

# NCHS Research and Development Survey during COVID-19 Webinar: Using an existing survey in a new way



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# National Center for Health Statistics (NCHS): What We Do

- **Monitor the nation's health by collecting, analyzing, and disseminating health data to:**
  - Compare across time, populations, providers, & geographic areas
  - Identify health problems, risk factors, & disease patterns
  - Inform actions & policies to improve the health of the American people
  - Administer cross-cutting, comprehensive, & foundational data collections that address the full range of public health issues including emerging concerns
- **As the designated Federal statistical agency for health, NCHS provides data that are unavailable elsewhere for informed decision-making**

# Research and Development Survey (RANDS)

- Ongoing, periodic set of surveys conducted by the NCHS Division of Research and Methodology
- Designed to expand NCHS' methodological research:
  - To supplement NCHS' survey and questionnaire evaluation efforts
  - To explore ways to integrate data from commercial survey panels with high-quality data collections

# RANDS Program So Far...

	RANDS 1	RANDS 2	RANDS 3	RANDS during COVID-19 (2 Rounds)	RANDS 4	RANDS 5 (Planned)
Year	2015	2016	2018	2020	2020	2021
Survey Focus	Health Conditions and Behaviors	Health Conditions and Behaviors	Disability and Opioids	COVID19-related concepts	Disability and Opioids	National Survey of Family Growth

# RANDS Sample Sources

## Recruited commercial survey panels

- Managed by commercial or non-governmental firms and organizations
- Panel is recruited based on statistical sampling methodology
- Typically well-maintained with good levels of panel retention
- Very few in the United States—to our knowledge, there are only six
- There is a *theoretical* ability to assign probabilities of selection
- Major coverage and response issues as compared to NCHS' household surveys

# RANDS Sample Sources

- Gallup Panel (RANDS 1 and RANDS 2)
  - Panel recruitment via Gallup’s Dual Frame Random Digit Dial (RDD) Daily Tracking Poll
  - No non-response follow up (NRFU) during recruitment
  - Non-internet panelists surveyed via phone or mail
- NORC’s AmeriSpeak Panel (RANDS 3 through present)
  - Panel recruitment via a dedicated mail out/mail back survey
  - Extensive NRFU (~60% of panel comes from this effort)
  - Non-internet panelists surveyed via phone

# Adapting RANDS for Estimation: RANDS during COVID-19

- Traditional NCHS surveys require advanced planning and cannot always adapt quickly to collect data on major events in real-time
- RANDS, as a largely web-based survey, could provide some information on COVID-19 in a rapid and timely way
- NCHS worked with the Office of Management and Budget to adapt the purpose of RANDS from a strictly methodological survey to one that could produce a limited set of experimental estimates
- The new survey was named RANDS during COVID-19 to distinguish it from previous versions of RANDS

# What is RANDS during COVID-19?

- Two-round survey, with a longitudinal design
- Web and phone mode, with a minimum sample size of 6,000 in the first round and 5,000 in the second round
- The questionnaire includes several health topics:
  - Health Status, Chronic Conditions, Depression and Anxiety
  - **Loss of Work due to Illness with COVID-19**
  - Health Insurance and Health Care Access
  - **Telemedicine Access and Use**
  - COVID-19 Related Health Care and Behaviors
  - **Reduced Access to Health Care**



# Data Overview

8,663

- Randomly selected adult panelists invited to participate

6,800

- Completed surveys
- 94% by web; 6% by telephone

23%

- Weighted cumulative response rate

Survey responses collected: June 9, 2020 – July 6, 2020

# Producing Experimental Estimates

- Experimental estimates were produced using calibrated weights to account for the survey design
- Sample weights were calibrated to the 2018 National Health Interview Survey sample adult weights (n=25,417) to adjust for differences in demographic and health factors
- Calibration uses the strength of existing surveys to adjust for possible differences in the survey design

# RANDS during COVID-19 Round 1 Release

- National and subgroup estimates are reported online
- Topic areas:
  - Loss of work due to illness
  - Telemedicine
  - Reduced access to care

<https://www.cdc.gov/nchs/covid19/rands.htm>

# Loss of Work due to Illness

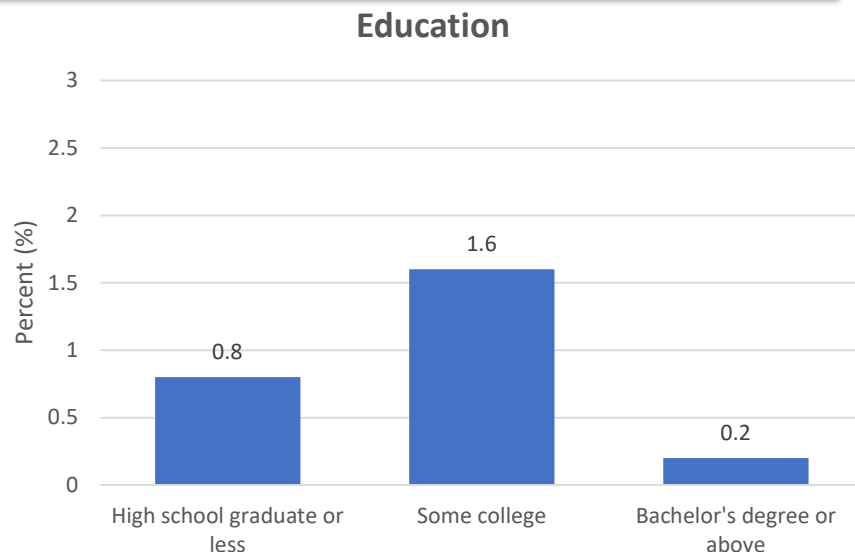
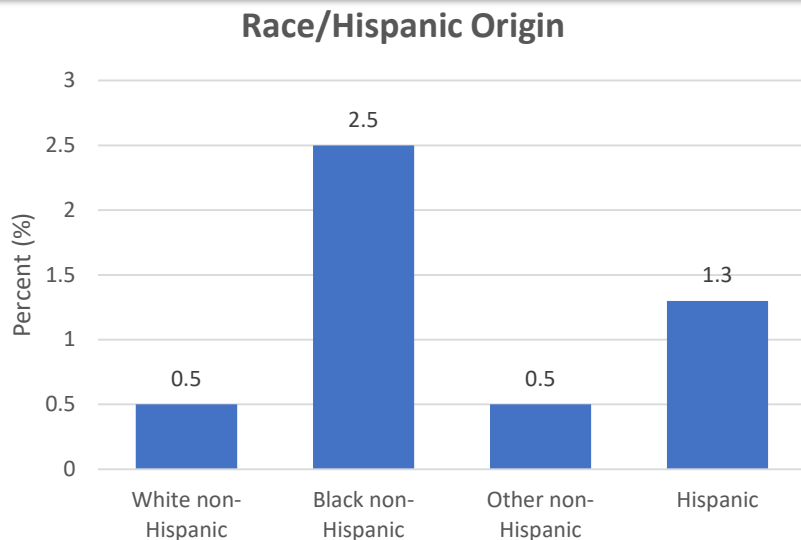
The inability to work at any point in the past week due to being sick or having a family member sick with COVID-19

- Overall 0.9% of U.S. adults were unable to work due to personal or family member illness



# Loss of Work due to Illness

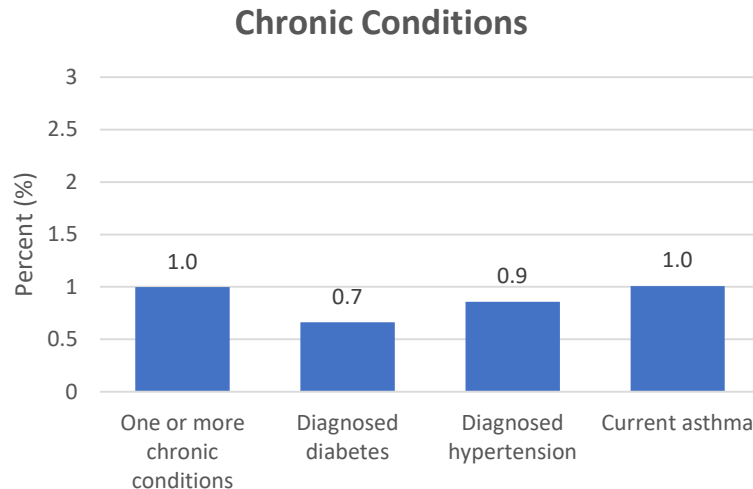
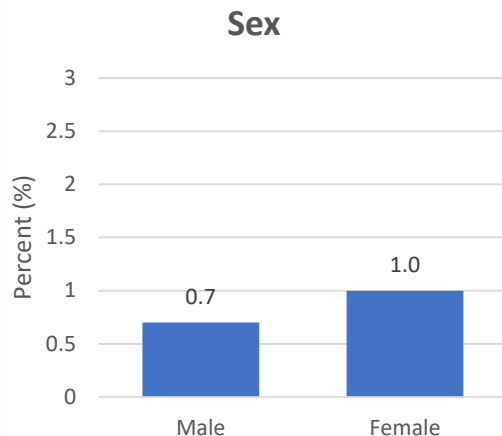
The percent of adults unable to work varied by race/Hispanic origin and education level



# Loss of Work due to Illness

The percent of males and females unable to work were similar

The percent of adults unable to work were similar across selected diagnosed chronic conditions



# Telemedicine

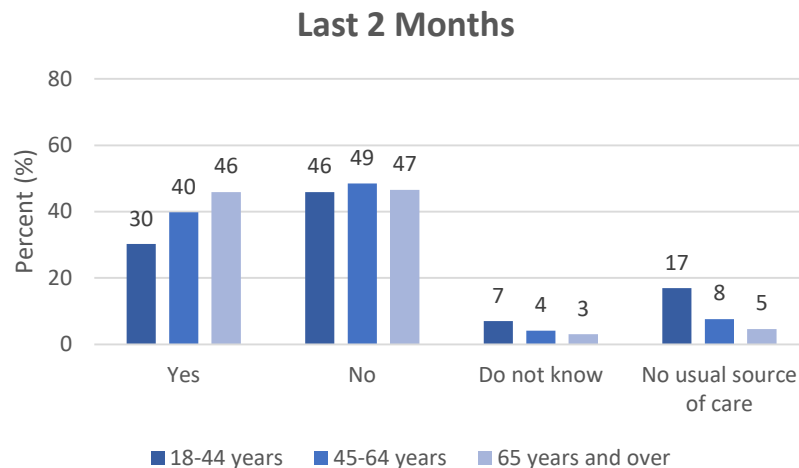
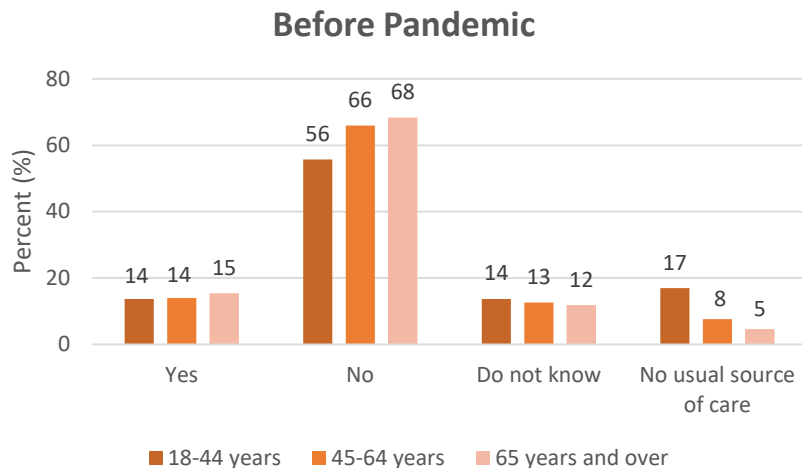
Access and use of telemedicine, including video and telephone appointments both before and during the pandemic

- 14.1% of adults in the U.S. have a provider that offered telemedicine prior to the pandemic
- 36.6% of adults in the U.S. have a provider that offered telemedicine in the last two months



# Telemedicine Access by Age Group

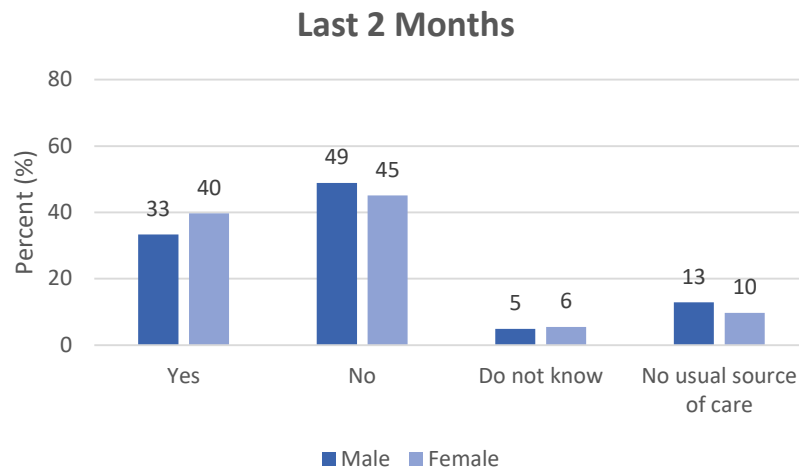
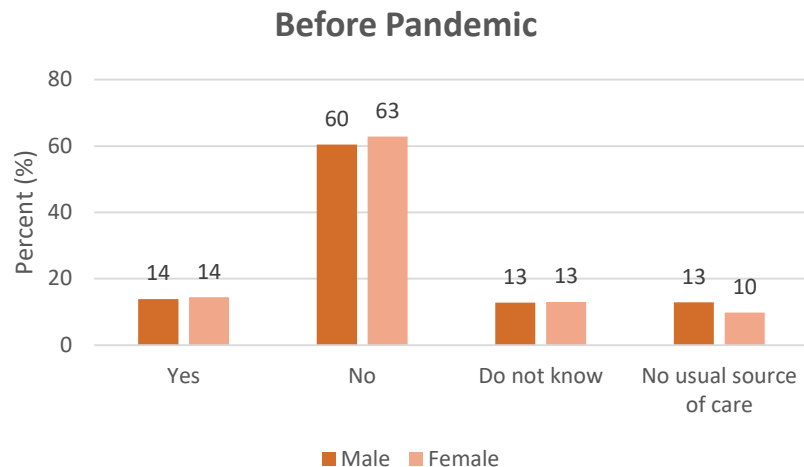
Telemedicine access varied by age group before the pandemic and in the last two months





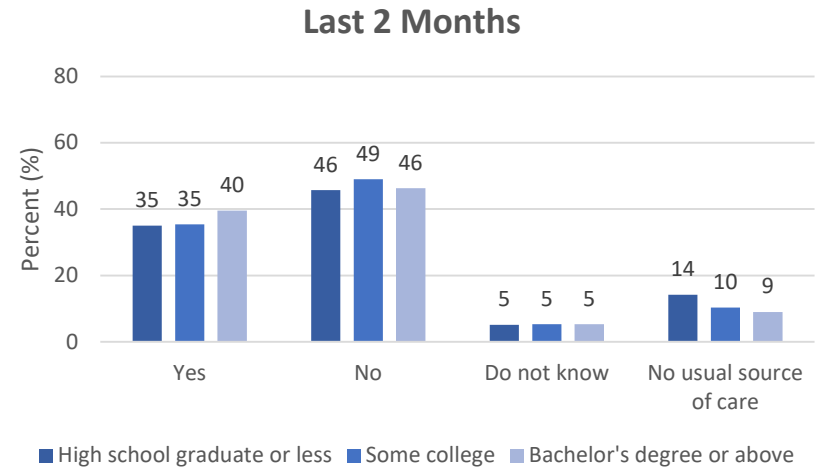
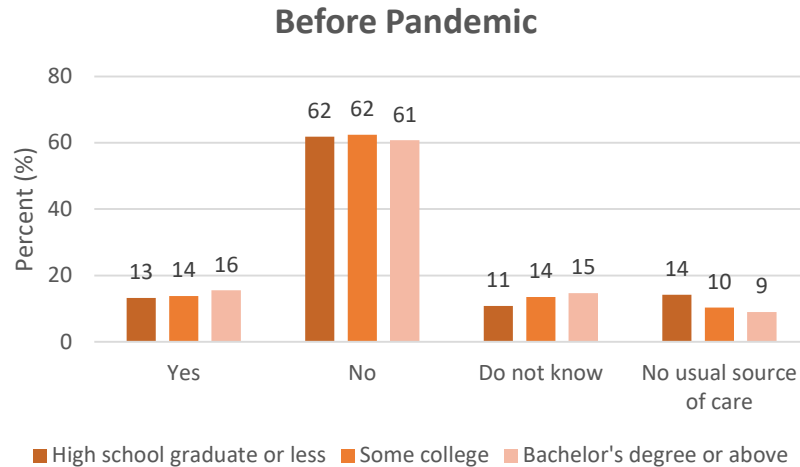
# Telemedicine Access by Sex

Telemedicine access was similar between males and females before the pandemic, but varied in the last two months



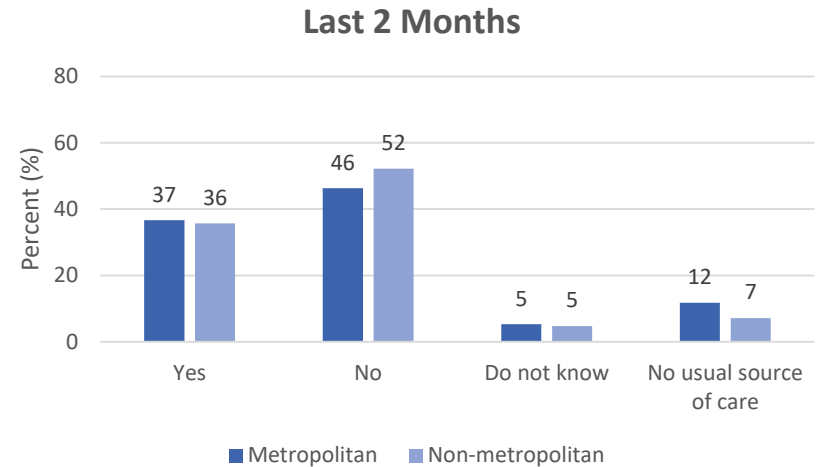
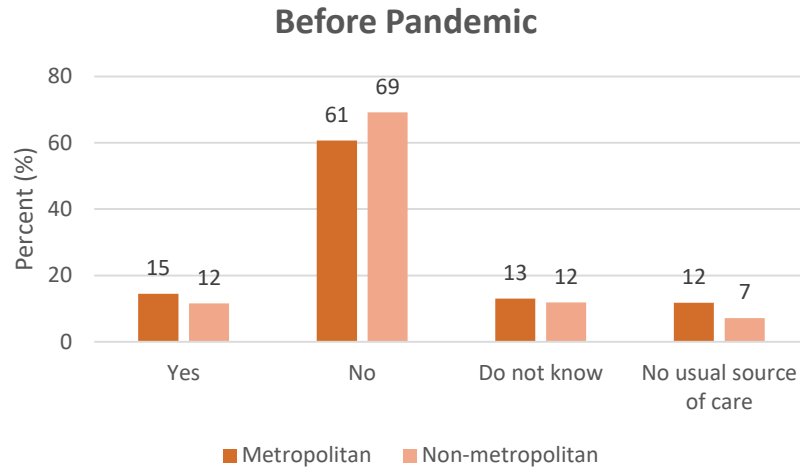
# Telemedicine Access by Education

Telemedicine access differed by education level before the pandemic and in the last two months



# Telemedicine Access by Urbanization

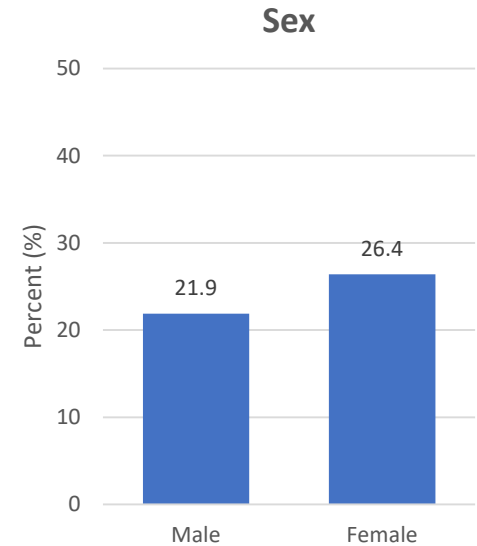
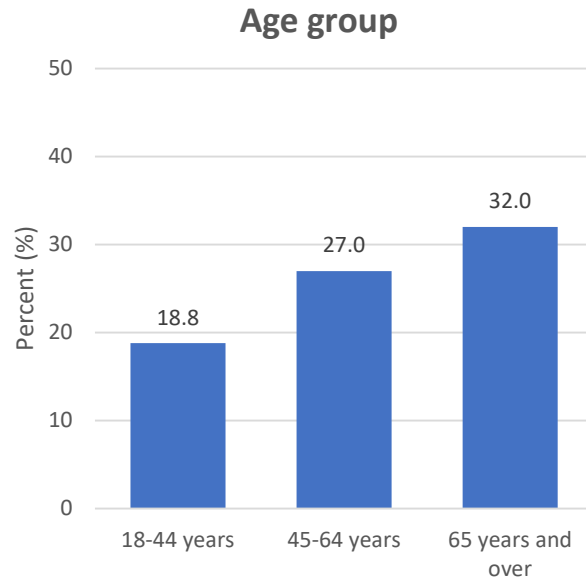
Telemedicine access in metropolitan and nonmetropolitan areas was more similar in the last two months than prior to the pandemic



# Telemedicine Use

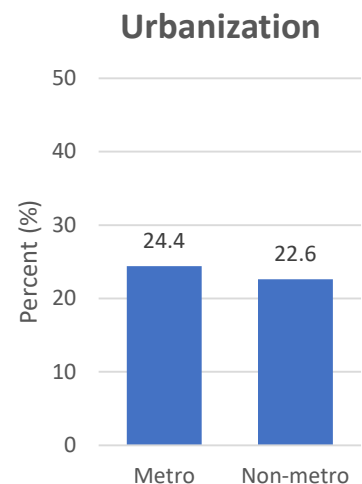
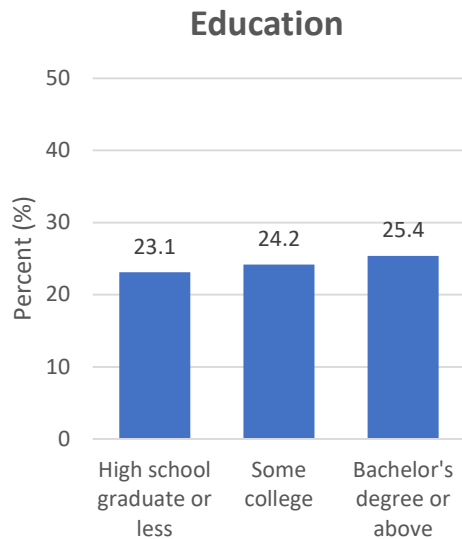
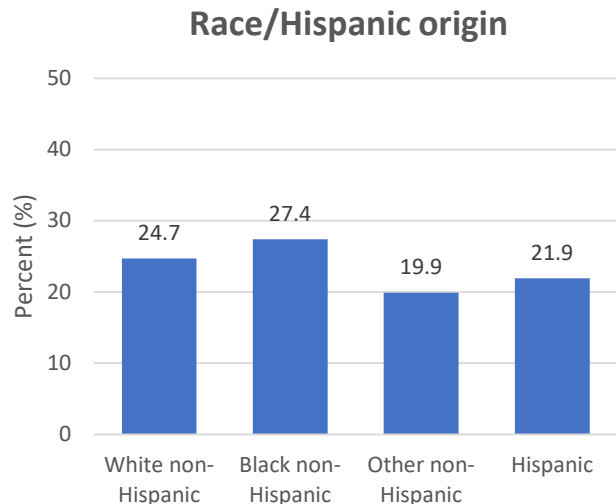
24.2% of adults in the U.S. had one or more telemedicine appointments in the last two months

Telemedicine use was higher among adults 65 years and over and females



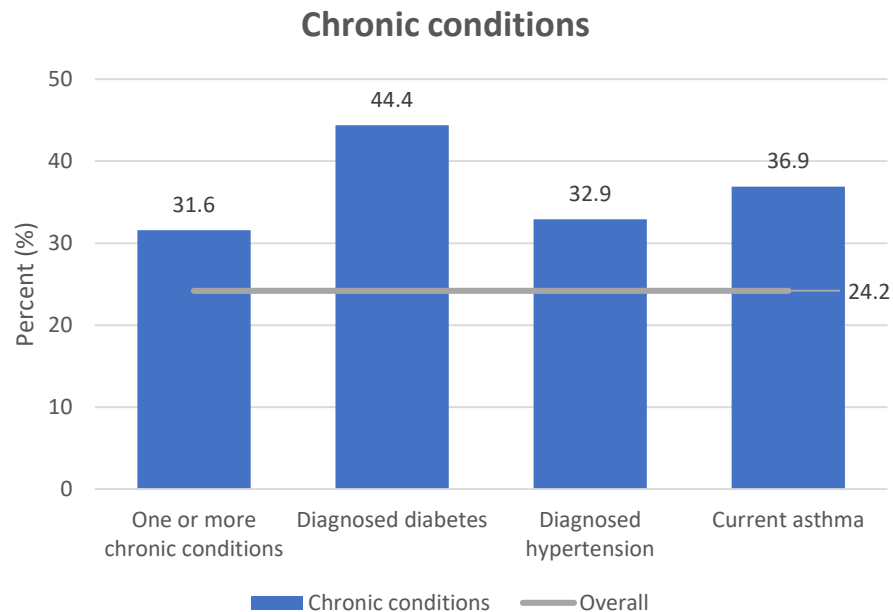
# Telemedicine Use

Telemedicine use was similar by race/Hispanic origin, education, and urbanization



# Telemedicine Use

Telemedicine use was above the national average for adults with diagnosed chronic conditions

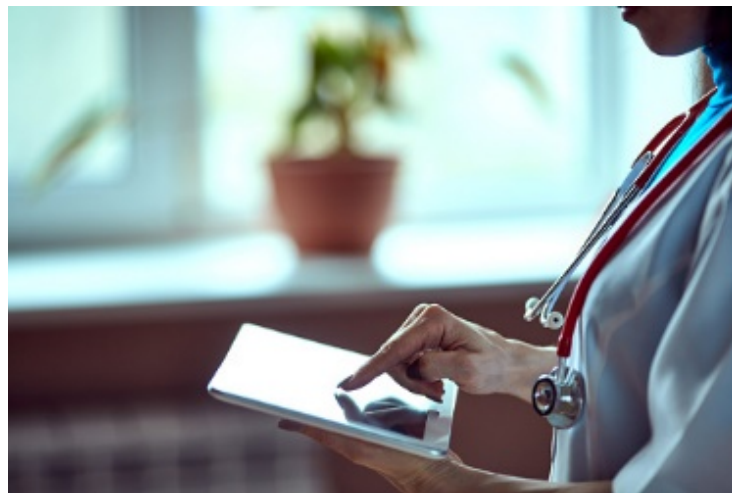


# Reduced Access to Care

- Inability to receive medical care for any reason and due to the coronavirus pandemic
- Reported types of care include:
  - ✓ One or more types of care
  - ✓ Dental care
  - ✓ Diagnostic or medical screening test
  - ✓ Hearing care
  - ✓ Prescription drugs or medications
  - ✓ Regular checkup
  - ✓ Surgical procedure
  - ✓ Treatment for ongoing condition
  - ✓ Urgent care
  - ✓ Vision care

# Reduced Access to Care

- 48.4% of U.S. adults missed one or more types of care in the last two months for any reason
- 38.7% of U.S. adults missed one or more types of care in the last two months due to the coronavirus pandemic

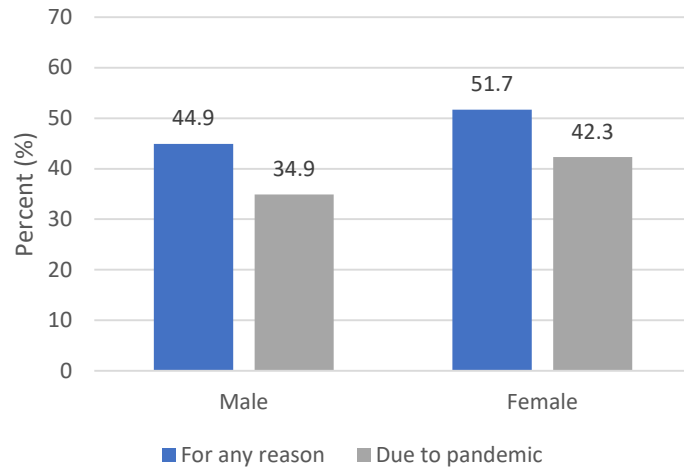




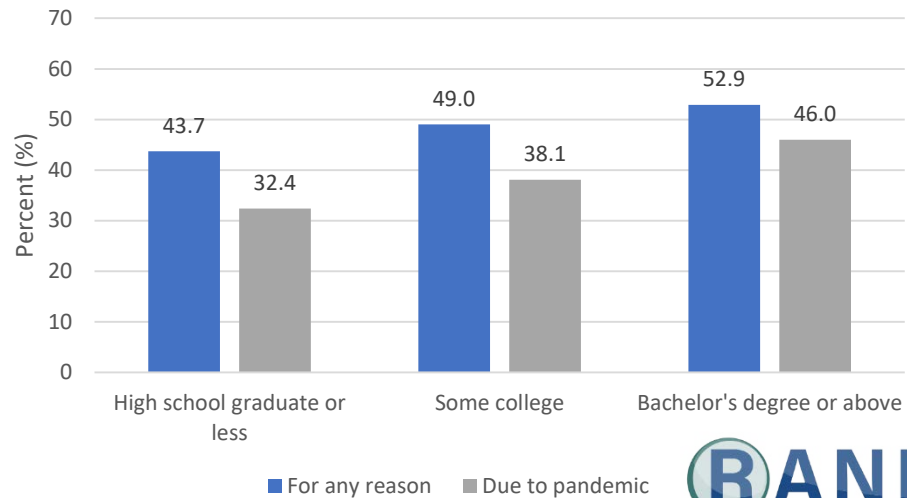
# Reduced Access to Care

Females and adults with a bachelor's degree or above were more likely to report missing one or more types of care in the last two months both due to the pandemic and for any reason

### Sex

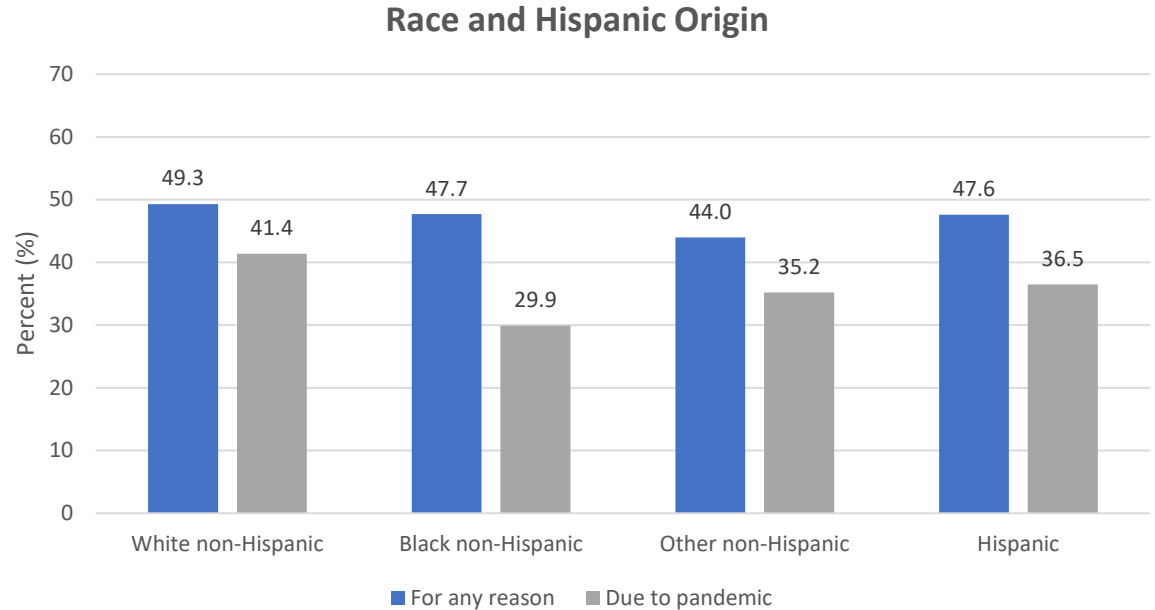


### Education



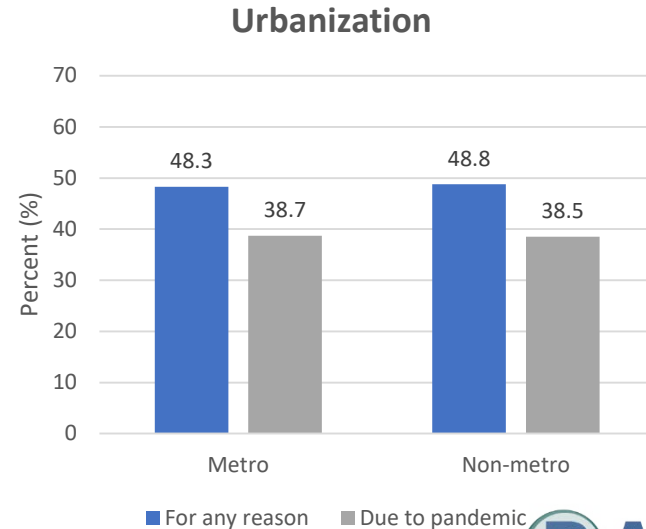
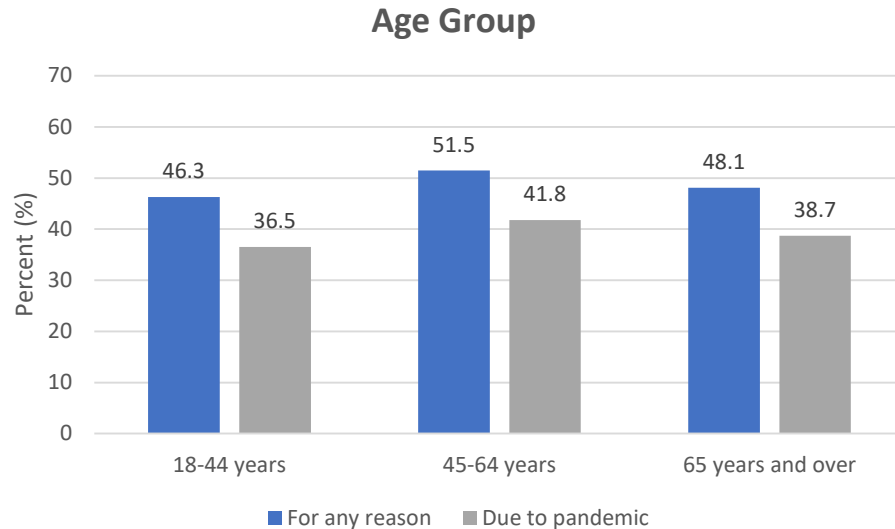
# Reduced Access to Care

The percent of adults missing one or more types of care for any reason were similar by race/Hispanic origin but differed for missed care due to the pandemic



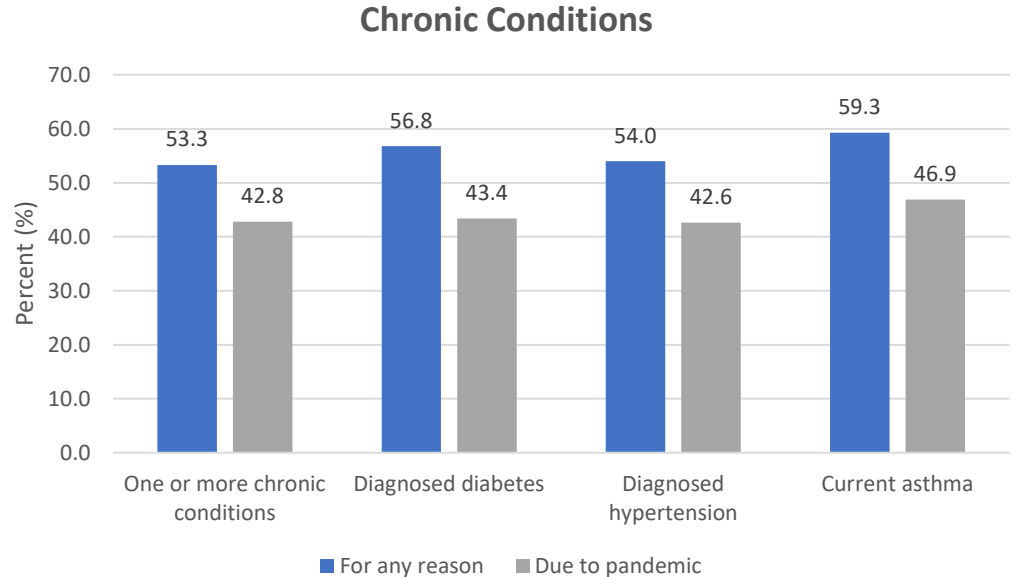
# Reduced Access to Care

The percent of U.S. adults missing one or more types of care in the last two months for any reason or due to the pandemic were similar by age group and urbanization



# Reduced Access to Care

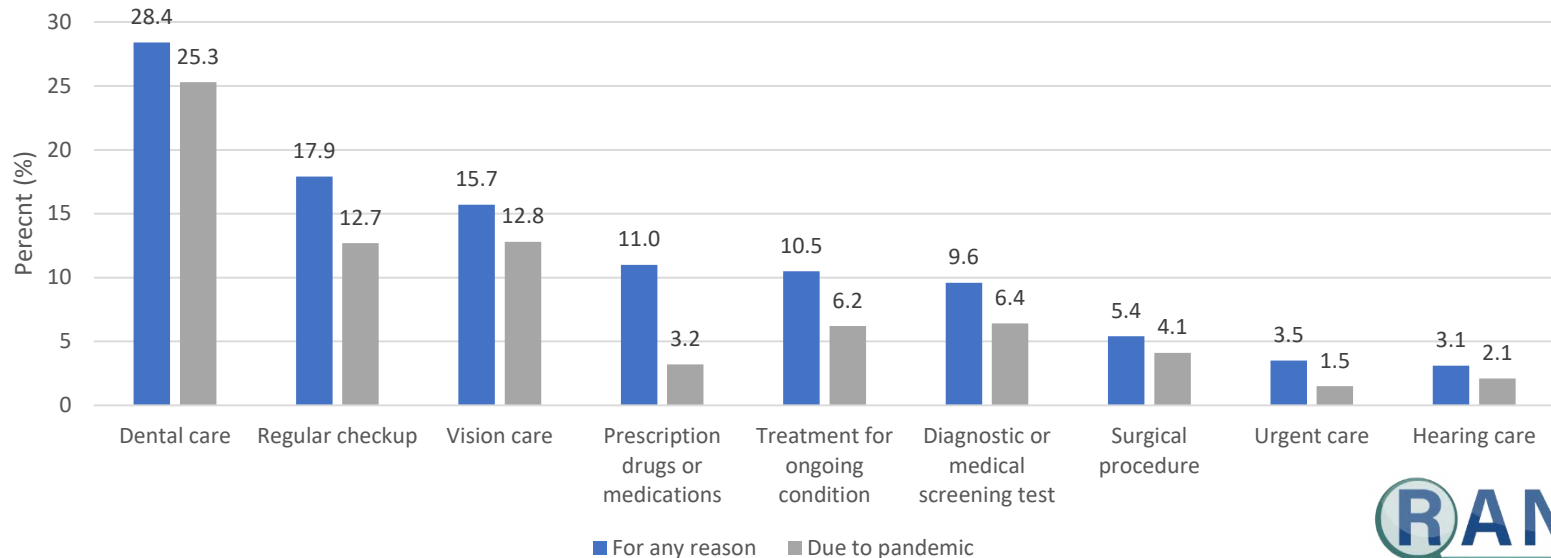
U.S. adults with current asthma reported a higher prevalence of one or more types of missed care for any reason or due to the pandemic compared to other selected chronic conditions



# Reduced Access to Care by Type of Care

Reduced access to care reflects the amount of missed care and the varying need for certain types of care

Certain types of care were impacted more than others



# Summary

- RANDS is a platform designed for conducting survey question evaluation and statistical research
- NCHS adapted RANDS to produce timely data on COVID-19 including:
  - Loss of work due to illness
  - Telemedicine
  - Reduced access to care
- Estimates from the first round are currently available at:  
<https://www.cdc.gov/nchs/covid19/rands.htm>

# Future RANDS during COVID-19 Plans

- Round 2:
  - Data collection began in late July
  - Estimates on the 3 constructs will be released in September
- NCHS will publish reports on the survey questions collected for methodological research purposes and findings from cognitive interviews focused on coronavirus-related survey questions
- NCHS is still determining how best to release a public use file for RANDS during COVID-19
  - Public use files for previous rounds of RANDS are available at:  
<https://www.cdc.gov/nchs/rands/index.htm>

# Questions?

- Please submit your questions via the Q&A feature in the Zoom application
- The facilitator will address questions as time allows. Questions not answered may be forwarded to [paoquery@cdc.gov](mailto:paoquery@cdc.gov)

<https://www.cdc.gov/nchs>

<https://www.cdc.gov/nchs/rands>