TEXAS A&M UNIVERSITY
HEALTH

Overview of the COVID-19 Situation in TEXAS

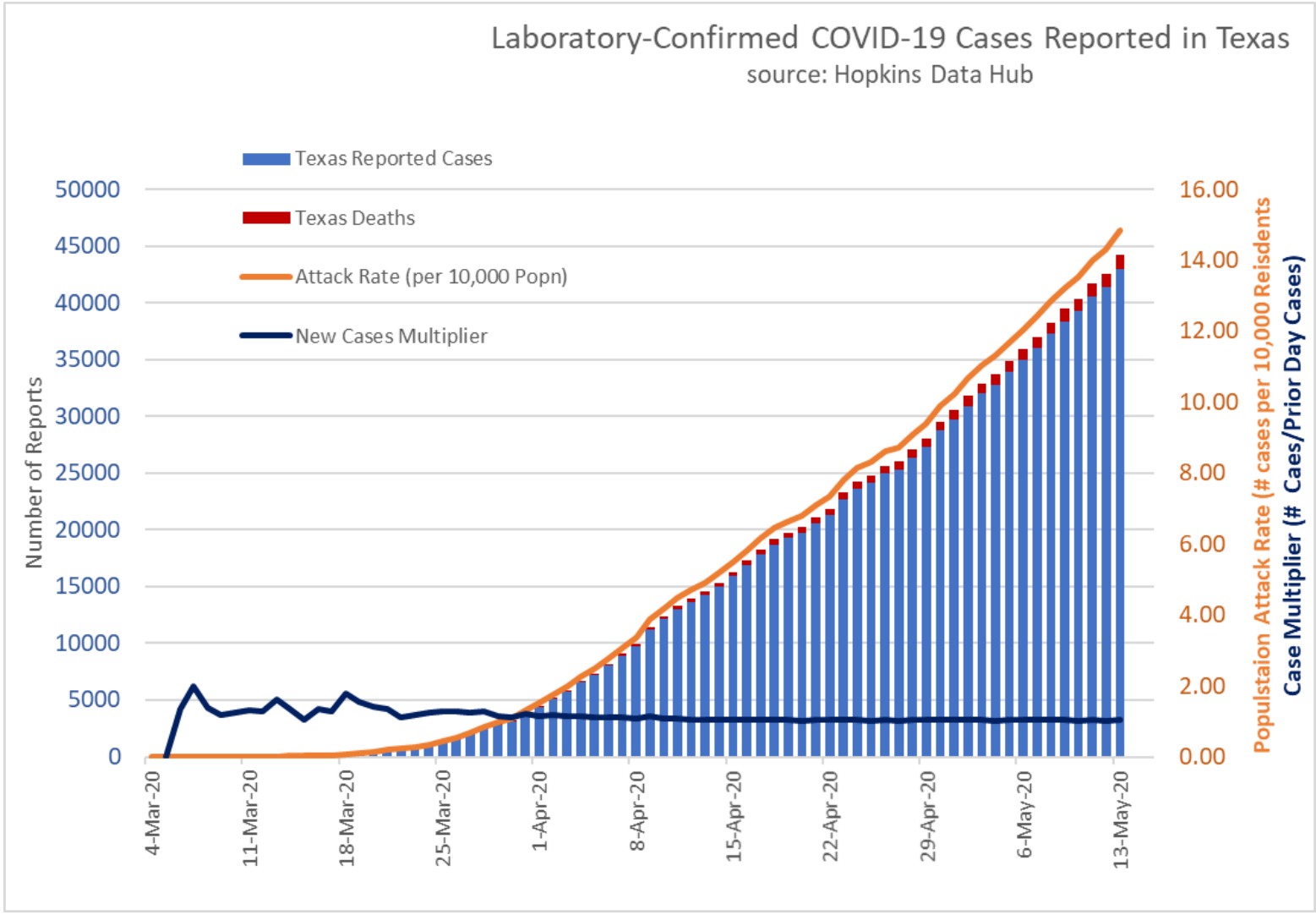
Rebecca S.B. Fischer, PhD MPH DTM&H
Department of Epidemiology & Biostatistics
School of Public Health

May 14, 2020

Cumulative Incidence of COVID-19 *Reported Cases* in TEXAS

13 May 2020

N=43,020
1,172 Deaths



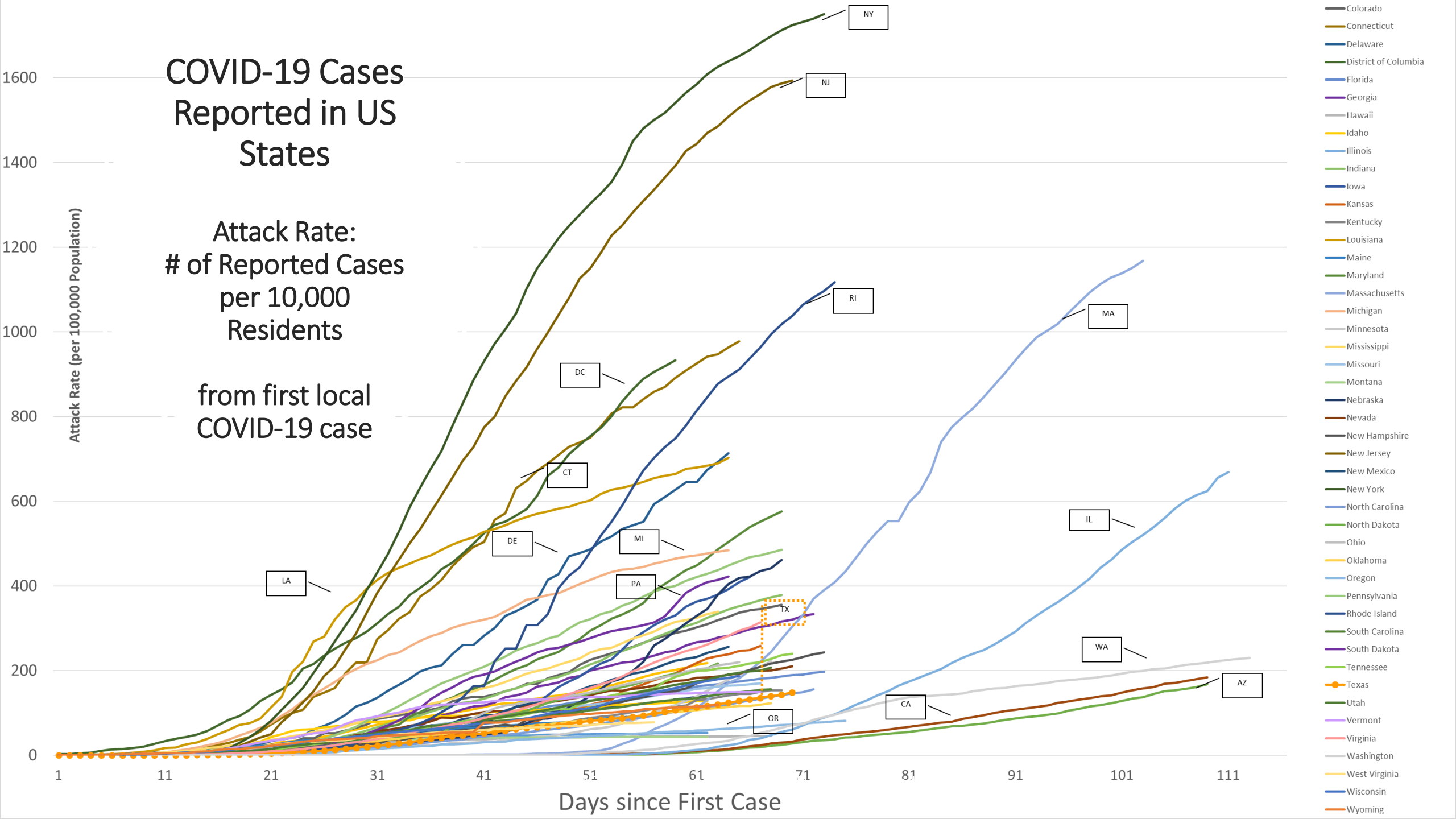
Texas Case Fatality ~3.8%

(# of Deaths / # of Reported Cases; 10-day Delay)

COVID-19 Cases Reported in US States

Attack Rate:
# of Reported Cases per 10,000 Residents

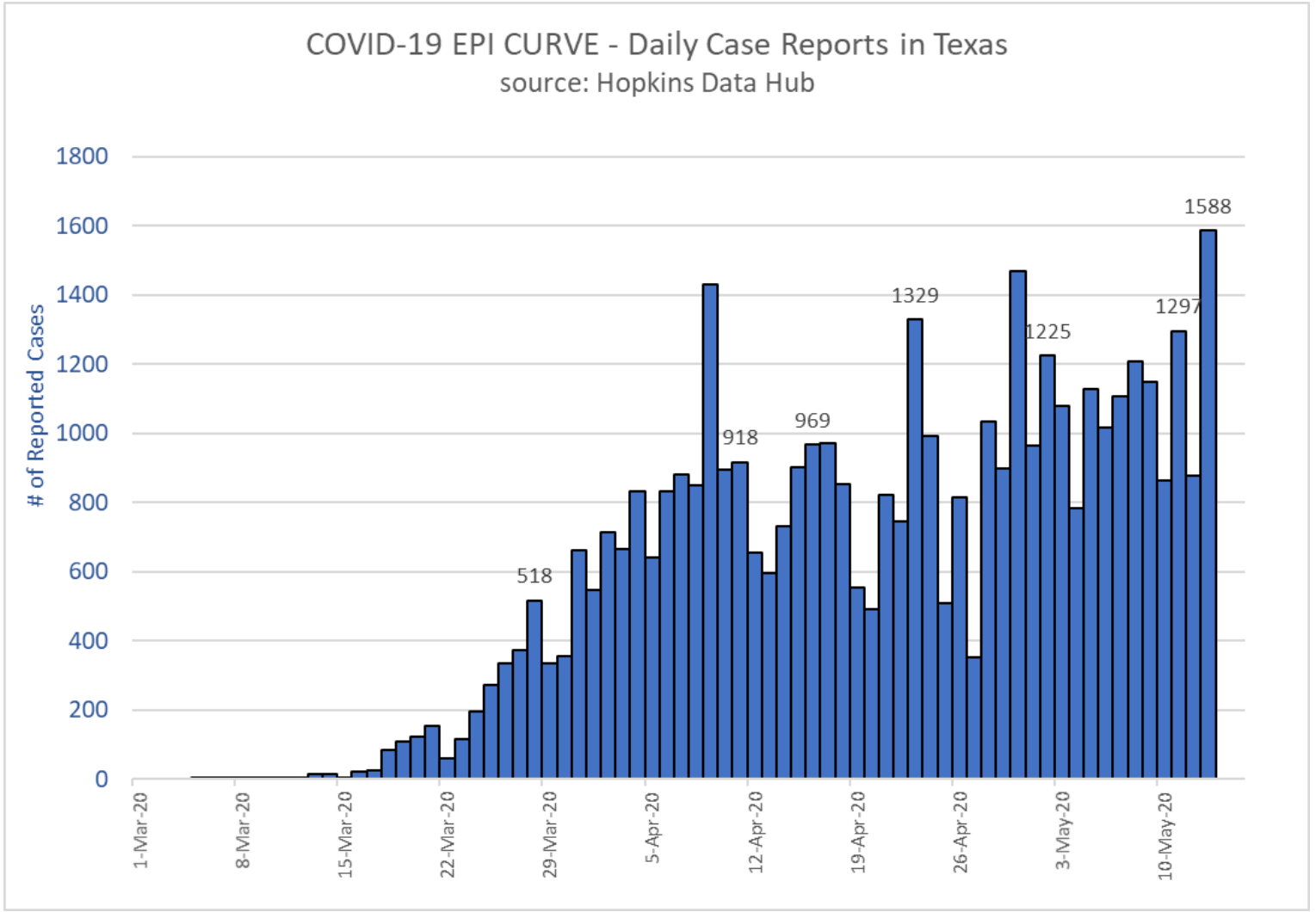
from first local COVID-19 case



Daily COVID-19 *Reported Cases* in TEXAS

13 May 2020

N=43,020

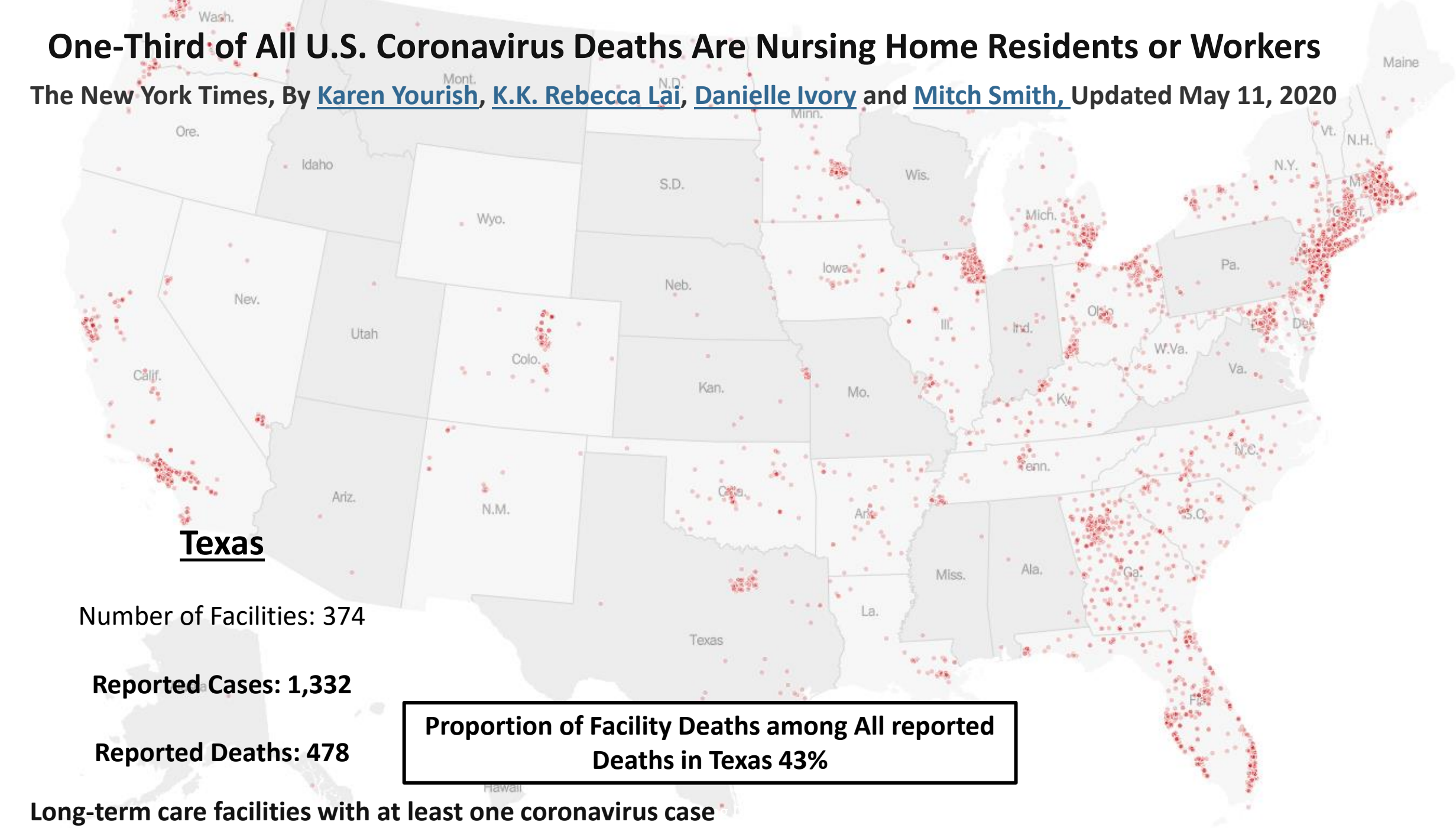


TEXAS' Vulnerable Populations

- Elderly and other residents in nursing homes, assisted living facilities, and other Long-term care centers
- People incarcerated in prisons or jails, or juvenile detention centers
- Immigrants in High-density communities
- Immigrants in Detention facilities
- Transient Populations and Shelter residents
- Individuals without Housing / Living on streets or camps
- Public housing residents
- University housing residents
- Rural communities
- Anyone with barrier or perceived barrier to healthcare or testin

One-Third of All U.S. Coronavirus Deaths Are Nursing Home Residents or Workers

The New York Times, By Karen Yourish, K.K. Rebecca Lai, Danielle Ivory and Mitch Smith, Updated May 11, 2020



Texas

Number of Facilities: 374

Reported Cases: 1,332

Reported Deaths: 478

Proportion of Facility Deaths among All reported Deaths in Texas 43%

Long-term care facilities with at least one coronavirus case

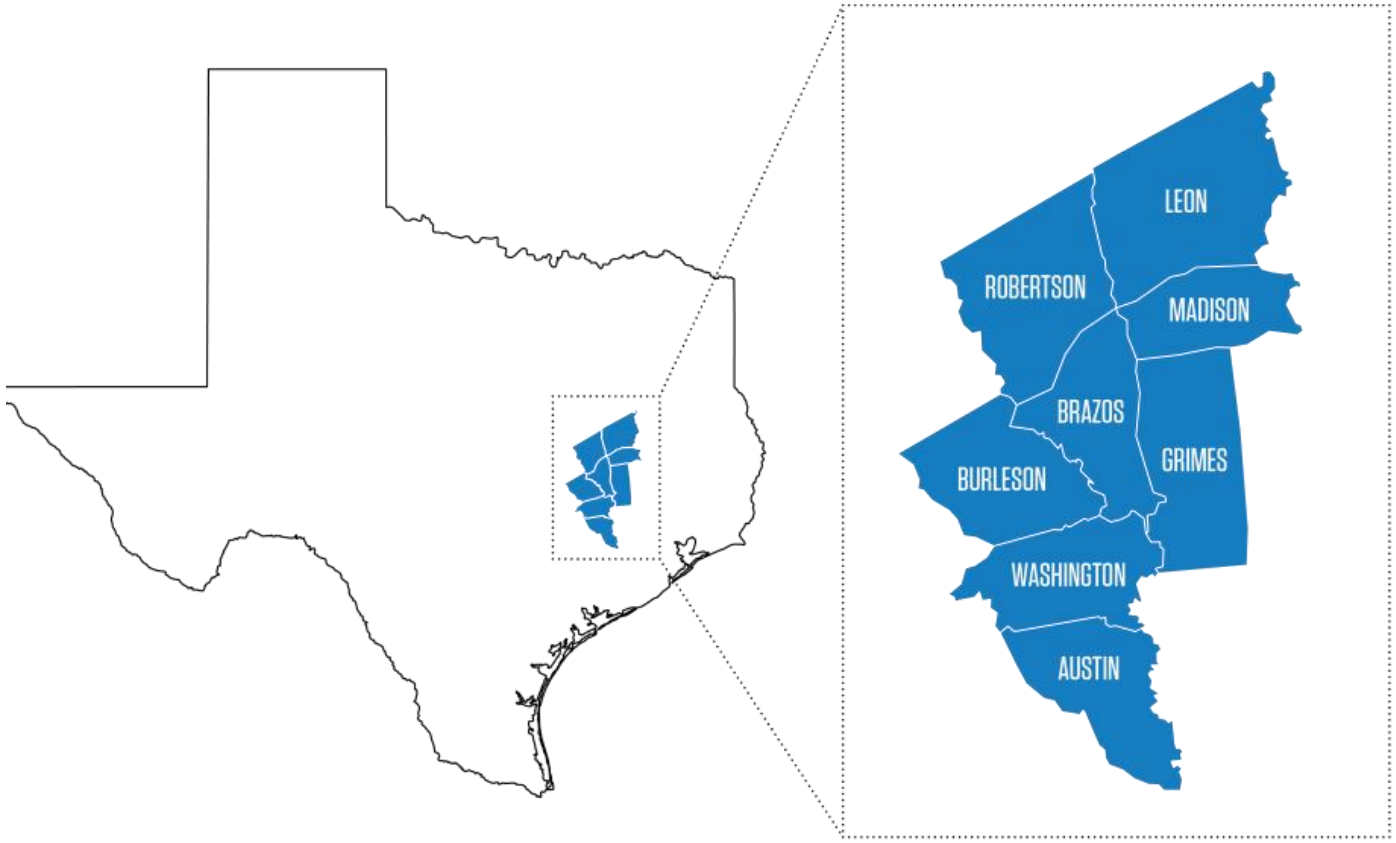
THE TEXAS TRIBUNE-PROPUBLICA INVESTIGATIVE UNIT

COVID-19 cases at a Texas immigration detention center soared. Now, town leaders want answers.

Coronavirus infections continue to rise at migrant detention facilities in towns with limited resources. Some local governments want details on what's being done to safeguard the public.

BY **PERLA TREVIZO**, THE TEXAS TRIBUNE AND PROPUBLICA

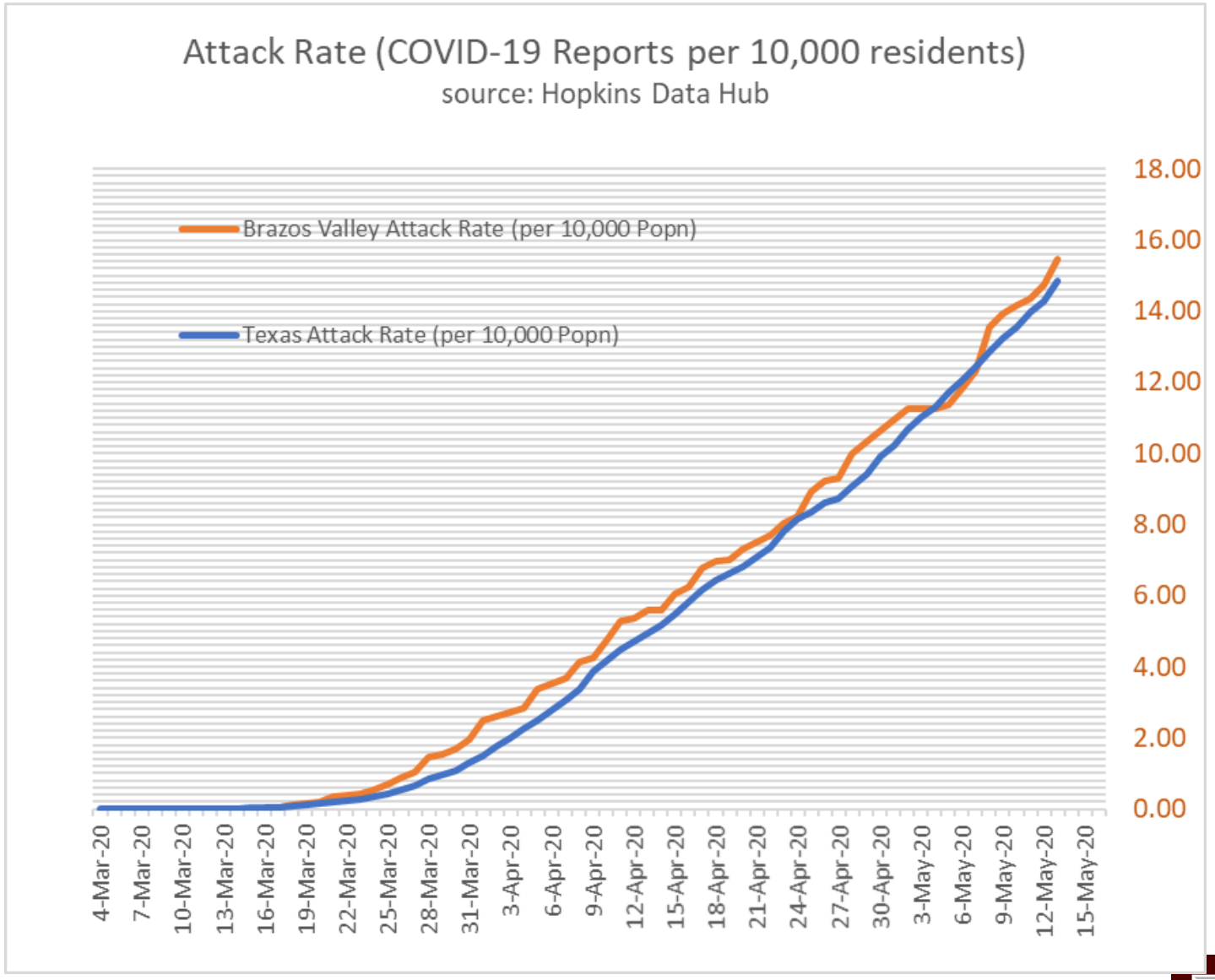
MAY 11, 202011 AM



Vulnerable Populations in Texas:

Our Rural and Smaller Urban Populations

Brazos Valley in Context

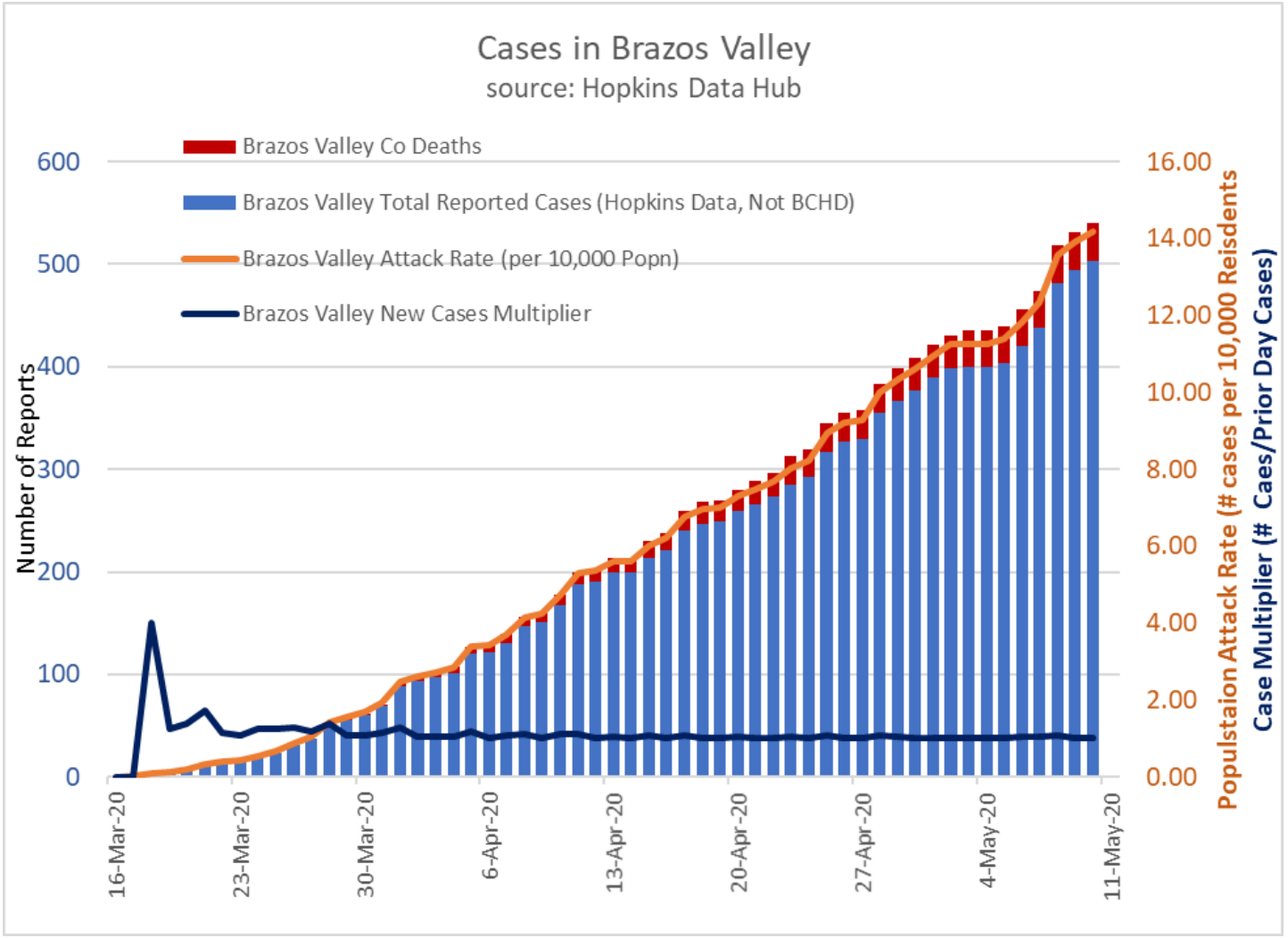


Cumulative Incidence of COVID-19 *Reported Cases* in Brazos Valley

(Popn ~355,000)

13 May 2020

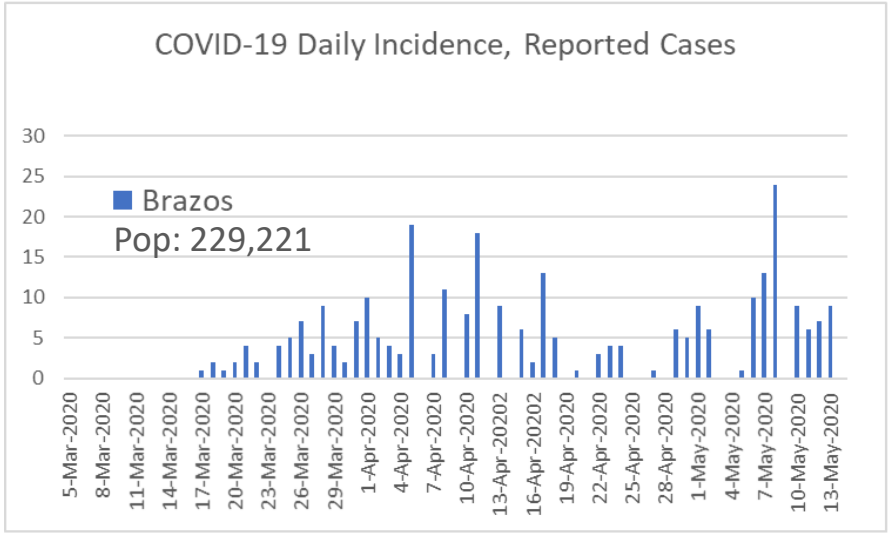
N=549
41 Deaths

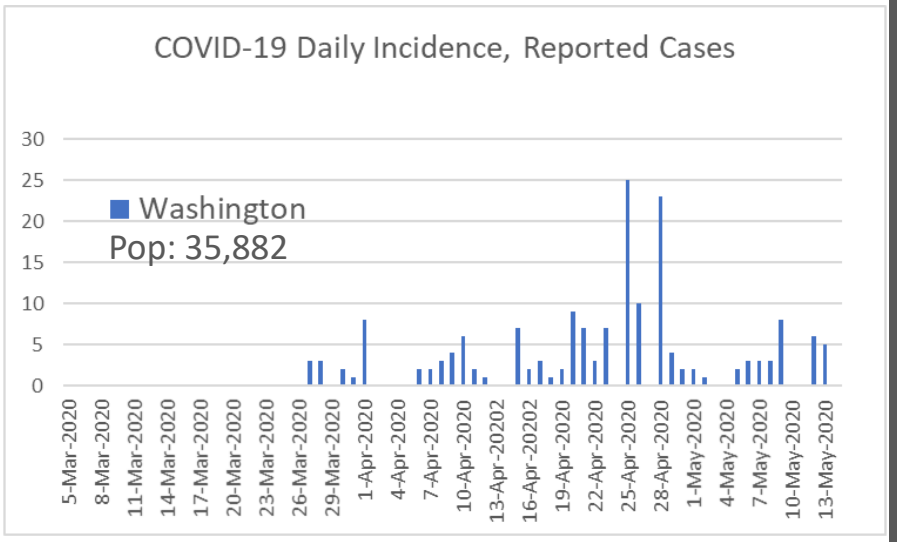


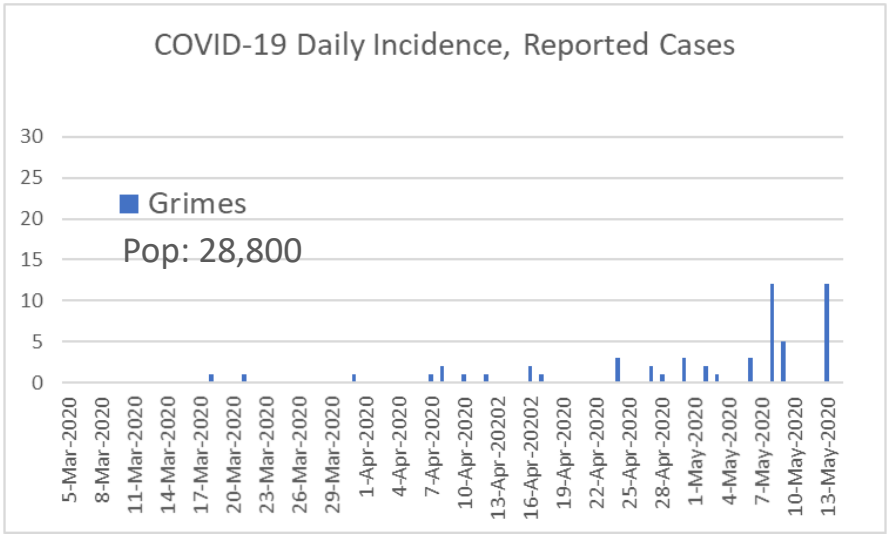
Brazos Valley Case Fatality ~8.7%

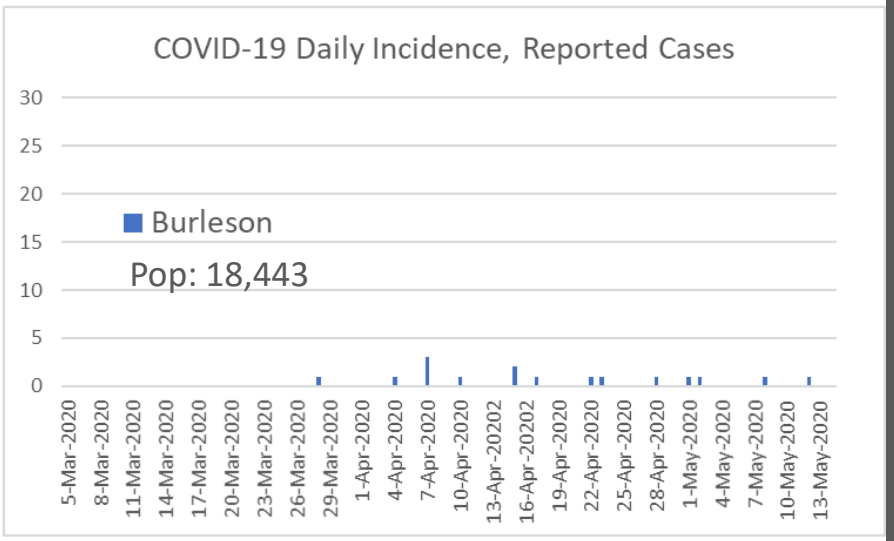
(# of Deaths / # of Reported Cases; 10-day Delay)

- Even this relatively small, 7-county region is **heterogeneous**.
- Small or rural communities are **vulnerable to situations in neighboring towns** & counties.
- Clusters (e.g. outbreaks among vulnerable populations) occurring in small populations can **seed large outbreaks**
- Access to **healthcare and testing resources and infrastructure are acute challenges** in rural and small communities.





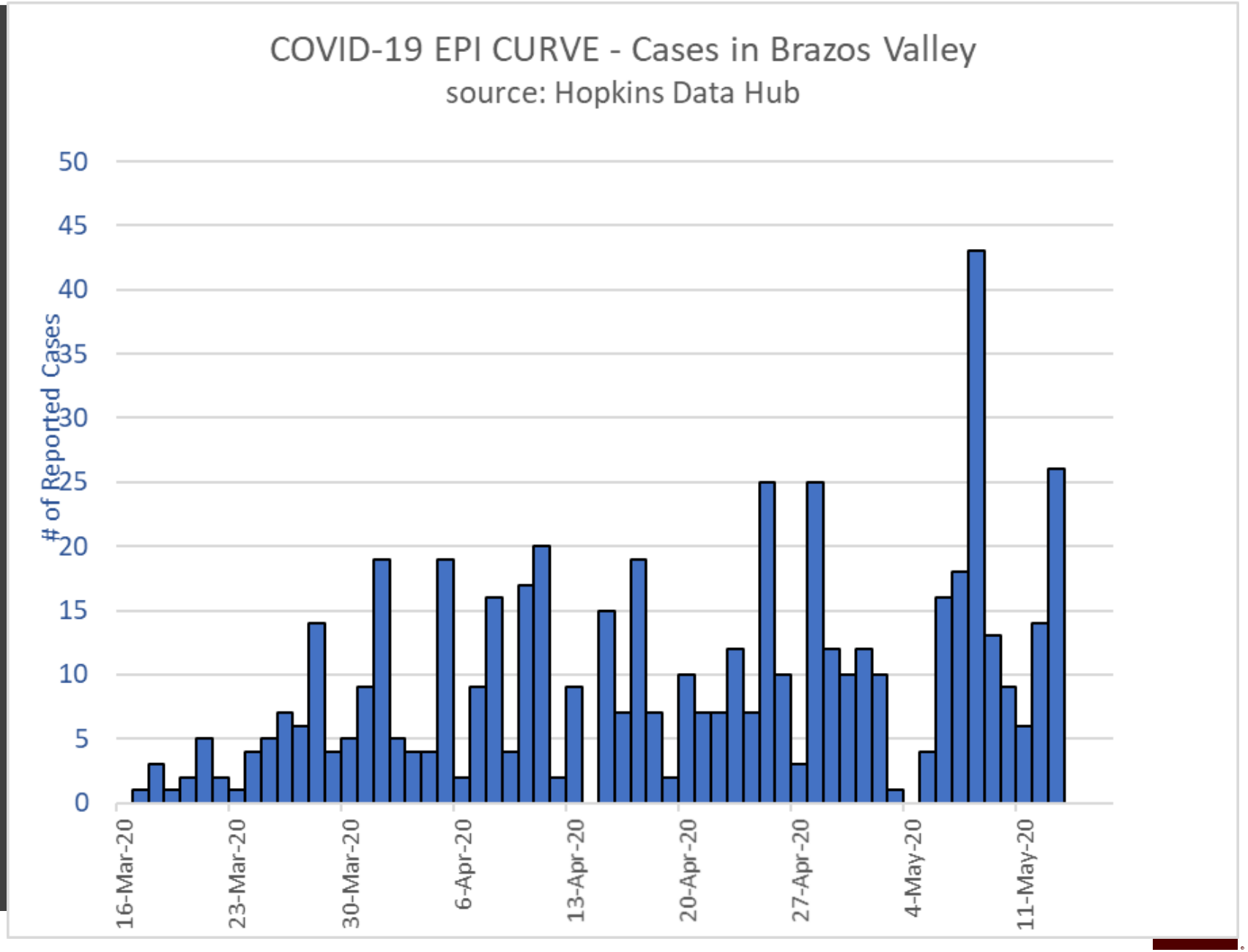




Epidemic Curve

An essential and informative tool

However, we also need to pay close attention to specific local epidemiology, social, demographic and physical community characteristics, & special / vulnerable populations



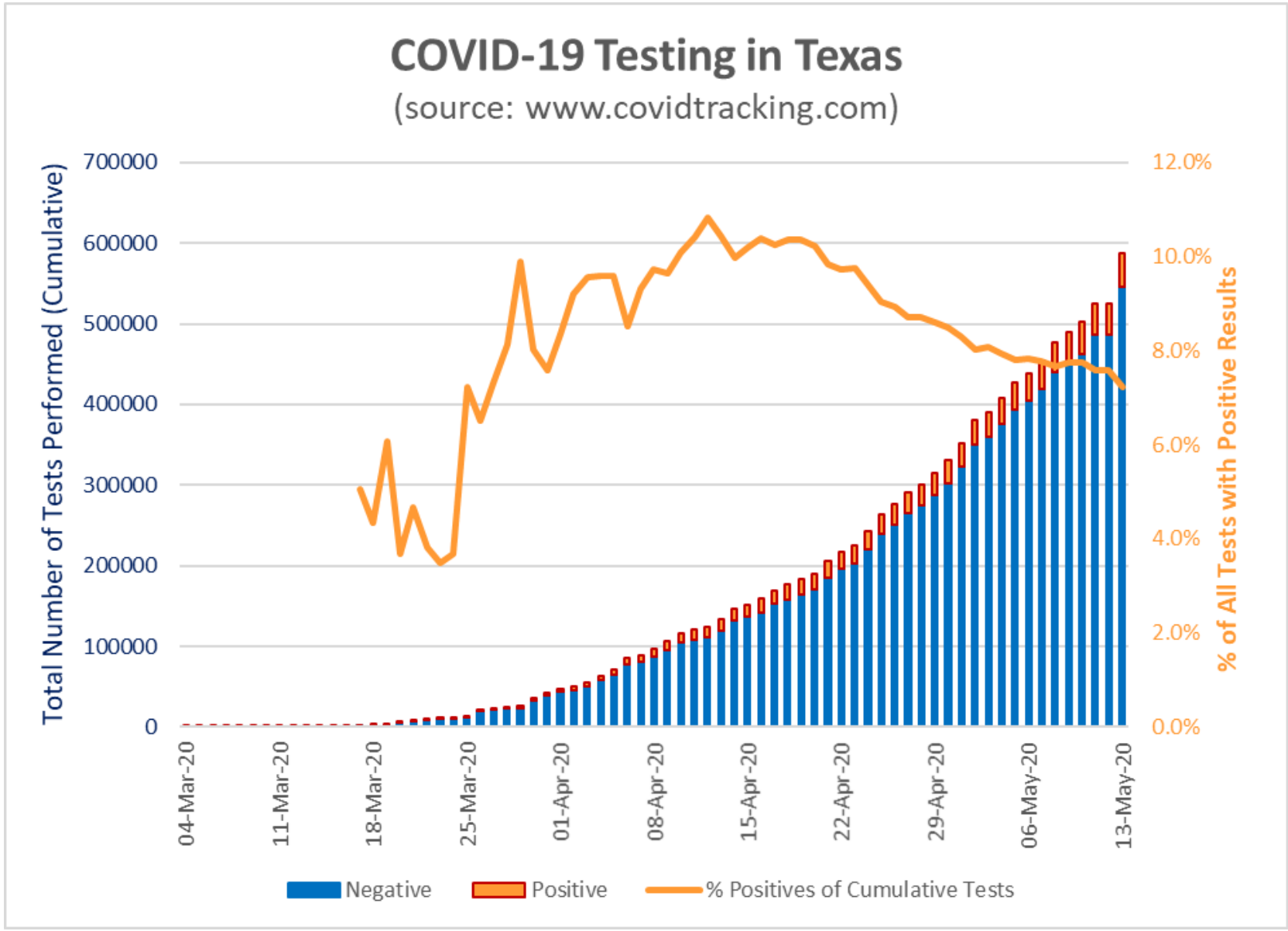
Take-aways from Tracking Texas Data

- **SARS-CoV-2** remains a dangerous and deadly disease that is a threat to our communities.
- Increased testing capacity and detection of all cases, including testing of asymptomatic individuals remains important for understanding the true nature of COVID-19 in TEXAS, as elsewhere.
- We are not out of the woods here in Texas!

Priorities for understanding Epidemiology & Spread Include:

- ***Expanded testing*** using scientifically sound products as one of the most important tools in controlling disease spread at this time
- Contact tracing & *testing* is essential, since knowing where the virus is guides where it can be stopped.
- Improved data (prompt COVID diagnosis, accurate reporting, reaching hidden populations)
- Better understanding of local transmission dynamics to guide how to prevent transmission in the community, at necessary venues (e.g. grocery stores), in places of employment, and within households.
- Finding a role for syndromic surveillance tools

Testing in Texas is Increasing but only incrementally

~1.9% of Texas Tested

COVID-19 detected in 6.6% of All tested individuals