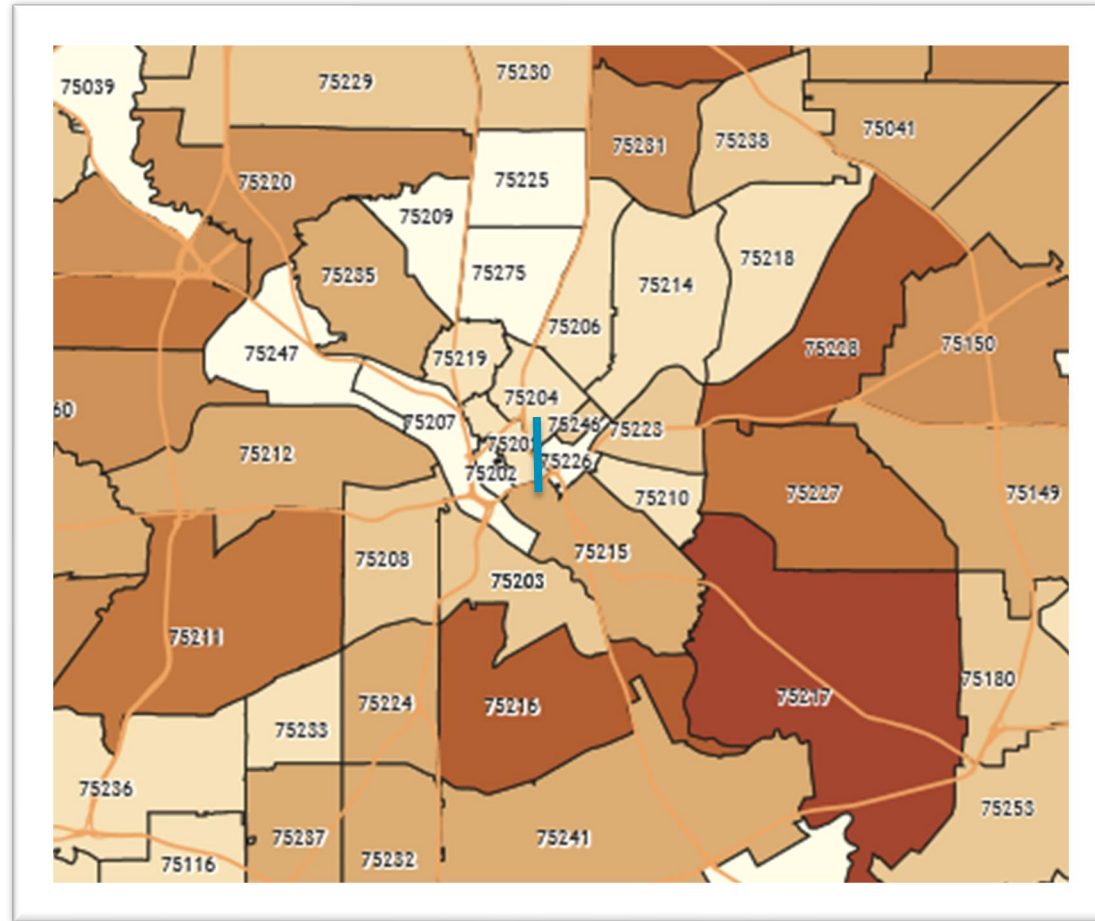
Life Expectancy Variance between ZIP Codes: Tale of Two Cities



Life Expectancy for All Population and AAM in Zip Codes with low life expectancy.



Several decades over just several miles.



March 10, 2020: Arrival of an unwelcome guest in Dallas County

Response of DCMS, County of Dallas, and TMA

- 3/6/20: Establishment of the TMA COVID 19 Taskforce, under the leadership of Wendy Chung, MD.
- 3/9/20: Called meeting of the DCMS Community Emergency Response Committee (CERC).
- 3/20/20: Initial meeting of what would become the Public Health Subcommittee, called by the County and Health Department (included leadership from DFW Hospital Council, DCMS, Dallas DHHS, and Dallas County).

Mass Critical Care Preparations

- 2017: Concluded product and adoption of the North Texas Mass Critical Care Guidelines, by the NTMCC Task Force.
- 3/20/20: Guidelines are dusted off and relevant stakeholders brought together.
- 3/21/20: Debriefing of regional Faith Leaders, as to the NTMCCG's.
- 3/22/20: Debriefing of regional County Judges.
- 3/28/20: Debriefing of Dallas Morning News / Media

County / Region Counsel Phase

- 4/19/20: Formal establishment of, and meeting of the Dallas County Public Health Subcommittee: Perl, Haley, Columbus, Cerise, Love, Blum, Branson, Ubramovitz, Casanova
- 5/4/20: Establishment of the North Texas County Medical Society Coalition

The June to August Blur....

- Weekly meetings of the TMA COVID 19 Taskforce.
- Twice weekly meetings of the Public Health Subcommittee.
- Weekly meetings of the NTCMC.
- Weekly meetings of the NTMCCG Task force and modifications.

Advocacy through Communication

COVID-19 IN NORTH TEXAS
A Discussion With The Experts
With Bianca Castro
Wednesday August 12, 2020 AT NOON **ONLINE**



John Flores, MD
NTMSC Chair
Denton County Medical Society

Beth Kassanoff, MD, FACP
NTMSC Vice-Chair
Dallas County Medical Society

Robert Rogers, MD
Tarrant County Medical Society

Sejal Mehta, MD
Collin-Fannin County Medical Society

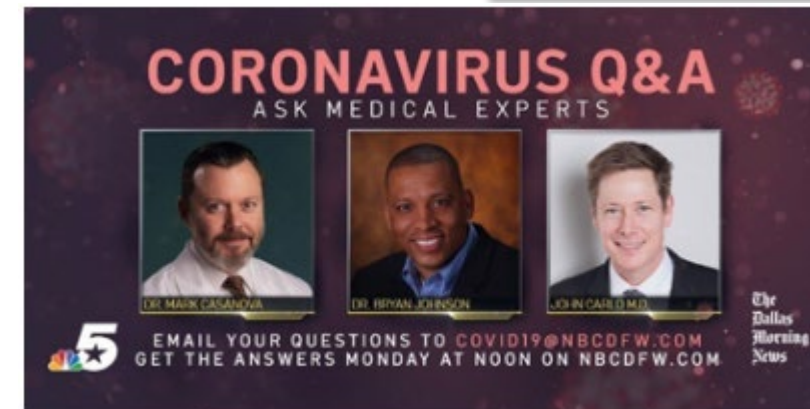
Mark Casanova, MD, FAAHPM
Dallas County Medical Society

Easwar Sundaram, Jr. MD,
Grayson County Medical Society

NORTH TEXAS MEDICAL SOCIETY COALITION



CORONAVIRUS Q&A
ASK MEDICAL EXPERTS



DR. MARK CASANOVA
DR. BRYAN JOHNSON
JOHN CARROLL MD

5 EMAIL YOUR QUESTIONS TO COVID19@NBCDFW.COM
GET THE ANSWERS MONDAY AT NOON ON NBCDFW.COM

The Dallas Morning News

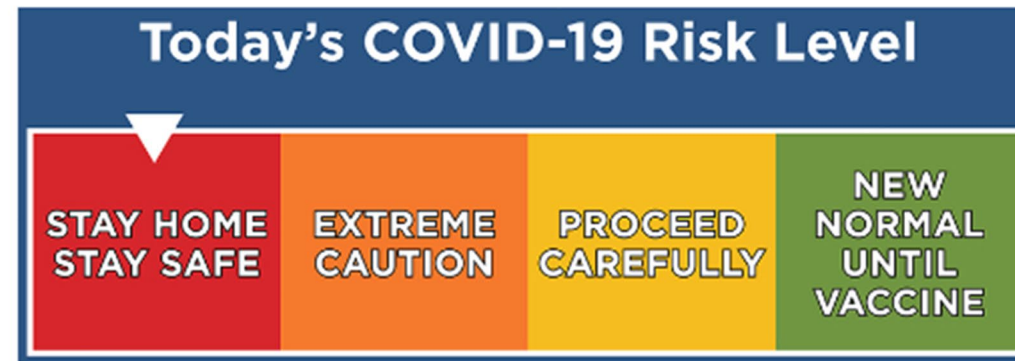
150 Media
Encounters,
Since March

NORTH TEXAS MEDICAL SOCIETY COALITION

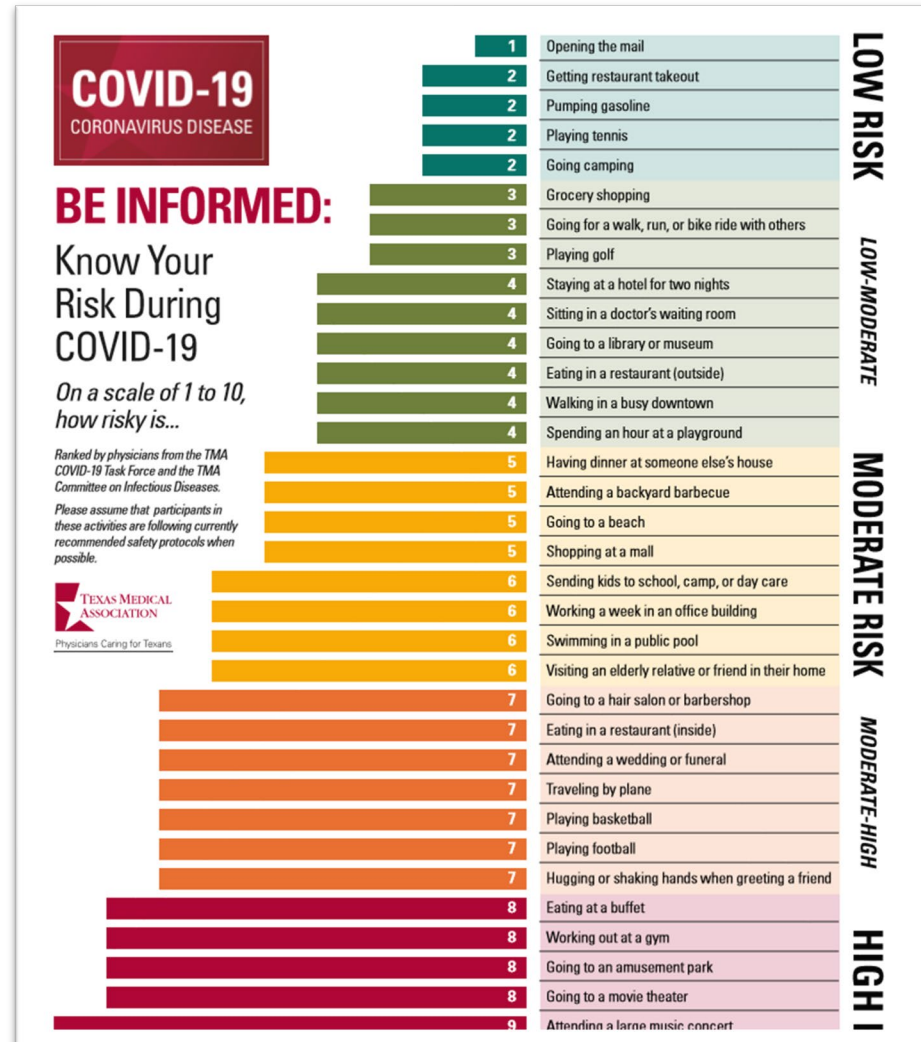


Advocacy through Education

2019 Novel Coronavirus (SARS-CoV-2/COVID-19)



Advocacy through Education

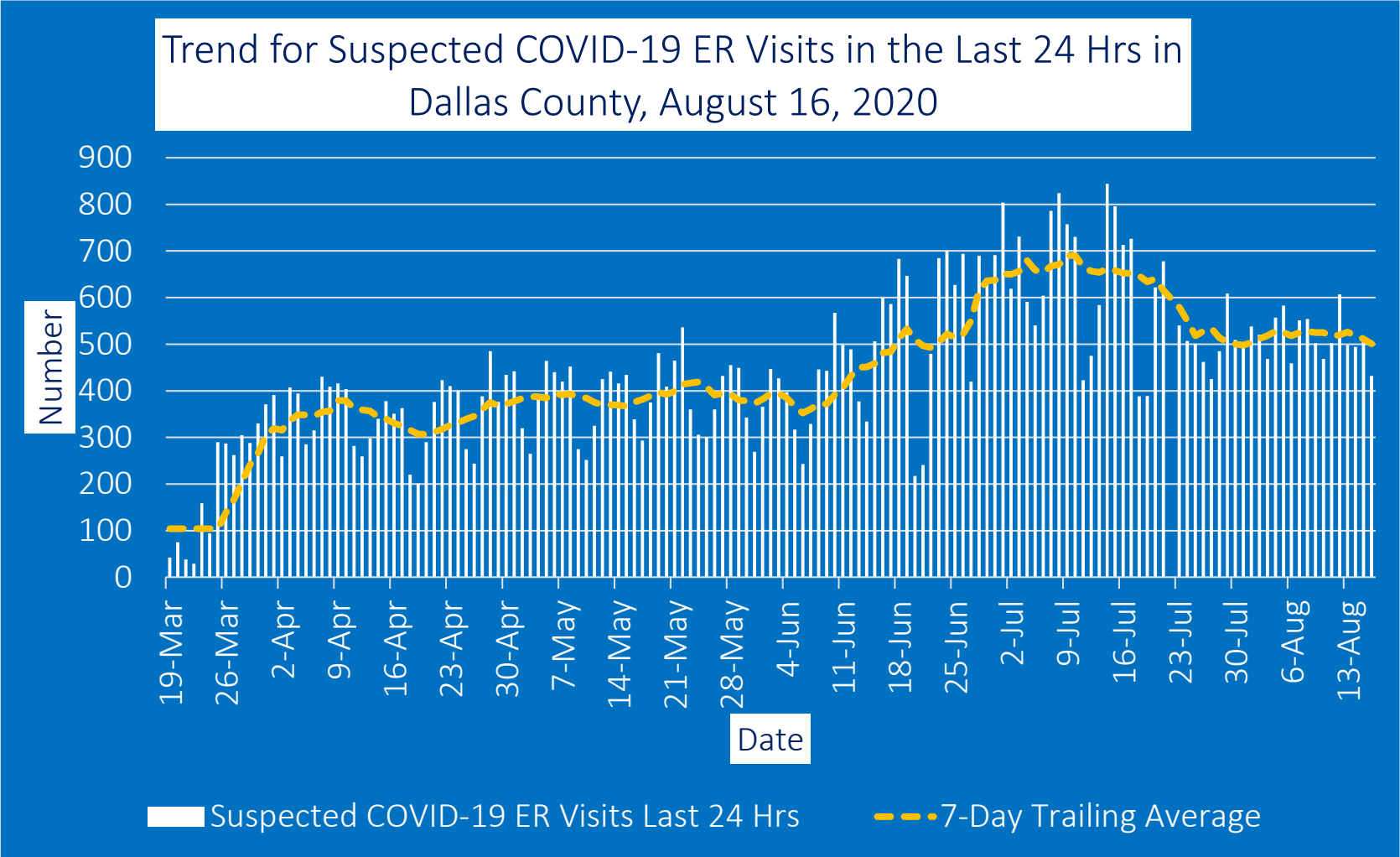




Dallas County COVID-19 Monitoring Data August 16, 2020

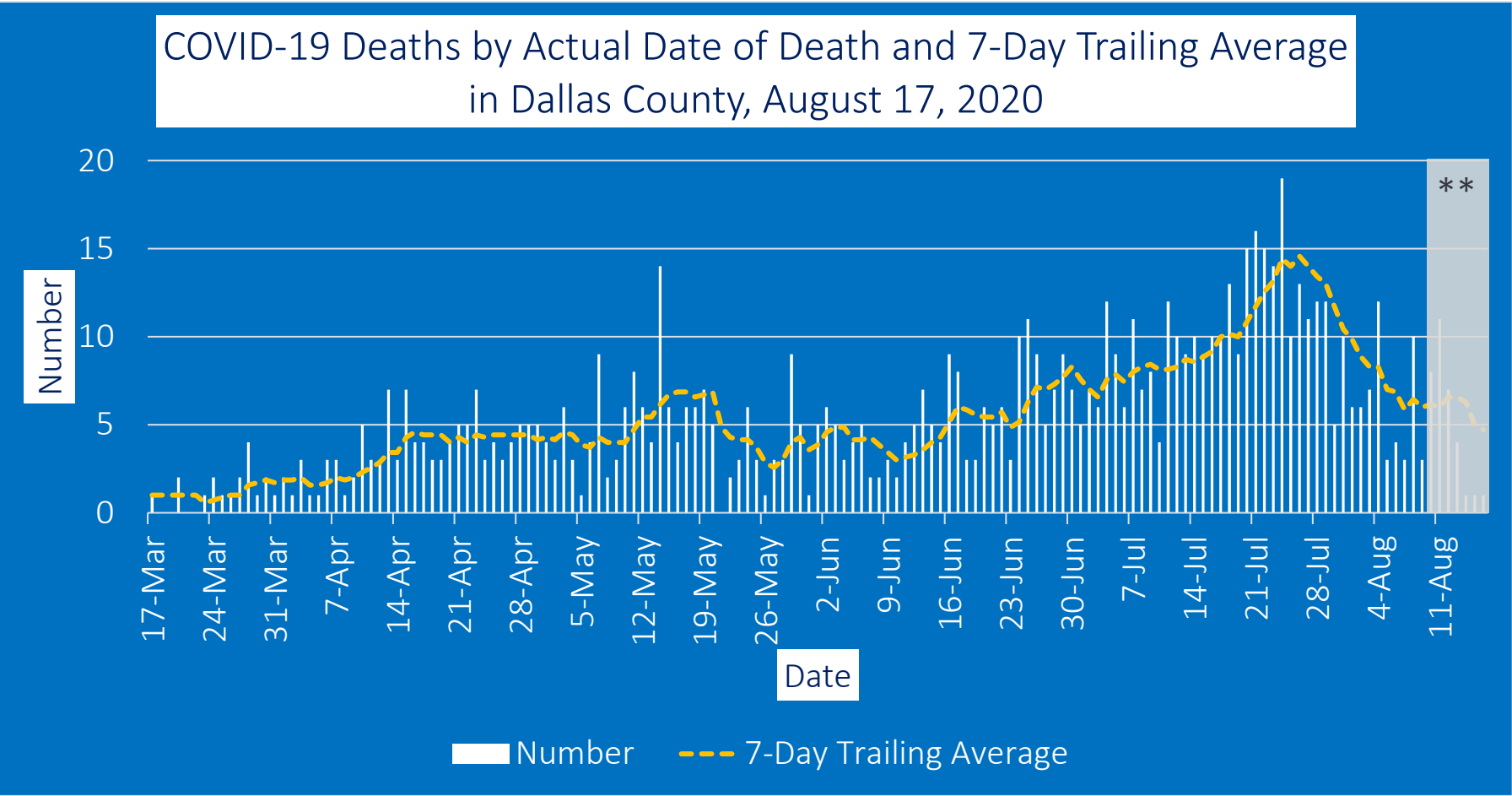
Image Source: <https://www.wfaa.com/article/news/health/coronavirus/coronavirus-updates-in-dallas-fort-worth-saturday-april-25/287-9fb7f0e0-2d6d-44fa-b48d-b0d29047f63e>

ED Visits: Suspected COVID-19 ER Visits in the Last 24 hrs



432 Suspected
COVID ER Visits
(↓ 75 from the
previous day)

COVID-19 Deaths by Actual Date of Death and 7-day Trailing Average

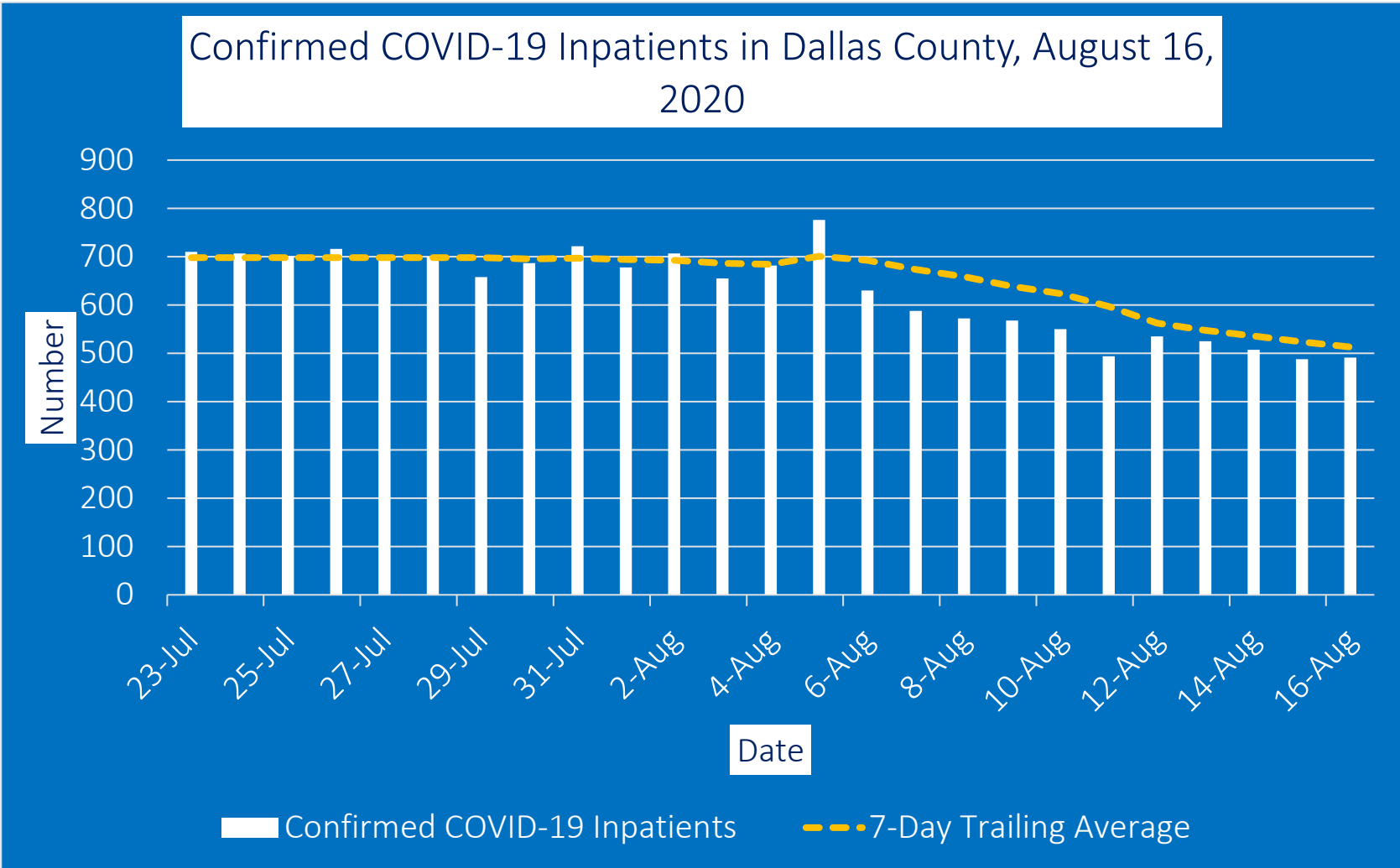


Data Source: Dallas County Health and Human Services.

**Data are incomplete for the most recent dates. Average reporting lag = 5.8 days (Range = 0 - 181 days)
Mortality data are updated as we receive additional death reports

How have our institutions fared?

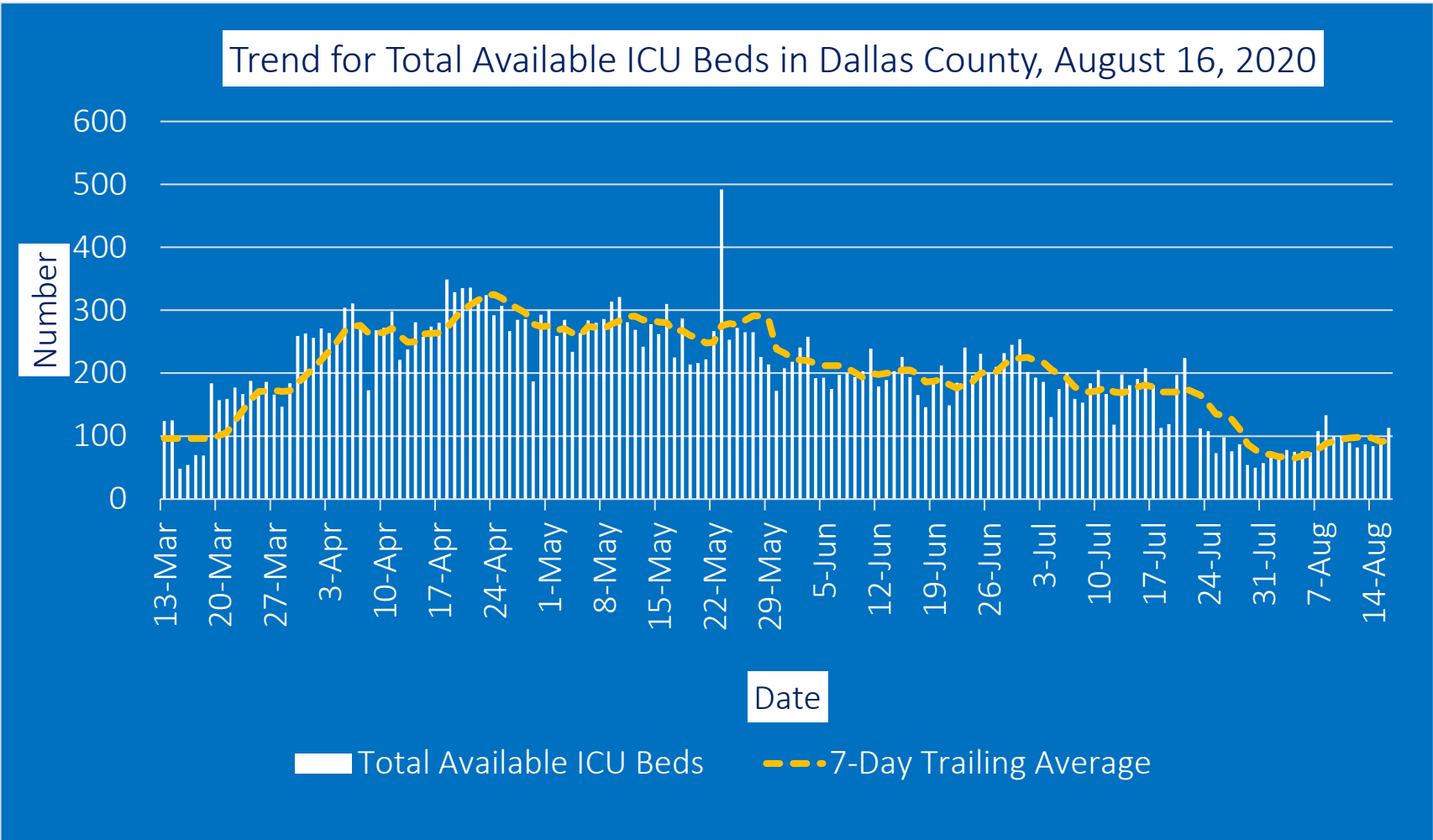
Hospital Occupancy: Confirmed COVID-19 Inpatients



491 Confirmed
COVID-19 Inpatients
(↑ 3 from the
previous day)

Available ICU Beds and 7-Day Trailing Average

113 All ICU Beds
(↑ 19 from the
previous day)



Current State of Affairs of COVID in North Texas

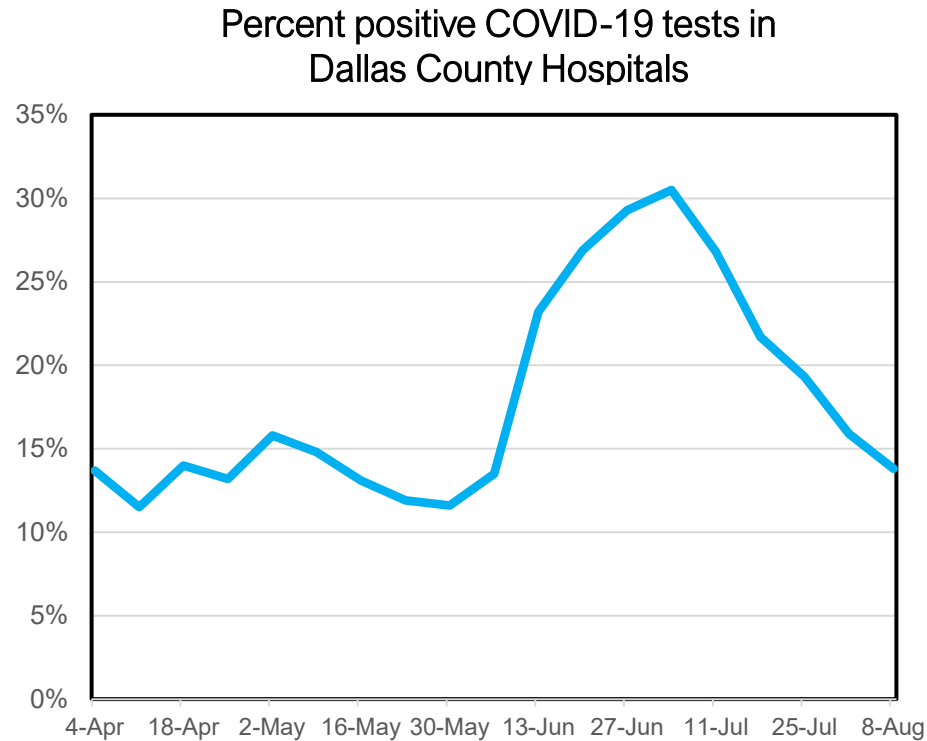


COVID-19 Current State Analysis and Forecasting for the DFW Region

Department of Internal Medicine
Lyda Hill Department of Bioinformatics
Department of Emergency Medicine
UTSW Health System Information Resources

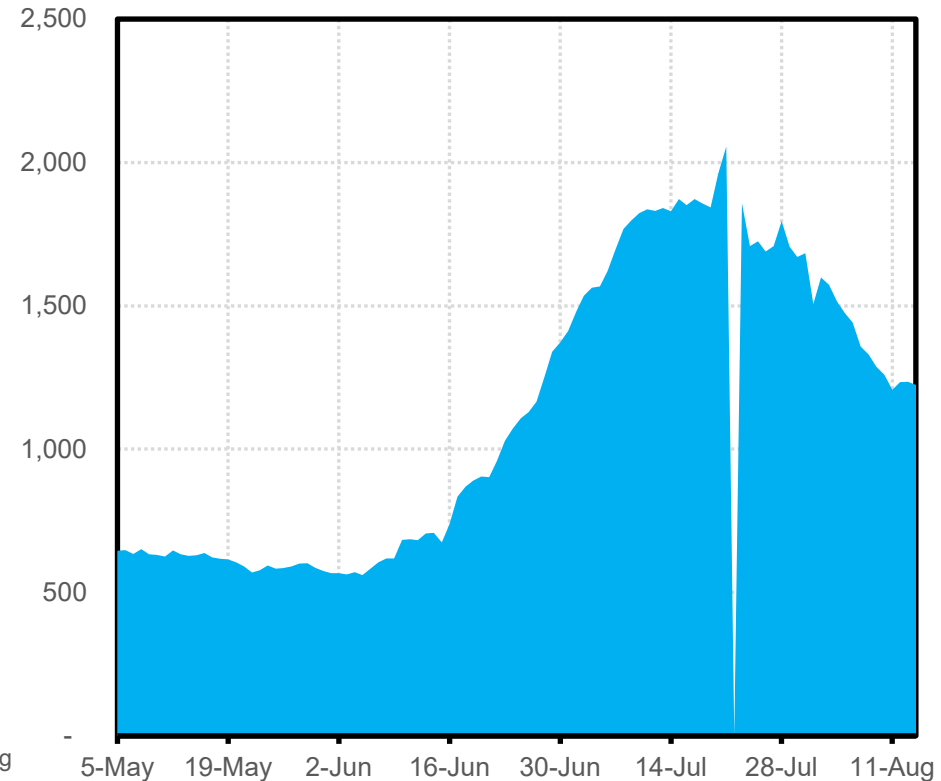
Data as of August 14

Cases of COVID-19 and those that require hospitalization are flattening in North Texas



14% of COVID-19 tests performed in Dallas County hospitals were positive in the week ending in August 8.

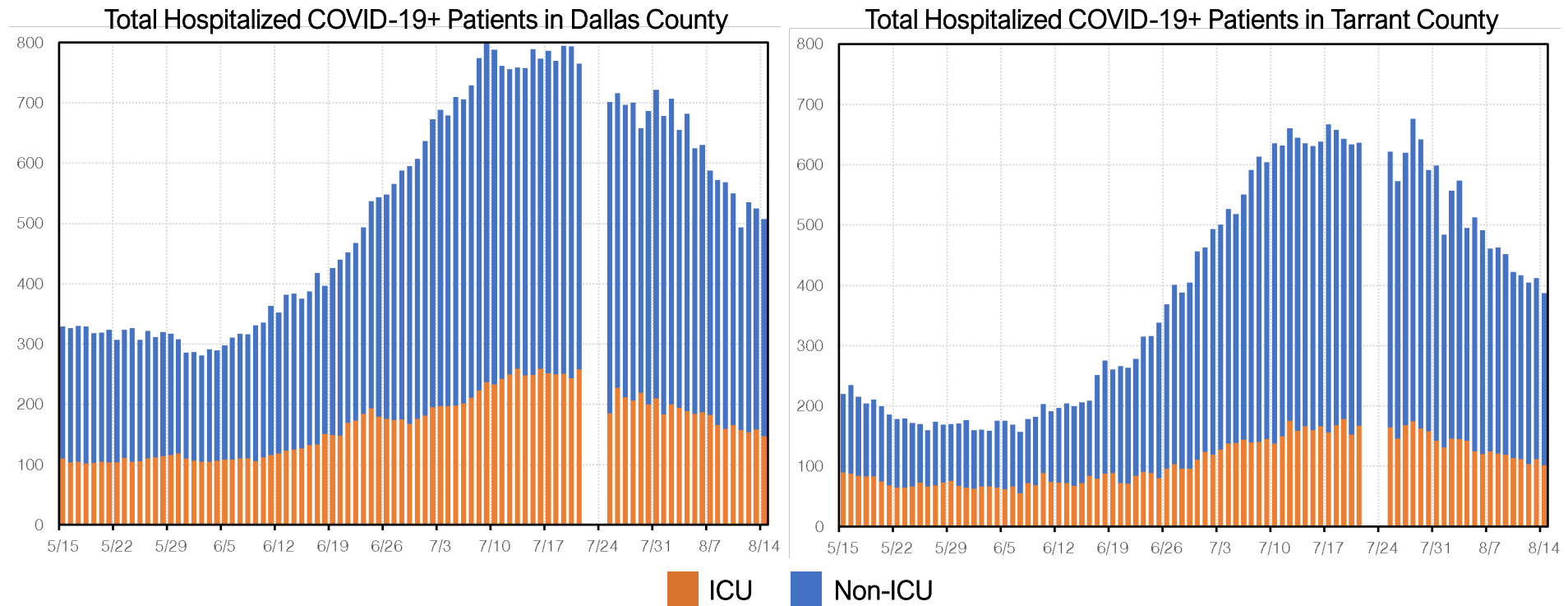
Confirmed COVID-19 Patients in North Texas Hospitals



Hospitalizations have declined 10% compared to one week ago and 27% compared to two weeks ago.

There is a gap in the available hospitalization data, as a new reporting system has been implemented. The latest data may not be comparable to the data before the gap.

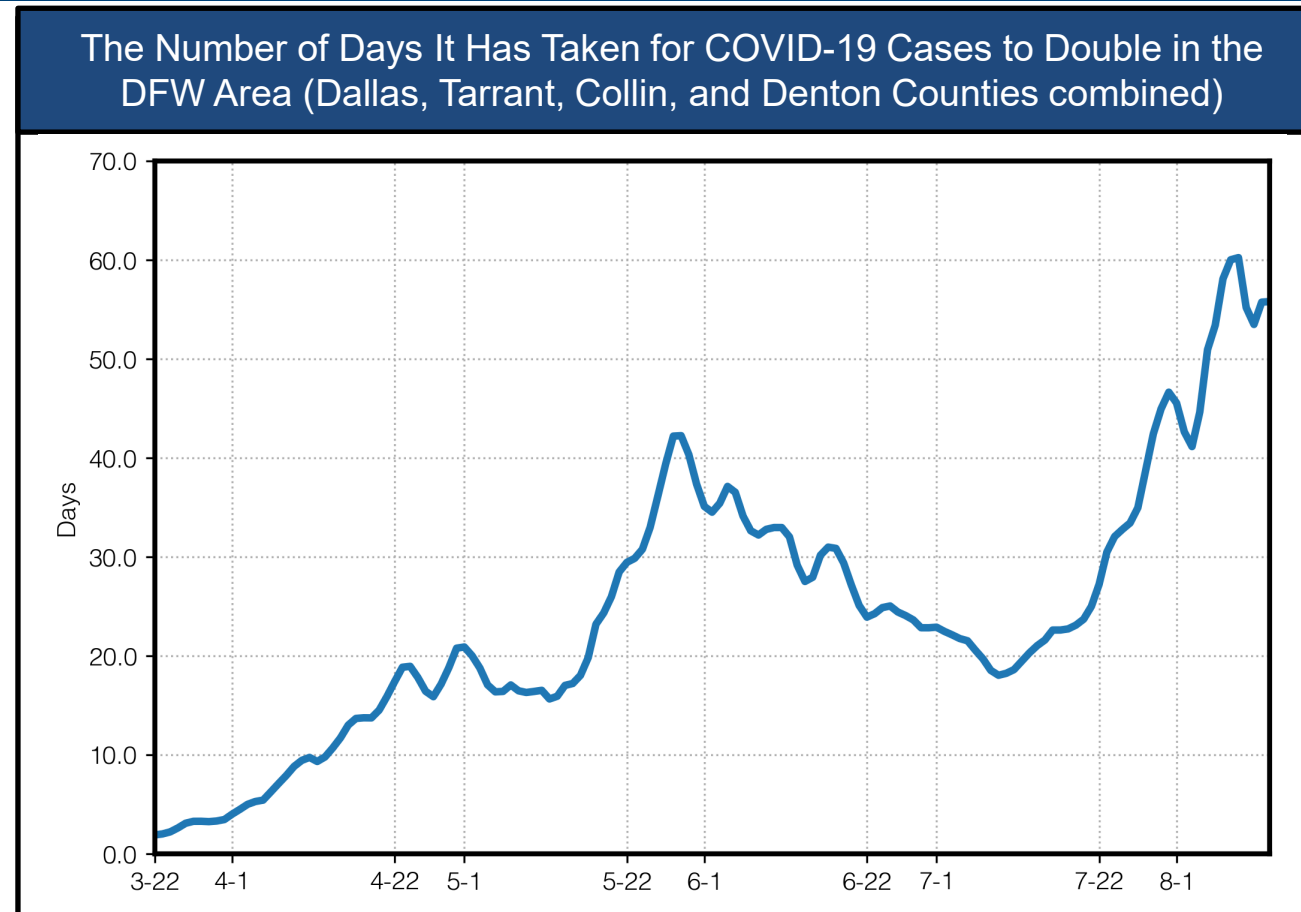
How many people with COVID-19 have been hospitalized in Dallas and Tarrant Counties in the past three months?



There is a gap in the available hospitalization data, as a new reporting system has been implemented. The latest data may not be comparable to the data before the gap.

We closely track daily COVID-19 hospitalizations, as this indicator reliably monitors the severity of the outbreak in DFW. Hospitalizations trail new infections by 1-2 weeks but are not influenced by testing capacity or test reporting delays, thus giving us a clear picture of severe cases in the community.

How quickly is COVID-19 spreading in North Texas?



Slower
COVID-19
spread



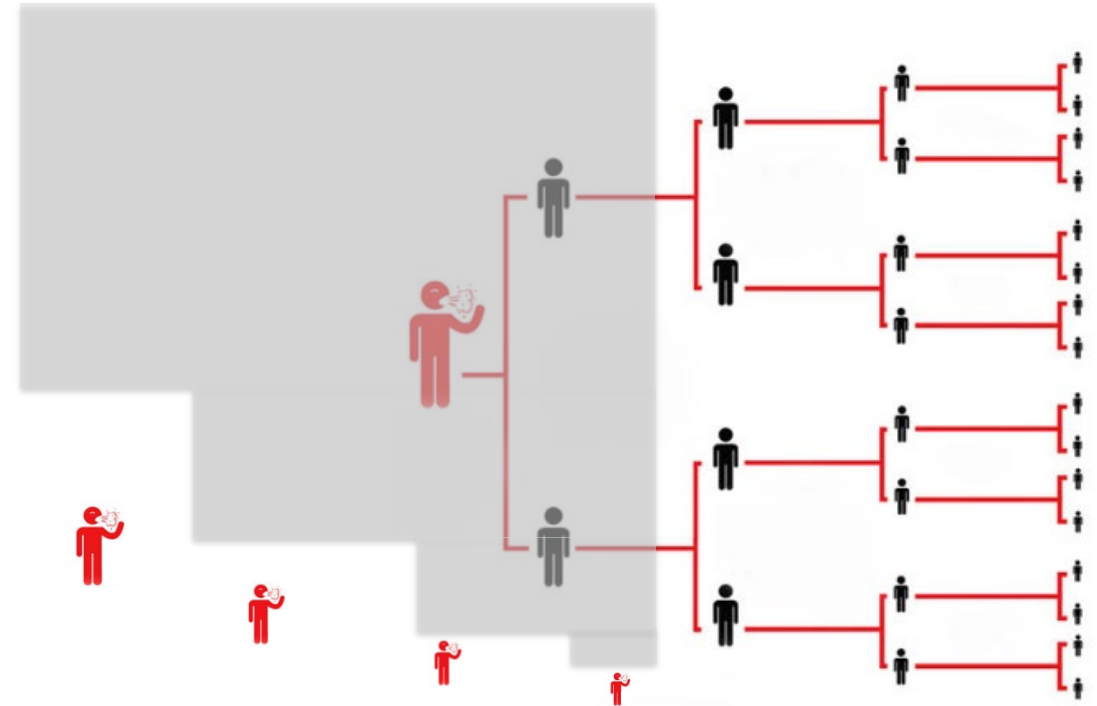
Faster
COVID-19
spread



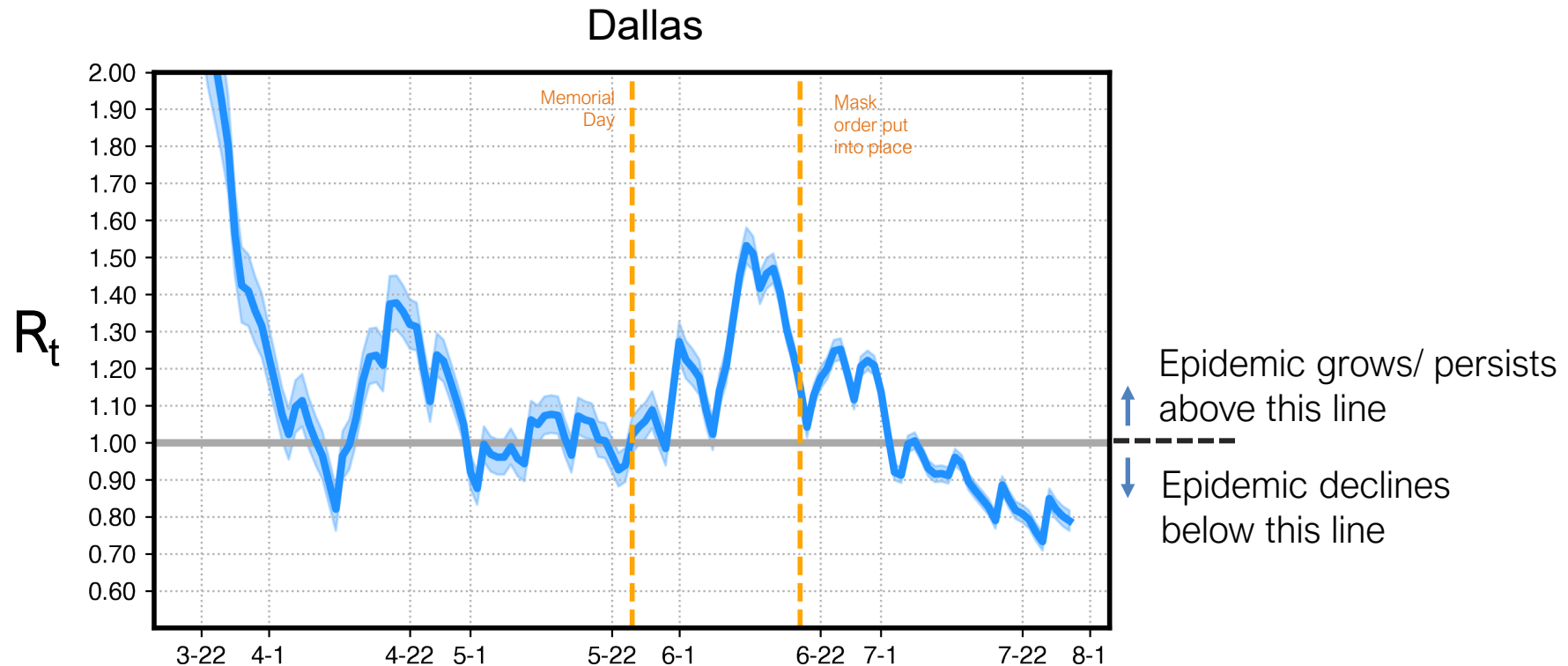
As the spread of disease slows, it takes longer for COVID-19 cases to double. Following Memorial Day weekend, the doubling time decreased in the DFW area. It has been increasing again (i.e. slower spread of disease) in the region since mid-July as reported case volumes have decreased.

R_t Represents Contagiousness

- R_t helps us measure how effective social distancing measures are after they are put into place.
- If social distancing and measures like masking are effective, then the number of secondary infections is dramatically reduced.
- In this scenario where social distancing measures were 50% effective, then only **five people** end up infected, rather than the original 31.



How Contagious is COVID-19 in Dallas Now?

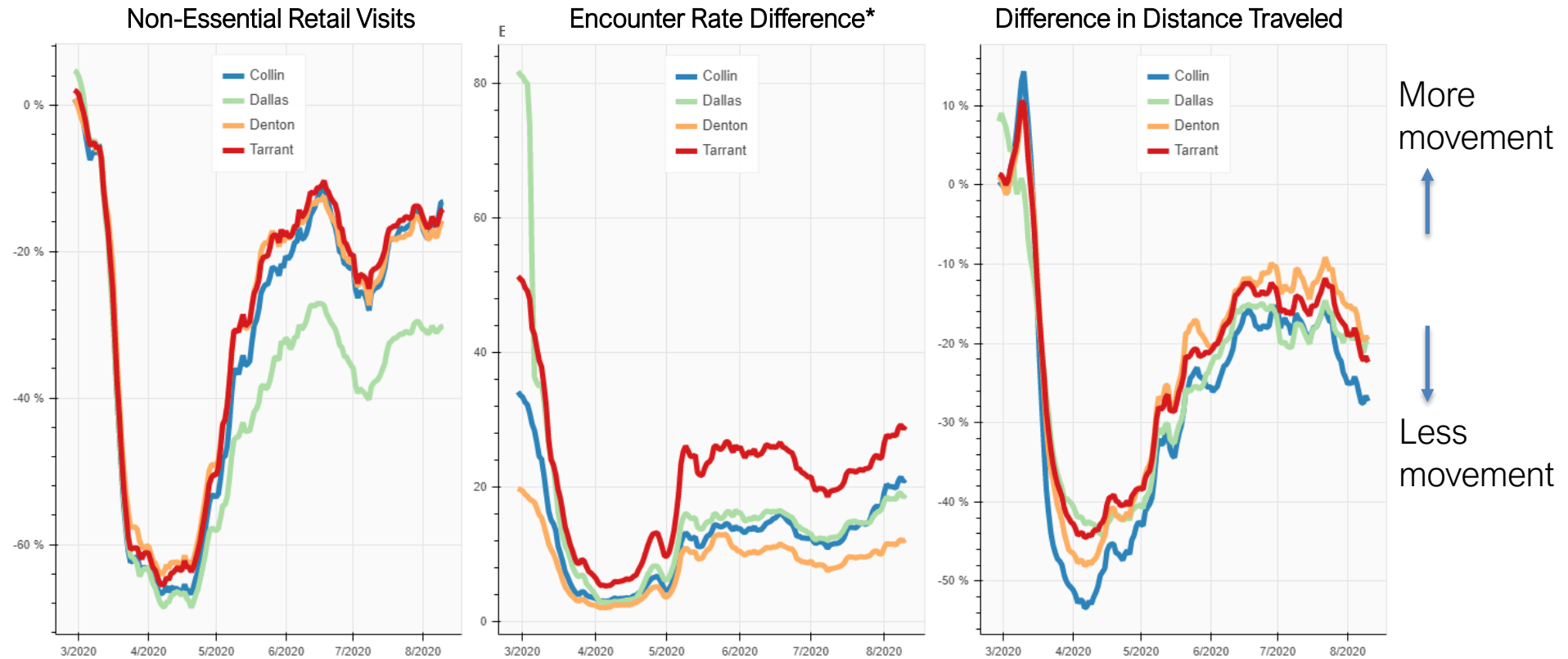


Each line represents how contagious COVID-19 has been in Dallas County over the last few weeks. Contagiousness depends on how well we social distance, wear masks, limit travel, clean high touch surfaces, etc.

The R_t value appears to have declined to below 1 in both counties as of mid-July. We now calculate this value for two weeks in the past using the date positive tests were collected rather than the date they were reported, since the tests reported on a given day were collected over many different days. Tarrant County no longer reports daily positive test counts by the date that they were collected, so we are unable to calculate its R_t value in this way.

****Historical data points are subject to revision.****

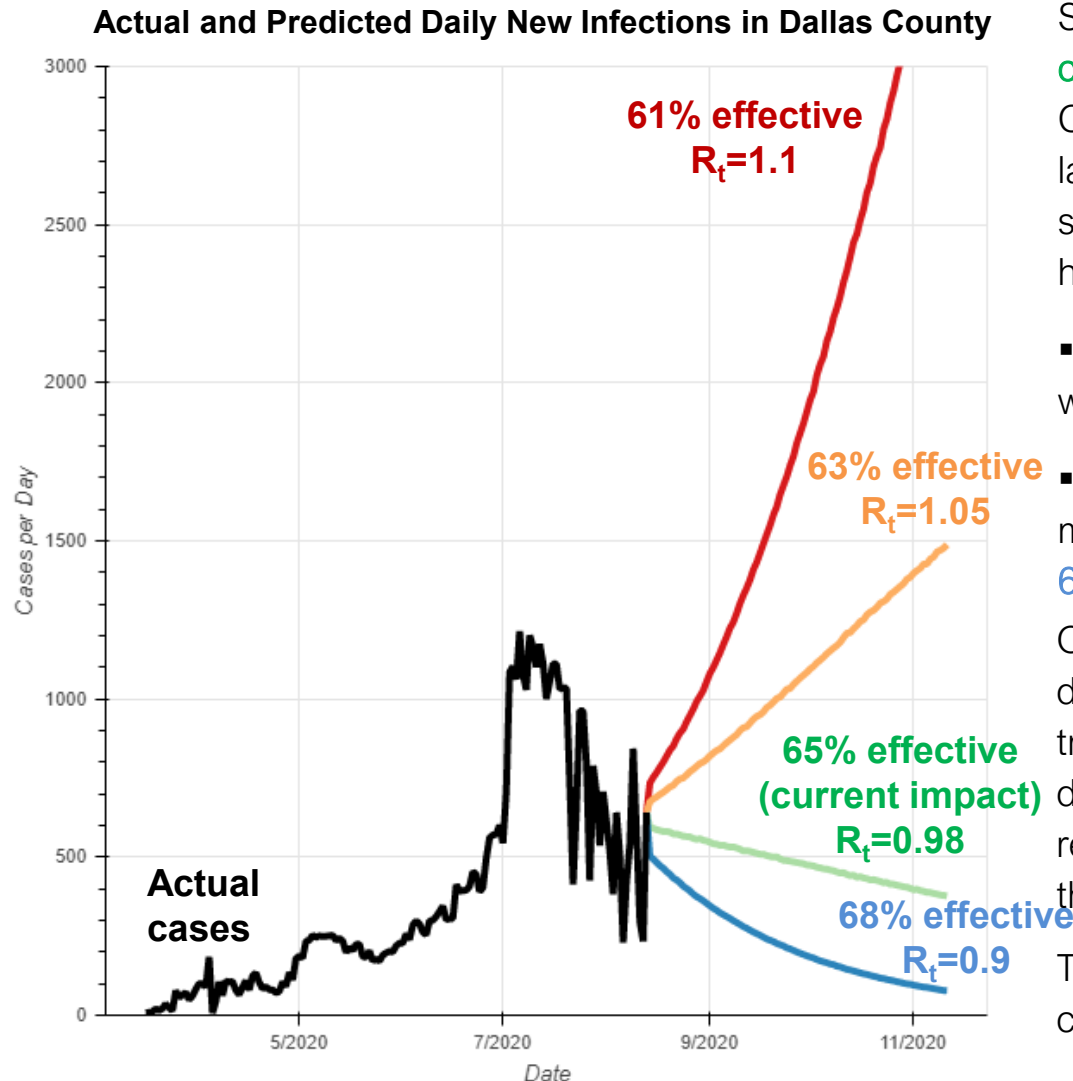
Are North Texans on the move?



To measure if residents are compliant with physical distancing, we use proxy measures for mobility. Three measures we follow are shown above. Visits to non-essential stores rose throughout July and have somewhat leveled off. The rate at which people's phones are uniquely encountering each other has been climbing since early July and it at its highest level since early March. This may represent an increase in people gathering privately.

*The encounter rate difference is the rate of unique human encounters per km² relative to the national pre-COVID-19 baseline.
Source: UnaCast Mobility Data, showing trailing 7-day averages, accessed August 14, data through August 10.

What is the impact of preventative measures on the future spread in Dallas County?



Social distancing & other prevention measures are **currently 65% effective** at curbing the spread of COVID-19. The resulting R_t decreased slightly from last week, and these small changes can still lead to significant pressure on cases and potentially healthcare resources.

- If measures **remain 65% effective**, the **green line** will happen.

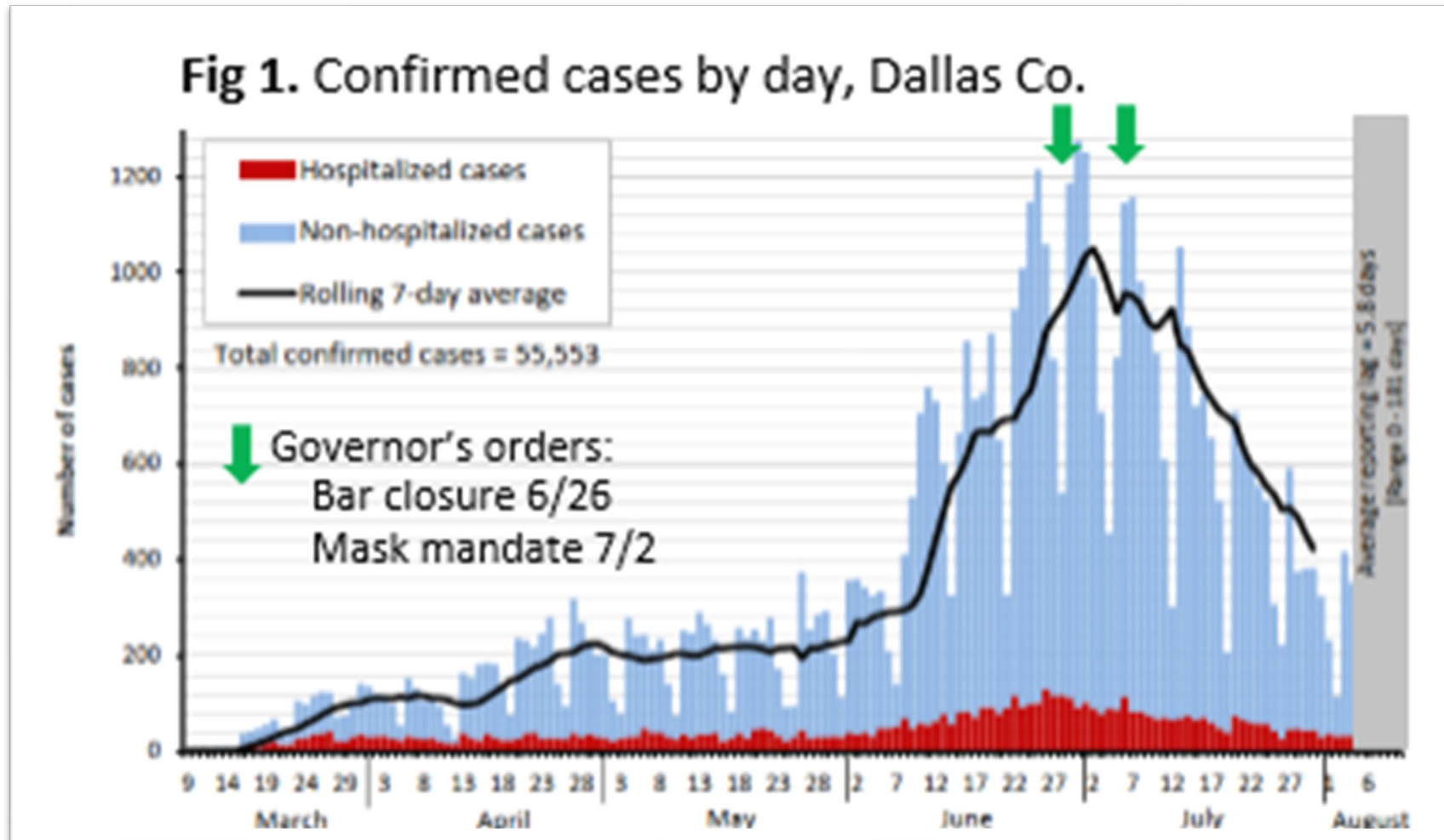
- The other lines illustrate what would happen if measures were **61% effective**, **63% effective**, or **68% effective**.

Our model is optimized to predict hospitalizations, depicted on the next slide. It is difficult to know the true number of new cases each day until weeks later due to significant delays in the reporting of test results to the county, so this is our best estimate for the current R_t .

There are limits to our ability to precisely determine compliance levels with prevention measures.

Note: model assumes perfect isolation of hospitalized cases, which has a dampening effect on effective R_t

Effect of Advocacy

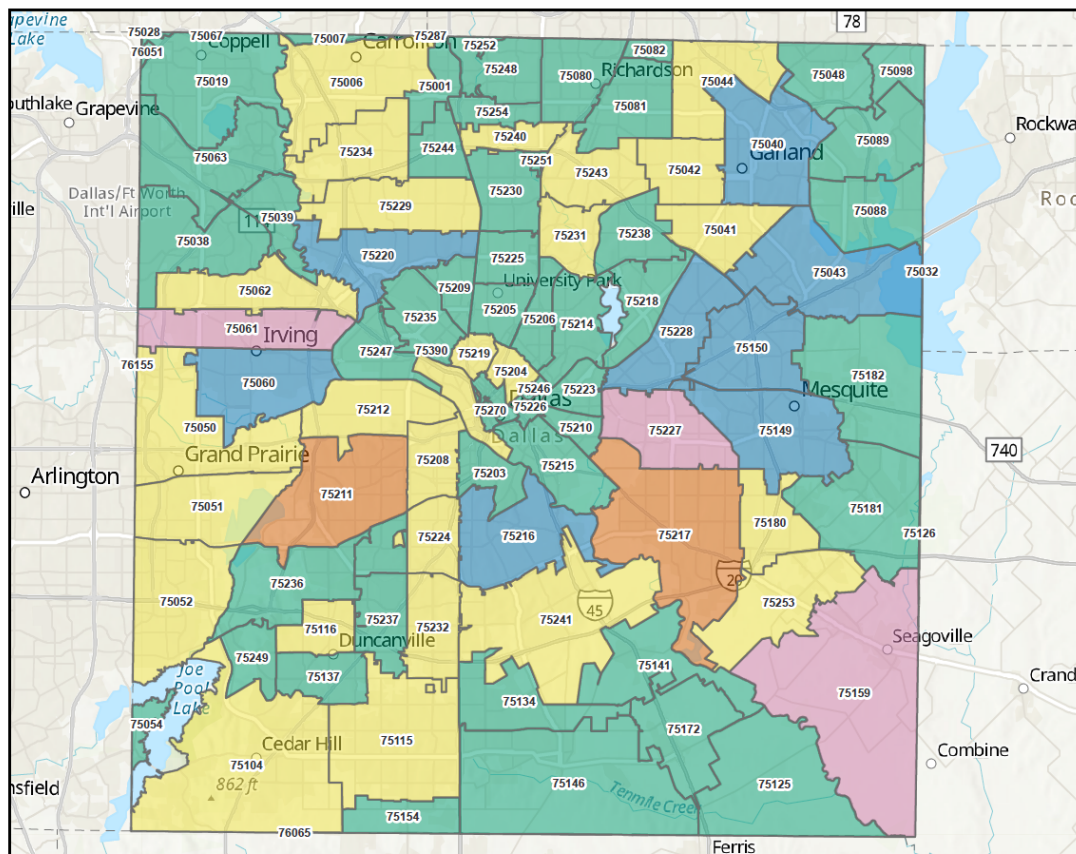


If a Pandemic wasn't enough...

Social Unrest and Social Disparities in Health



Confirmed COVID-19 Cases over Zip Codes as of 8/14/2020



Cumulative COVID Cases

Confirmed Cases :

- 1 - 546
- 547 - 1092
- 1093 - 1637
- 1638 - 2183
- 2184 - 2729

Total Cases: 57,313
New Reported Cases since
8/13 update: 885

<https://covid-analytics-pccinnovation.hub.arcgis.com/>

NOTES:

- [1] Reporting lag may be present. Please see the Dallas County Health & Human Services website for latest information.
- [2] 1770 confirmed cases not included on map due to partial address information.
- [3] All zip codes in Dallas county are present. Zip codes with no confirmed cases are labeled but not overlaid with legend color.



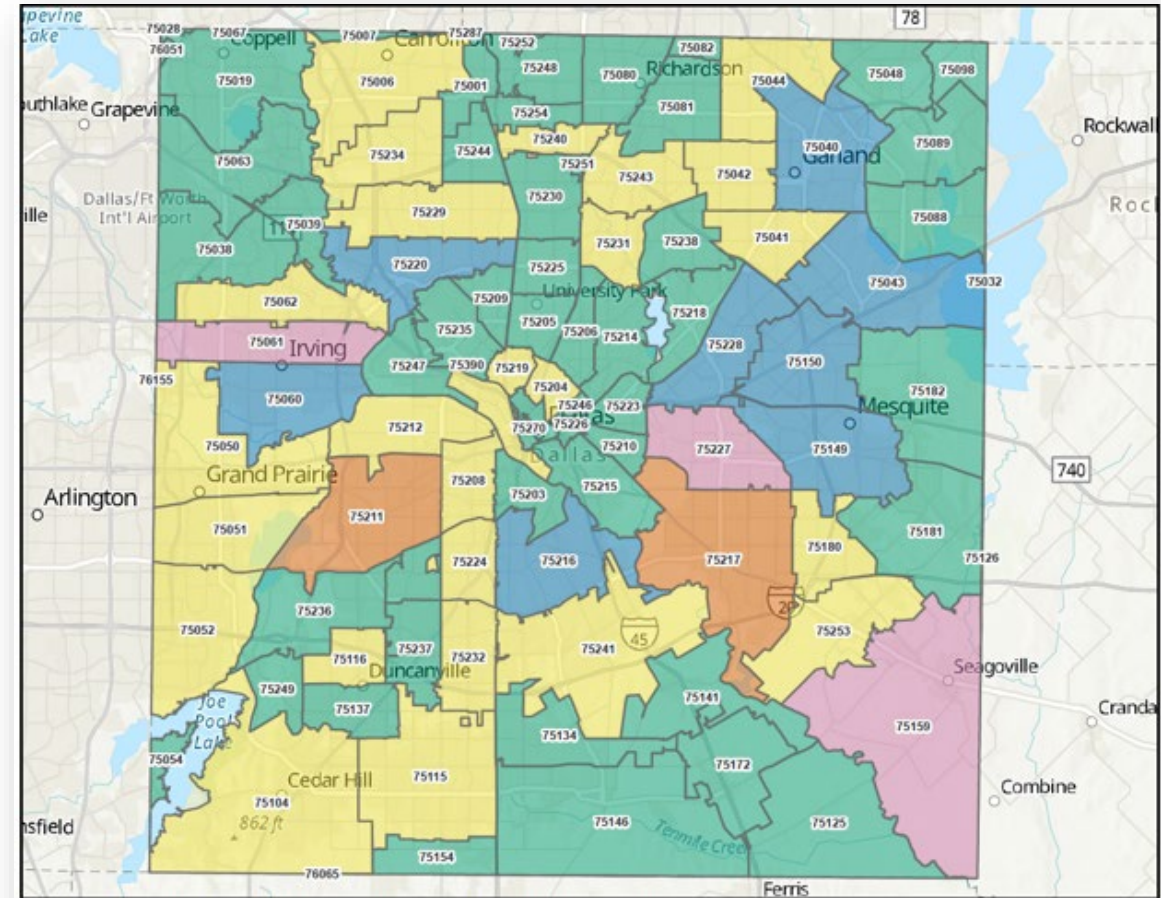
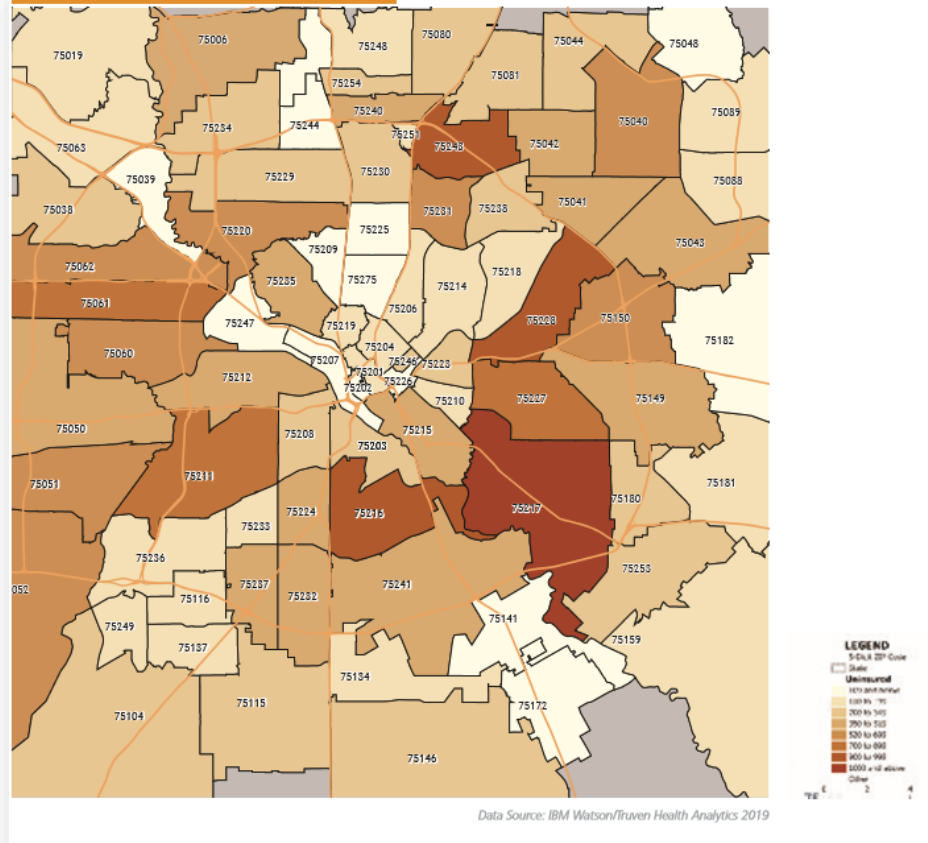
<https://pccinnovation.org/>



<https://www.dallascounty.org/departments/dchhs/>

Intersection between socio-economic factors and COVID

FIGURE 11. Uninsured Population, Dallas County, 2019



<https://covid-analytics-pccinnovation.hub.arcgis.com/>

Impact of COVID-19 on minorities in Dallas County



COVID-19 Reported Cases as of August 12, 2020

Race/Ethnicity	Patient Count	% of Total
African-American*	5032	9%
Asian	985	2%
Hispanic**	26596	48%
White	6235	11%
Other***	440	1%
Not Reported	16499	29%
Total	55787	100%



Race/Ethnicity	% of Dallas County	% of Deaths
African-American	23%	24%
Asian	7%	4%
Hispanic	32%	38%
White	29%	33%
Other	7.31%	

Opening / Continuing the conversation about social / racial inequities in healthcare:



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DCMS
CONNECT
Virtual Speaker Series

CLICK TO
REGISTER FOR
UPCOMING EVENTS

DCMS Connect: Cultural Bias in Healthcare - Aug 20

The second in our series was developed for healthcare professionals committed to improving quality and reducing racial and ethnic differences in health and health care. This seminar provides 1 AMA PRA Category 1 Credits™.

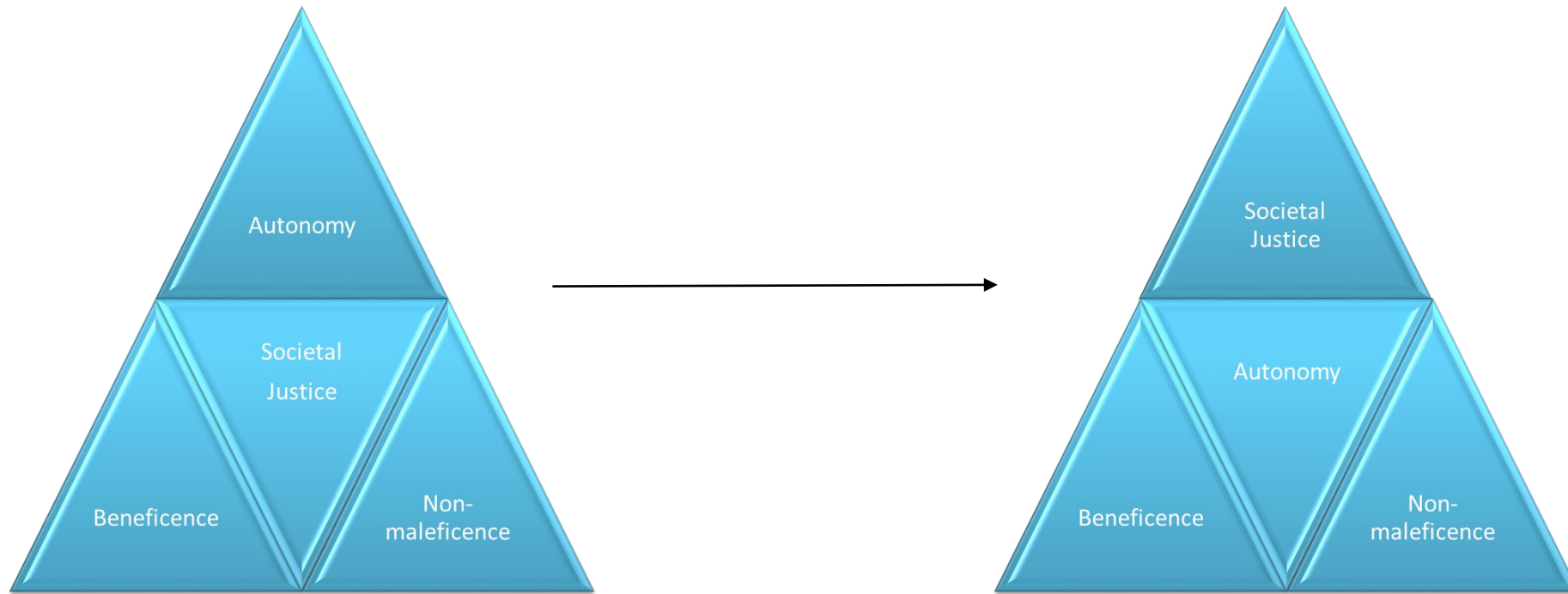
[See Additional Information>>>](#)

Intersection of public health advocacy, leadership,
policy making, politics, and politicization.

Delicate task when it comes to public health advocacy and political crosshairs.



Holding to our Medical Ethical Principles and Balance



Just mask it!



Our Emphasis on Physician Colleagues

Caring for the mind...



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Mind FIT^{Physician}
DCMS Physician Wellness Series



WEBINAR^{SERIES}

TOPIC: PHYSICIAN MENTAL HEALTH DURING COVID-19

WATCH NOW

Mind Fit Physician Wellness Series

We are excited to announce that DCMS has partnered with D2 Counseling to bring you a physician wellness web series discussing Physician Mental Health During the COVID-19 Crisis.

[See Additional Information>>>](#)

WATCH ON:



PRESENTED BY:
DALLAS MEDICAL

Caring for the family...



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EMERGENCY CHILD CARE

FOR COVID-19 FRONTLINE ESSENTIAL WORKERS

Emergency Child Care Toolkit

In response to the COVID-19 Pandemic, the State of Texas has developed a tool to help essential workers and employer's emergency child care options for their children and their employees' families.

[See Additional Information>>>](#)



Closing thoughts...

- We can't let our guard down.
- Our healthcare community in Dallas County, and North Texas should be proud of their collaboration.
- As a whole, N TX citizens are doing a good job, but we need to continue to support them. Fatigue is real.
- While our institutions have done a great job, we need to remain prepared from a Mass Critical Care Perspective.
- The age of the *.

Acknowledgments

- Dallas County Public Health Subcommittee
 - Trish Perl, MD; Robert Haley, MD; Philip Huang, MD; Cristie Columbus, MD; Fred Cerise, MD; Steve Love, Ruby Blum, Debbie Branson, Peter Urbanowicz
- TMA COVID 19 Task Force
- Dallas County Medical Society
- North Texas Medical Society Coalition
- North Texas Mass Critical Care Taskforce
- DCMS Community Emergency Response Committee (CERC)

Questions



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