



Study Update for City of Dallas Ad Hoc Committee on COVID-19 Recovery and Assistance September 16, 2021

DFW COVID-19 Prevalence Study

UTSouthwestern
Medical Center

 **Texas Health**
Resources®

WHAT WE SET OUT TO ACCOMPLISH

1. Measure prevalence of COVID-19 in DFW and by sociodemographic subgroup
2. Understand development and duration of immunity to COVID-19, and monitor for emerging hotspots
3. Engage the community as a trusted, transparent source of information about the COVID-19 pandemic

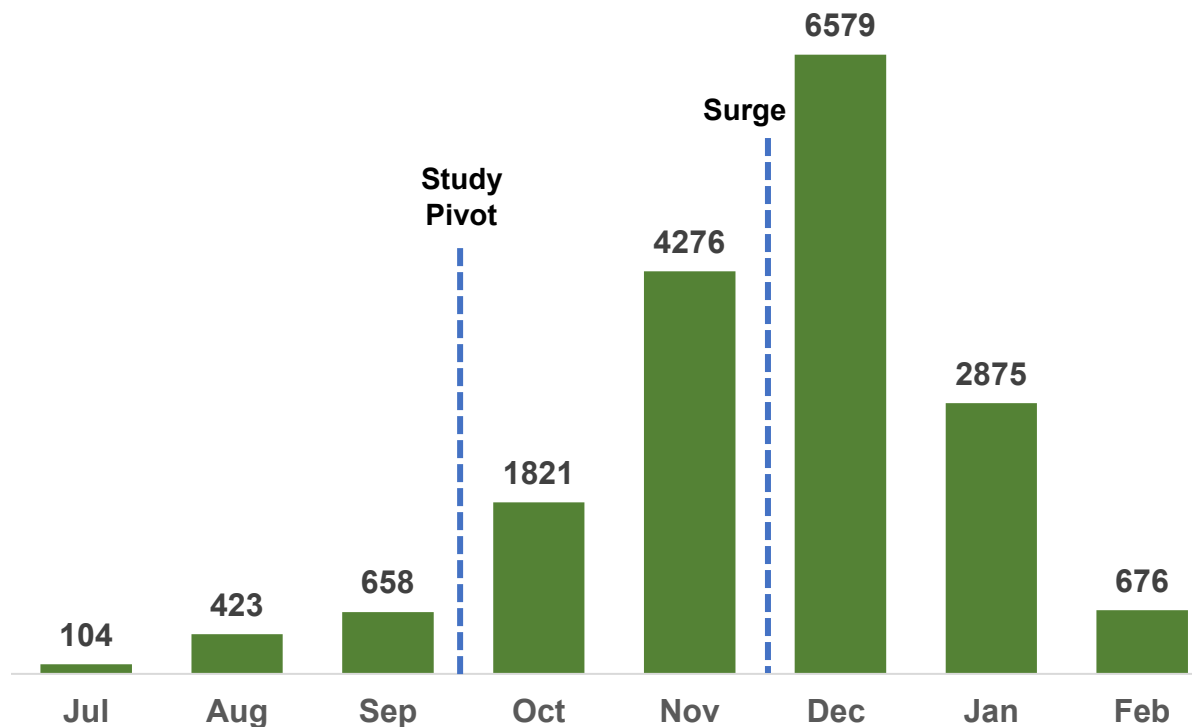
ADAPTED TO VOLUNTEER BASED SAMPLE DUE TO RESPONSE RATE

Community Sampling





Pivot from
population to
volunteer based

Community Sample Enrollment by Month



INTERIM ANALYSIS LED TO DECISION TO END STUDY IN FEBRUARY

	Prevalence Rates 	Vaccine Implementation 
Goal / Assumption	PCR+ = 1% Ab+ = 4%	12-18 months
Actual	PCR+ = 3% Ab+ = 7%	9 months

On December 29, 2020, Texas opened up vaccine eligibility to people 65+ or people 16+ with health conditions.

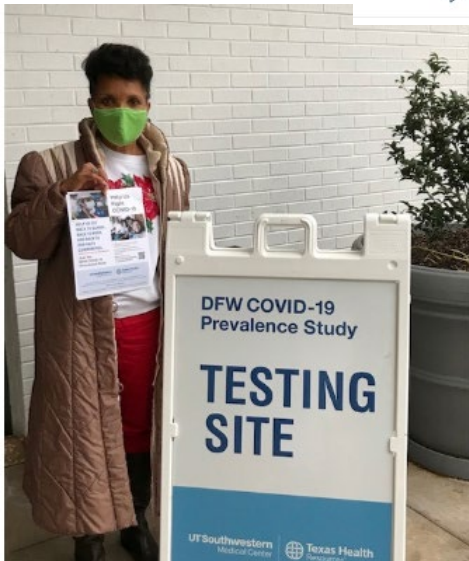
COMMUNITY ADVISORY BOARD LEVERAGED FOR RECRUITMENT

UT Southwestern News @UTSWNews · 15m
Thank you for participating in the #DFWCOVIDStudy, @theashmarieshow!
Get tested. Help us learn how #COVID spreads among vulnerable
communities. utswmed.org/covidstudy
[@TexasHealth](#) #DFWAnswerTheCall



3

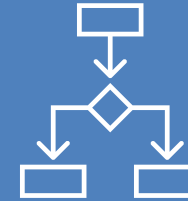
- Critical input on marketing & recruitment efforts and messaging of study findings
- Facilitated key introductions to community partners to raise awareness and conduct on-site testing events
- Return on investment— recruitment increased significantly Dec to Feb
 - Black/African American: ↑ 66% (500 ppl)
 - Latinx: ↑ 113% (1400 ppl)
 - Millennial (18-24): ↑ 153% (700 ppl)
- Encouraged pivot to COVID-19 vaccine communications & implementation in Jan



OUTCOMES AND ONGOING ACTIVITIES



**Investigation of
factors driving
COVID race / ethnic
disparities**



**Characterizing link
between behaviors
and COVID
infection**



**Investigation of
long-COVID
symptoms**



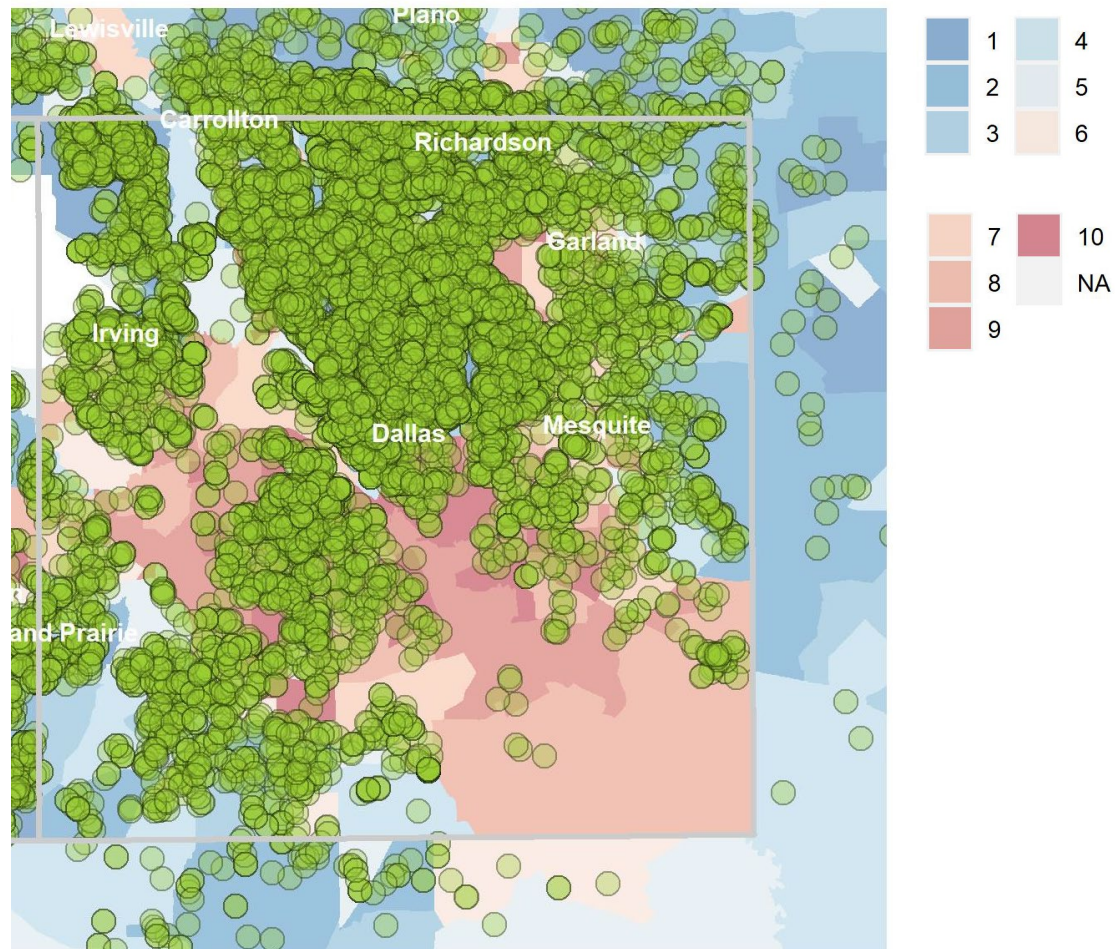
**Long-term study
of how long
antibodies stay in
system**

COMMUNITY SAMPLE

SPATIAL OVERVIEW

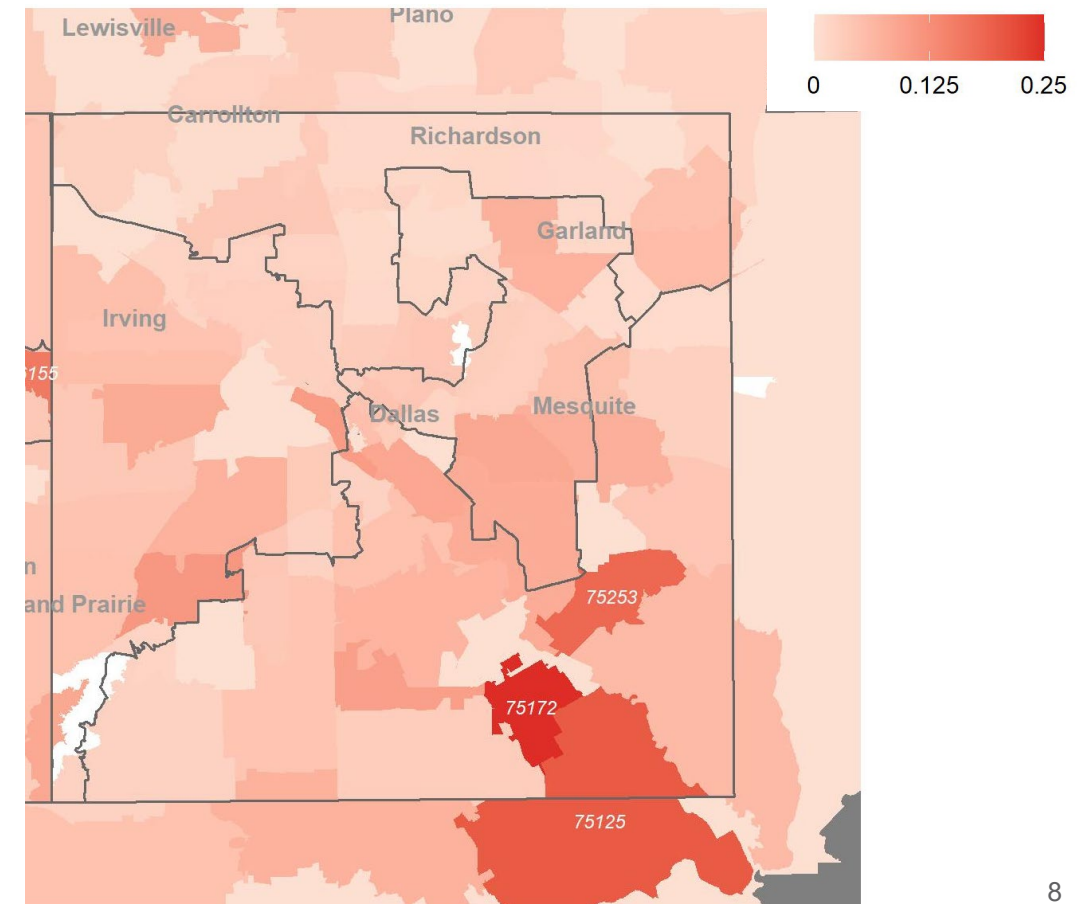
Location of Study Participants (Green Dot)

With tract-level Area Deprivation Index & commissioner's districts



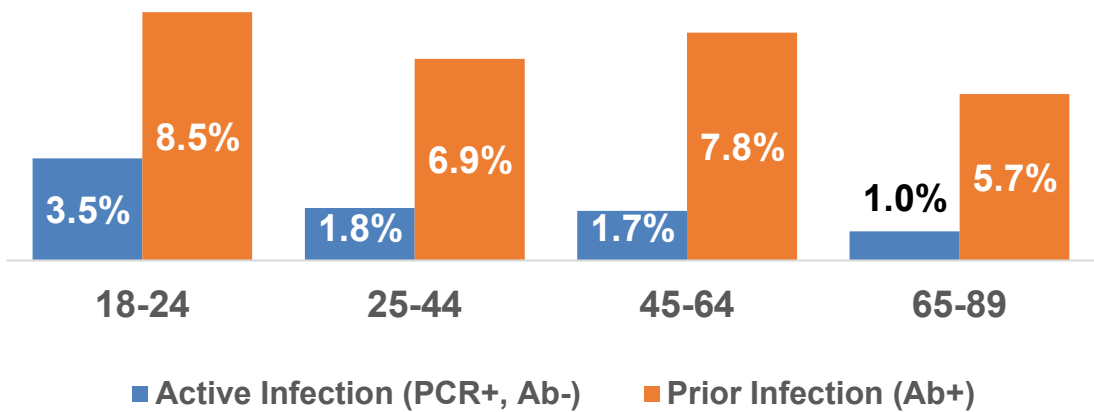
Percent PCR Positive Participants

At ZIP level with commissioner's districts

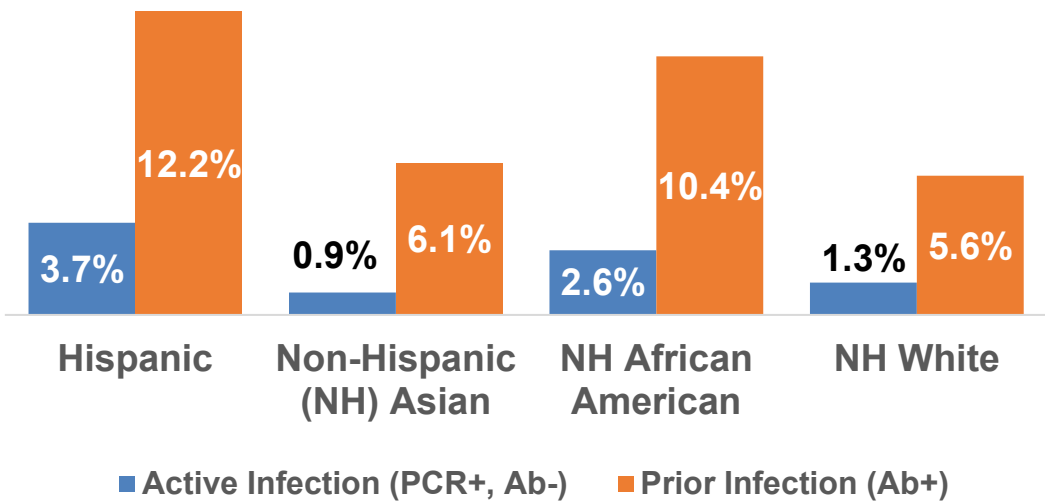


COVID INFECTION RATES: DALLAS COUNTY (N=11,580)

FOR EACH AGE GROUP



FOR RACE / ETHNIC GROUP



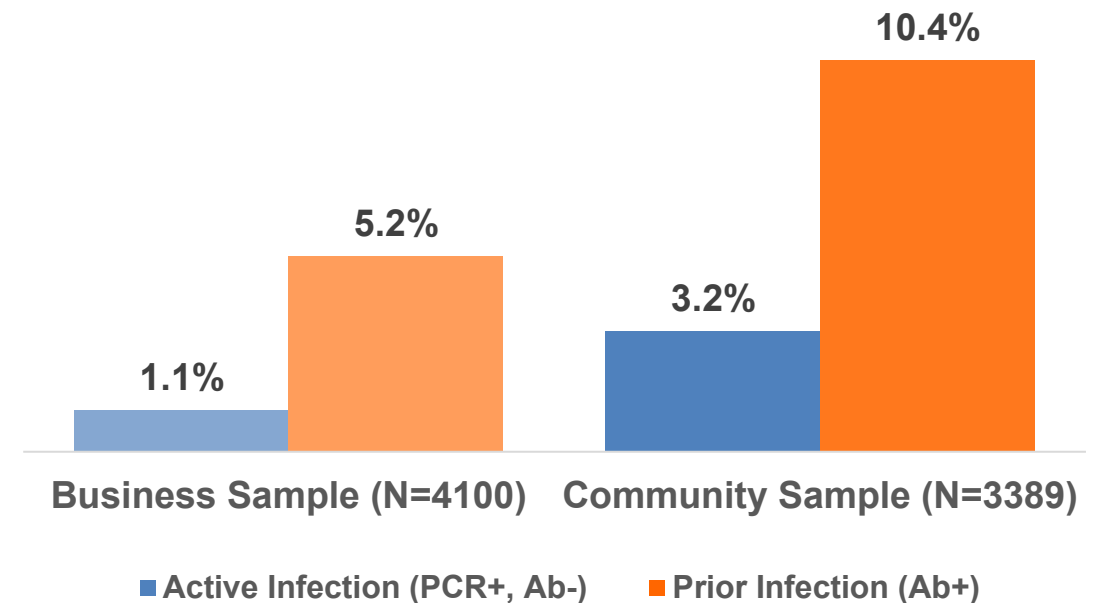
ESSENTIAL BUSINESS SAMPLE

INFECTION STATUS OF ESSENTIAL EMPLOYEES BY SAMPLE

PARTICIPATING INDUSTRIES

Industry Sector	# Businesses
Factory	3
Hospitality and Travel	3
Maintenance / Repair / Installation	7
Restaurant	7
School and Childcare	22
Services / Retail	10
Total	52

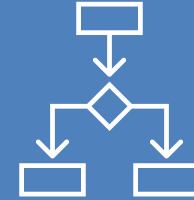
ACTIVE AND PRIOR INFECTION AMONG ESSENTIAL EMPLOYEES BY SAMPLE



OUTCOMES AND ONGOING ACTIVITIES



**Investigation of
factors driving
COVID race / ethnic
disparities**



**Characterizing link
between behaviors
and COVID
infection**

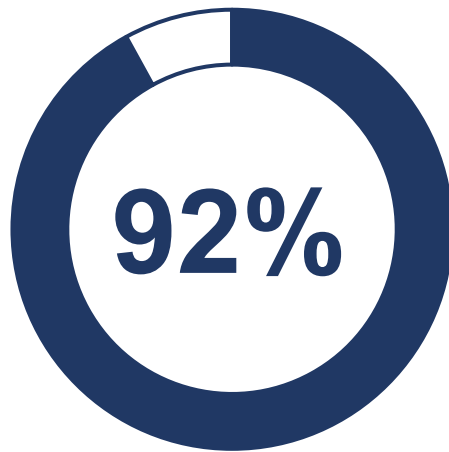


**Investigation of
long-COVID
symptoms**



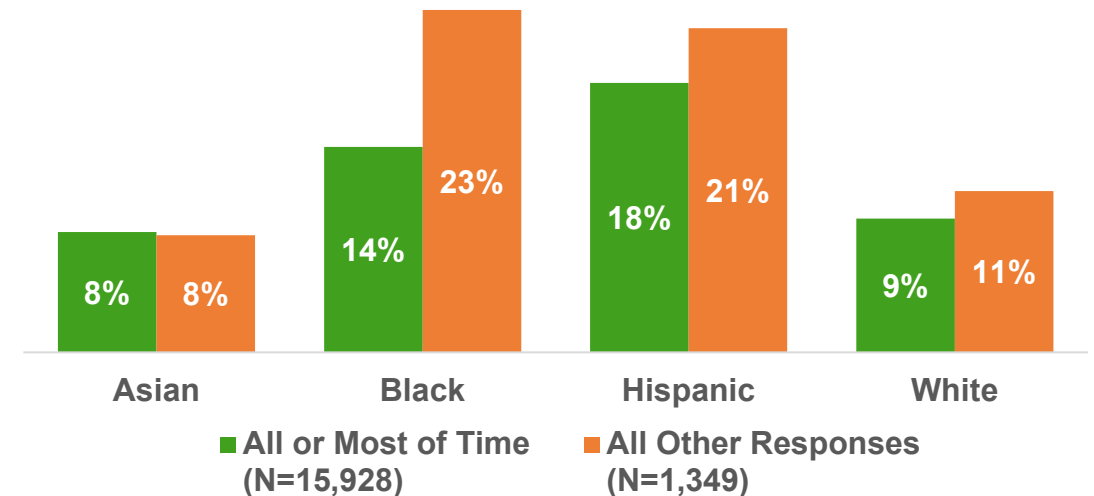
**Long-term study
of how long
antibodies stay in
system**

MASK WEARING BEHAVIOR AND COVID INFECTION



Wear face masks most of the time
across all racial / ethnic groups

COVID-19 INFECTION BY MASK WEARING BEHAVIOR



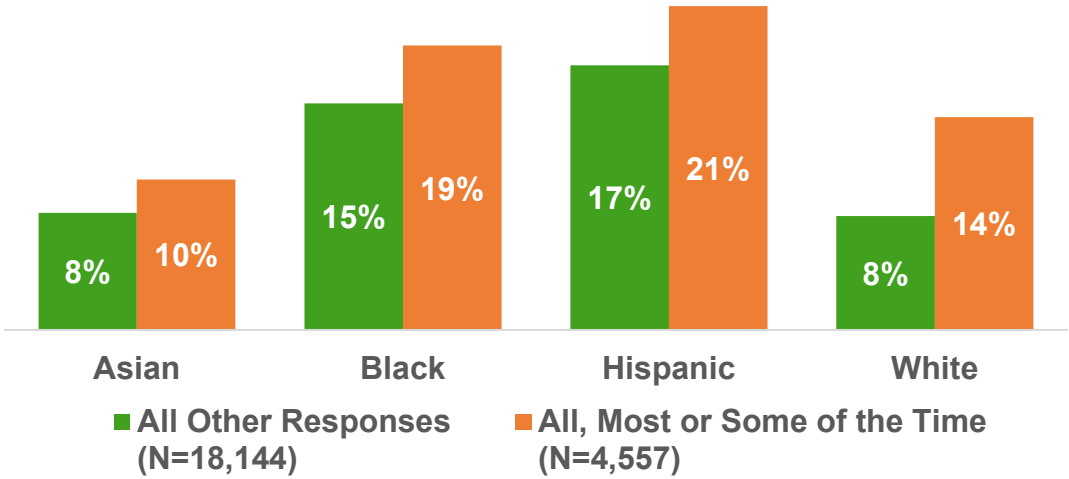
Mask wearing is universally high and associated with lower infection rates across most racial / ethnic groups.

EATING INSIDE A RESTAURANT AND COVID INFECTION



26-29% of all racial / ethnic groups report eating inside a restaurant, except for Hispanics at 34%

COVID-19 INFECTION BY RESTAURANT BEHAVIOR

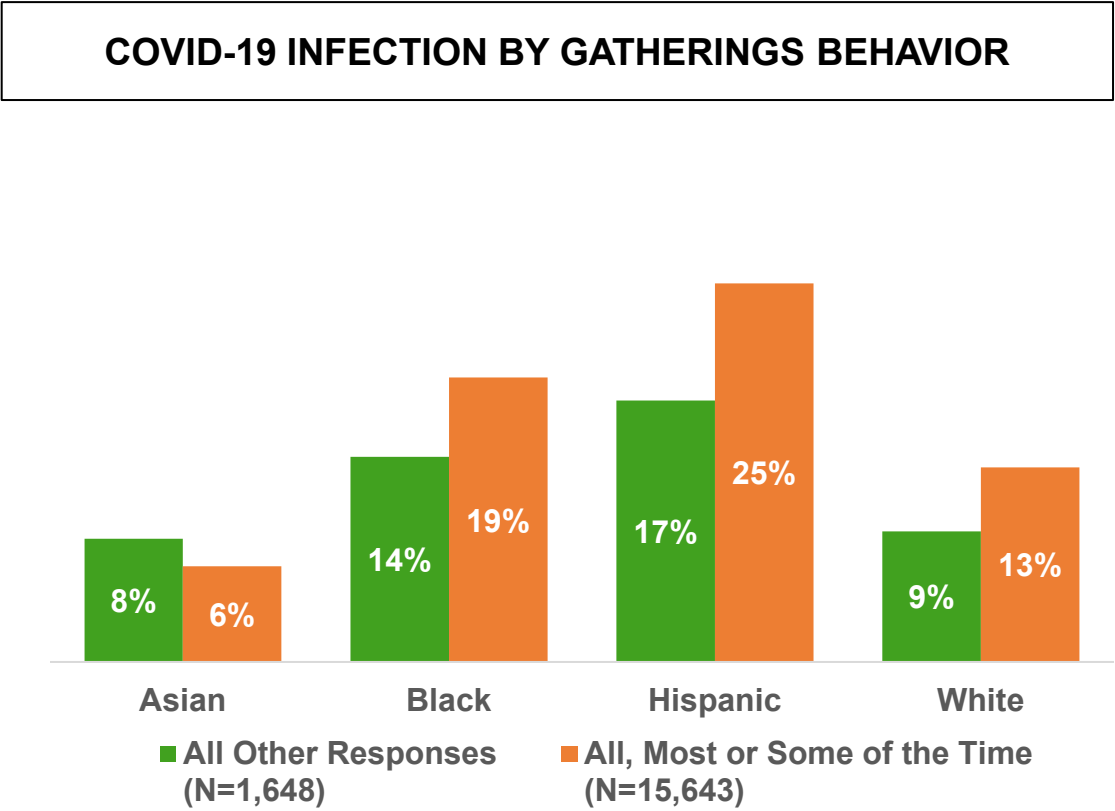


Eating inside a restaurant is associated with a higher infection rate across all racial / ethnic groups.

SOCIAL GATHERINGS AND COVID INFECTION



9-14% of all racial / ethnic groups report attending social gatherings all or most of the time

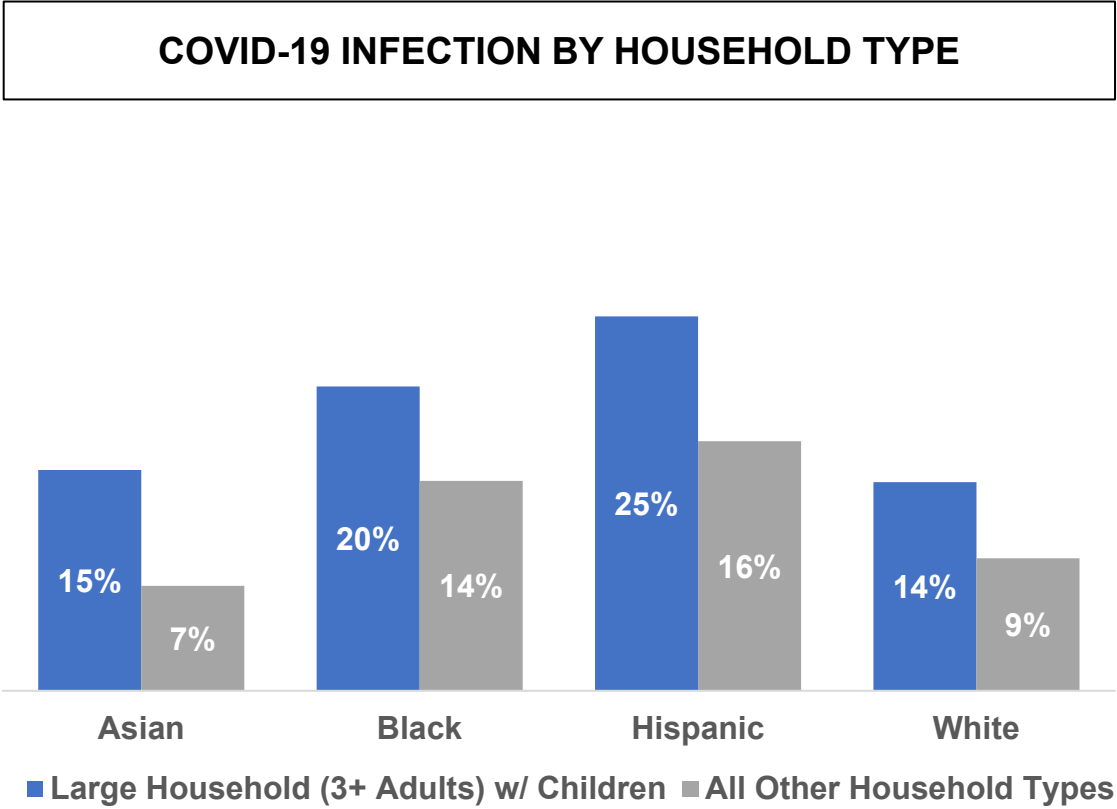


Attending social gatherings is associated with a higher infection rate across most racial / ethnic groups.

HOUSEHOLD TYPE AND COVID INFECTION



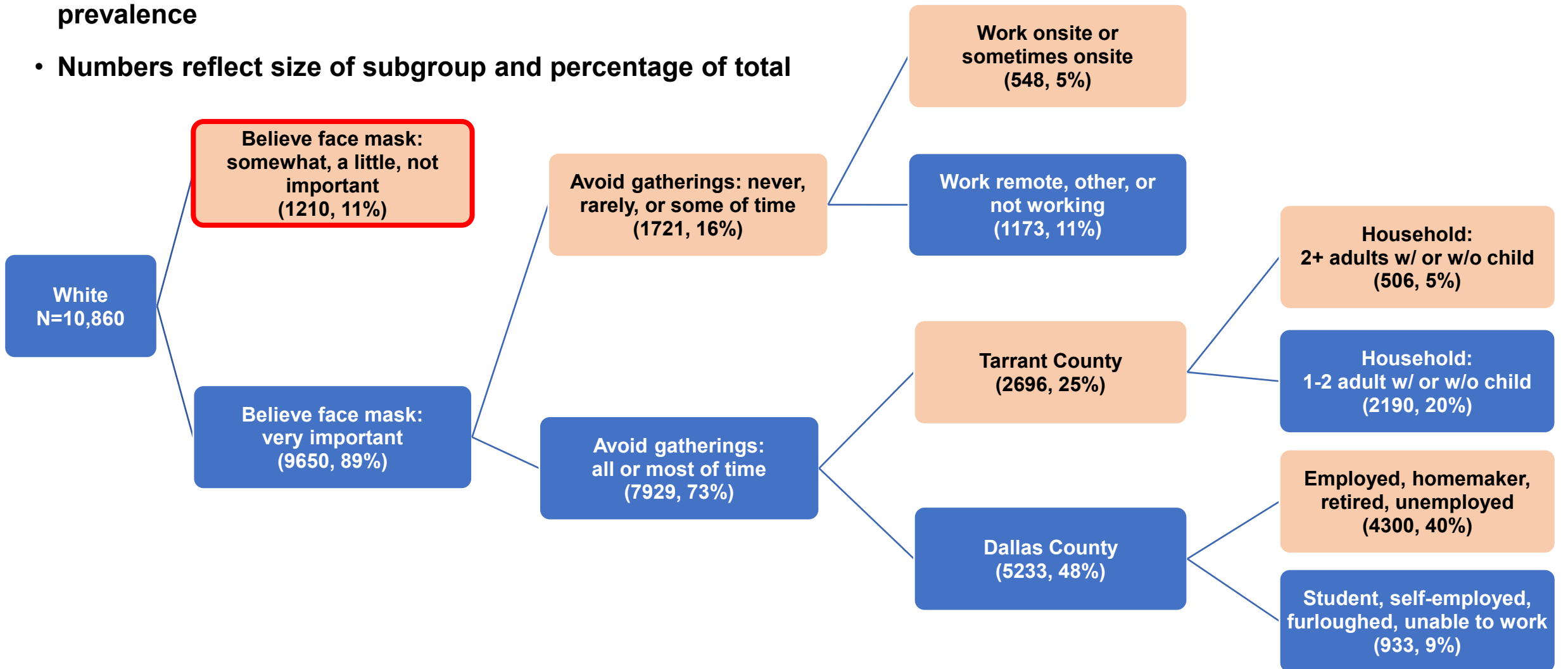
9-17% of all racial / ethnic groups live in large households (3+ adults) with kids, except for Whites at 5%



Larger households (3+ adults) with children have higher infection rates across all racial / ethnic groups.

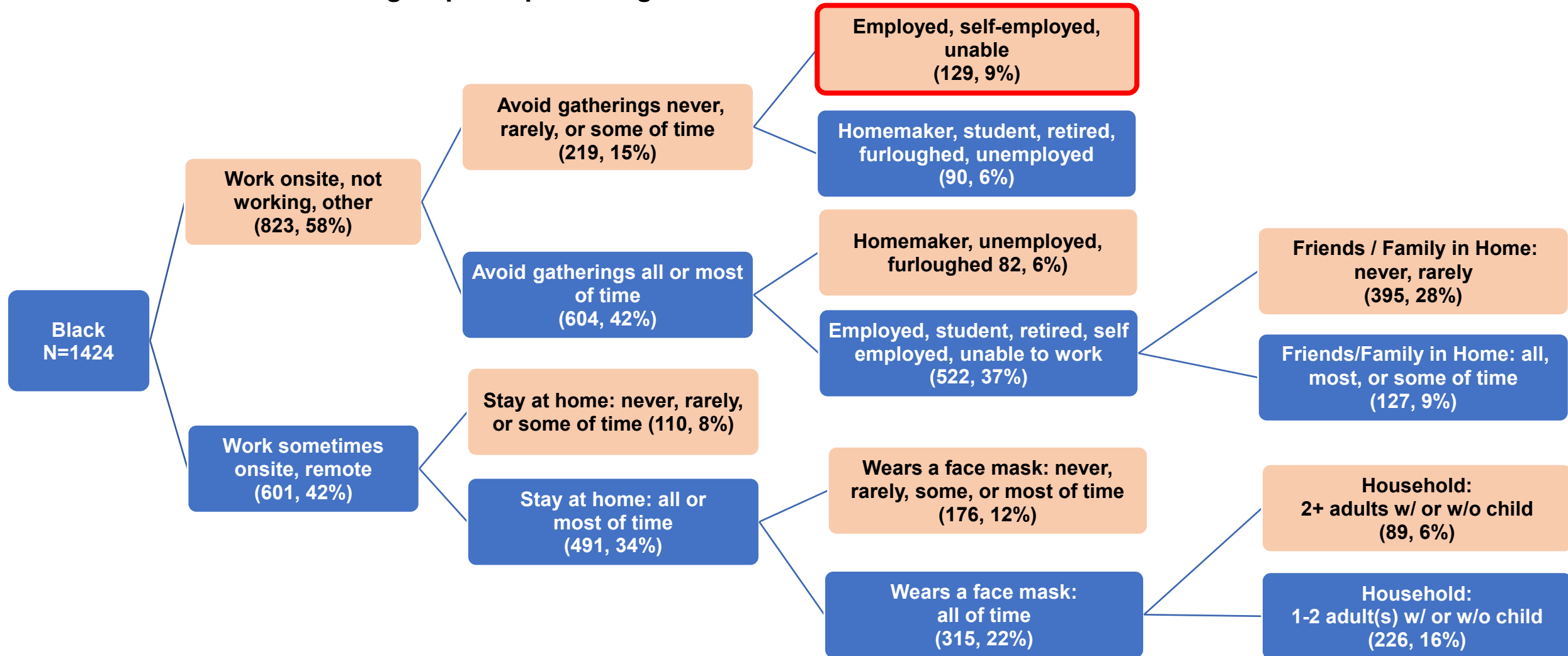
DECISION TREE ANALYSIS: WHITES*

- Groups in **orange** had higher COVID infection prevalence compared to **blue** group after accounting for prior testing and month of study participation
- The Group **outlined in red** had highest overall infection prevalence
- Numbers reflect size of subgroup and percentage of total



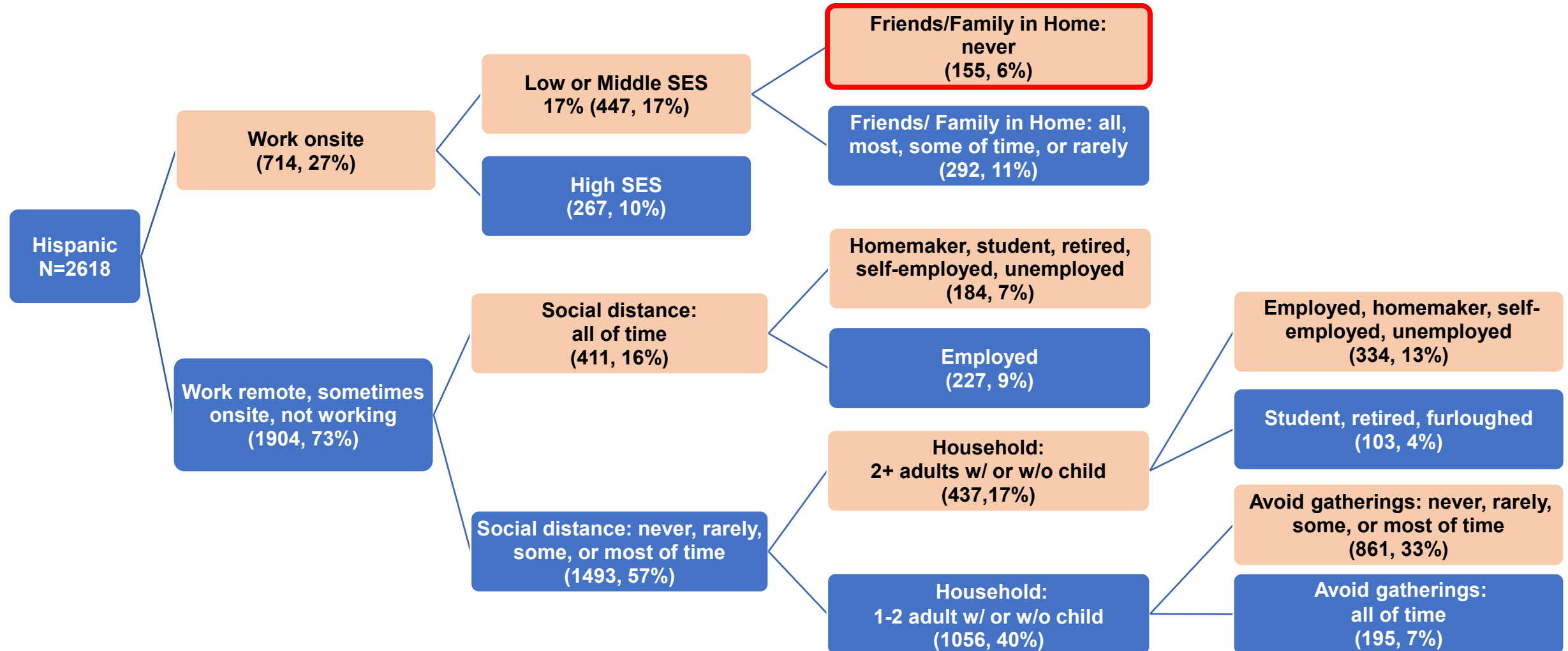
DECISION TREE ANALYSIS: BLACKS*

- Groups in **orange** had higher COVID infection prevalence compared to **blue** group after accounting for prior testing and month of study participation
- The Group **outlined in red** had highest overall infection prevalence
- Numbers reflect size of subgroup and percentage of total



DECISION TREE ANALYSIS: HISPANICS*

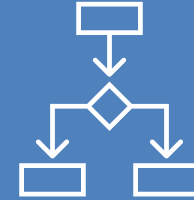
- Groups in **orange** had higher COVID infection prevalence compared to **blue** group after accounting for prior testing and month of study participation
- The Group **outlined in red** had highest overall infection prevalence
- Numbers reflect size of subgroup and percentage of total



OUTCOMES AND ONGOING ACTIVITIES



**Investigation of
factors driving
COVID race / ethnic
disparities**



**Characterizing link
between behaviors
and COVID
infection**

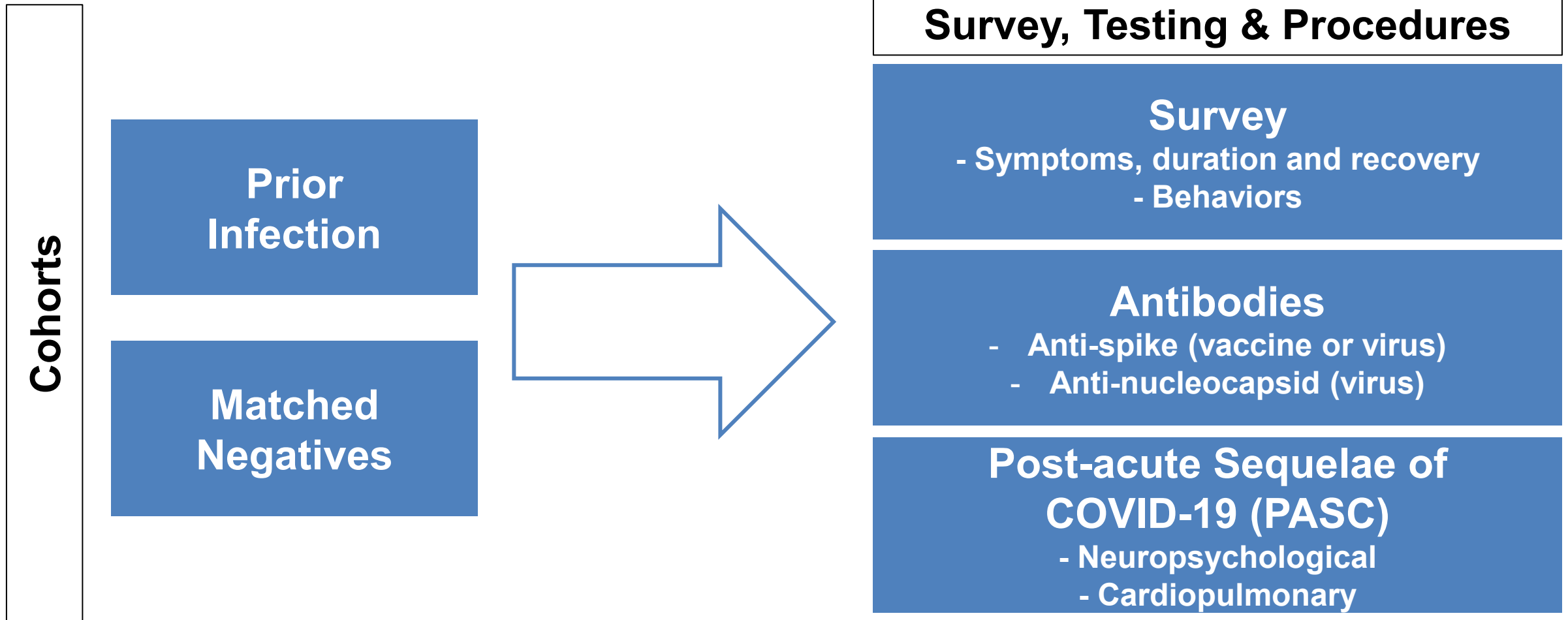


**Investigation of
long-COVID
symptoms**

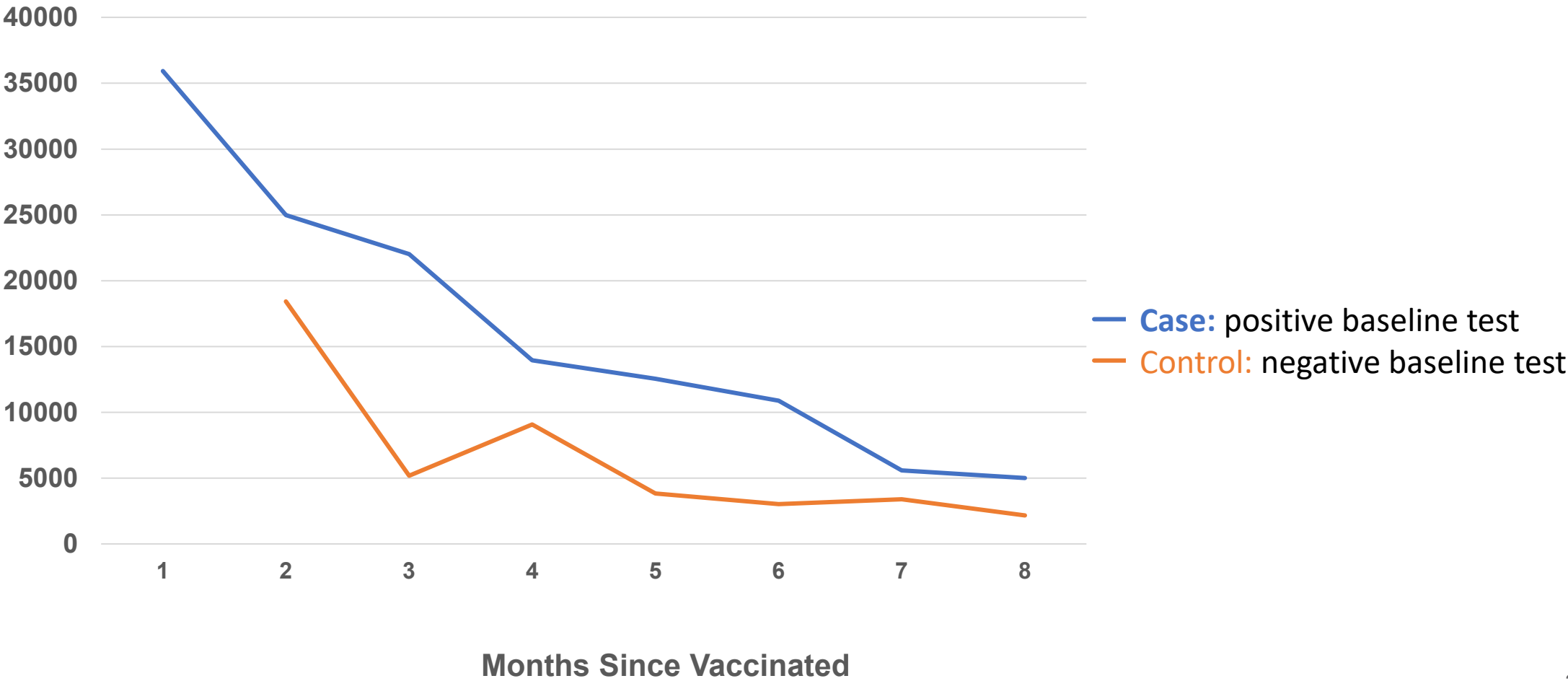


**Long-term study
of how long
antibodies stay in
system**

LONGITUDINAL STUDY: DESIGN



LONGITUDINAL STUDY: AVERAGE SPIKE PROTEIN LEVELS



KEY STUDY TAKEAWAYS

1. Documented racial and socioeconomic disparities in COVID-19 prevalence in Tarrant and Dallas Counties
2. Identified association between COVID-19 infection and behavioral risk factors, including small social gatherings
3. Developed infrastructure that is being leveraged to address vaccine hesitancy and facilitate vaccine dissemination
4. A variety of outreach strategies is needed to effectively address engagement barriers for communities of need

POLICY IMPLICATIONS

- Given patterns of vaccination uptake and presence of new variants, our communities remain vulnerable to COVID-19.
- Our local and national data support:
 - Mask wearing and social distancing in public spaces
 - Maintaining healthy environments in restaurants and adjusting practices during surges
 - Educating community members, especially young adults, so they can make an informed decision about strategies to protect themselves, family, friends, colleagues, and their community
 - Monitoring needs of those with long-COVID and connecting them to community resources

For ongoing updates on study findings, please visit:

utswmed.org/covidstudy/updates