

Massachusetts Department of Public Health

COVID-19

Community Impact Survey (CCIS)

Preliminary Analysis Results as of  
October 13, 2021

# CCIS TEAM MEMBERS

## **CCIS Project Leads**

W.W. Sanouri Ursprung, Lauren Cardoso, Beth Beatriz, Glory Song, Caroline Stack, Kathleen Fitzsimmons, Emily Sparer-Fine, Ta-wei Lin, Lisa Potratz, Heather Nelson, Amy Flynn, Lisa Arsenault, Abby Atkins

## **CCIS Steering Committee**

Lauren Cardoso, W.W. Sanouri Ursprung, Beth Beatriz, Abbie Averbach, Ruth Blodgett, Ben Wood, Sabrina Selk, Jessica del Rosario Nicole Daley, Lisa Potratz

## **CCIS Analytic Team, Data to Action Team, Data Dissemination Team, Communications Team**

Allison Guarino, Andrea Mooney, Angela Laramie, Ann Marie Matteucci, Anna Agan, Arielle Coq, Barry Callis, Beatriz Pazos Vautin, Ben Wood, Brittany Brown, Chelsea Orefice, Dana Bernson, David Hu, Dawn Fukuda, Ekta Saksena, Elise Pechter, Emily White, Fareesa Hasan, Frank Gyan, Glennon Beresin, Hanna Shephard, Hannah Walters, Hermik Babkhanlou-Chase, James Laing, Jena Pennock, Jennica Allen, Jennifer Halstrom, Justine Egan, Kathleen Grattan, Kim Etingoff, Kirby Lecy, Lamar Polk, Lauren Fogarty, Lauren Larochele, Mahsa Yazdy, Marianne Mabida, Matthew Tumpney, Megan Hatch, Megan Young, Melody Kingsley, Michelle Reid, Miriam Scrivener, Nassira Nicola, Nicole Daniels, Nicole Roos, Rebecca Berger, Rebecca Han, Robert Leibowitz, Susan Manning, Thomas Brigham, Timothy St. Laurent, Vera Mouradian, Victoria Nielsen, Ziming Xuan, Elizabeth Showalter, Priyokti Rana, Mayowa Sanusi, Emily Lawson, Alana LeBrón

# CCIS COMMUNITY PARTNERS

Many groups that were critical in the success of this effort and gave important input on the development and deployment of the survey:

- Academic Public Health Volunteer Corps and their work with local boards of health and on social media
- Mass in Motion programs, including Springfield, Malden, and Chelsea
- Cambodian Mutual Assistance
- The Mashpee Wampanoag Tribe
- The Immigrants' Assistance Center, Inc
- Families for Justice as Healing
- City of Lawrence Mayor's Health Task Force
- The 84 Coalitions, including the Lawrence/Methuen Coalition
- Boys and Girls Clubs, including those in Fitchburg and Leominster and the Metro South area
- Chinatown Neighborhood Association
- Father Bill's
- UTEC
- MassCOSH
- Stavros Center for Independent Living
- Greater Springfield Senior Services
- Center for Living and Working
- DEAF, Inc.
- Massachusetts Commission for the Deaf and Hard of Hearing
- Viability, Inc.

# TABLE OF CONTENTS

Introduction:		
Purpose and Approach.....	5	
Framing Matters: how to read these findings with a racial justice lens .....	13	
How to Convert Data To Action.....	29	
Mitigating Individual Risk Of Infection.....	44	
Access To Testing.....	54	
Access To Healthcare.....	60	
Social Determinants Of Health.....	73	
Mental Health .....	82	
Employment.....	94	
Parents & Families.....	119	
Substance Use.....	137	
Discrimination & Race Spotlights:.....	162	
Asian Resident Spotlight.....	181	
Latinx Resident Spotlight.....	209	
Indigenous Resident Spotlight.....	222	
Black Resident Spotlight.....	236	
Sexual Orientation & Gender Identity Spotlight.....	252	
Disability Spotlight.....	275	
Intimate Partner Violence.....	306	
NEW: Housing Stability.....	339	
NEW: Rural.....	364	
Youth Survey		
Youth Overview.....	392	
Youth and COVID Infection.....	396	
Youth Changes in Responsibility.....	402	
Youth Mental Health.....	412	
Youth Substance Use.....	419	
Youth Education & Employment.....	426	
Young Parents.....	456	
NEW: Youth Safety and Access to Healthcare.....	471	
Data to Action.....	502	
Appendix.....	518	

PURPOSE AND APPROACH:  
how and why did we conduct the CCIS?

# BACKGROUND

## Context

The pandemic is exacerbating pre-existing public health concerns and creating new health crises to address. Even people who have not become sick with COVID-19 are managing stress, uncertainty, and isolation during this challenging time. DPH and its partners need real time data to prioritize resources and inform policy actions.



## Goal

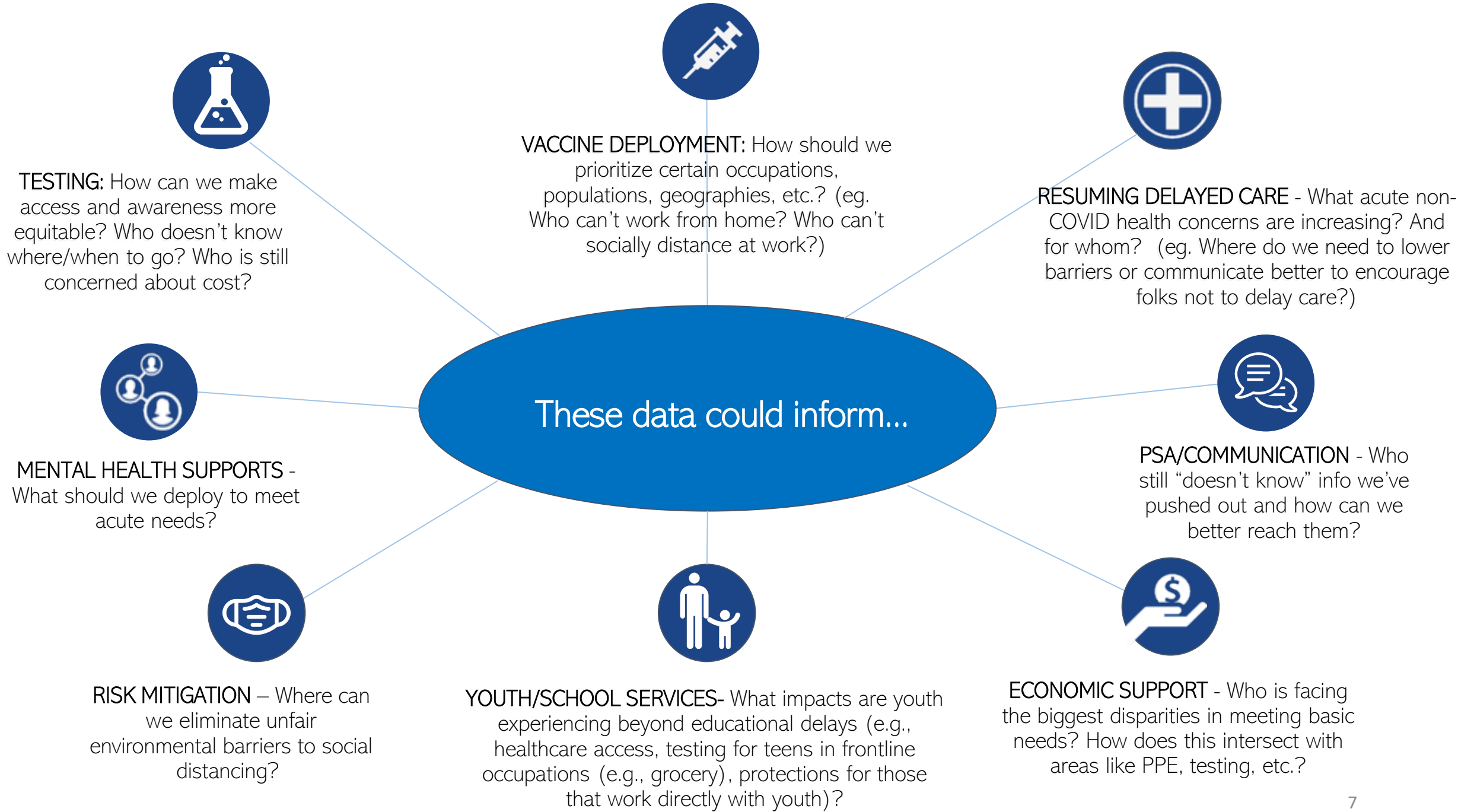
DPH conducted a survey to understand the specific needs of populations that have been disproportionately impacted by the pandemic, including its social and economic impacts.

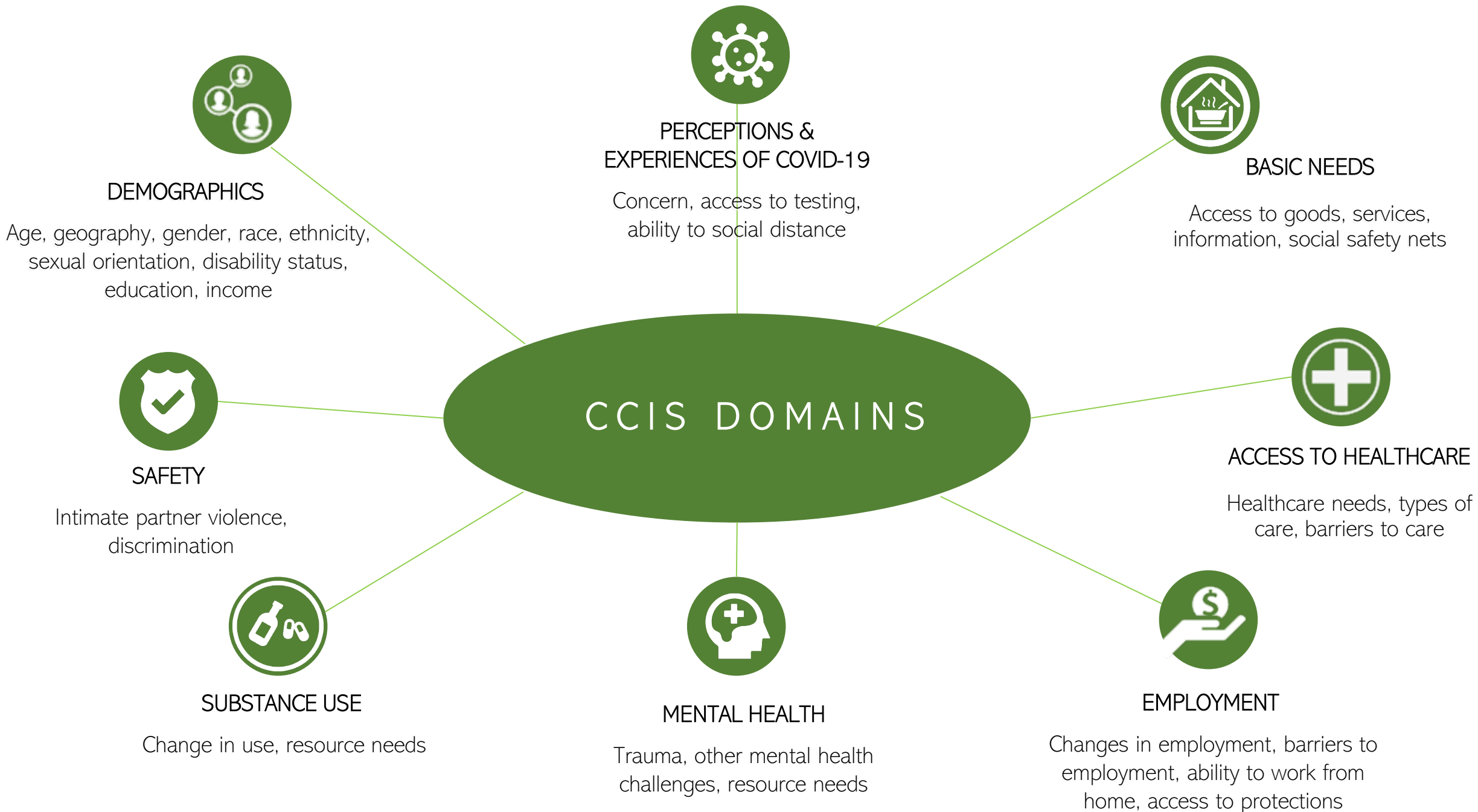


## Actions

DPH will use and share these data to prioritize our pandemic response and to create new, collaborative solutions with community partners.







# OVERVIEW OF APPROACH

- Conducted an online survey between Sept. and Nov. 2020
  - There were two versions of the survey questions: adult (n=33,000) and youth (n=3,000). Due to their unique needs, young parents(n=148) received the adult questions.
- Available in 11 languages, with focus groups conducted in ASL
- Employed a sampling strategy that ensured we reach key populations and a specific subset of questions for youth respondents.
- Open ended questions captured previously unknown needs and barriers
- Recruited participants via network of community-based organizations (CBOs)

# TECHNICAL DATA NOTES

- Any group where less than 30 respondents answered the question (denominator < 30), or less than 5 respondents reported that outcome (numerator or "count" < 5) was suppressed.
- For statistical significance testing, a chi-square ( $X^2$ ) test of independence for comparisons was used
- For the adult survey, percentages were weighted to the statewide age and educational distribution of residents aged  $\geq 25$  years.
- For the youth survey, all percentages are weighted to the statewide age and educational distribution of those  $\geq 25$  years.
- Data on young parents were unweighted due to methodological considerations.

# We intentionally worked to reach these Priority Populations:

- People of color
- LGBTQ+ individuals
- People with disabilities
- Essential workers
- People experiencing housing instability
- Older adults
- Individuals living in areas hardest hit by COVID-19

# Recruitment efforts were overwhelmingly successful

- Over **33,000** adult respondents and over **3,000** youth (under 25) in the final sample
- More respondents from western and central MA, than in the entire statewide samples of past surveillance surveys\* (eg. BRFSS).
- Compared to past surveillance surveys, CCIS priority population samples reached:
  - **10x** as many Alaska Native/Native Americans
  - **10x** as many LGBTQ respondents
  - **5x** as many residents who speak languages other than English
  - **5x** as many Hispanic residents
  - **5x** as many Asian residents
  - **Over twice** as many respondents in other populations including the deaf/hard of hearing and Black community
    - Additional Focus Groups were conducted with the Deaf/Hard of Hearing community

\*example comparison rates were calculated in comparison to the 2019 Behavioral Risk Factor Surveillance Survey (BRFSS) sample sizes

FRAMING MATTERS:  
*how to read these findings with a  
racial justice lens*

Racism is...

A system of advantage based on race.

*-David Wellman, Portraits of White Racism*

# RACIAL JUSTICE

Racial Justice  $\neq$  Diversity  
(Diversity = Variety)

Racial Justice  $\neq$  Equality  
(Equality = Sameness)

Racial Justice = Equity  
(Equity = Fairness, Justice)

# DISPARITIES, INEQUALITY, & INEQUITY

DISPARITY = INEQUALITY, and implies differences between individuals or population groups (UN-equal)

INEQUITY refers to differences which are unnecessary and avoidable, but in addition, are also considered unfair and unjust

# LEVELS OF RACISM

INTERNALIZED

INTERPERSONAL

MICRO-LEVEL



INSTITUTIONAL

STRUCTURAL

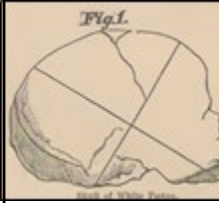
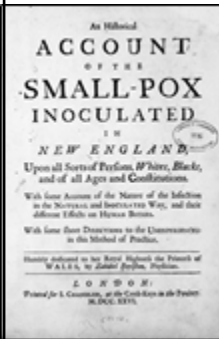
MACRO-LEVEL



# KEY TAKEAWAYS

- Lead with race and racism explicitly, but not exclusively.
- Keep your analysis structural.
- **Don't personalize critiques of systems.**
- The analysis is the tool.
- **Racial justice work is not work done FOR people of color.**
- Systems that are failing communities of color, are actually failing all of us.

Period	Years (% of History)	Characteristics	Health Systems	Example
Chattel Slavery	1619 - 1865 (62%)	Abolition of Atlantic Slave Trade (1808) – Black influx stopped; Black immigration since: scant	Disparate/inequitable treatment; poor health status and outcomes; “Slave health deficit” and “Slave health subsystem” in effect	1721 Cotton Mather and Zabdiel Boylston conduct first large-scale smallpox inoculation in the English-speaking world – inspired by enslaved African man, Onesimus
Jim Crow Segregation	1865 – 1965 (25%)	13 <sup>th</sup> , 14 <sup>th</sup> , and 15 <sup>th</sup> Amendments virtually nullified; legal segregation implemented in 1896	Absent or inferior treatment and facilities; <i>de jure</i> segregation / discrimination in South, <i>de facto</i> throughout most of the health system; health system recreates racial ideology	1875 and 1915 Johnson and Graves on negro health are example of how health professions are place where racial ideology is created
Structural Racism	1965 – Today (13%)	School desegregation (1954), Civil Rights Act (1964), Voting Rights Act	Southern medical school desegregation (1948), hospital desegregation in federal courts (1964), disparate health status, outcome, services, discrimination in effect	1999 NEJM study is example of clear physician bias present across health systems



# Racial inequity persists in every system across the country without exception.

System	Term	Definition
Child welfare	Disproportionality	Refers to the proportion of ethnic or racial groups of children in child welfare compared to those groups in the general population. <sup>1</sup>
Health	Health disparity	Healthcare disparities refer to differences in access to or availability of facilities and services. Health status disparities refer to the variation in rates of disease occurrence and disabilities between socioeconomic and/or geographically defined population groups. <sup>2</sup>
Juvenile justice	Disproportionate minority contact (“DMC”)	Refers to the disproportionate number of minority youth who come into contact with the juvenile justice system <sup>3</sup>
Education	Achievement gap	When one group of students (such as, students grouped by race/ethnicity, gender) outperforms another group and the difference in average scores for the two groups is statistically significant. <sup>4</sup>
Housing	Housing discrimination	Housing discrimination is discrimination in which an individual or family is treated unequally when trying to buy, rent, lease, sell or finance a home based on certain characteristics, such as race, class, sex, religion, national origin, and familial status. <sup>5</sup>
Economic Development	Historically underutilized businesses	Businesses that are disadvantaged and are deemed in need of assistance to compete successfully in the marketplace. <sup>6</sup>

# SOCIAL DETERMINANTS OF HEALTH INEQUITIES



# Addressing the Health Inequity Pathway: Groundwater, Upstream, Midstream, and Downstream

## Interconnected Systems

Address policies and interconnected systems to change unjust systems at the macro level and include global forces and governmental policies.

[Emerging Public Health Practice]

## Policies & Environment

Address policies and environments to change these unjust systems *ex: housing policies, land trusts, etc.*

## Increased Risk

Mitigate the impact of the increased risk caused by these unjust systems *ex: supportive housing, new development, stabilization initiatives*

## Health-Related Social Needs

Address the immediate health related social needs caused by these unjust systems *ex: air conditioner vouchers*

[Current Public Health Practice]

## GROUNDWATER

## UPSTREAM

## MIDSTREAM

## DOWNSTREAM



# UNDERSTANDING FRAMES

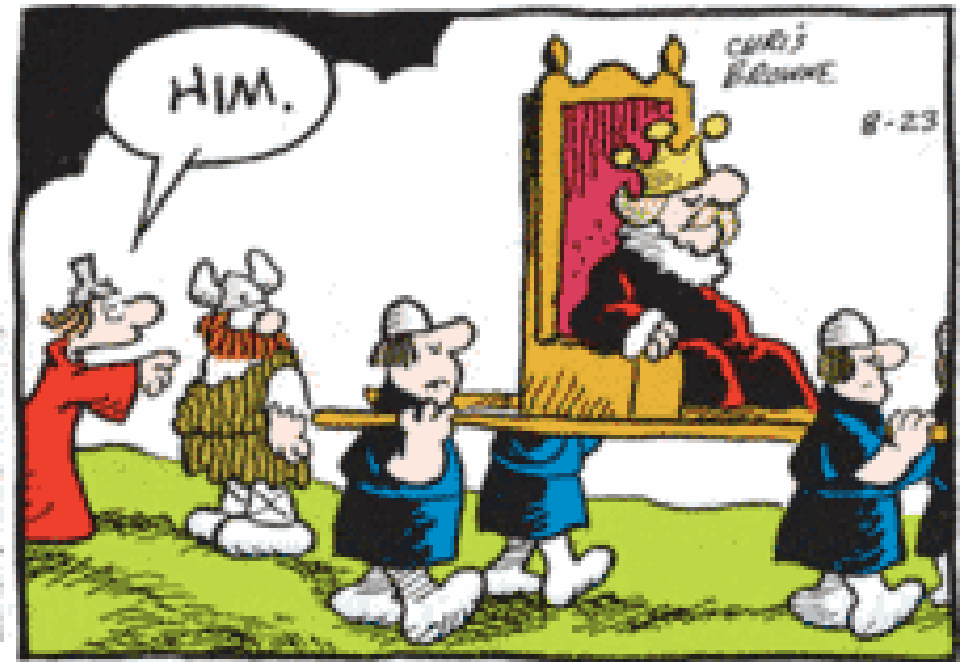
# WHAT ARE FRAMES?

“Frames are mental structures that shape the way we see the world. As a result, they shape the goals we seek, the plans we make, the way we act, and what counts as a good or bad outcome of our actions...frames shape our social policies and the institutions we form to carry out policies.” *George Lakoff*

# DOMINANT FRAMES

- Dominant frames are ideas, attitudes and beliefs that are shared collectively
- They evoke *certain* standards, values and morals that are reinforced and continued throughout society and across time
- Examples?
  - Bootstrap Theory

# BOOTSTRAP THEORY





**AP** Associated Press AP - Tue Aug 30, 11:31 AM ET

A young man walks through chest deep flood water after looting a grocery store in New Orleans on Tuesday, Aug. 30, 2005. Flood waters continue to rise in New Orleans after Hurricane Katrina did extensive damage when it

[Email Photo](#) [Print Photo](#)

**RECOMMEND THIS PHOTO** » Recommended Photos  
Recommend It: Average (138 votes)



3:47 AM ET

Two residents wade through chest-deep water after finding bread and soda from a local grocery store after Hurricane Katrina came through the area in New Orleans, Louisiana. (AFP/Getty Images/Chris Graythen)

[Email Photo](#) [Print Photo](#)

**RECOMMEND THIS PHOTO** » Recommended Photos  
Recommend It: Average (211 votes)



#### RELATED

• Katrina's Effects, at a Glance AP - Tue Aug 30, 1:26 PM ET

[Hurricanes & Tropical Storms](#)

“ We will not go back to normal. Normal never was. Our pre-corona existence was not normal other than we normalized greed, inequity, exhaustion, depletion, extraction, disconnection, confusion, rage, hoarding, hate and lack. We should not long to return, my friends. We are being given the opportunity to stitch a new garment. One that fits all of humanity and nature.”  
- Sonya Renee Taylor

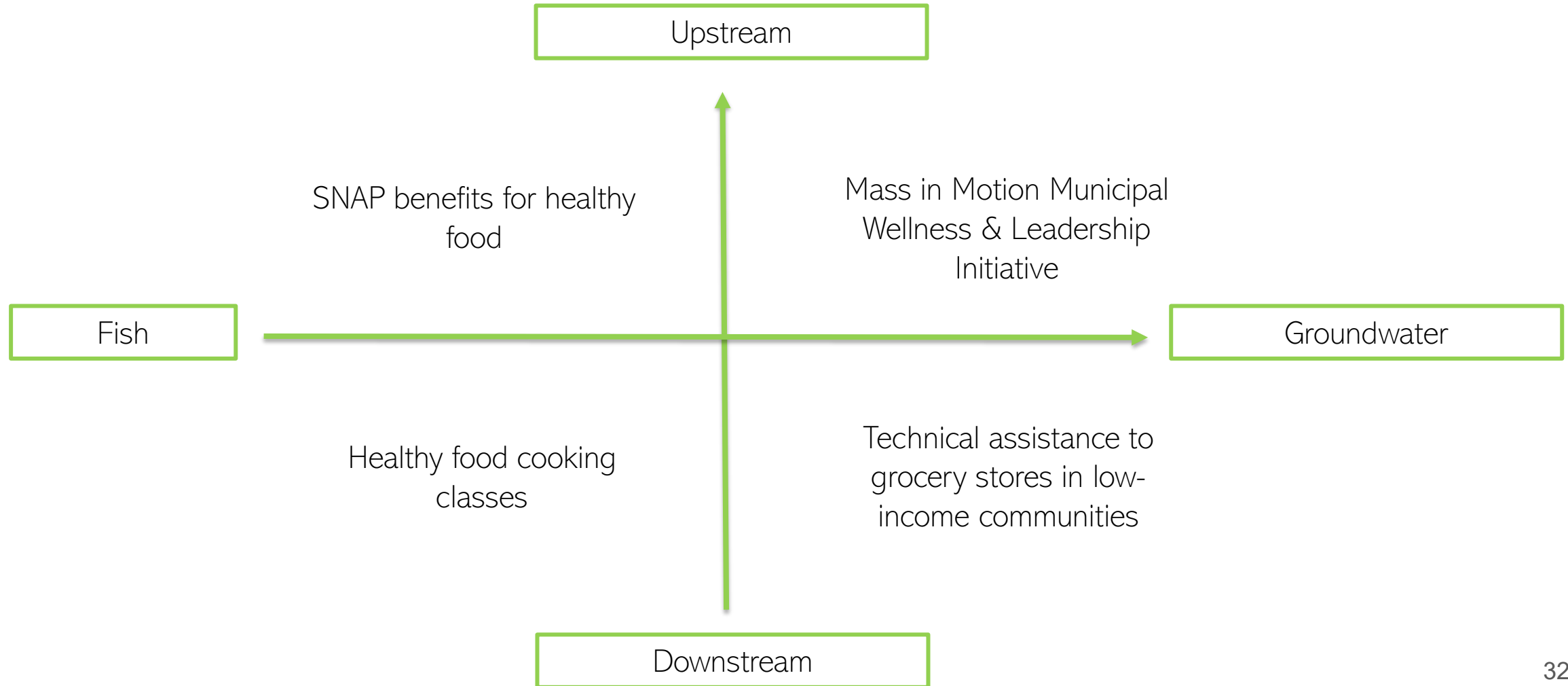
# RACIAL JUSTICE REFRAMING AND A CALL TO ACTION

# How should we interpret these findings?

<b>Framing Element</b>	<b>Traditional Approach</b>	<b>Racial Justice Approach</b>
<b>1. What's the Problem?</b>		
<b>2. What's the Cause?</b> <b>What/Who's Responsible?</b>		
<b>3. What's the Solution?</b>		
<b>4. What Action is Needed?</b>		
<b>5. What Values are highlighted?</b>		

Framing Element	Traditional Approach	Racial Justice Approach
1. What's the Problem?	High rates of diabetes	Persistent racial inequities in diabetes rates
2. What's the Cause? What/Who's Responsible?	<ul style="list-style-type: none"> <li>- Poor Nutrition</li> <li>- Lack of Exercise</li> <li>- Overweight/Obesity Individuals</li> </ul>	<ul style="list-style-type: none"> <li>- Food deserts, income inequity, racial redlining in transit and zoning for green space, etc., in communities of color</li> <li>- Disinvestment in communities of color</li> <li>- Residential segregation</li> <li>Businesses; policy makers</li> </ul>
3. What's the Solution?	<ul style="list-style-type: none"> <li>- Improve nutrition</li> <li>- Increase physical activity</li> </ul>	<ul style="list-style-type: none"> <li>- Food security in all communities</li> <li>- Economic investment in low-income communities/communities of color</li> <li>- Accessible and affordable healthy foods in all communities, particularly communities of color</li> </ul>
4. What Action is Needed?	<ul style="list-style-type: none"> <li>- Nutrition education classes</li> <li>- Exercise classes</li> </ul>	<ul style="list-style-type: none"> <li>- Food access policies that target roots of inequities</li> <li>- Economic policies that invest in communities of color</li> <li>- Partnerships across sectors and with community residents</li> </ul>
5. What Values are highlighted?	Individualist; Personal Responsibility; Choice; Individual Freedom	Equity; Justice; Fairness; Shared Responsibility

# GROUNDWATER MATRIX TOOL: *what solutions should we propose?*

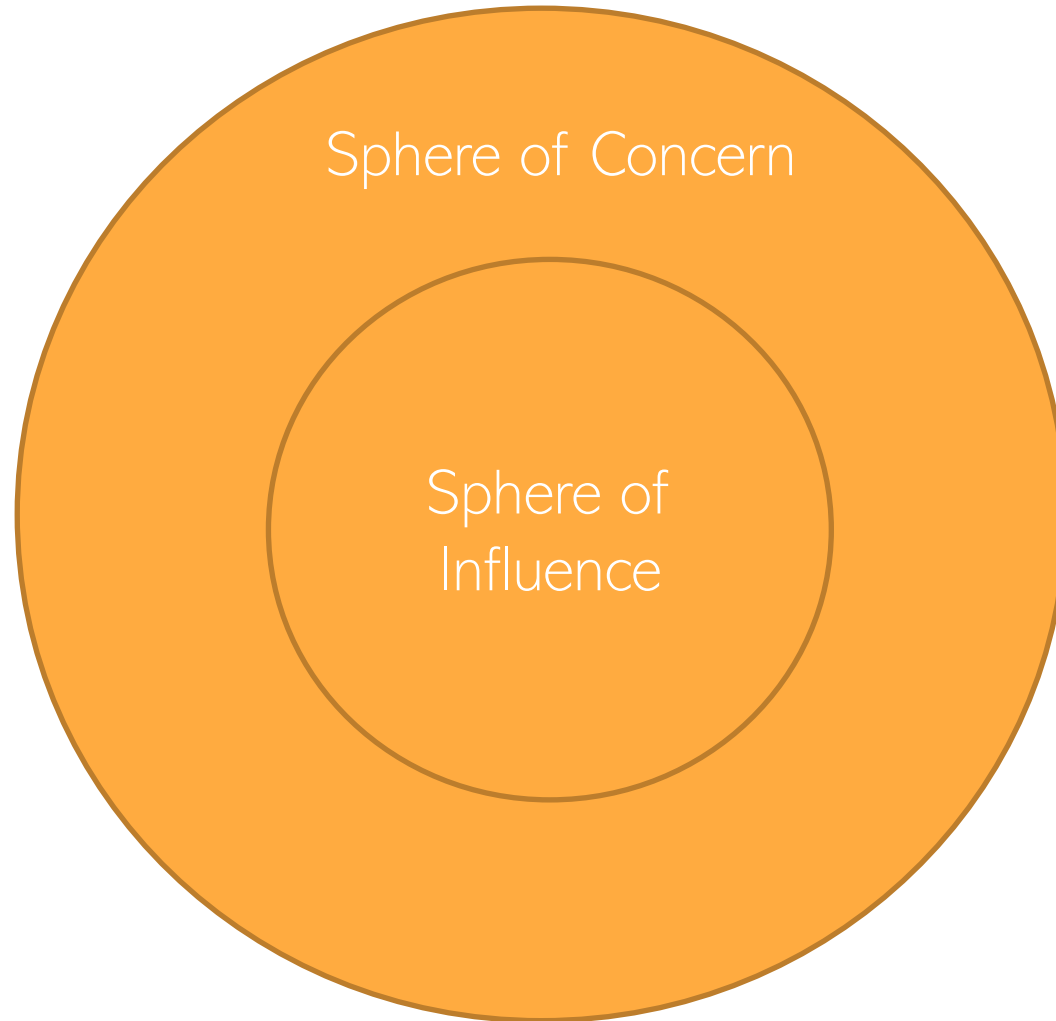


# GROUNDWATER MATRIX TOOL: *diagnosing your current and potential actions*

With your partners ask these questions...

- Can you identify the system(s) at play?
- Can you identify the systems failure?
- Does the proposed solution ask people to adjust to fit the system (fixing fish), or require changes to the systems in operation (groundwater)? Where is the burden of change falling?
- Can you name how systems are interacting to impact outcomes? And what are you doing about those interactions?
- How do you and other stakeholders and gatekeepers understand the role you play in dismantling the systems?

# Where are your opportunities to influence action?



# Who can take this data to action? You.

- MA Department of Public Health & other state agencies
- Local government, boards of health, health departments
- Community advocates & community-based organizations
- Quasi-public entities like regional planning agencies, regional transit agencies, regional councils of government

# Steps from Data to Action

1. Get the data
2. Identify your partners
3. Identify actions with partners
  - Short-term/immediate actions
  - Long-term/actions to change systems & policies
4. Make a plan & keep checking in with partners
5. Repeat!

Racial Justice Reframing at EVERY STEP!



## Racial Equity Considerations:

WHO BENEFITS?

WHO IS HARMED?

WHO INFLUENCES/WHO DECIDES?

WHAT MIGHT BE UNINTENDED CONSEQUENCES?

# STEP 1: Get the Data

COVID-19 Community Impact Survey @ mass.gov

<http://mass.gov/covidsurvey>

## Multiple Formats

- Webinars
- Slides
- Raw data in tables
- Talking points with statements of findings

Racial Justice Reframing

Remember the  
DISCRIMINATION  
& POPULATION  
SPOTLIGHTS data

# STEP 2: Identify Your Partners

Who are the partners that  
can help you take action?  
Which voice have you  
heard from?  
Who has been left out of  
the conversation so far?

+

Racial Justice Reframing  
Who benefits?  
Who is harmed?  
Who influences?  
Who decides?

= Your Data to Action partners!

# STEP 3: Identify Actions With Your Partners

What are some possible causes for the issues this data highlights?

What are possible solutions?

What is the underlying system issue?

Are there actions you are already taking or could take that relate to this finding?

Are there actions you can take right now?

Actions you can take soon? When?

Are there actions someone else can take? Who?

How can you engage others in data to action conversations? Who should see the data?

## Racial Justice Reframing

Who benefits?

Who is harmed?

Who influences?

Who decides?

What might be unintended consequences?

## STEP 4: Make a plan, check-in with partners

- Turn your answers into a work plan & share it
- Follow the plan - act with partners now and later
- Include the actions in funding opportunities to increase capacity
- Check in with partners about progress on the work plan
- Relate short-term change to long-term solutions

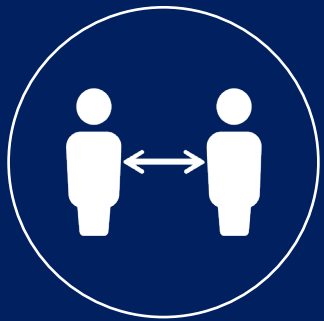
Ask the Racial Justice Reframing questions  
EVERY time you revisit your work plan!

# STEP 5: Repeat!

Data is updated every month so check-back & repeat the steps

<http://mass.gov/covidsurvey>

# RESULTS CHAPTERS



# ABILITY TO MITIGATE INDIVIDUAL RISK OF INFECTION

Lead: Elizabeth Beatriz  
Team: Lauren Cardoso, Glory Song,  
Caroline Stack, W.W. Sanouri Ursprung

# FRAMING MATTERS

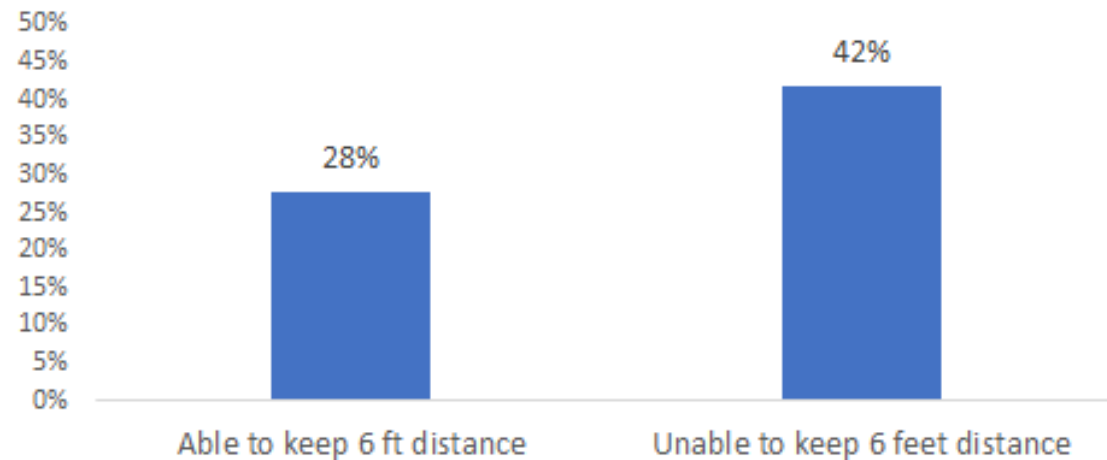
Despite the common belief that managing risk is entirely within an individual's control, the data shows us that factors such as employment and housing are significant drivers of exposure to COVID-19. Individuals who are most worried about being infected with COVID-19 are also those who are least able to socially distance, largely due to housing and work-related conditions.

# RISK MITIGATION

Individuals who are the **most worried** about becoming infected with COVID-19 (see next slide), are also the **least able** to maintain 6 ft. distance from others especially when in retail/grocery stores and at work.

Those who were **not able** to socially distance were 1.5 times as likely to be “very” worried about getting COVID -19

“Very” worried about getting infected with COVID-19\*



\* Among those who do not leave the house, 71% were very worried about getting infected.

p<0.0001

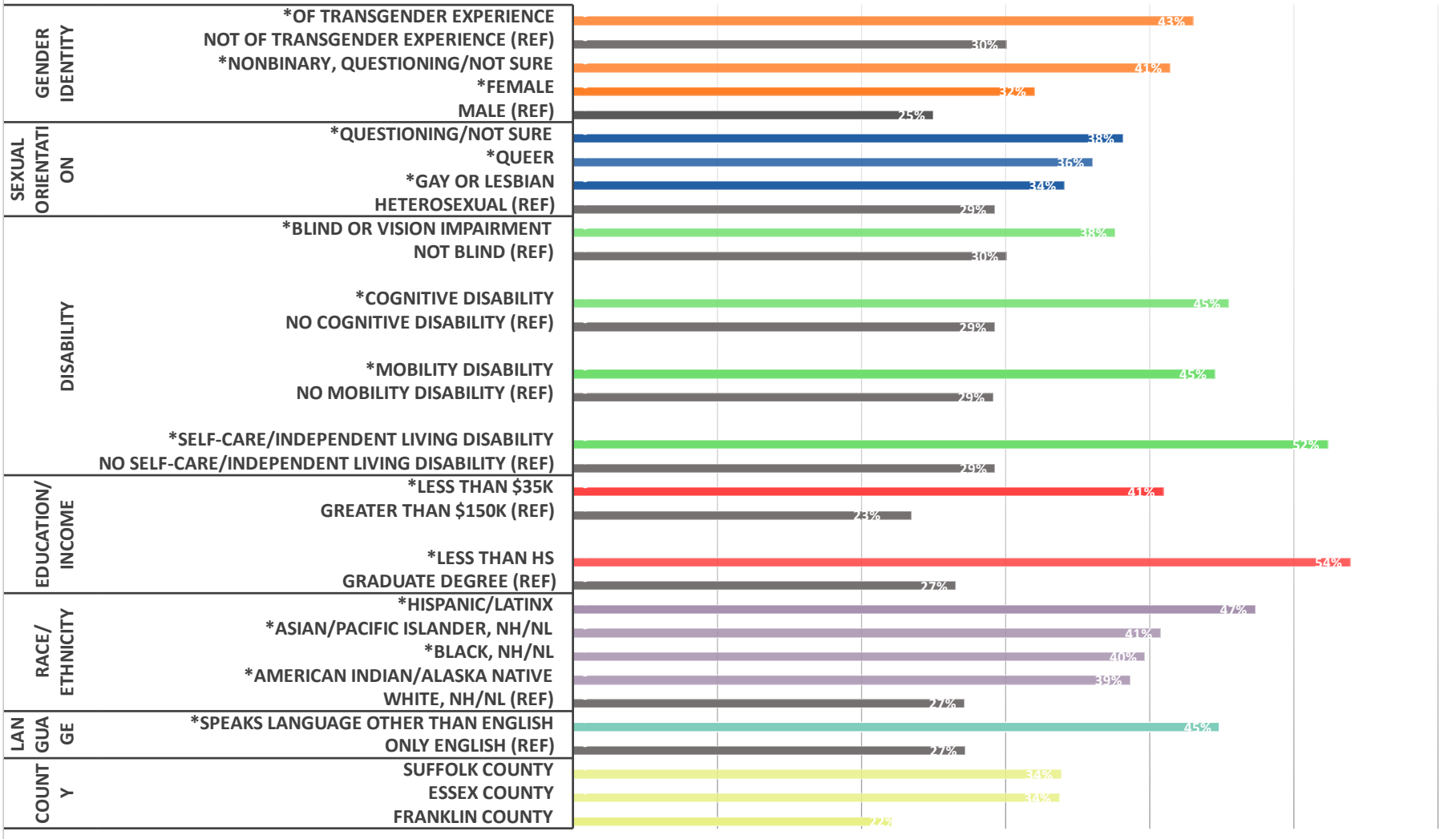
Among those who were not able to keep 6 feet distance most respondents experienced at least 2 of the following top reasons why:

- “The place where I shop or buy groceries is crowded” (62%)
- “In order to do my work, I need to be physically close to others” (42%)
- “My workplace is crowded” (23%)
- “The streets where I live are crowded” (20%)

# RISK MITIGATION

MA subpopulations most likely to be "very" worried about becoming infected with COVID-19

0% 10% 20% 30% 40% 50% 60%



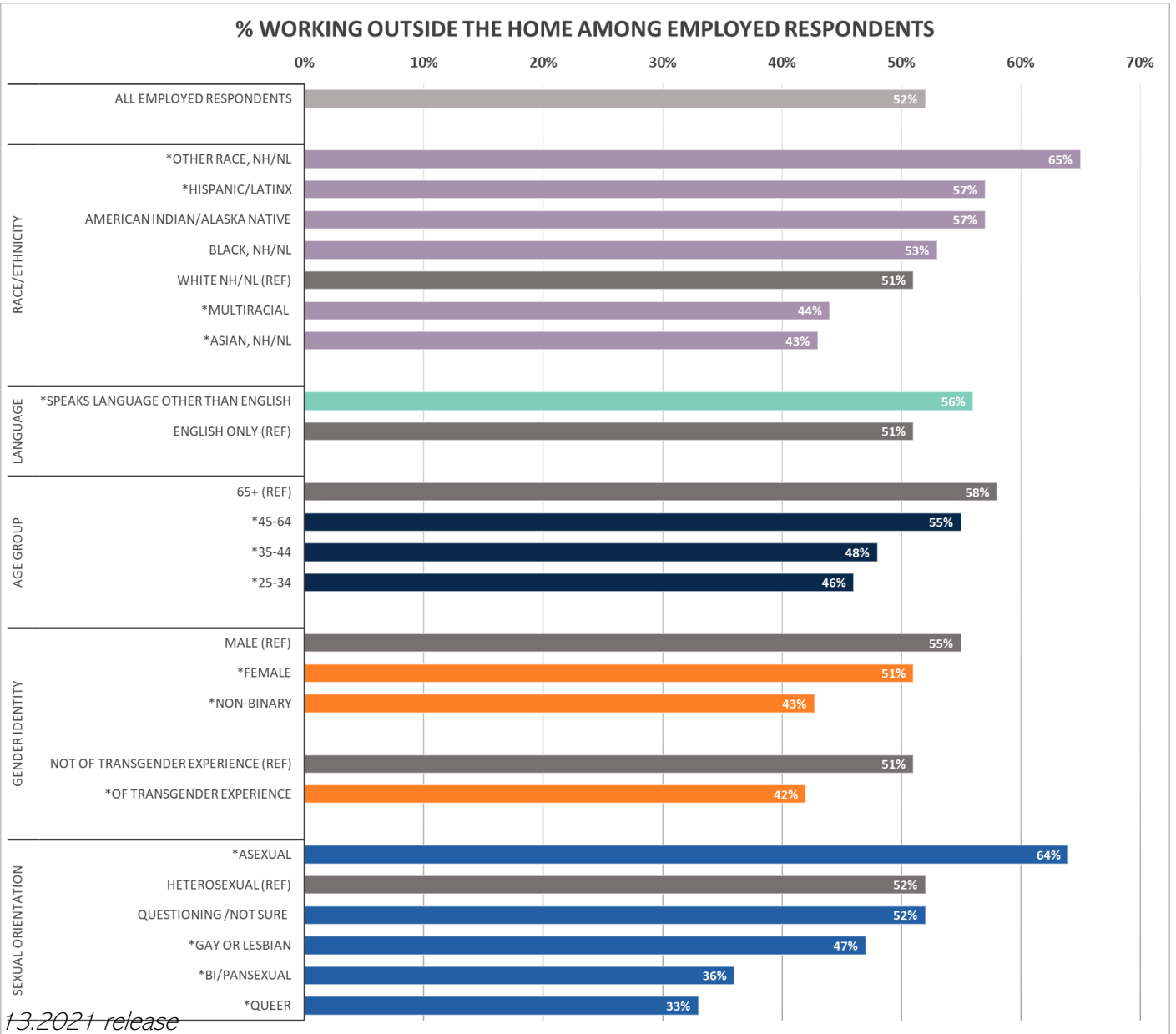
Populations most likely to say they are "very worried" about becoming infected with COVID-19 include:

- Respondents of Transgender experience
- Those who are female or questioning their gender identity
- LGBTQ+ respondents
- Blind people and people with vision impairment
- People with cognitive, mobility, or self-care disabilities
- Respondents with lower income and/or lower educational attainment
- Persons of color, including Hispanic/Latinx, Asian/Pacific Islander, Black, and American Indian/Alaska Native
- Those who speak a language other than English

\* denotes rate is significantly different compared to the reference group. No significance testing done for County; County estimates are unweighted

NOTE: American Indian/Alaskan Native includes Hispanic/Latinx. "Nonbinary, Questioning/Not Sure" gender identity group includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity.

Over half of those who could not socially distance listed work-related factors as a primary reason. Some populations were much more likely to work outside of the home and face greater risk of exposure. (1 of 2)



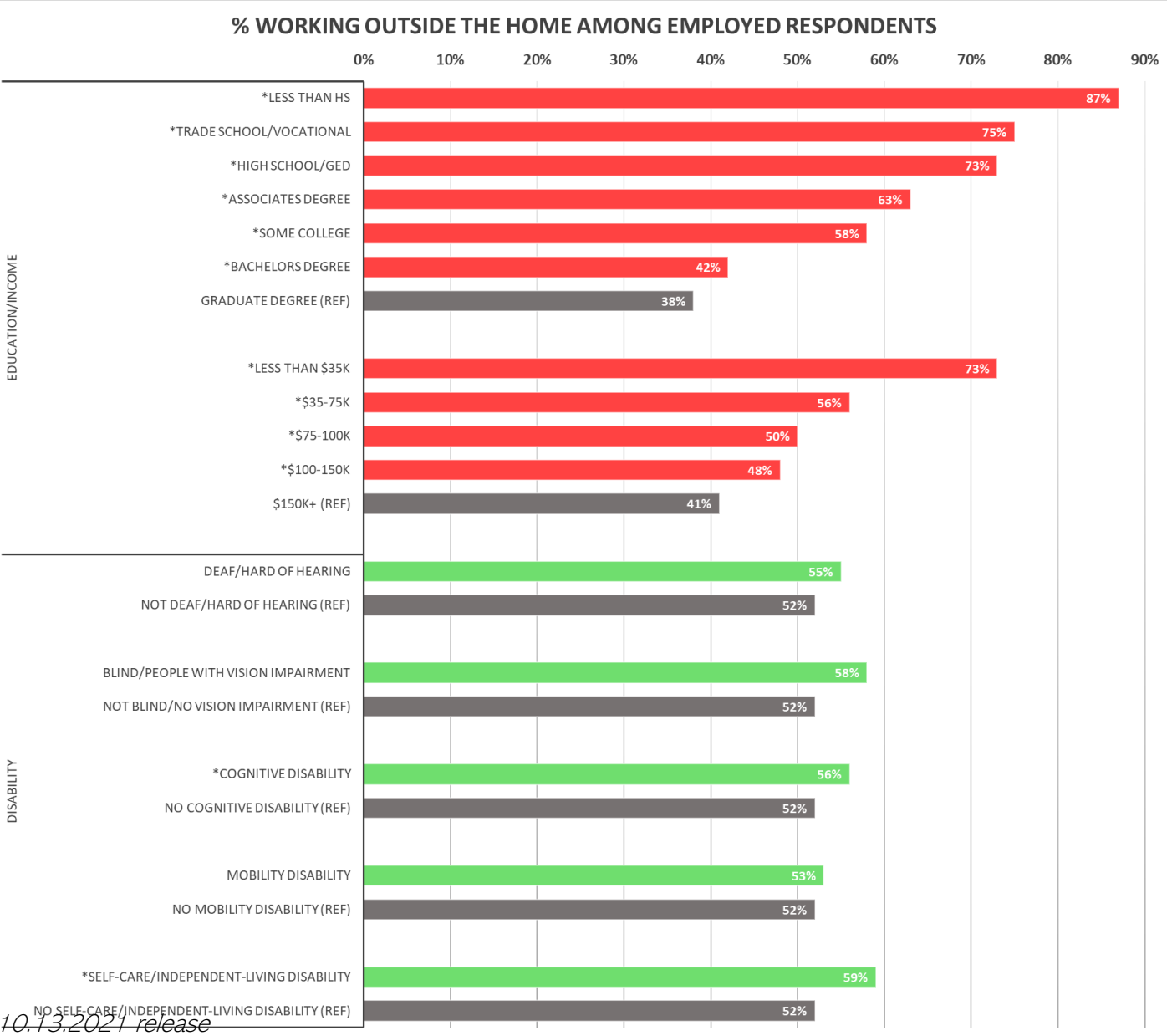
Half of all employed respondents worked a job outside the home, facing increased risk of exposure.

The following groups were more likely to work outside the home:

- Hispanic/Latinx or Other race, nH/nL
- Speak a language other than English.
- Aged 65 years and older
- Male
- Asexual

Notes: 1) "NH/NL"=non-Hispanic/non-Latinx; 2) "American Indian/Alaskan Native" includes Hispanic/Latinx; 3) ) \* denotes percentage is significantly different (p<0.05) compared to the reference group ("REF" in each category); 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Over half of those who could not socially distance listed work-related factors as a primary reason. Some populations were much more likely to work outside of the home and face greater risk of exposure. (2 of 2)



Half of all employed respondents worked a job outside the home, facing increased risk of exposure.

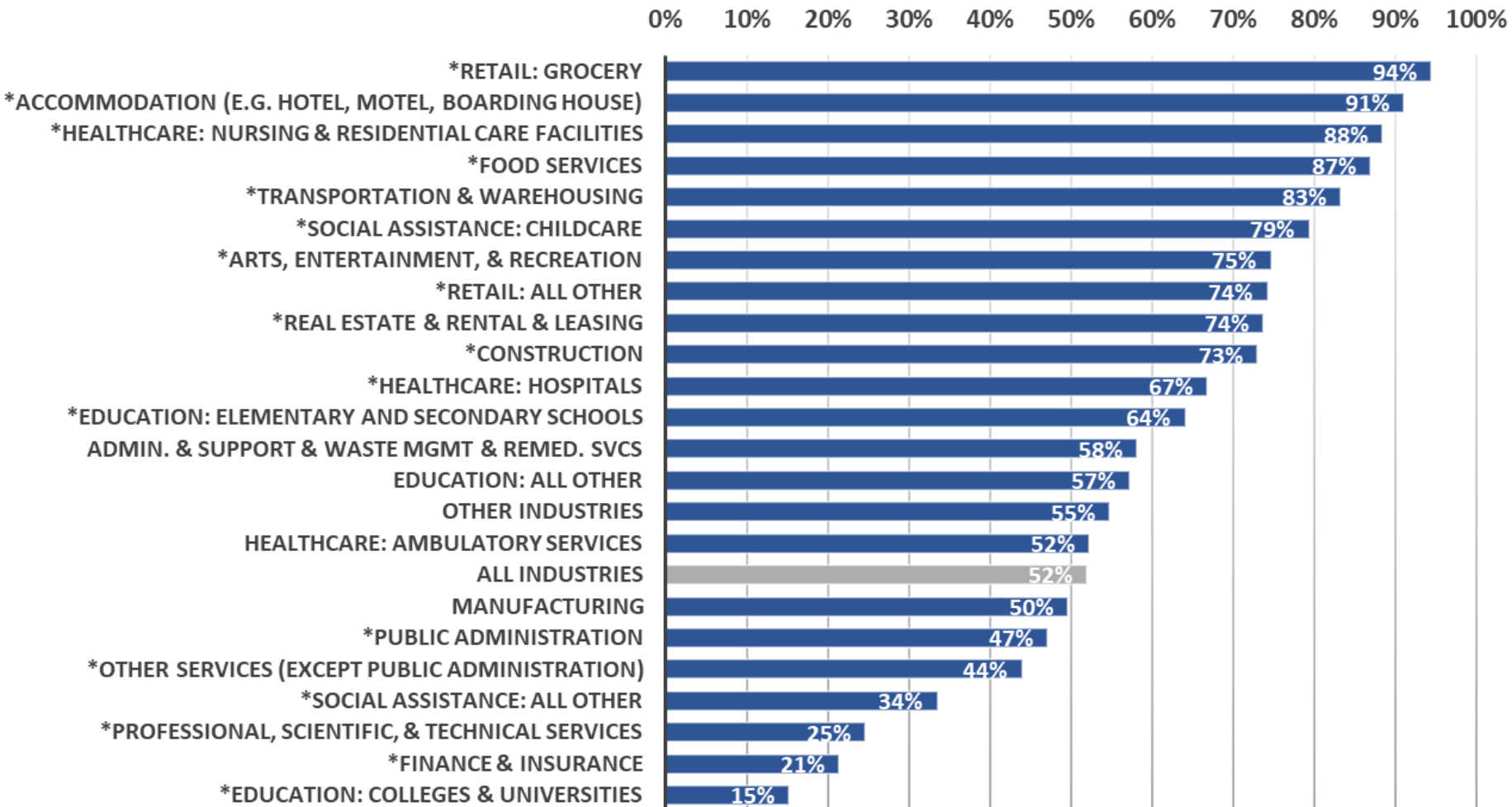
The following groups were more likely to work outside the home:

- Lower educational attainment
- Lower annual household income
- Those with cognitive or self-care/ independent-living disabilities

Notes: 1) "NH/NL"=non-Hispanic/non-Latinx; 2) "American Indian/Alaskan Native" includes Hispanic/Latinx; 3) \* denotes percentage is significantly different (p<0.05) compared to the reference group ("REF" in each category); 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# Respondents in certain industry groups were much more likely to work outside of the home, and thus face greater risk of exposure.

## WORKING OUTSIDE THE HOME: % AMONG EMPLOYED ADULTS BY INDUSTRY GROUP



The percentage varied by industry ranging from 94% in Retail: Grocery to 15% in Education: Colleges and Universities

Even within certain industries, the percentage who worked outside the home varied by subgroup. For example in healthcare:

- 88% in Nursing and Residential Care Facilities
- 67% in Hospitals
- 52% in Ambulatory Services

Notes: 1) "Retail: Grocery" = Grocery Stores, Specialty Food Stores, Gas Stations [includes those with convenient stores]; 2) "Other Industries" = Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 3) \*denotes percentage is statistically significantly different ( $p < 0.05$ ) compared to the average percentage for all industries

# RISK MITIGATION

Respondents working outside the home in the following industries\* were less likely to have employer provided/implemented COVID-19 precautions such as personal protective equipment, COVID safety training, and implementation of social distancing at work :

- Food Services
- Construction
- Transportation and Warehousing
- Administrative Support and Waste Management Services
- Arts, Entertainment, and Recreation (e.g. gyms)



1 in 4 respondents worked in places that **did not provide PPE**.



1 in 3 respondents worked in places that **did not implement social distancing**.



Over 1 in 2 respondents worked in places that **did not provide additional health & safety training**.

Identifying infections early through **testing** and lowering barriers to staying home by providing employees with **adequate paid sick leave** is essential to mitigating the spread of COVID.



Among respondents who had ever been tested, those working **outside the home** were nearly **2X** more likely to report **testing positive** than those working from home.



Access to sick leave varied widely across industries, ranging from **37% in food services** to **92% in public administration**.

# RISK MITIGATION

The **behavior** of individuals is one of the most **powerful tools** we have to stop the spread of COVID-19.

Our behaviors are influenced by:

1. Knowledge about what to do.

2. Belief that the behavior is important.

3. Factors that make the behavior easier or harder to engage in.



# KEY TAKEAWAYS

- The most common reasons people are unable to socially distance relate to work and their ability to access basic needs in their neighborhoods, not a lack of concern about infection.
- Employment is a major driver of infection. People who cannot work from home lack essential protections and the ability to socially distance at work. People who do not work from home were also **twice** as likely to test positive.



# TESTING ACCESS

Lead: Caroline Stack  
Team: Lauren Cardoso, Glory Song  
Elizabeth Beatriz, W.W. Sanouri Ursprung

# FRAMING MATTERS

- Increased access to COVID-19 testing can help slow the spread of the virus, but it's not as simple as just telling people to get tested.
- Messages about testing have not been reaching people who may need it most.
- Historically when this happens, these groups are deemed "hard to reach." In reality, messages have not been designed universally enough to meet people where they are, with the information they need the most.

# TESTING ACCESS

Among all respondents, 44% reported ever having been tested for COVID.

Key populations prioritized through Massachusetts testing initiatives like *Stop the Spread* program reported some of the highest rates of testing, suggesting that these efforts have been successful.

Priority Population	% Reported Ever Been Tested
Suffolk County residents	59%
Essex County residents	47%
Middlesex County residents	47%
Black, Non-Hispanic residents	52%
Hispanic/Latinx residents	51%
Residents who speak languages other than English	47%

# TESTING ACCESS

Besides not having symptoms, the top reasons for not getting tested were:

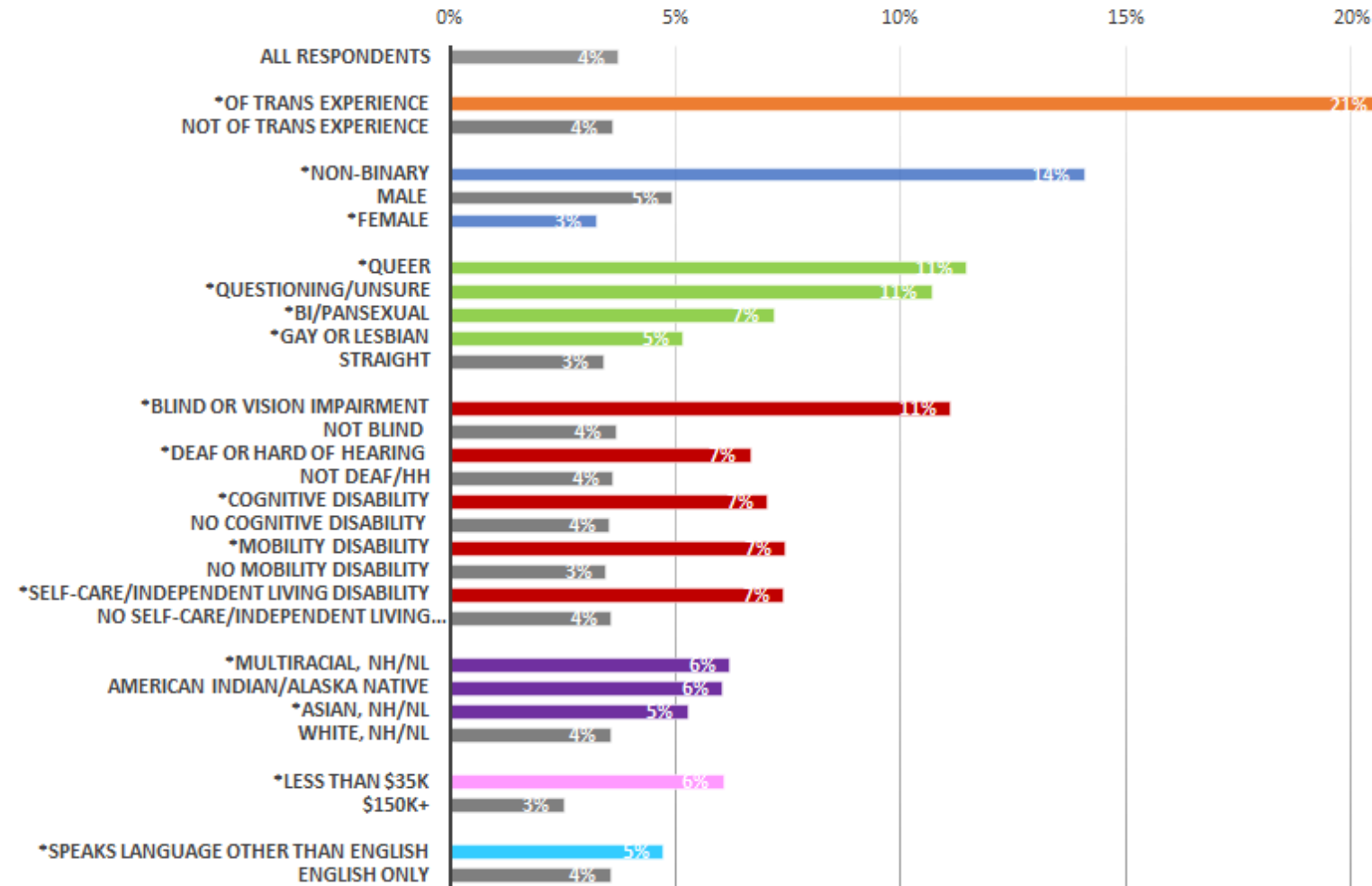
TOP REASONS FOR NOT BEING TESTED
1. Didn't meet testing criteria when had symptoms
2. Didn't know where to go
3. Lack of perceived exposure
4. Only had mild symptoms
5. Test was too expensive
6. Test wasn't available where I wanted to get tested

The STS program is currently addressing some of these top barriers through expansion of sites providing free testing regardless of symptoms/exposure.

# TESTING ACCESS

## % DIDN'T GET TESTED BECAUSE: "I DIDN'T KNOW WHERE TO GO"

AMONG THOSE WHO HAD NEVER BEEN TESTED FOR COVID-19



The following groups were more likely to report not getting tested because they didn't know where to go:

- Respondents of Transgender Experience
- Non-binary and Male respondents
- LGBTQ people
- Respondents with disabilities
- Am. Indian/Alaska Native, Multiracial, and Asian respondents
- Respondents with lower income
- Respondents who speak languages other than English

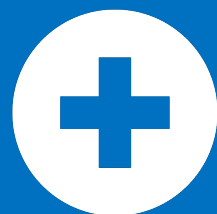
...suggesting that current communication and dissemination channels may not be as effective at reaching these populations

\* denotes rate is significantly different compared to the ref. group. *Note:* nH/nL = non-Hispanic/non-Latinx. AI/AN Hispanic/Latinx. Black nH/nL (4%) and Hispanic/Latinx (4%) not portrayed; questioning/undecided gender not portrayed due to small numbers. Non-binary includes only: non-binary, genderqueer, or not exclusively male or female.



# KEY TAKEAWAYS

- People who struggled to practice social distancing were less likely to have a work from home option. Those who had to leave home to work were also less likely to get tested, and twice as likely to test positive.
- **Communication channels** used in fall 2020 **were not equally effective at reaching all populations**. Translations, accessible options, tailored community engagement, and use of non-traditional modes of information sharing may help ensure more populations get future pandemic and vaccine related PSAs.
- Without more equitable access to broadband and technology, **populations** who were 2X to 4X as likely to have **technology related telehealth barriers would likely experience similar barriers** if only offered technology dependent modes of public service announcements and vaccine deployment infrastructure (eg. those with low educational attainment, low income, rural residents, indigenous residents, Hispanic residents, and multi-racial residents).



# HEALTH CARE ACCESS & DELAYS

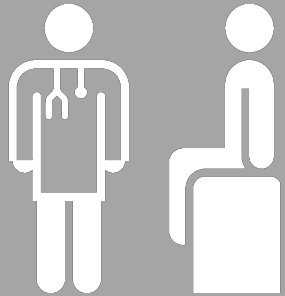
Lead: Glory Song  
Team: Lauren Cardoso, Caroline Stack,  
Elizabeth Beatriz, W.W. Sanouri Ursprung

# FRAMING MATTERS

- As we focus on the urgency of COVID-19, care for other health conditions - both routine and acute - is being delayed. This further exacerbates existing health inequities.
- Encouraging people to seek care is only part of the solution. Limited healthcare capacity was the #1 reason for delaying emergency, routine, and mental health care.
- Telehealth is not a cure-all for this. Much more work needs to be done to ensure this is an accessible mode for all.

# HEALTH CARE ACCESS & DELAYS

The pandemic has substantially impacted normal healthcare operations and put stress on healthcare capacity.



**4 of 5** respondents who needed medical care since July 2020 **have gotten the care that they needed.**



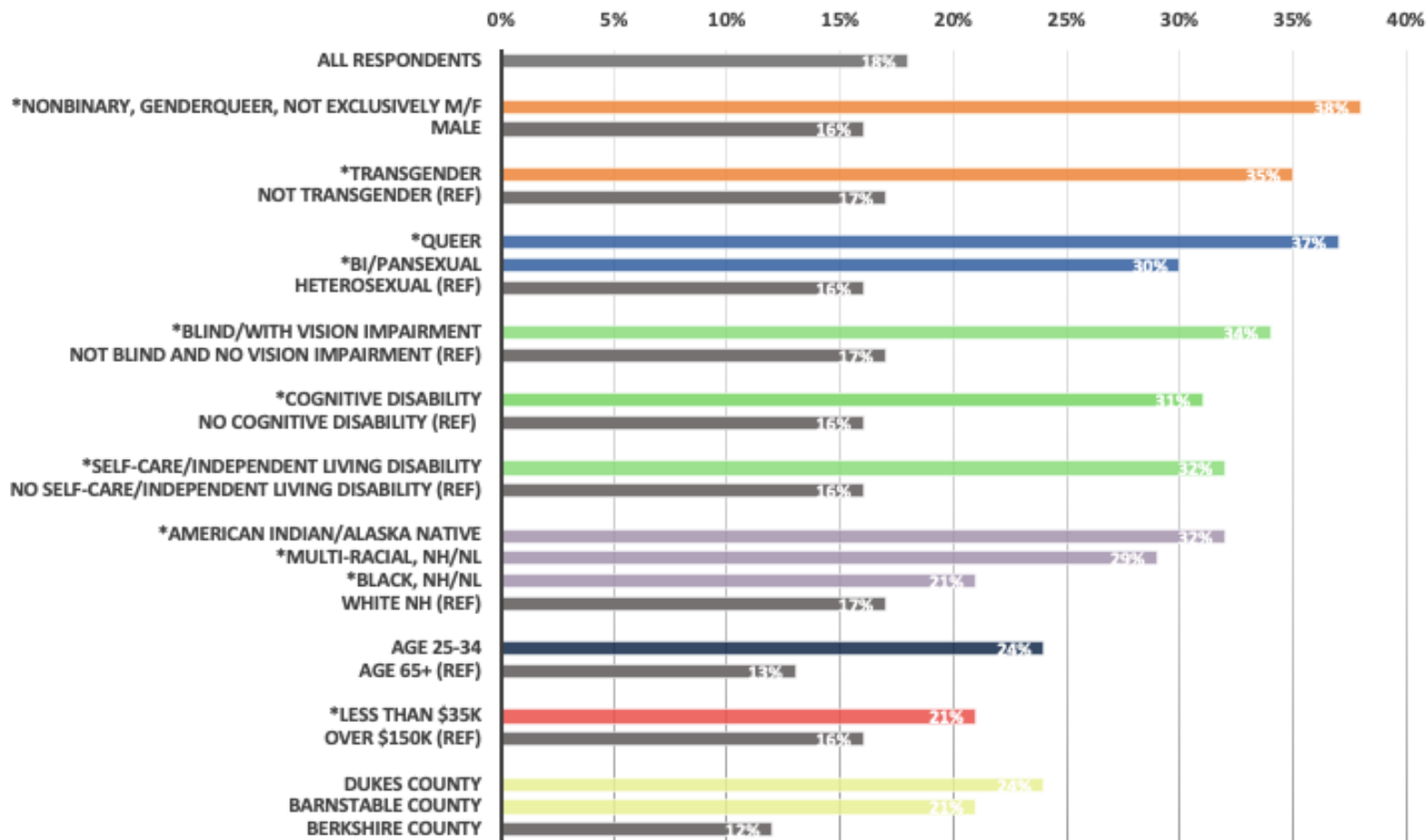
**60%** of those who needed care received **telehealth care via phone or video**, suggesting that the rapid scale-up of telehealth has been crucial.



However, **1 of 5** respondents are missing either critical **urgent care** or **essential routine care**. Some residents have missed **both**.

# HEALTH CARE ACCESS & DELAYS

Massachusetts subpopulations experiencing the highest rates of delayed medical care since July 1, 2020<sup>1</sup>



<sup>1</sup>Among respondents who said they have needed care since July 1, 2020. Overall, about 80% of respondents have needed care.

Delayed care (both urgent and routine) is **over 1.5X to 2X** as high among subgroups that already face many healthcare barriers such as cost, transportation, English proficiency, and discrimination:

- Respondents who identify as nonbinary, genderqueer, and not exclusively male/female gender
- Respondents of transgender experience
- LGBQA respondents
- Respondents with disabilities
- Am. Indian/Alaska Natives, Black, and Multiracial respondents
- Younger respondents
- Those with lower incomes
- Those in certain counties

\* denotes rate is significantly different compared to the reference group, No significance testing done for County and County estimates are unweighted  
 Note: nH/nL = non-Hispanic/non-Latinx; American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx

# DELAY IN EMERGENCY OR URGENT CARE

Delays in seeking or receiving emergency care for acute conditions like pain, chronic disease flare-ups, or severe mental health can lead to **serious health consequences**...

...yet **nearly 1 in 3 respondents** who had delayed care reported having an acute condition delayed.

The pandemic has drastically disrupted healthcare capacity even for people who normally face few barriers to care.

However, access concerns were still felt **most acutely** by **populations who already faced healthcare barriers prior to the pandemic**, and have the highest rates of delayed urgent care now.

## TOP 5 ACUTE CONDITIONS DELAYED

1. **Pain** (e.g. chest pain, stomach pain, headaches, back pain)
2. **Chronic disease flare-ups** (e.g. diabetes, uncontrolled asthma, cardiovascular conditions, GI, lupus)
3. **Severe mental health** (e.g. severe stress, depression, nervousness, anxiety)
4. **Oral or dental pain**
5. **Non work-related Injury**

## TOP 5 REASONS FOR DELAYED URGENT CARE

1. My appointment was **cancelled/delayed**
2. The office was **closed**, told no appointments available, or no one responded to my phone calls
3. I was **worried about getting COVID-19** from in-person care
4. I was worried I **could not afford** the care or my **insurance** didn't cover it
5. I didn't have **time** or had **caretaking** responsibilities

# DELAY IN ESSENTIAL AMBULATORY CARE

Essential ambulatory care services are also being delayed, and among those who need them the most.



Nearly **1 in 3 women** who reported delaying regular care said they experienced delays in services like OB/GYN care and **sexual and reproductive health** care (e.g. birth control or STI).



Nearly **1 in 3 individuals** with **1 or more chronic conditions** (e.g. asthma, diabetes, obesity) who reported delaying regular care said they had delays for **chronic disease management services**.

Limited healthcare capacity was the **#1** reason people could not access ambulatory care.

(e.g. office or clinic is closed or told no appointments available, certain services or procedures were being limited and not available, appointment was cancelled, delayed or the wait was too long, etc.)

# DELAY IN ESSENTIAL AMBULATORY CARE

Although 60% of respondents who needed care were able to get care via telehealth (by phone or video), technology-related barriers remain a challenge for certain populations.

*"I didn't have good enough phone or internet connection"*

*"I didn't have a phone, tablet, or computer"*

*"I didn't have a private place for a phone call or video chat"*

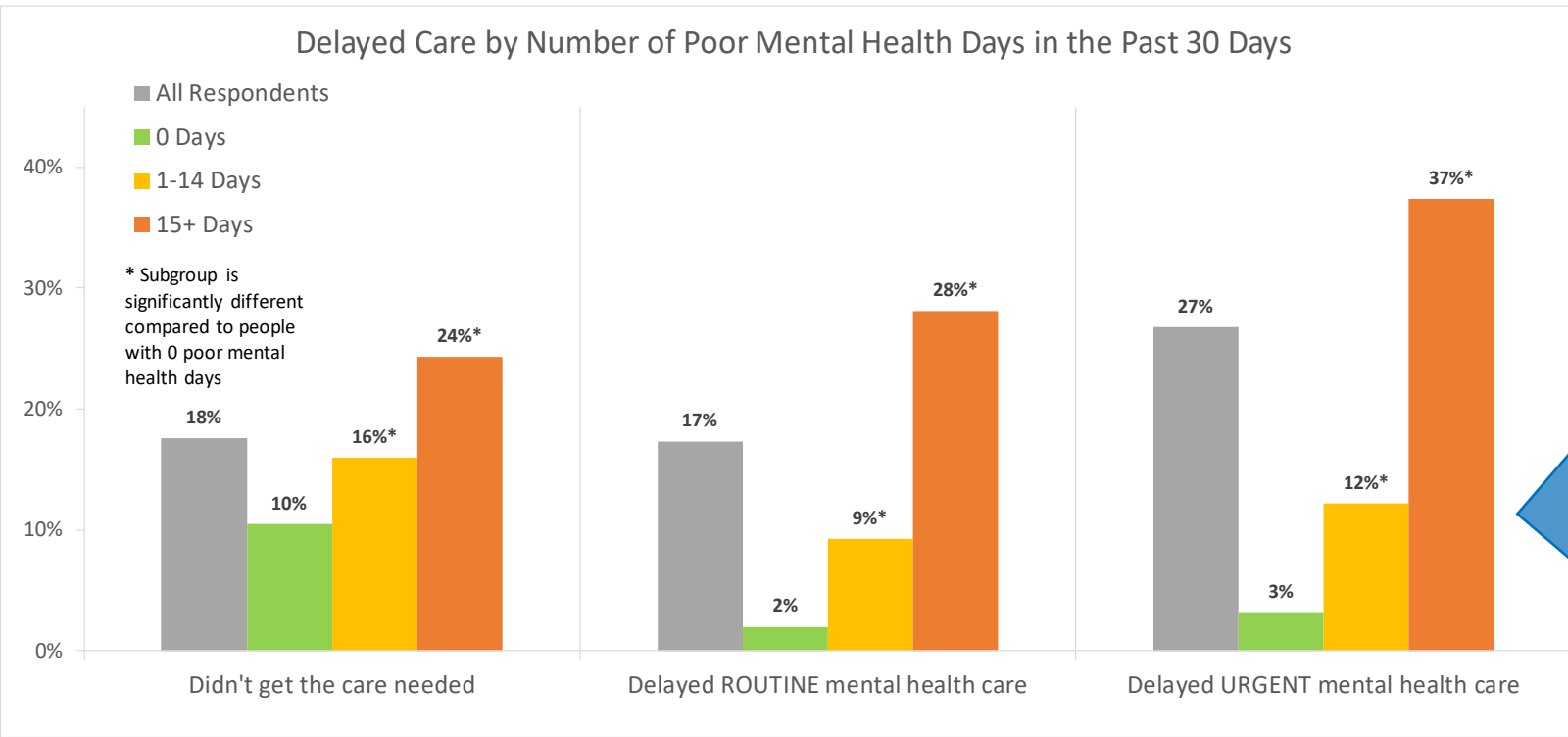


These populations were **2X** to **4X** as likely to have telehealth-related barriers:

- Respondents with less than HS education or less than \$35K income
- American Indian/Alaska Natives, Hispanic/Latinx, and Multi-racial respondents
  - Residents of Franklin county

# DELAY IN MENTAL HEALTH CARE

The respondents with 15+ days of poor mental health are also the most likely to experience delays in both routine and urgent mental health care.



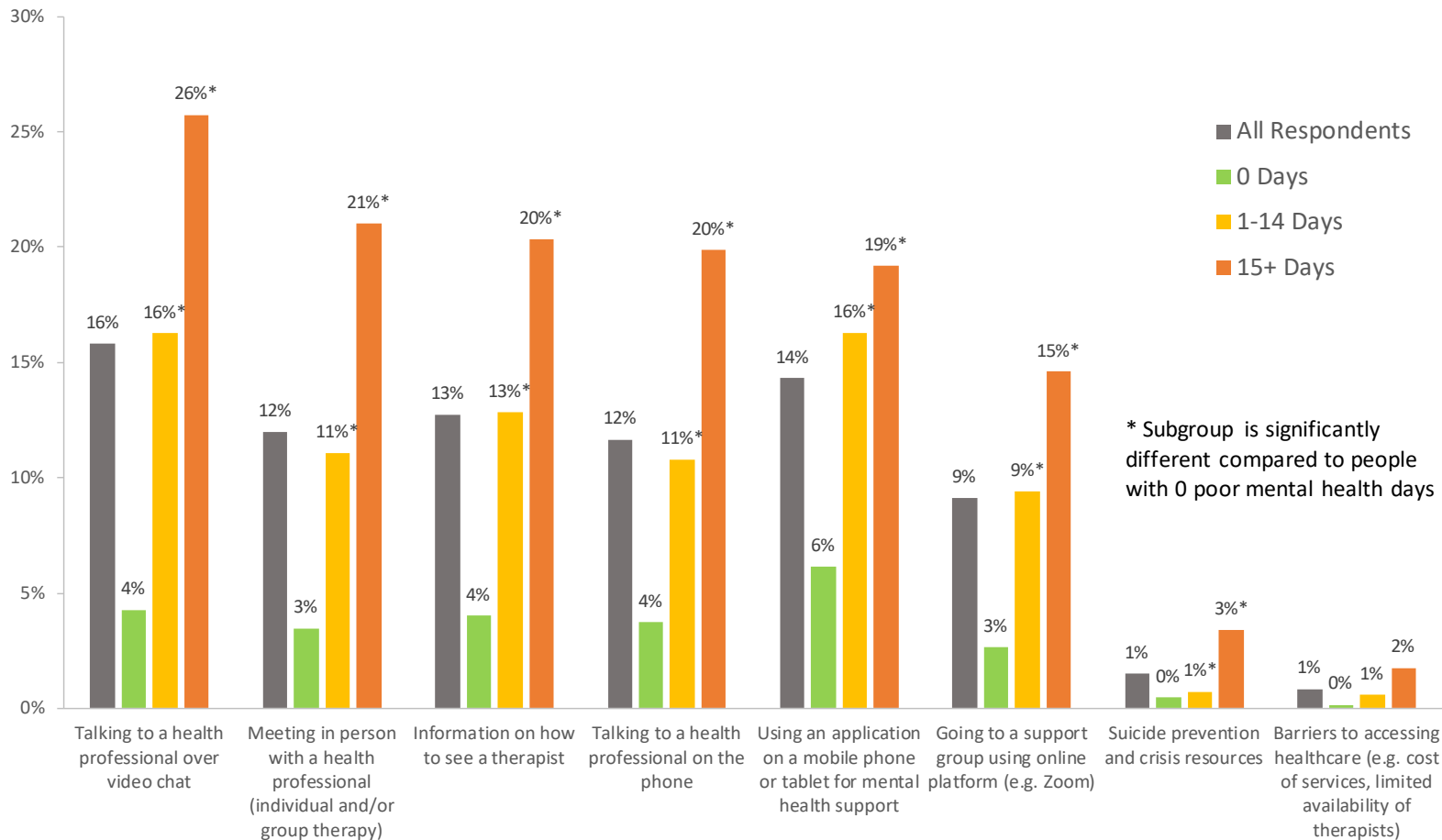
## TOP 5 REASONS FOR DELAYED CARE BY RESPONDENTS WITH POOR MENTAL HEALTH

1. My appointment was cancelled/delayed (59%)
2. I was worried about getting COVID-19 from in-person care (27%)
3. I was worried I could not afford the care or my insurance didn't cover it (8%)
4. I did not have a private place for a phone call or video chat (7%)
5. I did not have safe transportation to get to my appointment (7%)

# REQUESTED MENTAL HEALTH RESOURCES

Respondents with 15+ days of poor mental health are seeking health resources at higher rates compared to those who experienced “0” days or “1-14” days of poor mental health.

Resources Requested by Number of Poor Mental Health Days in the Past 30 Days



## TOP 5 RESOURCES REQUESTED by respondents with poor mental health

1. Talking to a health professional over video chat
2. Meeting in person with a health professional (individual and/or group therapy)
3. Information on how to see a therapist
4. Talking to a health professional on the phone
5. Using an application on a mobile phone or tablet for mental health support

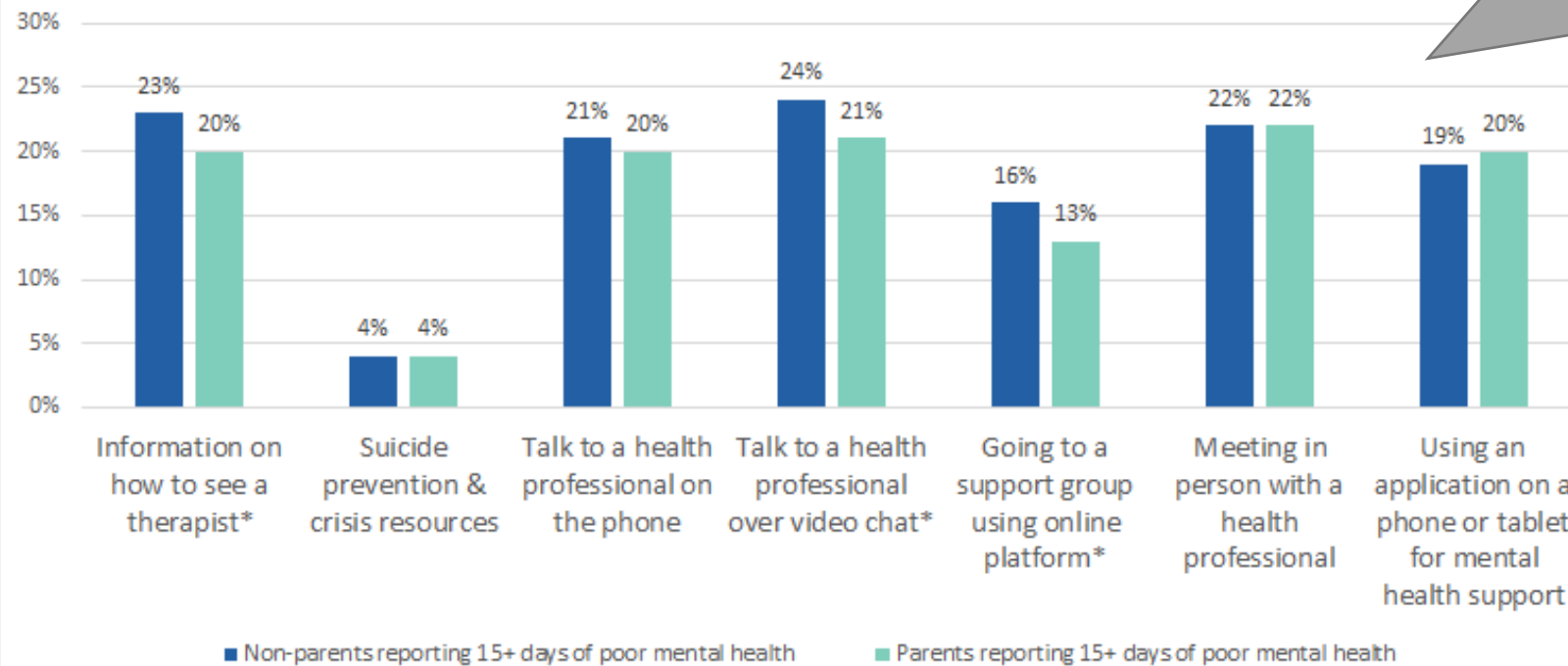
# DEMAND FOR MORE MENTAL HEALTH RESOURCES WAS NOT ALWAYS HIGH

While parents were more likely to report persistent poor mental health than non-parents, they were **less likely** to indicate that mental health resources would be helpful.

Instead they expressed needs for a variety of childcare and basic needs resources:

- "When would I have the time for this with my child home all day every day?"
- "The most helpful thing has been getting a nanny (at tremendous cost) so I could get adequate sleep while ensuring my professional and parental responsibilities are met."
- "Time and childcare. None of the above options matter if I don't have the time and capacity to engage with them."
- "Childcare, income assistance. These will help my mental health the most."

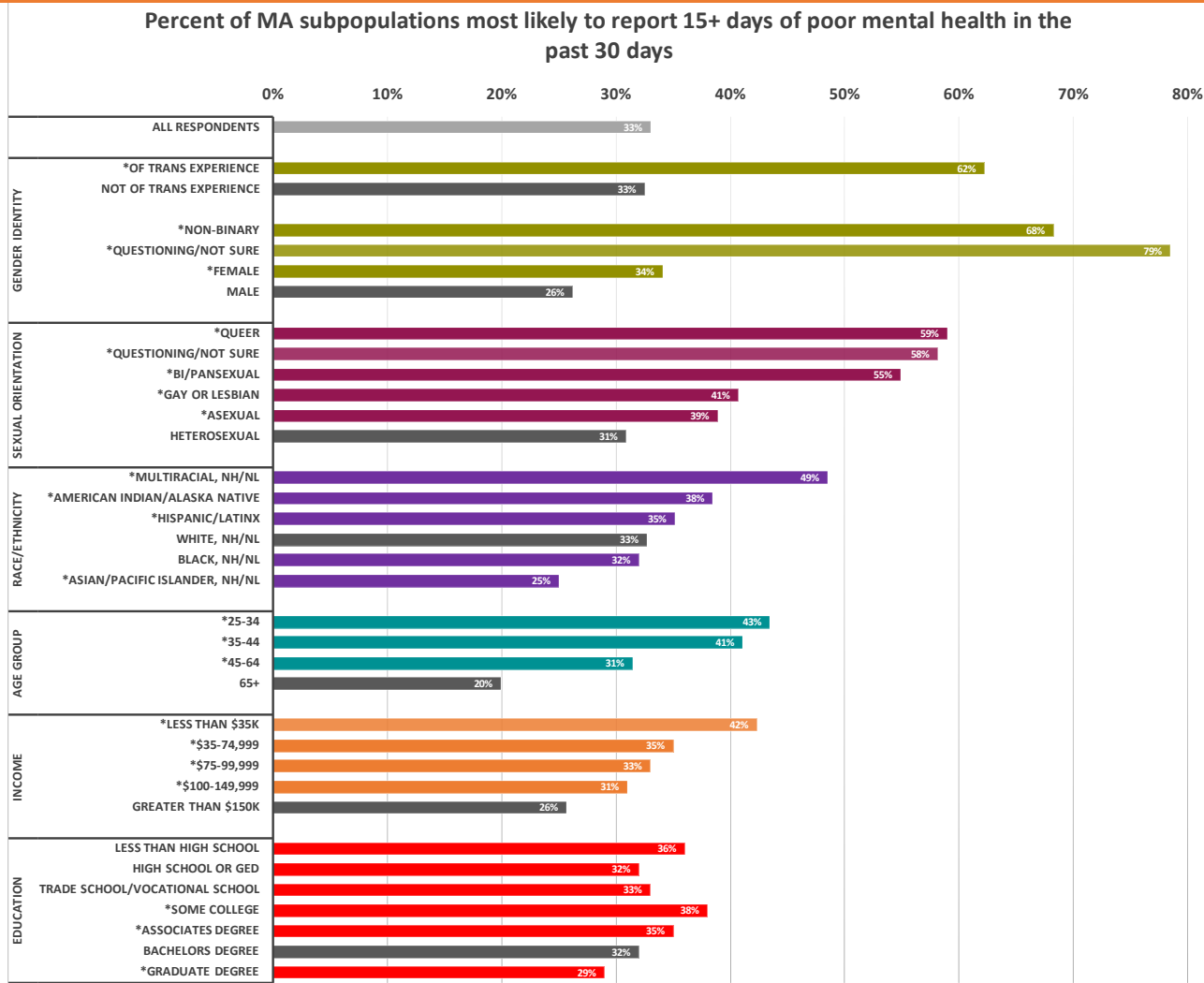
Which of these resources would be most helpful to you right now to help you with your mental health and well-being?



Data notes: 1) \* denotes rate is significantly different ( $p < 0.05$ ) between parents and non-parents; 2) All percentages are weighted to the statewide age and educational distribution of those  $\geq 25$  years.

# MENTAL HEALTH STATUS

1 in 3 MA adults reported 15+ days of poor mental health in the past 30 days.  
All demographic groups in MA are experiencing increases in poor mental health.



\* denotes rate is significantly different compared to the reference group

The percentage of adults who reported poor mental health on this survey is **3X higher** than the 11% of adults who reported poor mental health on the 2019 MA BRFSS

In this survey, the following groups experienced the highest rates of 15+ days of poor mental health:

- Respondents with **disabilities**
- Respondents of **transgender experience**, **non-binary** respondents, and respondents **questioning** their gender identity
- **LGBQ+** respondents
- **Multiracial, nH/nL, American Indian/Alaska Native, and Hispanic/Latinx** respondents
- **Caregivers of persons with special needs**
- Respondents between **ages 25-34**
- Respondents with **income <\$35k**

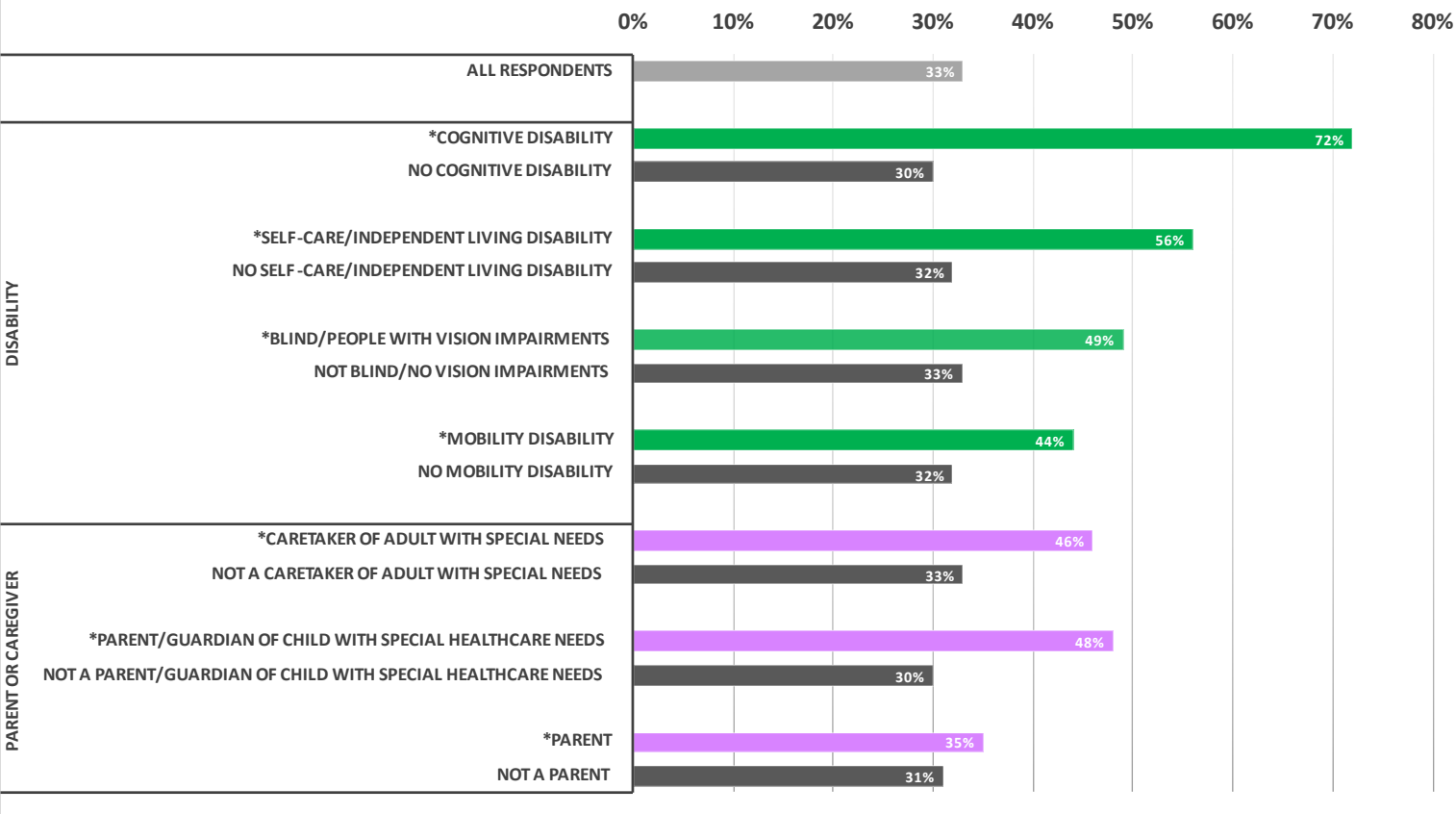
Notes on subpopulations:

- nH/nL = non-Hispanic/non-Latinx
- 'American Indian/Alaska Natives' includes Hispanic/Latinx
- 'Questioning, Undecided, Non-Binary' includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity

# MENTAL HEALTH STATUS, CONT.

1 in 3 of MA adults\* reported 15+ days of poor mental health.  
All demographic groups in MA are experiencing increases in poor mental health.

**Percent of MA subpopulations most likely to report 15+ days of poor mental health in the past 30 days**



Of the subpopulations experiencing high rates of poor mental health, **respondents with disabilities** reported the highest rates of 15+ days of poor mental health

Almost **1 in 2 caregivers of persons with special needs** and **parents of children with special healthcare needs** are experiencing high rates of poor mental health

\* denotes rate is significantly different compared to the reference group



# KEY TAKEAWAYS

- Delay in care - especially for deadly conditions like heart disease, injury and suicide - is endangering lives of those who need care most.
- Telehealth can help, but inequitable access remains a barrier, especially for those who were already at risk for worse health outcomes.
- Access to mental health resources via telehealth was most highly requested.
- Some groups have been hit hardest by the pandemic from multiple angles, like job loss, lack of food, housing insecurity, and discrimination. These are the same groups who have been impacted by delayed health care. They include LGBTQA respondents, respondents with disabilities, persons of color, youth, and those with low incomes.



# SOCIAL DETERMINANTS OF HEALTH

Lead: Glory Song  
Team: Melody Kingsley  
Lisa Arsenault

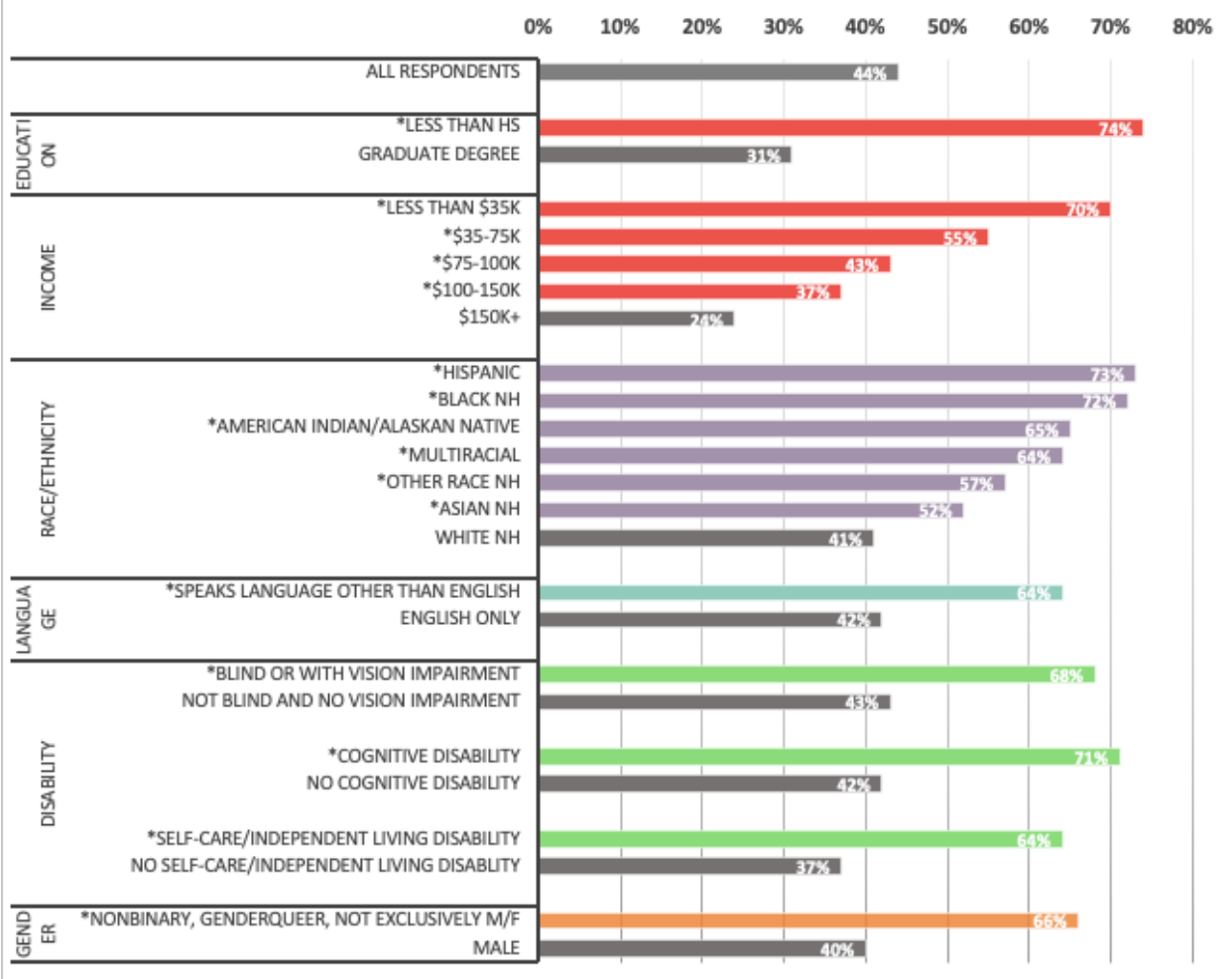
# FRAMING MATTERS

- Access to things like healthy food, safe housing, affordable medicine, technology, employment, and childcare are not separate issues from COVID-19.
- The pandemic's impact on people's ability to afford and access basic needs have changed lives and put people at greater risk for poor health - particularly among those already experiencing poor health outcomes.
- What's worse, is that people who are impacted by one of these areas are more likely to be impacted by several.
- This has enormous impacts on health and wellbeing.

# DETERMINANTS OF HEALTH: EXPENSES

A regular income is critical in order to afford essential medication, food, and health services, but some populations in the commonwealth have been harder hit by employment-related changes than others. Even before the pandemic, these same populations also had less financial reserve as a safety net.

**% WORRIED ABOUT PAYING FOR: 1 OR MORE TYPES OF EXPENSES/BILLS**



EXPENSES/BILLS RESPONDENTS WERE MOST CONCERNED ABOUT PAYING	% of Respondents
1. <b>Housing</b> (rent, mortgage, property taxes, condo fees, housing insurance)	28%
2. <b>Utilities</b> (cable, cell, electricity, water, gas, heating)	24%
3. <b>Debt</b> (credit card, student loan, bank fees)	21%
4. <b>Vehicle</b> (lease, car loan payment, car insurance)	15%
5. <b>Insurance</b> (health, disability, life)	11%

Groups experiencing the greatest economic hardship:

- Low income & low education respondents
- Respondents who are non-White
- Respondents who speak languages other than English
- Blind/with vision impairment
- With Cognitive disability
- With Self-care/ind. living disability
- Residents who are nonbinary, genderqueer, or not exclusively M/F

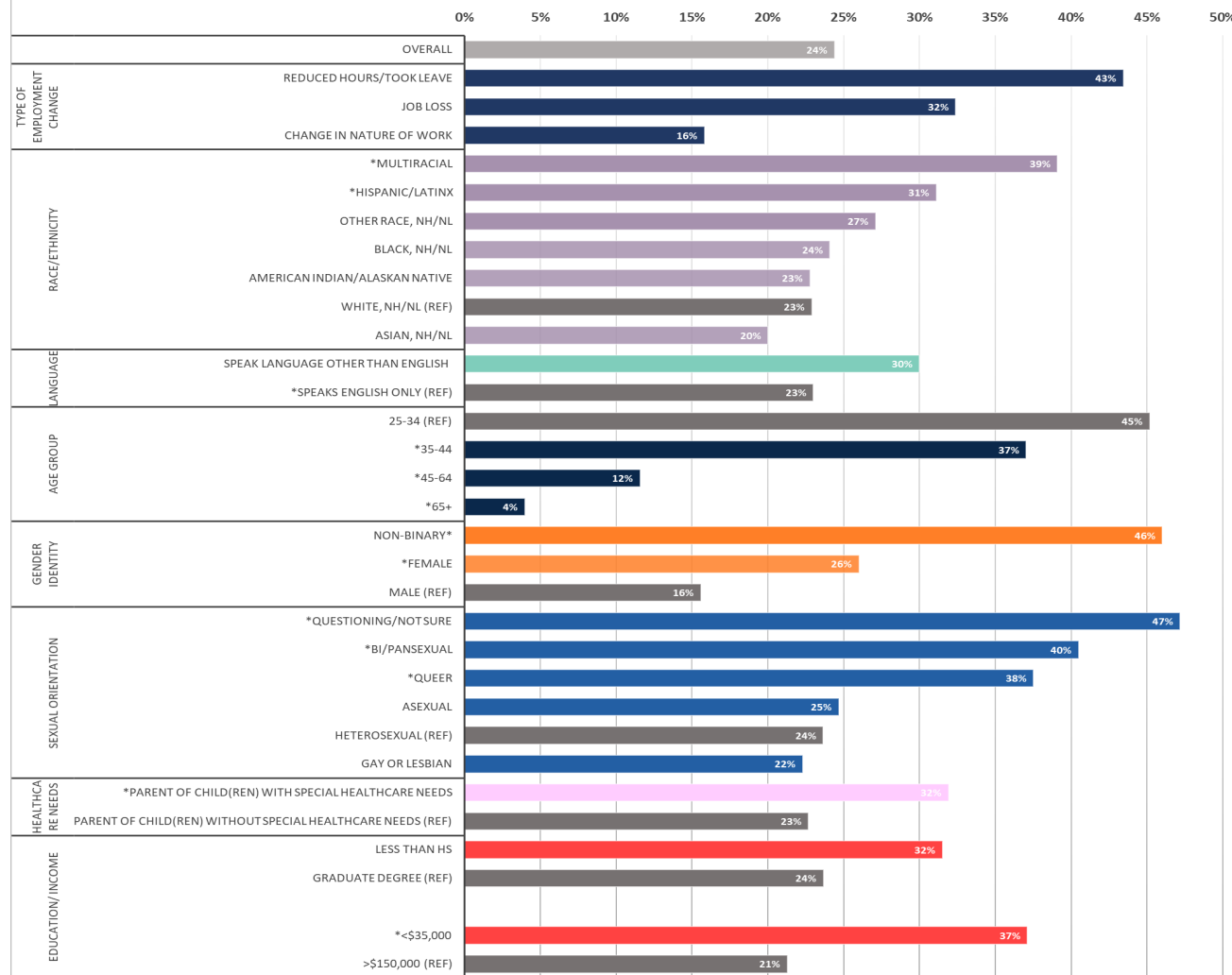
\* denotes rate is significantly different compared to the reference group

Note: nH/nL = non-Hispanic/non-Latinx;

American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx

# DETERMINANTS OF HEALTH: CHILDCARE

**CHANGE IN EMPLOYMENT TO TAKE CARE OF 'MY CHILD/CHILDREN':  
% AMONG PARENTS EMPLOYED IN THE PAST YEAR**



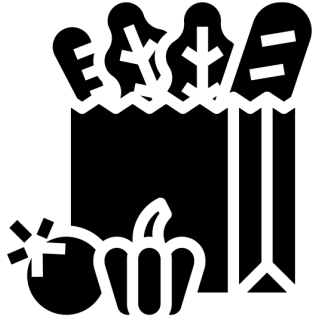
1 in 3 parents who lost their jobs and 2 in 5 parents who reduced hours or took leave noted needing to take care of children as a reason.

Changing employment to take care of children was more commonly reported by parents in the following groups:

- Hispanic/Latinx or Multiracial
- Speak languages other than English
- Younger (Note: Almost half of parents aged 25-34 and over 1 in 3 parents aged 35-44 – suggesting that parents of young and school-age children face higher childcare burdens.)
- Female or Non-binary.
- Questioning sexual orientation, bisexual or pansexual, or queer
- Parents of children with special healthcare needs
- Lower annual household income or lower education

Notes: 1) "Questioning, Undecided, Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different compared to the reference group; 5) All percentages are weighted to the MA statewide age and educational distribution of those 25 years old or older

# DETERMINANTS OF HEALTH: FOOD



Food insecurity is directly associated with mortality from obesity, hypertension, diabetes, and heart disease, which are all also risk factors for more severe COVID-19 illness and mortality.

Economic hardship brought on or exacerbated by the pandemic means that people may not be able to afford purchasing enough food or healthy food for themselves and their family. The pandemic has also made accessing groceries more challenging than before, especially among those without safe transportation and those more vulnerable to COVID-19.

More than 1 in 4 (28%) respondents worried about getting food or groceries in the coming weeks. However, some populations and communities reported much higher rates:

DISABILITY	%
Blind or hard of seeing	53%
Physical or mental disability	46%

SES	%
Less than a HS education	56%
Income less than \$35K	48%

ETHNICITY	%
Salvadoran	62%
Dominican	62%
Colombian	53%
Cape Verdean	51%
Puerto Rican	49%

ETHNICITY	%
Haitian	48%
Vietnamese	48%
Caribbean Islander	46%
Am. Indian/Alaska Native	45%

# DETERMINANTS OF HEALTH: BROADBAND



**Internet access is critical for health**, because it facilitates telehealth, working and learning remotely during the pandemic, as well as accessing goods and services in a socially distanced way.

Lack of broadband infrastructure  
in rural areas

Lack of affordable options  
in urban areas

Closed public spaces  
like offices, schools and libraries

These barriers limit abilities to safely work, learn, access health care and goods from home, thereby increasing risk of exposure.

# DETERMINANTS OF HEALTH: BROADBAND



Fast, stable and affordable internet access has become more critical than ever in connecting people to telehealth, work, remote learning, and essential goods and services.

Yet, accessing broadband remains a challenge for many residents. Barriers to access can include lack of broadband infrastructure in many rural areas and lack of affordable options for many urban families. Furthermore, public spaces like offices, schools, and libraries that once served as many residents' only connection to accessing internet are currently shut down.

1 in 7 (13%) respondents worried about getting internet in the coming weeks. However, some populations and communities were more likely to be concerned:

DISABILITY	%
Blind or hard of seeing	27%
Physical or mental disability	23%
SES	%
Less than a HS education	27%
Income less than \$35K	22%

ETHNICITY	%
Dominican	28%
Puerto Rican	26%
Am. Indian/Alaska Native	25%
Caribbean Islander	25%
Columbian	25%

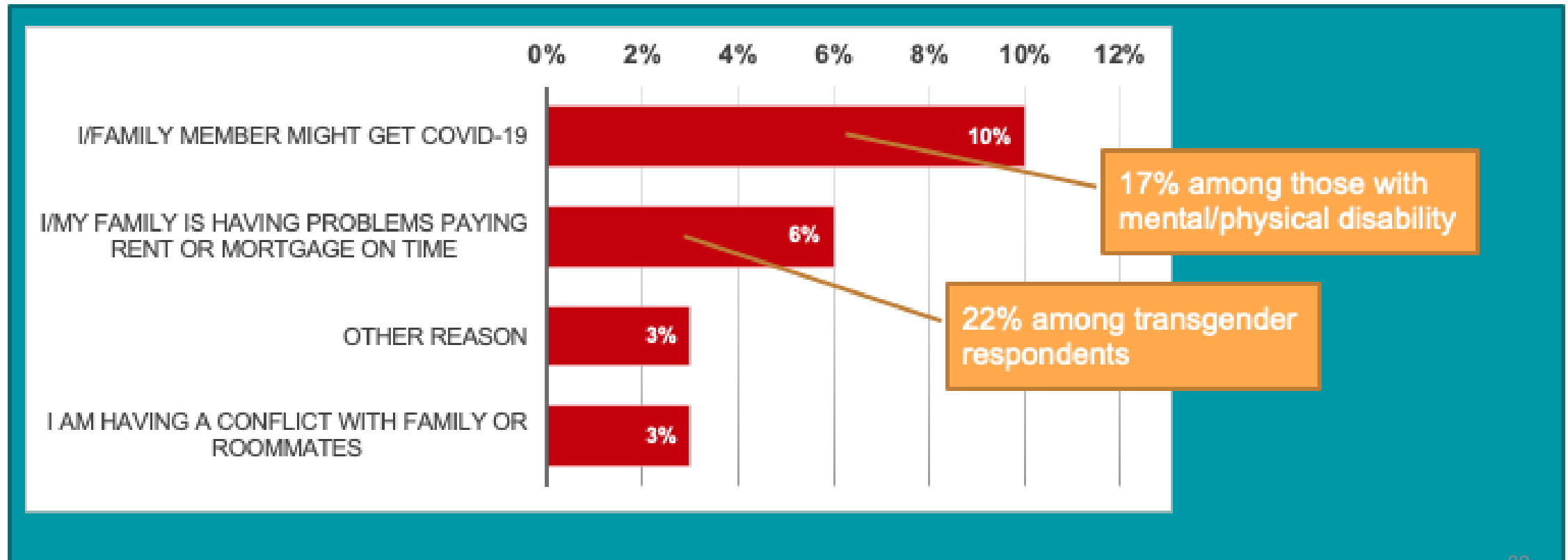
ETHNICITY	%
Cape Verdean	24%
Hispanic	24%
Salvadoran	23%
Vietnamese	23%
Haitian	20%

# DETERMINANTS OF HEALTH: HOUSING STABILITY

1 in 5 respondents worried that they would have to move out of their home soon.

Among them:

- The most common reason was if they or a family member got COVID-19.
- Nearly 30% said they would need a safe place to stay.
- 25% said having information about their rights as renters/tenants would help.





# KEY TAKEAWAYS

- Most people in MA are struggling with important basic needs, like housing, food, medicine, technology and childcare. These have big impacts on our abilities to get and stay healthy.
- As worrisome as this is across the board, some ethnic, education and disability groups have it even harder - by upwards of 50%.
- Inequities in technology access have made it even harder for people to work and attend school or healthcare appointments remotely, putting and health, development and income at risk.
- Parents and caretakers - especially women and the Latinx community - have been especially impacted by job loss and a reduction in hours, adding more financial strain to existing stressors.



# MENTAL HEALTH

Leads: Matthew Tumpney, Rebecca Han  
Team: Lauren Larochele, Vera E. Mouradian,  
Caroline Stack, Arielle Coq, Amy Flynn

# FRAMING MATTERS

Despite the common belief that poor mental health is associated with an individual's ability to cope, the data shows us that there is a strong association between mental health and the stressors people experience, including employment, childcare, access to food and housing, discrimination, and much more. For this reason, clinical services are not enough to address poor mental health – Structural change, such as increasing equitable access to care, is needed for sustainable change.

# MENTAL HEALTH INDICATORS

Two aspects of Mental Health were captured by the survey:

## How has the pandemic impacted the mental health of all residents?

- Adapted from “Primary Care PTSD Screen for DSM-5 (PC-PTSD-5)\*”
- **“3+ PTSD-like reactions”** - Respondents were asked how many PTSD related reactions to the pandemic they had experienced in the past month from a validated list of reactions.



## How have residents with the most persistent poor mental health been impacted by the pandemic?

- Standard item from the CDC Behavioral Risk Factor Surveillance System\*\*
- **“15+ days of poor mental health”** - Respondents were asked how many days during the past 30 days their mental health was not good, which includes stress, depression, and problems with emotions

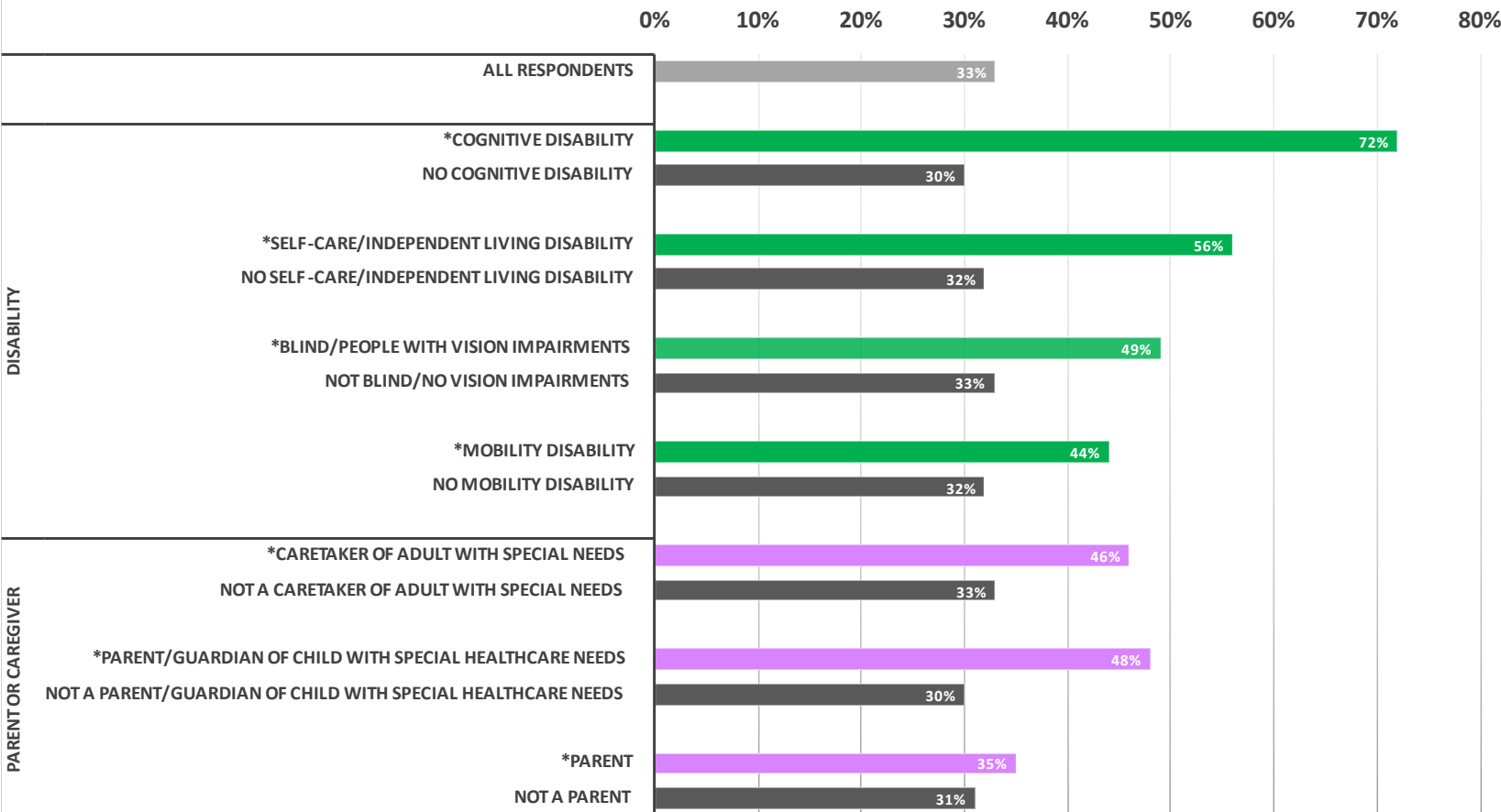
\* See Appendix for more details; Reference: Prins, A., Bovin, M. J., Kimerling, R., Kaloupek, D. G., Marx, B. P., Pless Kaiser, A., & Schnurr, P. P. (2015). Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) [Measurement instrument]. Available from <https://www.ptsd.va.gov>

\*\* Reference: Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Questionnaire. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

# MENTAL HEALTH STATUS

All demographic groups in MA are experiencing **increases** in poor mental health.

Percent of MA subpopulations most likely to report 15+ days of poor mental health in the past 30 days



Rates are **3X higher** than the 2019 MA BRFSS.

With **1 in 3 MA** adults reported 15+ days of poor mental health in the past 30 days.

Of the subpopulations experiencing high rates of poor mental health, **respondents with disabilities** reported the highest rates of 15+ days of poor mental health

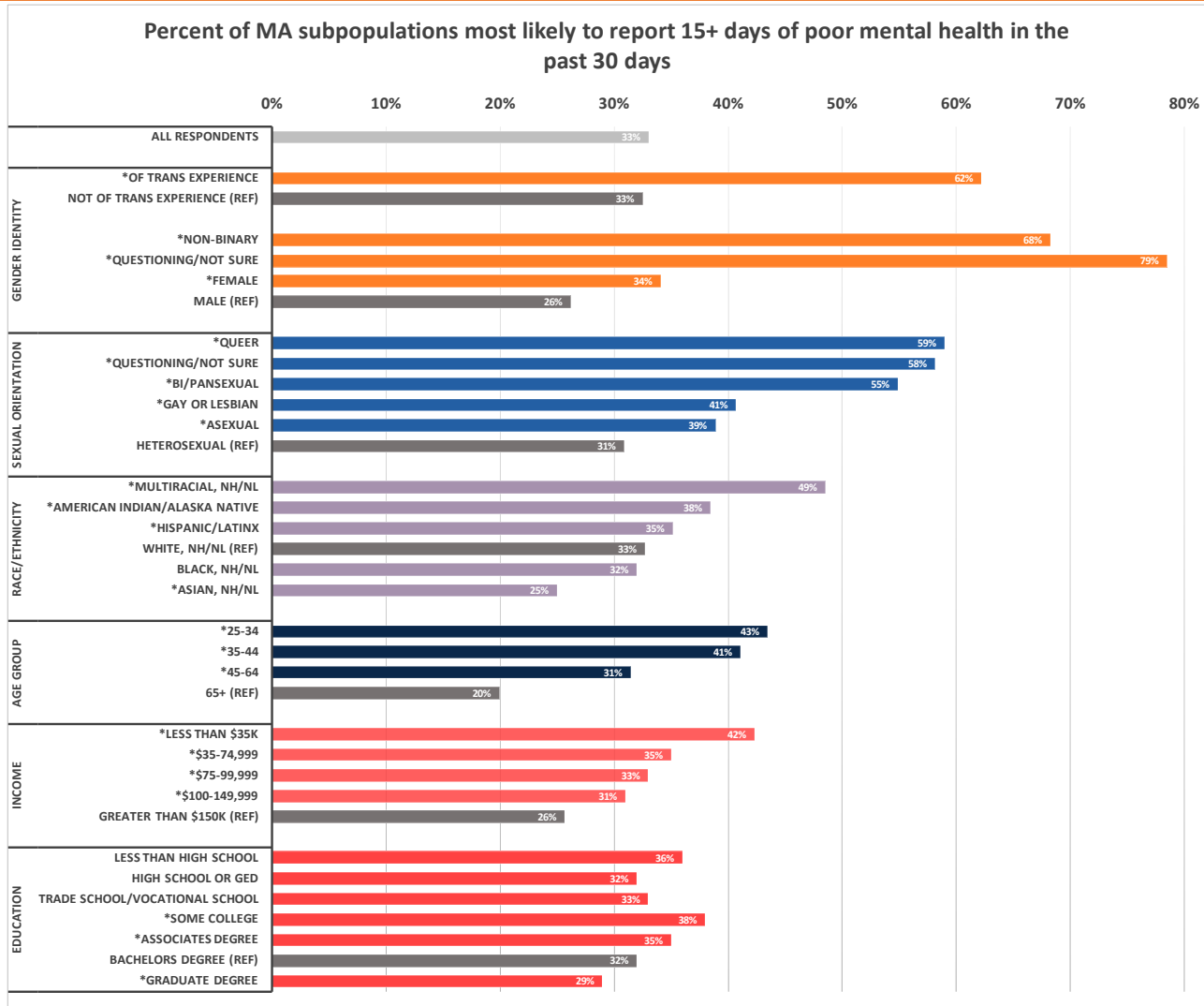
- This was true across all categories

Almost **1 in 2 caregivers** of persons with special needs and parents of children with special healthcare needs are experiencing high rates of poor mental health

\* Denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF)

# MENTAL HEALTH STATUS CNTD.

All demographic groups in MA are experiencing **increases** in poor mental health.



The groups reporting the highest rates of poor mental health include:

- Respondents of transgender experience, non-binary respondents, and respondents questioning their gender identity
- LGBTQ+ respondents
- Multiracial, nH/nL, American Indian/Alaska Native, and Hispanic/Latinx respondents
- Younger respondents
- Respondents with low income <\$35k
- Those with lower educational attainment

These are the same demographic groups who were more likely to have 3+ PTSD-like reactions in the past 30 days, with the exception of the Hispanic/Latinx race group which was not statistically significant.

1 in 4 adults reported 3+ PTSD-like reactions.

Notes on subpopulations:

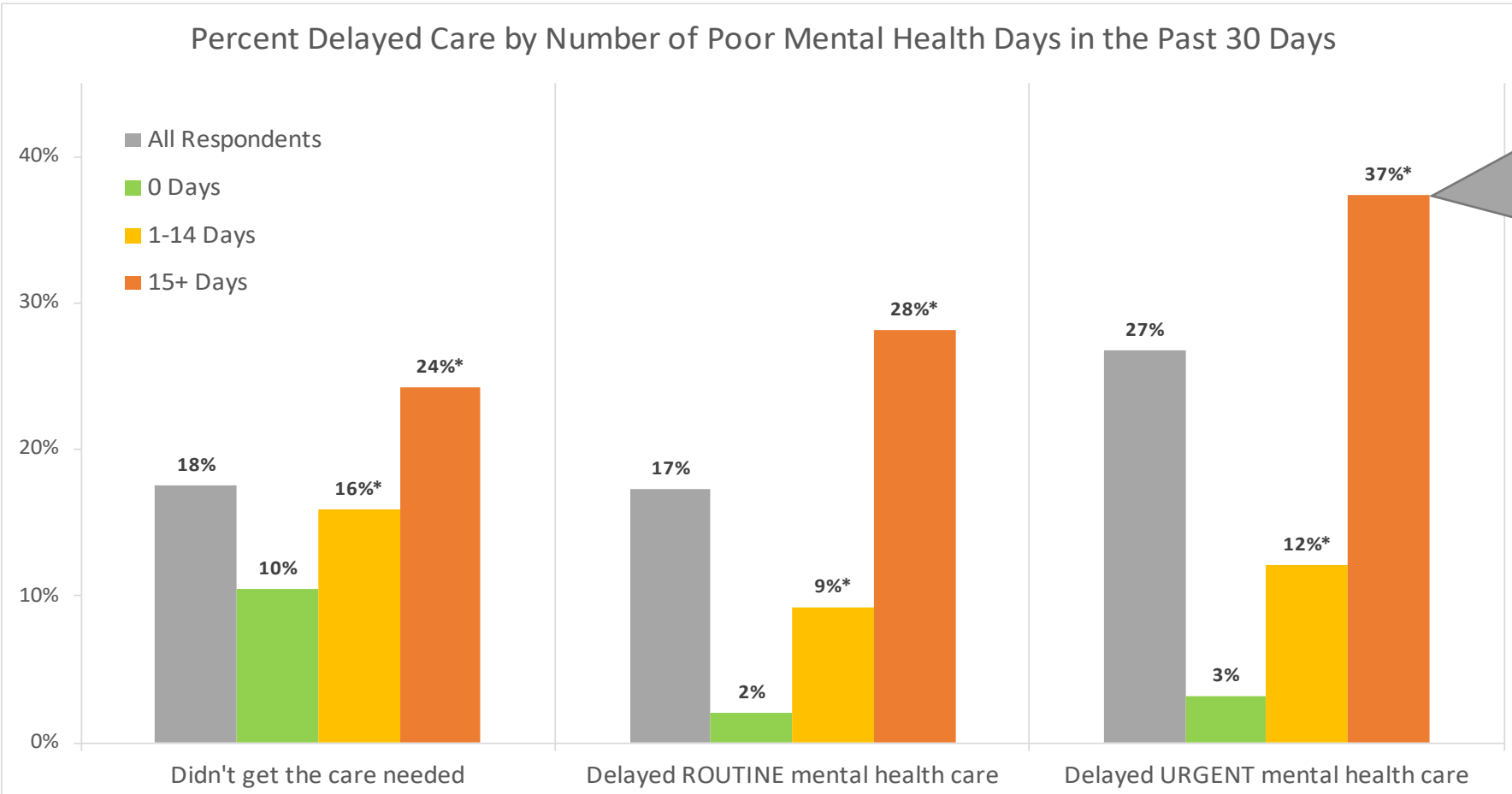
- nH/nL = non-Hispanic/non-Latinx

- 'American Indian/Alaska Natives' includes Hispanic/Latinx

\* Denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF)

# DELAY IN HEALTH CARE

Respondents who reported any days of poor mental health were more likely to experience delayed care, including routine and urgent mental health care, compared to those who reported 0 days of poor mental health.



Among respondents who reported 15+ days of poor mental health, the following groups experienced delayed urgent mental health care at the highest rates:

- Bisexual/Pansexual respondents
- Respondents with Cognitive Disabilities
- Respondents between ages 25-44

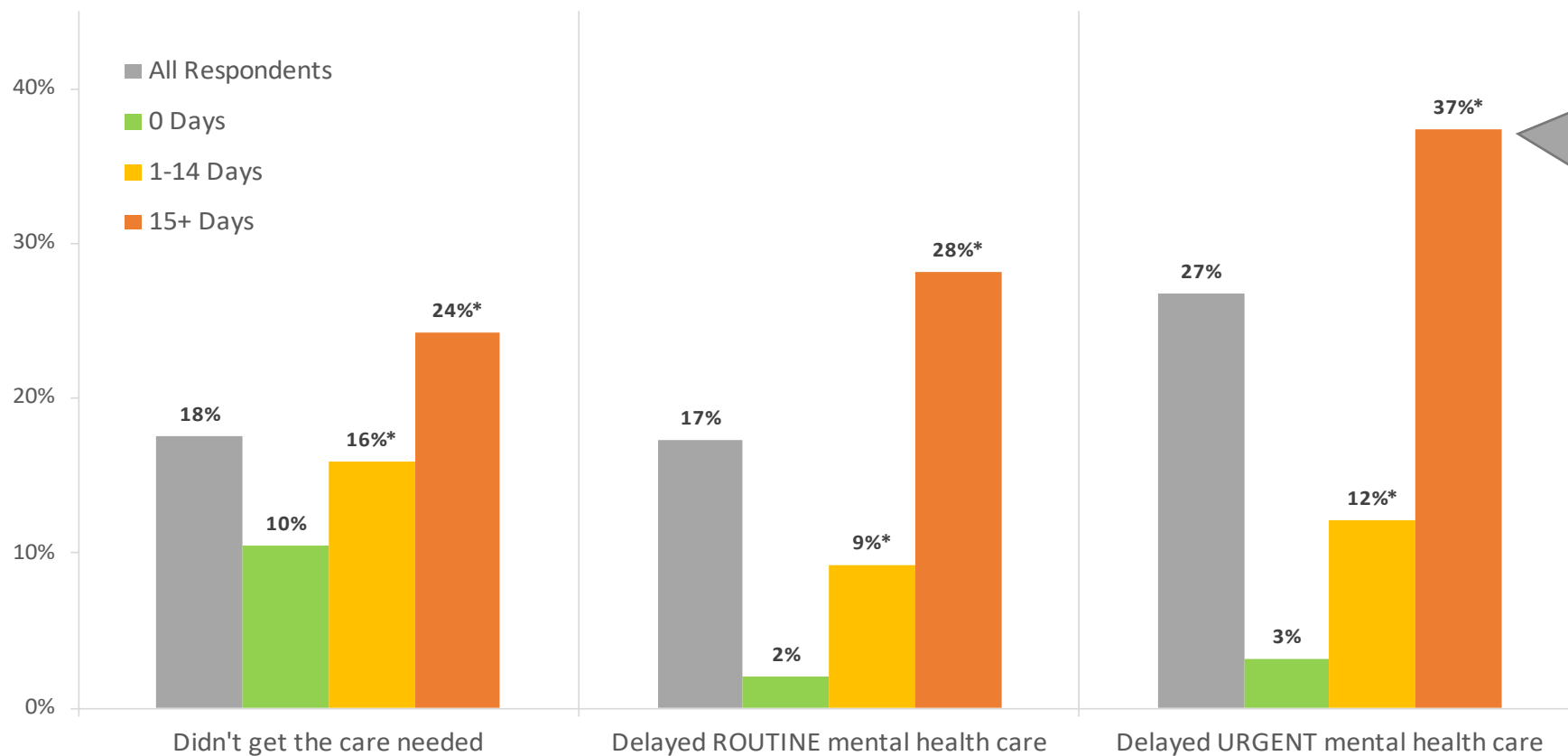
\* subgroup is significantly different compared to respondents with 0 poor mental health days at the  $p < 0.05$  level

NOTE: Similar results were seen when comparing delays in care by the number of PTSD-like reactions to COVID-19.

# DELAY IN HEALTH CARE, CONT.

Respondents reporting poor mental health were more likely to experience delayed care, including routine and urgent mental health care, compared to those who reported no poor mental health days.

Percent Delayed Care by Number of Poor Mental Health Days in the Past 30 Days

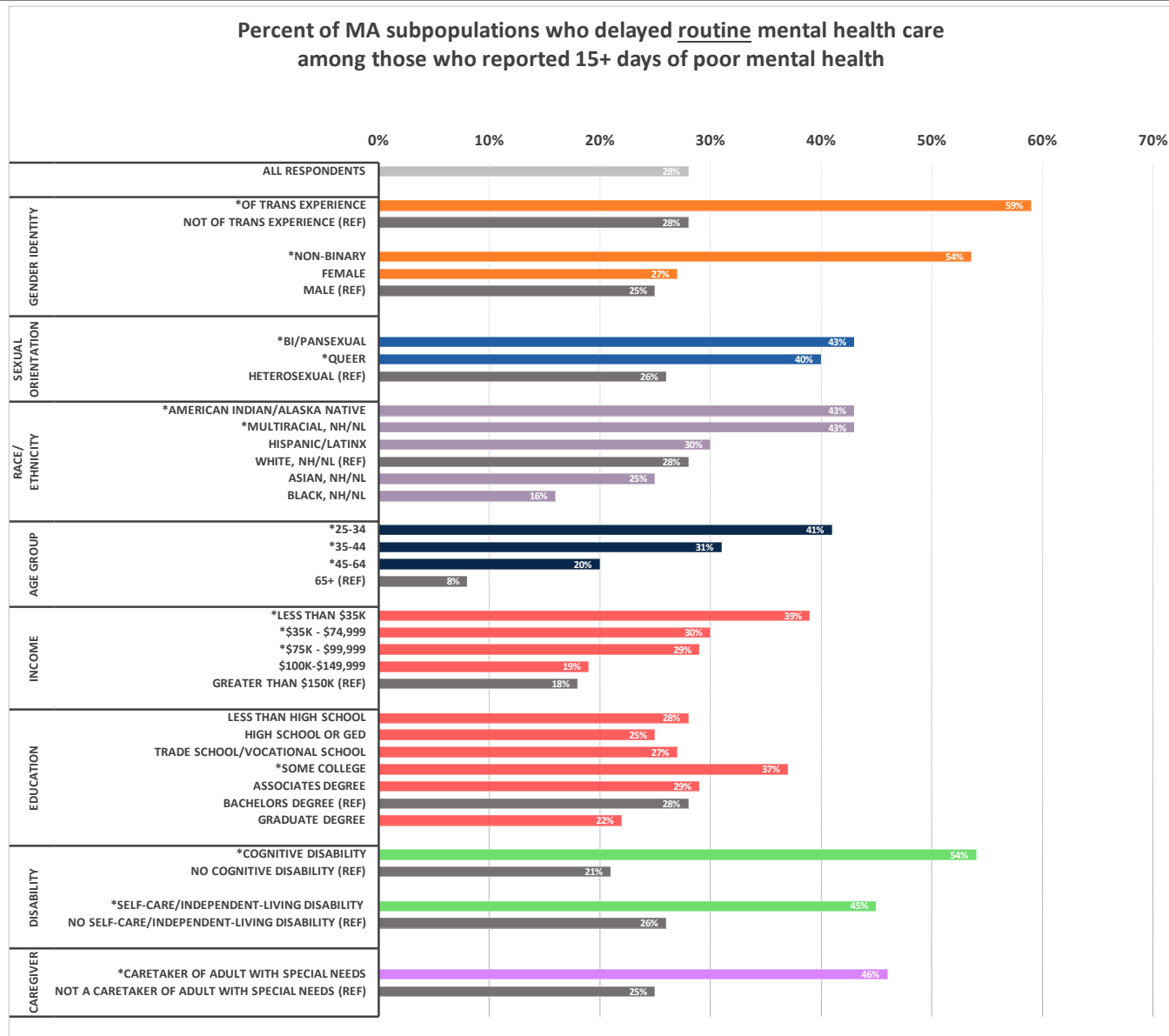


Among respondents who reported 15+ days of poor mental health, the top reasons for delays in any health care included:

1. Appointment was cancelled/delayed
2. Worried about getting COVID-19 from in-person care
3. Worried they could not afford the care or that their insurance didn't cover it
4. Not having a private place for a phone call or video chat

\* subgroup is significantly different compared to respondents with 0 poor mental health days at the  $p < 0.05$  level  
 NOTE: Similar results were seen when comparing delays in care by the number of PTSD-like reactions to COVID-19.

# DELAY IN ROUTINE MENTAL HEALTH CARE



Almost 30% of adults who reported 15+ days of poor mental health experienced delayed routine mental health care.

Among adults who reported 15+ days of poor mental health, the following groups delayed routine mental health care at the highest rates:

- Respondents of transgender experience and non-binary respondents
- Respondents with disabilities
- Caregivers of adults with special needs
- Bi/Pansexual and queer respondents
- American Indian/Alaska Native and Multiracial, nH/nL respondents
- Respondents between ages 25-34
- Respondents with income <\$35k and those with some college experience

## Notes on subpopulations:

- nH/nL = non-Hispanic/non-Latinx

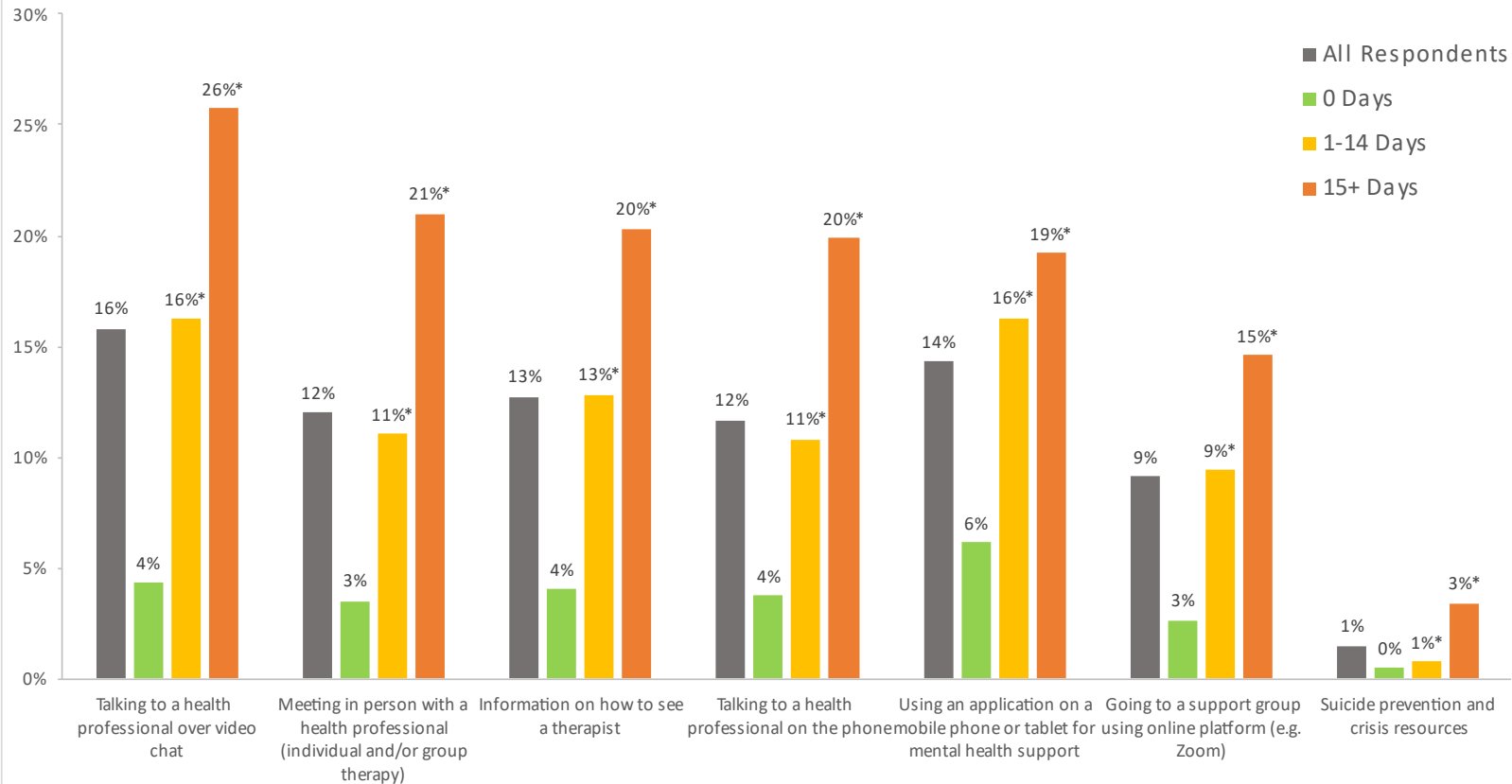
- 'American Indian/Alaska Natives' includes Hispanic/Latinx

\* Denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF)

# REQUESTED RESOURCES

Respondents who reported poor mental health were **5-7 X** more likely to request health resources compared to those who reported no days of poor mental health.

Percent of Respondents Who Requested Resources by Number of Poor Mental Health Days in the Past 30 Days



\* subgroup is significantly different compared to respondents with 0 poor mental health days at the  $p < 0.05$  level

## TOP 5 RESOURCES REQUESTED among respondents with 15+ days of poor mental health

1. Talking to a health professional over video chat
2. Meeting in person with a health professional (individual and/or group therapy)
3. Information on how to see a therapist
4. Talking to a health professional on the phone
5. Using an application on a mobile phone or tablet for mental health support

# SUICIDE PREVENTION RESOURCES

Requests for suicide prevention and crisis management resources were as high as 17% among certain subpopulations.

Among all survey respondents, about 2% requested resources for suicide prevention and crisis management.

The groups that reported the highest need for suicide prevention and crisis management resources were:

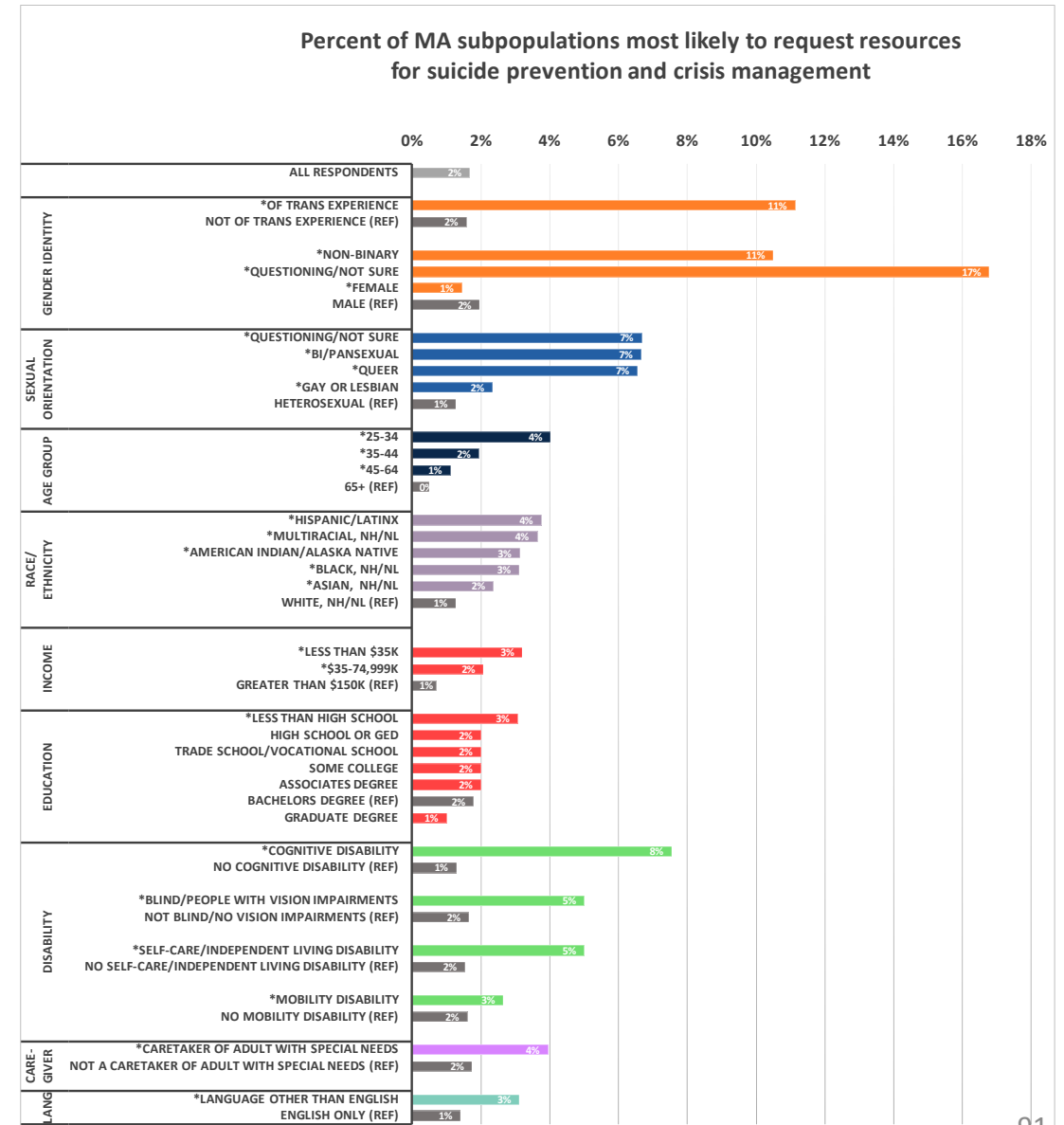
- Respondents of transgender experience, non-binary respondents, and respondents questioning their gender identity
- Respondents with disabilities
- LGBQ+ respondents
- Respondents ages 25-34
- Caretakers of adults with special needs
- Hispanic/Latinx respondents
- Respondents with lower incomes
- Those who speak a language other than English
- Those with low educational attainment

Many of these groups also reported higher rates of poor mental health across both indicators

## Notes on subpopulations:

- nH/nL = non-Hispanic/non-Latinx
- 'American Indian/Alaska Natives' includes Hispanic/Latinx

\* Denotes rate is significantly different (p<0.05) compared to the reference group (REF)



# RESPONDENTS WITH POOR MENTAL HEALTH

Those who reported 15+ days of poor mental health were much more likely to be impacted by social determinants of health, when compared to respondents who experienced 0 days of poor mental health,



2x more likely to have **delay in health care**



2.4x more likely to have **change in employment to take care of child/children**



2.6x more likely to worry about **getting medication**



2x more likely to be “very worried” about **getting covid-19**



2-3x more likely to worry about the following basic needs: **healthcare, technology, and childcare**



2.5X more likely to worry about **expenses/bills**



2-3X more likely to **request resources that would be helpful to them**



# KEY TAKEAWAYS

- Persistent poor mental health has **tripled** during the pandemic.
- Respondents who reported **any** days of poor mental health were also more likely to experience delays in seeking care, have a change in employment due to childcare reasons, worry about accessing basic needs, worry about paying for expenses, and request relevant resources.
- While all demographic groups in MA are experiencing increases in poor mental health, **LGBTQ+ respondents, respondents with disabilities, American Indian/Alaska Native respondents, Hispanic/Latinx respondents, multiracial respondents, respondents ages 25-44, respondents with lower income, and caregivers of adults with special needs** are disproportionately experiencing poor mental health. These groups also experience discrimination and face barriers related to access to food, housing, and care.



# EMPLOYMENT

Kathleen Fitzsimmons, PhD, MPH  
Emily Sparer-Fine, ScD  
Amy Flynn, MS

# FRAMING MATTERS

- Contrary to the common belief that an individual can effectively manage their risk if they “just know what to do and care enough to do it,” the data show us that an individual’s risk of COVID-19 is *not* entirely driven by their own knowledge, beliefs, and behaviors.
- Throughout the pandemic, some workers have *had* to leave home to do their jobs, thereby being put at higher risk of infection, illustrating that the workplace may be an important point of transmission, and therefore a *key opportunity for prevention*.
- Work may also be a driver of racial inequities in COVID-19 risk. Structural racism plays a role in people of color being disproportionately employed in jobs with hazardous physical and/or psychosocial working conditions, and underpins the observed racial inequities in COVID-19 risk.

# KEY DIMENSIONS OF EMPLOYMENT EXAMINED

Objective: To examine the impact of the pandemic on Massachusetts workers and to identify groups or populations that have been disproportionately impacted in order to guide prevention efforts and address potential inequities.

## DIMENSIONS ANALYZED

Change in employment due to the pandemic among respondents employed in the past year:

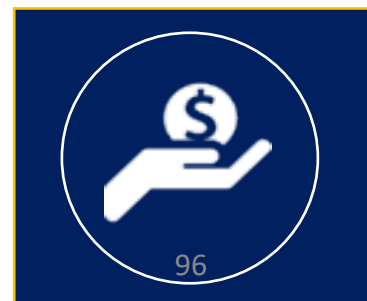
- JOB LOSS (permanent, temporary)
- REDUCED HOURS / TOOK LEAVE (paid, unpaid)
- NATURE OF WORK CHANGED (eg. increased hours, change in role, new job, working from home)
- NO CHANGE

Working from home status among those currently employed:

- WORKING FROM HOME
- WORKING OUTSIDE THE HOME

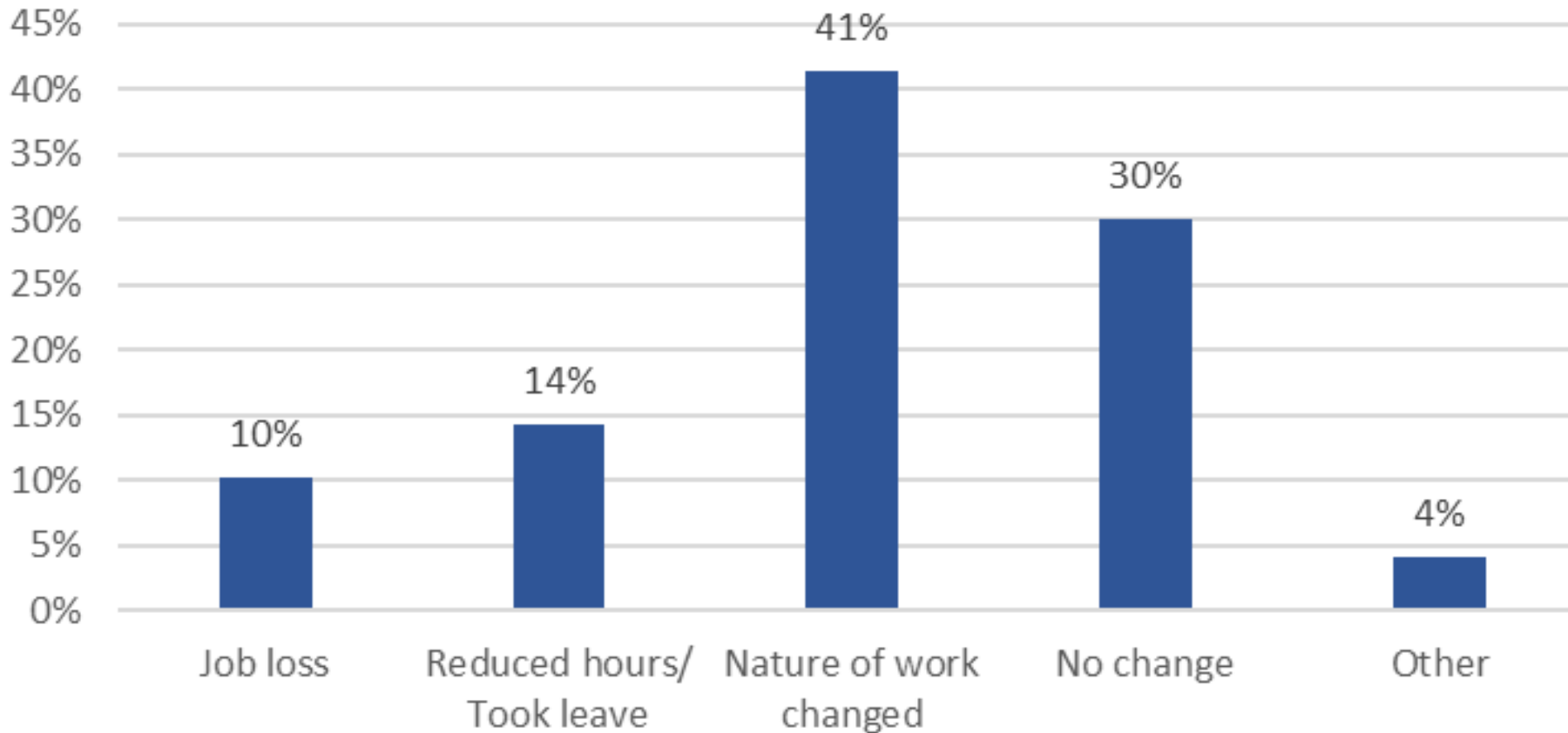
Employer-provided protective measures among those working outside the home:

- PERSONAL PROTECTIVE EQUIPMENT (PPE)
- SOCIAL DISTANCING IMPLEMENTED
- ADDITIONAL HEALTH AND SAFETY TRAINING
- PAID SICK LEAVE



# CHANGES IN EMPLOYMENT STATUS DUE TO THE PANDEMIC

## CHANGE IN EMPLOYMENT: % AMONG ADULTS EMPLOYED IN THE PAST YEAR



The pandemic has had a severe impact on Massachusetts workers.

Overall, **7 in 10** adults employed in the past year **reported changes to their employment status** due to the pandemic:

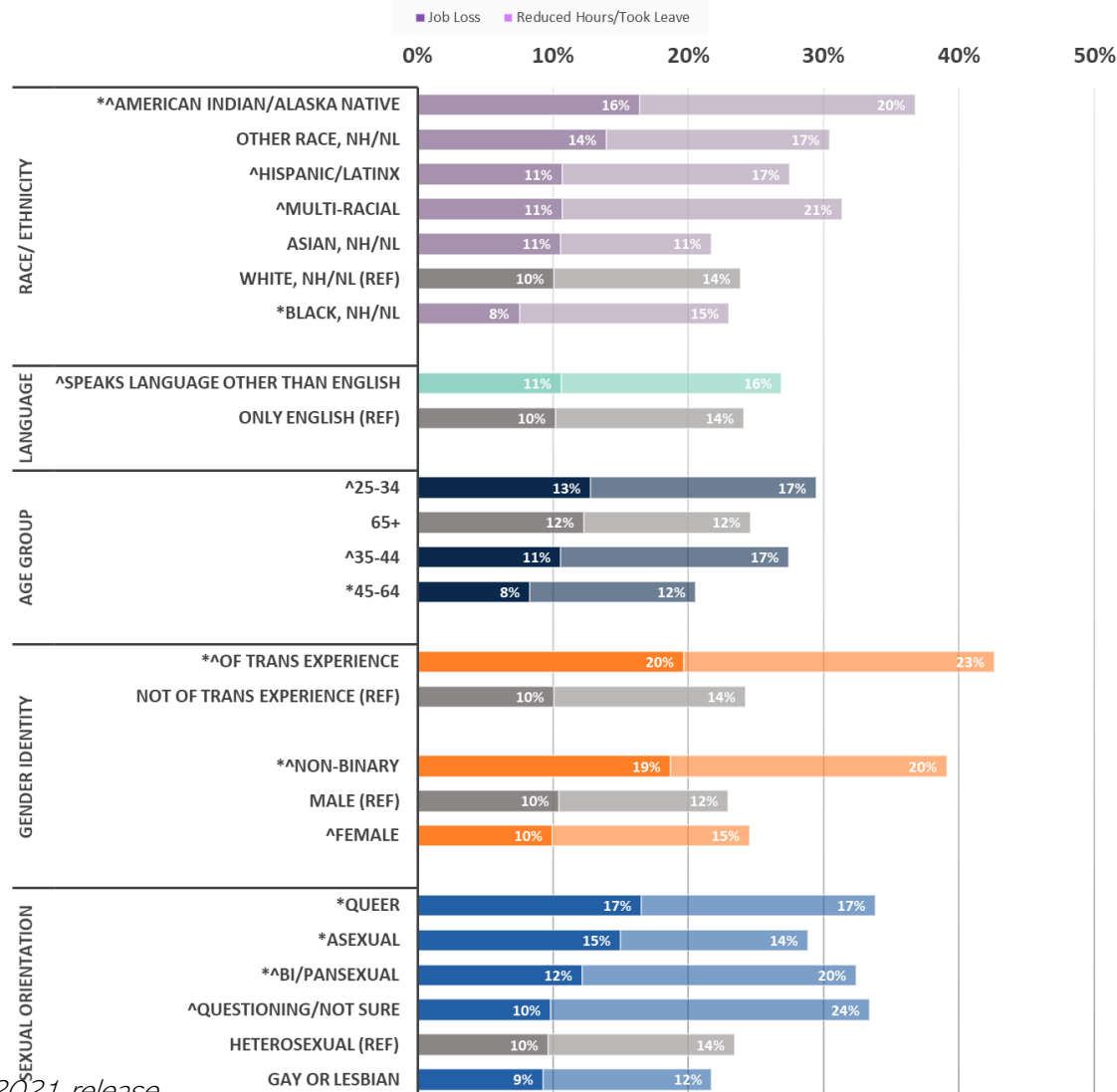
- 10% reported job loss
- 14% reduced hours or took leave
- 41% nature of work changed.

**1 in 4** adults employed in the past year **reported job loss, reduced hours or taking leave.**

Note: Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# CHANGE IN EMPLOYMENT STATUS DUE TO THE PANDEMIC. BY DEMOGRAPHICS (1 of 2)

**JOB LOSS OR REDUCED HOURS/TOOK LEAVE**  
% AMONG ADULTS EMPLOYED IN THE PAST YEAR



Respondents in the following groups were **more likely** to report:

### Job loss and reduced hours or taking leave:

- American Indian/Alaska Native (over 1 in 3 reported job loss, reduced hours or taking leave)
- Of transgender experience (over 2 in 5)
- Non-binary gender (2 in 5)
- Bi/Pansexual (1 in 3)

### Job loss:

- Queer, Asexual

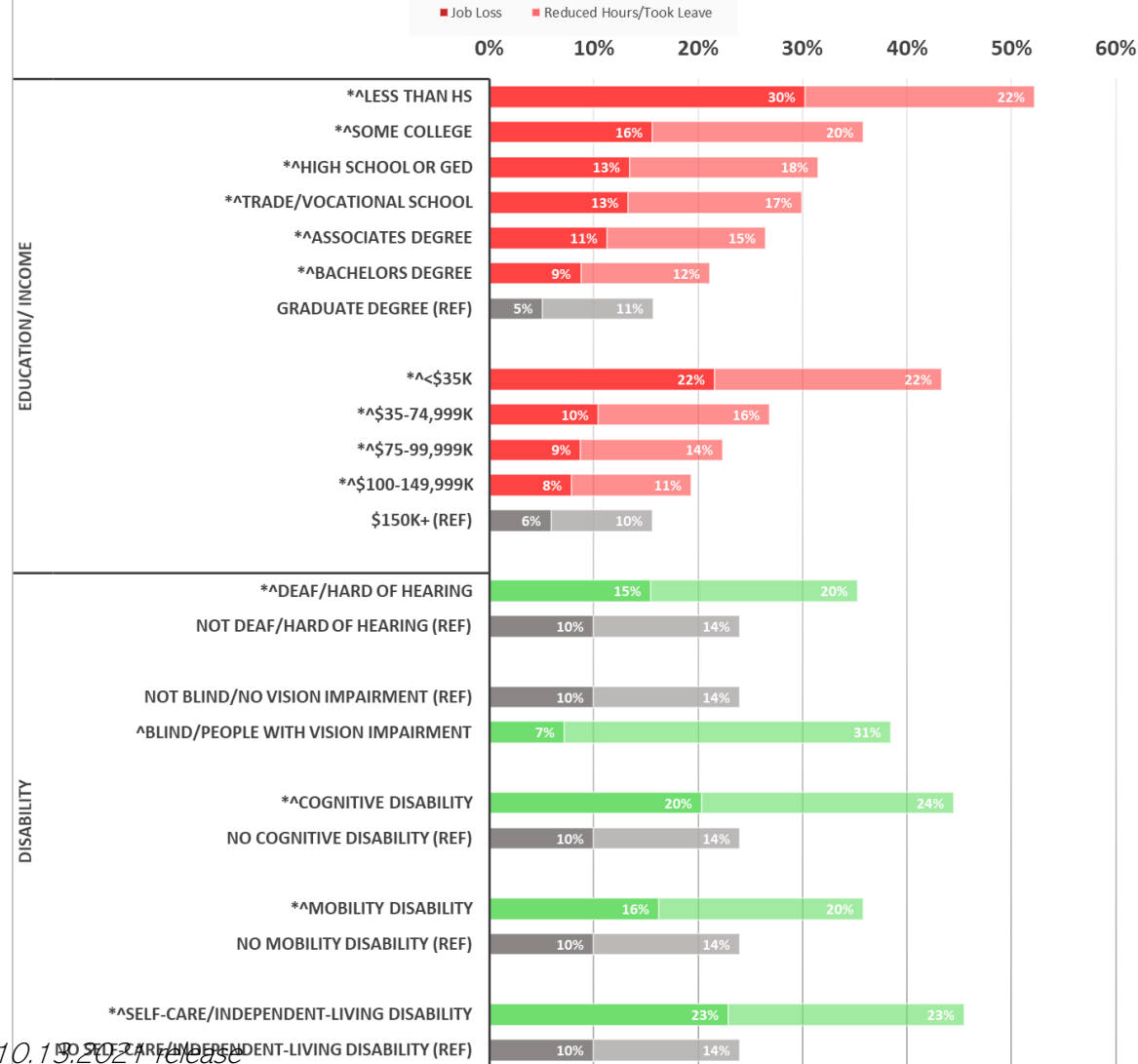
### Reduced hours or taking leave:

- Hispanic/Latinx, Multi-racial
- Speak a language other than English
- Aged 25-34 years
- Female
- Questioning/not sure of sexual orientation

Notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/not sure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* ^ denotes a statistically significant difference (ie.  $p < 0.05$ ) in job loss (\*) and/or in reduced hours/took leave (^) compared to the reference group ("REF" in each category); 5) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# CHANGE IN EMPLOYMENT STATUS DUE TO THE PANDEMIC. BY DEMOGRAPHICS (2 of 2)

**JOB LOSS OR REDUCED HOURS/TOOK LEAVE  
% AMONG ADULTS EMPLOYED IN THE PAST YEAR**



Respondents in the following groups were **more likely** to report:

## Job loss and reduced hours or taking leave:

- Lower educational attainment
  - 1 in 2 of those with < a high school level of education reported job loss, reduced hours or taking leave
- Lower income
  - over 2 in 5 respondents with < \$35K annual household income
- Deaf/Hard of hearing (1 in 3)
- Cognitive disability (over 2 in 5)
- Mobility disability (over 1 in 3)
- Self-care/Independent-living disability (nearly 1 in 2)

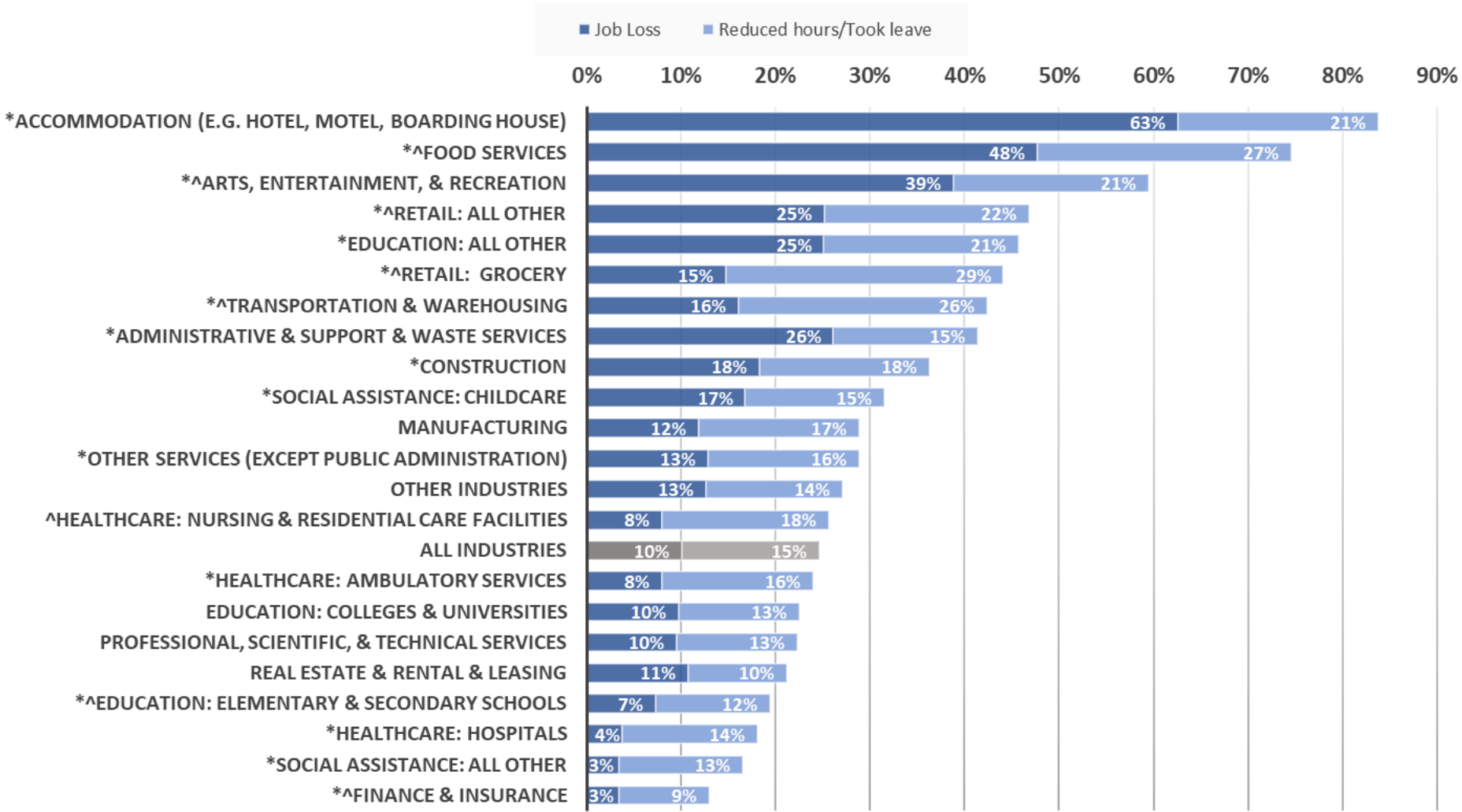
## Reduced hours or taking leave:

- Blind/People with vision impairment

Notes: 1) \* ^ denotes a statistically significant difference (ie.  $p < 0.05$ ) in job loss (\*) and/or in reduced hours/took leave (^) compared to the reference group ("REF" in each category); 2) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# CHANGE IN EMPLOYMENT STATUS DUE TO THE PANDEMIC. BY INDUSTRY GROUP

**JOB LOSS or REDUCED HOURS/TOOK LEAVE**  
% AMONG ADULTS EMPLOYED IN THE PAST YEAR BY INDUSTRY



Workers in the following industries were **most likely** to report job loss, reduced hours or taking leave:

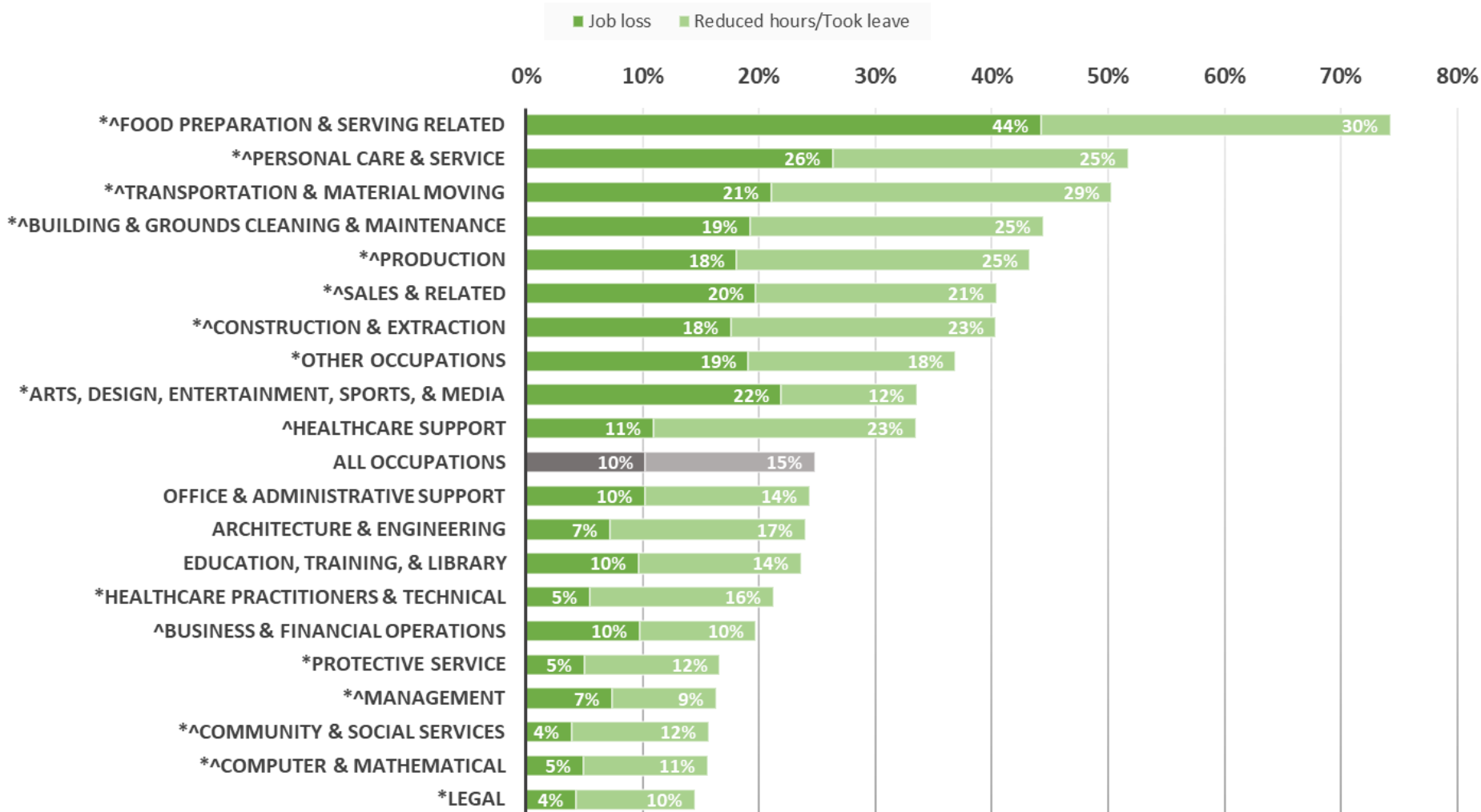
- Accommodation – 4 in 5
- Food Services – 3 in 4
- Arts, Entertainment & Recreation – 3 in 5

Workers in **Retail: Grocery** were most likely to report reduced hours or taking leave. – nearly 1 in 3 workers

Notes: 1) "Retail: Grocery" = Grocery Stores, Specialty Food Stores, Gas Stations [includes those with convenient stores]; 2) "Other Industries" = Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 3) \* ^ denotes a statistically significant difference (ie.  $p < 0.05$ ) in job loss (\*) and/or in reduced hours/took leave (^) compared to the average for all industries; 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# CHANGE IN EMPLOYMENT STATUS DUE TO THE PANDEMIC. BY OCCUPATION GROUP

**JOB LOSS or REDUCED HOURS/TOOK LEAVE**  
% AMONG ADULTS EMPLOYED IN THE PAST YEAR BY OCCUPATION



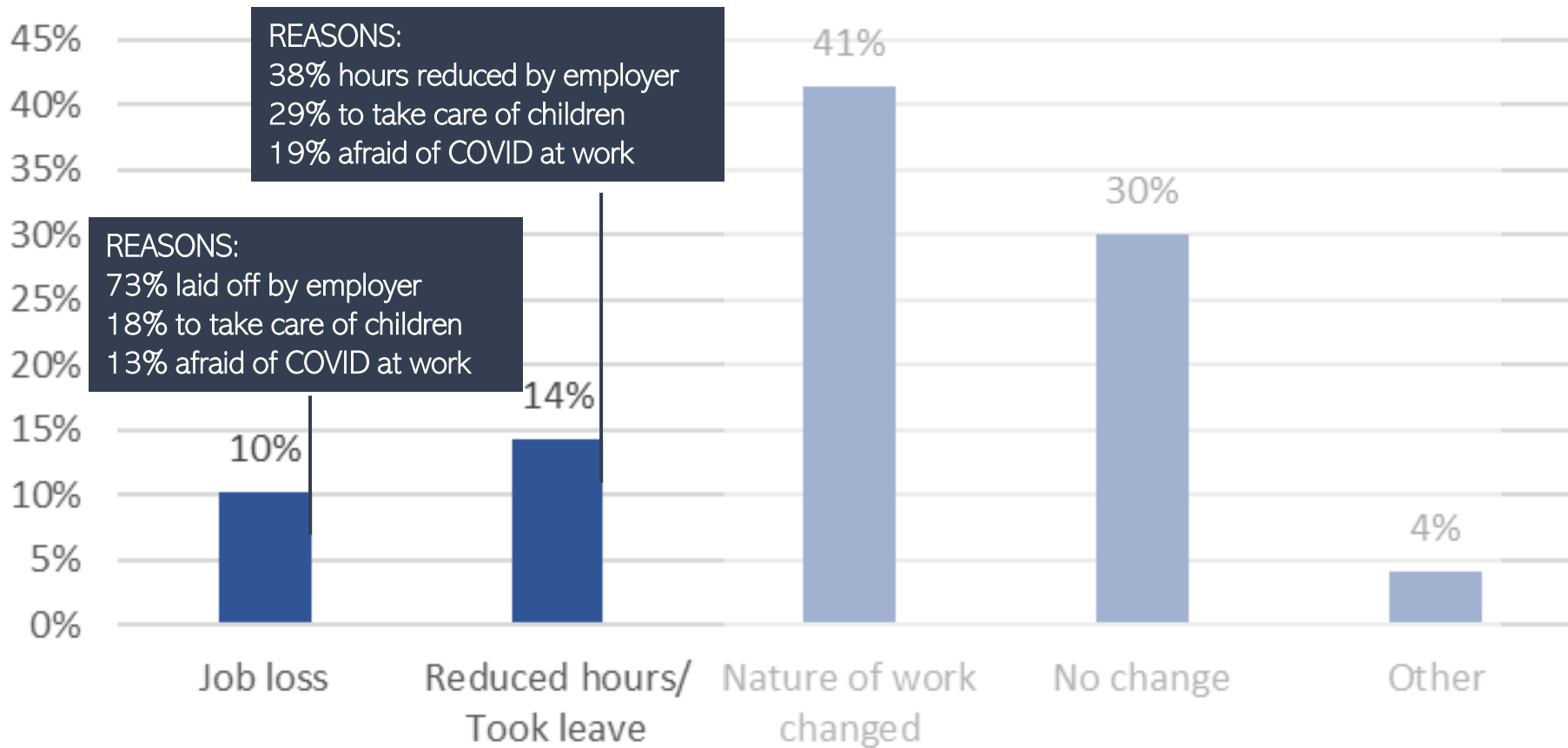
Workers in the following occupations were **most likely** to report job loss, reduced hours or taking leave:

- Food Preparation & Serving Related – 3 in 4
- Personal Care & Service – 1 in 2
- Transportation & Material Moving – 1 in 2
- Building & Grounds Cleaning & Maintenance – over 2 in 5

Notes: 1) Occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "Other Occupations" = Farming, Fishing & Forestry; "Installation, Maintenance, & Repair"; and Military occupations.; 3) \* ^ denotes a statistically significant difference (ie.  $p < 0.05$ ) in job loss (\*) and/or in reduced hours/took leave (^) compared to the average for all occupations; 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# REASONS FOR CHANGE IN EMPLOYMENT STATUS

## CHANGE IN EMPLOYMENT: % AMONG ADULTS EMPLOYED IN THE PAST YEAR



Leading reasons among those reporting job loss or reduced hours / took leave included:

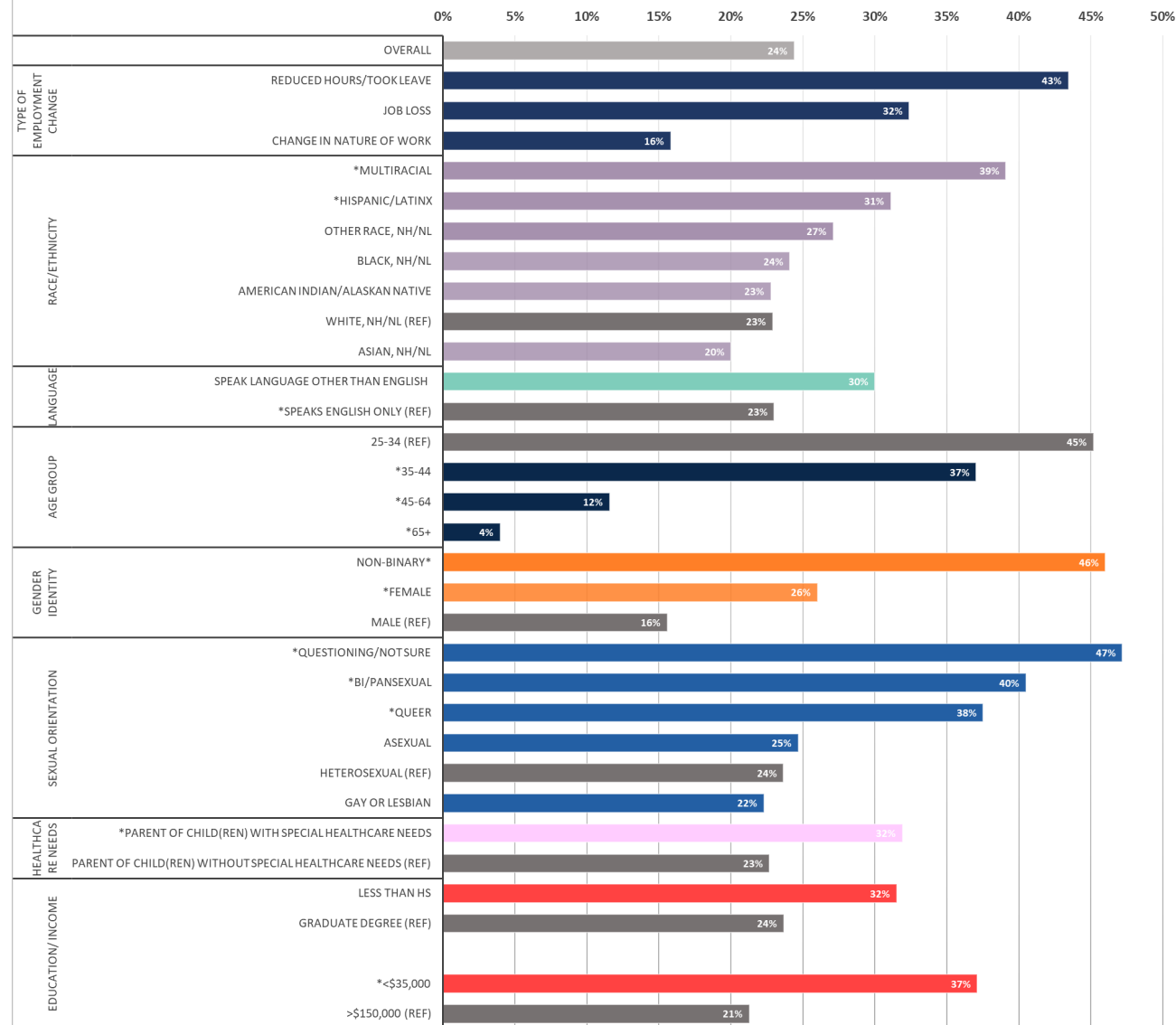
- Employer action (e.g. laid off)
- Need to take care of children
- Afraid to get COVID-19 at work

Nearly 1 in 5 who lost their jobs and over 1 in 4 who reduced hours or took leave noted needing to take care of children as a reason

Note: Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# EMPLOYMENT & CHILDCARE AMONG PARENTS

**CHANGE IN EMPLOYMENT TO TAKE CARE OF 'MY CHILD/CHILDREN':**  
% AMONG PARENTS EMPLOYED IN THE PAST YEAR



**1 in 4** employed parents lost their jobs or reduced hours/took leave due to the pandemic. Parents were **35%** more likely to report reducing hours/taking leave than non-parents.

**1 in 3** parents who lost their jobs and **2 in 5** parents who reduced hours or took leave noted needing to take care of children as a reason.

It was more commonly reported by parents in the following groups:

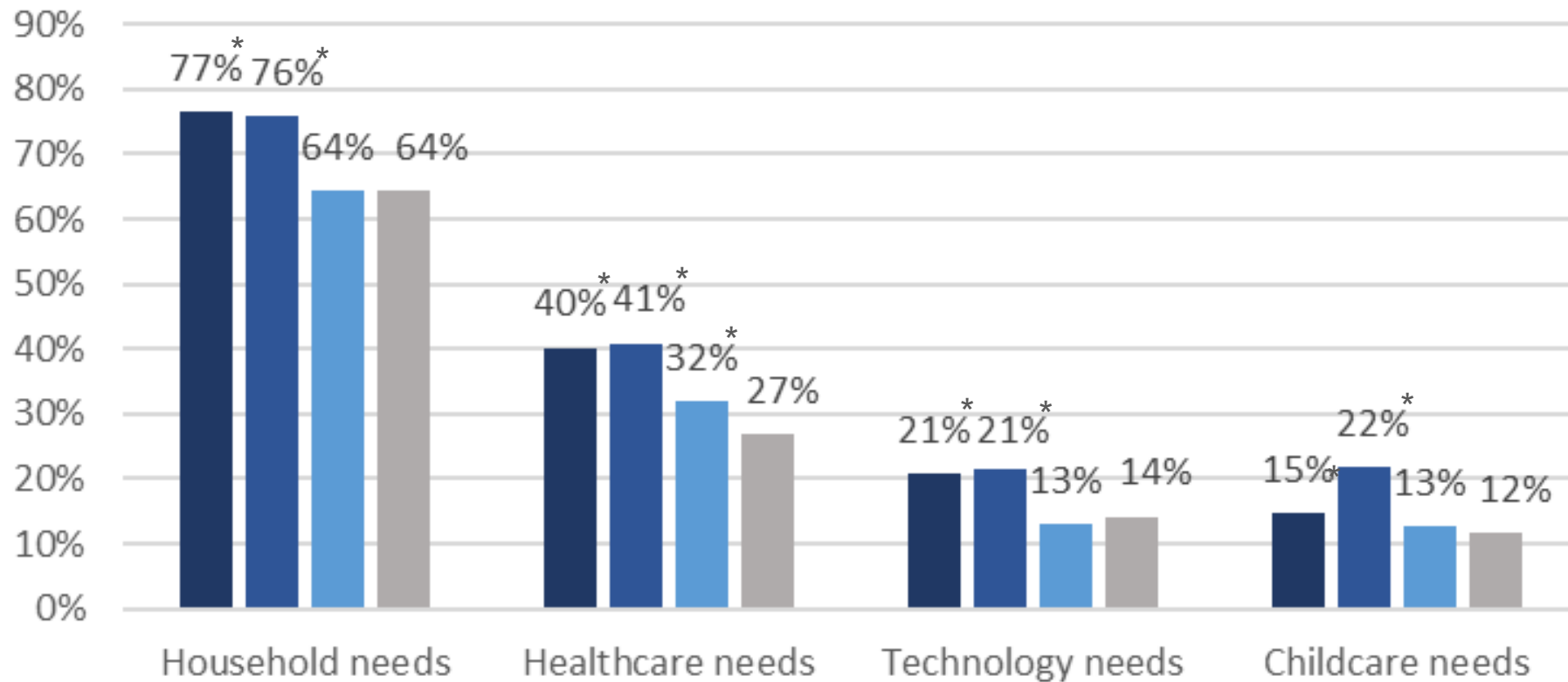
- Hispanic/Latinx or Multiracial
- Speak languages other than English
- Younger (Note: Almost half of parents aged 25-34 and over 1 in 3 parents aged 35-44 – suggesting that parents of young and school-age children face higher childcare burdens.)
- Female or Non-binary.
- Questioning sexual orientation, bisexual or pansexual, or queer
- Parents of children with special healthcare needs
- Lower annual household income or lower education

Notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group ("REF" in each category) ; 5) Percentages are weighted to the statewide age and educational distribution of those  $\geq 18$  years

# CHANGE IN EMPLOYMENT STATUS: WORRIED ABOUT BASIC NEEDS

**WORRIED ABOUT BASIC NEEDS BY EMPLOYMENT STATUS CHANGE:**  
% AMONG ADULTS EMPLOYED IN THE PAST YEAR

■ Job loss ■ Reduced hours/Took leave ■ Nature of work changed ■ No change



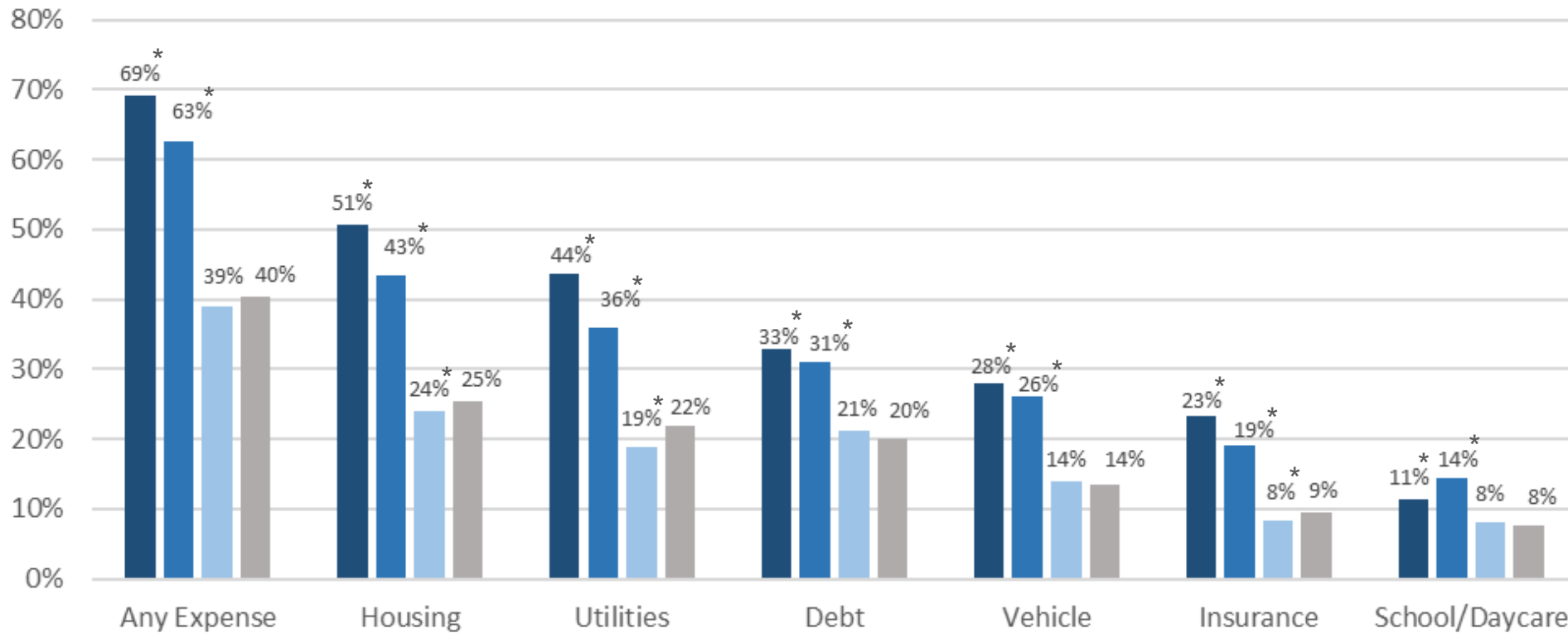
Overall, those who lost their jobs, or reduced hours or took leave were 1.2-1.8 times more likely to report being worried about basic needs, as compared to those with no employment change.

Notes: 1) \* denotes a statistically significant difference (ie.  $p < 0.05$ ) compared to the reference category of 'no change' in employment status or nature of work' 2) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# CHANGE IN EMPLOYMENT STATUS: WORRIED ABOUT EXPENSES

**WORRIED ABOUT EXPENSES BY CHANGE IN EMPLOYMENT:**  
% AMONG ADULTS EMPLOYED IN THE PAST YEAR

■ Job loss ■ Reduced hours/Took leave ■ Nature of work changed ■ No change



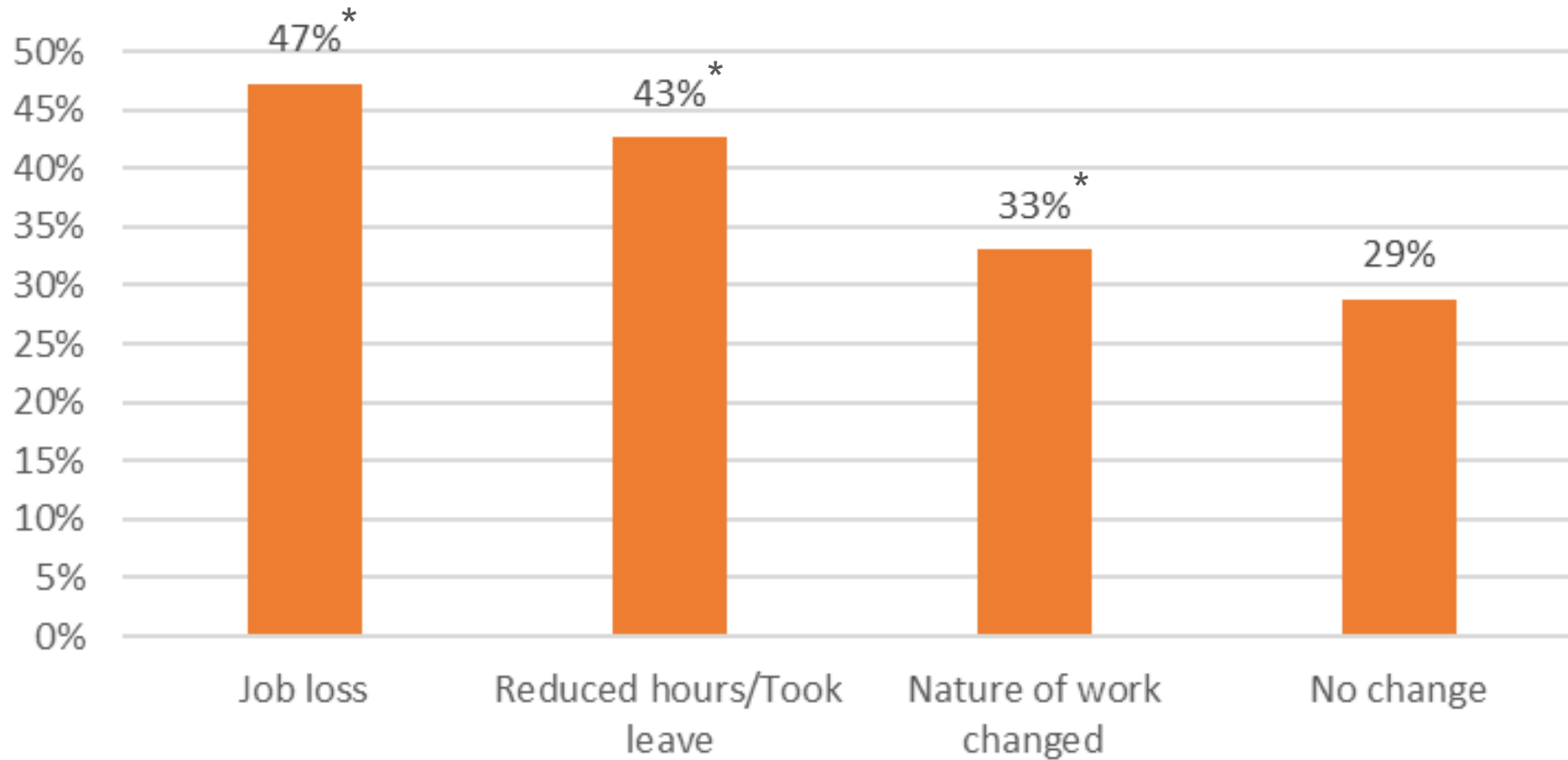
Nearly 7 in 10 respondents with job loss and over 6 in 10 with reduced hours/leave were worried about at least one expense

Those experiencing job loss or reduced hours/leave were 1.5-2.5 times more likely to report being worried about expenses across the board

Notes: 1) \* denotes a statistically significant difference (ie.  $p < 0.05$ ) compared to the reference category of 'no change' in employment status or nature of work' 2) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# CHANGE IN EMPLOYMENT STATUS: IMPACT ON MENTAL HEALTH

## ≥15 DAYS OF POOR MENTAL HEALTH: % AMONG ADULTS EMPLOYED IN THE PAST YEAR



Overall, adults **experiencing job loss** were **most likely** to report 15 or more days of poor mental health in the past 30 days, followed by those with reduced hours or who took leave.

Nearly **half of those** experiencing **job loss** reported 15 or more days of poor mental health in the past 30 days.

All three groups experiencing a disruptions to their work were more likely than those with no change to report poor mental health.

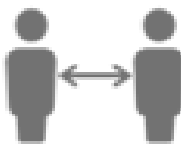
Notes: 1) \* denotes a statistically significant difference (ie.  $p < 0.05$ ) compared to the reference category of 'no change' in employment status or nature of work' 2) Note: Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# RISK MITIGATION: FOCUS ON WORK

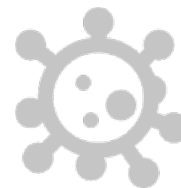
1 in 2 employed respondents worked a job outside the home, facing increased risk of exposure.



- Among respondents who had ever been tested for COVID-19, those working **outside the home** were nearly **2X** more likely to report **testing positive** than those working from home.
- **4 in 5** respondents **working outside the home** listed work-related reasons for **not being able to socially distance** (ie. maintain 6 ft. of distance from others):

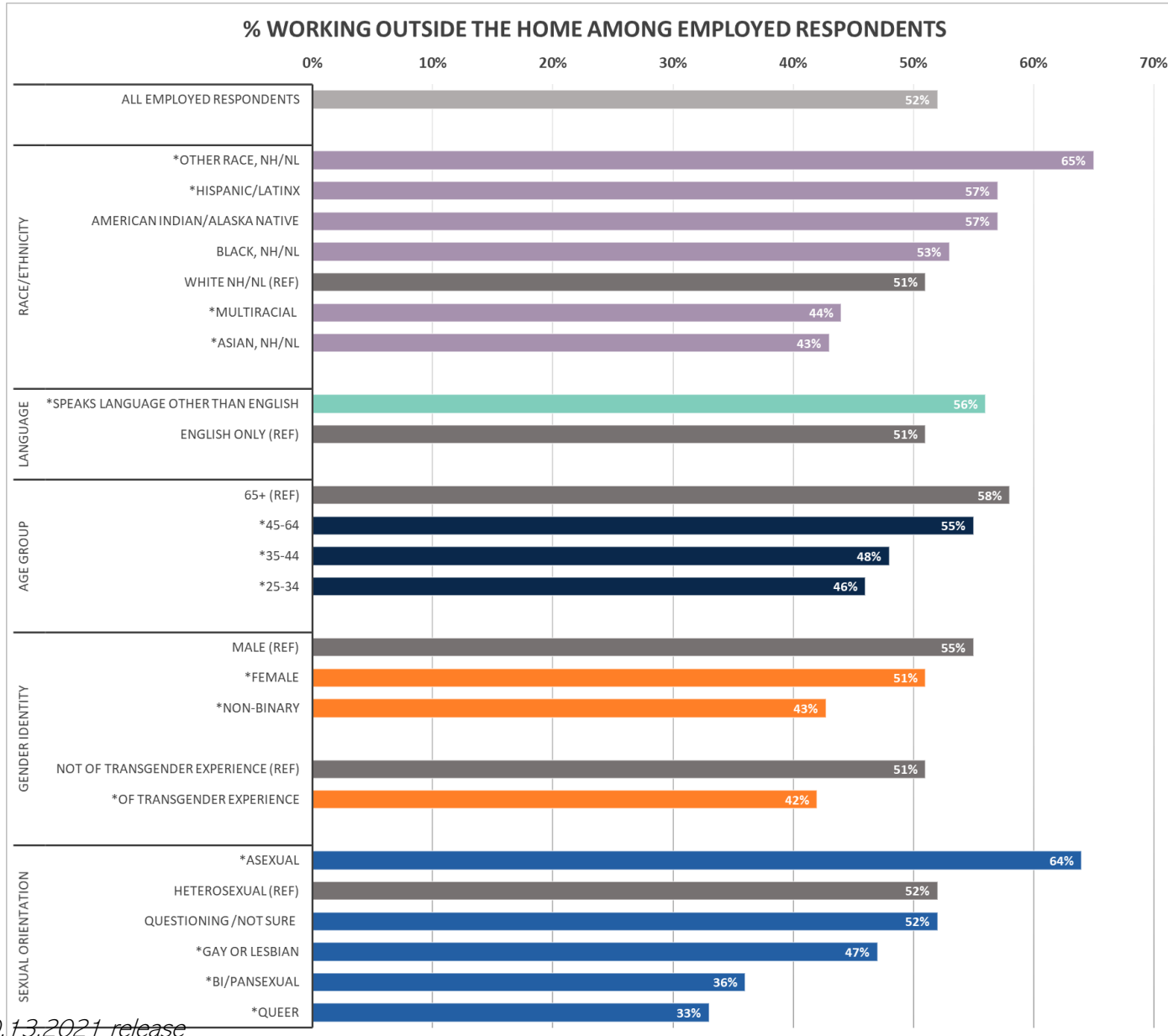


- “In order to do my work, I need to be physically close to others.”
- “My workplace is crowded.”
- “I have to take public transportation to get to work.”



- “I was afraid to get COVID-19 at work” was a key reason for change in employment status noted by:
  - Respondents who **lost their job** (over 1 in 10)
  - Respondents who **reduced hours or took leave** (1 in 5)

# WORKING OUTSIDE THE HOME BY DEMOGRAPHICS (1 of 2)



Some populations were more likely to work outside of the home, facing greater risk of exposure.

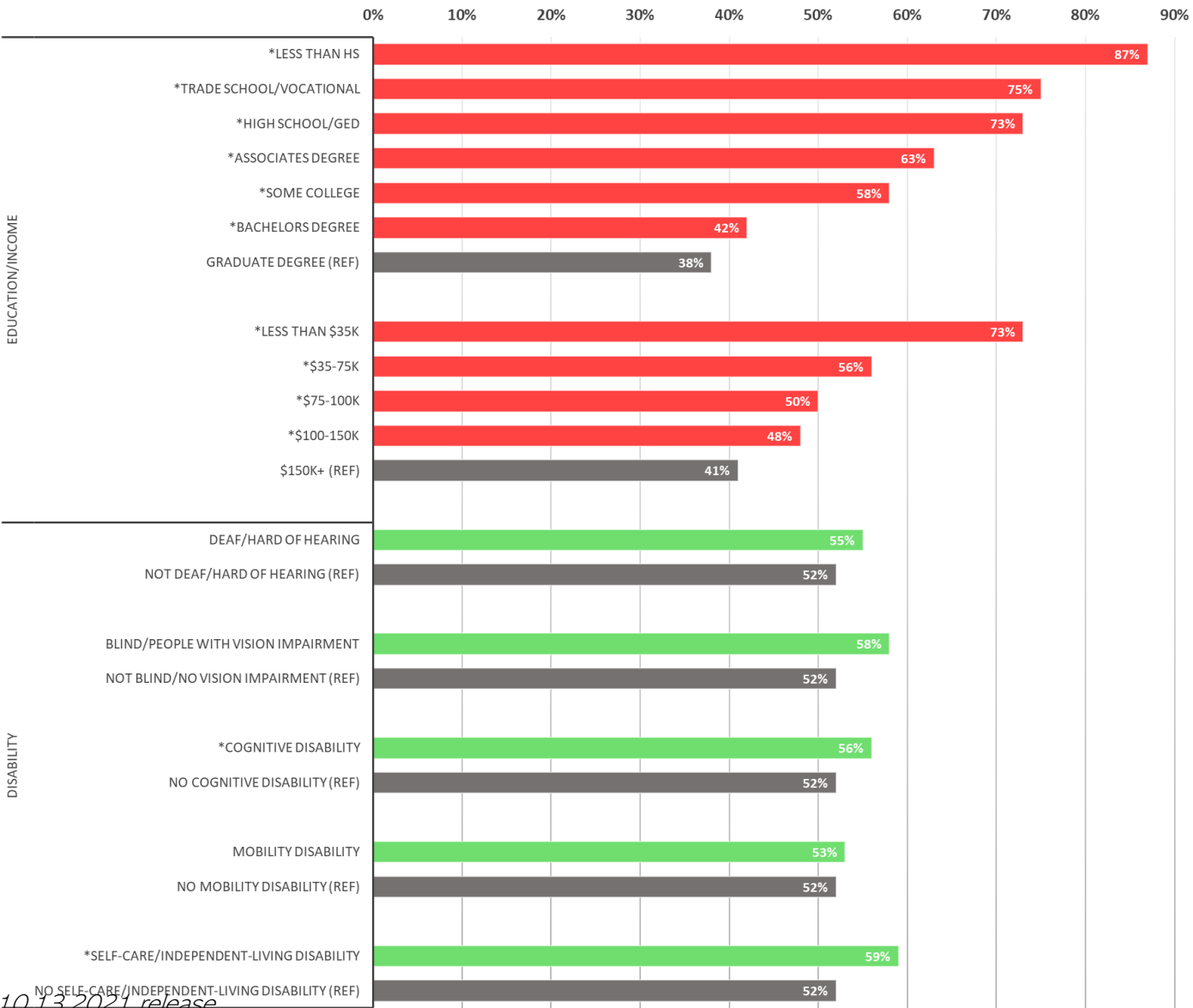
Respondents in the following groups were **more likely** to work outside the home:

- Hispanic/Latinx or Other race, nH/nL
- Speak a language other than English.
- Aged 65 years and older
- Male
- Asexual

Notes: 1) "NH/NL"=non-Hispanic/non-Latinx; 2) "American Indian/Alaskan Native" includes Hispanic/Latinx; 3) ) \* denotes percentage is significantly different ( $p < 0.05$ ) compared to the reference group ("REF" in each category); 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# WORKING OUTSIDE THE HOME BY DEMOGRAPHICS (2 of 2)

**% WORKING OUTSIDE THE HOME AMONG EMPLOYED RESPONDENTS**



Some populations were more likely to work outside of the home, facing greater risk of exposure

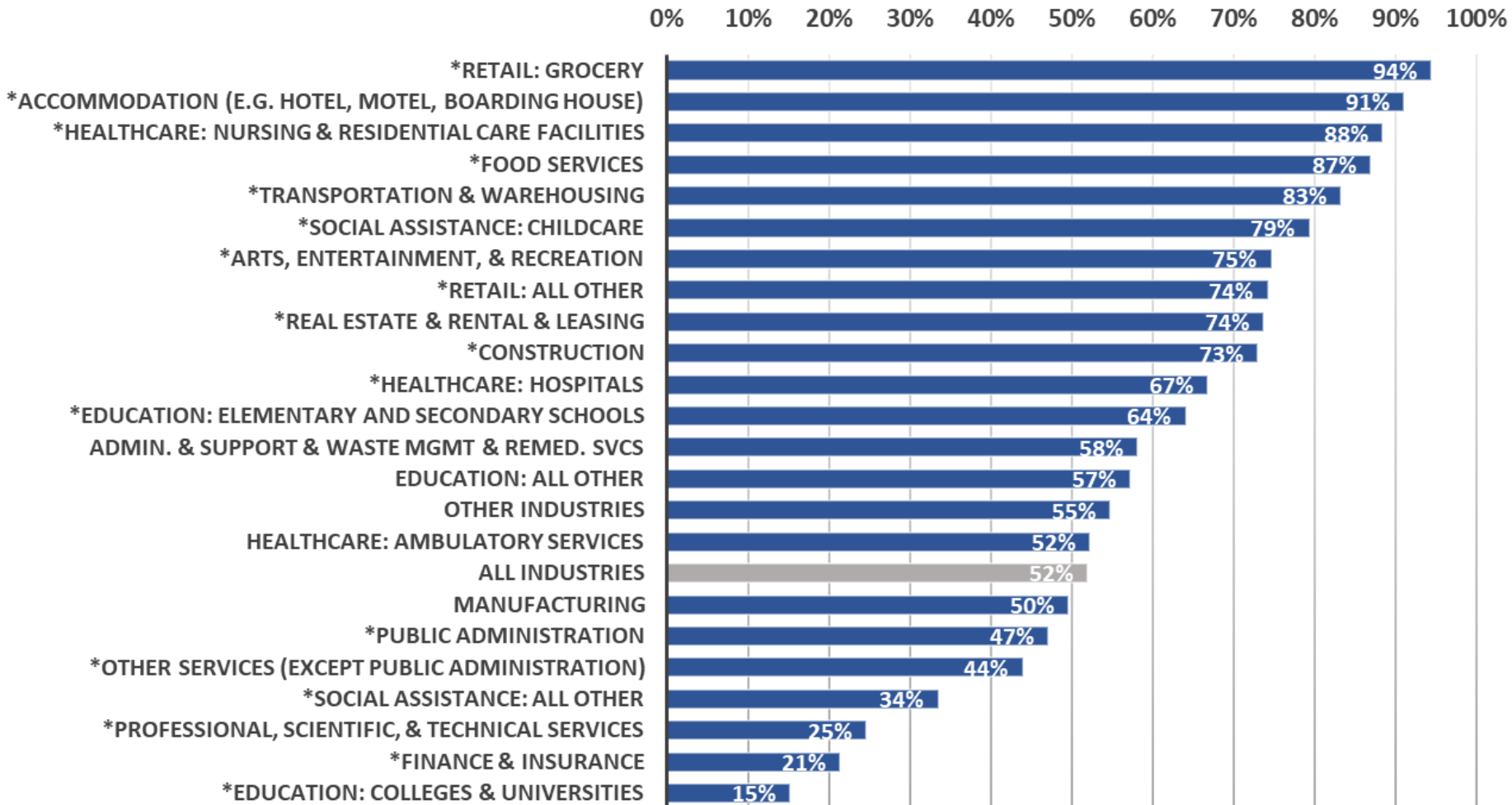
Respondents in the following groups were **more likely** to work outside the home:

- Lower educational attainment
- Lower annual household income
- Those with **cognitive or self-care/ independent-living disabilities**

Notes: 1) "NH/NL"=non-Hispanic/non-Latinx; 2) "American Indian/Alaskan Native" includes Hispanic/Latinx; 3) \* denotes percentage is significantly different ( $p < 0.05$ ) compared to the reference group ("REF" in each category); 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# WORKING OUTSIDE THE HOME BY INDUSTRY GROUP

## WORKING OUTSIDE THE HOME: % AMONG EMPLOYED ADULTS BY INDUSTRY GROUP



The percentage varied widely across industries ranging from

- 94% in Retail: Grocery to
- 15% in Education: Colleges and Universities

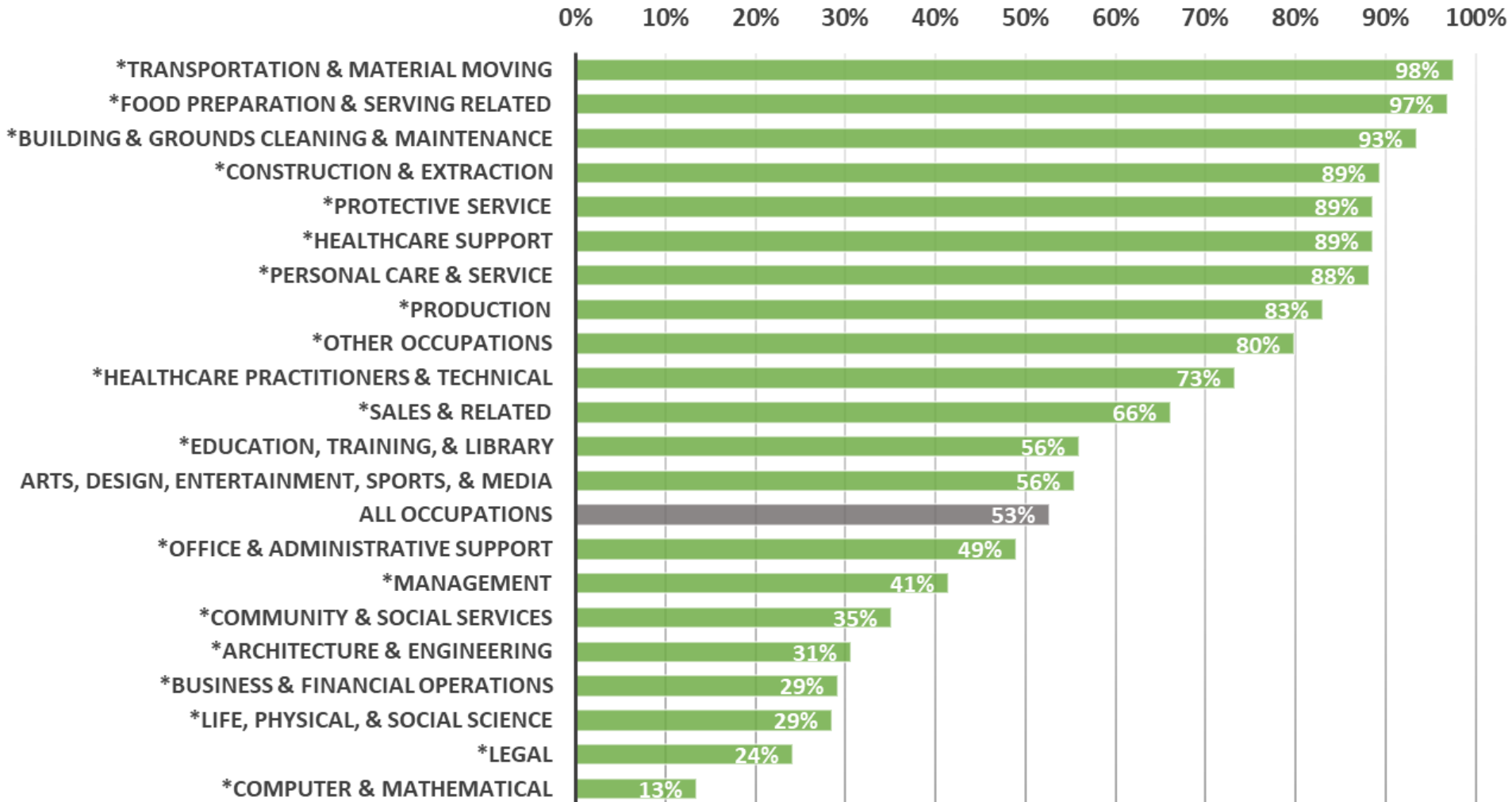
Even within certain industries, the percentage who worked outside the home varied by subgroup. For example in healthcare:

- 88% in Nursing and Residential Care Facilities
- 67% in Hospitals
- 52% in Ambulatory Services

Notes: 1) "Retail: Grocery" = Grocery Stores, Specialty Food Stores, Gas Stations [includes those with convenient stores]; 2) "Other Industries" = Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 3) \*denotes percentage is statistically significantly different ( $p < 0.05$ ) compared to the average percentage for all industries; 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# WORKING OUTSIDE THE HOME BY OCCUPATION GROUP

## WORKING OUTSIDE THE HOME: % AMONG EMPLOYED ADULTS BY OCCUPATION GROUP



The percentage varied across occupation groups ranging from 98% in Transportation and Material Moving to 13% in Computer and Mathematical occupations.

Working outside the home was most common among those working in:

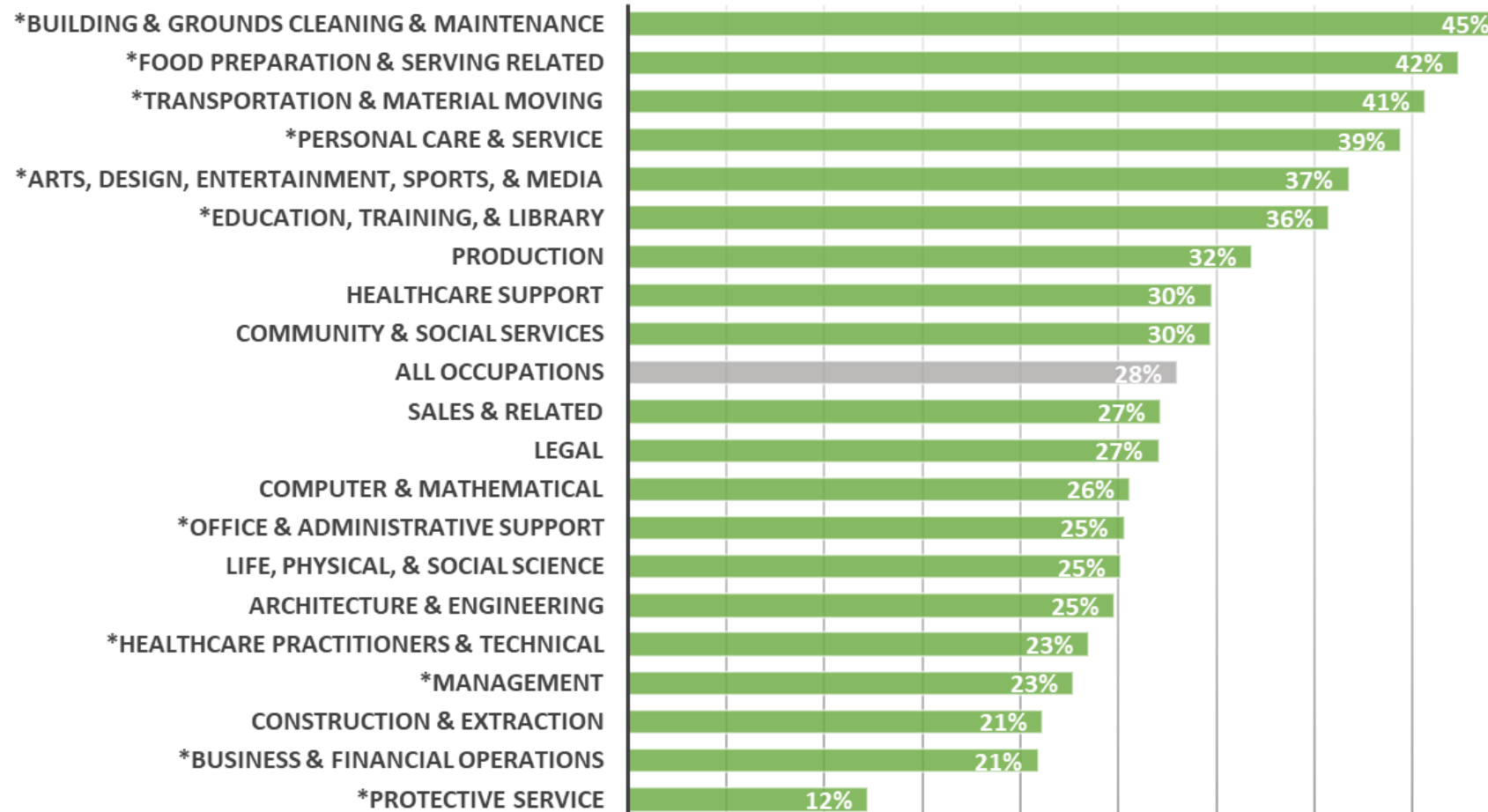
Transportation & Material Moving, followed by Food Prep & Serving Related; and Building & Grounds Cleaning & Maintenance occupations

Notes: 1) Occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "Other Occupations" = Farming, Fishing & Forestry; "Installation, Maintenance, & Repair"; and Military occupations.; 3) \*denotes percentage is statistically significantly different ( $p < 0.05$ ) compared to the average percentage for all occupations; 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# "VERY" WORRIED ABOUT GETTING INFECTED WITH COVID-19 BY OCCUPATION GROUP

## "VERY" WORRIED ABOUT GETTING INFECTED WITH COVID-19: % AMONG ADULTS WORKING OUTSIDE THE HOME BY OCCUPATION GROUP

0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50%



Over a quarter (28%) of adults working outside the home were "very" worried about getting infected with COVID-19.

Being "very" worried was **most common among** respondents working in: **Building & Grounds Cleaning and Maintenance**, followed by **Food Preparation & Serving Related**, and **Transportation & Material Moving** occupations.

Notes: 1) Occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "Other Occupations" = Farming, Fishing & Forestry; "Installation, Maintenance, & Repair"; and Military occupations.; 3) Percentage for "Other Occupations" suppressed due to insufficient data; 4) \*denotes percentage is statistically significantly different ( $p < 0.05$ ) compared to the average percentage for all occupations; 5) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# EMPLOYER-PROVIDED PROTECTIVE MEASURES

The five occupation groups below were most likely to be “very” worried about getting infected by COVID-19. They were less likely to have key employer-provided COVID-19 precautions at work .

Overall, among those working outside the home:



77% (3 in 4) of respondents worked in places that provided personal protective equipment (PPE).



67% (2 in 3) of respondents worked in places that implemented social distancing.



44% (2 in 5) respondents worked in places that provided additional health & safety training.



80% (4 in 5) reported having paid sick leave.

Building and Grounds Cleaning & Maintenance	Food Preparation & Serving Related	Transportation & Material Moving	Personal Care & Service	Arts, Design, Entertainment, Sports & Media
58%	59%	71% <sup>^</sup>	72%	57%
34%	55%	51%	46%	64% <sup>^</sup>
24%	35%	29%	39% <sup>^</sup>	19%
49%	52%	65%	61%	65%

Notes: 1) Full occupation breakdowns are provided in the appendix; 2) <sup>^</sup> denotes estimate is not statistically significantly different from the average for all occupations.

# EMPLOYER-PROVIDED PROTECTIVE MEASURES

The following populations were **less likely** to have **key employer-provided COVID-19 precautions** at work and **paid sick leave** :

- Hispanic/Latinx
- Speak a language other than English
- Questioning, undecided, non-binary gender
- Lower educational attainment
- Lower annual household income
- Those with a cognitive disability

For example:



Compared to 77% of respondents who speak only English:

Only **67%** (2 in 3) of respondents who **speak a language other than English** worked in places that **provided PPE**



Compared to 73% of respondents with incomes of at least \$150K:

Only **54%** (1 in 2) of those with incomes of **less than \$35K** worked in places that **implemented social distancing**.



Compared to 45% of White, nH/nL respondents:

Only **37%** (1 in 3) of **Hispanic/Latinx** respondents worked in places that **provided additional health & safety training**.

**Adequate paid sick leave** is essential to mitigating the spread of COVID



Compared to **86%** of respondents **with a graduate degree**:

Only **52%** (1 in 2) of respondents with **less than a high school** education reported having **paid sick leave**.

# KEY TAKEAWAYS

The CCIS captured important information on the disparate impact of the pandemic on subgroups of Massachusetts workers.

- Findings revealed **disparities in the economic impact** of the pandemic with certain populations more likely to report job loss, reduced hours or leave due to, for example, businesses closing or in order to care for children. Workers in occupations not able to be done remotely were more likely to experience disruptions to employment.
- A person's **work may be a risk factor for COVID-19**. Throughout the pandemic some workers have had to leave home to do their jobs, facing increased risk of exposure. In the CCIS, employed respondents working outside the home were nearly twice as likely to report testing positive as those working from home and commonly reported work-related reasons for not being able to socially distance.
- Findings suggest that **work may contribute to observed COVID-19 inequities** in Massachusetts. Certain populations were more likely to work outside the home and less likely to have key workplace COVID-19 protections or paid sick leave, putting them at increased risk of work-related exposure.

# DATA TO ACTION

Key Finding: The effect of COVID-19 on workers in Massachusetts has been severe, and has disproportionately impacted specific groups of workers.

Heard: As we move continue to make efforts to increase vaccination efforts state-wide, we need to recognize that work is an important contributor to COVID-19 risk.

## Actions Taken:

- Community Liaisons to the 20 Vaccine Equity Initiative (VEI) communities are being briefed on the CCIS employment findings. We are also adding contextual information about the employment make-up of the 20 communities prioritized in the VEI to help increase vaccinations of high-risk worker populations in those communities.
- Advocating for employee centric considerations in vaccination uptake efforts such as appointments available outside of regular working hours, increased mobile units, educating employers about available financial resources to cover sick leave, engaging with a vaccine ambassador, etc. and developed a one-page guide for ways employers can increase COVID-19 vaccinations (<https://www.mass.gov/doc/ways-to-increase-covid-19-vaccination/download>).

# DATA TO ACTION

Key Finding: While vaccination is a crucial preventive measure, CCIS findings suggest that there is still work to be done around improving access to other key employer-provided COVID-19 precautions, especially for workers in high-risk occupations that cannot be done remotely (i.e. public facing, work in close proximity to others, work indoors).

Heard: As vaccination efforts in Massachusetts increase, we must also ensure that other COVID-19 prevention strategies (such as ventilation, personal protective equipment (PPE), social distancing, and health and safety training) are in place in workplaces consistent with state laws. Employers have a responsibility to minimize risk of workplace exposure to known hazards associated with serious illness or death.

## Actions Taken:

- Messages of the importance of non-vaccine related COVID-19 mitigation measures are included in outreach to employers, municipalities, and community groups.
- Tools have been provided to help the Community Liaisons in the 20 Vaccine Equity Initiative support their communities in obtaining mitigation measures such as PPE.

# DATA TO ACTION

Key Finding: Availability of paid sick time varies by industry and occupation, as well as between different demographic groups.

Heard: Having paid sick time enables workers to stay home if feeling sick, or recover from related symptoms, benefiting the individual and also reducing risk of workplace transmission. Lack of paid sick time may limit access to vaccination and result in low vaccination rates among certain groups.

## Actions Taken:

- As part of outreach to employers, municipalities, and community groups, DPH is sharing information about state and federal financial resources that can assist businesses who don't currently provide paid sick leave to all employees. Funding is provided to cover paid leave for workers to get vaccinated or recover from symptoms of the vaccine. For more information: <https://www.mass.gov/doc/ways-to-increase-covid-19-vaccination/download> ”



# PARENTS & FAMILIES

Elizabeth Beatriz, PhD

Justine Egan, MPH

Allison Guarino, MPH

Beatriz Pazos Vautin, MPH

# FRAMING MATTERS

Despite the common belief that the responsibility for raising children lies solely with parents, the data shows us that parents and families interact with systems that can limit access to financial means and social support, due to racism and inequitable access to jobs, education, housing and childcare. Access to equitable resources increases the ability of parents to financially provide for their children and create socially supportive environments.

# PARENTS & FAMILIES

Compared to respondents who were not parents, parents or guardians of children were:



35% more likely to be worried about any expenses



35% more likely to lose their jobs or reduce hours/take leave.

- Nearly 1 in 3 who lost their jobs cited needing to take care of children as a reason.



50% more likely to be worried about housing



More likely to report delaying healthcare

# PARENTS & FAMILIES



## Parents have unique needs:

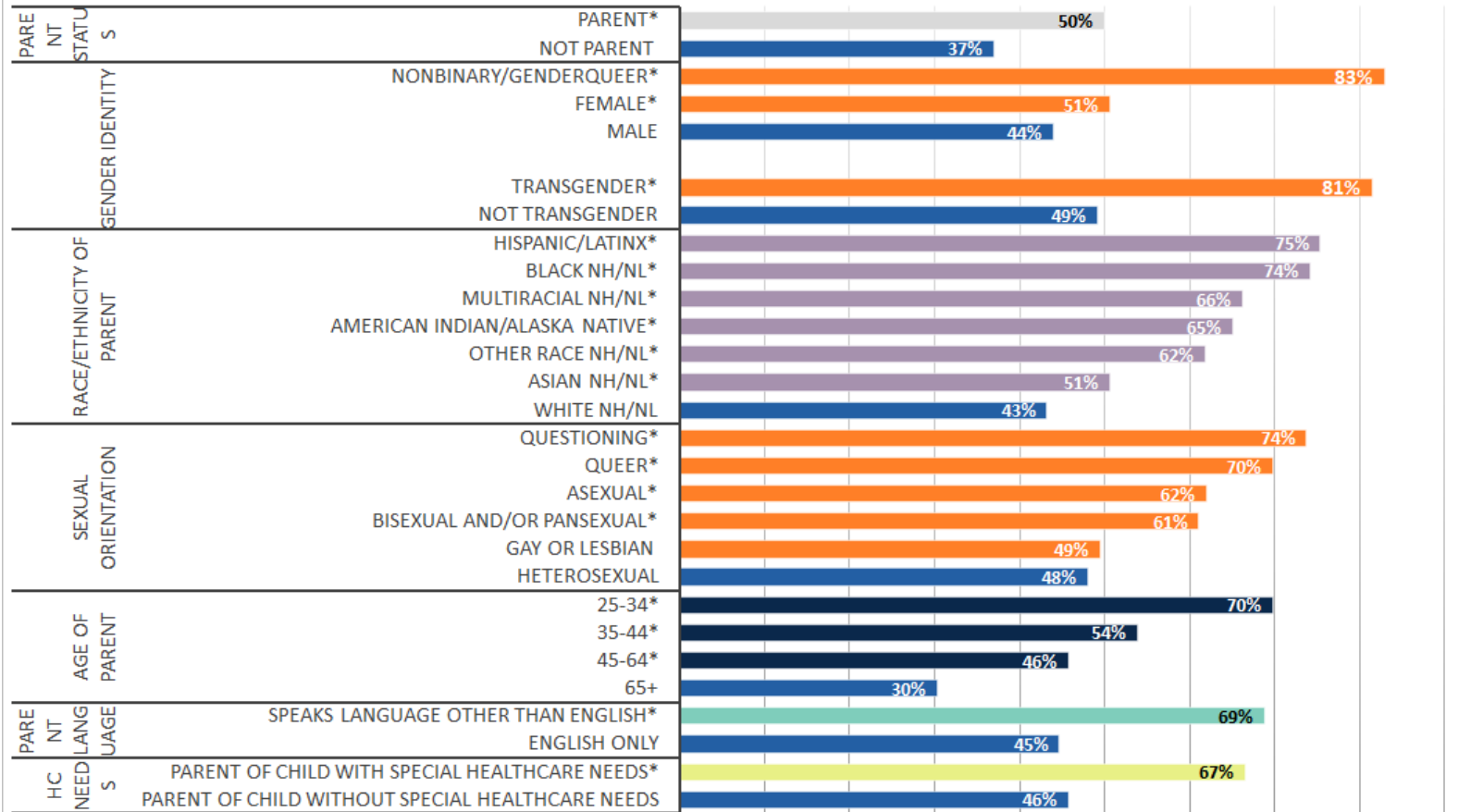
- **Nearly 1 in 5** parents reported being worried about accessing available and affordable childcare.
- Parents were more likely to report **15+ days of poor mental health** in the last month, but less likely to request certain mental health resources.
- Parents worried about **expenses**, housing, and childcare were more likely to report 15+ days of poor mental health.
- Parents of children with **special healthcare needs** were more likely to report being concerned about meeting basic needs compared to all parents, particularly for food and healthcare.

# EXPENSES AMONG PARENTS

1 in 2 parents reported being worried about expenses, including housing, utilities, vehicle, and debt expenses. Parents are 35% more likely to be worried about expenses than non-parents.

**% Parents Worried about Any Expenses in Next Few Weeks**

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%



Prior to the pandemic, MA had the 4th highest level of income inequality and 1 in 9 children were living below the FPL.<sup>1</sup> The pandemic has further exacerbated financial strains on families.

As many as 3 in 4 parents in certain groups were worried about expenses:

- Nonbinary/genderqueer parents
- Transgender parents
- Hispanic/Latinx parents
- Black nH/nL parents
- Queer and Questioning parents
- Parents aged 25-34

<sup>1</sup>Source: American Community Survey 2019; Analysis by talkpoverty.org  
 Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4)\* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and educational distribution of those ≥25 years.

# HOUSING NEEDS AMONG PARENTS

1 in 3 parents reported being worried about housing expenses.



Prior to the pandemic, Massachusetts had the second highest number of homeless families with children in the US and the number of homeless families with children in MA nearly doubled from 2007-2018.<sup>1</sup>

While parents and non-parents were equally worried about having to move in the next few months, parents were almost twice as likely to say that this was due to not being able to pay the rent or mortgage.

Unstable housing impacts the whole family, including the mental health and education of children.

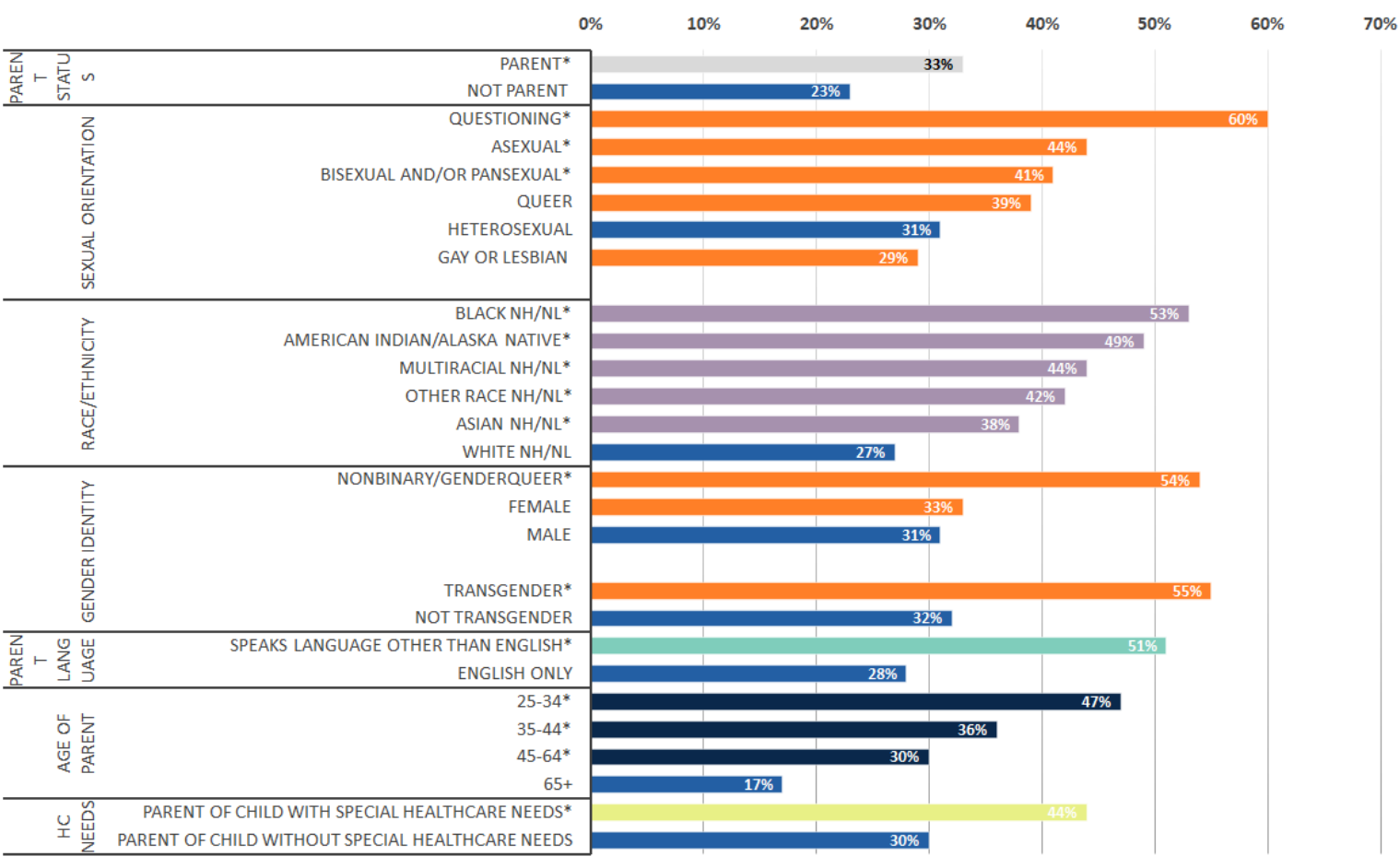


Source: (1) US Department of Housing and Urban Development. (2018). *The 2018 Annual Homeless Assessment Report to Congress*. Retrieved from: <https://files.hudexchange.info/resources/documents/2018-AHAR-Part-1.pdf> Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and educational distribution of those  $\geq 25$  years.

# HOUSING NEEDS AMONG PARENTS

1 in 3 parents reported being worried about housing expenses.

% Parents Worried about Housing Expenses in Next Few Weeks



Certain groups of parents are more likely to report being worried about housing expenses:

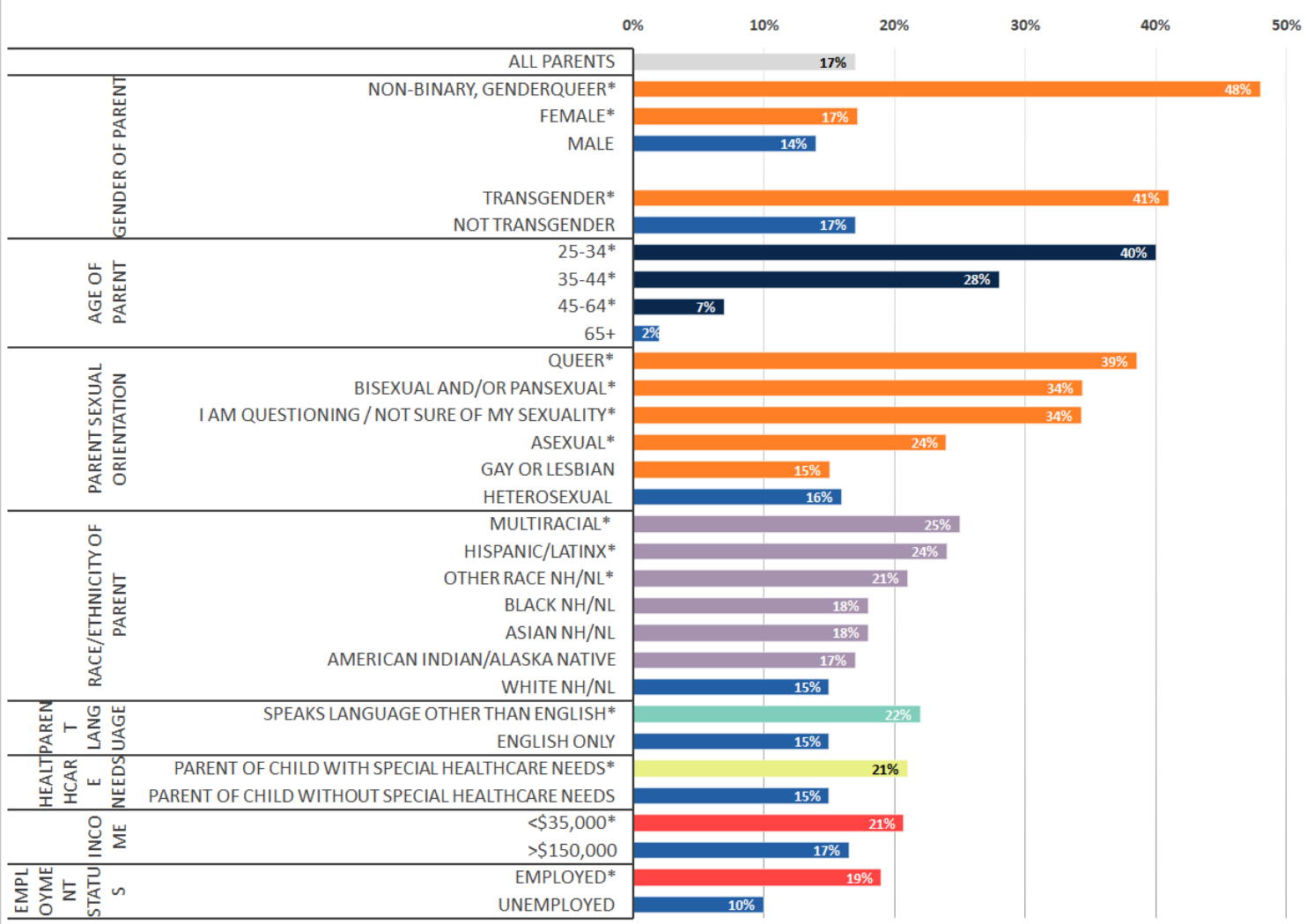
- Questioning, Asexual, Bisexual and/or Pansexual parents
- Parents of Color
- Non-binary/genderqueer parents
- Transgender parents
- Parents who speak a language other than English
- Parents under the age of 45
- Parents of children with special healthcare needs

Source: (1) US Department of Housing and Urban Development. (2018). *The 2018 Annual Homeless Assessment Report to Congress*. Retrieved from: <https://files.hudexchange.info/resources/documents/2018-AHAR-Part-1.pdf> Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and educational distribution of those ≥25 years.

# AVAILABLE & AFFORDABLE CHILDCARE

Nearly 1 in 5 parents reported being worried about accessing available and affordable childcare.

% Parents Worried about Available Childcare Services



Lack of childcare may affect employment, parent and child mental health, and access to healthcare.

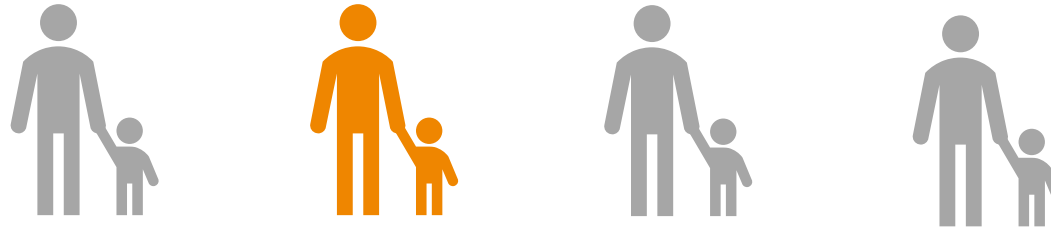
Several groups of parents reported rates that were 2 times higher than parents overall:

- Non-binary/genderqueer parents
- Transgender parents
- Parents under 35 years old
- Queer, Bi-sexual and/or Pansexual, and parents questioning their sexuality

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and educational distribution of those ≥25 years.

# EMPLOYMENT & CHILDCARE

1 in 4 employed parents lost their jobs or reduced hours/took leave.  
Parents were 35% more likely to report reducing hours/taking leave than non-parents.



43% of parents who reduced hours/took leave and 32% of parents who lost jobs listed needing to take care of children as a reason.

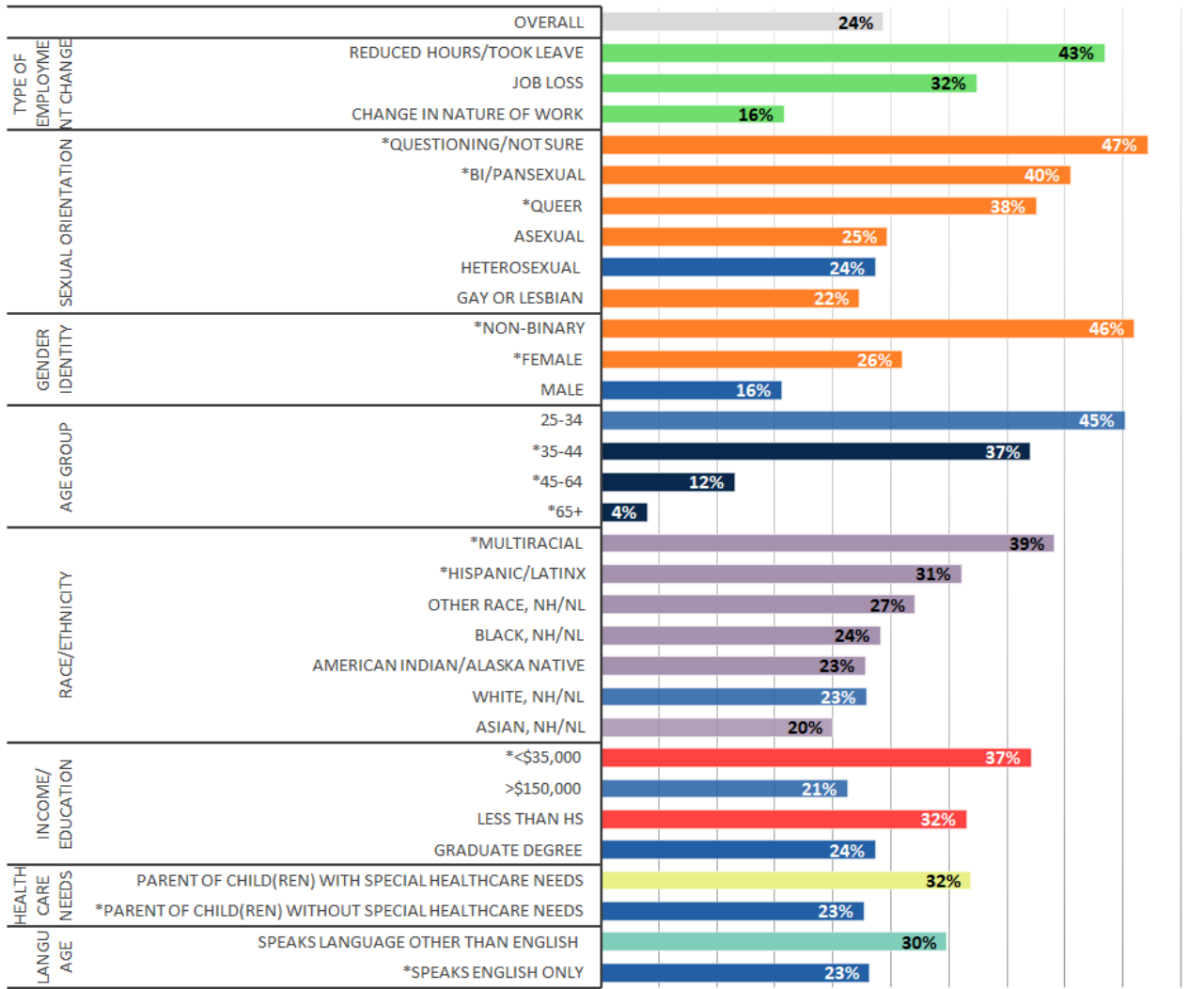
Populations who have experienced inequities in other areas face additional challenges in balancing parental stressors. The following parental groups were more likely to report a change in status or nature of employment in order to take care of children:

- Questioning of sexual orientation, **Bisexual** and/or **Pansexual**, and **Queer** parents
- **Non-binary**, and **female** parents
- **Younger** parents
- **Hispanic/Latinx** and **Multiracial** parents
- Parents with **lower income** or **lower education**
- Parents of **children with special healthcare needs**

# EMPLOYMENT & CHILDCARE

**CHANGE IN EMPLOYMENT TO TAKE CARE OF 'MY CHILD/CHILDREN':  
% AMONG PARENTS EMPLOYED IN THE PAST YEAR**

0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50%



**1 in 4** employed parents lost their jobs or reduced hours/took leave.  
Parents were **35%** more likely to report reducing hours/taking leave than non-parents.

1 in 3 parents who lost their jobs and 2 in 5 parents who reduced hours cited needing to take care of children as a reason. The following groups were more likely to report a change in status or nature of employment to take care of children:

- Parents who were questioning, bisexual or pansexual, and queer
- Parents who were Female or Non-binary.
- Younger parents (Note: Almost half of parents aged 25-34 and over 1 in 3 parents aged 35-44 who had a change in employment cited caring for children as a reason – suggesting that parents of young and school-age children face higher childcare burdens.)
- Hispanic/Latinx and Multiracial parents
- Parents with lower income or lower education
- Parents of children with special healthcare needs
- Parents who speak languages other than English

Notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and educational distribution of those ≥25 years

# WORRIED ABOUT EXPENSES AMONG PARENTS

Top 10 communities reporting the highest rates of expenses concerns are listed below.  
All communities had at least 30 parents answer this question on the survey.

HOUSING		
Rank	COMMUNITIES	%
1	Lawrence	62%
2	Somerset	54%
3	Marlborough	54%
4	Brockton	54%
5	Springfield	52%
6	N. Adams	51%
7	New Bedford	50%
8	Everett	49%
9	Revere	49%
10	Lowell	49%

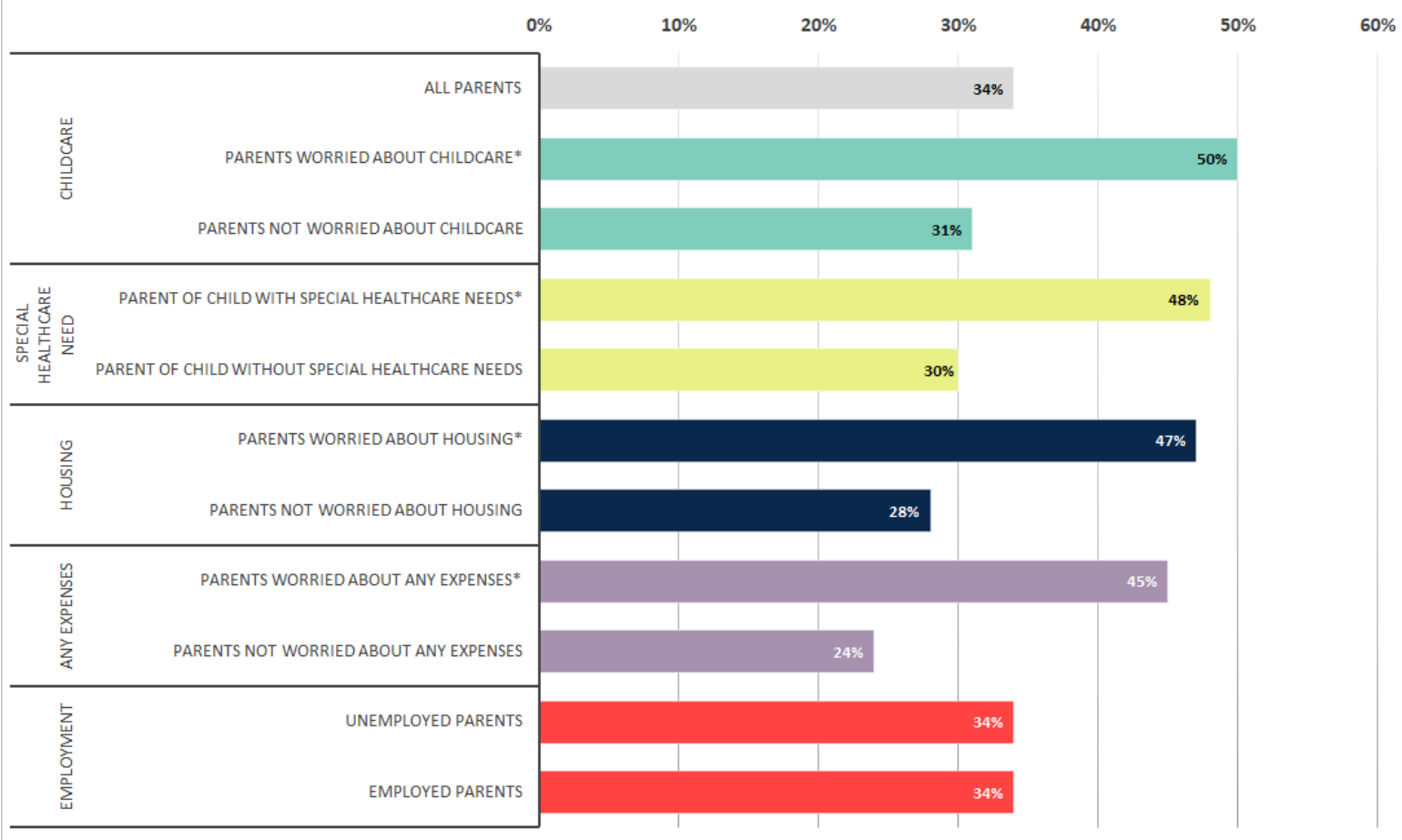
UTILITIES		
Rank	COMMUNITIES	%
1	Lawrence	64%
2	Pittsfield	58%
3	New Bedford	56%
4	Lowell	52%
5	Chelsea	51%
6	Somerset	50%
7	Haverhill	49%
8	Fitchburg	48%
9	Everett	48%
10	Randolph	46%

ANY EXPENSES		
Rank	COMMUNITIES	%
1	Lawrence	86%
2	Everett	79%
3	Lowell	71%
4	Pittsfield	70%
5	Springfield	69%
6	Revere	68%
7	Brockton	68%
8	New Bedford	68%
9	Haverhill	68%
10	West Springfield	68%

# MENTAL HEALTH OF PARENTS

Parents worried about basic needs and parents of children with special healthcare needs are more likely to report poor mental health for 15+ days in the past month

**% Parents Reporting 15+ Days of Poor Mental Health Last Month**



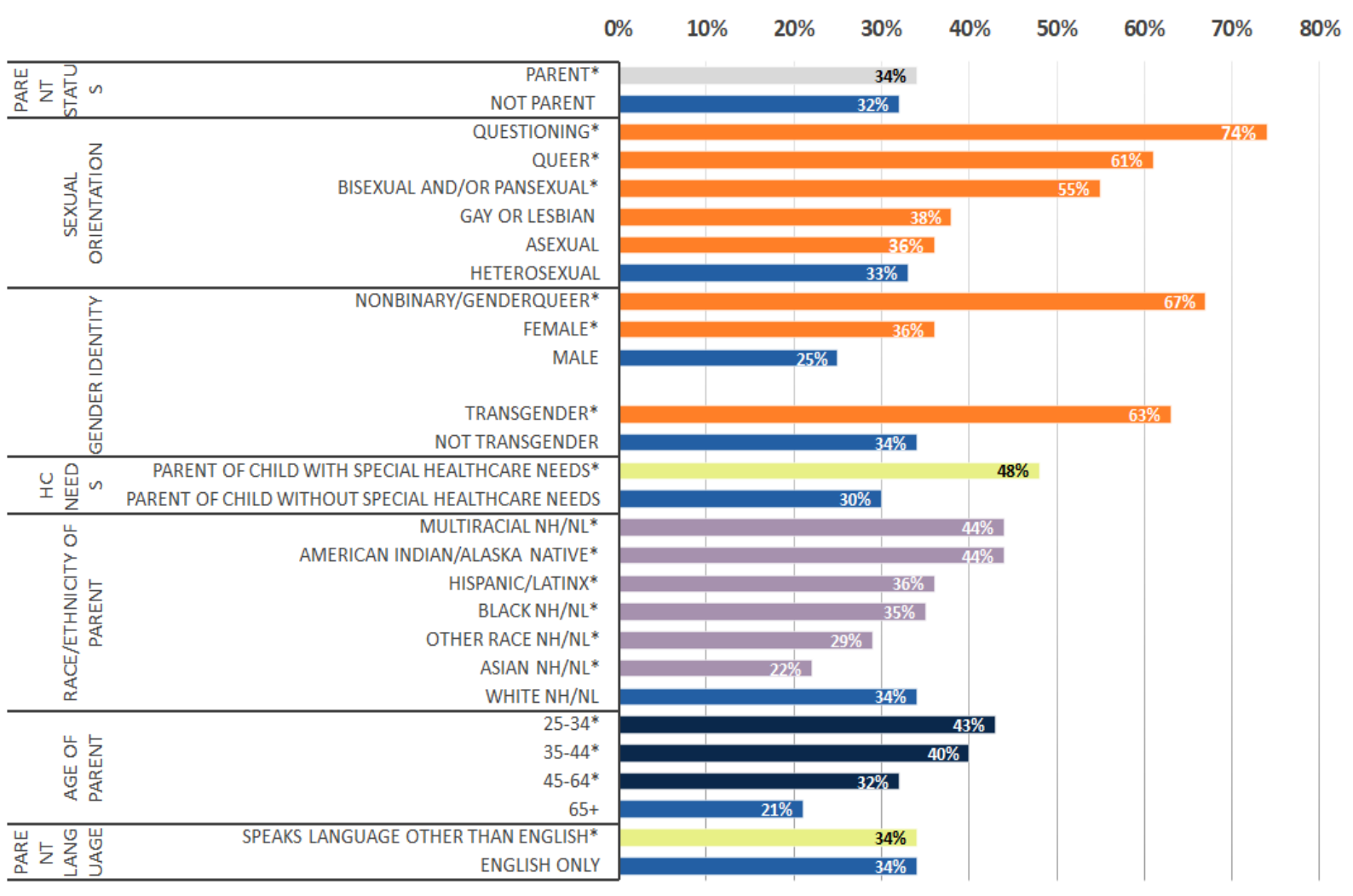
Parents worried about housing, childcare, or any expenses are between 61% - 88% more likely to report poor mental health. Poor parental mental health affects not only parents, but also their children.

Parents of children with special healthcare needs are 60% more likely to report poor mental health. Parents of children with special healthcare needs who do not have access to respite care or programs outside of the home to support their children may have little time to work, perform household tasks, or rest.

Data notes: 1) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 2) All percentages are weighted to the statewide age and educational distribution of those  $\geq 25$  years.

# MENTAL HEALTH OF PARENTS

% Parents Reporting 15+ Days of Poor Mental Health Last Month



Certain groups of parents are more likely to report poor mental health for 15+ days in the past month:

- Parents of children with **special healthcare needs**
- **Non-binary/genderqueer** parents
- **Female** parents
- **Transgender** parents
- **Queer, questioning, and bisexual/pansexual** parents
- Parents under the **age of 45**
- **American Indian/Alaska Native** parents
- **Multiracial** parents
- Parents with **incomes** under \$35,000

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and educational distribution of those  $\geq 25$  years.

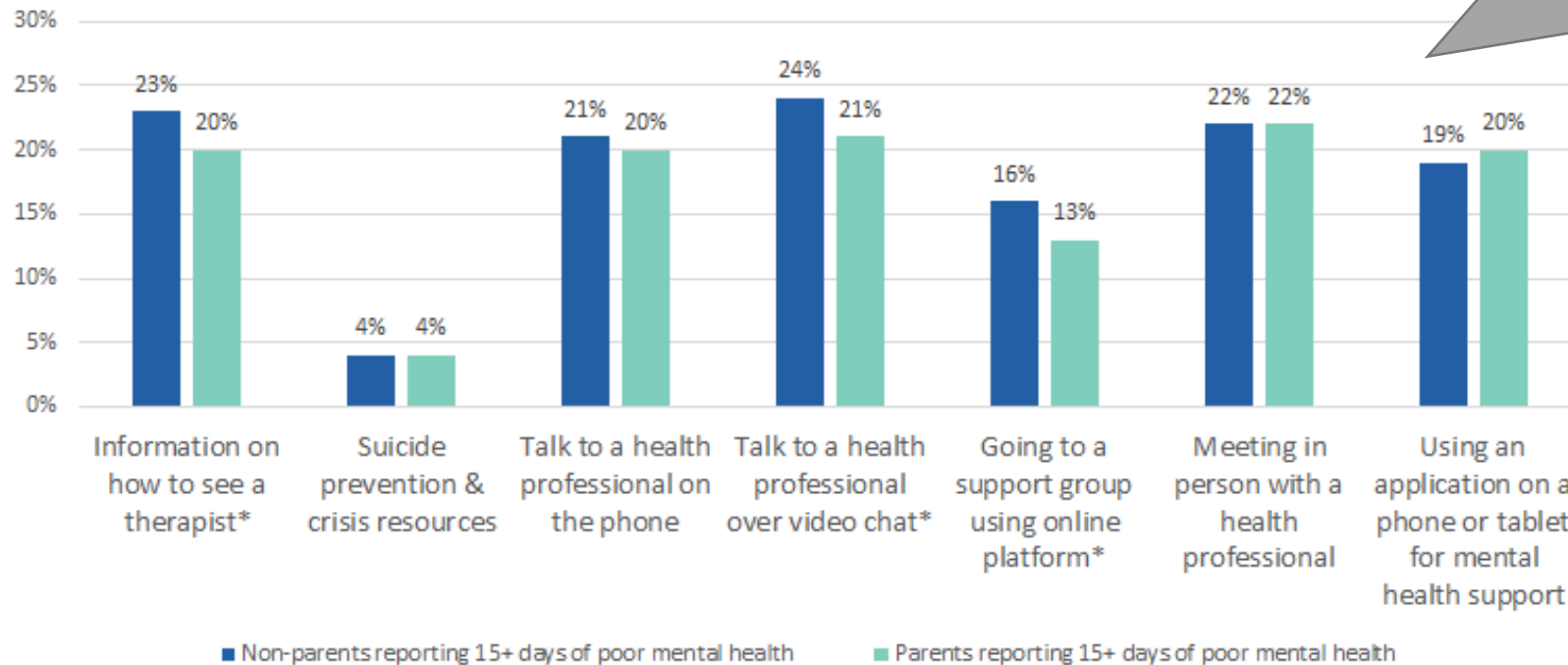
# MENTAL HEALTH RESOURCES: PARENTS

While parents were more likely to report 15+ days of poor mental health than non-parents, they were **less likely** to indicate that mental health resources would be helpful.

Instead they expressed needs for a variety of childcare and basic needs resources:

- "When would I have the time for this with my child home all day every day?"
- "The most helpful thing has been getting a nanny (at tremendous cost) so I could get adequate sleep while ensuring my professional and parental responsibilities are met."
- "Time and childcare. None of the above options matter if I don't have the time and capacity to engage with them."
- "Childcare, income assistance. These will help my mental health the most."

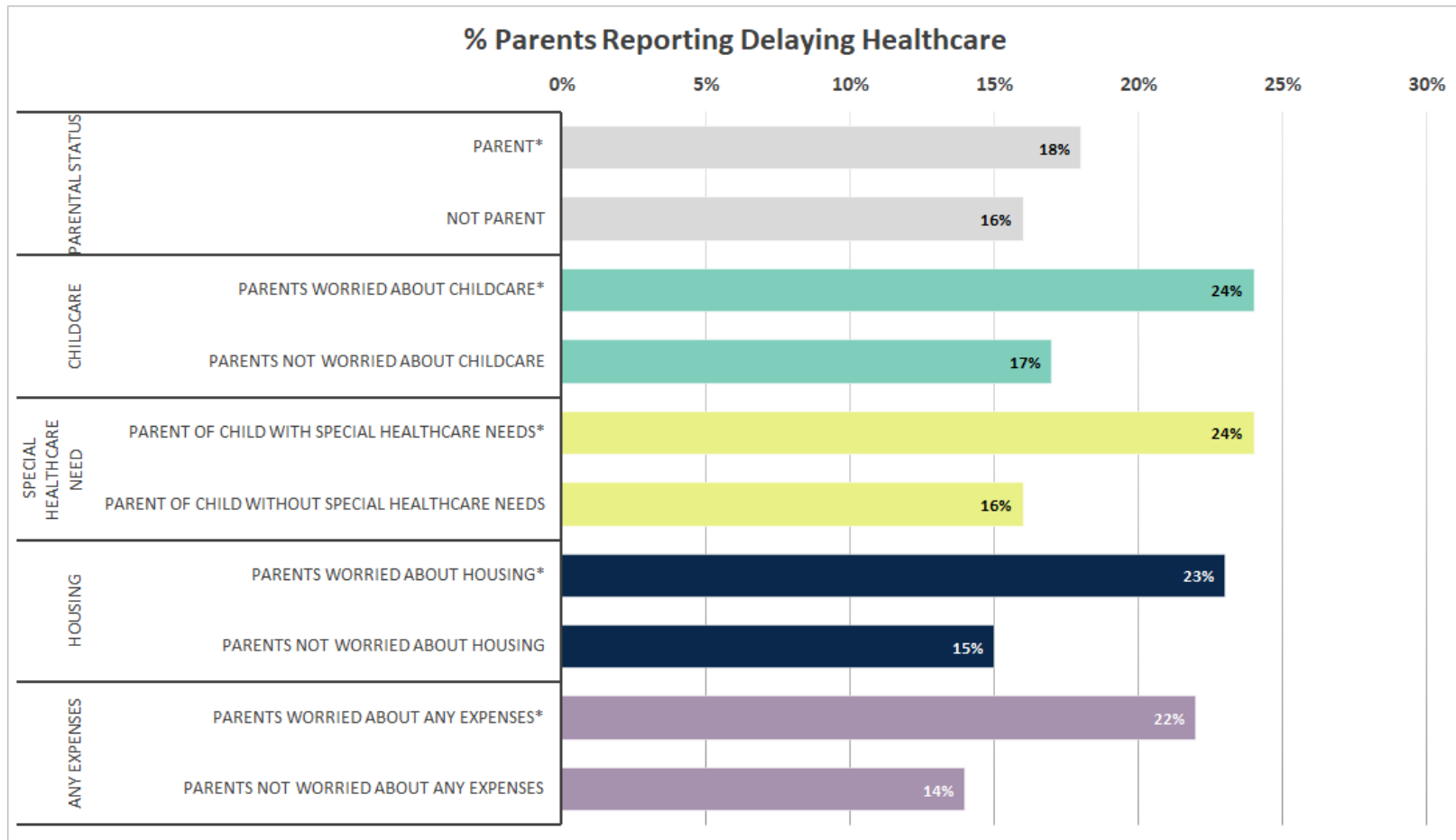
Which of these resources would be most helpful to you right now to help you with your mental health and well-being?



Data notes: 1) \* denotes rate is significantly different ( $p < 0.05$ ) between parents and non-parents; 2) All percentages are weighted to the statewide age and educational distribution of those  $\geq 25$  years.

# HEALTHCARE ACCESS & DELAYS: PARENTS

Parents were more likely to delay healthcare than non-parents.



Parents worried about childcare, expenses, and housing and parents of children with special healthcare needs were especially likely to delay healthcare.

The most common reasons for delaying care were:

1. Appointment cancelled, delayed or wait was too long\*
2. Worried about getting COVID-19 from seeing doctor in-person
3. Worried couldn't afford the care or insurance didn't cover it\*
4. Didn't have time for appointment
5. Didn't have a private place for a phone call or video chat.

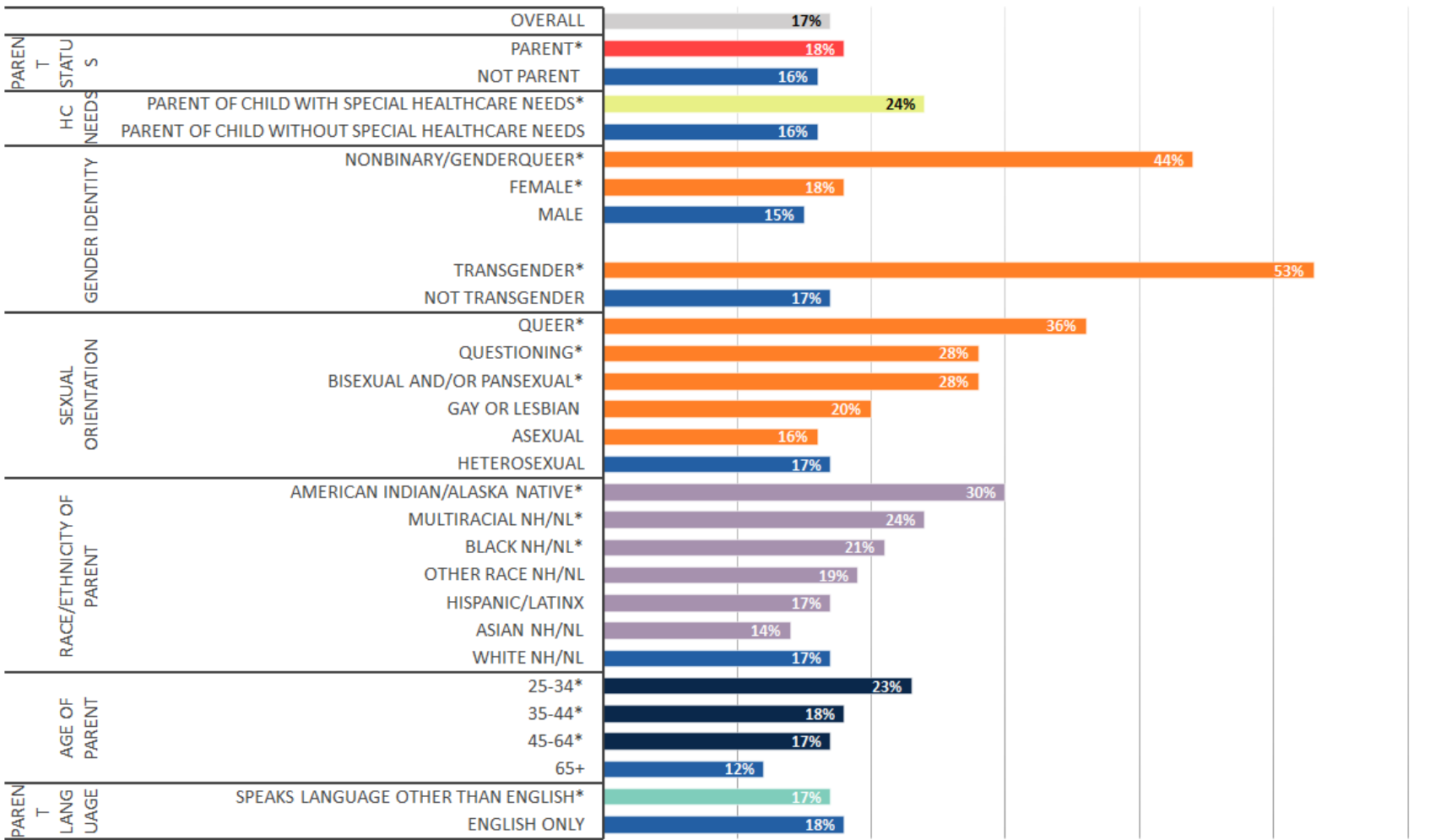
\*Indicates significantly higher among parents than non-parents

Data notes: 1)\*)\* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 2) All percentages are weighted to the statewide age and educational distribution of those  $\geq 25$  years.

# HEALTHCARE ACCESS & DELAYS: PARENTS

% Parents Reporting Delaying Care

0% 10% 20% 30% 40% 50% 60%



Certain groups of parents are more likely to report delaying care:

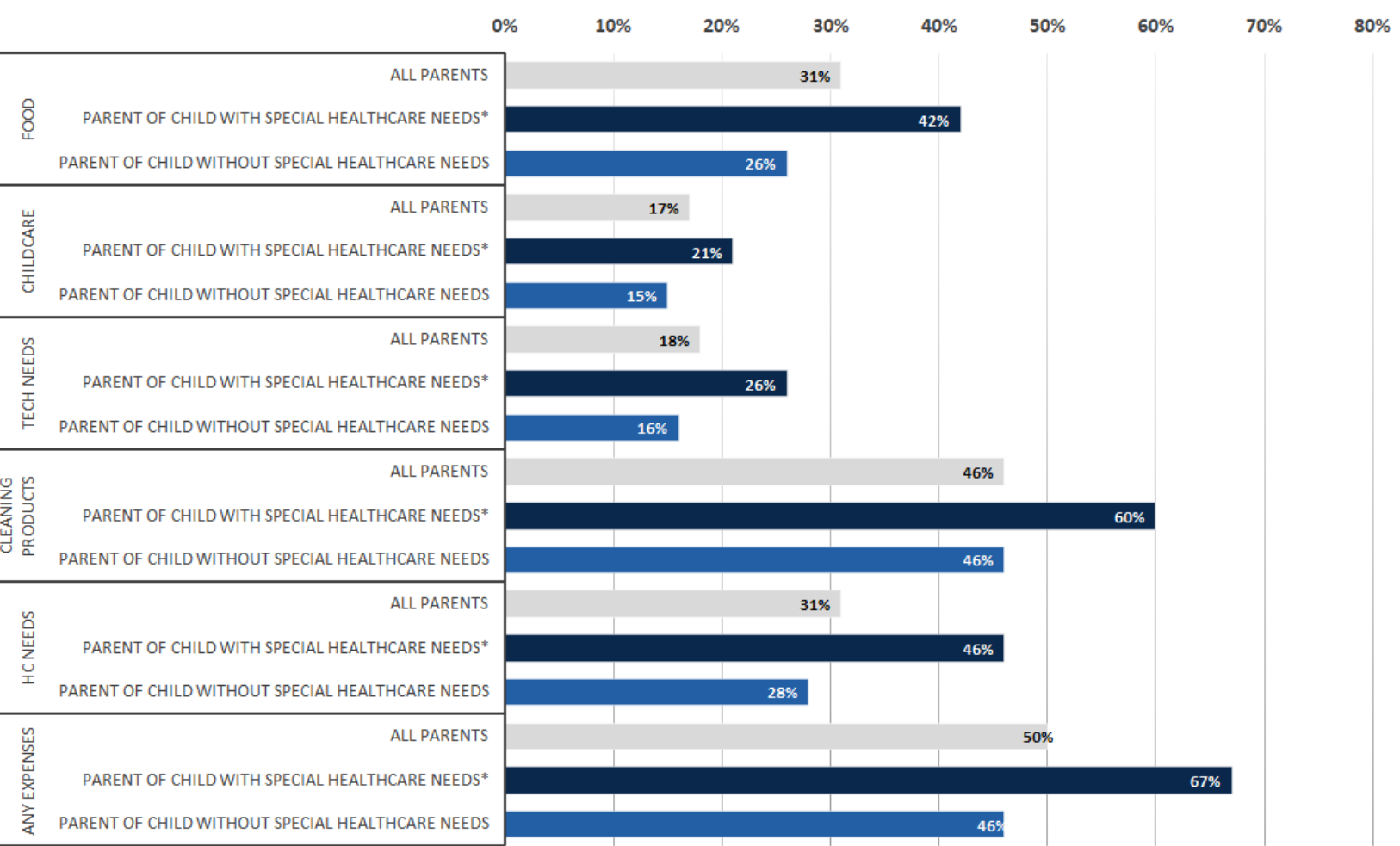
- Parents of children with **special healthcare needs**
- **Non-binary/genderqueer** parents
- **Female** parents
- **Transgender** parents
- **Queer, questioning, and bisexual/pansexual** parents
- **American Indian/Alaska Native** parents
- **Multiracial** parents
- **Black nH/nL** parents
- **Parents under the age of 45**

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and educational distribution of those  $\geq 25$  years.

\* denotes rate is significantly different compared to the reference group

# PARENTS OF CHILDREN WITH SPECIAL HEALTHCARE NEEDS

**% Parents concerned about Basic Needs, by Special Healthcare Needs**



Parents of children with special healthcare needs are more likely to report being concerned about basic needs, including food, childcare, technology needs, cleaning products, and healthcare needs compared to all parents.

Parents of children with special healthcare needs are **nearly 2x more likely** to be worried about food.

Data notes: 1) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 2) All percentages are weighted to the statewide age and educational distribution of those  $\geq 25$  years.

# KEY TAKEAWAYS

- Parents were more likely than non-parents to reduce their hours/lose their jobs, to report concerns about expenses and housing, and to delay healthcare.
- Childcare is a major reason why parents have reduced their hours/lost jobs.
- Certain groups of parents - in particular, parents of children with special healthcare needs, non-binary parents, transgender parents, parents of color, parents who speak a language other than English, and parents under the age of 45 are more likely to worry about expenses and childcare.
- Parents who are concerned about expenses or childcare are significantly more likely to report poor mental health.
- Resources typically targeted to those experiencing poor mental health, such as individual or group therapy, may need to be supplemented with, or offered after provision of resources for childcare and income assistance to parents.



# SUBSTANCE USE

Lauren Larochele, MS

Anna Agan, MPH

Hermik Babakhanlou-Chase

Anne Marie Matteucci, PhD, MHA

David Hu, MD, MPH

Arielle Coq, MPH

Lisa Bandoian, MPH

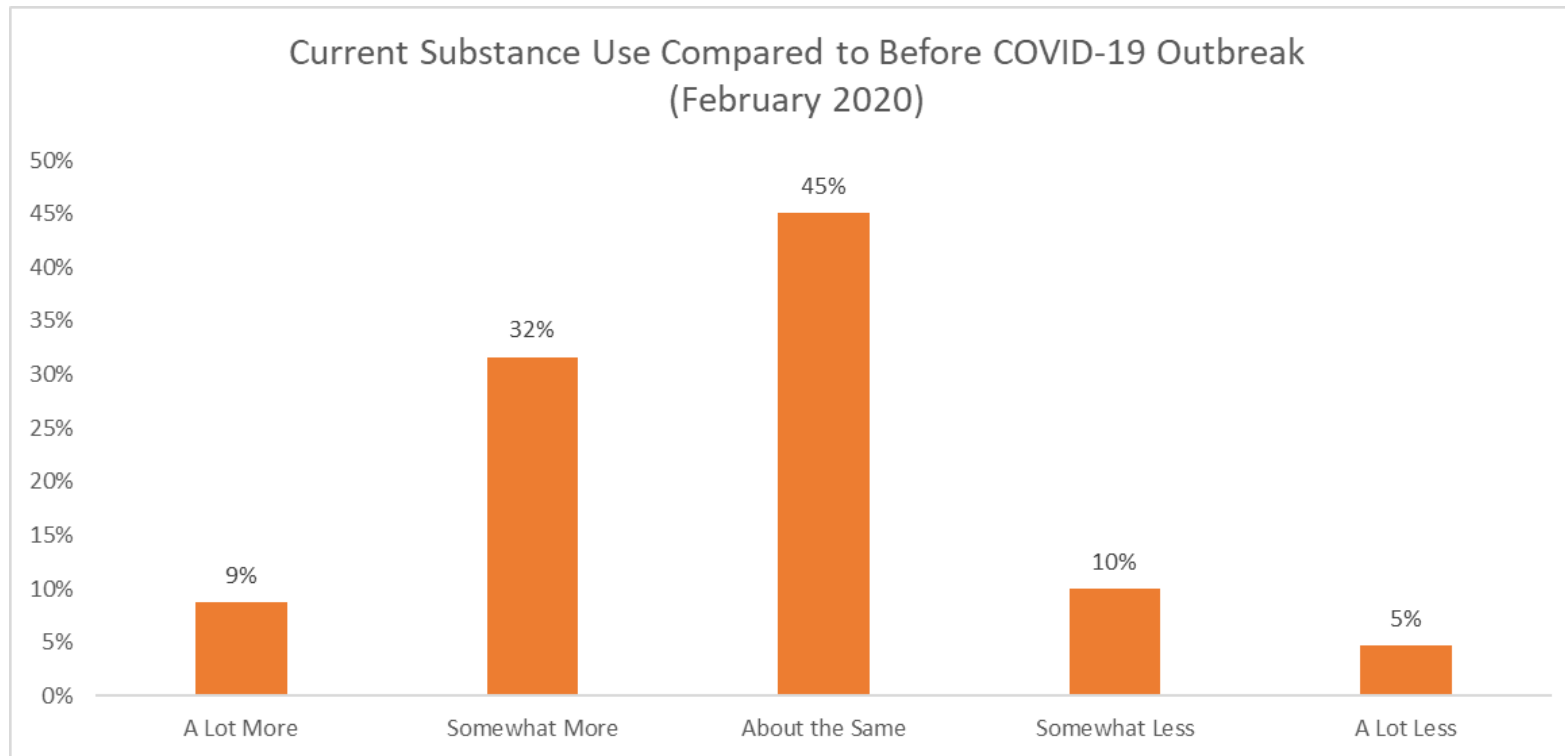
# FRAMING MATTERS

Alcohol appears to be an accepted part of the social fabric in the United States.

Despite the common belief that addiction and overdose can impact anyone, the data shows us that factors including socioeconomic status, race, and other social/environmental factors potentially put people at increased risk of substance use and overdose.

# CHANGE IN SUBSTANCE USE

2 out of 5 MA adults using substances reported increasing their substance use compared to prior to February 2020.



Among respondents who reported substance use in the last 30 days:

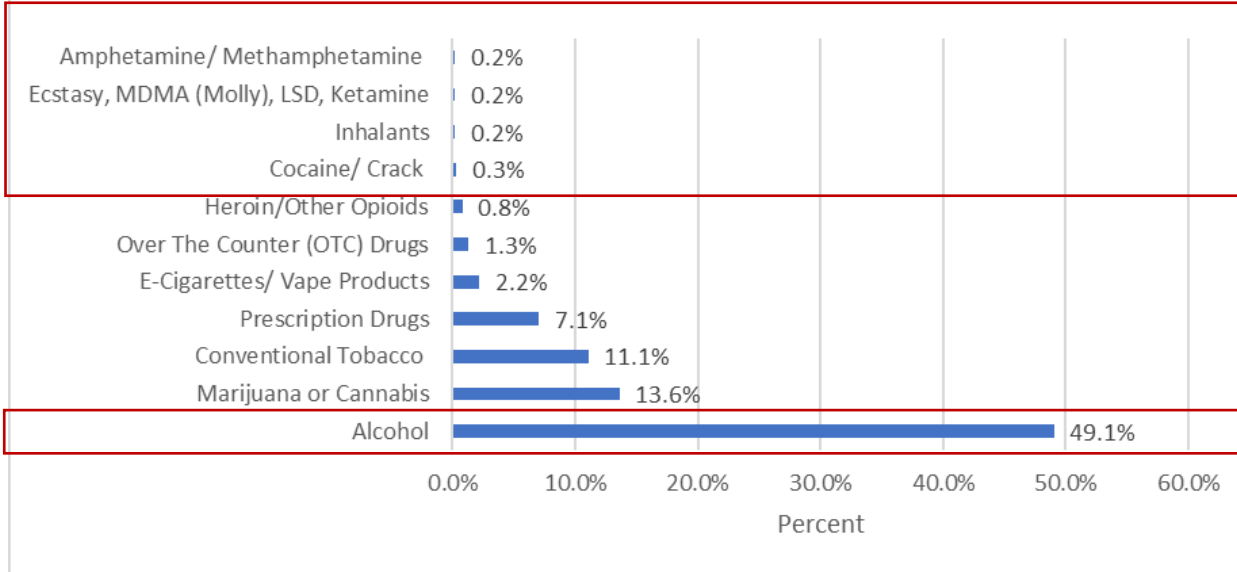
- 41% reported that their current substance use **increased** compared to before the COVID-19 outbreak
- 45% reported that their current substance use has remained **about the same**
- 15% reported that their current substance use **decreased**.

This aligns with trends seen in statewide substance use treatment data.

# SUBSTANCE USE

3 out of 5 MA adults reported using a least one substance/product in the past 30 days.

Percent of People who Reported Using Substances in the past 30 days by Substance

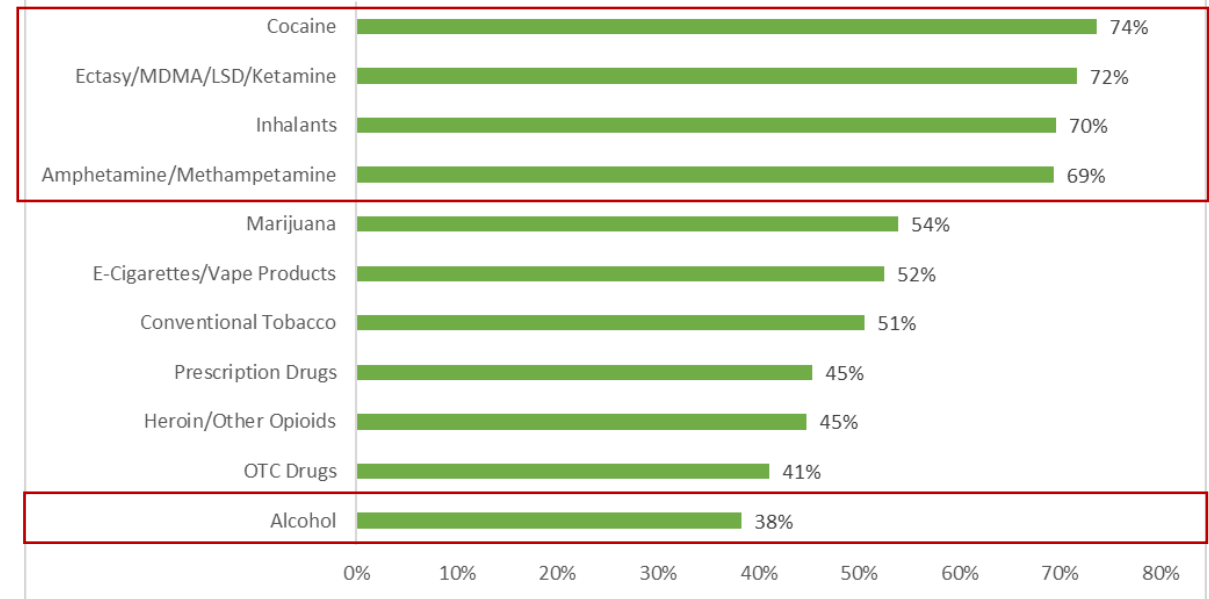


In this survey, respondents reported the most use of the following substances:

- Alcohol
- Marijuana/Cannabis
- Conventional Tobacco

NOTE: Prescription drugs, Other Opioids and OTC drugs may have been taken as prescribed/intended.

Percent of Respondents Reporting Increased Substance Use

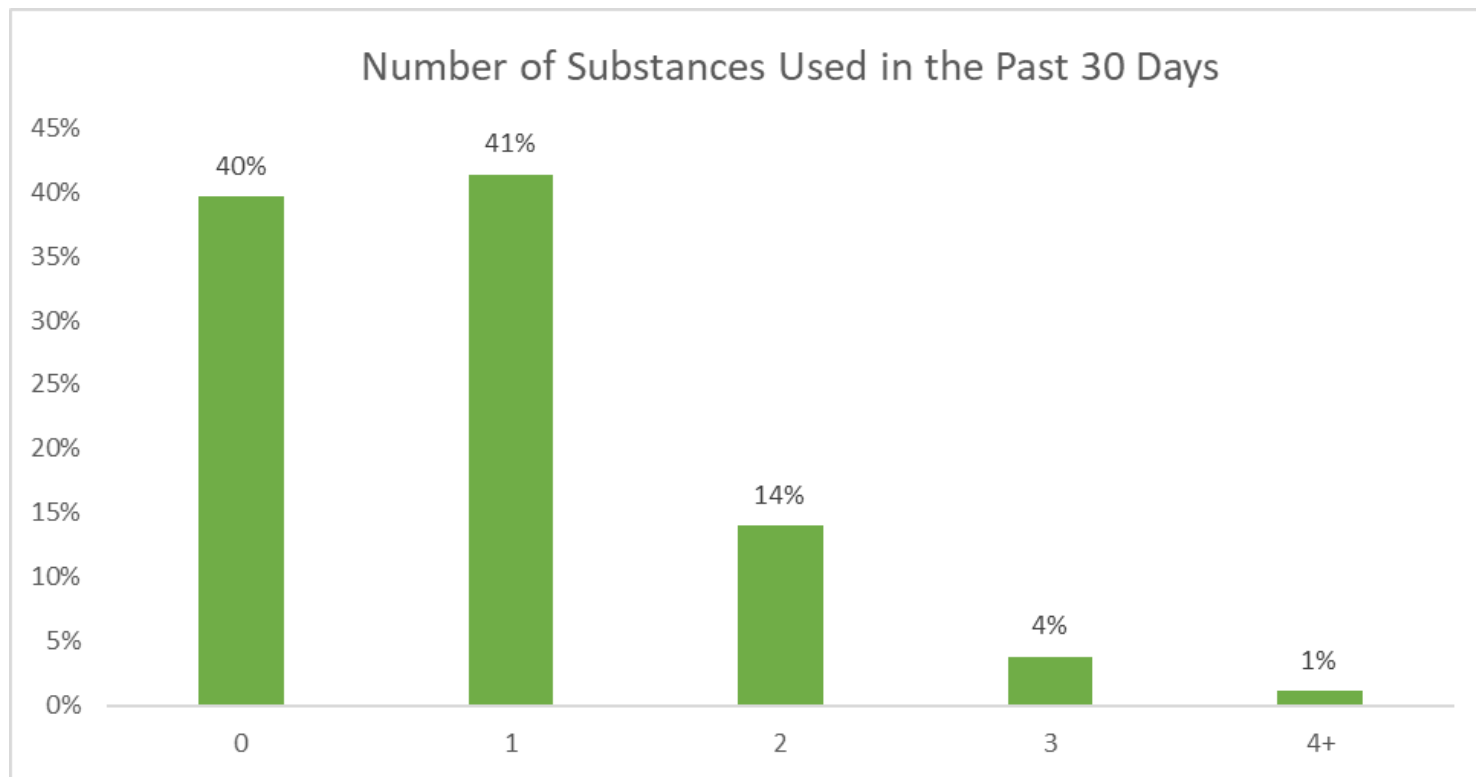


Although respondents could select multiple substances when indicating increased use:

- 74% of respondents who used **cocaine** reported increased use
- 72% of respondents who used **ecstasy/MDMA/LSD/ketamine** reported increased use
- 69% of respondents who used **amphetamine/methamphetamine** or **inhalants** reported increased use

# SUBSTANCE USE

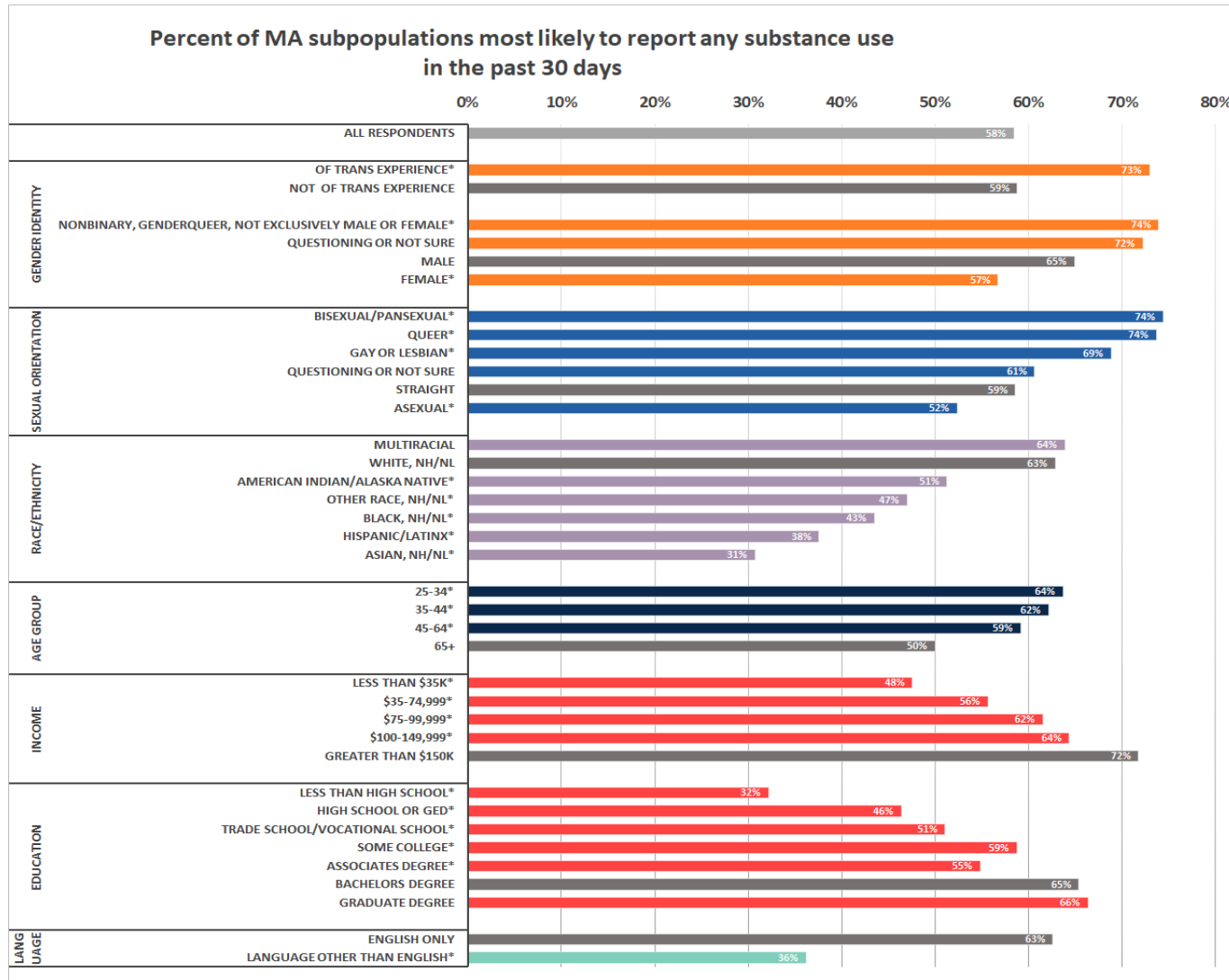
1 out of 5 MA adults reported using 2 or more substances/products in the past 30 days.



- 40% of respondents reported **no substance use** in the past 30 days
- 41% of respondents reported using **only one substance** in the past 30 days
- 19% of respondents reporting using **2 or more substances** in the past 30 days

# SUBSTANCE USE

Over half of MA adults reported using at least one substance in the past 30 days.



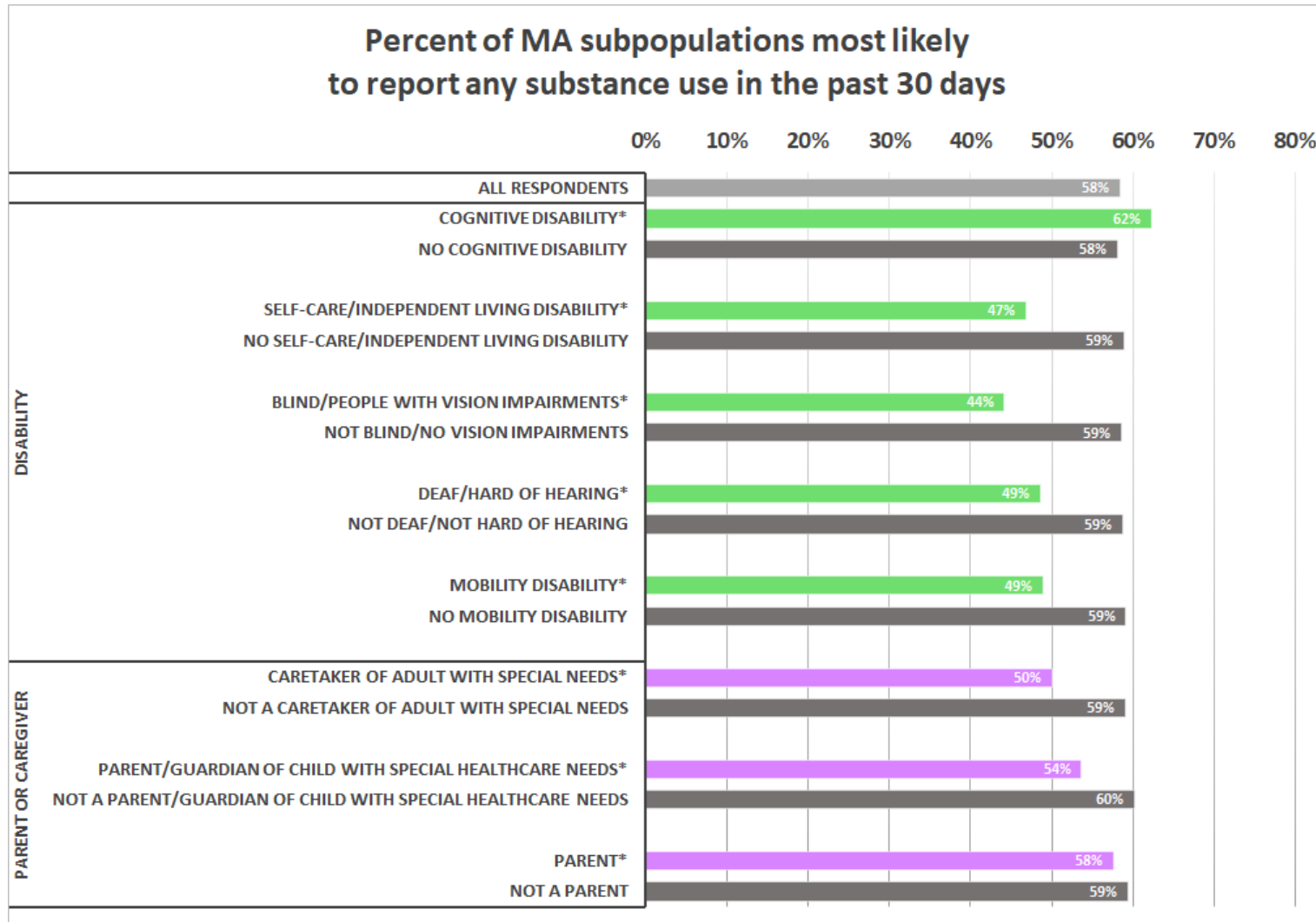
In this survey, the following groups reported the highest rates of substance use:

- Whites, nH/nL
- Respondents of transgender experience
- Nonbinary respondents
- Bisexual/pansexual, queer & gay or lesbian respondents
- Respondents between ages 25-64
- Respondents with income >\$150K
- Respondents with a Bachelors degree
- Respondents who spoke English only

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# SUBSTANCE USE, CONT.

Over half of MA adults reported using at least one substance in the past 30 days.



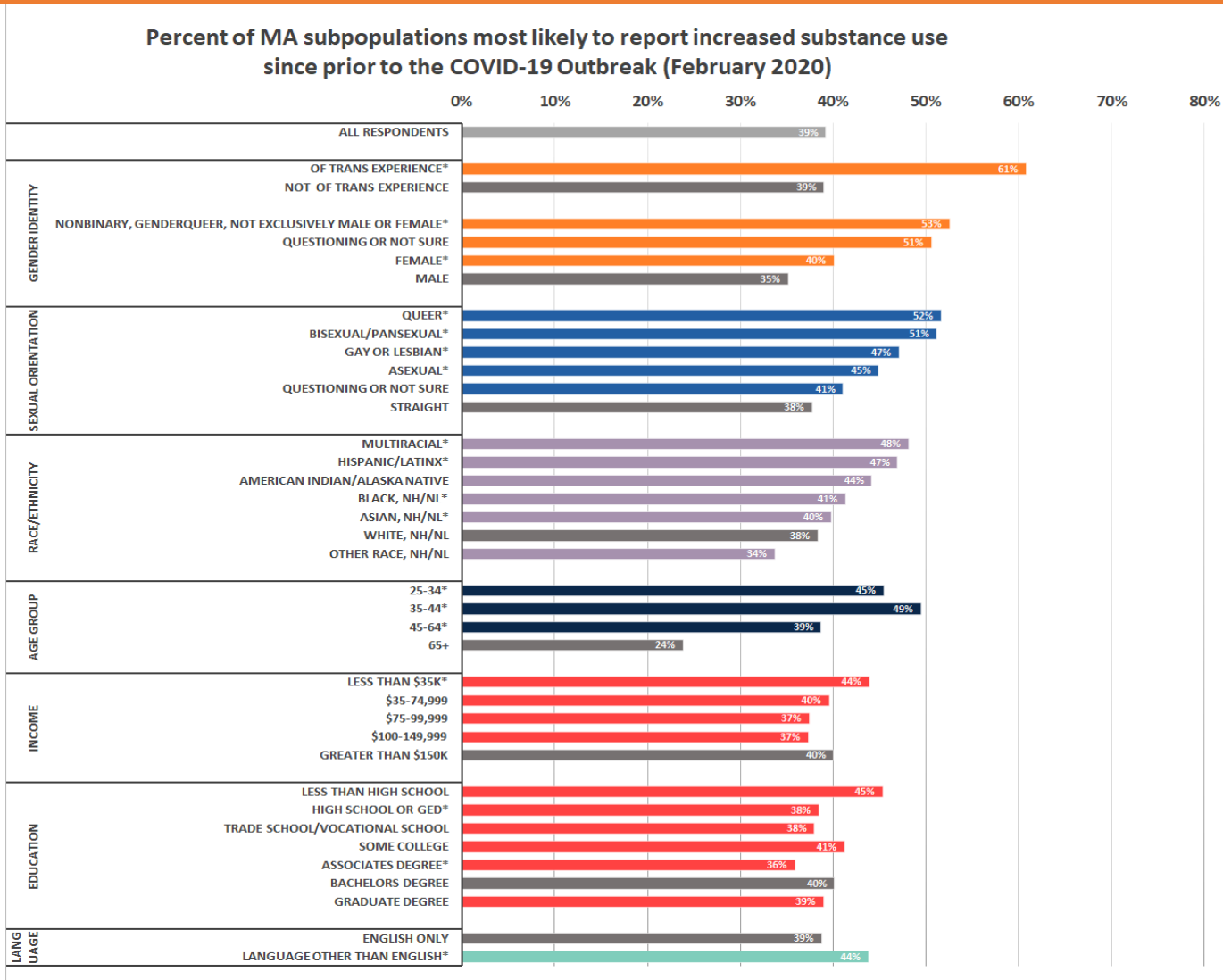
Respondents with a cognitive disability were more likely to report substance use in the past 30 days.

Parents & caretakers of persons/children with special needs were less likely to report substance use in the past 30 days.

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# INCREASED SUBSTANCE USE

2 out of 5 MA adults using substances reported increasing their substance use compared to prior to February 2020.



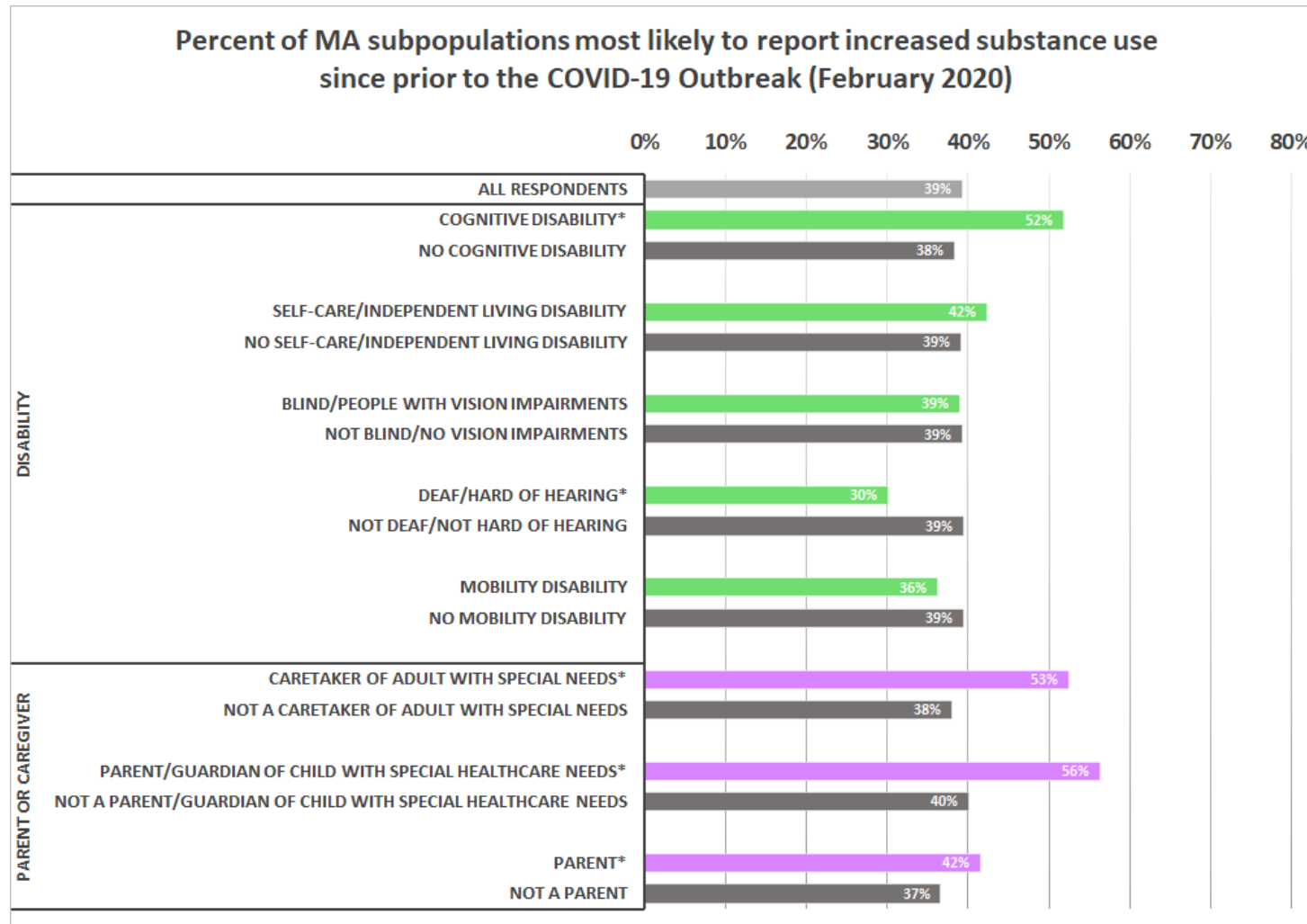
In this survey, the following groups were more like to report having increased substance use prior to the COVID-19 outbreak (February 2020):

- Respondents of transgender experience
- Nonbinary respondents; females
- Bisexual/pansexual, queer, gay or lesbian & asexual respondents
- Multiracial, Hispanic/Latinx, Black nH/nL & Asian, nH/nL respondents
- Respondents between ages 25-64
- Respondents with income <35K
- Respondents who spoke a language other than English

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# INCREASED SUBSTANCE USE, CONT.

2 out of 5 MA adults using substances reported increasing their substance use compared to prior to February 2020.



Respondents with a cognitive disability were more likely to report increased substance use.

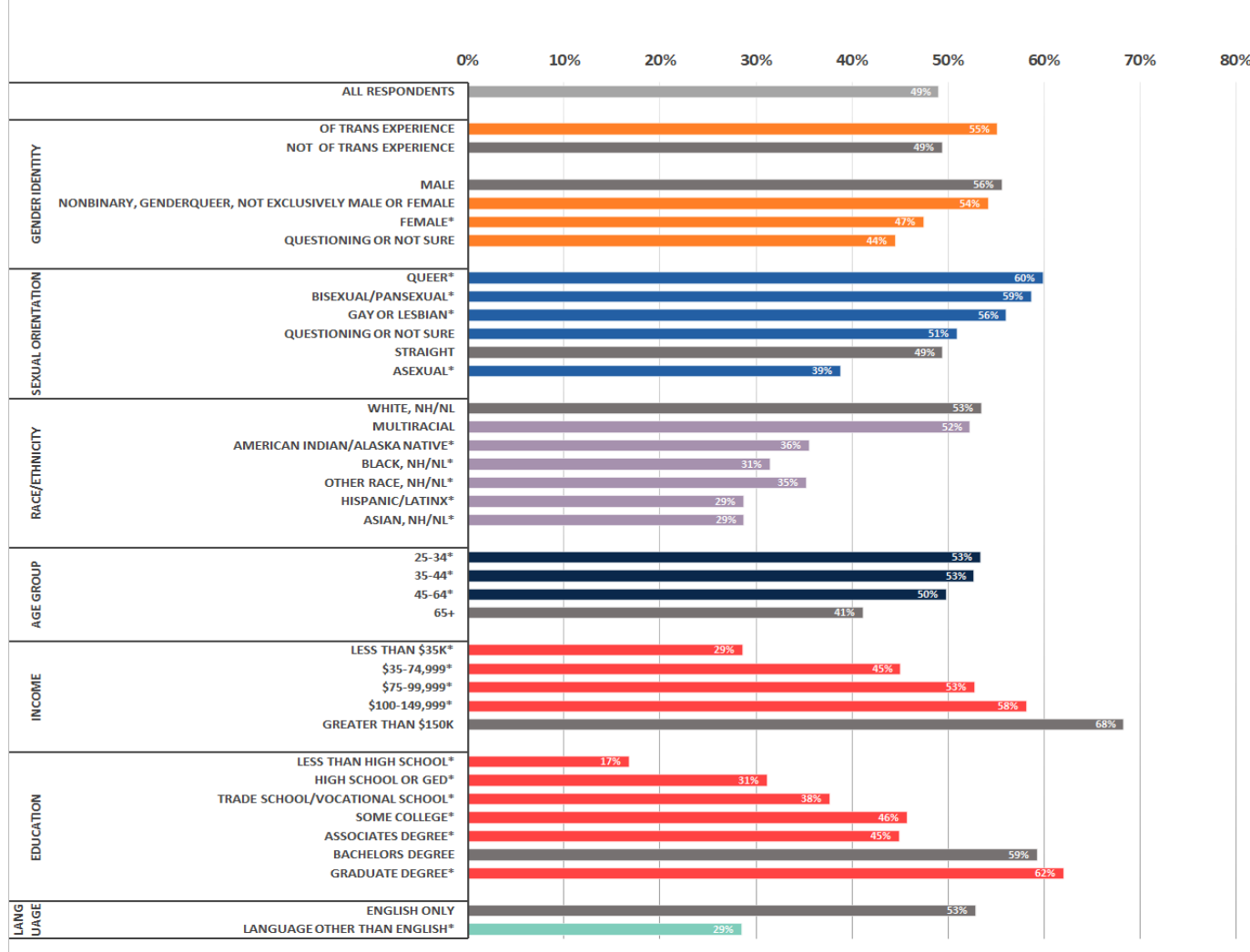
Parents & caretakers of persons/children with special needs were more likely to report increased substance use.

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# ALCOHOL USE

Almost half of MA adults reported alcohol use in the past 30 days.

Percent of MA subpopulations most likely to report alcohol use in the past 30 days



In this survey, the following groups reported the highest rates of alcohol use:

- Males
- Queer, bisexual/pansexual & gay or lesbian respondents
- White, nH/nL respondents
- Respondents between ages 25-44
- Respondents with income >\$150K
- Respondents with a graduate degree
- Respondents who spoke English only

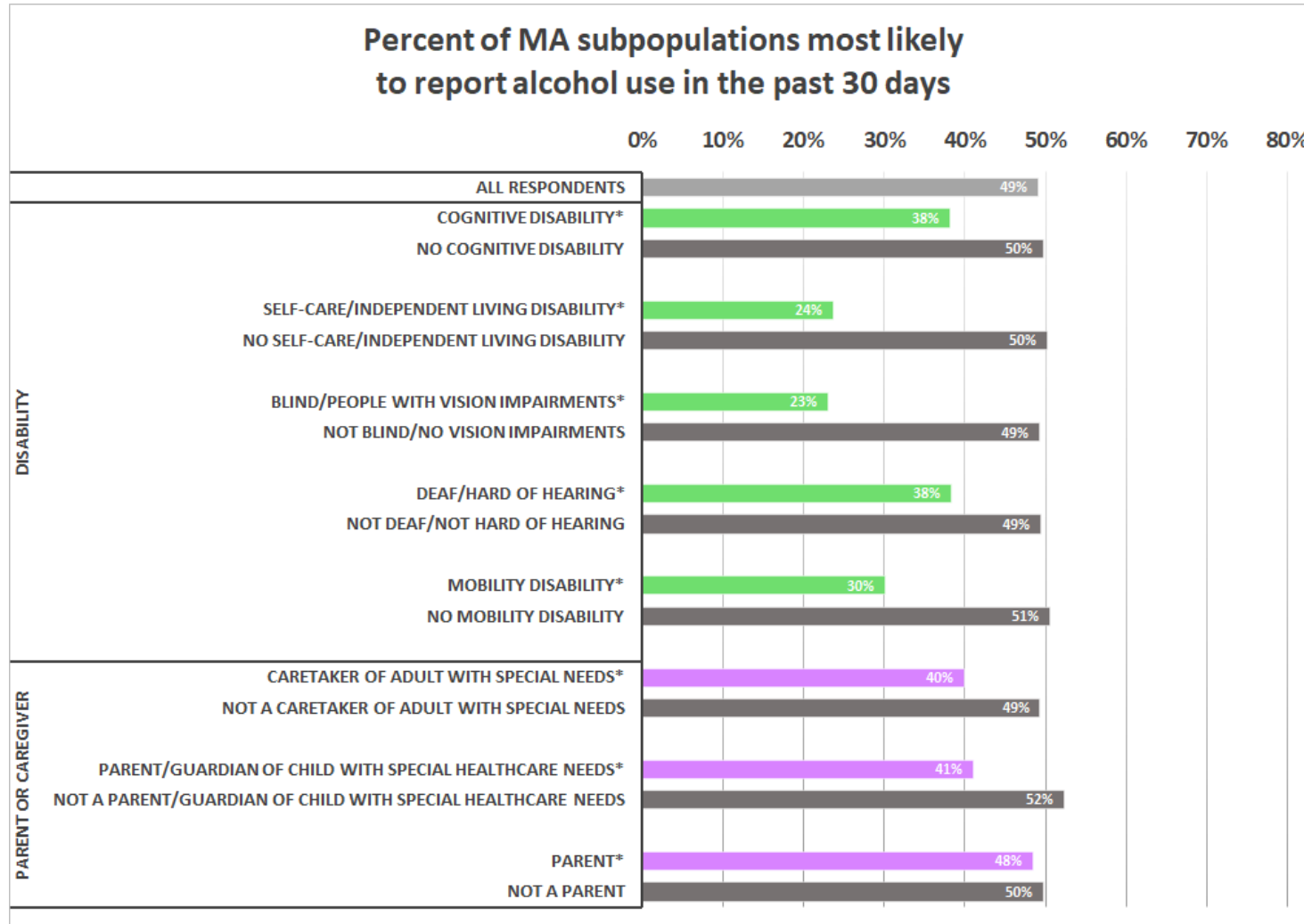
2 out of 3 respondents reporting alcohol use reported alcohol as the only substance they used in the past 30 days.

38% of those who reported using alcohol in the past days reported increased use since prior to February 2020.

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# ALCOHOL USE, CONT.

Almost half of MA adults reported alcohol use in the past 30 days.



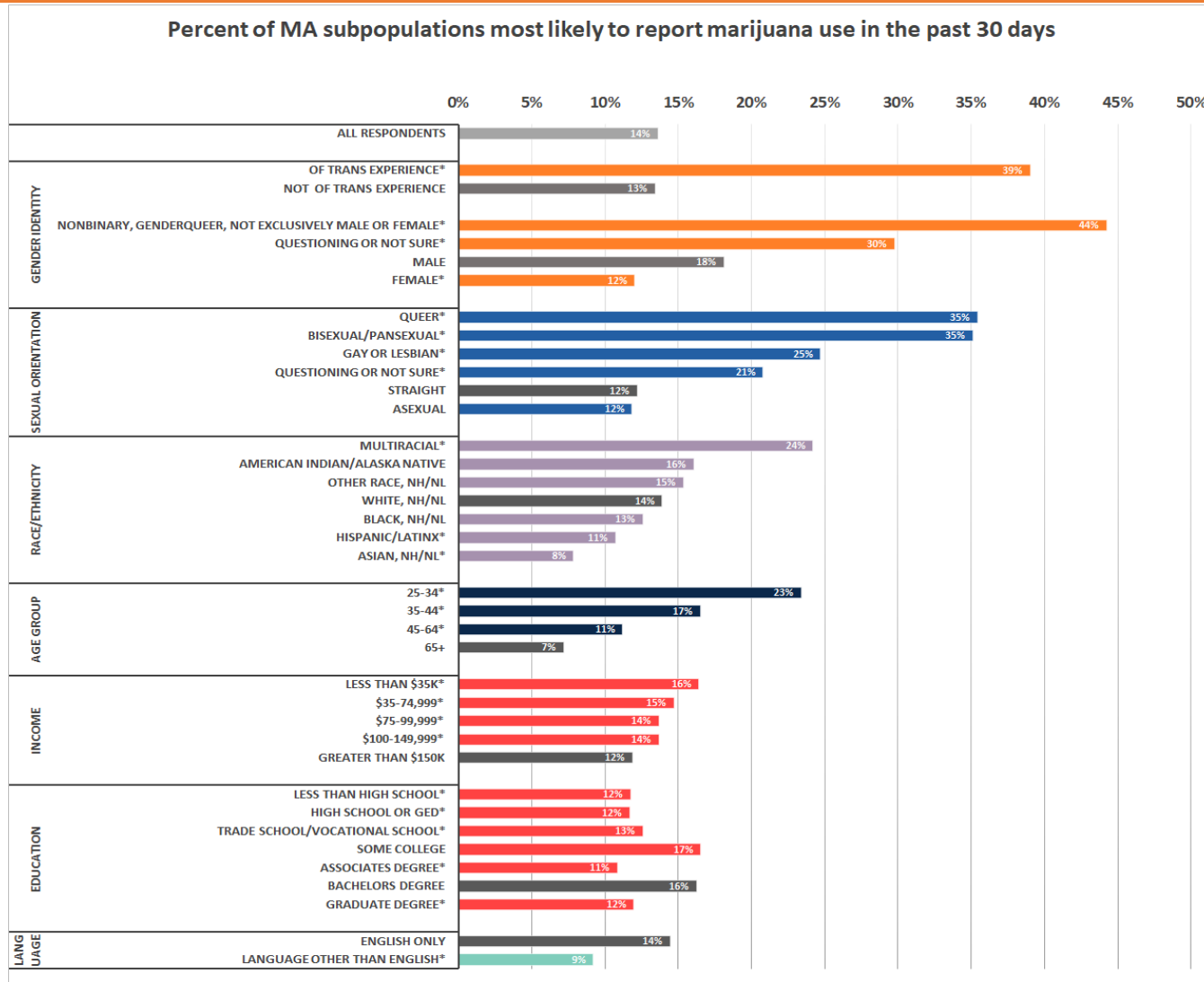
Respondents with disabilities were less likely to report alcohol use in the past 30 days.

Parents & caretakers of persons/children with special needs were less likely to report alcohol use in the past 30 days.

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# MARIJUANA USE

14% of MA adults reported marijuana use in the past 30 days.



In this survey, the following groups reported the highest rates of marijuana use:

- Respondents of **Transgender Experience, Non-binary** respondents and respondents **questioning** their gender identity
- **Queer, bisexual/pansexual & gay or lesbian** respondents
- **Multiracial** respondents
- Respondents between **ages 25-34**
- Respondents with **income <\$35K**
- Respondents who spoke **English only**

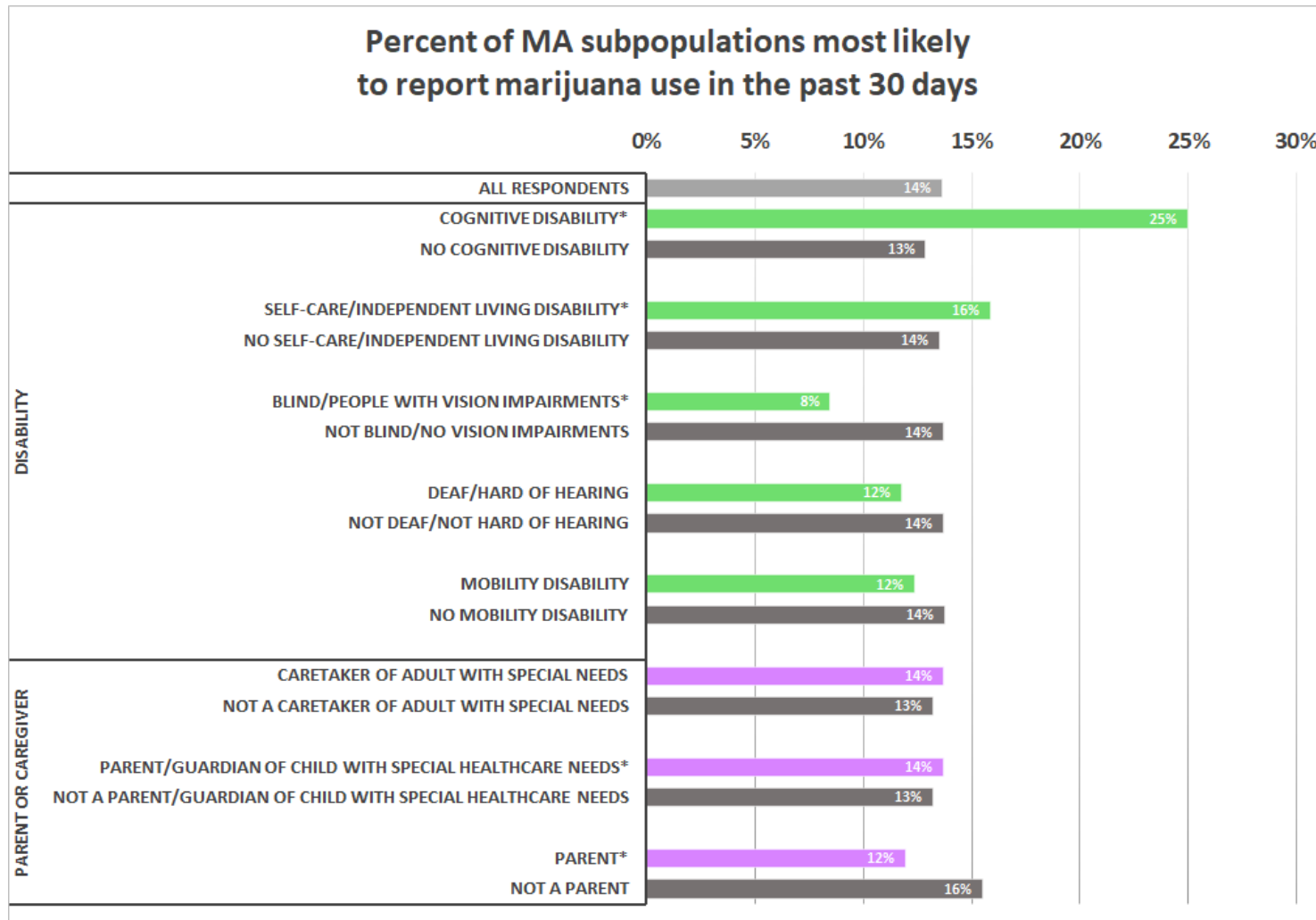
About 1 out of 5 respondents reporting marijuana use reported marijuana as the only substance they used in the past 30 days.

Over half of those who reported using marijuana in the past days reported increased use since prior to February 2020.

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# MARIJUANA USE, CONT.

14% of MA adults reported marijuana use in the past 30 days.



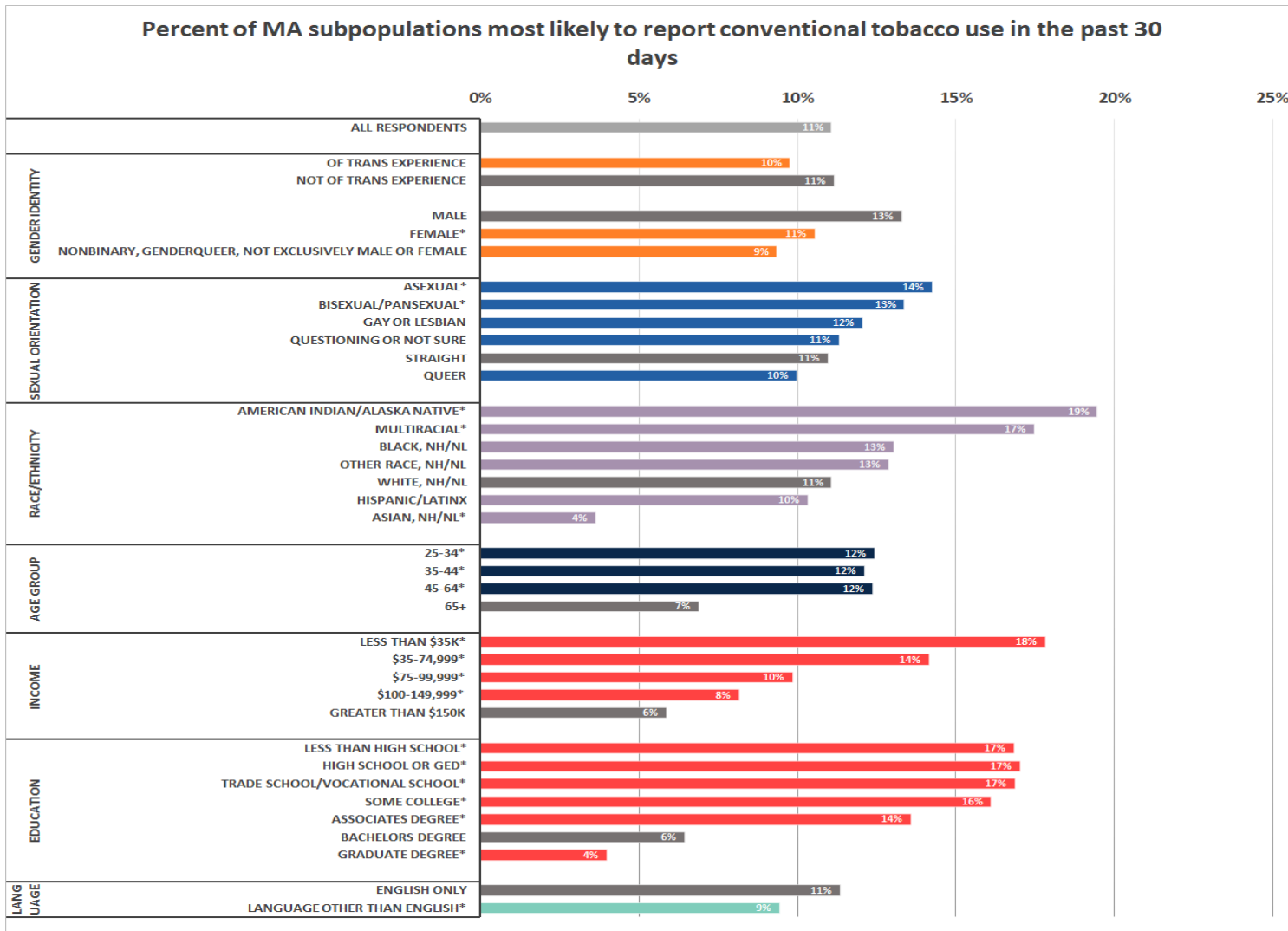
Respondents with cognitive disabilities and respondents with self-care/independent living disabilities were more likely to report marijuana use in the past 30 days.

Parents of children with special needs were more likely to report marijuana use in the past 30 days.

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# CONVENTIONAL TOBACCO USE

1 in 10 MA adults reported tobacco use in the past 30 days.



In this survey, the following groups reported the highest rates of conventional tobacco use:

- Males
- Asexual & bisexual/pansexual respondents
- American Indian/Alaska Native & multiracial respondents
- Respondents between ages 25-64
- Respondents with income <\$35K
- Respondents with education of less than high school, high school/GED & trade school/vocational school
- Respondents who spoke English only

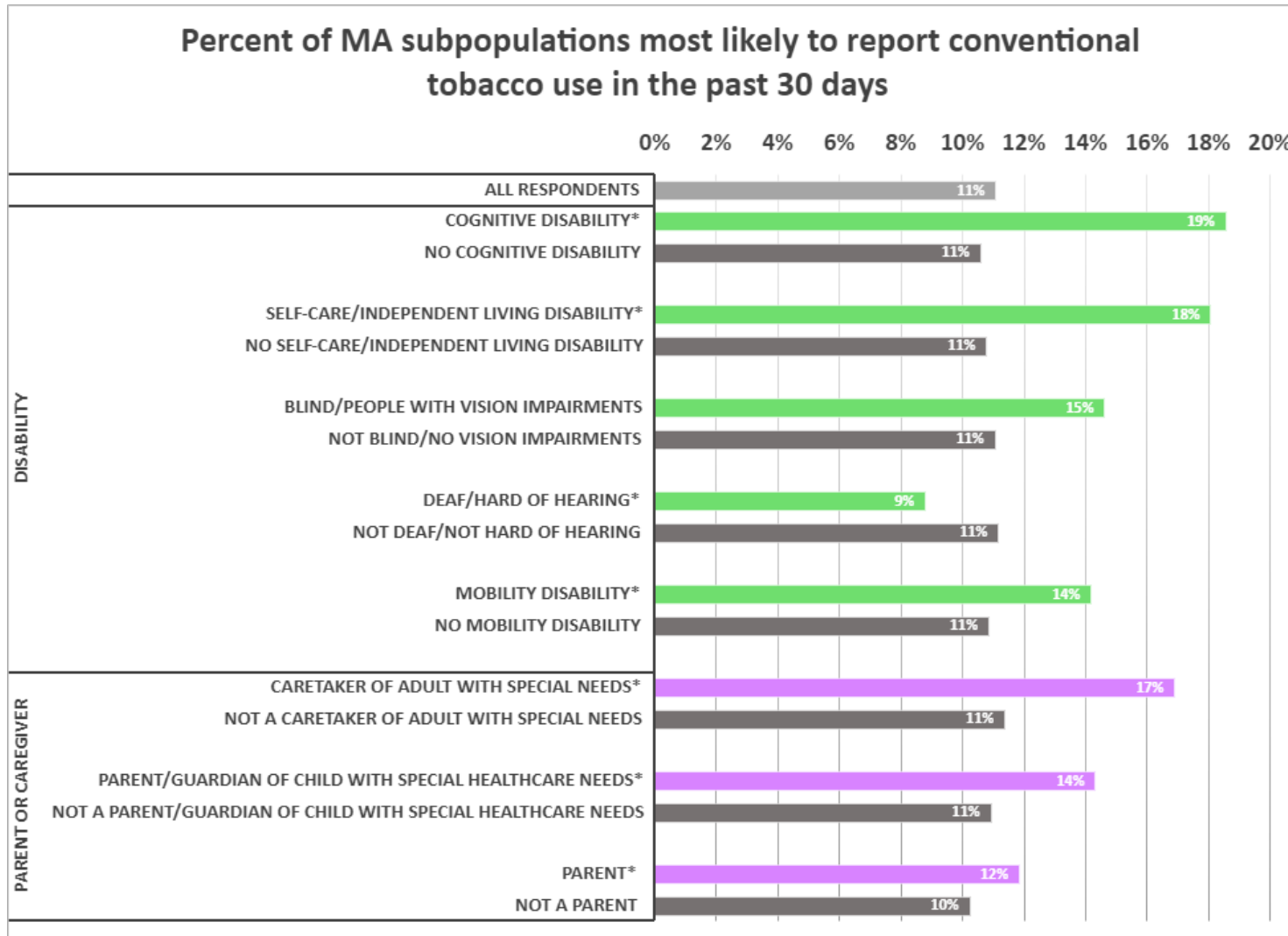
About 1 out of 3 respondents reporting tobacco use reported tobacco as the only substance they used in the past 30 days.

Over half of those who reported using tobacco in the past days reported increased use since prior to February 2020.

\* significant at the p<0.05 level as compared to the grey referent group in each cluster

# CONVENTIONAL TOBACCO USE, CONT.

1 in 10 MA adults reported tobacco use in the past 30 days.

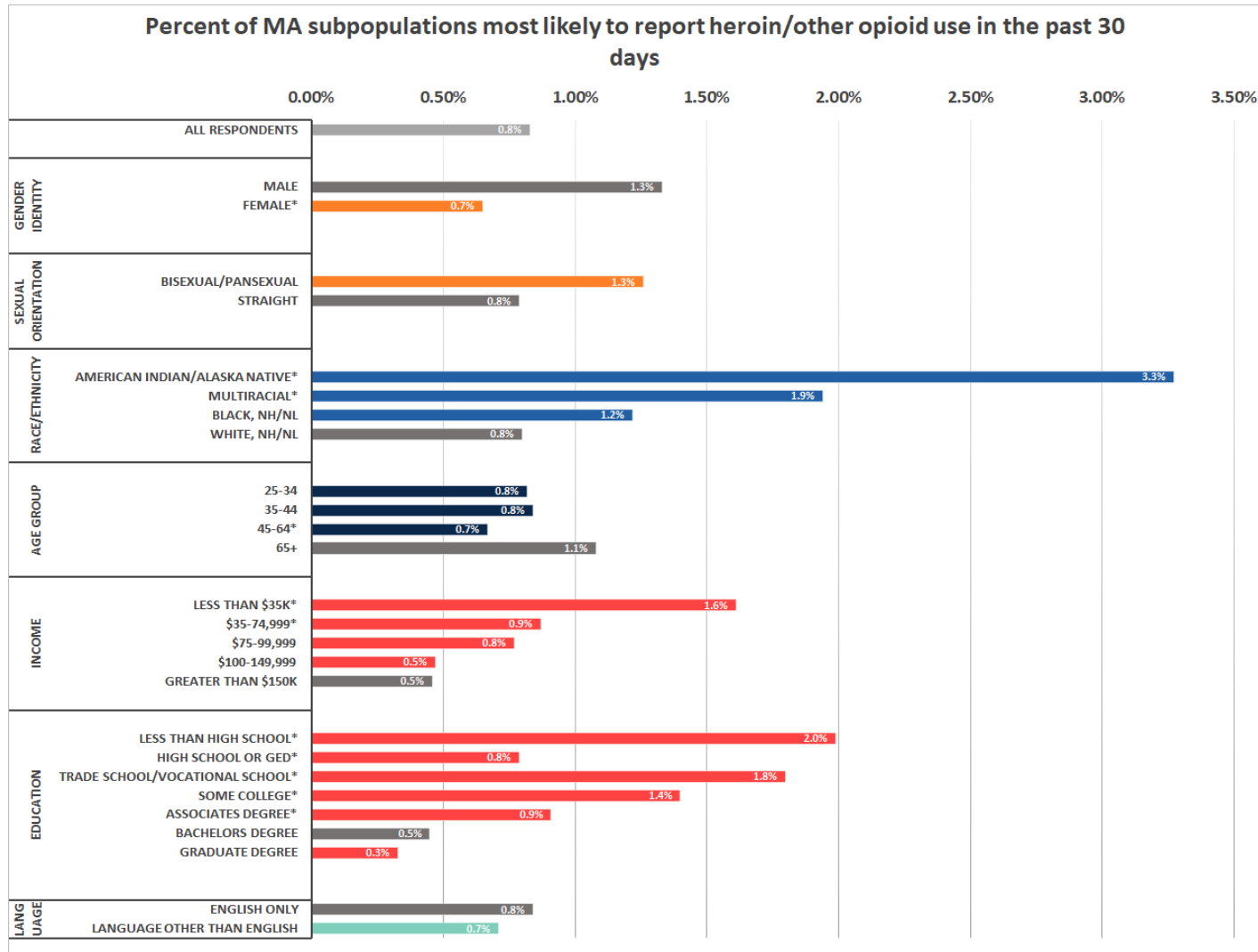


Respondents with cognitive disabilities, respondents with self-care/independent living disabilities and respondents with mobility disabilities were more likely to report conventional tobacco use in the past 30 days.

Parents & caretakers of persons/children with special needs were more likely to report conventional tobacco use in the past 30 days.

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# HEROIN/OTHER OPIOID USE



In this survey, the following groups reported the highest rates of heroin/other opioid use:

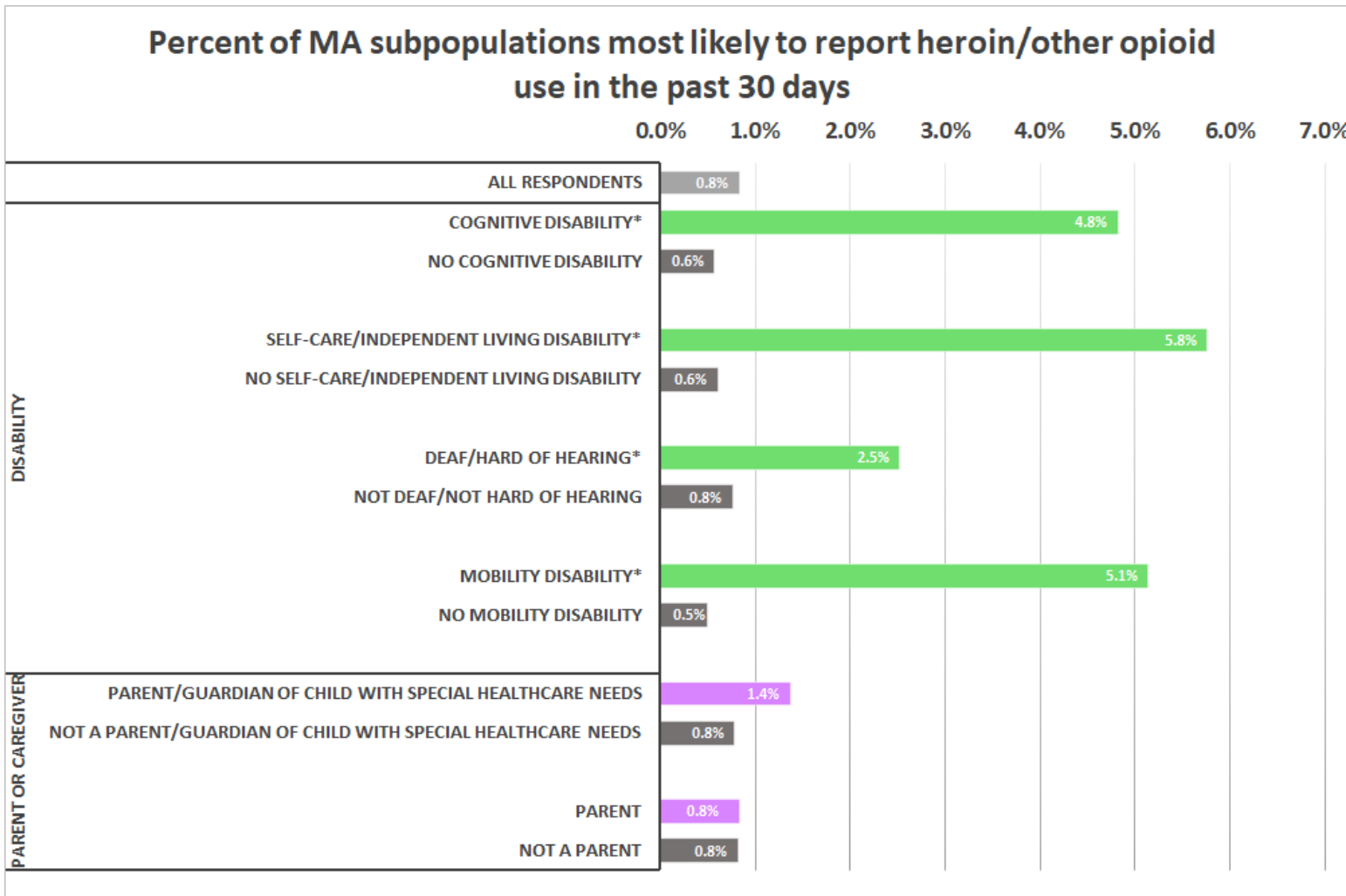
- Males
- American Indian/Alaska Native & multiracial respondents
- Respondents aged 65+
- Respondents with income below \$75k
- Respondents with education of less than high school, high school/GED, trade school/vocational school, some college, & Associates degree

9% of respondents reporting heroin/other opioid use also reported cocaine/crack use, while 10% also reported amphetamine/methamphetamine use.

NOTE: Other opioids may include both illicit and prescription opioids.

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# HEROIN/OTHER OPIOID USE, CONT.

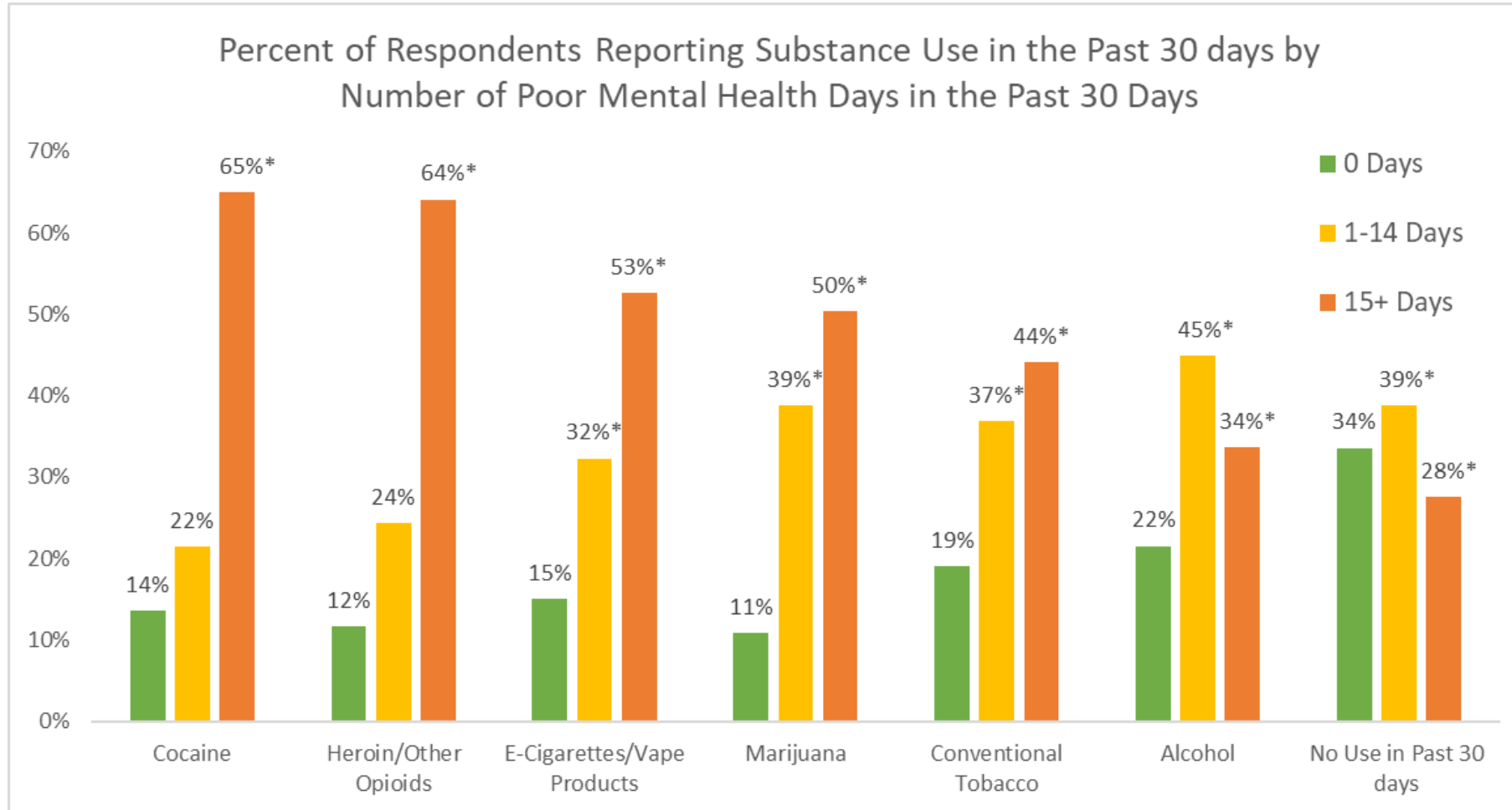


Respondents with cognitive disabilities, respondents with self-care/independent living disabilities and respondents with mobility disabilities were more likely to report heroin/other opioid use in the past 30 days.

\* significant at the  $p < 0.05$  level as compared to the grey referent group in each cluster

# SUBSTANCE USE & MENTAL HEALTH

People reporting substance use were more likely to report poor mental health days in the past 30 days.

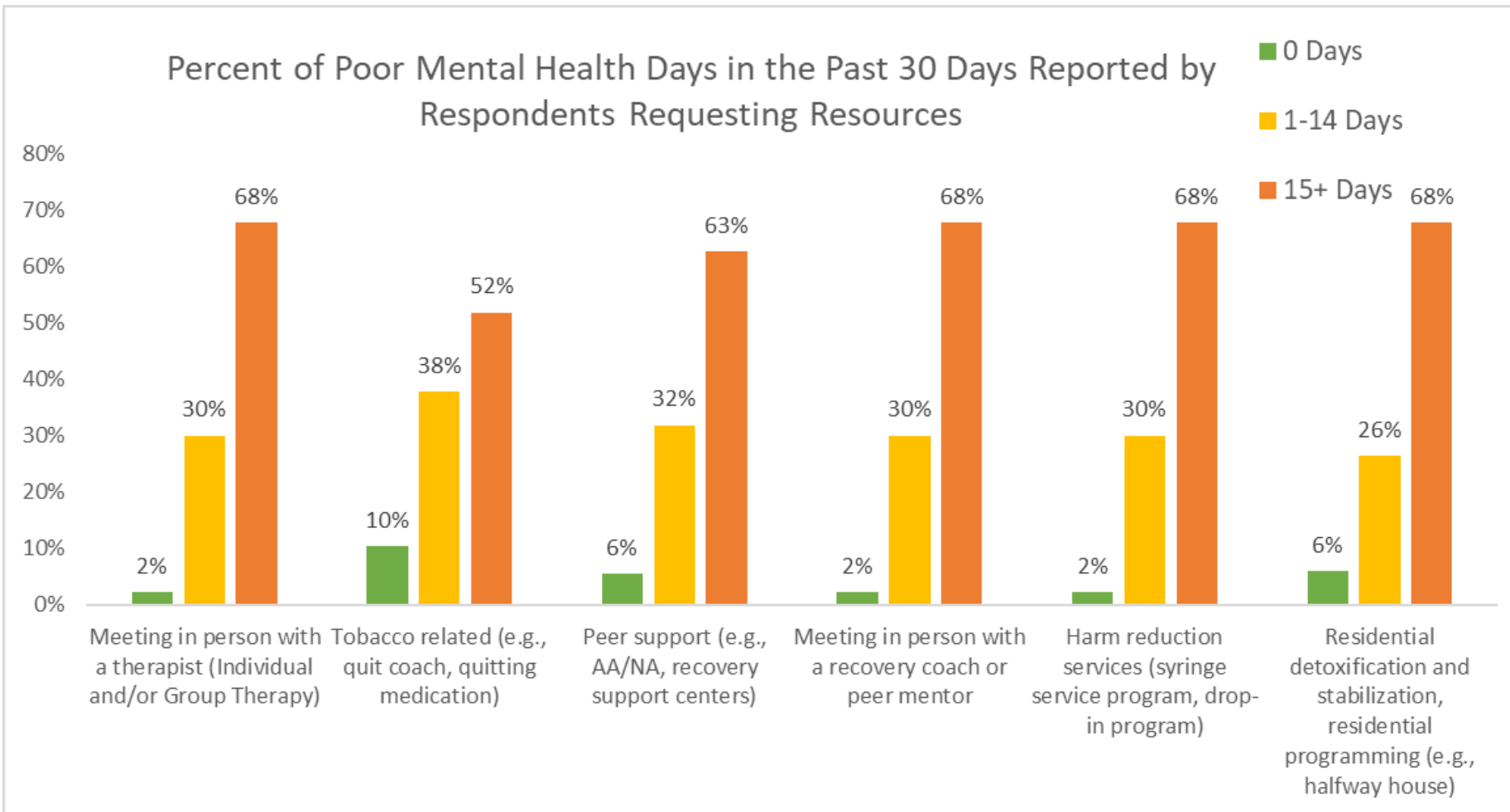


At least half of the people reporting use of **cocaine**, **heroin/other opioids**, **e-cigarettes/vape products** or **marijuana** reported 15+ days of poor mental health.

\* significant at the  $p < 0.05$  level as compared to the green reference group (0 days of poor MH)

# SUBSTANCE USE & MENTAL HEALTH

People experiencing persistent poor mental health were more likely to request a wide range of substance use resources.



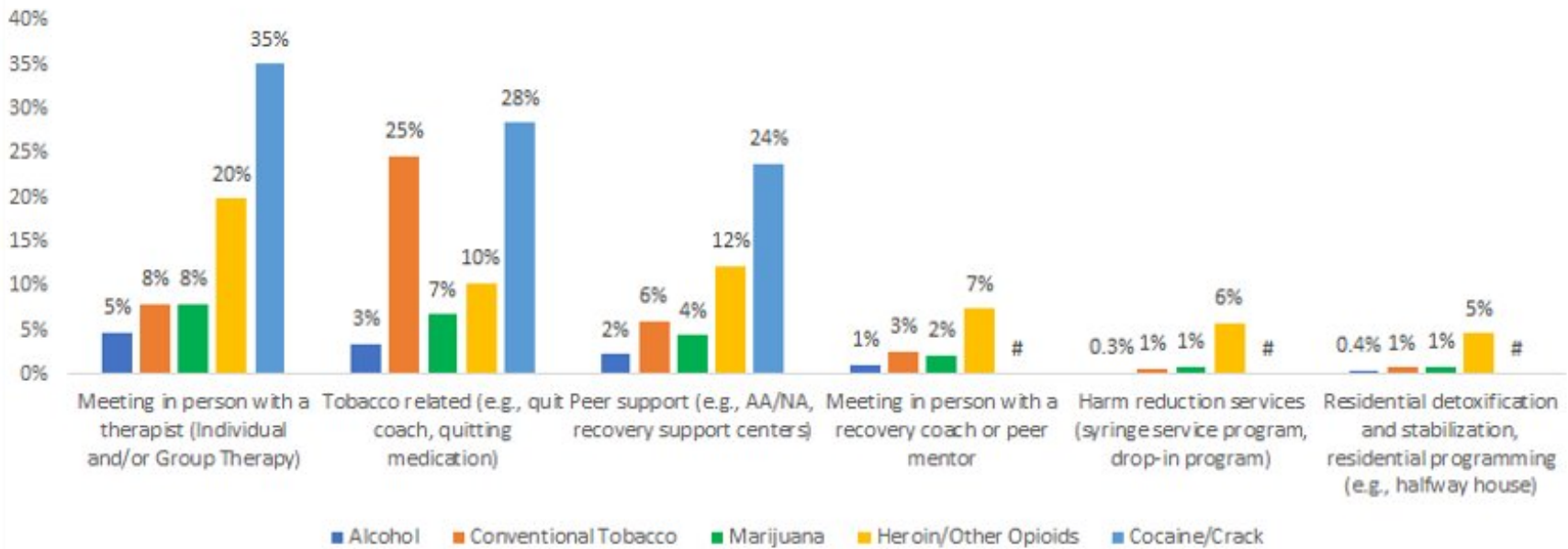
The majority of people requesting resources for substance use report 15 or more days of poor mental health in the past 30 days.

\* significant at the  $p < 0.05$  level as compared to the green referent group (0 days of poor MH)

# SUBSTANCE USE RESOURCES

Respondents reporting substance use were more likely to request resources.

Percent of Respondents Requesting Resources by Substance Use in the Past 30 Days



# percentage suppressed due to small counts

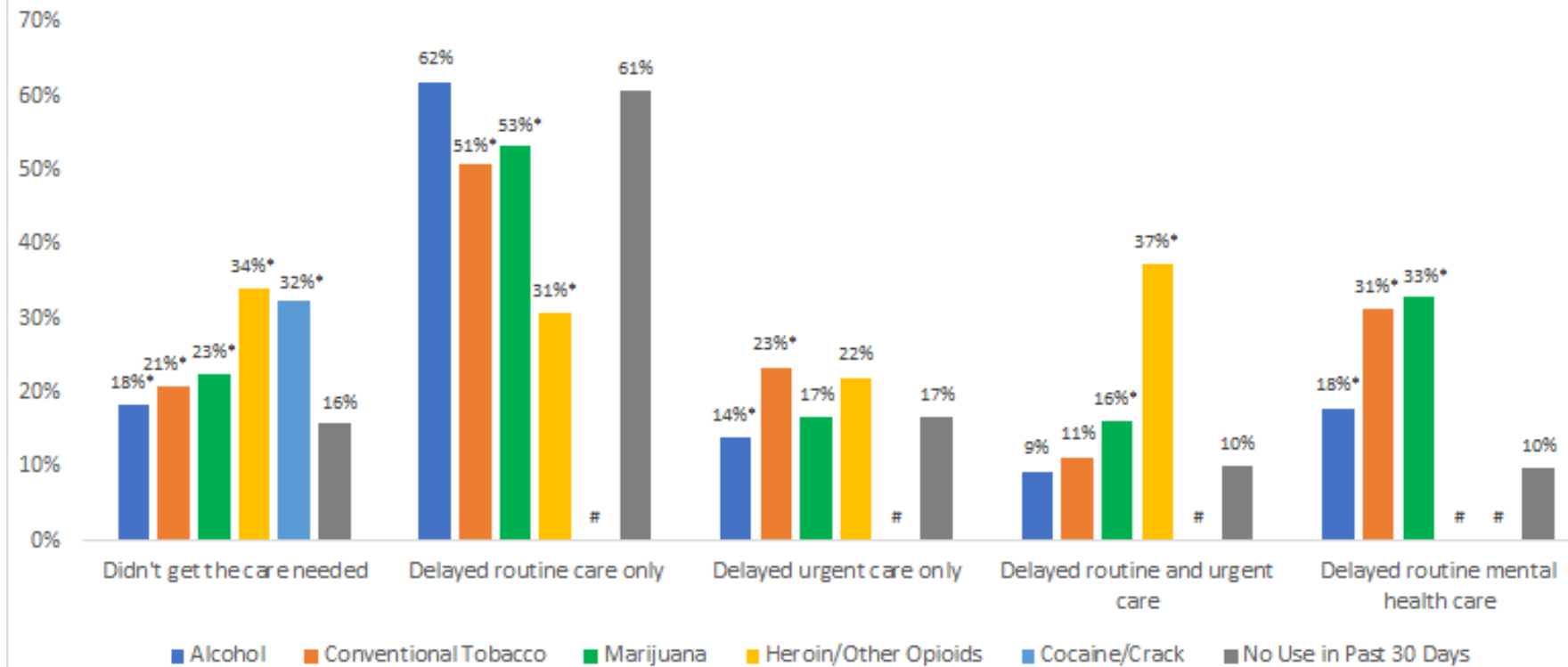
## TOP 3 RESOURCES REQUESTED among respondents reporting substance use

1. Meeting in person with a therapist (individual and/or group therapy)
2. Tobacco related resources (e.g., quit coach, quitting medication)
3. Peer support (e.g., AA/NA, recovery support centers)

Nicotine replacement therapy (NRT) was the most requested tobacco-related resource across substance use groups.

# SUBSTANCE USE & DELAYED CARE

Percent of Respondents Reporting Delayed Care by Substance Use in the Past 30 Days



People using **heroin/other opioids** and **cocaine/crack** were most likely to report **not getting the care that they needed**.

37% of the people reporting **heroin/other opioid** use reported that they **delayed routine and urgent care** compared to 10% of people reporting no substance use.

People using **marijuana** were most likely to report **delayed routine mental health care** followed by people using conventional tobacco and alcohol.

\* significant at the  $p < 0.05$  level as compared to the grey reference group (no reported substance use)

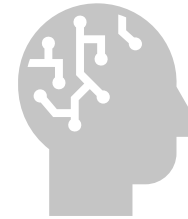
# percentages suppressed due to small counts

# SUBSTANCE USE & DELAYED CARE

Respondents reporting substance use were 1.2X more likely to delay care than respondents reporting no substance use.



People reporting **heroin/other opioid** use were **2.2X** more likely to **DELAY CARE**, followed by those reporting **cocaine/crack** use at **2X**.



People reporting any substance use were **2.1X** more likely to **HAVE DELAY IN ROUTINE MENTAL HEALTH CARE** than those reporting no substance use.

- People reporting **marijuana** were **3.3X** more likely, while those reporting **conventional tobacco** were **3.1X**



People using **heroin/other opioids** were **3.7X** more likely to report **DELAYED ROUTINE AND URGENT CARE**.



People using **conventional tobacco** were **1.4X** more likely to report **DELAYED URGENT CARE**, followed by those reporting **heroin/other opioids** at **1.3X**.

# RESPONDENTS REPORTING SUBSTANCE USE

Compared to respondents who reported no substance use in the last 30 days, those who reported substance use were:



**3.6X** more likely to have had an overnight or longer stay at a **CORRECTIONS INSTITUTION**



**1.3X** more likely to **WORRY ABOUT HAVING TO MOVE IN THE NEXT FEW MONTHS**



**1.3X** more likely to BE **“VERY WORRIED” ABOUT GETTING COVID-19**



**1.4X** more likely to **WORRY ABOUT** access to **MENTAL OR EMOTIONAL SUPPORT**

# KEY TAKEAWAYS

- Populations who were most likely to use substances were **not** always the same populations who saw the biggest increase in use. Many of the populations who reported increased use were the same populations **more likely** to be impacted by the pandemic in other ways.
- Certain populations, including people of trans experience, people who are nonbinary, and people questioning their gender identity were **more likely** to report using substances as well as increased use. These populations were also more likely to report 15+ days of poor mental health.
- **Services need to address co-occurring substance use and poor mental health.** People reporting substance use were more likely to report poor mental health days in the past 30 days and people reporting poor mental health days were more likely to request substance use treatment resources.
- Respondents reporting substance use were any **1.2X** more likely to delay any medical care and **2.1x** more likely to delay routine mental health care than respondents reporting no substance use.
- Helping people address substance use disorders requires more than increasing substance use treatment services. **People need additional supports to access basic needs, access mental health services, and overcome barriers to accessing medical care, in addition to treatment for substance use disorder.**

# DATA TO ACTION

Key Finding: Substance Use – Respondents are burdened with a range of social determinant related needs, and are more likely to delay care

Heard: Need to increase integration of mental health and substance use disorder services, address recent changes in substances used, and provide for basic needs and wrap-around support

Action Taken: BSAS' comprehensive portfolio of programs/initiatives, including:

- Funding triage-urgent care centers to address co-occurring MH/SUD, allowing for immediate access at the initial point of care
- Reinforcing the use of Screening, Brief Intervention and Referral to Treatment (SBIRT) to address increased alcohol consumption during COVID
- Addressing stimulant use by allowing admissions into MAT Enhanced settings
- Leverage use of telehealth for induction/intake for Medications for Opioid Use Disorder (MOUD), including telehealth induction on buprenorphine and naltrexone and promoting the use of telehealth by reimbursing providers for patient cell phones/data plans
- Providing recovery-based/culturally-responsive services for Black and Latino men at risk of fatal overdoses following release from incarceration
- Increasing investments in new and existing housing-related initiatives, including expanding low threshold/housing first and recovery housing programs



# DISCRIMINATION

Robert Liebowitz PhD

Vera Mouradian PhD

Glory Song MPH

Elizabeth Beatriz PhD

Caroline Stack MPH

Lisa Arsenault PHD

Lauren Cardoso PhD

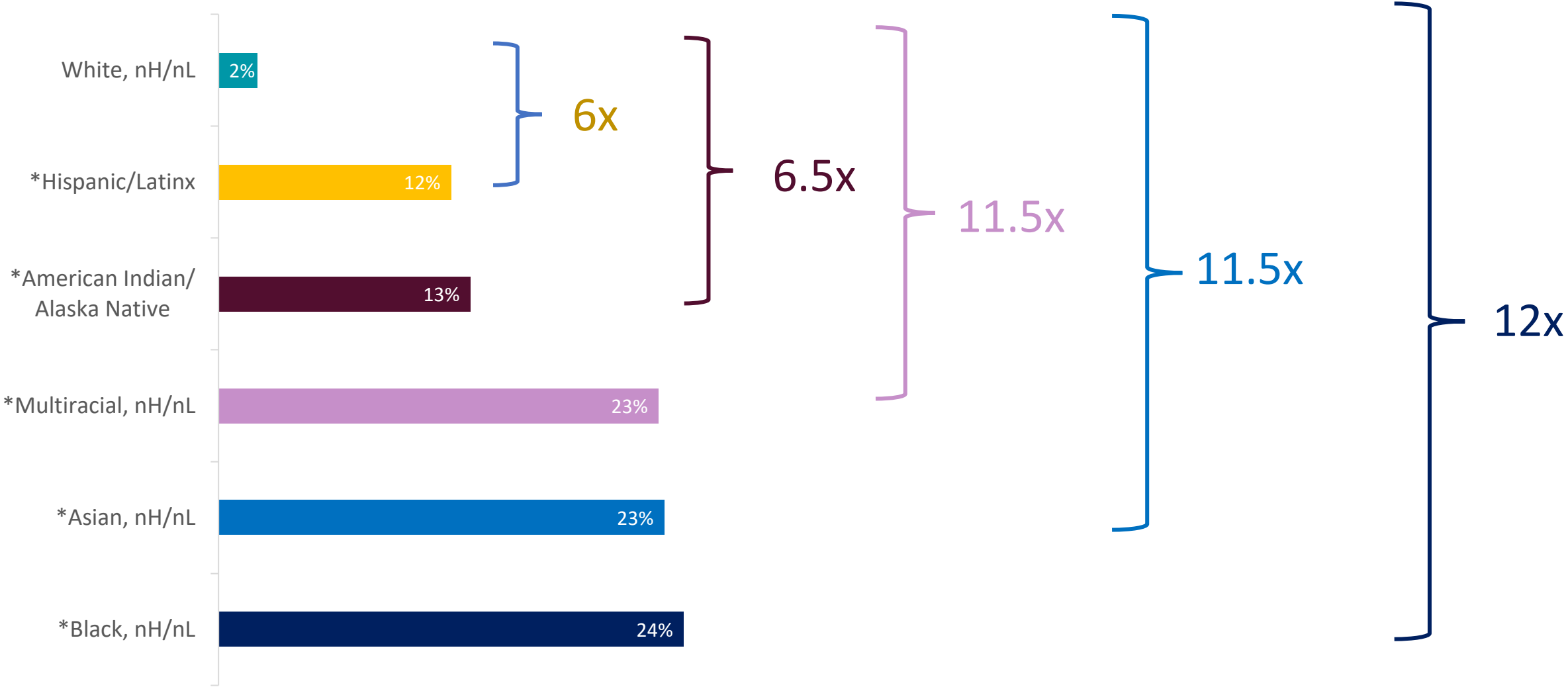
W.W. Sanouri Ursprung PhD

# FRAMING MATTERS

- Being discriminated against is not just a feeling. Discrimination, especially within the context of structural racism, impacts mental and physical health by increasing allostatic load - wear and tear on the body, due to the cumulative burden of repeated chronic stress.
- Compared to Whites, other race/ethnicity groups experienced discrimination at much higher levels during the pandemic.

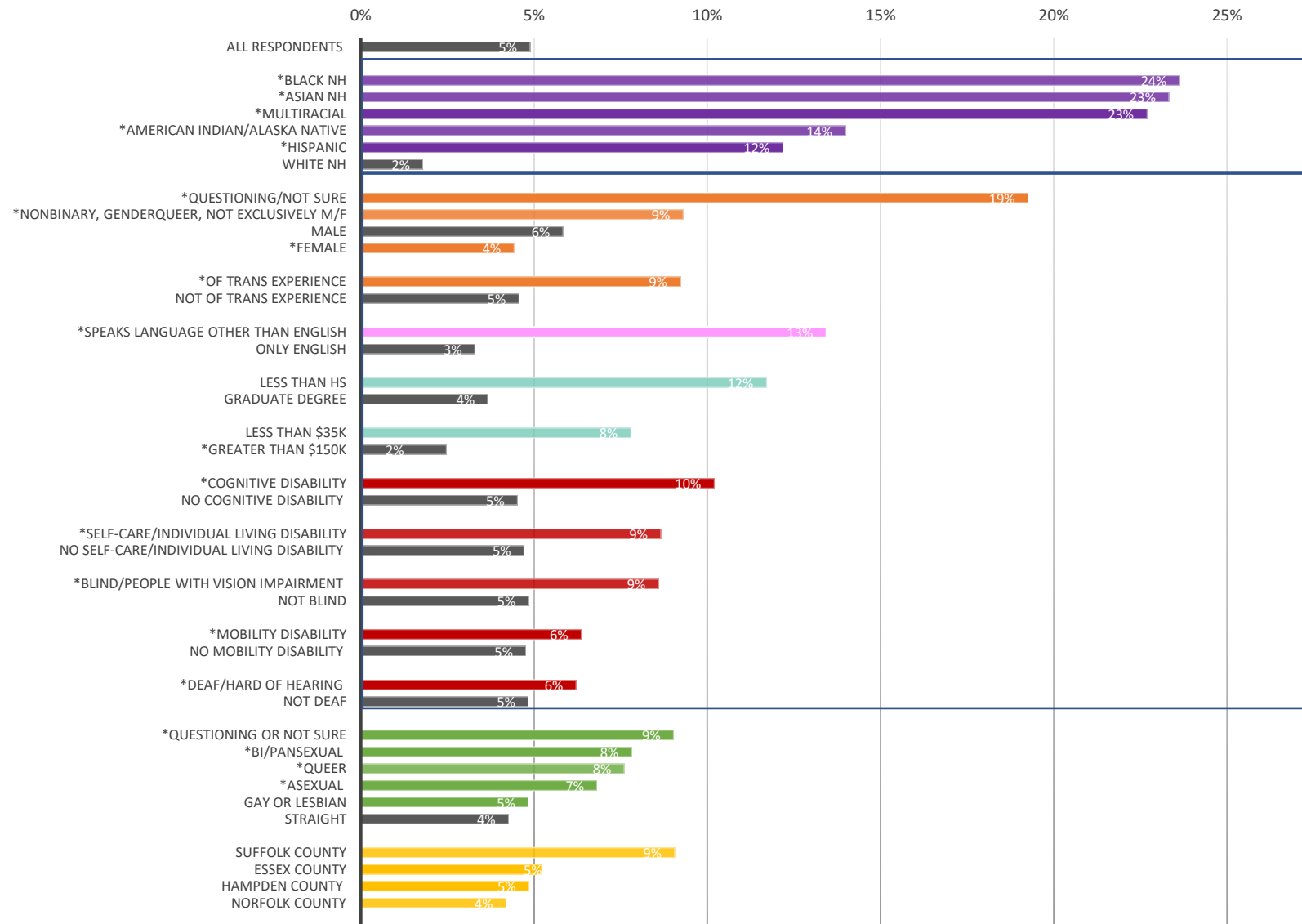
# UNDERSTANDING THE CONTEXT OF DISCRIMINATION

Reporting Experiences of Discrimination based on Race/Ethnicity During COVID-19 Pandemic



# DISCRIMINATION DEMOGRAPHICS

MA Subpopulations Reporting Experiences of Discrimination based on Race/Ethnicity During COVID-19 Pandemic



- Compared to Whites, other race/ethnicity groups experienced discrimination at much higher levels during the pandemic.
- Black, Asian, and Multiracial groups experienced more discrimination than other subpopulations.
- Other subpopulations experiencing greater discrimination include Questioning/Not Sure gender identity, Speaks language other than English, Less than high school education, and those with disabilities

# UNDERSTANDING THE CONTEXT OF DISCRIMINATION

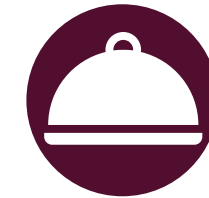
Within the context of structural racism, discrimination is pervasive in institutions, organizations, businesses, in public interpersonal encounters, and in systems like policing and security. Understanding this widespread manifestation is crucial to preventing it.

Among those who reported experiencing discrimination during the pandemic:



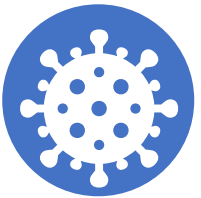
## DISCRIMINATION WHILE WORKING

20.8% of AI/AN and 16.2% of Black, nH/nL reported discrimination while working



## POOR SERVICE OR REFUSAL OF SERVICE

6.1% of Black, nH/nL and 5.8% of Multiracial, nH/nL reported poor service or refusal of service.



## ACCUSATIONS: CARRYING COVID-19

22.5% of Asian, nH/nL and 8.8% of Multiracial, nH/nL reported accused of carrying the virus or blamed for the pandemic



## BY POLICE/SECURITY GUARDS

- Hispanic/Latinx were over 6x,
- AI/AN were over 8x,
- Multiracial, nH/nL were over 15x, and
- Black, nH/nL were over 17x as likely to report being discriminated against by police or security guards (compared to all other race/ethnicity groups).



## STORES, RESTAURANTS, ETC

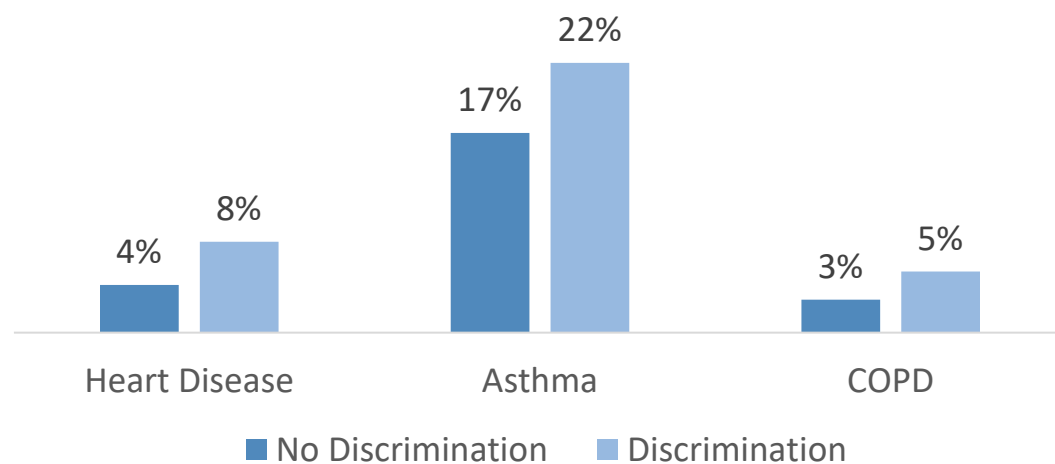
14.9% of Black, nH/nL, 13.6% of Multiracial nH/nL, 8.6% of Asian, nH/nL, 8.5% of AI/AN and 7.0% of Hispanic/Latinx reported discrimination while in stores, restaurants, or other face-to-face environments,

# DISCRIMINATION, HEALTH & COVID-19

Those who experienced discrimination also faced barriers to health and basic needs. These residents were:

- At higher risk for COVID-19 complications
- More worried about meeting basic needs
- 75% less likely to have access to healthcare

Prevalence of Selected Chronic Diseases



Those who experienced discrimination were more likely to be worried about paying for or accessing:

- Cleaning products
- Face masks
- Medications
- Medical care
- Food and groceries
- Mental or emotional support
- Internet access
- Computers, cell phones, tablets
- Childcare
- Formula/baby food

# DISCRIMINATION HOT SPOTS

## 10 CITIES WITH THE HIGHEST DISCRIMINATION RATES

RANK	COMMUNITY	DISCRIMINATION %	% PEOPLE OF COLOR	POC RANK
1	Brockton	15.0	55.2	5
2	Chelsea	12.8	72.4	2
3	Milton	12.6	18.1	34
4	Lawrence	12.6	82.8	1
5	Randolph	11.8	52.5	7
6	Springfield	11.2	63.5	3
7	Methuen	11.0	32.7	13
8	Fitchburg	10.9	32.4	14
9	Boston	10.1	42.5	9
10	Lynn	9.9	53.6	6

Of the 10 communities with the highest rates of discrimination due to race/ethnicity,

9 were in communities with a high percentage (> 30%) of people of color (POC)

-People of Color = Black & Hispanic/Latinx  
 -Race/ethnicity data is from the 2019 5-year ACS

-Includes communities where at least 30 respondents answered the question & 5 or more reported experiencing discrimination.

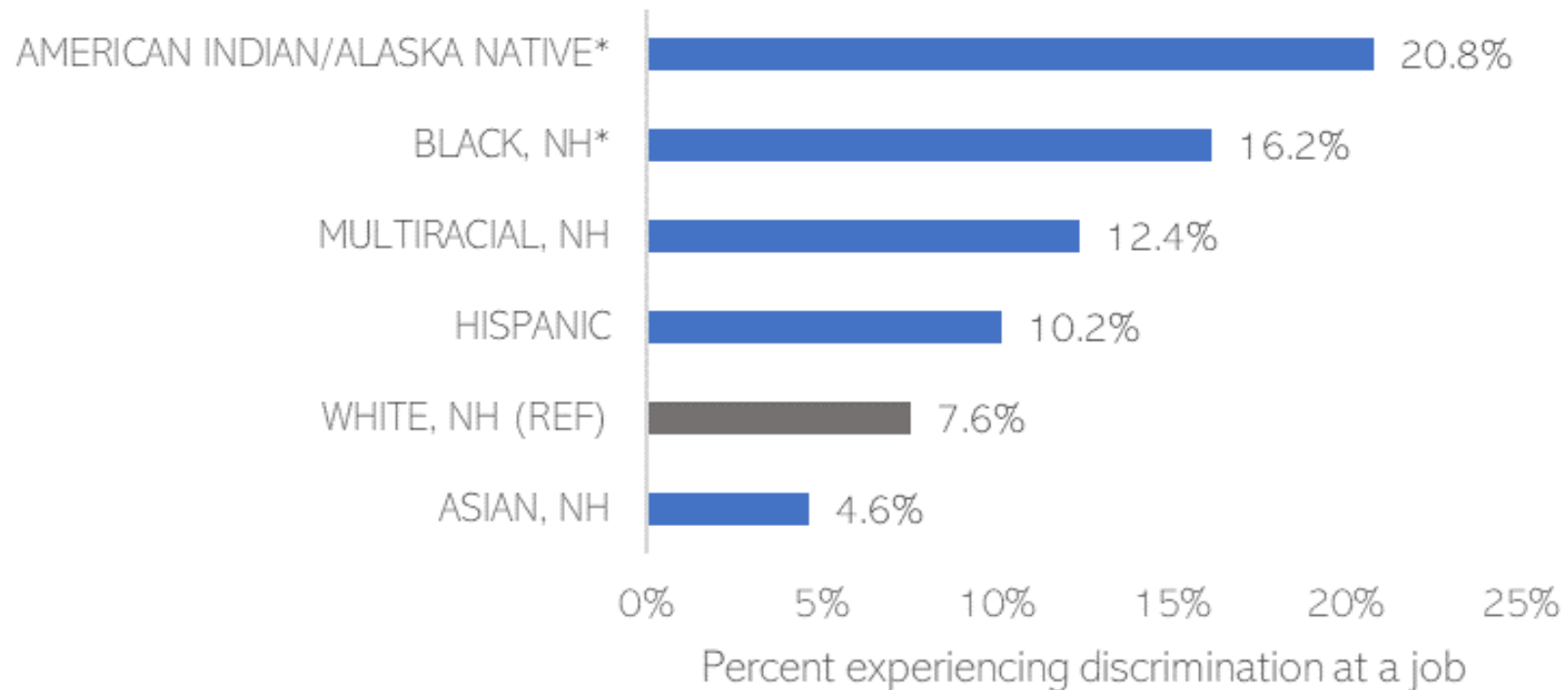
-Unweighted data

Within the context of structural racism, discrimination is pervasive in institutions, organizations, businesses, in public interpersonal encounters, and in systems like policing and security. Understanding this widespread manifestation is crucial to preventing it.

# DISCRIMINATION AT WORK

Compared to Whites, American Indian/Alaska Natives and Blacks experienced more work-related discrimination during the pandemic.

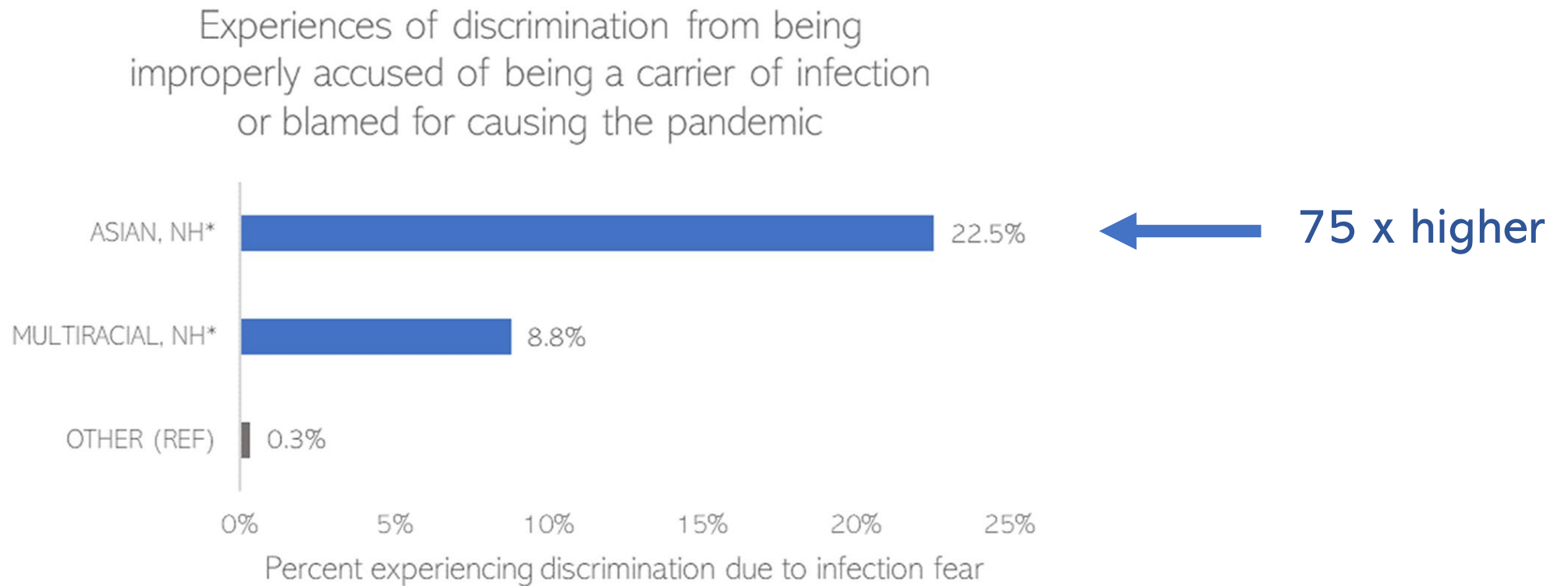
## Experiences of discrimination while working at a job during the pandemic



\* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF). Analytic subgroup only includes respondents reporting experiences of discrimination

# DISCRIMINATION DIRECTED AT ASIAN AMERICANS

Asian Americans experienced a much higher rate of discrimination as a result of being improperly associated with the coronavirus and the pandemic. Multiracial persons, sometimes mistaken for being Asian, also experienced higher rates of discrimination for the same reason.



\* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF), which includes all race/ethnicities due to small counts.

NOTE: Analytic subgroup only includes respondents reporting experiences of discrimination

# DISCRIMINATION IN STORES

Compared to Whites, all other race and ethnic groups experienced more discrimination while shopping in stores and eating in restaurants during the pandemic.

Experiences of discrimination in stores, restaurants, and similar "face to face" retail locations during the pandemic



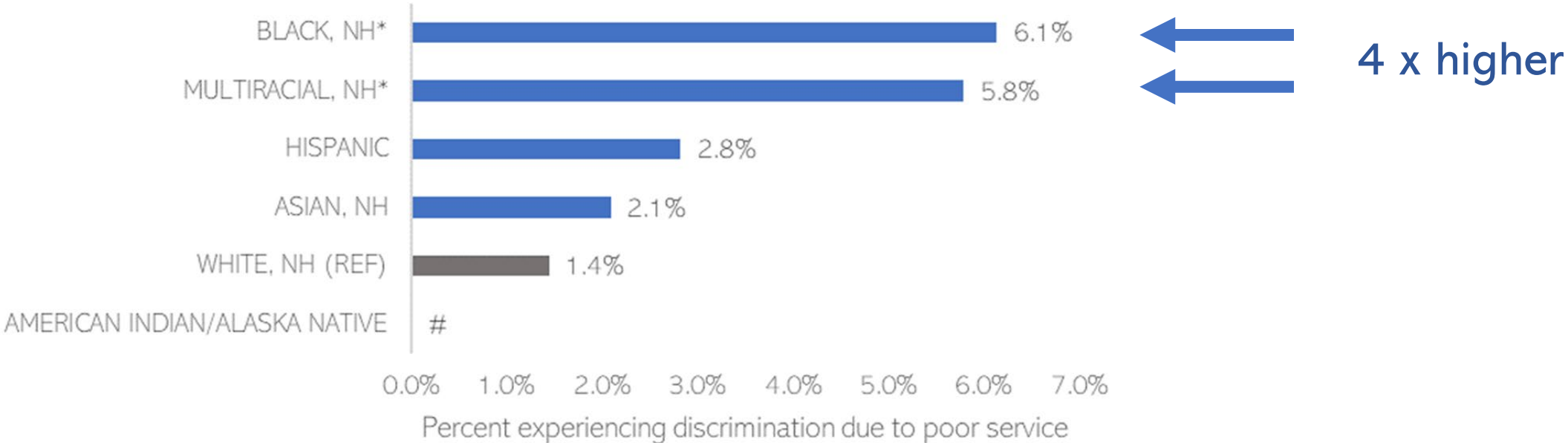
\* denotes rate is significantly different (p<0.05) compared to the reference group (REF), which includes all race/ethnicities due to small counts.

NOTE: Analytic subgroup only includes respondents reporting experiences of discrimination

# DISCRIMINATION THROUGH POOR SERVICE

Black and Multiracial groups experienced poor service during the pandemic as compared to Whites. Respondents mentioned poor service from store employees, healthcare providers, and government employees.

Experiences of discrimination in the form of poor service (or refusal to provide service) in stores and other situations



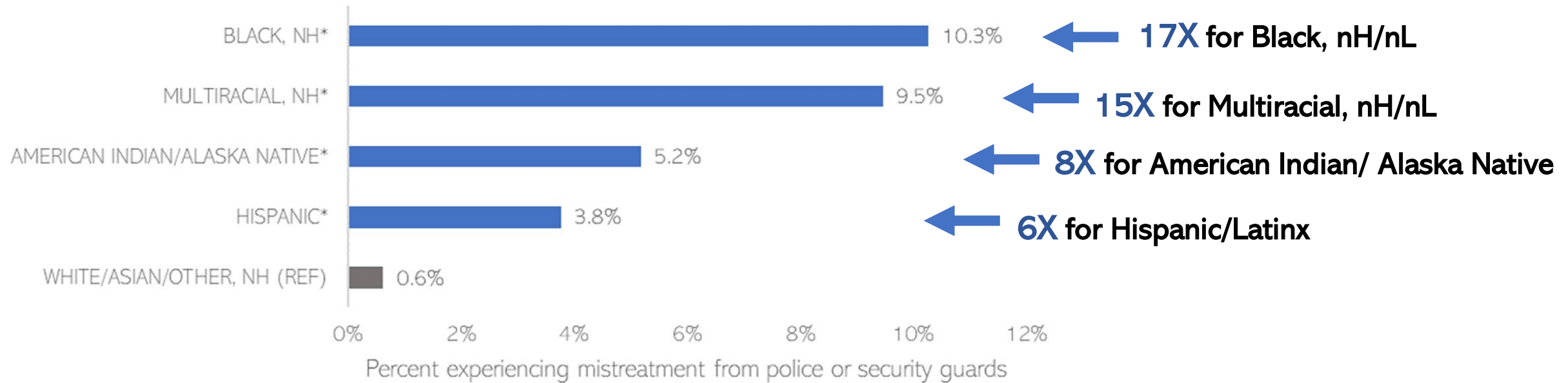
\* denotes rate is significantly different (p<0.05) compared to the reference group (REF), # Percentages suppressed due to small counts.

NOTE: Analytic subgroup only includes respondents reporting experiences of discrimination

# DISCRIMINATION BY POLICE & SECURITY GUARDS

Black, Multiracial, American Indian/Alaska Native, and Hispanic respondents experienced far greater discrimination from police and security guards than all other groups.

Experiences of discrimination resulting from interactions with police or security guards during the pandemic



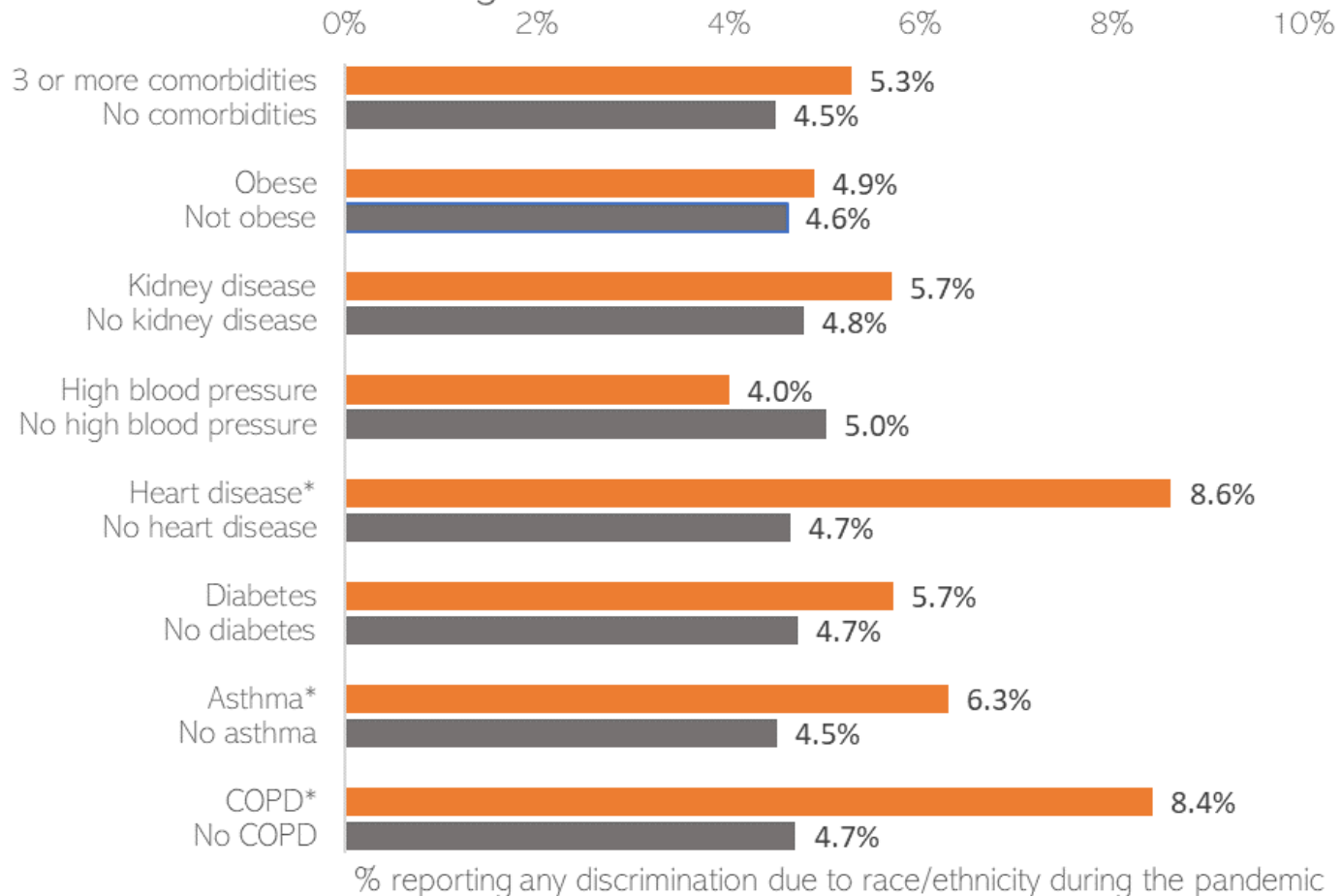
\* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF). The reference group combines White, Asian, and Other race groups for the purposes of this analysis due to small numbers. Analytic subgroup only includes respondents reporting experiences of discrimination.

Discrimination has real and lasting health impacts.

# DISCRIMINATION AND CHRONIC DISEASE

Those who experienced discrimination were more likely to have co-morbidities that put them at higher risk for COVID-19 complications

Experiences of Discrimination by Those With Chronic Disease During the COVID-19 Pandemic in MA

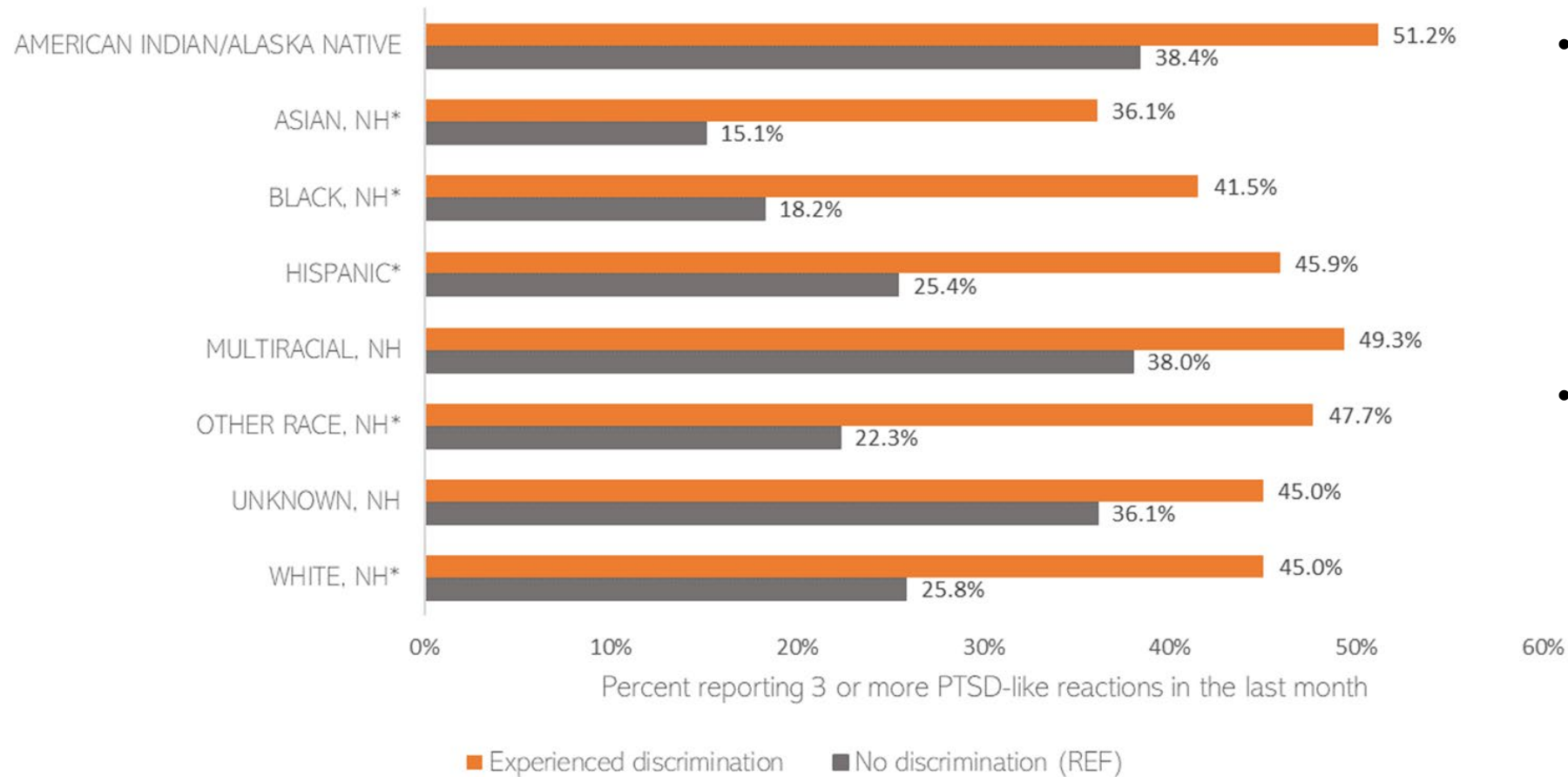


- Those with heart disease, asthma, and COPD experienced greater discrimination due to race/ethnicity than those without those conditions.
- This underscores the deep connection between discrimination, stress, and cardiovascular risk identified in the literature

\* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group without chronic disease.

# DISCRIMINATION AND MENTAL HEALTH

Discrimination experiences were associated with higher rates of PTSD-like reactions attributed to the pandemic



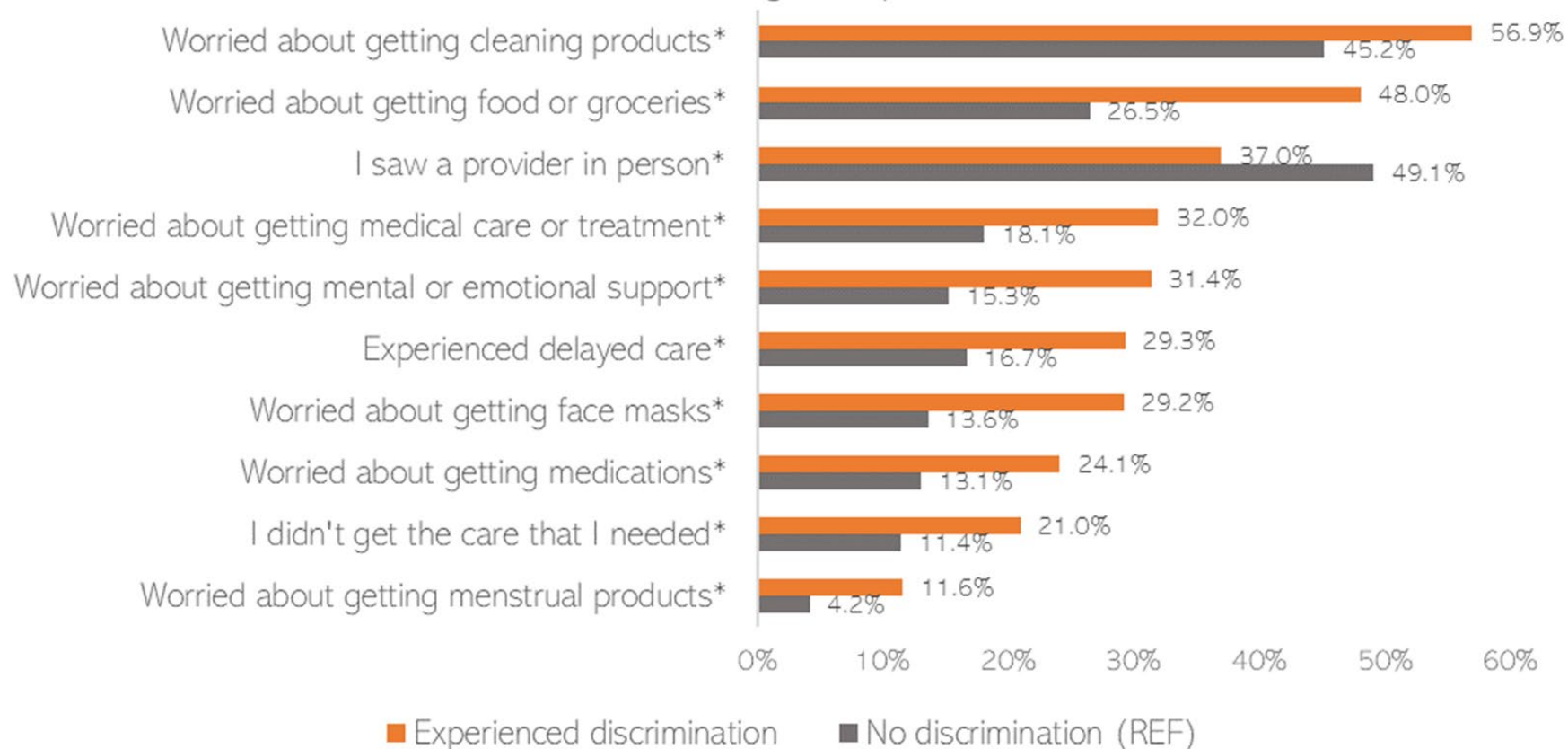
- Discrimination experiences were associated with higher rates of PTSD-like reactions attributed to the pandemic in Asian, Black, Hispanic, White, and “Other race” groups.
- In Black, Asian, and “Other race” groups, PTSD-like reactions more than doubled in the presence of discrimination.

\* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF)

# DISCRIMINATION AND HEALTH CARE NEEDS

Those who experienced discrimination had difficulty accessing health care and worried about basic needs and health care supplies.

## Experiences of discrimination and health care needs and worries during the pandemic

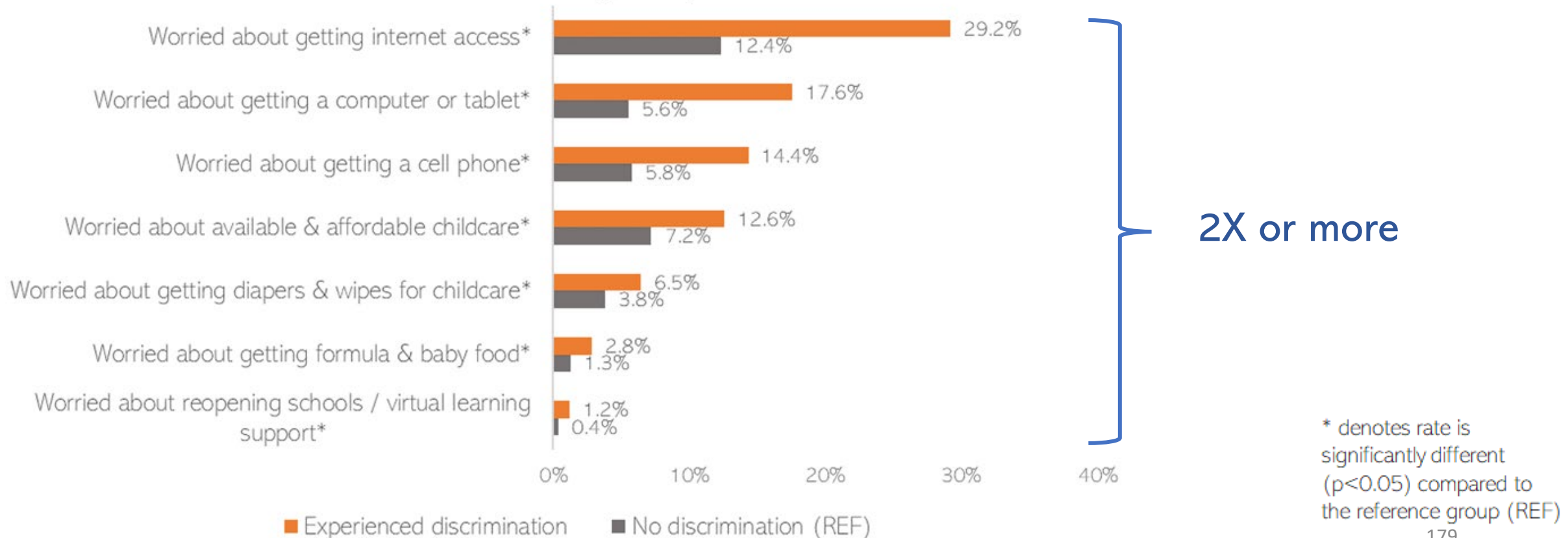


\* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF)

# DISCRIMINATION AND BASIC NEEDS

Those who experienced discrimination had more difficulty getting the technology that would enable them to work and learn from home. They were also more worried about childcare supplies and school support.

## Experiences of discrimination and worries about technology and childcare during the pandemic



# KEY TAKEAWAYS: DISCRIMINATION

- There is a relationship between discrimination and health.
- Residents experiencing discrimination are also facing crucial barriers to accessing healthcare and basic needs.
- Groups who are already suffering health consequences of structural racism, such as Black, Latinx, Asian and indigenous populations are facing discrimination more than Whites.



# POPULATION SPOTLIGHT: ASIAN AMERICAN/PACIFIC ISLANDER RESIDENTS

# FRAMING MATTERS

Despite the common belief that the AAPI community is a monolith, the data shows us that the stories, struggles, and experiences of these individuals vary greatly, especially during the pandemic.

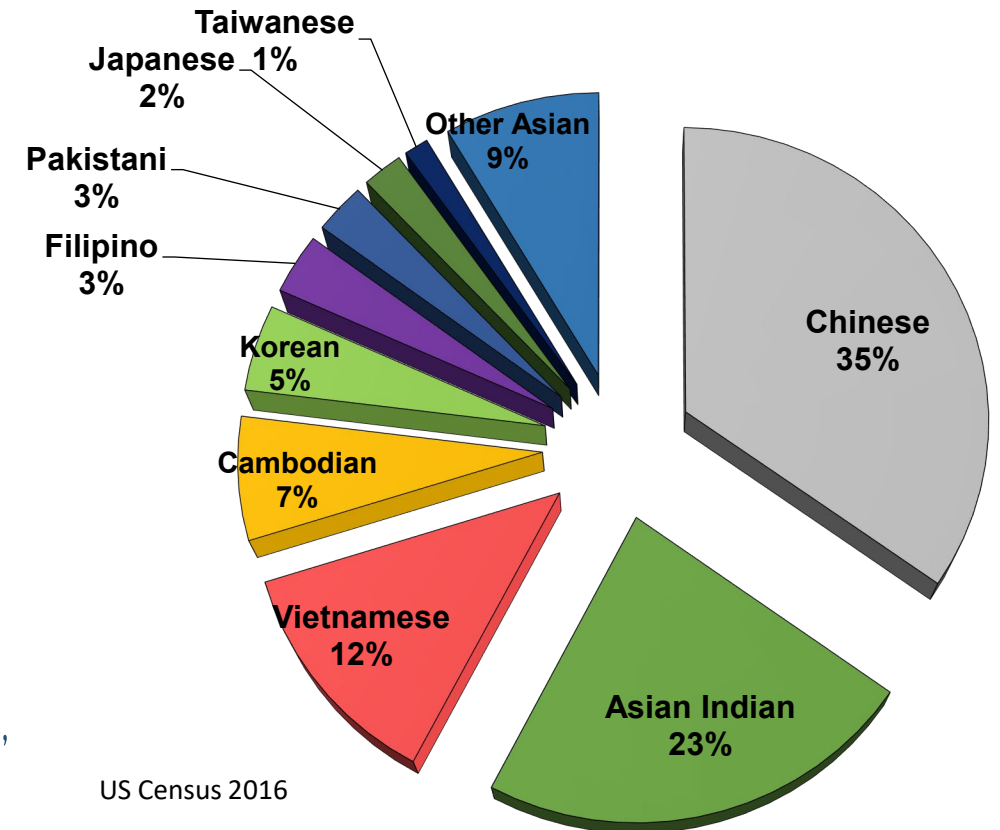
“In the popular imagination, Asian Americans are all high-achieving professionals. But in reality, **this is the most economically divided group in the country**, a tenuous alliance of people with roots from South Asia to East Asia to the Pacific Islands, from tech millionaires to service industry laborers. How do we speak honestly about the Asian American condition—if such a thing exists?”

-- Cathy Park Hong, *Minor Feelings: An Asian American Reckoning*

# AAPI IN MASSACHUSETTS

- AAPI refers to individuals who identify as **Asian American** or **Pacific Islander**. This highly diverse group includes individuals representing different national origins, ethnicities, languages, cultures, economic status, among other characteristics.<sup>1</sup>
- Massachusetts is home to **over 520,000** AAPI residents, making up nearly **8%** of the total population.<sup>2</sup>
- In addition to the ethnic groups shown here, the state is also home to residents who identify as **Laotian, Malaysian, Indonesian, Bangladeshi, Sri Lankan, Native Hawaiian, Chamorus, Samoan**, and many other ethnic groups.<sup>3</sup>
- While the common umbrella of “AAPI” unites these individuals, their stories, struggles, and experiences vary greatly.

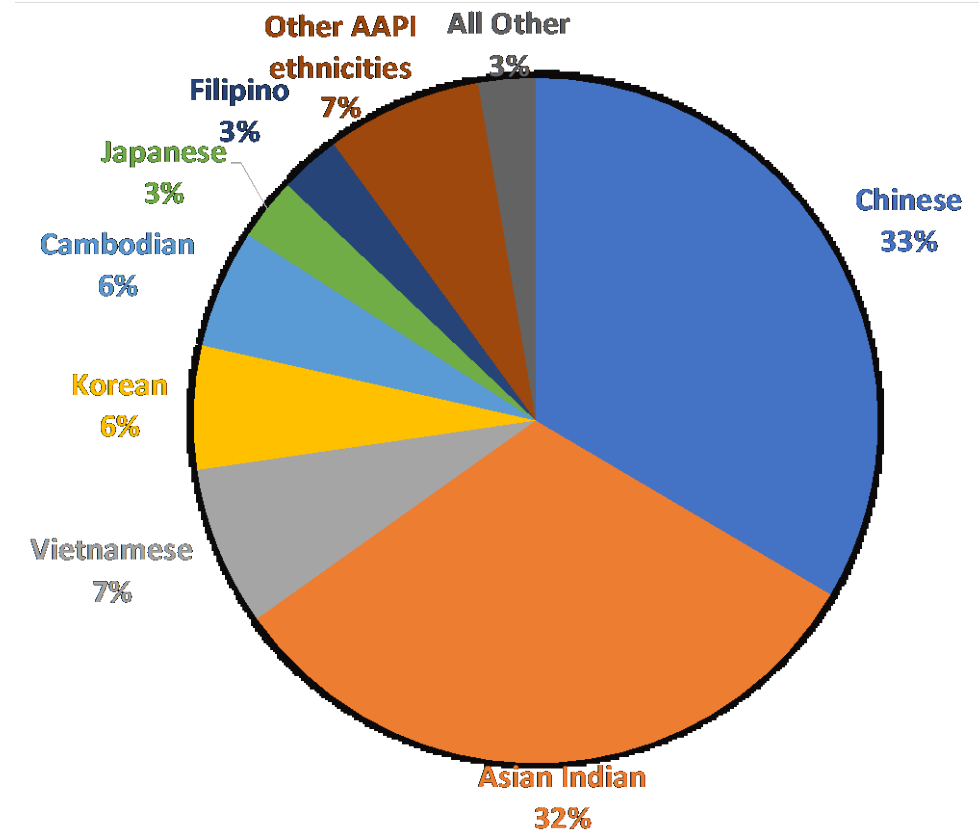
## MASSACHUSETTS AAPI PROFILE



# REACHING THE AAPI COMMUNITIES ON CCIS

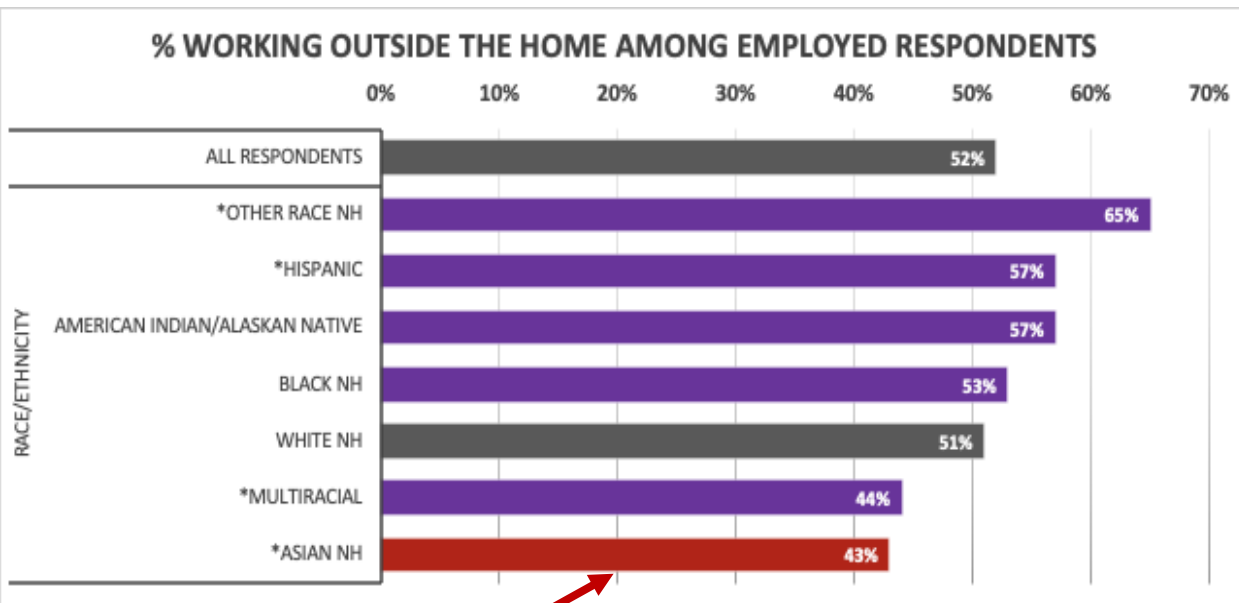
- CCIS intentionally worked to reach diverse AAPI subgroups through **survey translation** (Chinese, Vietnamese, Khmer) and partnership with **AAPI community partners**.
- **Over 1,100 residents** representing over 10 AAPI ethnicities residing across 134 communities were captured in the survey.
- While we were not able to reach all AAPI ethnic groups equally, these extensive outreach efforts still allowed us to capture and report on the experiences for many ethnic groups, like the Cambodian community, **that have historically been “invisible”** due to small sample sizes.
- What we found was that **the pandemic has disproportionately impacted many of these AAPI communities** in significant and uniquely different ways.

## CCIS AAPI PROFILE (N = 1,183)

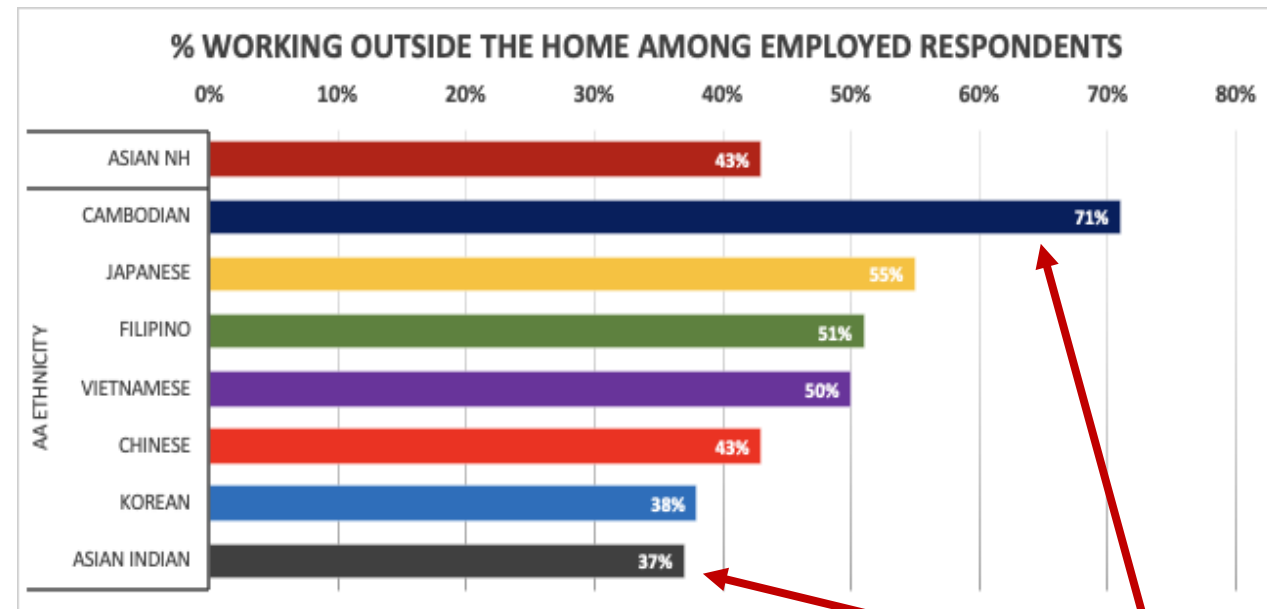


# DATA DISAGGREGATION MATTERS

Asians as a single group often appear to do as well as White respondents. However, CCIS highlighted the **wide socio-economic inequities** among Asian ethnicities, evidence that the Asian population in Massachusetts is far from the “model monolith” it is commonly perceived to be.



Overall, 43% of employed Asian respondents reported to be working outside of the home, significantly lower than White, NH.

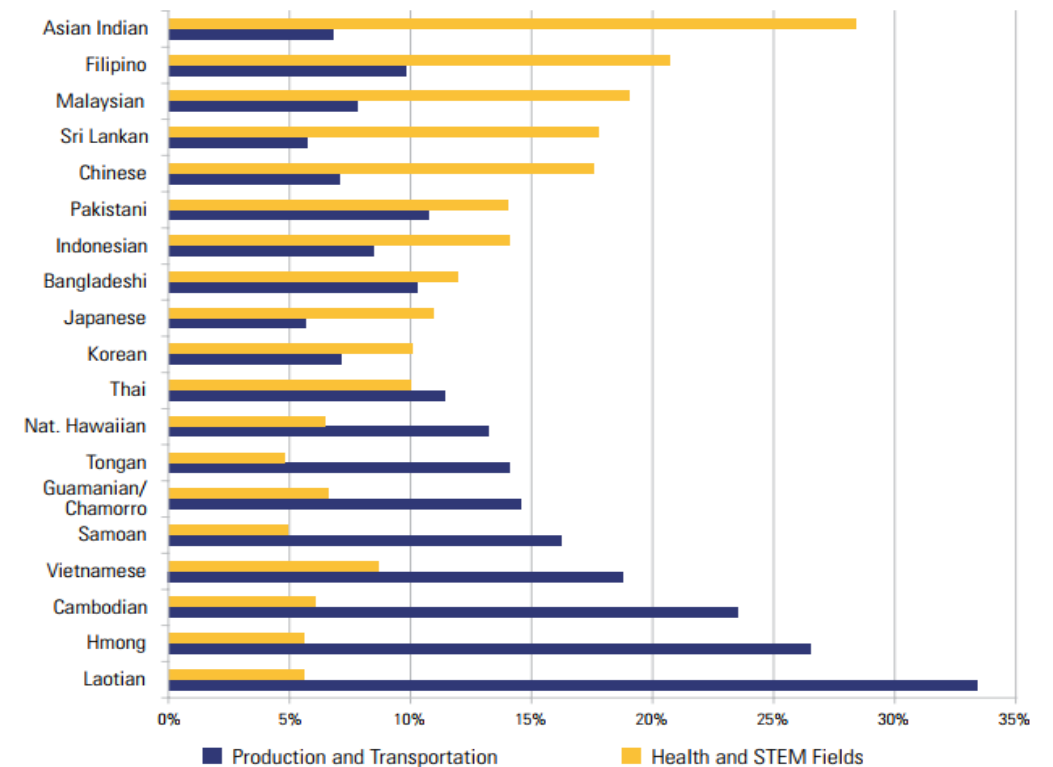


However, further disaggregation revealed that over 70% of Cambodians were working outside of the home, in stark contrast with just 37% of Asian Indians.

# SOME HISTORY ON AAPI IMMIGRATION

- Nationally, immigrants accounted for 81% of the growth in the Asian adult population from 1970 to 2016.<sup>4</sup>
- This surge followed the Immigration and Nationality Act in 1965, drawing migrants from many countries for family reunification or as refugees, and later through skill-based programs such as the H-1B visa program.<sup>4</sup>
- The result is a wide variation in education levels and incomes among Asians in the U.S.<sup>4</sup>
  - In 2015, the share with at least a bachelor's degree among adults ages 25 and older ranged from 9% among Bhutanese to 72% among Indians
  - median household income varied from \$36,000 among Burmese to \$100,000 among Indians,
  - poverty rates were as high as 35% among Burmese and 33% among Bhutanese (incomes not adjusted for household size).

Figure 5: Distribution of AAPIs in Selected Occupational Types by Ethnicity (3-Year Average), 2006–2008



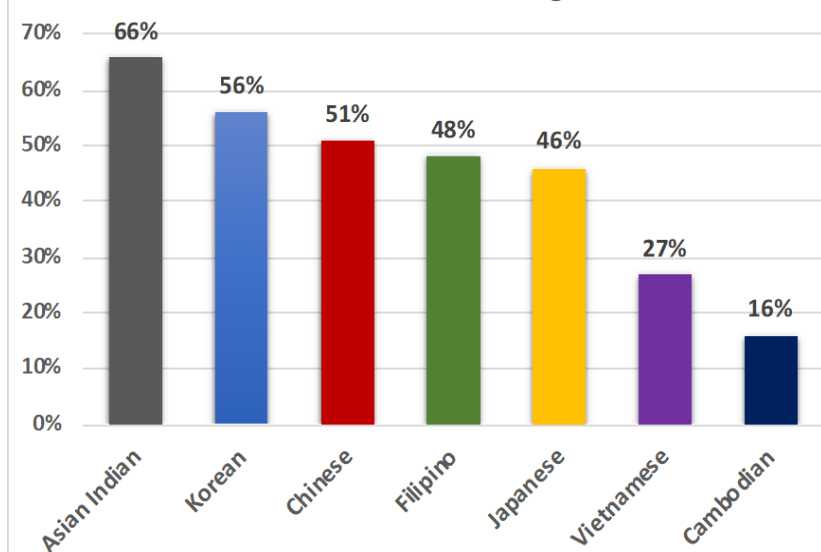
Source: American Community Survey, 3-Year Public Use Microdata Sample (PUMS)

# INEQUITIES WITHIN THE AAPI “MONOLITH”

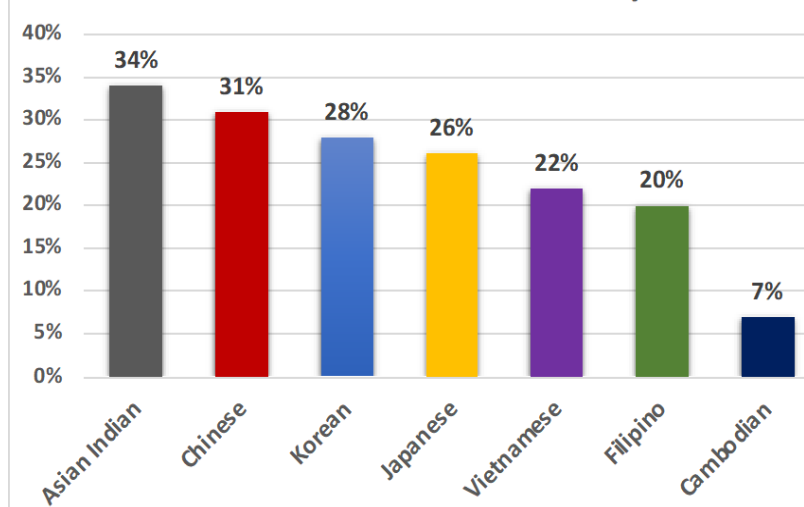
CCIS highlighted the **wide socio-economic inequities** among AAPI ethnicities, evidence that the AAPI population in Massachusetts is far from the “monolith” it is commonly perceived to be.

- South Asians and East Asians tend to have higher educational attainment, more likely to be employed in STEM or education fields, and as a result have much higher median income compared to Southeast Asians. These socioeconomic differences stem in large part from each group’s **immigration history**.
- However, this does **NOT** mean that the AAPI ethnicities with higher socio-economic status were not impacted by the pandemic.
- Each AAPI ethnic group faced **its own set of unique but significant challenges** during the pandemic.

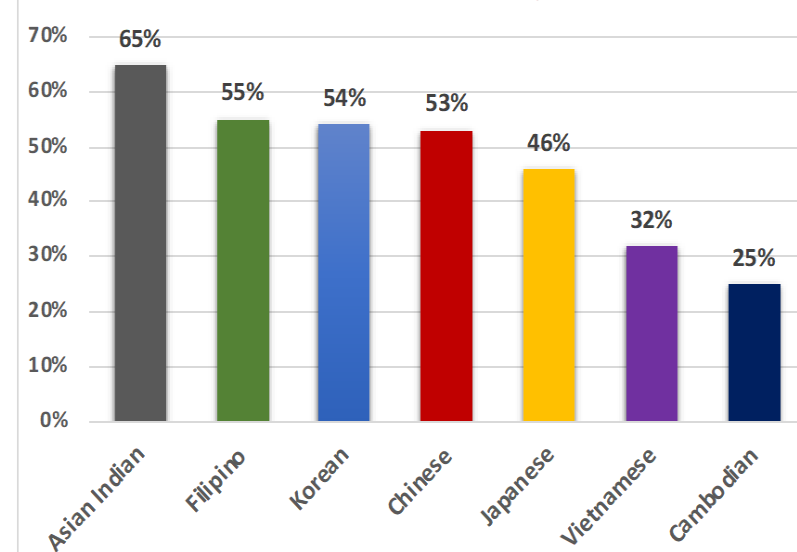
**% with a Graduate Degree**



**% Employed in a Professional, Scientific, Technical or Education Industry**



**% with Median Income \$100K+**



# Spotlight on Cambodian Americans

# BACKGROUND

- Massachusetts has the second largest Cambodian American population in the US, after California. Many Cambodians in Massachusetts live in Lowell and Lynn.<sup>5</sup>
- Since 1975, Lowell has served as a central migration hub for many Cambodian refugees, fleeing the Khmer Rouge regime.<sup>6</sup>
- Many Cambodian Americans in Massachusetts continue to face significant economic and employment hardships that have left them extremely vulnerable to the multi-faceted impact of the pandemic.

## CCIS CAMBODIAN RESPONDENTS PROFILE (N = 78)



70% live in Middlesex County  
60% live in Lowell, MA



30% have a median income <\$35K



83% speak a language other than English at home



18% identified as asexual, bisexual or pansexual, gay or lesbian, queer, or questioning, the highest rate reported among AAPI ethnicities.



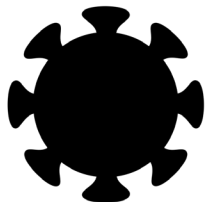
23% are caretakers of an adult with special needs

# CAMBODIANS & EMPLOYMENT

The pandemic has had a number of job-related impacts on the Cambodian community in Massachusetts.



- **71%** of Cambodians **work outside the home**, the 2<sup>nd</sup> highest among all CCIS ethnic groups
- Over 60% of Cambodians work in **front-line industries** that puts them at **increased risk of COVID-19 infection**:
  - 26% work in healthcare
  - 16% work in manufacturing
  - 12% work in social assistance
  - 7% work in accommodation and food services
- **1 in 5** Cambodians said they were **not able to keep 6 ft distance** when outside the home



- **Half (49%)** of all Cambodians were **“very worried”** about getting infected with COVID-19, the 3<sup>rd</sup> highest among all CCIS ethnic groups



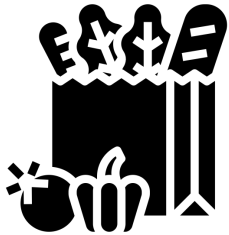
- **1 in 5 (19%)** employed Cambodians experienced a **recent job loss** in the past year, the 2<sup>nd</sup> highest among all CCIS ethnic groups
- **Another 17%** of employed Cambodians experienced **reduced work hours**

# CAMBODIANS & ACCESS TO BASIC NEEDS

Drastic employment changes have exacerbated the financial struggles faced by the Cambodian community.



- **4 out of 5 (81%)** worried about paying for 1 or more types of expenses or bills in the coming few weeks, the 3rd highest among all CCIS ethnic groups.



- **Nearly half (48%)** worried about getting food or groceries in the coming few weeks, nearly 2X as high compared to all CCIS respondents.



- **More than 1 in 4 (28%)** worried about getting internet in the coming few weeks, nearly 2X as high compared to all CCIS respondents.

# CAMBODIANS & HEALTH

All of these conditions and stressors have led the Cambodian community to experience some of the highest rates of behavioral health and substance use conditions among all AAPI groups:



- **2 out of 5 (38%)** reported 15+ days of poor mental health, compared to 25% among all AAPI respondents



- **However, nearly 1 in 3 (29%)** have not gotten the medical care that they needed since July 2020, compared to 16% among all AAPI respondents.



- **1 out of 5 (20%)** also reported use of marijuana in the past 30 days, one of the highest rates reported among all CCIS ethnic groups

# Spotlight on Vietnamese Americans

# BACKGROUND

- Massachusetts is home to over 53,000 Vietnamese Americans, who live primarily in Boston (Field's Corner in Dorchester), Quincy, Randolph, Lowell, and Worcester.<sup>7</sup>
- Since 1975, when the US military left Vietnam, many Vietnamese arrived in Massachusetts as refugees. The majority were non-English speaking with less formal education.<sup>8</sup>
- Like Cambodian Americans, Vietnamese Americans continue to face significant economic and social hardships, including high unemployment rates, housing instability, and family separation.

## CCIS VIETNAMESE RESPONDENTS PROFILE (N = 100)



Top communities represented include Boston (16%), Randolph (11%), Quincy (5%), and Revere (5%)



16% have a median income <\$35K



72% speak a language other than English at home



12% identified as asexual, bisexual or pansexual, gay or lesbian, queer, or questioning, one of the highest rates reported among AAPI ethnicities.

# VIETNAMESE & ECONOMIC NEEDS

Similar to the impact on Cambodian Americans, the Vietnamese American community is also experiencing significant economic hardship.



- **Half** of Vietnamese work outside of the home, leaving them more likely to be exposed to COVID-19.
- **1 in 10 (11%)** of employed Vietnamese experienced a recent job loss & **14%** had reduced work hours.



- **Nearly half (48%)** worried about getting food or groceries in the coming few weeks, nearly 2X as high compared to all CCIS respondents.



- **2 out of 3 (62%)** worried about paying for 1 or more types of expenses or bills in the coming few weeks, the 2<sup>nd</sup> highest among all AAPI ethnic groups.



- **More than 1 in 4 (27%)** worried about getting medication in the coming few weeks, 2X as high compared to all CCIS respondents.

# Spotlight on East Asian Americans

# BACKGROUND

- East Asians in Massachusetts come from China, Japan, South Korea, Mongolia, and Taiwan.
- There is much diversity even among this group, ranging from the first wave of working-class immigrants that took up jobs in restaurants and other service industries, to later waves of scholars and professionals now working in predominantly academic and STEM fields.<sup>9</sup>
- Though socioeconomically-driven health inequities are not immediately apparent from the data, this group still faced a unique set of significant challenges during the pandemic.



## CCIS EAST ASIAN RESPONDENTS PROFILE

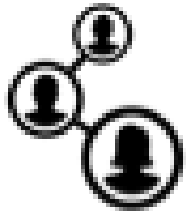
### Top communities represented on CCIS by East Asian ethnicity

Chinese (N = 471)	Korean (N = 94)	Japanese (N = 101)
Boston	Cambridge	Cambridge
Cambridge	Boston	Boston
Shrewsbury	Brookline	Brookline
Quincy	Arlington	Framingham
Newton	Stoneham	Somerville

Percent of respondents that spoke a language other than English at home:

- 54% among Chinese
- 31% among Japanese
- 30% among Korean

# EAST ASIANS & HEALTH



**Chinese, Korean, and Japanese** residents reported some of the **highest rates of discrimination among all CCIS ethnic groups.**



**Japanese and Koreans** experienced some of the **highest rates of job loss and reduced work hours among all CCIS ethnic groups.**



**Over 2 in 5 (41%) Koreans** have not gotten the medical care that they needed. **This is the highest reported rate among all CCIS ethnic groups.**  
**Over 1 in 3 (34%) Japanese** have also not gotten the medical care that they needed. **This is the 4th highest reported rate among all CCIS ethnic groups.**



Experiences of discrimination and other stressors brought on by the pandemic may have led to **1 in 5 (22%) Japanese and Korean (18%)** residents reporting marijuana use in the past 30 days - **two of the highest among all CCIS ethnic groups**

# Spotlight on Indian Americans

# BACKGROUND

- Over 58,000 Indian Americans reside in Massachusetts.<sup>10</sup>
- There are two areas in Massachusetts with high concentrations of Indian Americans: the Boston/Cambridge/Newton area and the Worcester/Shrewsbury/Westboro.<sup>10</sup>
- Indian Americans have the highest educational attainment and median household income among all AAPI ethnicities. Nearly 75% of Indians in the Boston area work in white-collar professions, the most common occupations are postsecondary teachers, physicians and surgeons, and management analysts.<sup>11</sup>

## CCIS INDIAN AMERICAN RESPONDENTS PROFILE (N = 436)



Top communities represented include Shrewsbury (29%), Boston (10%), Cambridge (6%), and Framingham (4%)



10% have a median income <\$35K



71% speak a language other than English at home



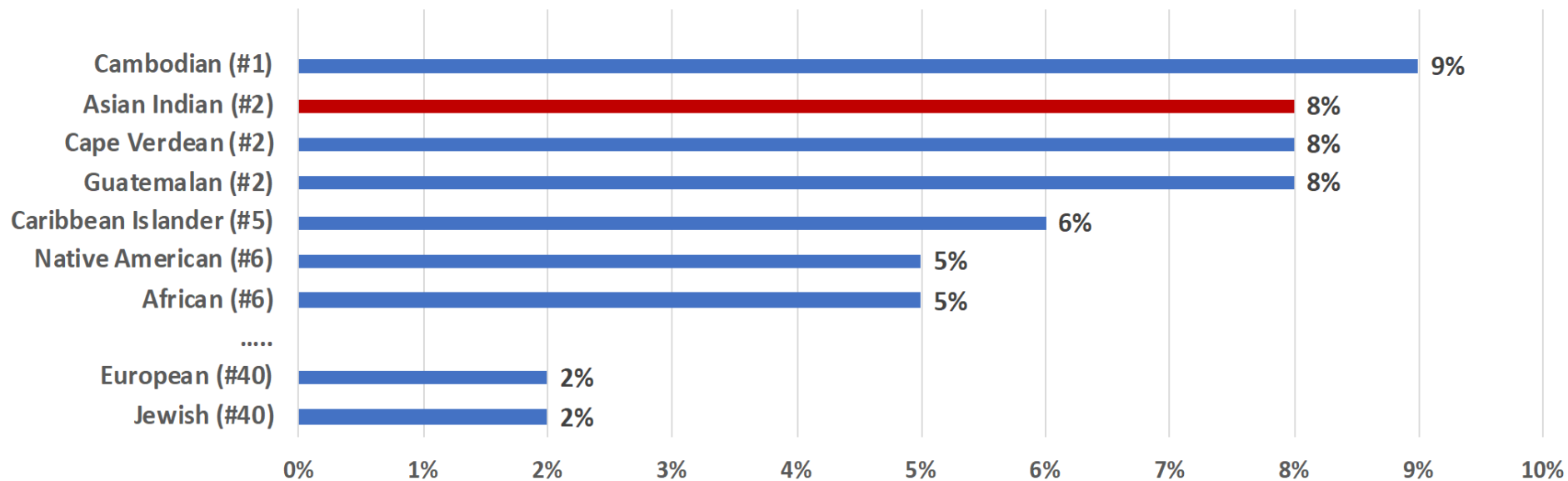
10% identified as asexual, bisexual or pansexual, gay or lesbian, queer, or questioning, one of the highest rates reported among AAPI ethnicities.

# INDIAN AMERICANS

Although Indian Americans experienced, on average, lower rates of employment and economic challenges compared to other AAPI ethnicities, this community still experienced its own set of unique issues.

Indian Americans reported the second highest rate of intimate partner violence (IPV) among all CCIS ethnic groups:

**% Experience Any Intimate Partner Violence During COVID-19 Pandemic**



Overall, 8% of Indian Americans said someone they were dating/married to exhibited IPV :

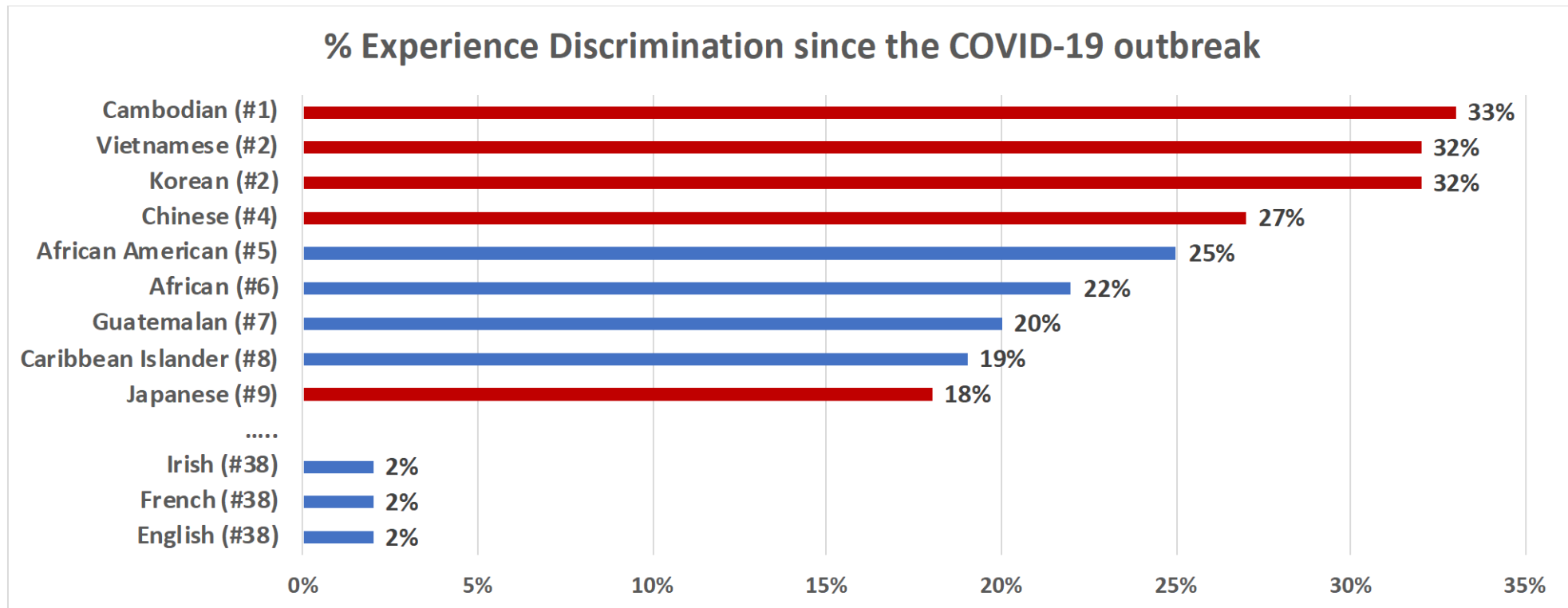
- 6.5% exhibited IPV control behavior
- 2% exhibited physical violence

# Experiences of Discrimination

# ANTI-ASIAN SENTIMENTS

As we have seen on the news countless times over the last year, Asian Americans have increasingly become victims of Anti-Asian violence. Though this violence is not new, it has been exacerbated since the beginning of the pandemic with a spike in racism and xenophobia linked to pandemic-related rhetoric.

AAPI communities in Massachusetts were among those most severely impacted by experiences of discrimination during the pandemic:



# ANTI-ASIAN SENTIMENTS

“...people curse me during pandemic, ‘your Chinese people brought the virus to USA. You should go back to China.’ As a matter of fact, I have been living in the United States for over 7 years and never been out of the states or visited China.”

- Chinese respondent

“My 12 year old child is Asian and was called derogatory names, including 'coronavirus' while out publicly in a store back in March. This experience has made a lasting impression and was emotionally harmful.”

“1 person looked at me and screamed 'Corona' and ran out of public restroom while we at the sink washing our hands. There were only two of us in the bathroom. People have looked at me and immediately crossed the street in order to avoid me.”

- Japanese respondent

“i felt targeted because of my Asian background. I can see shoppers in grocery market intentional monitor my every move at the market and costumers refusing to be seated in table next to me. Its minor details but i did not experience these subtle discrimination prior to covid.”

- Vietnamese respondent

# LIMITATIONS

While CCIS was successful in reaching many traditionally hard to reach AAPI ethnicities, we were not able to reach all AAPI ethnicities in sufficient sample sizes in order to report out on their experiences. These include other **Southeast Asian** ethnicities like Hmong, Malaysian, Thai, Indonesian; other **Central Asian** ethnicities like Sri Lankan, Bangladeshi; and the Native Hawaiian and **Pacific Islander** ethnicities, like Chamorus and Samoan.

The absence of CCIS data on these populations does **NOT** mean they are not being adversely impacted by the pandemic. In fact, national data and information would suggest that each of these ethnic groups is experiencing their own set of unique challenges during the pandemic.

# KEY TAKEAWAYS: AAPI RESIDENTS

While the common umbrella of "AAPI" unites this community, we must be nuanced when addressing the experiences and needs of Asian Americans/Pacific Islanders during the pandemic.

- Data Disaggregation matters.
- Each ethnicity is being impacted by the pandemic differently. We must understand their stories in order to understand their experiences.
- AAPI communities in Massachusetts were among those most severely impacted by experiences of discrimination during the pandemic.

# References

1. US Census Bureau. <https://www.census.gov/topics/population/race/about.html>
2. *American Community Survey, 2019 5-year estimate*
3. Estimated Population of Asian American Subgroups in Massachusetts, 2017. Institute for Asian American Studies. University of Massachusetts Boston, Available online at [https://www.umb.edu/iaas/census/acs/estimated\\_population\\_of\\_asian\\_american\\_subgroups\\_in\\_massachusetts\\_2017](https://www.umb.edu/iaas/census/acs/estimated_population_of_asian_american_subgroups_in_massachusetts_2017)
4. Pew Research Center analysis of 1970 decennial census through 2016 American Community Survey data; <https://www.pewresearch.org/hispanic/2017/09/18/2015-statistical-information-on-hispanics-in-united-states-current-data/>
5. Plokhii, Olesia; Mashberg, Tom. [Cambodian-Americans confronting deportation](#), *The Boston Globe*, January 27, 2013.
6. Chan, Sucheng (2015-09-03). "[Cambodians in the United States: Refugees, Immigrants, American Ethnic Minority](#)". *Oxford Research Encyclopedia of American History*.
7. Lo, Shauna; Tran Thao. Profiles of Asian American Subgroups in Massachusetts: Vietnamese Americans in Massachusetts. August 12, 2012. [https://scholarworks.umb.edu/cgi/viewcontent.cgi?article=1029&context=iaas\\_pubs](https://scholarworks.umb.edu/cgi/viewcontent.cgi?article=1029&context=iaas_pubs)
8. *Changing Faces of Greater Boston - A report from Boston Indicators, the Boston Foundation, UMass boston and UMass Donahue Institute*. Page 26-29. Available online at <https://www.bostonindicators.org/-/media/indicators/boston-indicators-reports/report-files/changing-faces-2019/changing-faces-of-greater-boston.pdf>
9. "History of Chinese Americans". Wikipedia. [https://en.wikipedia.org/wiki/History\\_of\\_Chinese\\_Americans](https://en.wikipedia.org/wiki/History_of_Chinese_Americans)
10. Indian community at home in Central Mass." *Worcester Telegram*. Dec 10, 2017. <https://www.telegram.com/news/20171210/indian-community-at-home-in-central-mass>
11. "Imagine all the people: Indians in Boston". Boston Planning and Development Agency. 2016. <http://www.bostonplans.org/getattachment/fb373ac4-ff85-415f-9984-739b3767f296>



# POPULATION SPOTLIGHT: HISPANIC/LATINX RESIDENTS

# FRAMING MATTERS

While much emphasis is placed on the personal responsibility of masking and social distancing, and the increased morbidity and mortality of COVID-19 experienced by Hispanic/Latinx groups, less emphasis is placed on the structural drivers of these, including lack of workplace protections against COVID-19, and the importance of work in order to meet expenses for basic needs.

- In addition to being disproportionately impacted by COVID cases and deaths, Latinx respondents facing significant employment/work related stressors while also struggling to meet basic needs.
- The above stressors are associated with increased mental health concerns and increased substance use.

*“I just need mental health days from work to recoup my energy and help my kids with their online studies.[It’s] stressful.”*

*-Latinx parent respondent*

# BACKGROUND

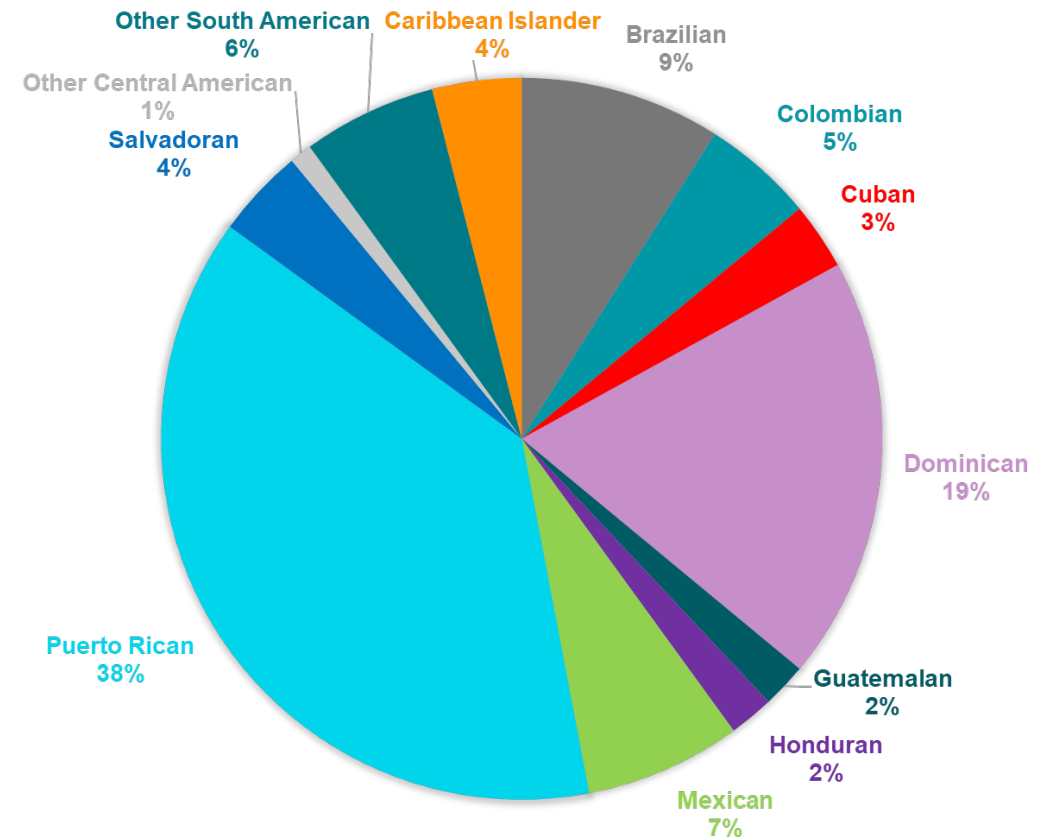
Hispanic/Latinx are a diverse group that came to the United States for a variety of reasons, such as better economic opportunities, fleeing poverty and violence, political changes in their home country, and impacts of natural disasters.

Hispanic/Latinx populations in the US have historically faced racism, xenophobia, and fear of deportation. Targeted immigration policies in recent years have exacerbated these problems, making many Hispanic/Latinx in the US fearful of government programs.

Among CCIS Hispanic/Latinx respondents, the most common ethnicities reported were: Puerto Rican (38%), Dominican (19%), and Brazilian (9%).

This was comparable to the 2019 proportion of Hispanic/Latinx residents in MA\*.

## CCIS Hispanic/Latinx Profile (n=2,432)



# CCIS HISPANIC/LATINX RESPONDENTS PROFILE



2,432 Hispanic/Latinx residents took the survey

60% of Hispanic/Latinx respondents lived in one of the 20 Vaccine Equity Initiative Communities most effected by COVID-19



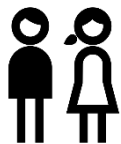
75% had a median income <\$100K



80% spoke a language other than English at home



78% had less than a Bachelors degree



37% were between the ages of 25-35

The CCIS worked intentionally to reach diverse Hispanic/Latinx populations by **offering the survey in Spanish and Portuguese**, in addition to **partnering with community-based organizations** serving various Hispanic/Latinx communities and in communities most impacted by COVID-19

These efforts were successful with **5x** as many Hispanic respondents as in past annual surveillance surveys

# FOR HISPANIC/LATINX RESIDENTS, WORK INCREASED RISK OF COVID-19



## WORK OUTSIDE THE HOME

**57%** of Hispanic/Latinx workers worked outside the home,

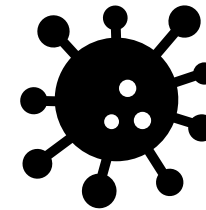
- 65% received PPE from their employer
- 37% received additional health and safety training
- 60% were able to social distance while at work
- 65% had paid sick leave



## HIGH-RISK INDUSTRIES

Hispanic/Latinxs worked in a number of industries that puts them at **increased risk of COVID-19 infection:**

- 26% worked in healthcare
- 17% worked in social assistance
- 12% worked in education
- 10% worked in other services (not public administration)



## HIGHER RATES OF INFECTION + HOSPITALIZATION

- Hispanics were **3.2X as likely to get infected** w/COVID compared to White nH/nL\*,
- and were **1.7X as likely to be hospitalized** for COVID compared to White nH/nL\*



## LOW VACCINE ACCESS

- Vaccine access remains a major issue
- Hispanics make up **28% of COVID cases** but just **7% of vaccinations** in MA\*

# WHERE YOU WORK IMPACTS YOUR MENTAL HEALTH

## Health Care

- 26% of Hispanic/Latinx worked in Health Care
- 39% reported 15+ poor mental health days last month

## Social Assistance

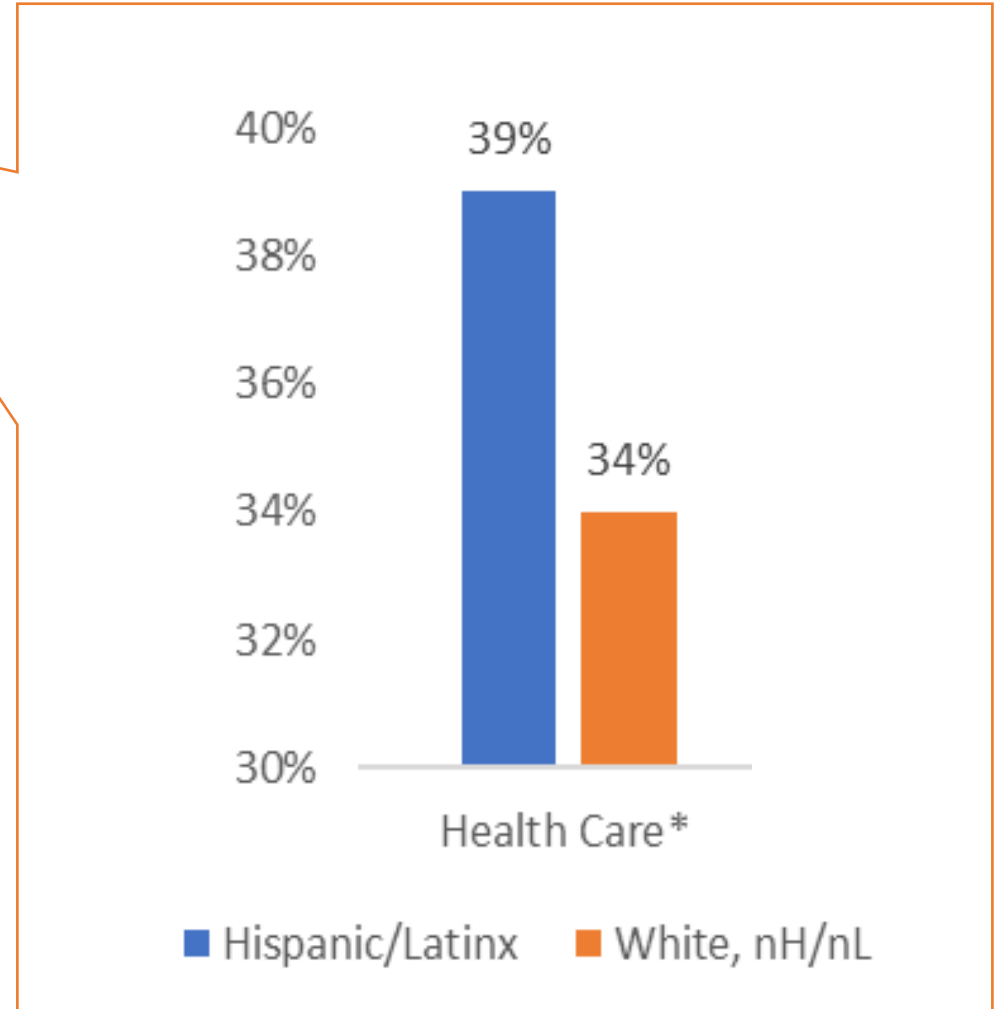
- 17% of Hispanic/Latinx worked in Social Assistance
- 34% reported 15+ poor mental health days last month

## Education Services

- 12% of Hispanic/Latinx worked in Education
- 34% reported 15+ poor mental health days last month

## Other Services (not Public Administration)

- 10% of Hispanic/Latinx worked in Other Services
- 34% reported 15+ poor mental health days last month



# CHANGES IN WORK IMPACTED YOUR MENTAL HEALTH



- **Over 2 in 5 (42%)** Hispanic/Latinx workers who lost their job reported 15 or more poor mental health days in the past 30 days.
- Hispanic/Latinx workers who had a change in the nature of their work were significantly more likely to report 15 or more poor mental health days in the past 30 days compared to white, nH/nL workers (38% v 33%).

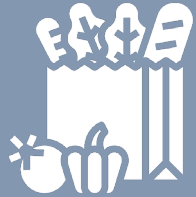


- Change in nature of work included:
  - Increase in hours
  - Started a new or different job
  - Assigned a different role
  - Working from home

# HISPANIC/LATINX WERE WORRIED ABOUT MEETING THEIR BASIC NEEDS

Though working increased risk of contracting COVID-19, job loss and reduced work hours created barriers to affording expenses for basic needs like food, bills, internet. This was associated with poor mental health.

- **JOB LOSS:** 11% of employed Hispanic/Latinxs experienced a recent job loss in the past year
- **REDUCED WORK:** Another 17% experienced reduced work hours or had to take leave



## FOOD INSECURITY

Nearly **half** (49%) worried about getting food or groceries in the coming few weeks.



## PAYING BILLS

**70%** worried about paying for 1 or more types of expenses or bills in the coming few weeks.



## INTERNET FOR SCHOOL/WORK

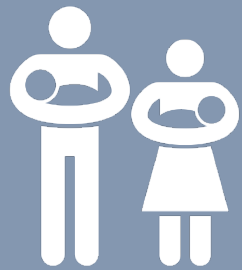
**24%** worried about getting internet in the coming few weeks.



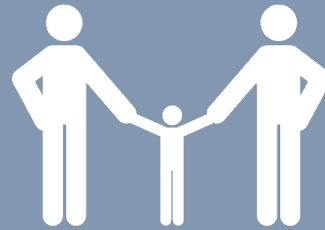
## MENTAL HEALTH

**1 in 3** reported having 15 or more poor mental health days in the past month.

# HISPANIC/LATINX PARENTS WERE PARTICULARLY IMPACTED BY STRESS



**80%** of younger Hispanic/Latinx parents (age 25-34) reported poor mental health days



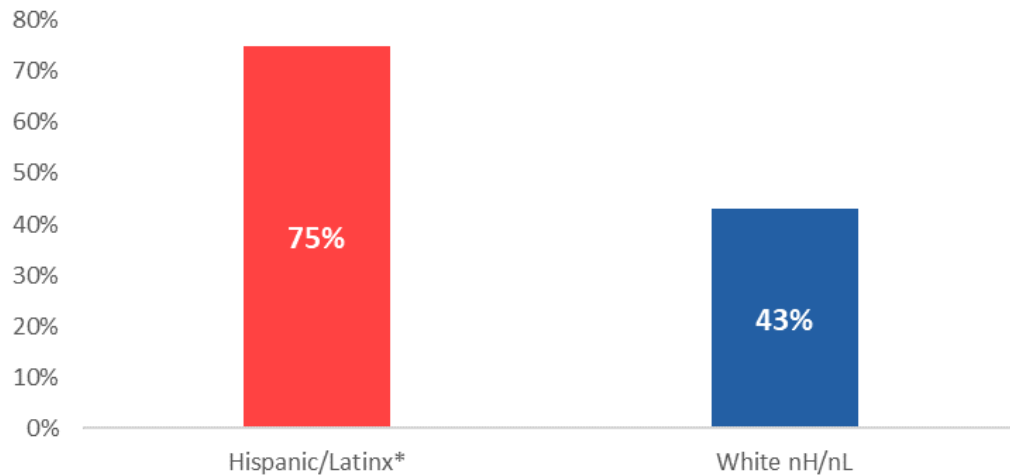
**28%** of Hispanic/Latinx parents reported one or more PTSD reactions during COVID-19



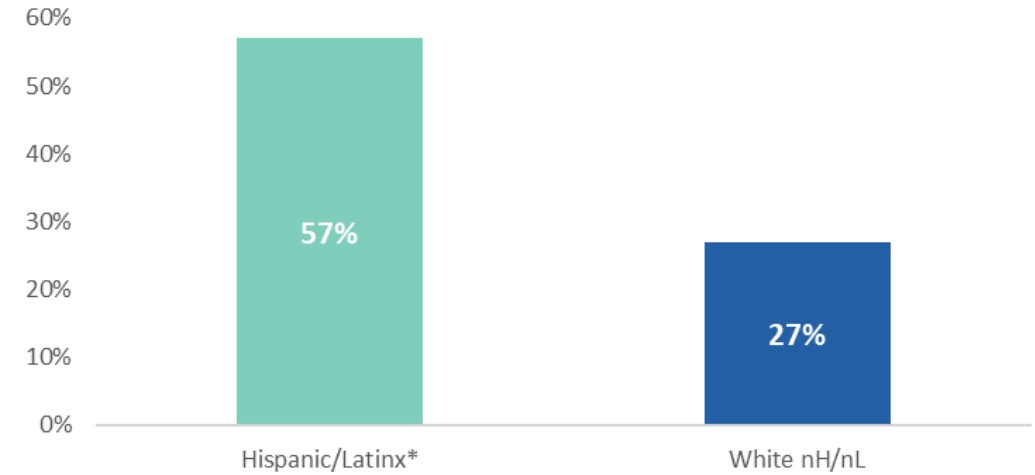
The rate of Hispanic/Latinx respondents requesting suicide prevention and crisis management services was **4x higher** than their white counterparts

# HISPANIC PARENTS WERE UNDER A LOT OF STRESS

% Parents Most Worried about Any Expenses in Next Few Weeks



% Parents Worried about Housing Expenses in Next Few Weeks



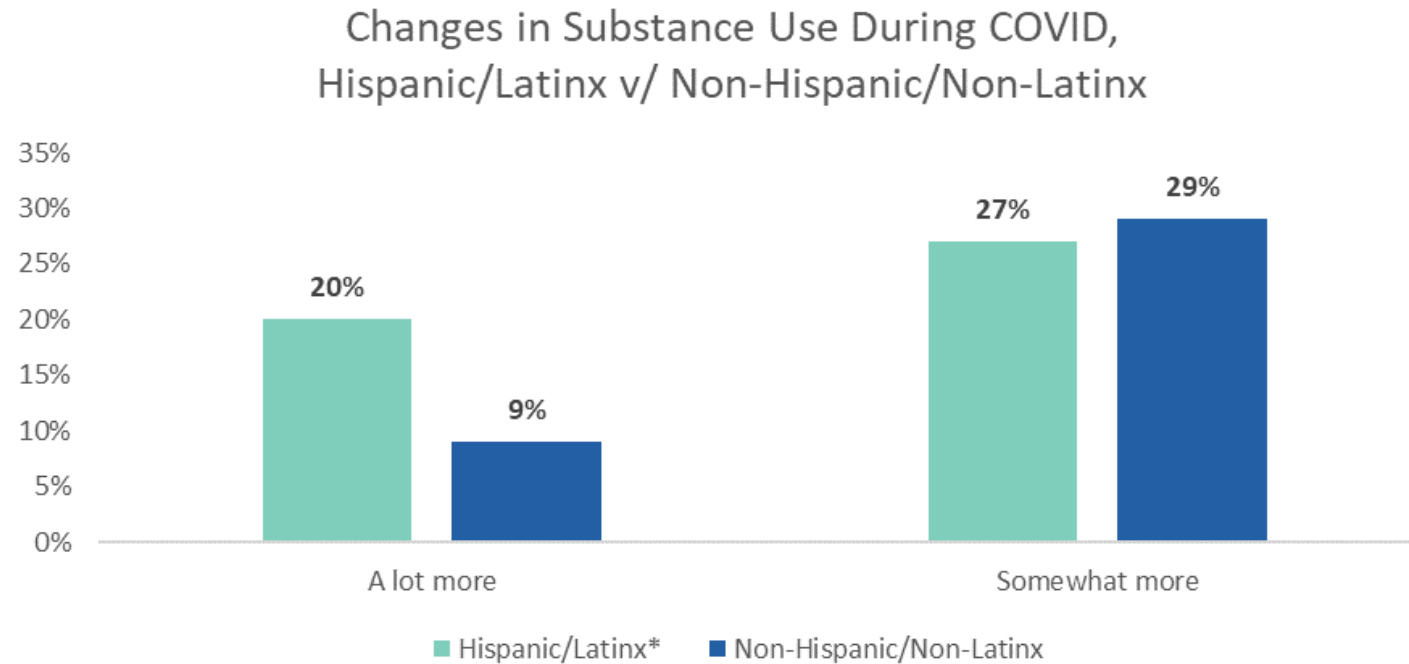
Almost 1 in 3 (31%) Hispanic/Latinx parents reduced their hours or took leave from work in order to take care of their children



75% of Hispanic/Latinx parents reported being worried about expenses

\* denotes statistically significant findings

# CHANGE IN SUBSTANCE USE



While Hispanic/Latinx reported less substance use than White nH/nL, those that are using substances were **more likely to report increased use (47%)** compared to White nH/nL (38%)

\* denotes statistically significant findings  
220

## KEY TAKEAWAYS: HISPANIC/LATINX RESIDENTS

Hispanic/Latinx groups – especially parents – are under increased stress, and face barriers to affording basic needs, which makes work even more crucial. Unfortunately, work is also increasing this group's risks to COVID-19, by requiring them to work outside the home, offering few opportunities for social distancing, and providing inconsistent access to PPE.



# POPULATION SPOTLIGHT: INDIGENOUS RESIDENTS

# FRAMING MATTERS

Despite their high rates of need, indigenous residents and their data are often "invisible" - many report their American Indian or Alaska Native (AI/AN) identity in combination with other race categories and get categorized into other groups. This yields very low aggregate numbers, which makes understanding and quantifying their needs difficult.

# EXECUTIVE SUMMARY

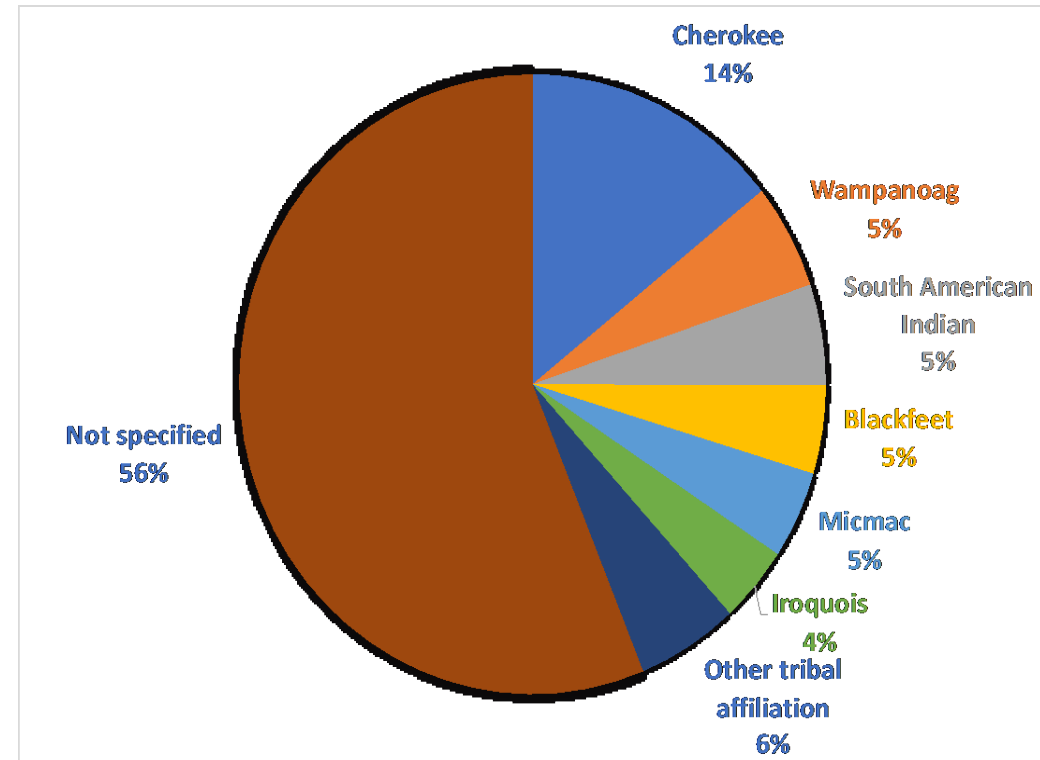
- The AIAN community in Massachusetts is consistently experiencing **some of the worst outcomes** during the pandemic, including employment, access to basic needs, exposure to COVID-19 outside the home, mental health, substance use, and access to medical care.
- Despite their high rates of need, AIAN residents and their **data are oftentimes "invisible"** due to the fact that many report their AIAN identity in combination with other race categories and end up getting categorized into other groups, yielding very low aggregate numbers that make understanding and quantifying their needs difficult.
- Furthermore, AIAN residents **are spread widely across the Commonwealth**, where they typically make up less than a fraction of a percent of the population overall, making it even more challenging to identify and reach them.
- Statewide, regional, and municipal public health efforts should **prioritize the identification and reach of AIAN residents.**

“Because Native Americans are often “invisible,” so are their struggles...”

# AI/AN IN MASSACHUSETTS

- Today, there are over **49,000 American Indian and Alaska Natives (AI/AN)** residing in Massachusetts (including individuals who self-identify as “AI/AN” in combination with another Census race category).
- AI/ANs in Massachusetts are of **diverse tribal affiliations**. In addition to the tribes listed here, the state is also home to AI/ANs who identify as Nipmuc, Central American Indian, Canadian and French American Indian, as well as Spanish American Indian.
- However, data on Massachusetts AI/AN populations are **often unreportable because of small sample sizes**, due in part to a longstanding practice of counting only those who select “AI/AN” as their sole identification. Individuals who select AI/AN along with one or more other census race categories often get grouped with “Multi-racial”.

MASSACHUSETTS AI/AN PROFILE  
N = 49,405  
AI/AN alone or in combination with other races



# REACHING THE AI/AN COMMUNITY ON CCIS

- CCIS intentionally worked with tribal partner organizations and other community partners to reach the AI/AN population.
- **Over 300 residents who identify as AI/AN (alone or in combination with other race identities)** were captured in the survey. This substantial sample size enabled us to capture the experiences of this population in rich detail.
- AI/AN respondents came from **over 130 geographically and demographically diverse communities** across Massachusetts – from Agawam to Yarmouth, from Bolton to Boston.
- What we found was that **the pandemic has disproportionately impacted the AI/AN community in many aspects of life. The AI/AN population consistently reported the worst outcomes among all race groups.**

## CCIS AAPI PROFILE

Top 12 communities by percent of AI/AN survey respondents living there were:

- Boston (10%)
- Lowell (4%)
- Springfield (4%)
- Cambridge (4%)
- Worcester (3%)
- Aquinnah (2%)
- Brockton (2%)
- Chelsea (2%)
- Holyoke (2%)
- Lynn (2%)
- Northampton (2%)
- New Bedford (2%)

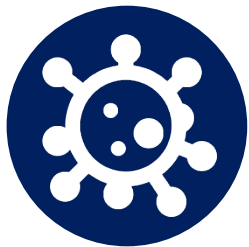
“A pandemic like Covid-19, it makes sense for it to disproportionately impact [the Native American] population that is [already at health] risk...and then you add to it other social and economic situations that this population deals with -- rental housing, multigenerational housing, work situations which exposes them to continued exposure to Covid-19, both at work and at home. Those are all the circumstances that lend themselves to this population being impacted disproportionately.”

-- Dr. Esmaeil Porsa, Harris Health System (Houston)

# ABILITY TO STAY SAFE FROM COVID-19

AI/AN residents faced increased risk of COVID-19 exposure from working outside the home. Yet, were less likely to have adequate employer protection for PPE and other risk mitigation measures.

Compared to White, nH/nL residents, AI/AN residents were....



**1.2x** as likely to work outside of the home

**1.3x** as likely to NOT report being provided PPE by their employer

**1.5x** as likely to be extremely worried about becoming infected with COVID

# ECONOMIC CHALLENGES

AI/AN residents faced some of the worst economic challenges – they were hit hardest by employment related changes among all race groups and had some of the highest rates of need for many essential items.

Compared to White, nH/nL residents, AIAN residents were....



## Employment Changes

- 1.6x** as likely to experience recent job loss
- 1.4x** as likely to experience reduced work hours/leave



## Ability to Meet Basic Needs

- 1.6x** as likely to report concern for paying 1 or more bills
- 1.9x** as likely to be worried about getting food or groceries
- 2x** as likely to be worried about getting face masks
- 2.1x** as likely to be worried about getting medication
- 2.3x** as likely to be worried about having access to broadband

“So we have entire historical and [socio-]economic circumstances that include **racism and marginalization**, quite frankly, that lead to high prevalence of **mental health** and **behavioral health** concerns, higher rates of **depression**, higher rates of [post-traumatic stress disorder], higher rates of **substance abuse**, and higher rates of **suicide**...

and this is only where we are as a **baseline**... prior to COVID-19.”

-- Donald Warne  
Associate Dean of Diversity, Equity and Inclusion  
University of North Dakota School of Medicine & Health Sciences

# MENTAL HEALTH AND ACCESS TO CARE

Though experiencing one of the highest rates of poor mental health, indigenous residents also were most likely to experience delays in routine mental health care.

Compared to White, nH/nL residents, AIAN residents were....



## Mental health & substance use

**1.2x** as likely to report poor 15+ days of poor mental health

**1.2x** as likely report increased substance use since prior to the pandemic



## Ability to access care

**1.5x** as likely to experience delays in routine mental health care

**1.9x** as likely to experience delays in any type of medical care

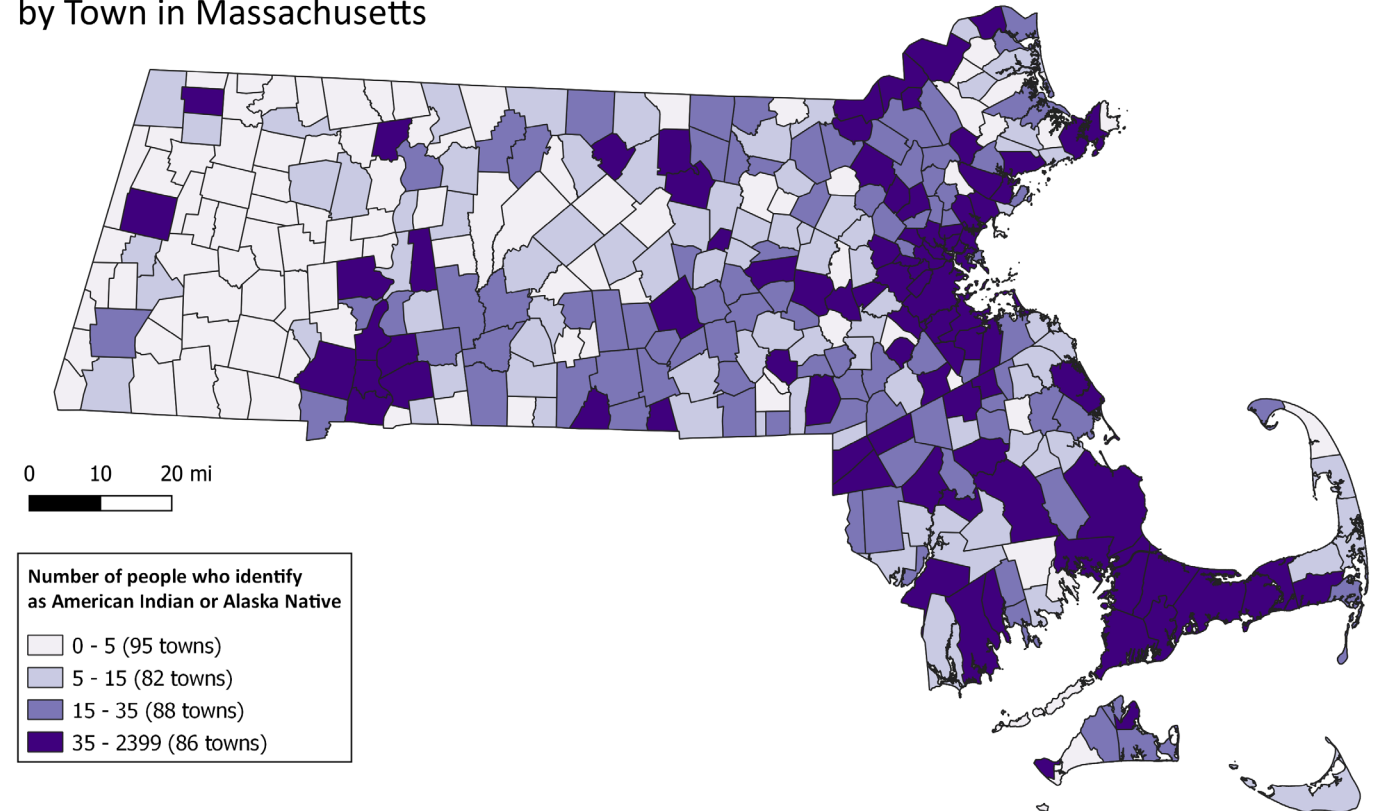
“Just because we have a small population size relative to the larger population doesn’t mean that we need less resources...it means we need those resources even more.”

-- Raquel Halsey  
Executive Director, North American Indian Center in Boston

# WE NEED TO FIND THEM TO SUPPORT THEM

- AI/AN residents reside in **nearly every city or town in Massachusetts**. They are not concentrated into just a handful of communities.
- Yet with the exception of Mashpee where AI/AN population make up 3-5% of the overall population, in almost all other communities, they make up **less than a fraction of a percent of the population overall**.
- Statewide, regional, and municipal public health efforts should **prioritize the identification and reach of AI/AN residents**, many of whom may identify as AI/AN in combination with other races.

American Indian and Alaska Native Population  
by Town in Massachusetts



Map depicts number of people who identify as American Indian or Alaska Native (AI/AN) by town in Massachusetts, based on 2010 United States Census data. The ranges are equal quartiles, where the maximum value is inclusive for each range. Please note this data only includes individuals who identified as "American Indian and Alaska Native" alone and not in combination with 1 or more other race categories. It is likely an undercount of the total number of AI/AN residents in Massachusetts.

# KEY TAKEAWAYS: AI/AN RESIDENTS

- The AIAN community in Massachusetts is consistently experiencing **some of the worst outcomes** during the pandemic, including employment, access to basic needs, exposure to COVID-19 outside the home, mental health, substance use, and access to medical care.
- Despite their high rates of need, AIAN residents and their **data are oftentimes "invisible"** due to the fact that many report their AIAN identity in combination with other race categories and end up getting categorized into other groups, yielding very low aggregate numbers that make understanding and quantifying their needs difficult.
- Furthermore, AIAN residents **are spread widely across the Commonwealth**, where they typically make up less than a fraction of a percent of the population overall, making it even more challenging to identify and reach them.
- Statewide, regional, and municipal public health efforts should **prioritize the identification and reach of AIAN residents.**



# POPULATION SPOTLIGHT: BLACK RESIDENTS

# FRAMING MATTERS

Despite the common belief that inequities are caused by people's culture and/or behavior, the data shows us that structural racism is a primary driver of health:

- Differences in socioeconomic status (education and income) do not explain inequities alone
- Differences in where people live do not explain inequities alone
- Inequities are caused by systems and are cumulative and compounding

Why are black people generally being infected and dying at higher rates than other racial groups? This is the question of the hour. And too many Americans are answering this new question in the old, familiar way. They are blaming poverty, but refusing to recognize how racism distinguishes black poverty from white poverty, and makes black poverty more vulnerable to a lethal contagion.

-- Ibram X. Kendi,  
*Stop Blaming Black People for Dying of the Coronavirus*

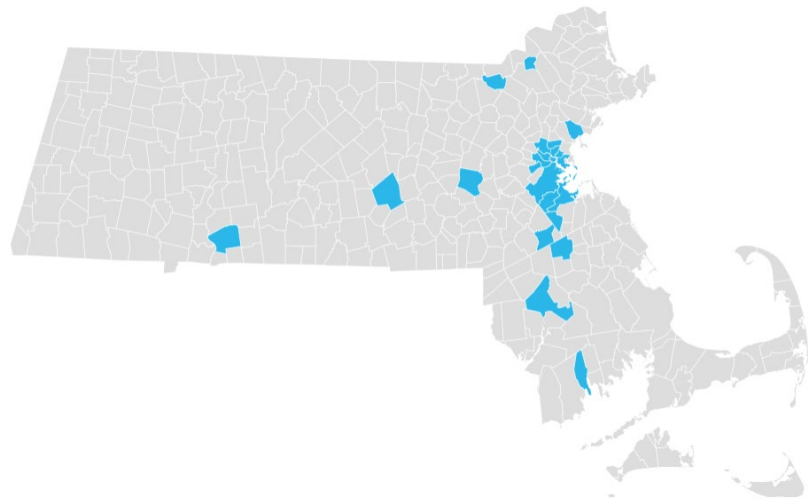
# BLACK COMMUNITY IN MASSACHUSETTS



9% of the population of Massachusetts is Black.

The Black community in Massachusetts includes people from varied backgrounds, ethnicities, languages and histories.

Inequities experienced by Black people must be understood within the context of persistent anti-Black racism – from slavery and the commodification of Black bodies to segregation and redlining to police brutality.



Due to the continued legacy of these racist policies, Massachusetts continues to be a deeply segregated state - geographically, occupationally and socioeconomically. 78% of Black MA residents live 20 municipalities.

# BLACK COMMUNITY IN MASSACHUSETTS

Black residents of Massachusetts experience significant socio-economic inequities compared to White residents.

## In Massachusetts:

The median net worth of a White household is \$247,500, the median net worth of a Black household is **\$8.00**.



For every \$1.00 White households earn, Black households only earn **\$0.62**



48%



28%

48% of White residents 25+ hold a Bachelors' degree or higher, while only 28% of Black residents 25+ do.

Sources: UMDI 2019 Population Estimates; Federal Reserve Bank of St. Louis, Examining U.S. Economic Racial Inequality by State, 2020; American Community Survey 2019 Table S1501; Federal Reserve Bank of Boston, The Color of Wealth,, 2017.

# REACHING THE BLACK COMMUNITY ON CCIS

CCIS intentionally worked to reach diverse communities of color, including partnering with trusted **community-based organizations** (CBOs), translating the survey into 11 languages including **Cape Verdean creole** and **Haitian creole**.

## CCIS BLACK RESPONDENTS PROFILE



1,153 Black, nH/nL respondents took the survey. 1,1750 respondents identified Black as at least a part of their racial identity.

70% of Black, nH/nL respondents live in one of the 20 Vaccine Equity Initiative Communities most effected by COVID-19

77% of Black, nH/nL respondents have incomes less than \$100,000

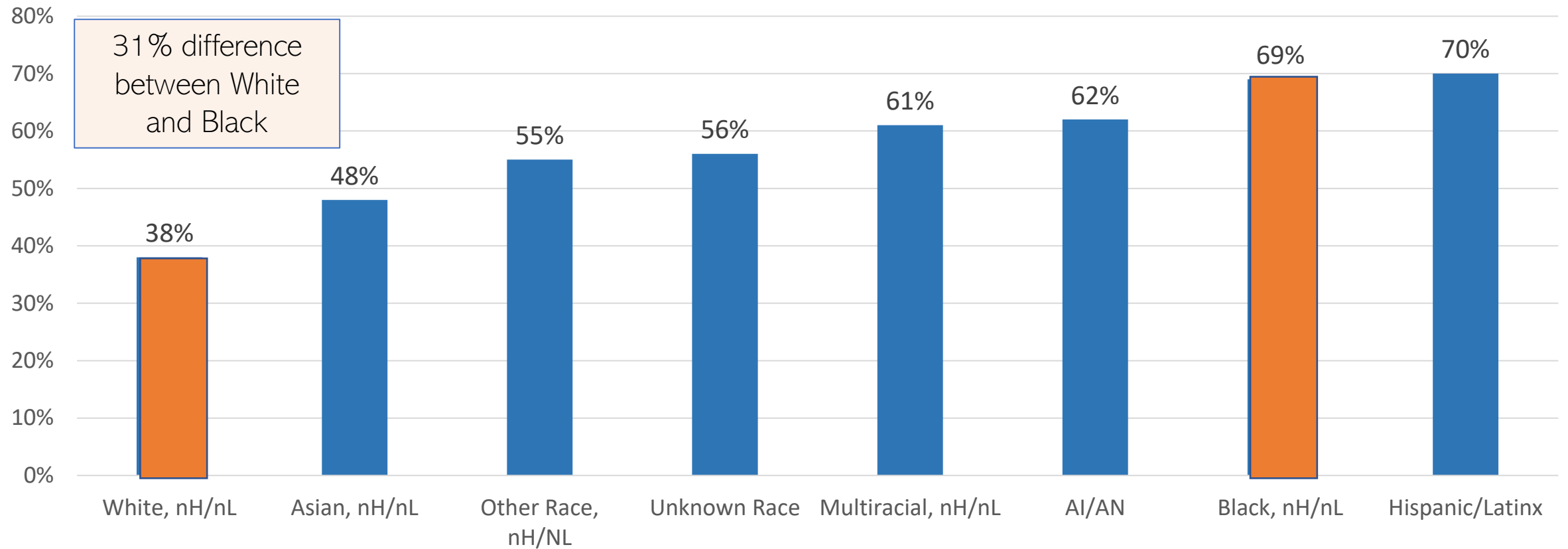
28% of Black, nH/nL respondents speak languages other than English

The most common **ethnicities** identified among Black, nH/nL respondents are: (1) African American – 65%; (2) Caribbean Islander – 12%; (3) African – 11%; (4) Haitian – 9%; (5) Cape Verdean – 8%

# EDUCATION, INCOME & INEQUITY

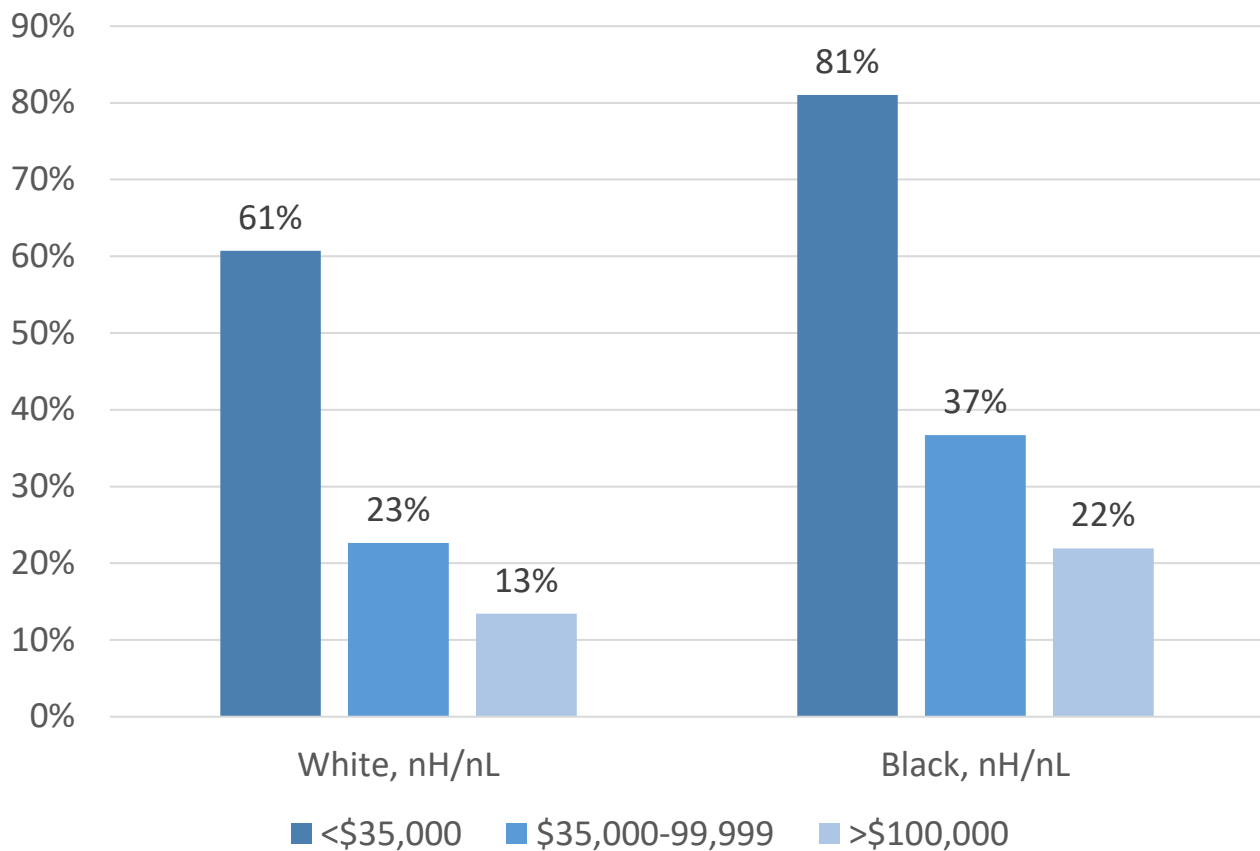
# There are significant inequities in SDoH between Black and White respondents.

Worried about paying 1 or more types of expense or bills in the coming few weeks

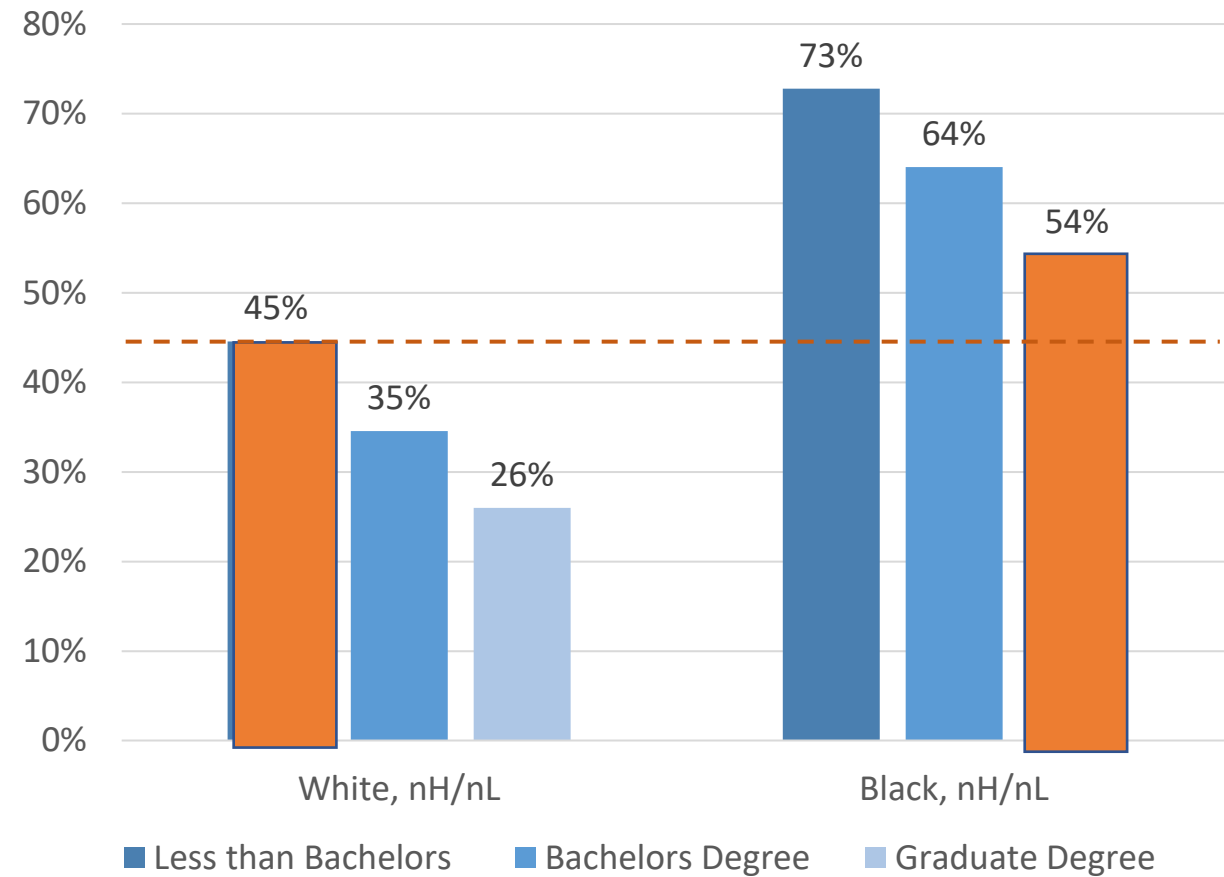


# Differences in education and income do not explain these inequities.

Worried about paying 1 or more types of expense or bills in the coming few weeks



Worried about paying 1 or more types of expense or bills in the coming few weeks



# Inequities are cumulative.

Populations who experience inequities who are also Black experience even greater inequities.

44% of all respondents were worried about expenses.

50% of all respondents who are parents were worried about expenses.

+

69% of all respondents who are Black were worried about expenses.

=

74% of all respondents who are parents & are Black were worried about expenses.

# GEOGRAPHY & INEQUITY

# REDLINING, SEGREGATION, DISINVESTMENT

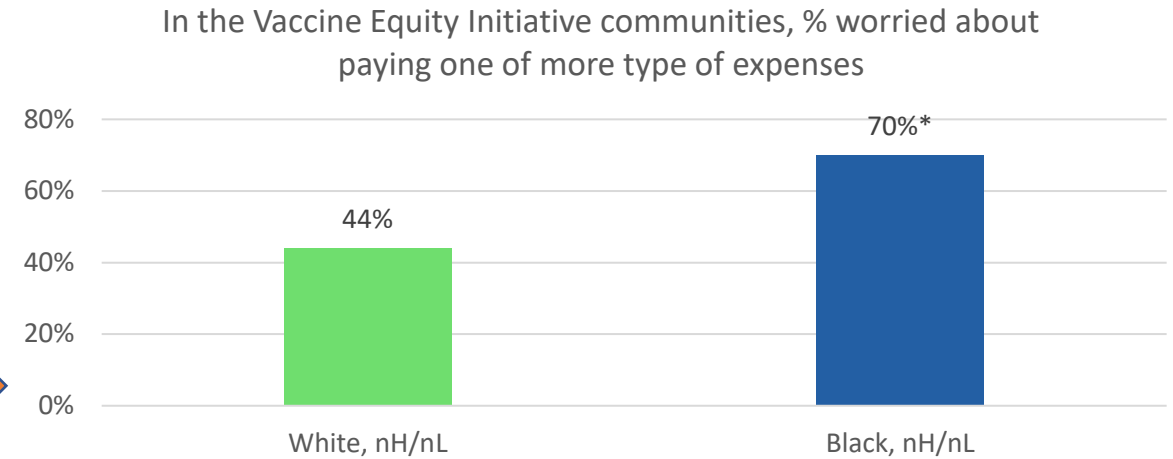
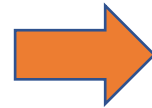


- Over centuries, discriminatory and exclusionary policies and practices have shaped where people live. These policies, practices and their modern manifestations have impacted where Black people live in Massachusetts. People of color, including Black people, are concentrated in only a handful of communities.
- Policies and practices, including school funding models, disinvestment of business, and over-policing, have perpetuated racial inequities in these communities.

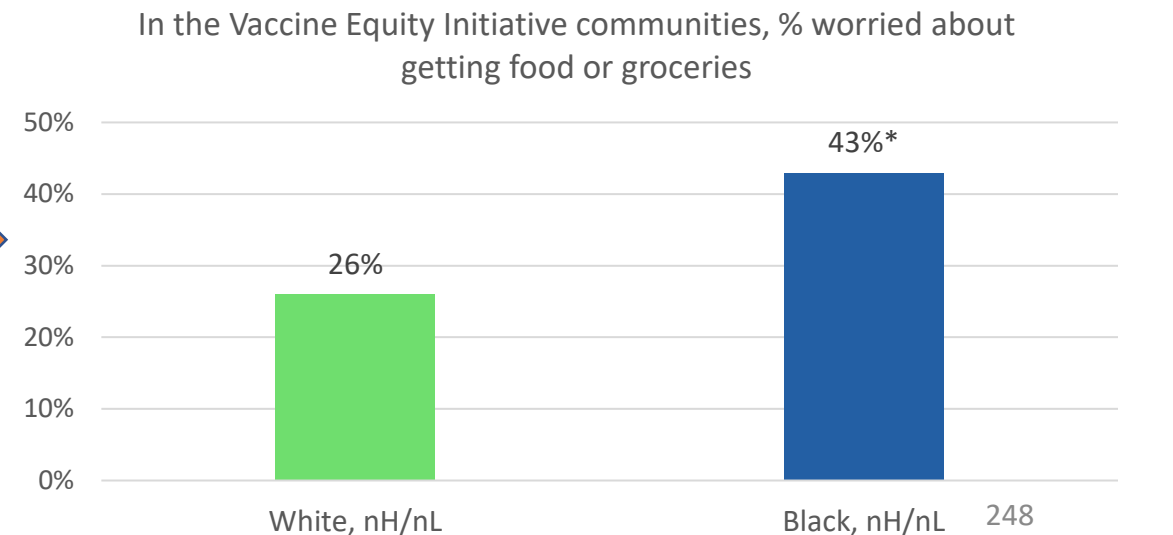
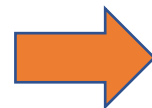
# Spotlight on the 20 Vaccine Equity Initiative Communities

20 communities that were particularly hard hit by COVID-19 were identified as Vaccine Equity Initiative Communities. Compared to the other 331 municipalities, respondents from these communities were:

**45%** more likely to report being worried about paying any type of expense in the next few weeks



**50%** more likely to report being worried about getting food or groceries in the next few weeks



# TWO PANDEMICS

# Intersecting and reinforcing health crises

Since the COVID-19 pandemic began in March 2020, Black residents have inequitably suffered from two pandemics – COVID-19 and racism.

The consequences are being felt acutely.

For example, compared to White, nH/nL, Black, nH/nL respondents are:

## BEING DISPROPORTIONATELY IMPACTED BY COVID-19.

1.5x as likely to report being “very worried” about being infected with COVID-19.

1.5x as likely to be infected with COVID-19.<sup>1</sup>

1.7x as likely to be hospitalized due to COVID-19.<sup>1</sup>

## EXPERIENCING RACISM and RACIAL TRAUMA.

24% of Black respondents reported experiencing discrimination, including in stores, by police, and by security guards.

## THE IMPACTS OF THESE TWO PANDEMICS ARE FELT ACROSS HEALTH OUTCOMES.

Despite being less likely to report any substance use, Black respondents were more likely to report **increased substance use**.

Experiencing discrimination **doubled** the risk of reporting 3+ PTSD reactions among Black respondents.

# KEY TAKEAWAYS: BLACK RESIDENTS

To truly understand how Black populations have been impacted by the pandemic, we must consider the multiple identities people hold and the systems and structures they interact with.

Intersectionality matters.



# POPULATION SPOTLIGHT: Sexual Orientation, Gender Identity, and Transgender Experience

# FRAMING MATTERS

Despite the dominant perception that LGBTQ+ health inequities in MA have all been addressed through the implementation of progressive LGBTQ+-supportive laws and policies, the data shows that Massachusetts LGBTQ+ adults and youth **continue** to be systematically discriminated against and excluded from the systems that drive the social determinants of health, causing inequities in multiple domains. This **persistent exclusion**, and the resulting impacts on health, have been further exacerbated by the pandemic.

# LGBTQ+ Identities

## Understanding LGBTQ+ Identities

### LESBIAN

describes a woman who is attracted to other women



### BISEXUAL

describes a person who is attracted to two or more genders



### GAY

describes a person who is attracted primarily to the same gender



### PANSEXUAL

describes a person who may be attracted to others without regard to their gender or sex



### ASEXUAL

describes a person who experiences little or no sexual attraction, but may still have romantic relationships

### Queer

an umbrella term that could include anyone who wants to identify outside the societal norms in regards to gender identity or sexual orientation, has been reclaimed in recent decades

### Questioning

a term used to describe a person who is exploring their sexual orientation and/or gender identity and does not necessarily self-identify as LGBTQ.

## NONBINARY & GENDERQUEER



Terms for people who identify outside the confines of the binary definition of gender (man/woman). Genderqueer people may consider themselves to be two or more genders, without a gender, a third gender, and/or fluid

## TRANSGENDER



an umbrella term used to describe a person whose gender identity or gender expression is different from that traditionally associated with the assigned sex at birth.

## INTERSEX



label used to describe a person whose primary or secondary sex characteristics differs from one of the two expected patterns of male or female.



Want to learn more?  
Go to [mass.gov/cgly](https://www.mass.gov/cgly)

# CCIS LGBTQ+ Data: Understanding the Analysis

While often analyzed as such, the LGBTQ+ population is not a monolith. Analyzing data using only one 'LGBTQ+' indicator variable can sometimes hide differences that exist within the LGBTQ+ population, particularly those that are associated with sexual orientation, gender identity, and transgender experience.

In order to better understand these differences, analyses presented in this report were conducted separately by each sexual orientation, transgender experience, and gender identity. Unless otherwise stated, each identity construct utilized a different reference group (the group in which the other groups are compared to), as described below:

- **Sexual orientation: Reference group = Straight (heterosexual)**
  - Asexual, bisexual and/or pansexual, gay or lesbian, queer, and questioning/unsure of sexual orientation were compared to straight/heterosexual
- **Transgender identity/experience: Reference group = Not transgender** (sometimes referred to as cisgender in presentation)
  - Transgender identity/of transgender experience was compared to not transgender/not of transgender experience (cisgender)
- **Gender identity: Reference group = Male**
  - Nonbinary and questioning/unsure of gender identity were compared to male gender identity

# CCIS LGBTQ+ Data: Understanding the Analysis (cont.)

Within this report, the magnitude of difference in outcomes between LGBTQ+ groups and designated reference groups are sometimes presented as a ratio: an LGBTQ+ group (e.g., asexual) outcome percentage divided by the designated reference group outcome percentage. If the pattern of higher or lower percentages is consistent across multiple LGBTQ+ groups, and these differences are statistically significantly different at the  $p < 0.05$  level, these ratios are at times presented together as a range. For example:

- **Statement:** “BTQ and NB adults were up to 3x as likely to report delaying healthcare”
- **Interpretation:** The ratios of delayed health care for BTQ (bisexual and/or pansexual, transgender, and queer) and NB (nonbinary) adults compared to their respective reference groups (bisexual and/or pansexual and queer were compared to straight; transgender was compared to not transgender (cisgender); nonbinary was compared to male) ranged from 1.8 (30% of bisexual and/or pansexual respondents delayed healthcare compared to 16% of straight respondents) to 2.5 (38% of non-binary respondents reported delaying healthcare compared to 15% of males). Sometimes these ratios are rounded to the nearest whole number (e.g., 3).
- In this example, differences in delayed healthcare did not differ significantly between lesbian or gay respondents and straight respondents, and between asexual respondents and straight respondents, so these sexual orientations were not included in the statement.
- Provided the data suggest similar patterns exist across sexual orientations and gender/transgender identities, future analyses will explore the aggregation of sexual orientation, gender identity, and trans experience and the intersection of these identities with other identities and characteristics, such as race, age, and income.
- Abbreviations used in presentation:
  - LG= Lesbian or Gay
  - B = Bisexual and/or Pansexual
  - Q = Queer
  - A = Asexual
  - T = Transgender/Of Transgender Experience
  - NB = Nonbinary

# June is Pride Month.

The Pride Parade honors the Stonewall Riots of 1969, led by Black, Trans, and Nonbinary activists like Marsha P Johnson and Sylvia Rivera.

Boston held its first PRIDE Parade two years later.



Since 1971, MA has made overall admirable progress in social, cultural and legislative advances to promote LGBTQ+ protections:

- Sexual orientation nondiscrimination law for employment, housing and public accommodations (1989)
- Safe Schools Program for Gay and Lesbian Students (1992)
- Legalized same-sex marriage (2003)
- Creation of Special Legislative Commission on LGBT Aging (2014)

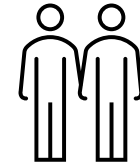
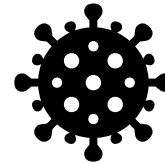
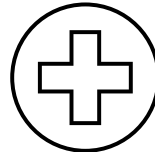
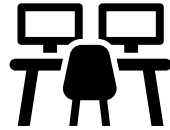


Figure 1. Marsha P. Johnson and Sylvia Rivera.<sup>1</sup>

<sup>1</sup>Figure 1. Marsha P. Johnson and Sylvia Rivera at the Christopher Street Liberation Day March. Photo by Leonard Fink, Courtesy of LGBT Community Center National History Archive, 1973, retrieved from "<https://www.nps.gov/articles/000/marsha-p-johnson-sylvia-rivera.htm>." 257

# This progress has not been enough.

LGBTQ+ youth and adults experience inequities in multiple domains: housing, employment, healthcare access, chronic disease, mental health, discrimination, and violence.



People in MA continue to commit acts of violence against individuals within the LGBTQ+ community, particularly against trans-identified individuals and against people of color.

MA continues to lag behind other states in responding to the needs of the Transgender community.

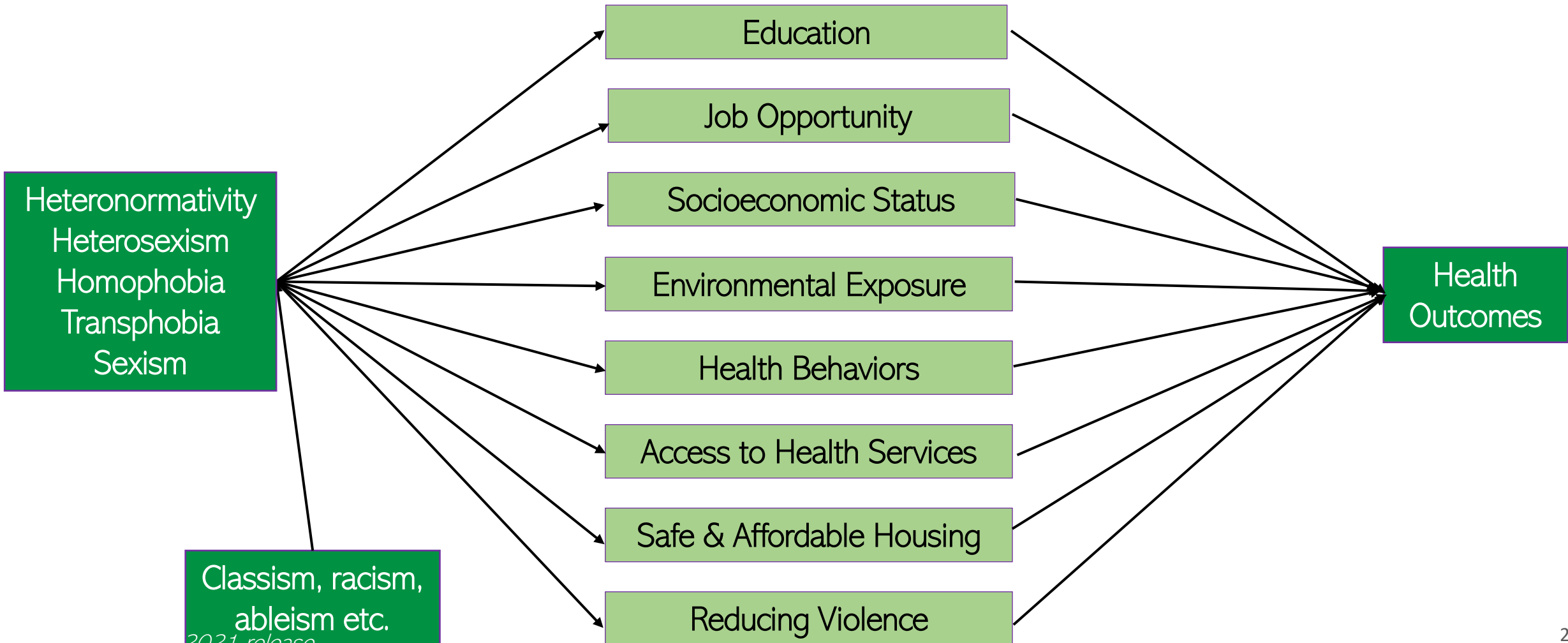
**Already in 2021, at least 27 transgender or nonbinary people have been killed by violent means nationally.<sup>1</sup>**

This persistent exclusion forces people into survival mode: LGBTQ+ folks may have to disown their sexual orientation and gender identity for fear of losing access to essential supports and services.

These exclusionary conditions, and the resulting inequities, have been exacerbated by the pandemic.

**Actions are needed now:** to aid this community in recovery, to address inequities, and to prevent this from happening again.

# Systems of oppression impact the social determinants of health inequities:



2021 release

# Heteronormativity, heterosexism, transphobia, and other oppressions act at multiple levels:

## INTERNALIZED

- Conforming to normative views of relationships
- Following heteronormative scripts of binary masculinity/femininity



## INTERPERSONAL

- Family rejection
- Bullying
- Domestic violence



## INSTITUTIONAL

- Lack of affirmative medical care
- Denial of insurance coverage for trans-specific care
- Gatekeeping through gendered stereotypes or required therapist approval



## STRUCTURAL

- Discrimination in legal benefits, tax codes, immigration policies
- Exclusion of those of trans experience from bathroom access, education, & sports opportunities



# REACHING LGBTQ+ COMMUNITIES ON CCIS

Through intentional outreach efforts conducted by CCIS partners, LGBTQ+ adults and youth participated in the survey at unprecedented rates:

## 4,102 Adults (aged 25+) identifying as:

Asexual (n=639)	Queer (n=464)
Bisexual and/or pansexual (n=1242)	Questioning (n=213)
Gay or lesbian (n=1351)	Other (n=107)
Of transgender experience (n=242) or not sure of transgender experience (n =108)	
And/or of non-binary, genderqueer, or not exclusively male or female gender (n=312); questioning gender (n =53), and other gender (n=26)	

## 923 Youth (aged 14-24) identifying as:

Asexual (n=71)	Queer (n=81)
Bisexual and/or pansexual (n=445)	Questioning (n=137)
Gay or lesbian (n=175)	Other (n=15)
Of transgender experience (n=103) or not sure of transgender experience (n =36)	
And/or of non-binary, genderqueer, or not exclusively male or female gender (n=124); questioning gender (n =31); and other gender*	

\*Suppressed due to low sample size.

- Sexual orientation and gender identity (SOGI) survey questions:
  - Developed under the guidance and recommendation of the MDPH SOGI Data Standards Group.
  - 3 separate measures: sexual orientation, gender identity, transgender experience
- The development of SOGI data collection and analysis recommendations are part of an on-going process that will continue to incorporate lessons learned and feedback of community members.

Thank you to our community partners and the MDPH SOGI Data Standards Group for this effort.

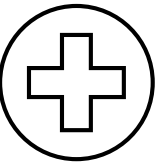
The pandemic has inequitably impacted LGBTQ+ youth and adults across multiple domains affecting the social determinants of health.

Addressing any domain in isolation will not work.

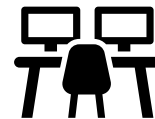
Economic Stability



Access to Healthcare



Employment



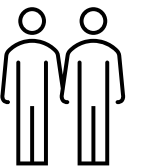
Mental Health



Housing Stability



Social Inclusion and Support






Employment support and equitable benefits are needed to address job loss, hour reduction, and lack of employment protections.

Context	Impact	What we can do
<p>Discrimination within social services, hiring practices, and places of employment affect adult job stability.</p> <p>LGBTQ individuals are more likely to experience risk factors as youth that are associated with unstable employment:<sup>2</sup></p> <ul style="list-style-type: none"> <li>• Homelessness</li> <li>• School bullying</li> <li>• Lack of proper ID</li> <li>• Carceral system involvement</li> </ul>	<p><b>Lack of Paid Sick Leave:</b></p> <ul style="list-style-type: none"> <li>• Among currently employed adults: <b>14 - 20%</b> of nonbinary and trans-identified adults reported <u>not having paid sick leave</u></li> </ul> <p><b>Job Loss:</b></p> <ul style="list-style-type: none"> <li>• 1 out of 5 working adults of trans experience and nonbinary gender identity lost their job (vs. 1 out of 10 cisgender and 1 out of 10 male)</li> </ul> <p><b>Reduced Hours/Took leave:</b></p> <ul style="list-style-type: none"> <li>• Out of employed adults, nonbinary (20%) and bi/pansexual (20%) adults and adults of trans experience (23%) were more likely to report reduced hours of work/took leave (1.5-1.6 x as likely) when compared to male, straight, and cis-gender adults, respectively</li> </ul>	<p><b>Policy &amp; organizational change</b></p> <ul style="list-style-type: none"> <li>• Address any gaps in state/federal paid sick leave benefits</li> <li>• Promote job opportunities for LGBTQ+ youth<sup>2</sup></li> <li>• Provide career readiness resources for LGBTQ+ youth and adults who face barriers to employment<sup>2</sup></li> </ul>


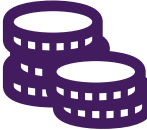

Note: Comparative analyses were conducted using the following reference groups: transgender (REF = not transgender [cisgender]); gender identity (REF = male); sexual orientation (REF = straight).

## Economic resources are needed now to mitigate financial impacts.

Context	Impact	What we can do
<ul style="list-style-type: none"> <li>Exclusion from social determinants of health leads to exclusion from the economy.</li> <li>Homelessness, bullying, discrimination affect youth education and future employment.</li> <li>Family rejection and experiences in the foster care system can cause LGBTQ youth and adults to have fewer savings to draw from in an emergency.</li> </ul>	<ul style="list-style-type: none"> <li>More than <b>1 out of 2</b> BTQA/NB adults were worried about paying a bill in the next few weeks</li> <li>Over <b>30%</b> of trans, NB, asexual, bi/pansexual, and adults questioning gender or sexual orientation worried about getting food in the next few weeks</li> <li>Out of youth 18+ who reported they may not continue their education in the fall, NB youth were over <b>2x</b> as likely as male youth to name tuition expenses as the reason for discontinuing</li> </ul> <div style="display: flex; flex-direction: column; align-items: center; margin-top: 10px;">    </div>	<p><b>Resource Provision</b></p> <ul style="list-style-type: none"> <li>Trans, non-binary, asexual, and bi/pansexual adults were up to 1.4x as likely* as cis-, male, and straight adults, respectively, to request free or cheaper food and other supplies</li> </ul> <p><b>Policy &amp; organizational change</b></p> <ul style="list-style-type: none"> <li>Provide LGBTQ cultural competency training to social, educational, and direct service providers <sup>2</sup></li> </ul>


\*Compared to respective reference groups: Trans-identifying respondent rates were compared to not trans [cisgender] respondent rates; nonbinary or questioning gender rates were compared to male gender rates; asexual, bisexual and/or pansexual, lesbian or gay, queer, or questioning rates were compared to straight [heterosexual] rates.

Safe, stable housing is needed now.

Context	Impact	What we can do
<ul style="list-style-type: none"> <li>Economic and employment instability affects one’s ability to attain or maintain safe housing.</li> <li>Family rejection and violence in the home or may require LGBTQ+ individuals to move to attain safety-- but a lack of resources may prevent them from doing so.</li> </ul>	<ul style="list-style-type: none"> <li>LGBTQA and NB adults were <b>2x</b> as likely* to report worrying about needing to move for any reason in the next few weeks.</li> <li>BTQA and NB adults were <b>up to 4x</b> as likely* to be worried about needing to move because of having trouble paying rent/mortgage</li> <li>LGBTQA and NB adults were <b>2-10x</b> as likely* to report worrying about needing to move because of conflict with family/roommates</li> <li>LGBTQ youth were <b>2 – 5x</b> as likely* to report experiencing <b>violence in their household</b> during COVID</li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>“My housemate was openly transphobic to me. They have since moved out, but the tension was at times hard to bear during the shelter-in-place.”</p> </div> <div style="text-align: center; margin-top: 20px;">        </div>	<p><b>Resource Provision</b></p> <ul style="list-style-type: none"> <li>LGBTQA/NB adults and LGBQ youth were up to 3x as likely* to report that a safe place to stay if they had to move would be helpful now</li> </ul> <p><b>Policy &amp; organizational change</b></p> <ul style="list-style-type: none"> <li>Provide LGBTQ+ cultural competency training to staff and providers of shelter and housing programs<sup>2</sup></li> <li>Promote safety and privacy of LGBTQ+ youth and/or those transitioning genders in shelters<sup>2</sup></li> </ul>


\*Compared to respective reference groups: Trans-identifying respondent rates were compared to not trans [cisgender] respondent rates; nonbinary or questioning gender rates were compared to male gender rates; asexual, bisexual and/or pansexual, lesbian or gay, queer, or questioning rates were compared to straight [heterosexual] rates.

# LGBTQ adults and youth need affirming, accessible healthcare.

Context	Impact	What we can do
<p>LGBTQ residents experience barriers to healthcare due to <b>discrimination</b> and the lack of:</p> <ul style="list-style-type: none"> <li>• Insurance coverage</li> <li>• Technology needed for telehealth</li> <li>• Affirming accessible care</li> </ul> <p>“I was denied care on the basis of being transgender and disabled ... or refusal to make disability accommodations and cannot find anyone to help me so I can get the care I need”</p> <p>In the CCIS, the top reasons for which LGBTQ adults or those questioning gender/sexual orientation identified for their delayed healthcare were<sup>†</sup>:</p> <ol style="list-style-type: none"> <li>1. Appt. cancelled or delayed (61%)</li> <li>2. Worried about getting COVID (31%)</li> <li>3. Worried about cost/insurance coverage (12%)</li> <li>4. No private place for phone call/video chat (10%)</li> <li>5. Didn't have safe transportation(8%)</li> </ol> <p><small>†Within LGBTQ+ group described, ranking of reasons differed by sexual orientation, gender, and trans experience.</small></p>	<ul style="list-style-type: none"> <li>• BTQ and NB adults and adults questioning gender or sexual orientation were more likely to report delaying any health care (up to 3x*)</li> <li>• LGB and NB youth were up to 6.2x as likely* to be very worried about getting medicine</li> </ul>  <ul style="list-style-type: none"> <li>• Out of adults reporting delayed routine care, BTQ and NB adults were more likely to delay a sexual/reproductive health concern (up to 6x*)             <ul style="list-style-type: none"> <li>• 1 out 5 trans adults who delayed routine care reported delaying sexual/reproductive health care</li> </ul> </li> <li>• Among those who had never been tested for COVID, LGBTQ adults were up to 5.7x as likely* to report never getting tested because they didn't know where to go</li> </ul>	<p><b>Resource Provision</b></p> <ul style="list-style-type: none"> <li>• Increase access to technology needed for telehealth services: 1 out of 4 trans &amp; NB adults reported needing technology resources (up to 1.7x that of cisgender and male adults, respectively)</li> </ul> <p><b>Policy &amp; organizational change</b></p> <ul style="list-style-type: none"> <li>• Train healthcare and social service providers on LGBTQ cultural competency<sup>2</sup></li> <li>• Improve outreach of health services to LGBTQ youth and adults (e.g., through using social media and dating apps)<sup>2</sup></li> </ul>

\*As likely compared to respective reference groups: Trans-identifying respondent rates were compared to not trans [cisgender] respondent rates; nonbinary or questioning gender rates were compared to male gender rates; asexual, bisexual and/or pansexual, lesbian or gay, queer, or questioning rates were compared to straight [heterosexual] rates.

# Accessible, affirming mental health and substance use resources are also needed now.

Context	Impact	What we can do
<ul style="list-style-type: none"> <li>Violence, victimization, and family rejection increase LGBTQ individuals' risk of needing mental health and substance use support<sup>2</sup></li> <li>Discrimination during previous care and the lack of affirming accessible care, insurance coverage, &amp; technology needed for telehealth affect LGBTQ folks' ability to access this behavioral health support.</li> </ul> <p>Many LGBTQ adults expressed financial barriers to accessing mental health care:</p> <p>"Therapy is frankly too expensive. I had to stop previous sessions since insurance doesn't cover it."</p>	<p>LGBTQA and NB adults were up to 3x as likely* to report:</p> <ul style="list-style-type: none"> <li>15+ days of poor MH in past 30 days</li> <li>3+ PTSD-like reactions to COVID</li> <li>68% of NB adults reported 15+ poor MH days in past 30 days</li> <li>83-84% of NB and queer youth reported feeling sad or hopeless for 2+ weeks in past year</li> </ul>  <p><b>Poor mental health and substance use may have been exacerbated by the pandemic's impact on delayed care:</b></p> <p>LGBT adults and youth reported delaying care for stress, nervousness or anxiety, or depression</p> <ul style="list-style-type: none"> <li>Out of trans adults who delayed urgent care, 50% delayed care for <u>severe</u> stress/depression</li> <li>Out of trans youth who delayed care, 67% delayed care for stress/depression</li> </ul> <p>Among lesbian, gay and/or transgender adults who reported past-month substance use, those who reported delaying healthcare were up to 1.4x as likely to report that their substance use had increased during COVID than those who had not delayed any healthcare.</p>	<p><b>Resource Provision</b></p> <ul style="list-style-type: none"> <li>LGBA, NB, and trans-identified adults who reported substance use <b>requested substance use resources at rates up to 1.7x</b> that of straight, male, or cisgender adults, respectively, who reported substance use</li> <li>Among those with persistent poor mental health<sup>†</sup>: trans, queer and questioning sexual orientation adults were 3-5 x as likely* to request suicide resources as male and straight adults, respectively</li> </ul> <p><b>Policy &amp; organizational change</b></p> <ul style="list-style-type: none"> <li>Train healthcare and social service providers on LGBTQ cultural competency<sup>2</sup></li> </ul>

\*Compared to respective reference groups: Trans-identifying respondent rates were compared to not trans [cisgender] respondent rates; nonbinary or questioning gender rates were compared to male gender rates; asexual, bisexual and/or pansexual, lesbian or gay, queer, or questioning rates were compared to straight [heterosexual] rates. <sup>†</sup>Persistent poor mental health = 15+ days of poor mental health in past month.

We need to prioritize social inclusion and support in our families, schools, and communities.

Context	Impact	What we can do
<p><b>Daily Discrimination</b></p> <p>LGTBQ experience interpersonal, organizational, and structural exclusion daily:</p> <p>“Being trans and gay I experience microaggressions. People pointedly do not 'notice' me when I am waiting to be helped. Sometimes they are openly rude.”</p> <p>“I am a lesbian and I have been publicly targeted, harassed and threatened due to my sexual orientation.”</p>	<p><b>Relationships</b></p> <ul style="list-style-type: none"> <li>• BTQA and NB adults and those questioning their sexual orientation were up to 4x as likely* to report experiencing intimate partner violence during COVID</li> <li>• LGBTQ <u>youth</u> were more likely to report:                     <ul style="list-style-type: none"> <li>○ Experiencing violence at home during COVID (2 -5x)</li> <li>○ Being very worried about social interactions &amp; connection to community (up to 2x)<sup>†</sup></li> </ul> </li> </ul> <p><small><sup>†</sup>Difference between queer and straight youth was not significant at p&lt;0.05 level.</small></p>	<p><b>Resource Provision</b></p> <ul style="list-style-type: none"> <li>• Tailored social supports for LGBTQ folks:                     <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>“social support events for transgendered people”</p> </div> </li> <li>• Mentorship for LGBTQ youth:                     <ul style="list-style-type: none"> <li>• Bi and/or pansexual, queer, non-binary, &amp; questioning gender youth were up to <b>2x</b> as likely* to report that an adult mentor would be helpful</li> </ul> </li> <li>• Social services for older adults:                     <ul style="list-style-type: none"> <li>• Among adults aged 65+: gay, lesbian, (43%) or questioning (61%) adults were more likely to request <b>online services for older adults</b> – including social services –than straight adults 65+ (28%)</li> </ul> </li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Policy &amp; organizational change<sup>2</sup></b></p> <ul style="list-style-type: none"> <li>• Implement LGBTQ-inclusive curriculum in public schools</li> <li>• Expand staff trainings on LGBTQ inclusion and competency</li> <li>• Recognize gender identity diversity in workplaces</li> <li>• Collaborate to address family rejection in LGBTQ youth</li> <li>• Strengthen protections against bullying of LGBTQ youth</li> </ul> </div>

\*Compared to respective reference groups: Trans-identifying respondent rates were compared to not trans [cisgender] respondent rates; nonbinary or questioning gender rates were compared to male gender rates; asexual, bisexual and/or pansexual, lesbian or gay, queer, or questioning rates were compared to straight [heterosexual] rates.

Within the LGBTQ+ community, some groups, particularly those at the intersections of oppressions, have experienced more severe impacts.

## Transgender, nonbinary, and queer adults and youth

Compared to cis, male, and straight respondents, respectively, individuals identifying as trans, nonbinary, and/or queer:

- Were **2x** as likely to have lost their job during COVID (adults)
- Were more likely to report **experiences of violence during COVID**:
  - **6-9%** of youth reported experiencing violence at home<sup>†</sup>
  - Adults were up to **3x** as likely to report experiencing intimate partner violence

“Two concierges routinely discriminate both my husband and I, for being inter racial and gay.”

## People of color

- POC reported experiences of racism, heterosexism, and homophobia
- Gay or lesbian adults who were AI/AN, Hispanic/Latinx, Black nH/nL, or Multiracial nH/nL were up to **2x** as likely to report worrying about any expense in the next few weeks than gay or lesbian white adults.

## Older LGBT Adults

- Among LGBQA adults, those 65+ were **up to 4x** as likely to live alone as those under 65
- Gay or lesbian and questioning sexual orientation older adults were **up to 2x** as likely to request services for older adults, including social services, than straight older adults.

<sup>†</sup>Difference for non-binary youth was not significant from male youth at p<0.05 level.

# Meeting basic needs is among the most critical concerns

Over 63% of LGBTQ adults expressed worry about attaining at least one household need in the next few weeks.

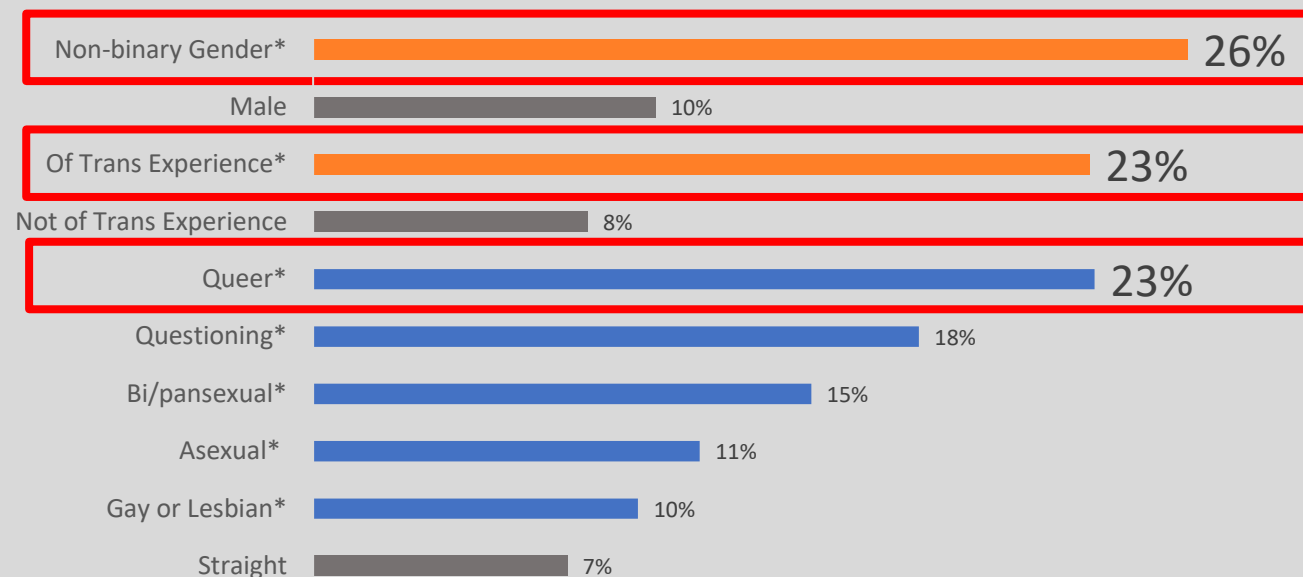
LGBTQ and NB adults were more likely to express worry about attaining:

- **Healthcare** (Up to 2.2x\*)
- **Technology** (Up to 1.7x\*†)

And more likely to express that the following resources would be helpful right now:

- **Goods & services for people with disabilities** (Up to 5x\*)
- **Help applying for benefits** (Up to 2.1x\*)
- **Housing stability resources** (Up to 3.1x\*)

## Percentage of MA Adults Requesting Housing Stability Resources



\* Denotes a statistically significant difference from reference group at  $p < 0.05$  level.

\*As likely compared to respective reference groups: Trans-identifying respondent rates were compared to not trans [cisgender] respondent rates; nonbinary or questioning gender rates were compared to male gender rates; asexual, bisexual and/or pansexual, lesbian or gay, queer, or questioning rates were compared to straight [heterosexual] rates.

†Difference was not significantly different at  $p < 0.05$  level for gay or lesbian and queer respondents when compared to straight respondents.

# Resources that address mental & behavioral health are needed now to aid recovery.

LGBTQ adults and youth were more likely to request immediate resources around mental health, substance use, and social support.

## Behavioral Health

LGBTQ and NB adults were more likely to request:

- Info on seeing a therapist (up to **2x**)
- Suicide prevention resources (up to **7x**)

Out of adults who reported using substances, LGBTQA/NB adults were up to **1.7x** as likely to request substance use resources.

LGBTQ adults also requested mental health support other than therapy, including:

“Financial resources to access mental health care.”

“Financial resources for rent and debt payment postponement to help relieve stress”

And mental health resources for LGBTQ people specifically:

“Social support events for transgendered people”

“Peer health worker (especially LGBTQ) 1-on-1”

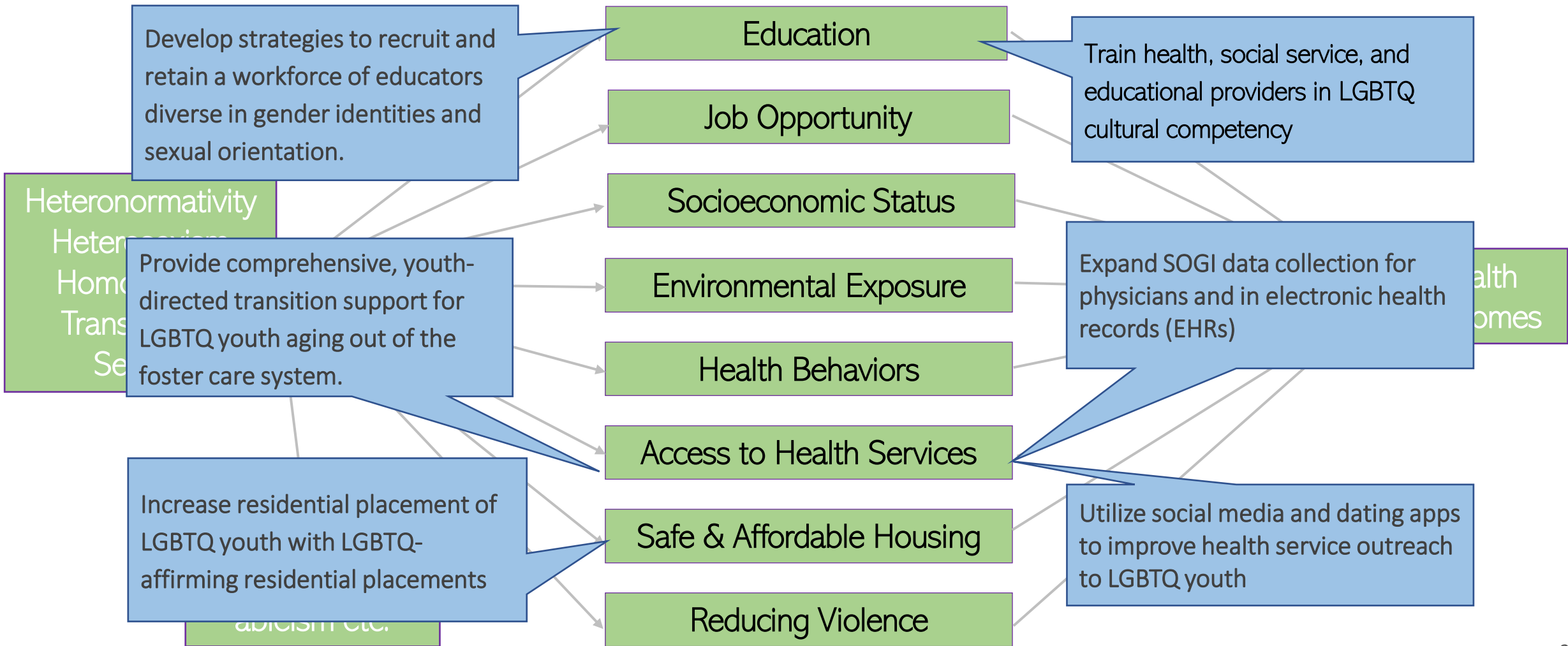
## Social Support

Bisexual, queer, non-binary, and youth questioning their gender were up to **twice** as likely to say that **having a mentor to talk to about problems** with would be helpful.

Among adults 65+, gay or lesbian adults and those questioning their sexual orientation were up to **twice** as likely as straight adults to request services for older adults, including social services:

“Someone from outside my social circle calling to check in with me regularly. For ex., senior center or my primary care physician...being checked on, even briefly, feels a comfort especially to people living alone” – *Gay male respondent aged 65+*

# Policy and systems-level changes are needed to address structural determinants:



# KEY TAKEAWAYS

LGBTQ+ adults and youth have been disproportionately impacted by the pandemic, particularly POC and persons of trans experience

We need to prioritize inclusion of LGBTQ+ residents in all areas – families, schools, state entities, healthcare, social services, and data systems –

- 1) To support pandemic recovery, and
- 2) To address the conditions that contributed to these inequitable impacts
- 3) To promote optimal health and quality of life of LGBTQ+ individuals and families

# KEY TAKEAWAYS: LGBTQ+ RESIDENTS

- Continued and new initiatives to collect and utilize SOGI data is critical to ensure an equitable COVID-19 recovery and prevent future harm.
- Short-term **resources tailored for LGBTQ+ community** are needed NOW: financial, housing, mental health, healthcare, substance use, social inclusion
- Long-term **policy, system, and legislative change** is necessary to create a social environment fully inclusive of LGBTQ+ individuals



# POPULATION SPOTLIGHT: PERSONS WITH DISABILITIES



*“The COVID-19 pandemic has revealed that the Convention on the Rights of Persons with Disabilities (CRPD) has not been comprehensively implemented by States Parties. It has starkly exposed the heightened vulnerability and risks to persons with disabilities that is underpinned by entrenched discrimination and inequality. Persons with disabilities are often wrongly perceived to be inherently vulnerable, when it is attitudinal, environmental and institutional barriers that result in situations of vulnerability. While many persons with disabilities have health conditions that make them more susceptible to COVID-19, pre-existing discrimination and inequality means that persons with disabilities are one of the most excluded groups in terms of health prevention and response actions and economic and social support measures, and among the hardest hit in terms of transmission risk and actual fatalities.”*

– United Nations Human Rights Office of the High Commissioner

# FRAMING MATTERS

**Dominant frames** about disability see it as a problem with individual bodies/minds.

According to this frame (also called the “medical model”):

- Disability is an outcome of failed health care and public-health policies.
- People with disabilities are, by definition, unhealthy and have low quality of life.
- Differences in health outcomes are seen as a natural and expected result of biological differences.
- Interventions are focused on curing and preventing disabilities and “restoring” people to a state of non-disabled health.

# FRAMING MATTERS

**Equity-focused frames** about disability see it as a combination of atypical bodies/minds with an environment that is designed by and for non-disabled people. According to this frame (one version of what is known as the “social model”):

- People with disabilities are a demographic group whose bodies/minds reflect normal diversity and variation. They can be happy and healthy.
- Differences in health outcomes are more likely to be the result of societal ableism than natural biological differences.
- Interventions focus on reducing barriers to health and community participation.

# ABLEISM

**Ableism:** “A system that places value on people’s bodies and minds based on societally constructed ideas of normalcy, intelligence and excellence. These constructed ideas of normalcy, intelligence and excellence are deeply rooted in anti-Blackness, eugenics and capitalism.

This form of systemic oppression leads to people and society determining who is valuable or worthy based on people's appearance and/or their ability to satisfactorily produce, excel & ‘behave.’”

- working definition developed by Talila “TL” Lewis, in collaboration with Dustin Gibson and other members of the community, 2019 (see <https://www.talilalewis.com/blog/january-2021-working-definition-of-ableism> for version updates and context)

# Ableism, like other oppressions, acts at multiple levels:

## INTERNALIZED

- Suppressing own needs to avoid feeling like a burden
- Avoiding other people with disabilities to avoid being seen as similar to them



## INTERPERSONAL

- Pity, condescension
- Scrutiny of who's "disabled enough"
- Withholding access to exert control



## INSTITUTIONAL

- Mandatory on-site work policies
- Patients with disabilities pressured to sign Do Not Resuscitate orders
- Laptop bans in classrooms



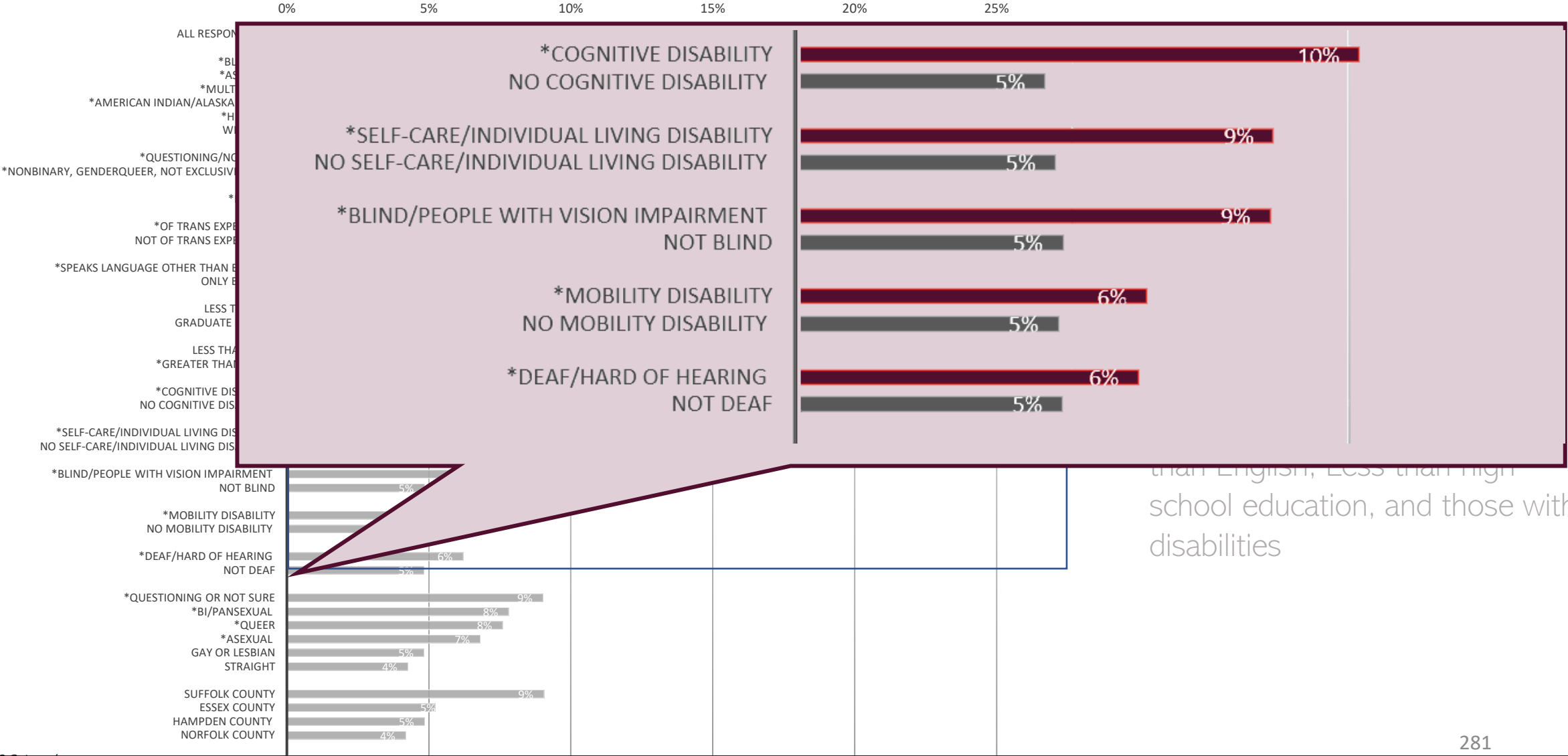
## STRUCTURAL

- Financial penalties for marriage, work
- "Undue burden" clauses in civil-rights law
- Public charge restrictions in immigration policies



# Ableism doesn't act alone.

MA Subpopulations Reporting Experiences of Discrimination based on Race/Ethnicity During COVID-19 Pandemic



than English, less than high school education, and those with disabilities

# Ableism doesn't act alone.

Context	Impact	What we can do
<p>LGBTQ members experience barriers to health care due to discrimination and the lack of:</p> <ul style="list-style-type: none"> <li>• Insurance coverage</li> <li>• Technology needed for telehealth</li> <li>• Affirming accessible care</li> <li>• “I was denied care on the basis of being transgender and disabled, and I cannot find anyone to help me so I can get the care I need”</li> </ul>	<p>1/x)</p> <ul style="list-style-type: none"> <li>• 1 out of 5 trans respondents reported delaying sexual/reproductive health care</li> </ul>	<p>Technology services: 1 ults nology that of</p> <p>Policy &amp; organizational change</p> <ul style="list-style-type: none"> <li>• Train healthcare and social service providers on LGBTQ cultural competency<sup>2</sup></li> </ul>
<p>In the CCIS, after cancelled delayed appointments, the top barriers LGBTQ adults identified for delayed care were:</p>		
<ol style="list-style-type: none"> <li>1. Worried about getting COVID</li> <li>2. Worried could not afford care/insurance wouldn't cover</li> <li>3. No private place for phone call/video chat</li> <li>4. No safe transportation to get to appt.</li> <li>5. Didn't have good enough phone or internet connection.</li> </ol>	<ul style="list-style-type: none"> <li>• LGBTQ adults were up to 5.3x as likely to report never getting tested for COVID because they didn't know where to go</li> </ul>	<ul style="list-style-type: none"> <li>• Improve outreach of health services to LGBTQ youth and adults (e.g., through using social media and dating apps)<sup>2</sup></li> </ul>

“I was denied care on the basis of being transgender and disabled ... or refusal to make disability accommodations and cannot find anyone to help me so I can get the care I need”

# ABLEISM, DISABILITY & COVID-19



Limited systematic data on COVID-19 outcomes by disability status



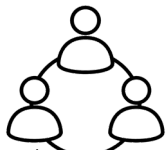
Media messaging that “only people with pre-existing conditions” were at risk perceived as devaluing disabled lives



Prioritization of health care resources (e.g., ventilators) based on assumptions regarding quality of life



Increases in telehealth removes some barriers to health care & creates barriers to communication & assessing conditions or treatment plans



Disruption of support systems



COVID-19 swept through congregate settings (e.g., nursing homes); restrictions on movement from congregate settings limit independence and safety of residents



Barriers to following best practices for preventing virus exposure (e.g., handwashing, keeping 6 ft. distance, wearing masks)



Challenging to get COVID-19 accommodations for people with disabilities, whereas employers moved swiftly to make telecommuting possible

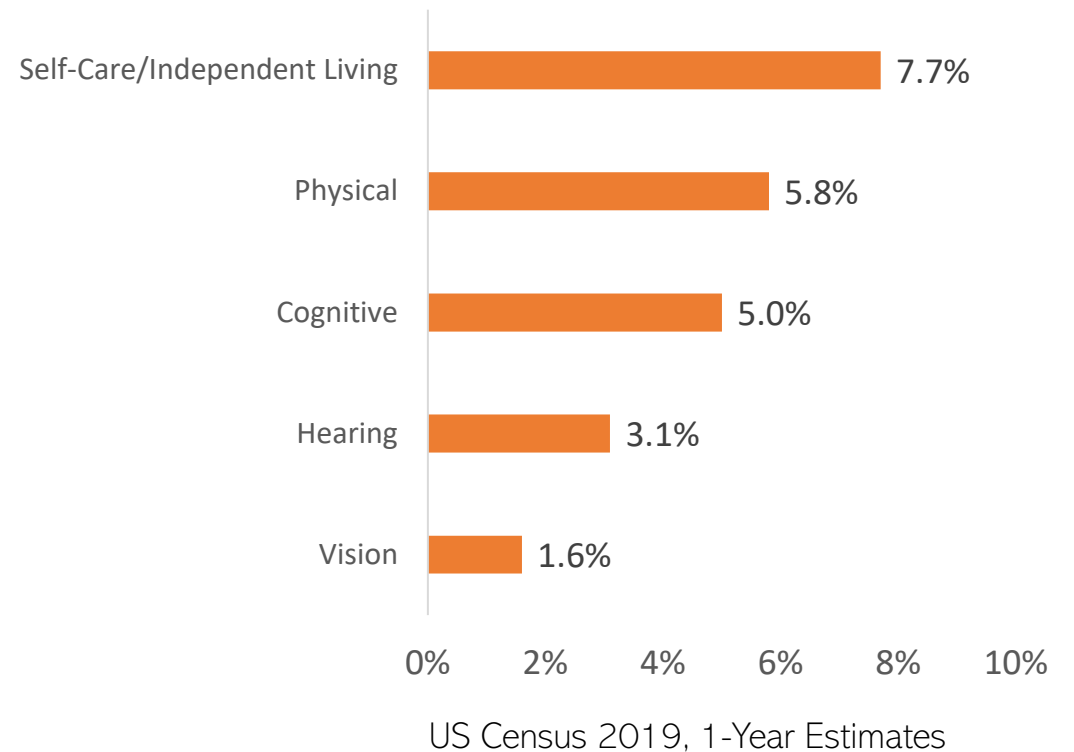


Fast changing COVID-19 information may not be adapted or accessible

# DISABILITY POPULATION IN MASSACHUSETTS

- In Massachusetts, over **785,000 residents** have a disability, representing 11.5% of the non-institutionalized total population in Massachusetts.

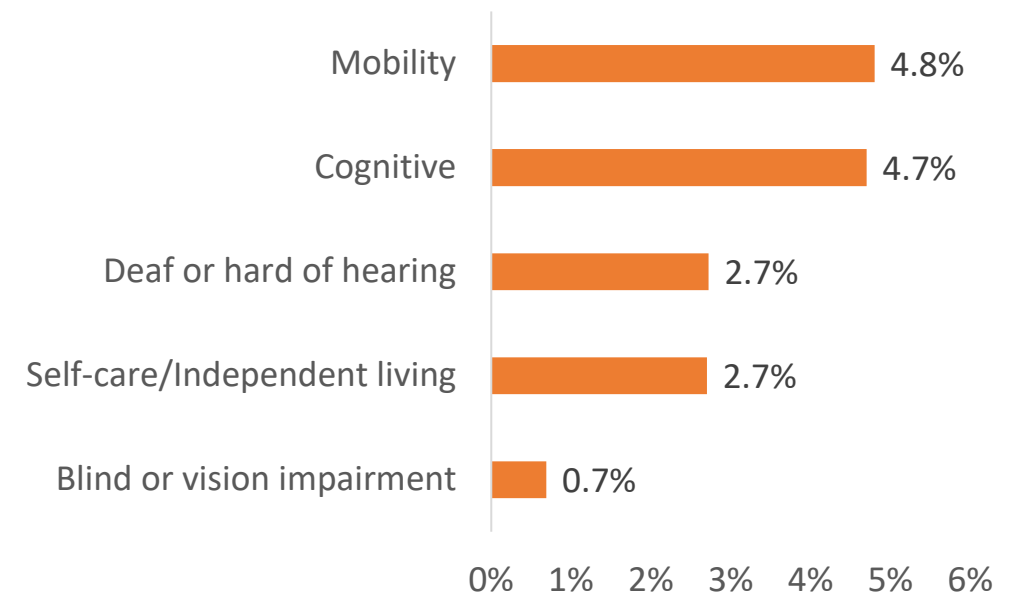
## MASSACHUSETTS DISABILITY PROFILE



# REACHING THE DISABILITY POPULATION IN MA CCIS

- Over 4,100 CCIS participants had 1+ disability.
- While we did not directly sample residents <25 years of age and may not have reached many residents living in congregate settings, CCIS allows us to examine the experiences of multiple disability subgroups.
- Focus groups conducted with deaf and hard of hearing residents (10 participants) to better understand experiences with COVID-19 mitigation, testing, and communication.
- MA CCIS begins to fill an important gap in COVID-19 data by disability status.

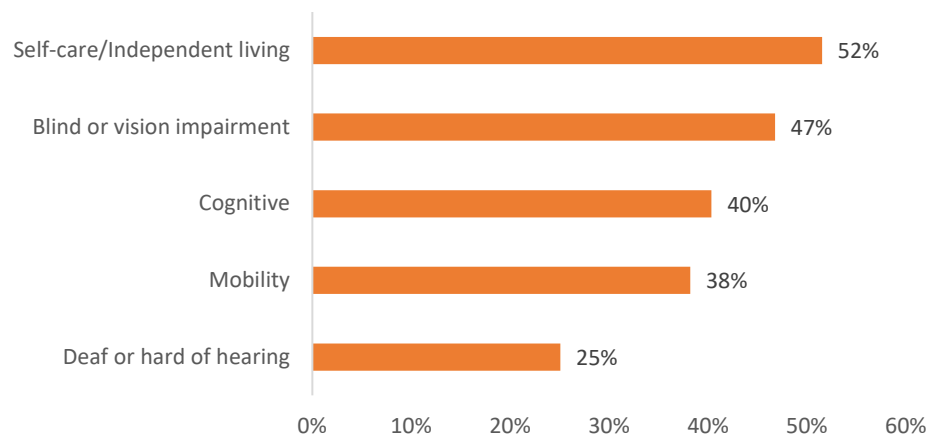
## CCIS DISABILITY PROFILE



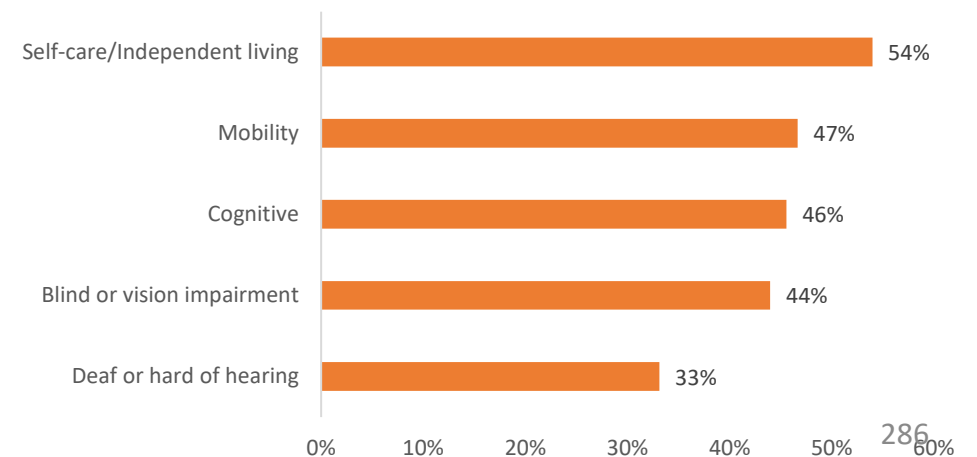
# SOCIOECONOMIC INEQUITIES AND DISABILITY

- While the American Disabilities Act ensures equal educational and occupational opportunities and prohibits discrimination due to disability, **people with disabilities are more likely to have incomes below poverty and have lower levels of education than people without disabilities.**
- There are **socioeconomic differences** across disability subgroups.
- In the CCIS, **one-quarter to half of respondents with a disability have incomes <\$35K.**
- About **half** of respondents with a self-care or independent living disability, mobility disability, or cognitive disability have **less than a college education.**

**% with Median Income <\$35K**



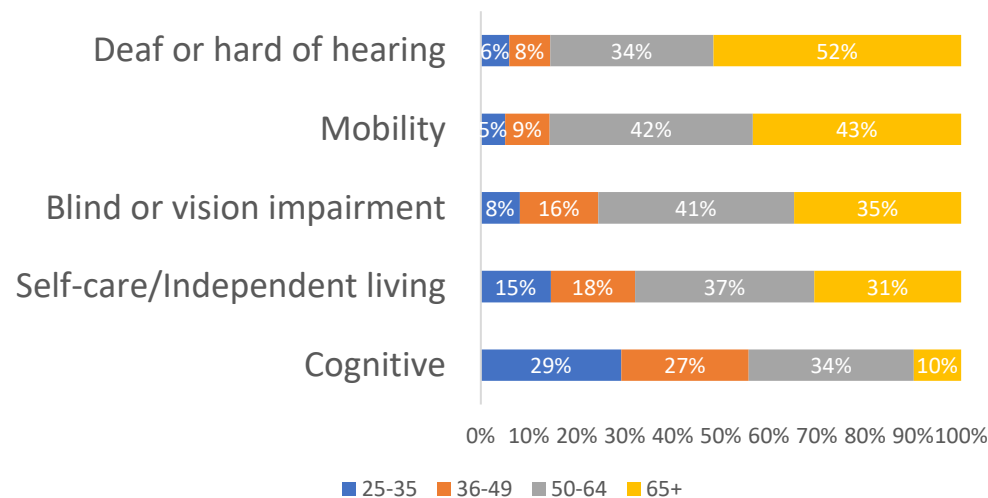
**% with Less than College Education**



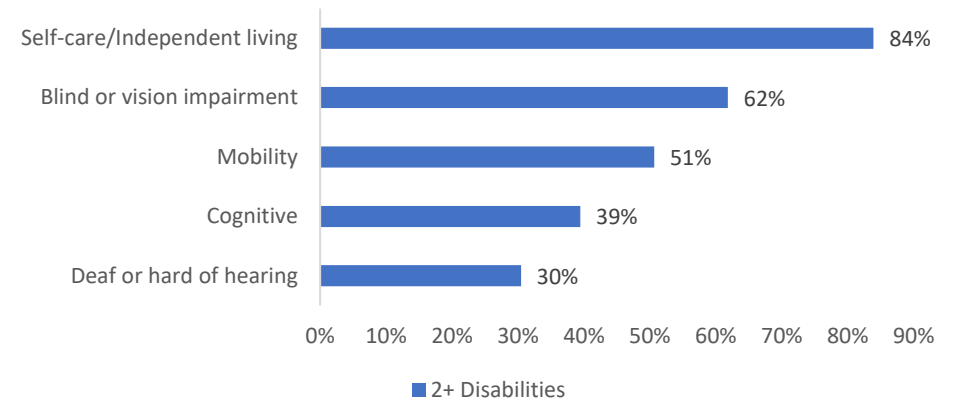
# DISABILITY: CONSIDERING MULTIPLE INTERSECTIONAL IDENTITIES

- While disability can occur at any age, disabilities are more common later in life.
- Age profiles differ by disability subgroups.
- Half (52%) of respondents who are deaf or hard of hearing are 65+ years of age, and nearly 1 in 3 (29%) respondents with a cognitive disability are 25-35 years of age.
- 8 in 10 (84%) respondents with a self-care or independent living disability have 2+ disabilities.

Age Distribution



% with 2+ Disabilities





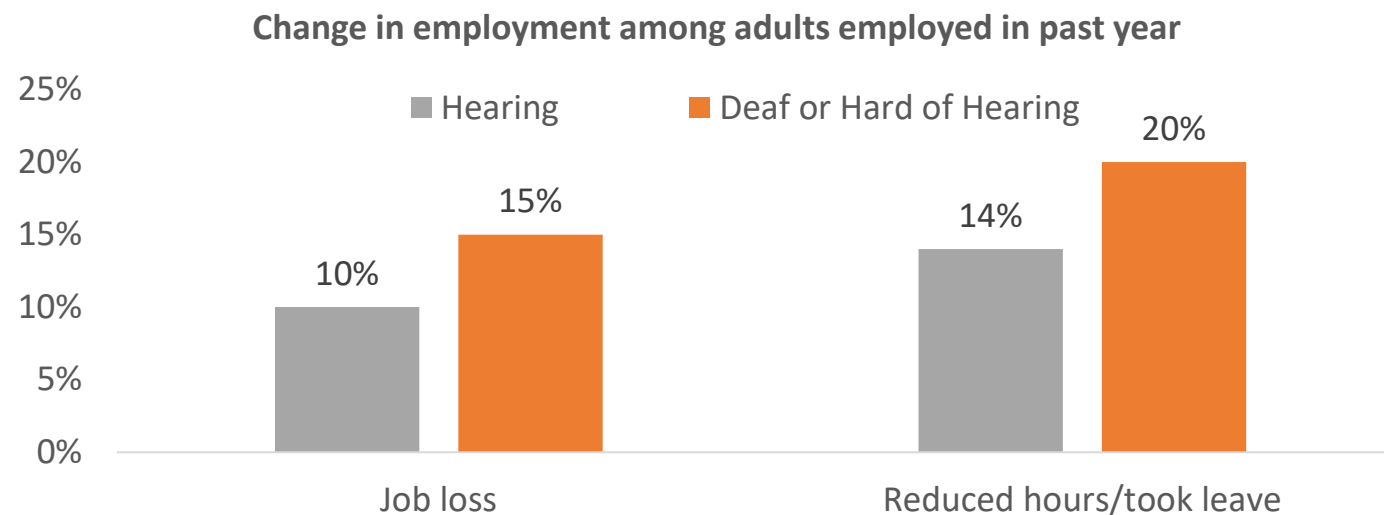
# SPOTLIGHT DEAF OR HARD OF HEARING

# COMMUNICATION BARRIERS AMONG DEAF OR HARD OF HEARING POPULATION

- Deaf or hard of hearing focus group participants highlighted how practices to prevent virus transmission served as barriers to communication
  - *“I almost never use my voice, but now with masks, sometimes I have to speak out loud to get people's attention, and they all look at me like I'm an alien and I have to try and tell them I'm deaf.”*
  - *“All of the grocery store workers know that I am deaf and sometimes they will pull down their masks for a second so that I can see what they're saying. Everyone seems more serious though when you can't see their faces. “*
  - *“There have been some challenges with repair people for our home and having to communicate with pen and paper – hard to keep that distance in our home.”*

# JOB LOSS AND ECONOMIC STRAIN AMONG DEAF AND HARD OF HEARING RESPONDENTS

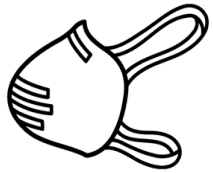
- Employed deaf or hard of hearing respondents are 1.5X\* more likely to experience job loss and 1.4X\* more likely to experience reduced hours or leave due to the pandemic.
- 4 in 10 (39%) deaf or hard of hearing respondents worry about paying for 1+ expenses or bills in the coming few weeks.
- Nearly 2 in 10 (18%) deaf or hard of hearing respondents have not gotten medical care needed since July 2020.



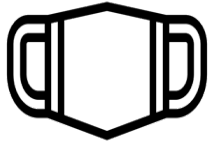
p<0.05

\*Indicates compared to hearing respondents

# DEAF OR HARD OF HEARING & COVID-19



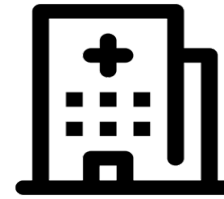
Face masks can reduce acoustic transmission & prevent lip reading for people with hearing loss



Face masks can be hard to wear and/or uncomfortable for people with hearing devices (e.g., hearing aid, cochlear implant)



Telehealth visits not fully accessible (e.g., arranging for interpreter services)



Elective surgeries were postponed, which may include non-urgent ear surgeries



COVID-19 information may not be accessible to persons who are deaf or hard of hearing



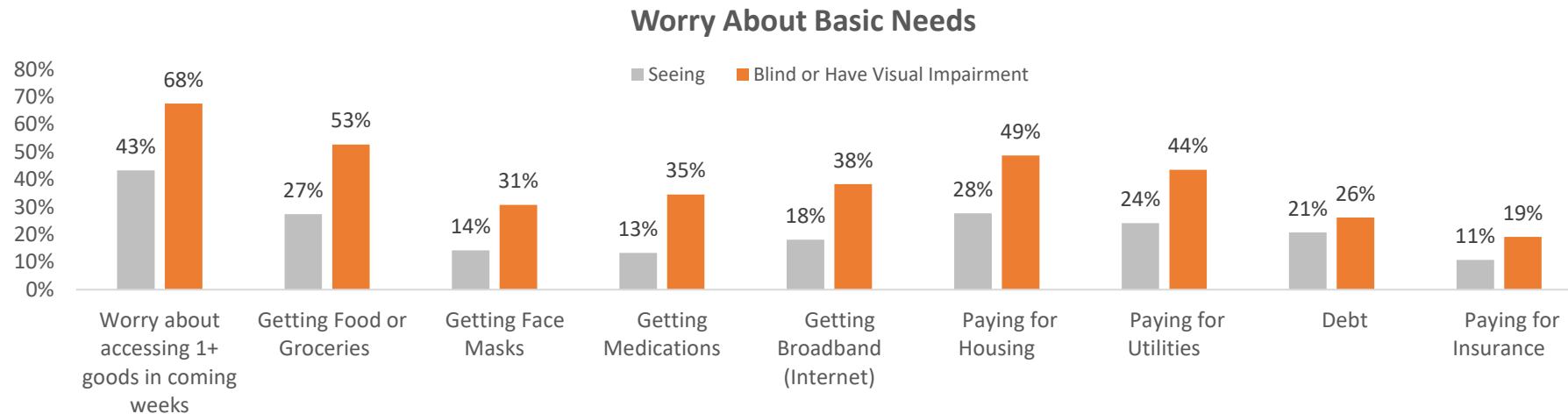
Drive-up testing is difficult if use transportation services



# SPOTLIGHT BLIND OR VISION IMPAIRMENT

# INEQUITIES IN COVID-19 PREVENTION PRACTICES AND BASIC NEEDS AMONG RESPONDENTS WHO ARE BLIND OR WHO HAVE A VISION IMPAIRMENT

- Respondents who are blind or who have a vision impairment are:
  - 1.2X\* more likely to be “very” worried about getting infected with COVID-19.
  - 1.9X\* more likely to not be able to keep 6 ft. distance when outside the home, compared to respondents who are not blind or have a vision impairment.
  - 1.9X\* more likely to worry about getting food or groceries.
  - 2.1X\* more likely to worry about getting broadband (internet).
  - 1.8X\* more likely to worry about paying for housing.
  - 1.5X\* more likely to report 15+ poor mental health days in past 30 days.



p<0.05

\*Indicates compared to seeing respondents

# BLIND OR VISION IMPAIRMENT & COVID-19



Touch & tactile senses are important for routine activities



May need to be guided by holding someone's elbow; elbows used for sneezing & coughing



Difficult to locate hand sanitizer stations



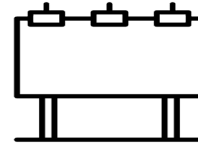
Public transportation schedules reduced, may be crowded



Difficult to arrange ride share services, need to sit in close proximity to driver



Telehealth visits not fully accessible



Best practices for virus prevention often visually conveyed



Getting groceries is more difficult: staff occupied with pick-up & delivery orders, items hard to find due to demand, cannot search multiple stores



Higher prevalence of comorbidities than general population, which increases risk of severe COVID-19



Elective surgeries were postponed, which may include eye surgeries



Drive-up testing is difficult if use transportation services

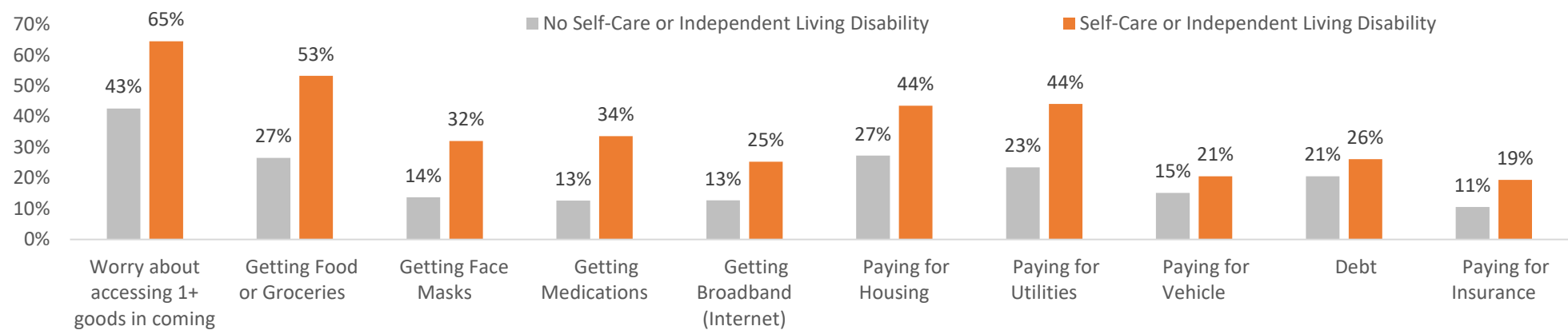


# SPOTLIGHT SELF-CARE OR INDEPENDENT LIVING DISABILITY

# INEQUITIES IN MEETING BASIC NEEDS FOR RESPONDENTS WITH A SELF-CARE OR INDEPENDENT LIVING DISABILITY

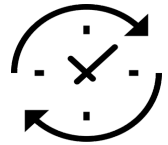
- Respondents who have a self-care or independent living disability are:
  - 1.8X\* more likely to be “very” worried about getting infected with COVID-19.
  - 2X\* more likely to have not gotten medical care needed since July 2020.
  - 2X\* more likely to worry about getting food or groceries.
  - 2.6X\* more likely to worry about getting medications.
  - 2X\* more likely to worry about getting broadband (internet).
  - 1.6X\* more likely to worry about paying for housing.
  - 1.8X\* more likely to report 15+ poor mental health days in past 30 days.

**Worry About Basic Needs**



\*Indicates compared to respondents who do not have a self-care or independent living disability

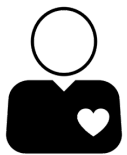
# SELF-CARE OR INDEPENDENT LIVING DISABILITY & COVID-19



Rapid change to routine may strain day-to-day activities & support, stressful to adopt new behaviors



Support of family members or caregivers outside of household could increase risk of virus exposure (e.g., cannot fully distance)



Finding reliable & safe in-home care may be more difficult (e.g., rotation of caregivers, staffing constraints due to illness or isolation)



Community-placed supports (e.g., day schools, respite centers) interrupted



Higher prevalence of comorbidities than general population, which increases risk of severe COVID-19



Limitations on leaving supported living communities to prevent virus exposure



Congregate settings (e.g., nursing homes) had outbreaks linked with close quarters, shared living spaces, frequent staff changes



Reduced in-person visits with social & health care providers who may support disability management



Drive-up testing is difficult if use transportation services



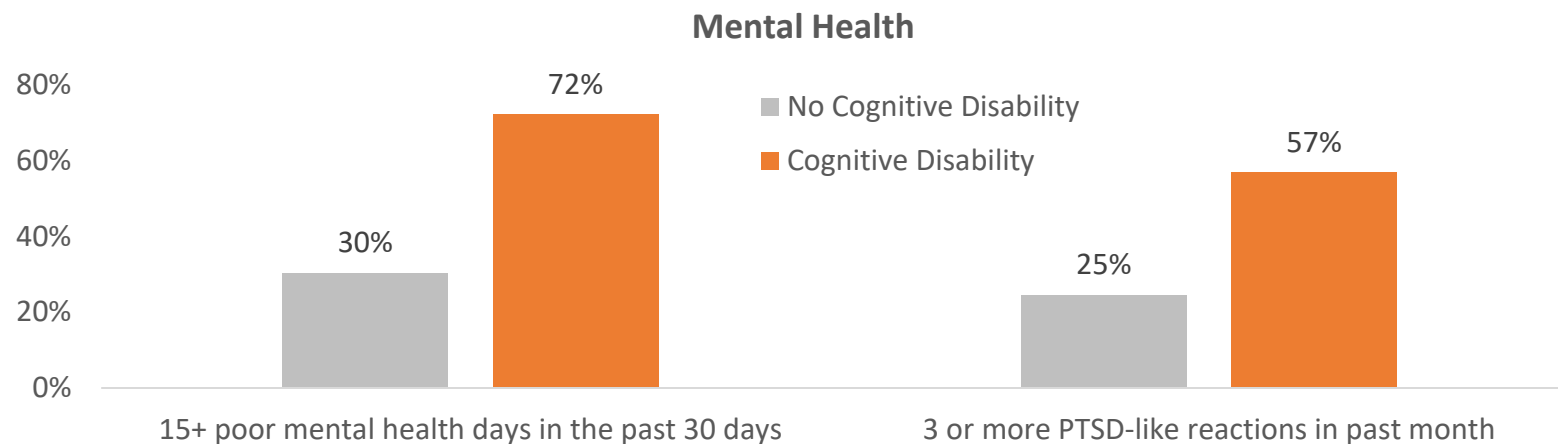
Barriers to following best practices for preventing virus exposure (e.g., handwashing, keeping 6 ft. distance, wearing masks)



# SPOTLIGHT COGNITIVE DISABILITY

# MENTAL TOLL OF COVID-19 AMONG RESPONDENTS WITH A COGNITIVE DISABILITY

- Respondents who have a cognitive disability are:
  - 1.6X\* more likely to be “very” worried about getting infected with COVID-19.
  - 2.1X\* more likely to not be able to keep 6 ft. distance when outside the home.
  - 2X\* more likely to worry about getting food or groceries.
  - 1.9X\* more likely to worry about paying for housing.
  - 2.4X\* more likely to report 15+ poor mental health days in past 30 days.
  - 2.3X\* more likely to report 3+ PTSD-like reactions in the past month.



\*Indicates compared to respondents who do not have a cognitive disability

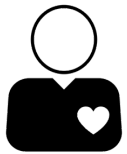
# COGNITIVE DISABILITY & COVID-19



Rapid change to routine may strain day-to-day activities & support, stressful to adopt new behaviors



Support of family members or caregivers outside of household could increase risk of virus exposure (e.g., cannot fully distance)



Finding reliable & safe in-home care may be more difficult (e.g., rotation of caregivers, staffing constraints due to illness or isolation)



Community-placed supports (e.g., day schools, respite centers) interrupted



Some genetic factors linked with cognitive disability may increase risk of severe COVID-19



Limitations on leaving supported living communities to prevent virus exposure



Congregate settings (e.g., nursing homes) had outbreaks linked with close quarters, shared living spaces, frequent staff changes



Reduced in-person visits with social & health care providers who may support disability management



Drive-up testing is difficult if use transportation services



Barriers to following best practices for preventing virus exposure (e.g., handwashing, keeping 6 ft. distance, wearing masks)

# COGNITIVE DISABILITY & COVID-19



Physical proximity to caregivers may be important for making routines manageable & predictable



Cognitive impairments may limit processing of information communicated



COVID-19 restrictions & limits on usual routine, connections, supports may be stressful, contribute to externalizing behaviors



Deluge of information about COVID-19 may heighten anxiety, contribute to paranoid thinking and/or catalyze externalizing behaviors



Disproportionately isolated before COVID-19, isolation increased after COVID-19



May rely on others to process COVID-19 information & how to act upon information



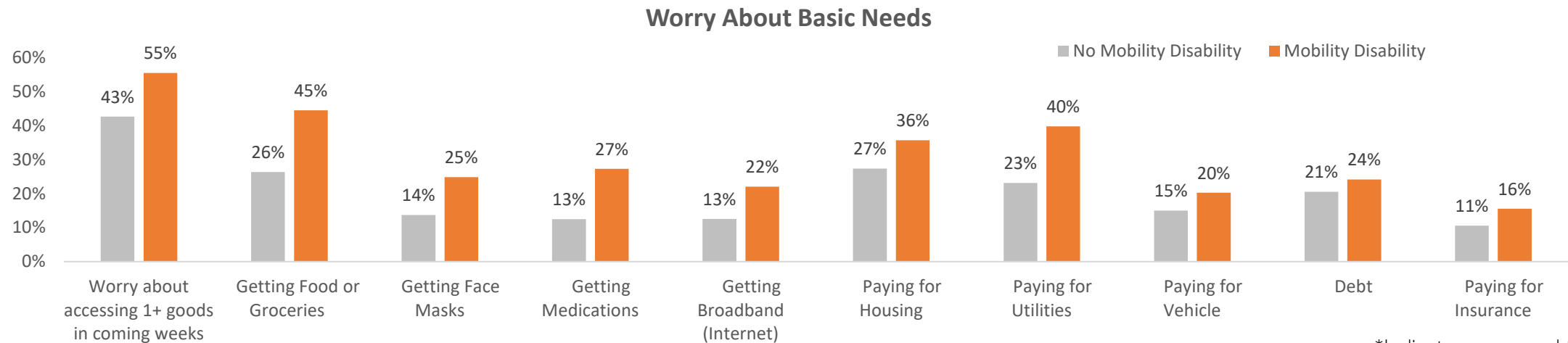
Abuse may be more difficult to detect by providers using remote communication or physical distancing



# SPOTLIGHT MOBILITY DISABILITY

# INEQUITIES IN BASIC NEEDS AMONG RESPONDENTS WITH A MOBILITY DISABILITY

- Respondents who have a cognitive disability are:
  - **1.5X\*** more likely to be “very” worried about getting infected with COVID-19.
  - **1.4X** more likely to have not gotten medical care needed since July 2020.
  - **1.7\*** more likely to worry about getting food or groceries.
  - **2.2X\*** more likely to worry about getting medications.
  - **1.8X\*** more likely to worry about getting broadband (internet).
  - **1.3X\*** more likely to worry about paying for housing.



\*Indicates compared to respondents who do not have a mobility disability

p<0.001

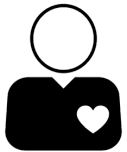
# MOBILITY DISABILITY & COVID-19



Support of family members or caregivers outside of household could increase risk of virus exposure (e.g., cannot fully distance)



Reduced in-person visits with social & health care providers who may support disability management



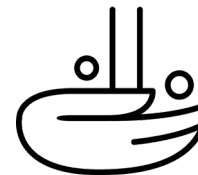
Finding reliable & safe in-home care may be more difficult (e.g., rotation of caregivers, staffing constraints due to illness or isolation)



Drive-up testing is difficult if use transportation services



Higher prevalence of comorbidities than general population, which increases risk of severe COVID-19



Barriers to following best practices for preventing virus exposure (e.g., handwashing, keeping 6 ft. distance, wearing masks)



*“COVID-19 pandemic highlights that protection, response and recovery efforts will not be effective unless everyone is equally valued and included. Critical and urgent action is required to ensure that those most at risk, including persons with disabilities are explicitly included in public emergency planning and health response and recovery efforts.”*

– United Nations Human Rights Office of the High Commissioner



# SAFETY : INTIMATE PARTNER VIOLENCE

Vera E. Mouradian, PhD  
Caroline Stack, MPH  
Lauren Cardoso, PhD  
Amy Flynn, MS

# INTIMATE PARTNER VIOLENCE DEFINITION

Intimate Partner Violence (IPV) refers to a pattern of behaviors that one person in an intimate partner relationship uses against the other person in the relationship to try to establish and maintain power and control over that other person.

## IPV involves current or former:

- Spouses
- Romantic partners who live/lived together
- Fiances/Fiancees
- Dating Partners

## IPV involves behaviors including, but not limited to:

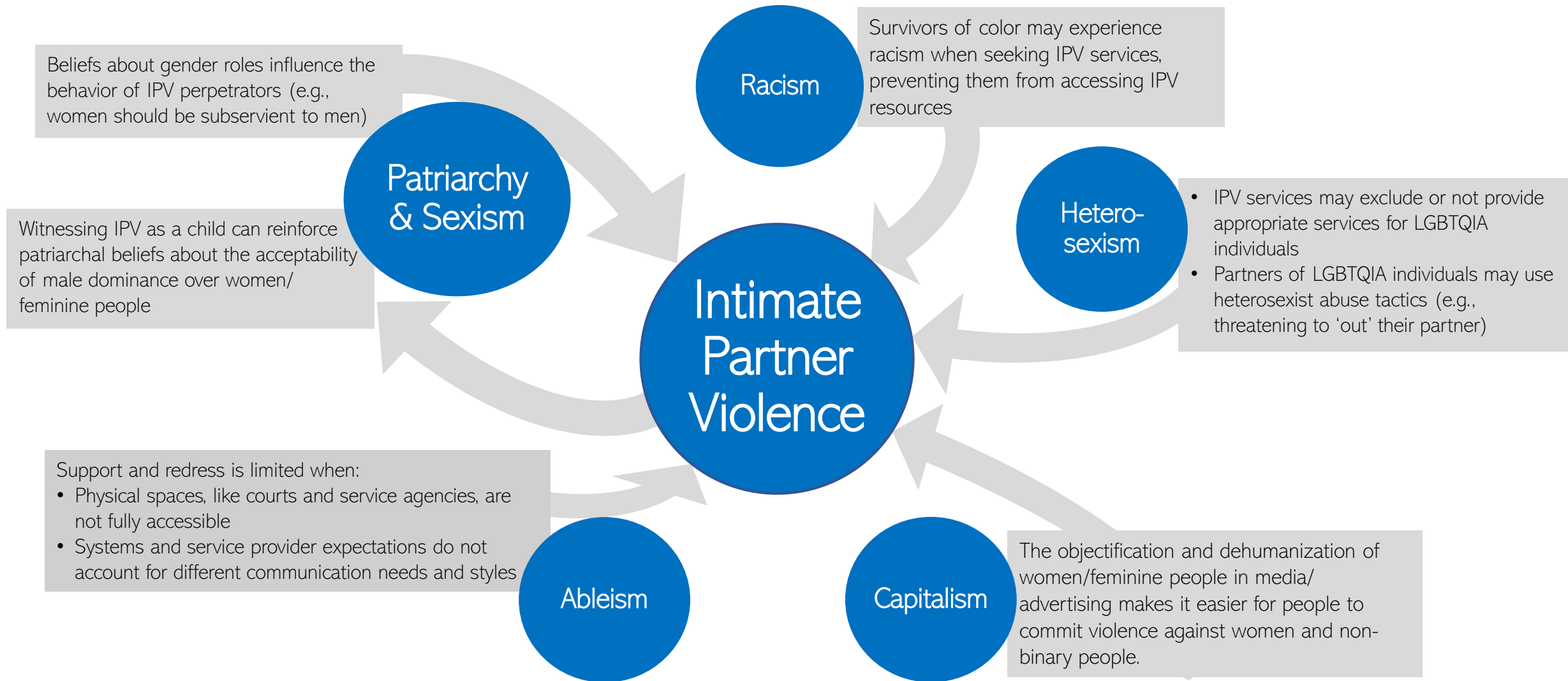
- Physical assaults
- Sexual assaults
- Verbal and implied threats to assault or kill
- Controlling behaviors
- Stalking behaviors
- Verbal and implied threats of non-physical harm
- Other types of psychological and emotional abuse
- Financial abuse and exploitation

IPV is sometimes also called Domestic Violence. However, **researchers tend to prefer the term Intimate Partner Violence because:**

- 1) IPV can involve people who are not or are no longer living together, while the term, "domestic" implies a shared living arrangement
- 2) In the courts, assaults between people in the same household that do not involve IPV may be called "domestic violence." For example:
  - child abuse
  - elder abuse by an adult child of the victim
  - assaults between siblings
  - assaults between roommates who have no current or prior romantic or sexual relationship

# OPPRESSIVE SYSTEMS CREATE A SOCIAL ENVIRONMENT THAT ENABLES INTIMATE PARTNER VIOLENCE

Layers of oppression make some people more vulnerable to intimate partner violence.



# FRAMING MATTERS

Despite the common belief that survivors of intimate partner violence (IPV) can exercise control over their circumstances, **access to social and economic resources affects survivors' ability to attain safety.**

There is also a tendency to focus on physical injury as the only impact of IPV, however, **IPV also affects mental health and multiple other life domains.**

Some groups are at higher risk, but **IPV affects people of all backgrounds** (genders, races, ethnicities, ages, sexual orientations, disability statuses, educational backgrounds, incomes, etc.).

# INTIMATE PARTNER VIOLENCE INDICATORS

CCIS respondents were asked about two types of intimate partner violence (IPV): physical and/or sexual violence and controlling behavior.

*Adapted from Massachusetts Youth Health Survey (MA YHS), 2019:*

## Physical and/or Sexual IPV

*Since COVID-19 began (March 10, 2020),*

has someone you were dating or married to physically hurt you? (for example, being shoved, slapped, hit, kicked, punched, strangled, forced into sexual activity, or anything that could have caused an injury)

## Control IPV

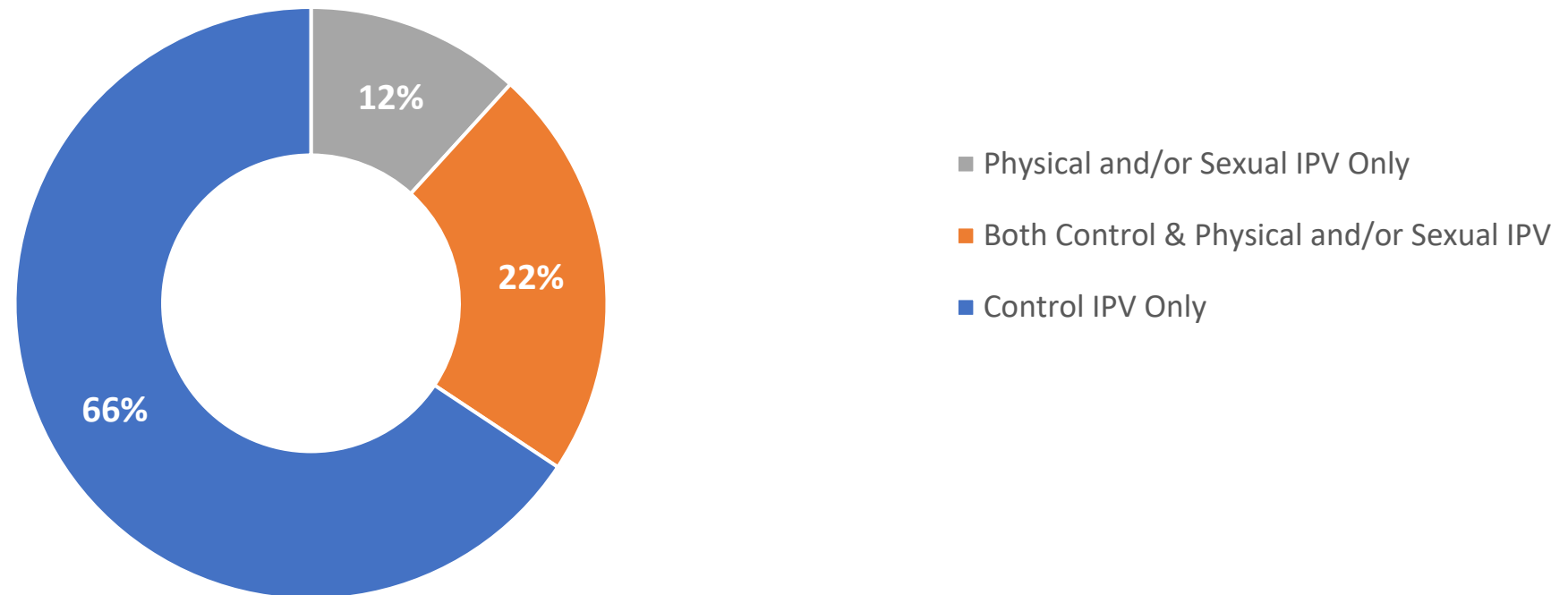
*Since COVID-19 began (March 10, 2020),*

has someone you were dating or married to done any of the following: monitored your cell phone, called or texted you a lot to ask where you were, stopped you from doing things with friends, been angry if you were talking to someone else, or prevented you from going to school or work (including remotely)?

NOTE: All results presented in the following slides are for adults who had ever been in a relationship and refer to the period starting in March 2020 up to when the respondent took the survey, which was between September and November 2020.

# INTIMATE PARTNER VIOLENCE REPORTING PATTERNS

While 1 in 3 respondents reporting IPV during Covid-19 reported experiencing physical and/or sexual violence, most respondents reporting IPV (88%) reported experiencing controlling forms of IPV.



† The total number of respondents reporting Any IPV during COVID = 572. However, for the analysis that produced the breakdown in this slide, the responses of some of these 572 respondents are excluded, because it could not be determined, based on their response to one or the other of the two IPV questions, whether or not they had experienced that form of IPV. Therefore, the overlap in the kinds of IPV they had experienced also could not be determined. The statistics in this slide are based on the responses of the 514 people whose answers to both questions were clearly either yes or no.

# INTIMATE PARTNER VIOLENCE REPORTING PATTERNS (cont.)

A majority of adults who reported IPV during Covid-19 reported that it was new or had gotten worse since the pandemic began.

Of those 177 respondents who reported physical and/or sexual IPV during Covid-19, **67%** reported that it was new or had gotten worse.

Of those 489 respondents who reported controlling forms of IPV during Covid-19, **63%** reported that it was new or had gotten worse.

We found other outcome patterns also were the same for the two types of IPV. So, in order to be able to report outcomes in more depth, in the remaining slides we have combined the responses of people who experienced either or both types of IPV into one group called "Any IPV During Covid-19." The total number of respondents who reported either or both types of IPV was 572 (out of 26,769 respondents.)

# INTIMATE PARTNER VIOLENCE OVERALL RATE

More than **2x** the percentage of MA adults reported experiencing any IPV in just the first 6-8 months of the Covid-19 pandemic than the percentage of adults who reported experiencing any IPV over the course of a full year the last time we asked:

**2.3% in the fall 2020 CCIS Adult Survey vs. 1.1% in the 2005 MA BRFSS**

NOTE: The CCIS asked about controlling behavior, while the MA BRFSS survey did not, and the MA BRFSS asked about threatened and attempted physical/sexual assault, while the CCIS did not. However, results from the CCIS cover a shorter time period and do not include the reports of 18-to-24-year-olds and so the difference in survey results is suggestive of a possible increase in IPV during the pandemic. Across all data sources, these experiences are under-reported, because they are traditionally stigmatized and because circumstances and/or incorrect beliefs about "what counts" may limit reporting. No data source covers all IPV due to space and time limitations, among other reasons, and neither the CCIS or MA BRFSS asked about certain types of IPV (threats to kill, threats of non-physical harm, stalking, verbal/emotional/psychological abuse, financial abuse) and only gave examples of some types of controlling behavior and/or physical and sexual violence.

NOTE: The number of respondents reporting Any IPV during COVID = 572. Effective sample size = 26,769.

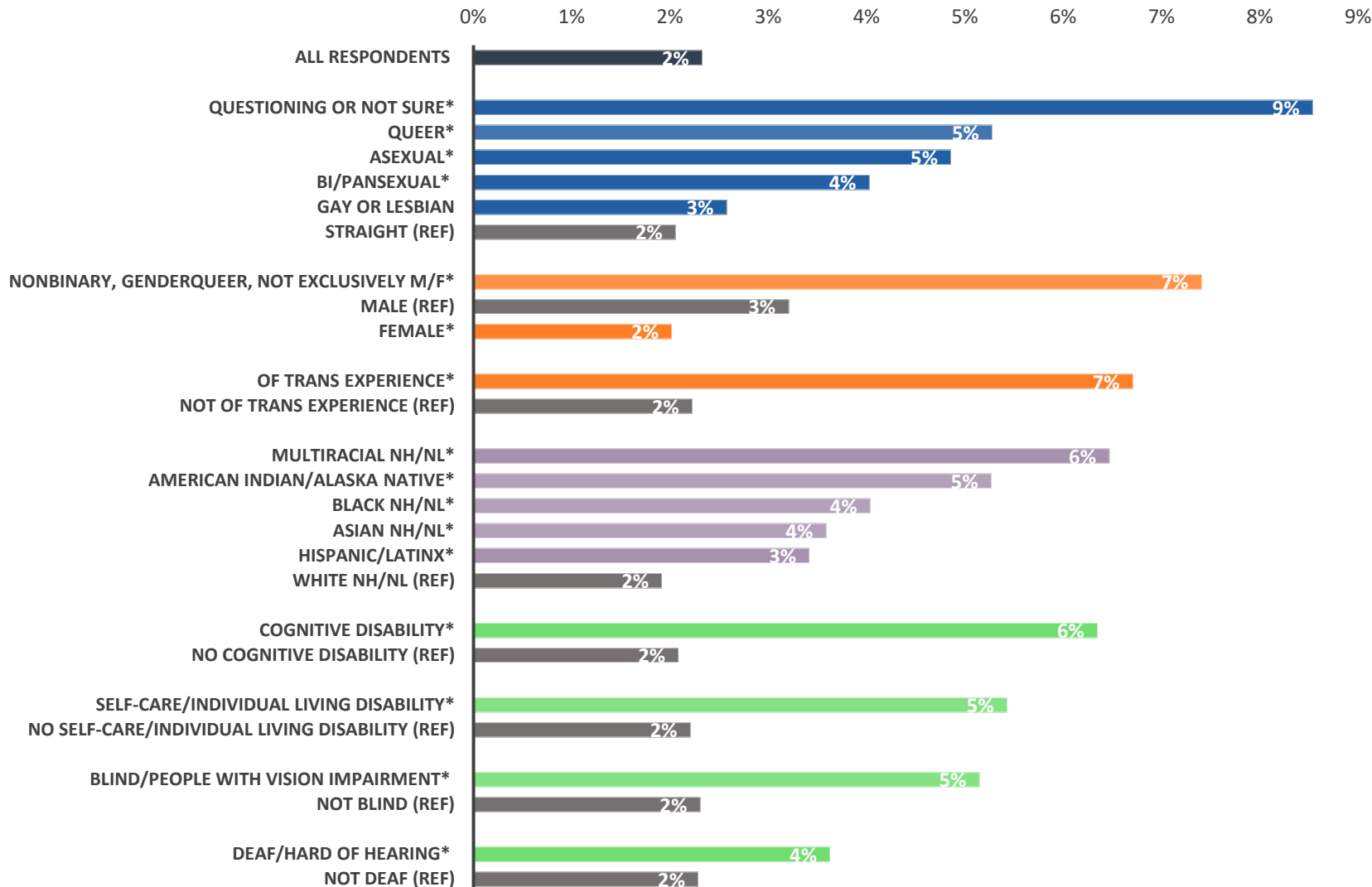
These findings<sup>†</sup> are consistent with local, national, and international service providers' anecdotal reports of increases in IPV and related service requests during the pandemic

<sup>†</sup>potentially higher overall rate of IPV reported in the CCIS in relation to a shorter period of time (6-8 months) and the majority of reports indicating that the IPV that was happening was new during that first 6-8 months of the pandemic or worse than before the pandemic began

# INTIMATE PARTNER VIOLENCE & DEMOGRAPHICS

Some groups may be particularly in need of IPV screening and follow-up support services.

Percent of MA Subpopulations Reporting Experiences of IPV During Covid-19 Pandemic



Experiences of IPV during Covid-19 were reported over **2 to 4x** more frequently by respondents identifying as:

- LGBQA
- Of transgender experience and non-binary gender
- Multi-racial nH/nL, American Indian/Alaska Native, Black nH/nL, Asian nH/nL, and Hispanic/Latinx
- Having a disability

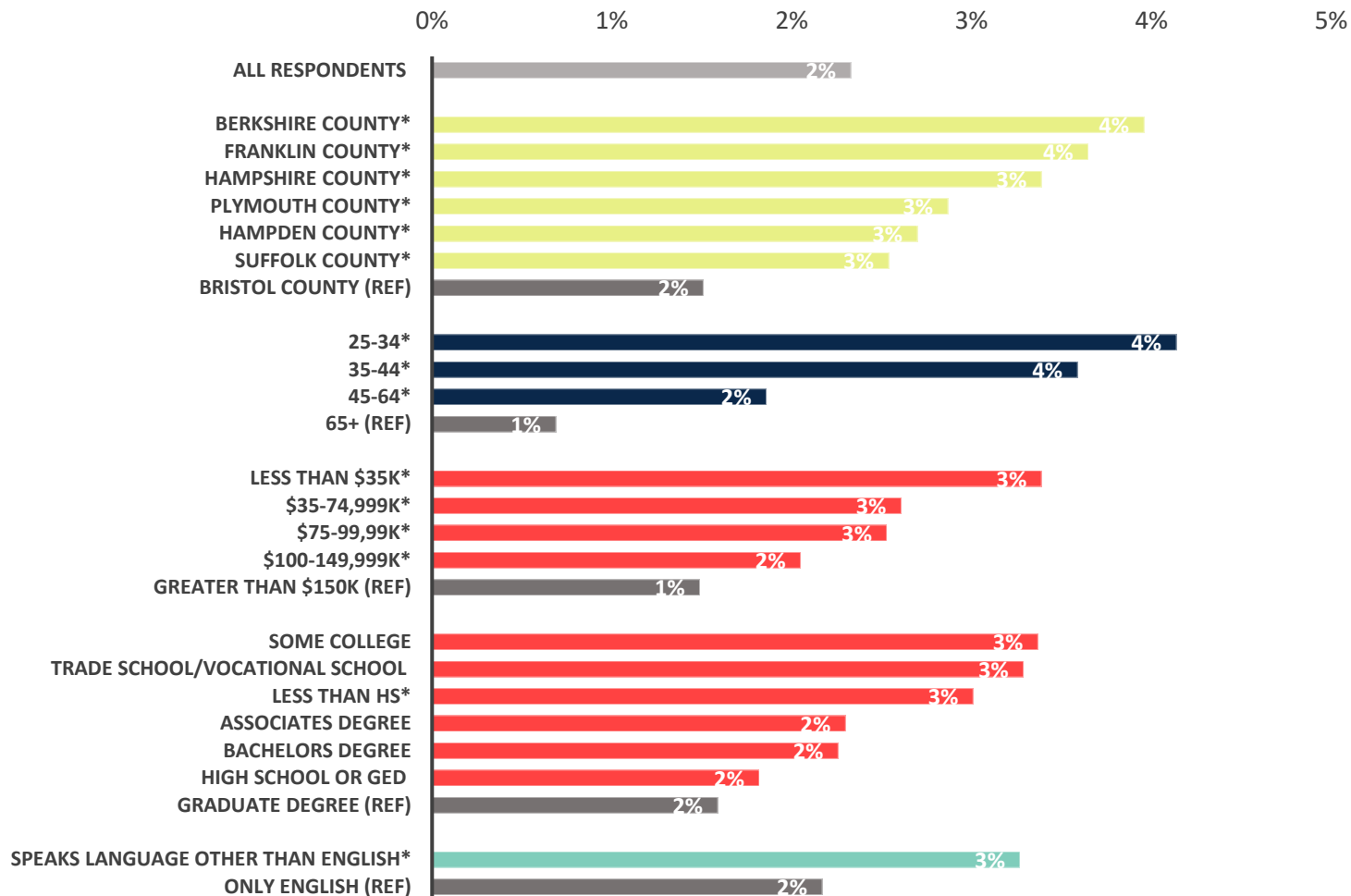
nH/nL = non-Hispanic/non-Latinx; American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx. Non-binary gender identity includes respondents identifying as non-binary, genderqueer, and not exclusively male or female.

\*Difference is statistically significant at  $p < .05$ . See Appendix for sub-population frequencies.

# INTIMATE PARTNER VIOLENCE & DEMOGRAPHICS (cont.)

Some groups may be particularly in need of IPV screening and follow-up support services.

Percent of MA Subpopulations Reporting Experiences of IPV During Covid-19 Pandemic (cont.)



Experiences of IPV during Covid-19 were reported over **1.5 to 3x** more frequently by respondents identifying as:

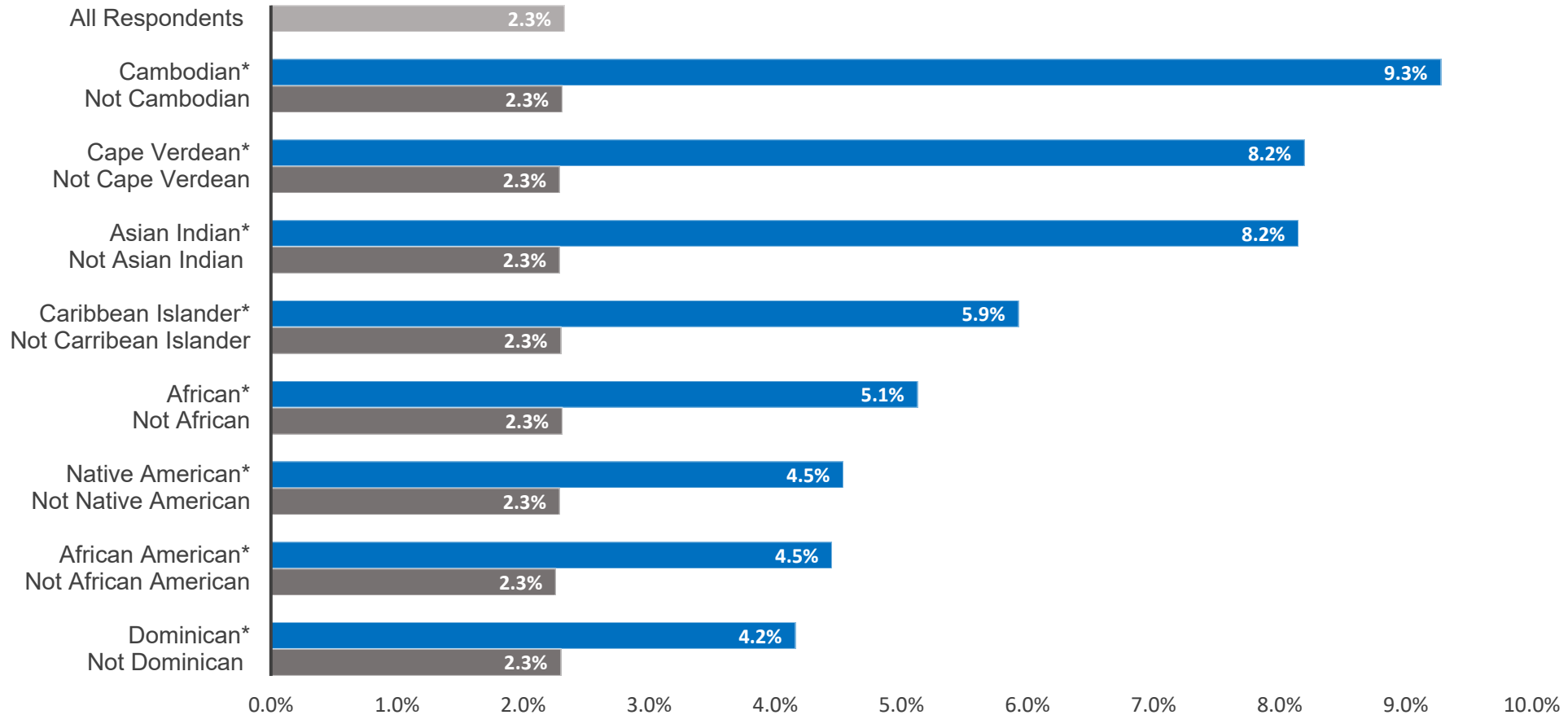
- Residing in Western MA or Suffolk county
- Younger
- Of lower income
- Of lower educational attainment
- Speaking a language other than English

\*Difference is statistically significant at  $p < .05$ . Response categories for which differences were not statistically significant are not represented in graph (see Appendix for those results and sub-population frequencies.)

# INTIMATE PARTNER VIOLENCE & DEMOGRAPHICS (cont.)

Some groups may be particularly in need of IPV screening and follow-up support services.

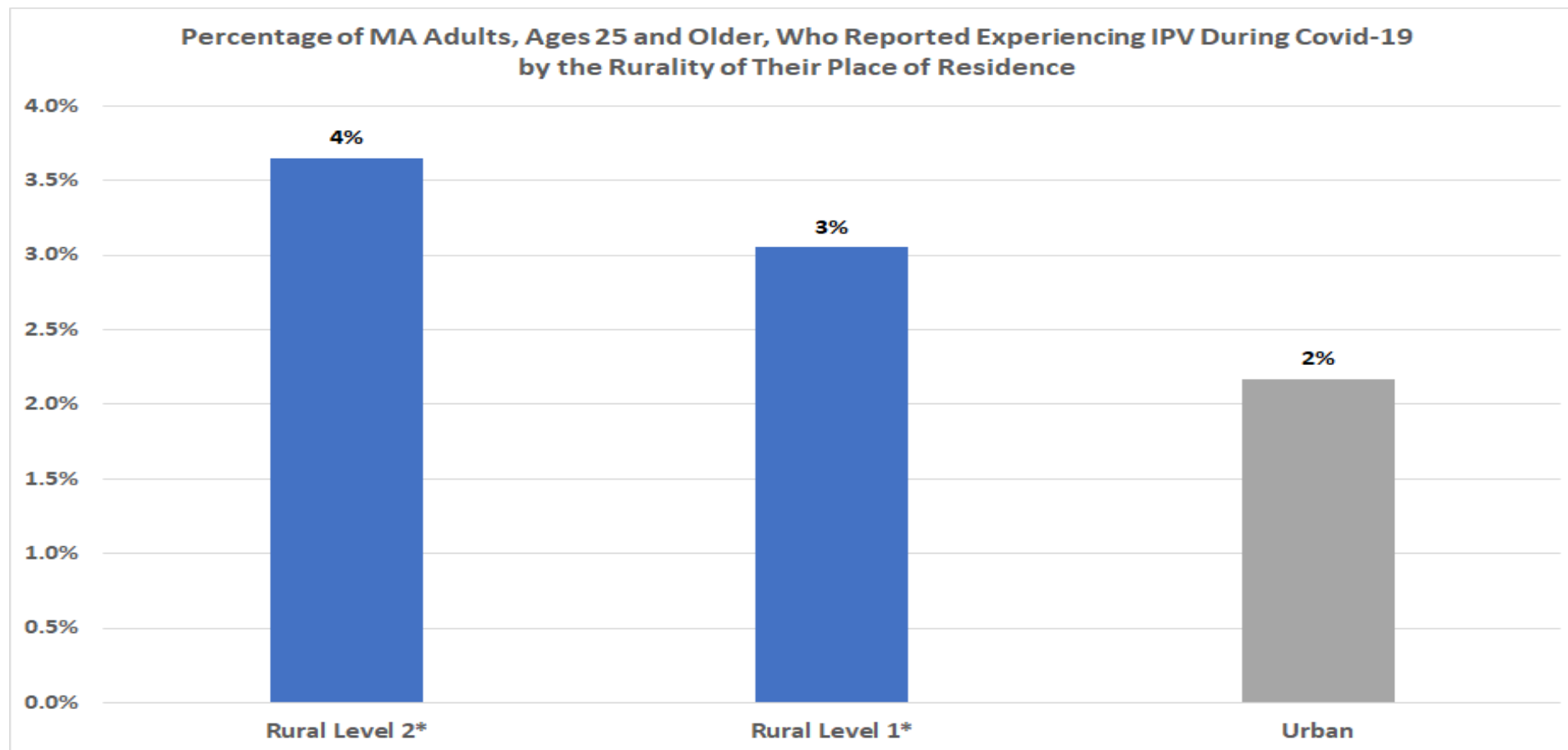
### Percentage of Respondents Reporting IPV During Covid-19 by Ethnicity



\*Difference between people identifying as the ethnicity indicated and people not identifying as this ethnicity is statistically significant at  $p < .05$ . Ethnicity responses are not mutually exclusive. See Appendix for sub-population frequencies.

# INTIMATE PARTNER VIOLENCE & RURALITY

Adult residents in rural areas of Massachusetts<sup>†</sup> were more likely than adult residents in urban areas to report having experienced IPV in the first 6-8 months of the COVID-19 pandemic suggesting that **tailored solutions are needed to address structural barriers, based on where people live.**



<sup>†</sup>City-town groupings were based on the MA State Office of Rural Health's MA rural designations. Rural definitions are available at: <https://www.mass.gov/doc/rural-definition-detail-0/download>. Towns in level two are less densely populated and more remote and isolated from urban core areas than are towns in level one, but both are considered rural.

\*Difference is statistically significant at  $p < .05$

\*Difference is statistically significant at  $p < .05$ . See Appendix for sub-population frequencies.

# IPV and basic needs are interconnected.

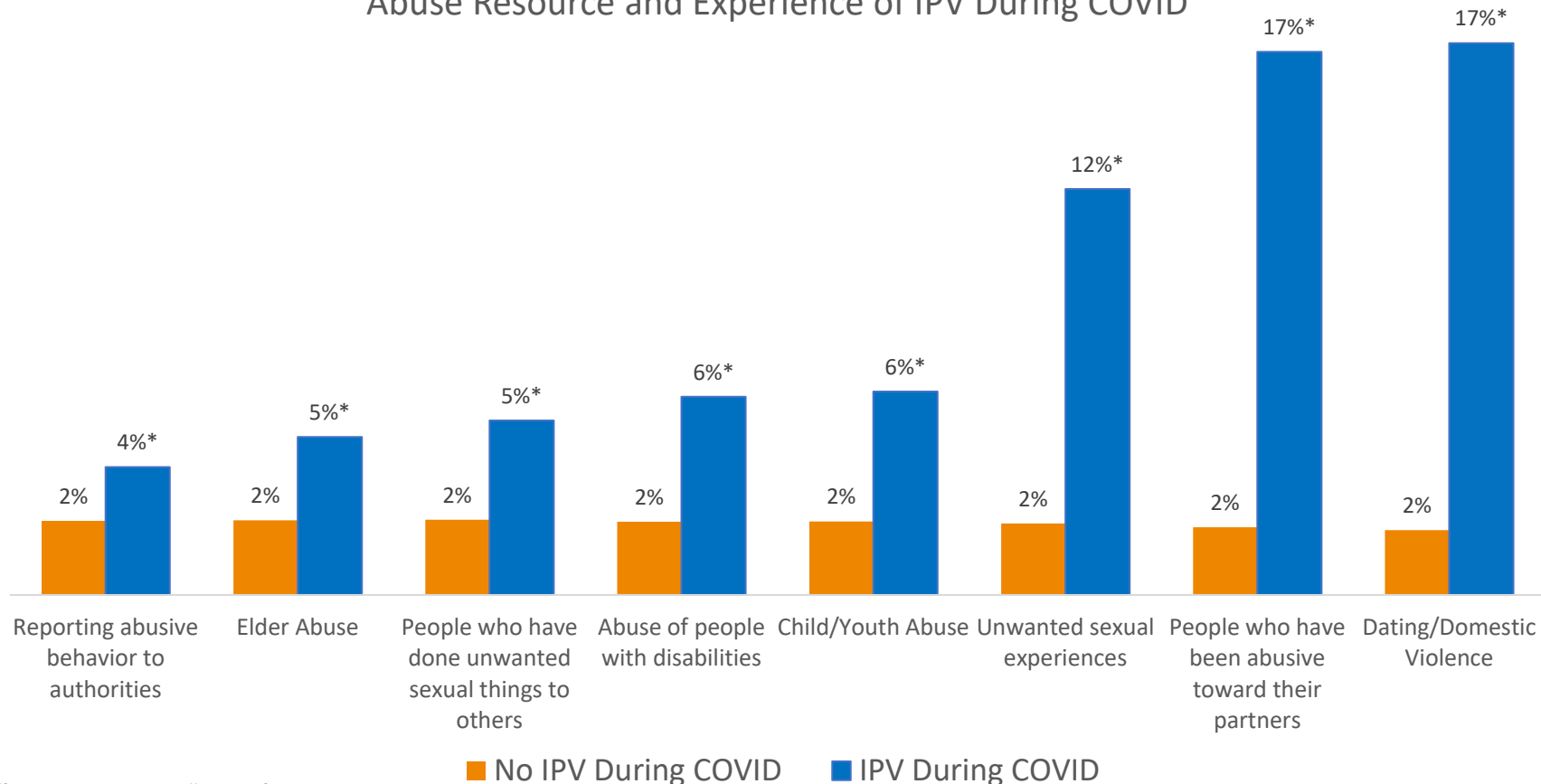
Survivors had needs over and above other adults in multiple domains and these needs shape their vulnerability to violence.



# ONLINE SAFETY SUPPORTS REQUESTED BY IPV SURVIVORS

People who reported experiencing IPV during Covid-19 wanted not just IPV survivor services, but also support for other types of abuse.

Percentage of Respondents Requesting Online Support for Abuse by Type of Abuse Resource and Experience of IPV During COVID



## Reaching Survivors with Resources

Almost 1 in 4 (22%) survivors who experienced IPV during Covid-19 identified **social media** as a top source for obtaining Covid-19 information –1.5x the percentage of people who did not report experiencing IPV during Covid-19.

... reinforcing the need for tailored outreach to IPV survivors around health information and safety support resources.

\*Difference is statistically significant at  $p < .05$ .

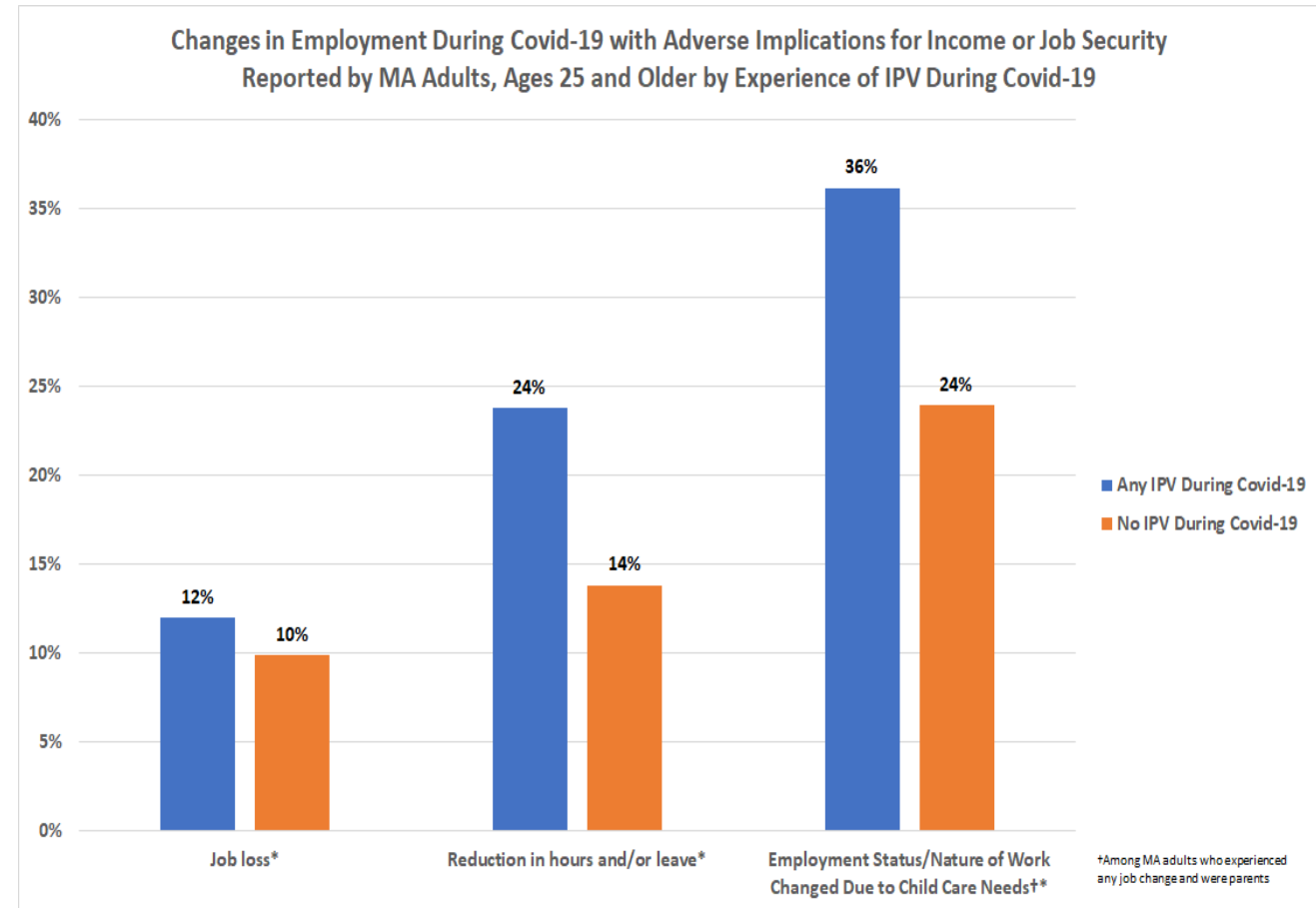
NOTE: Percentages are out of respondents reporting Any IPV during COVID-19 (n = 572) and those reporting No IPV During COVID-19 (n = 26,197).

# CHANGES IN EMPLOYMENT & IPV

MA adults who reported experiencing IPV during Covid-19 were more likely than those who did not to report changes in employment during the same time period that adversely affected their personal and household income.

The lack of stable, independent financial resources is a known barrier to leaving an abusive relationship.

- ❖ More than 1 in 10 MA adult survivors of IPV during Covid-19 reported losing a job during this time period
- ❖ Nearly a quarter of MA adult survivors of IPV during Covid-19 reported either a reduction in work hours or having to take a leave of absence during this time period
- ❖ More than 1 in 3 MA adult survivors of IPV during Covid-19 who were parents and who experienced a change in employment status or nature of work<sup>†</sup> had to make this change due to childcare needs

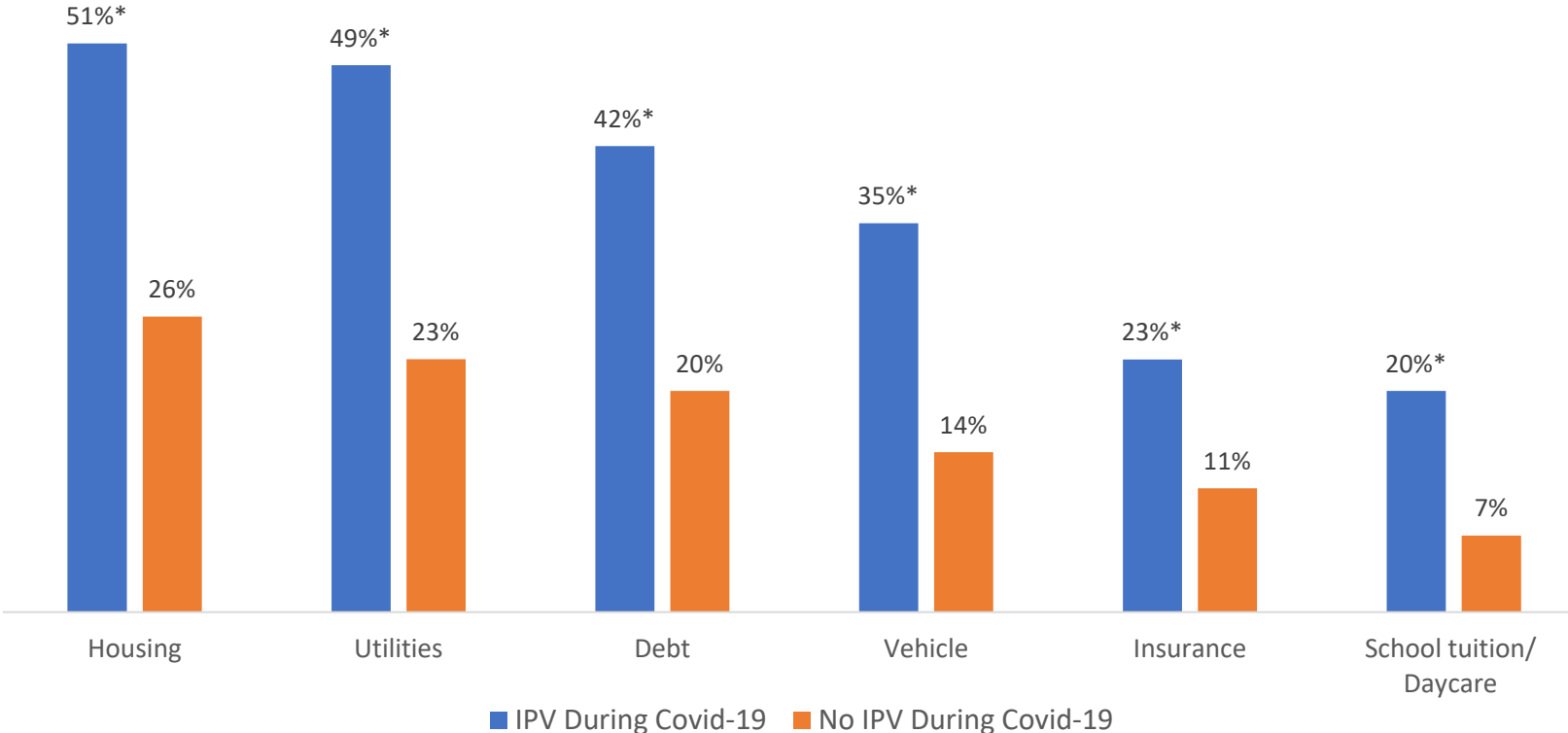


\*Difference is statistically significant at  $p < .05$ . NOTE: Percentages are out of respondents reporting Any IPV During COVID-19 ( $n = 572$ ) and those reporting No IPV During COVID-19 ( $n = 26,197$ ). <sup>†</sup>Number of MA adult survivors of IPV during COVID-19 who were parents and experienced a change in employment status or nature of work = 236.

# WORRIES ABOUT EXPENSES & IPV

76% of MA adults who reported experiencing IPV during Covid-19 were worried about paying at least one expense in upcoming weeks.

Percentage of Respondents Worried About Paying Expenses by Category of Expense and Experience of IPV During Covid-19



\*Difference is statistically significant at  $p < .05$ .

NOTE: Percentages are out of respondents reporting Any IPV During COVID-19 ( $n = 572$ ) and those reporting No IPV During COVID-19 ( $n = 26,197$ ).

Out of respondents reporting IPV during Covid-19, respondents identifying as:

- Women\*, Non-binary gender\*
- Parents\*
- Having a cognitive\*, mobility\*, and/or self-care/individual-living disability\*
- Younger\*
- Of lower income\*

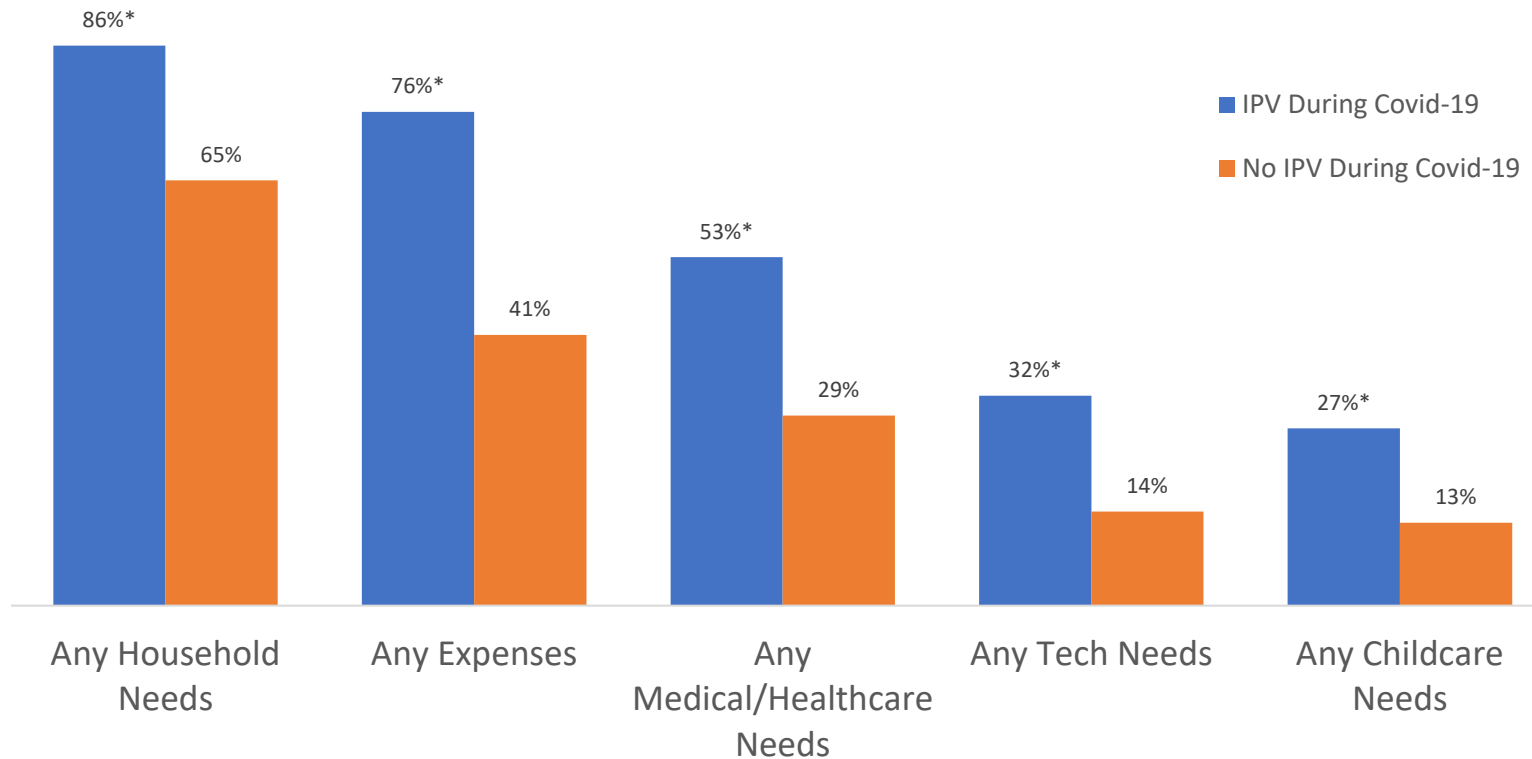
...were more likely to report worry about at least one expense.†

† As compared to 1) men; 2) non-parents; 3) no cognitive, no mobility, no self-care/Ind. Living disability; 4) age 65+; 5) income of \$150k+.

# WORRIES ABOUT BASIC NEEDS & IPV

Respondents who reported experiencing IPV during Covid-19 were more likely to worry about basic needs compared to those who did not report experiencing IPV during Covid-19.

Percentage of Respondents Worried About Basic Needs by Category of Need and Experience of IPV During COVID-19



## TOP BASIC NEEDS OF CONCERN TO RESPONDENTS WHO REPORTED EXPERIENCING IPV DURING COVID-19

1. Cleaning products (61%)
2. Food or groceries (49%)
3. Paper products (46%)
4. Mental or emotional support (42%)
5. Medical care or treatment (37%)

\*Difference is statistically significant at  $p < .05$ .

NOTE: Percentages are out of respondents reporting Any IPV during COVID-19 (n = 572) and those reporting No IPV During COVID-19 (n = 26,197).

# HOUSING STABILITY & IPV

People who reported experiencing IPV during Covid-19 were more likely than those who did not to also report worries about housing expenses\* and needing to move soon\*.

Survivors were **3x** as likely to report being worried about needing to move in the next few weeks



Not having a safe place to go is a known barrier to leaving an abusive relationship.

...And **7X** as likely to report being worried about needing to move because of conflict with roommates/family or because of experiencing abuse at home.

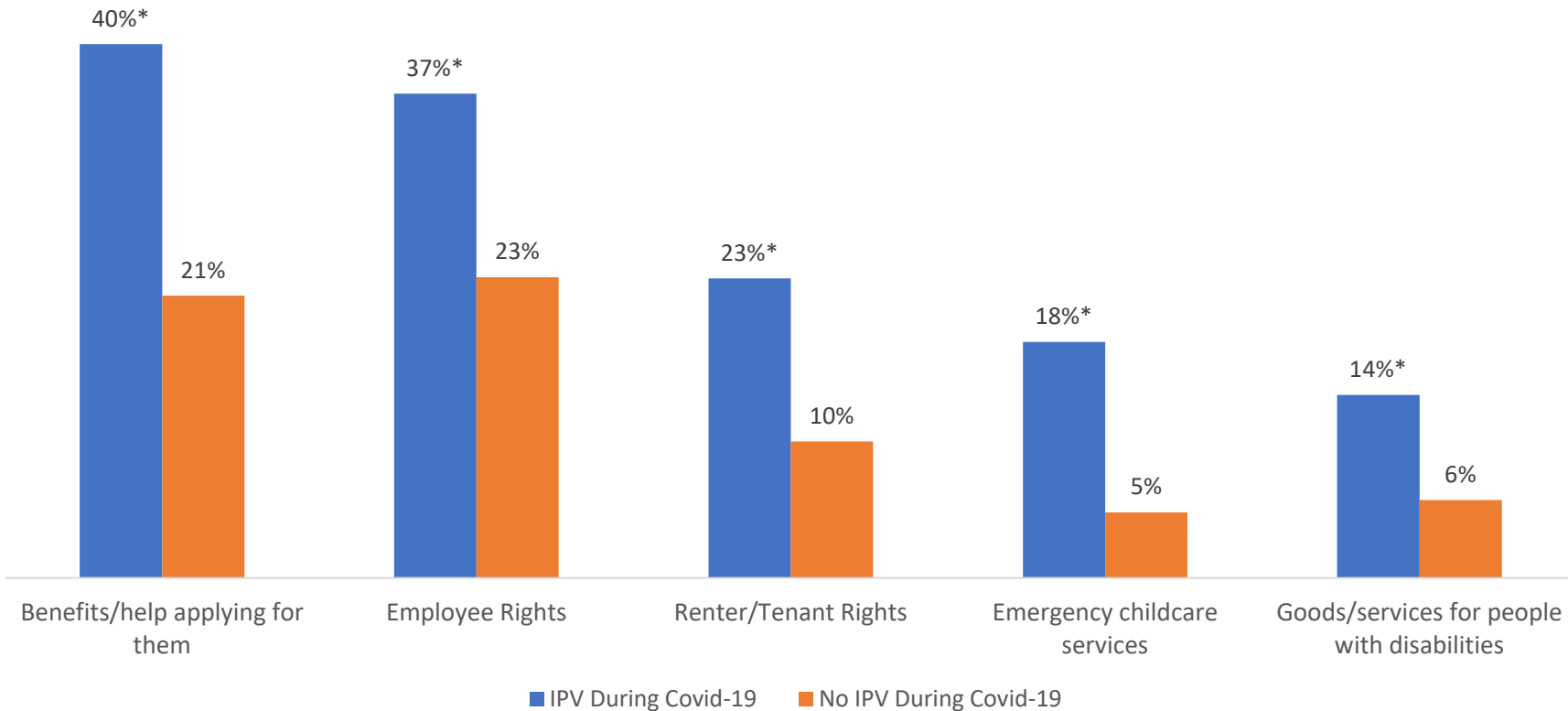
**“Facing homelessness is one of our primary calls. Many of the people we provide services to have experienced job loss or they have been furloughed, exacerbating their financial insecurity. Many of those we provide services to have to sneak out of their homes or hide in a closet to call for assistance because the abuser is living with them.... It is much more dangerous [now] for many of those we serve.”**

\*Difference is statistically significant at p. < .05. Comparisons are to those who did not report experiencing IPV during Covid-19.

# REQUESTED RESOURCES & IPV

Respondents who reported experiencing IPV during Covid-19 were more likely to request information about rights and about obtaining services compared to those who did not report experiences of IPV during Covid-19.

Percentage of Respondents Reporting What Information Would Be Helpful to Them By Type of Information and Experience of IPV During Covid-19



Survivors of IPV During Covid-19 also were **3-11x** as likely to request information regarding:

- immigrant rights (6%\*)
- indigenous person rights (5%\*)
- translation services to obtain goods and services (4%\*)

\*Difference is statistically significant at  $p < .05$ .

NOTE: Percentages are out of respondents reporting Any IPV during COVID-19 ( $n = 572$ ) and out of those reporting No IPV During COVID-19 ( $n = 26,197$ ).

# MENTAL HEALTH & IPV

MA adults who reported experiencing IPV during the first 6-8 months of the Covid-19 pandemic were 2x as likely to report experiencing poor mental health as adults who did not report experiencing IPV

Survivors of IPV during Covid-19 were more likely to report:

- ❖ 15+ Days of Poor Mental Health\* (61% vs. 32%)
- ❖ 3+ Symptoms consistent with PTSD<sup>†</sup>\* (49% vs. 25%)

<sup>†</sup>Attributed to experiences with Covid-19. \*Difference is statistically significant at  $p < .05$ .

NOTE: Percentages are out of respondents reporting Any IPV during COVID-19 (n = 572) and those reporting No IPV During COVID-19 (n = 26,197).

# MENTAL HEALTH & IPV

MA adults who reported experiencing IPV during Covid-19 also were more likely than those who did not to report needing certain mental health resources, including resources accessed via non-traditional media.

The top 6 mental health resources survivors of IPV during Covid-19 identified as of potential help:

1. Meeting in-person with a mental health professional for individual or group mental health therapy\* (30%)
2. Talking to a mental health professional via video chat\* (29%)
3. Using an app on a cell phone or tablet to obtain mental health support\* (25%)
4. Talking to a mental health professional over the telephone\* (24%)
5. Information on seeing a therapist\* (24%)
6. Attending a support group via an on-line platform\* (19%)

\*Difference from those not reporting IPV during Covid-19 is statistically significant at  $p < .05$ .

Note: Percentages are out of respondents reporting Any IPV During COVID (n =572).

Adults who reported experiencing IPV during the pandemic were **5x as likely to report needing suicide prevention and crisis resources** as adults who did not report experiencing IPV during this time period.\*

\*7.8% vs. 1.4%: This difference is statistically significant at  $p < .05$ .

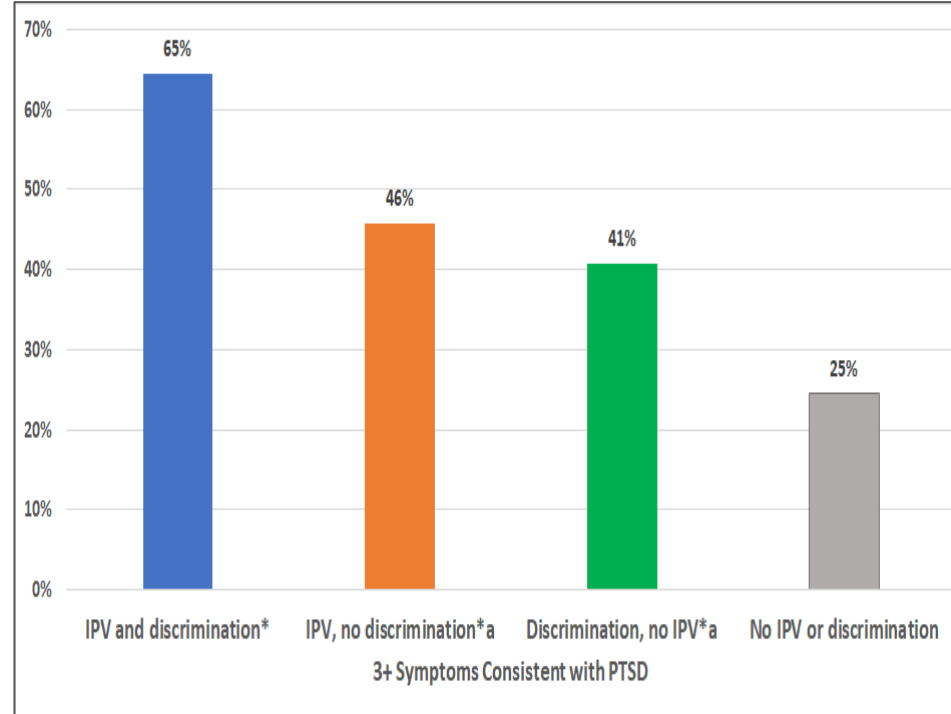
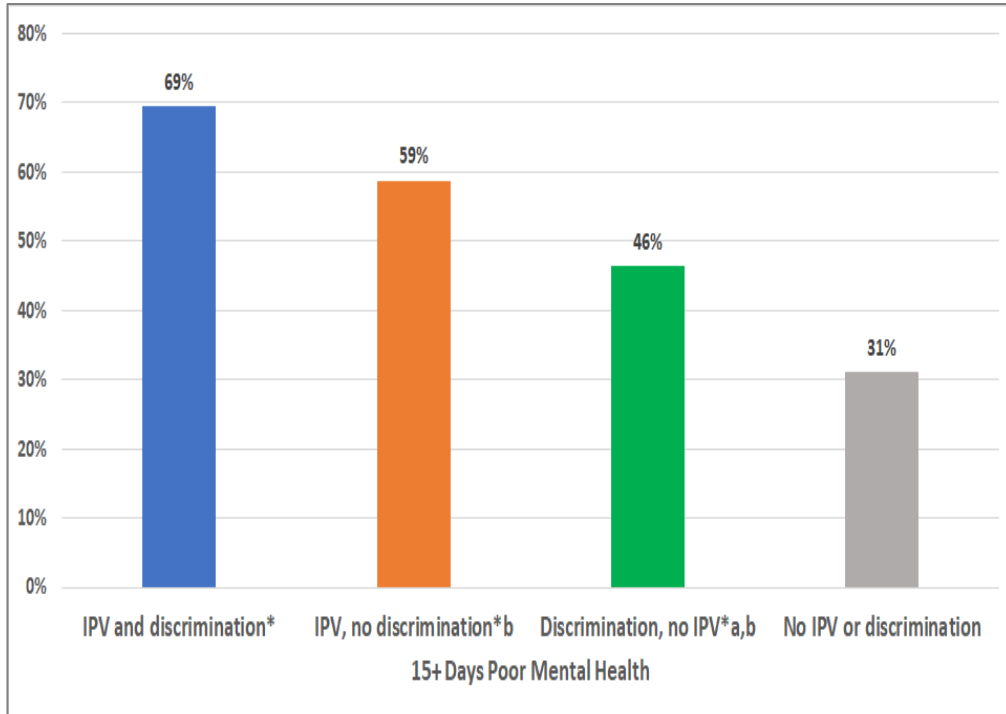
NOTE: Percentages are out of respondents reporting Any IPV during COVID-19 ( $n = 572$ ) and those reporting No IPV during COVID-19 ( $n = 26,197$ ).

# DISCRIMINATION, IPV, & MENTAL HEALTH

Directly experiencing events that may be life-threatening (like a pandemic) and witnessing them happen to others, even just via media exposure, can lead to negative mental health effects, including symptoms of depression, anxiety and post-traumatic stress disorder.

Negative mental health effects are even more likely for people who also have had other traumatic experiences, like IPV or discrimination, so they may be especially in need of services and support.

Percentage of Respondents Reporting 15+ Poor Mental Health Days and 3+ PTSD-like Symptoms in Past 30 Days by Experiences of IPV and Discrimination During Covid-19



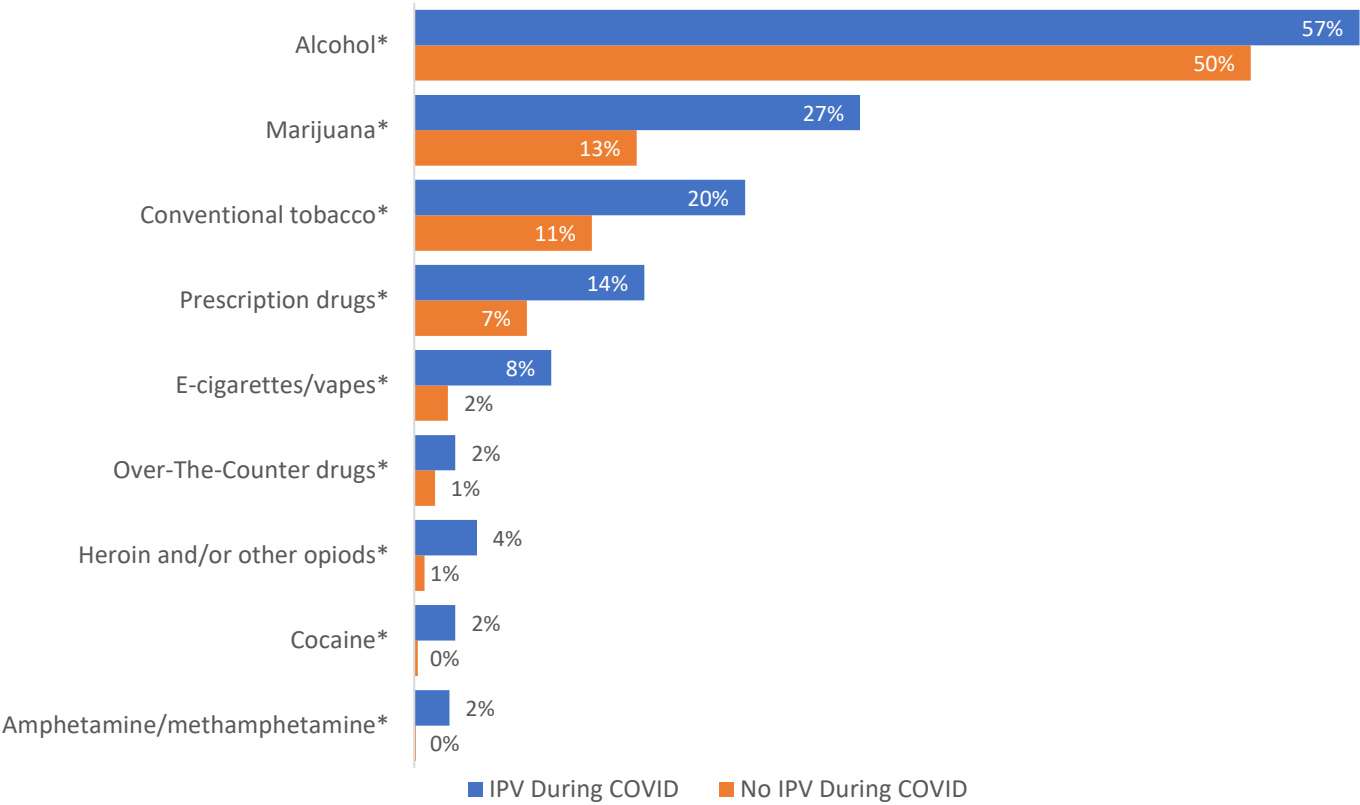
MA adults who had experienced both IPV and discrimination during the pandemic were the group that most frequently also reported each type of poor mental health (more than adults who reported neither experience as well as adults who reported either discrimination alone or IPV alone).

\*Difference from referent group is statistically significant at  $p < .05$ . <sup>a</sup>Difference from "IPV and Discrimination" group is statistically significant at  $p < .05$ . <sup>b</sup>Difference between these two groups is statistically significant at  $p < .05$ . NOTE: The question on PTSD symptoms was in relation to experiences with Covid-19. The discrimination question was in relation to race and/or ethnicity. For 15+ Days Poor Mental Health: No IPV or discrimination,  $n = 7,218$ ; Discrimination, No IPV,  $n = 430$ ; IPV, No Discrimination,  $n = 32$ , and; IPV and Discrimination,  $n = 50$ . For 3+ PTSD Symptoms: No IPV or discrimination,  $n = 6,116$ ; Discrimination, No IPV,  $n = 382$ ; IPV, No Discrimination,  $n = 224$ , and; IPV and Discrimination,  $n = 44$ .

# SUBSTANCE USE & IPV

People who reported experiencing IPV during Covid-19 were more likely to also report using a variety of legal and non-legal substances in the past 30 days and they were 1.6x as likely to report increased use of any substance

Percentage of Respondents Reporting Use of Substance in Past 30 Days by Substance Type and Experience of IPV During Covid-19



Many substances showing increased use during this period were legal, medical substances, so some increases may have occurred at the advice/under the guidance of a health professional (e.g., prescription medications, over-the-counter medications, and medical marijuana).

In both groups,<sup>†</sup> a higher percentage of those who experienced delays in healthcare than those who did not also reported increased use of substances, suggesting some of the increased use may reflect efforts to address untreated physical or mental health symptoms.

In addition to the potential that some increases in use were to cope with the effects of the pandemic, many survivors were sheltering at home with their abuser and prior research on IPV dynamics and substance use has found:

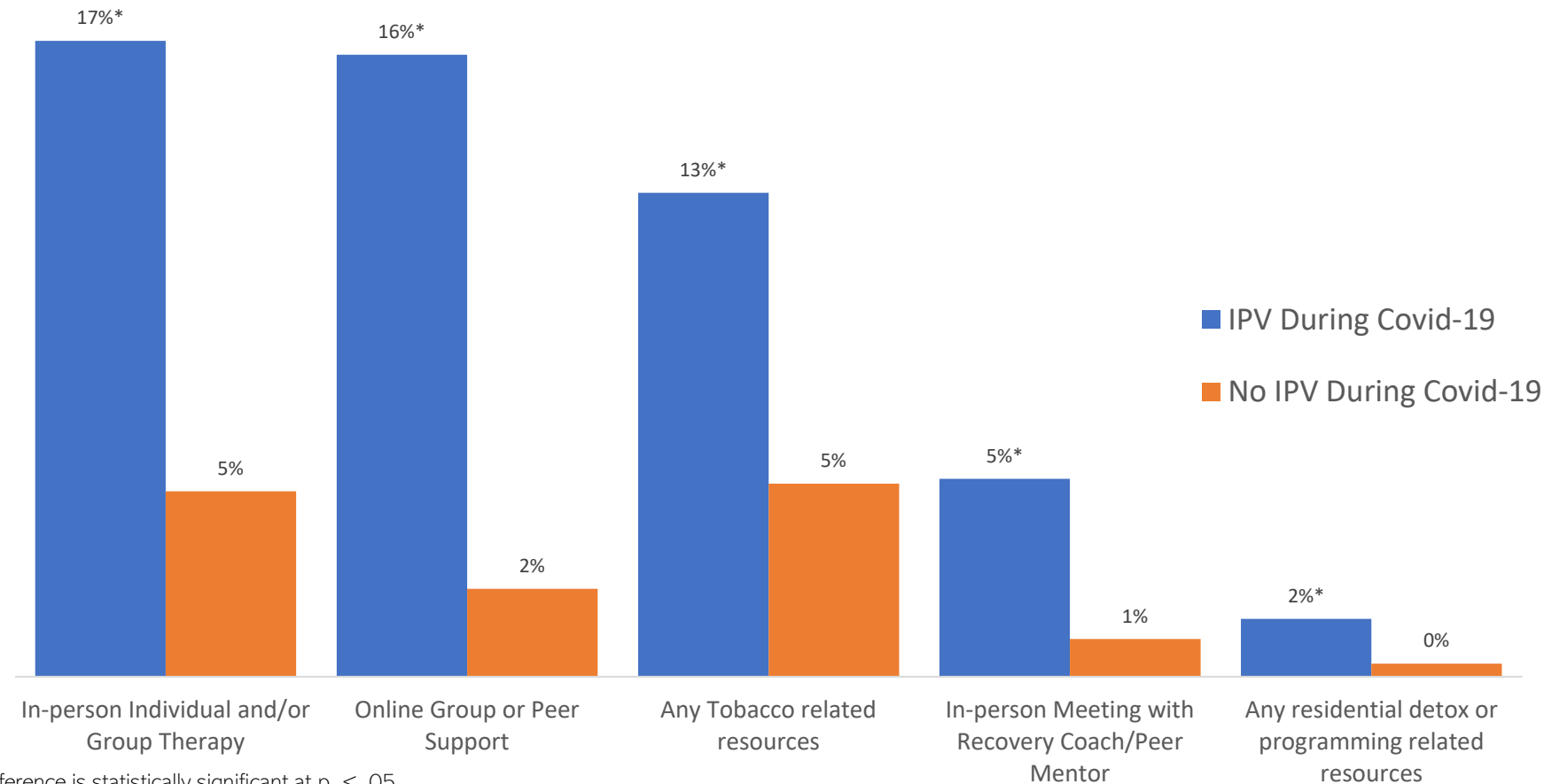
- ❖ Some survivors use substances to try to cope with the emotional trauma of abuse
- ❖ Some abusive partners force substance consumption on survivors and/or intentionally sabotage their efforts to maintain recovery

\*Difference is statistically significant at p. < .05. †Differences were found for both groups, but statistically significant overall and for the "No IPV during Covid-19" group.  
 NOTE: Percentages in the bar chart are out of respondents reporting Any IPV during COVID-19 (n = 572) and out of those reporting No IPV During COVID-19 (n = 26,197).

# SUBSTANCE USE RESOURCES & IPV

People who reported experiencing IPV during Covid-19 also were 3x as likely to request one or more substance use resources.

Percentage of Respondents Requesting Substance Use Resources by Type of Resource and IPV Experience During Covid-19 Among Respondents Reporting Substance Use in the Past 30 Days



**Top 3 Substance Use Resources Requested by IPV Survivors:**

1. In-person Individual and/or Group Therapy (17%)
2. Online Group or Peer Support (16%)
3. Any Tobacco-Related Resources (13%)

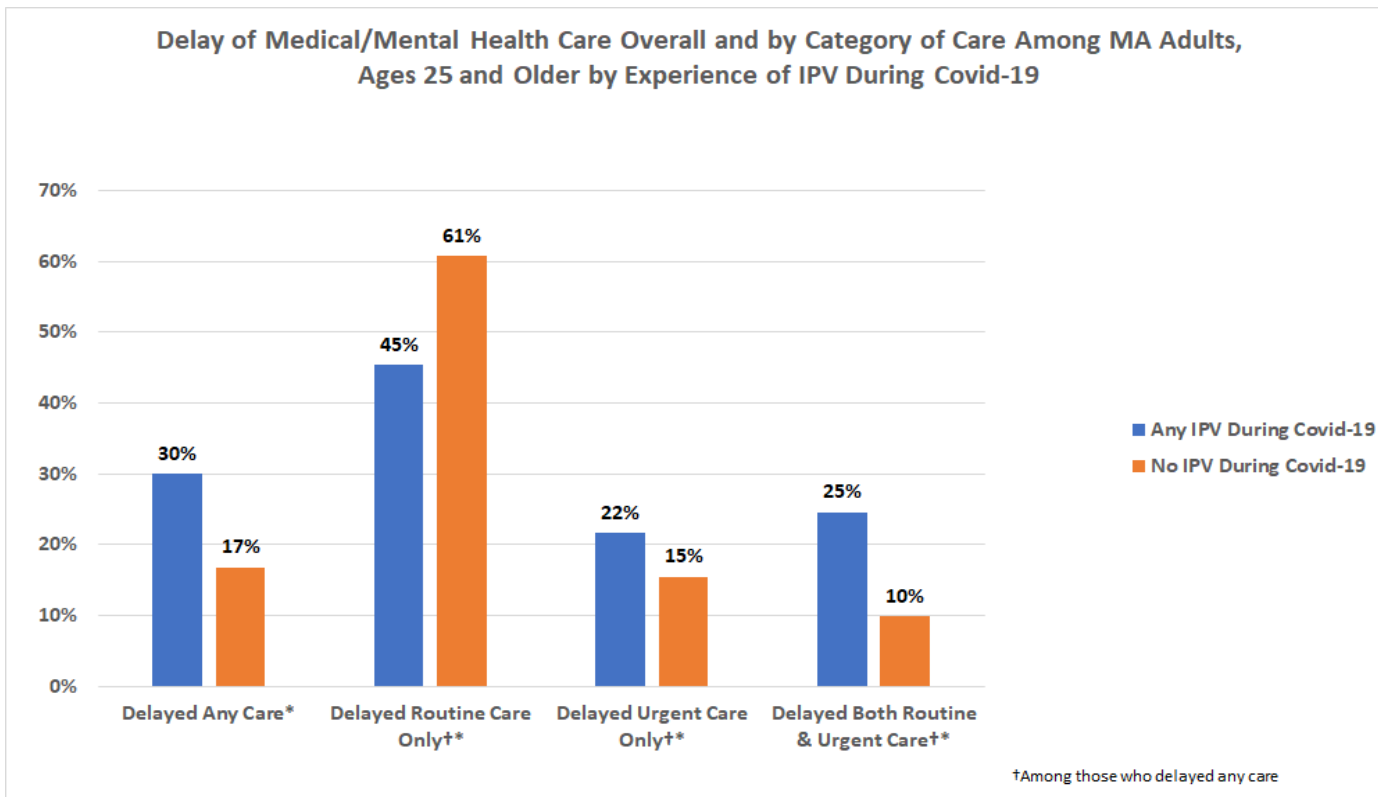
\*Difference is statistically significant at p. < .05

Note: Percentage are out of respondents reporting past-month substance use and no IPV During COVID-19 (n = 14918) and reporting past-month substance use and IPV During COVID-19 (n = 403).

# DELAYS IN HEALTH CARE & IPV

MA adults who reported experiencing IPV during Covid-19 were more likely than those who did not to also report experiencing delays in medical and/or mental health care; in particular, these were delays in urgent and both urgent and routine care.

**Primary care visits were the most common healthcare need to have been delayed** (reported by 62% of survivors of IPV during Covid-19 and 63% of those who did not report experiencing IPV during Covid-19).



The top 3 types of *routine* healthcare needs that were delayed during Covid-19 for IPV survivors (after primary care visits) were:

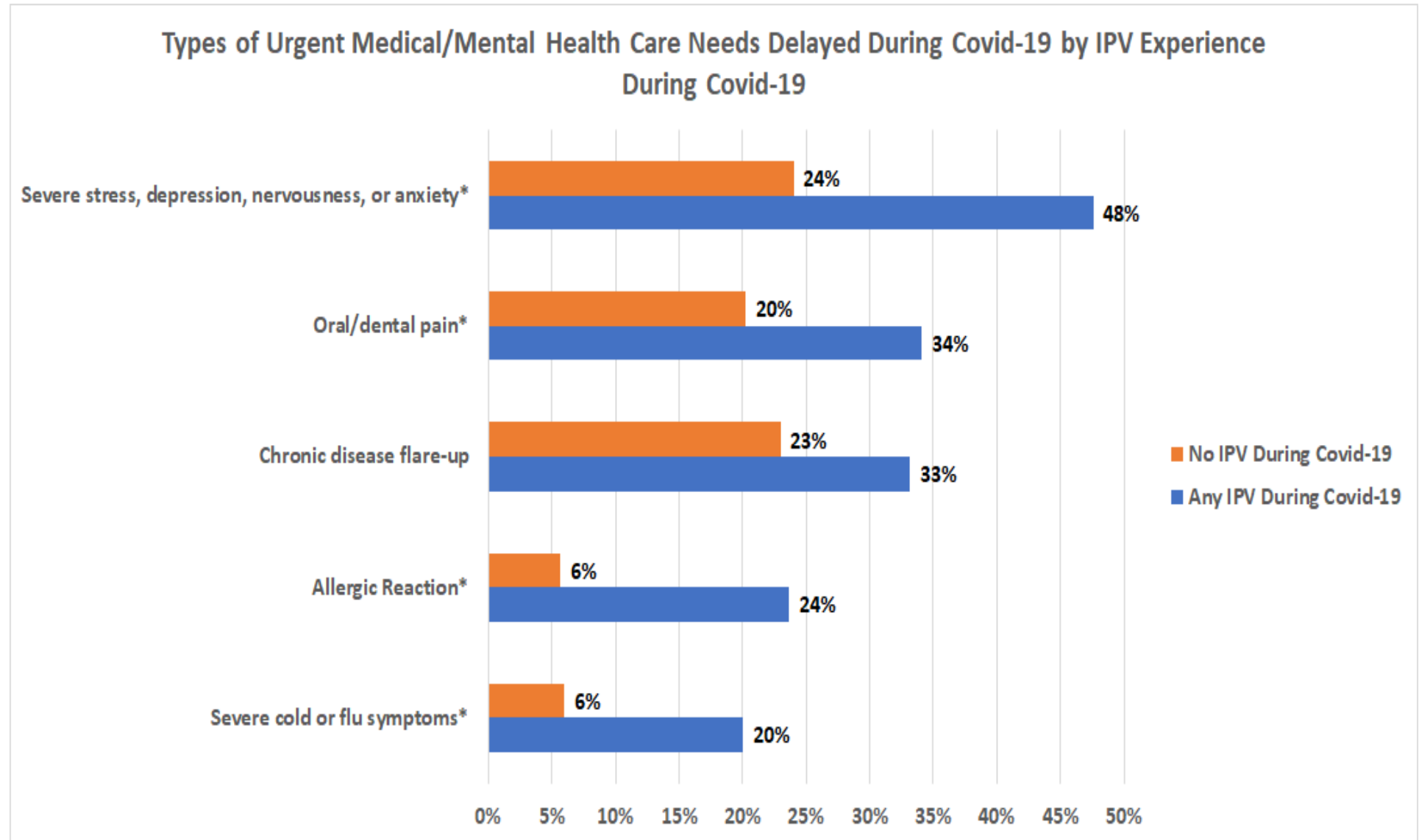
1. Oral/Dental Care (54%)
2. Mental health care\* (30%)
3. Chronic disease management (28%)

Delays for these types of health issues were more common for those who reported experiencing IPV during COVID than for those who did not.

\*Difference is statistically significant at  $p < .05$ . NOTE: Percentages are out of respondents reporting Any IPV during COVID-19 ( $n = 572$ ) and those reporting No IPV During COVID-19 ( $n = 26,197$ ). Percentages within those who experienced any delayed care were out of 132 respondents who also reported Any IPV During Covid-19 and 3,075 respondents who reported No IPV During Covid-19. Percentages within those who experienced routine delayed care and who also reported Any IPV During Covid-19 were out of 102 respondents.

# DELAYS IN URGENT HEALTH CARE & IPV

MA adults who reported experiencing IPV during Covid-19 as well as delays in urgent health care reported several kinds of urgent medical and/or mental health care delays more frequently than other MA adults who experienced urgent care delays. **Survivors of IPV During Covid-19 were between 1.4x and 4x as likely to report these delays.**



\*Difference is statistically significant at  $p < .05$ . NOTE: Percentages are out of respondents reporting any delays in urgent healthcare and Any IPV During COVID-19 ( $n = 57$ ) and those reporting any delays in urgent health care and No IPV During COVID-19 ( $n = 791$ ).

# DELAYS IN HEALTH CARE & IPV

MA adults who reported experiencing IPV during Covid-19 were more likely than those who did not to also report experiencing delays in medical and/or mental health care\*; in particular, these were delays in urgent\* and both urgent and routine care\*.

Among those who experienced delays in healthcare, **primary care visits were the most common healthcare need delayed** (reported by 62% of survivors of IPV during Covid-19 and 63% of those who did not report experiencing IPV during Covid-19).

The top 3 ***routine*** healthcare needs delayed during Covid-19 for IPV survivors<sup>†</sup> (after primary care visits) were:

1. Oral/Dental Care (54%)
2. Mental health care\* (30%)
3. Chronic disease management (28%)

The top 5 ***urgent*** healthcare needs delayed during Covid-19 for IPV survivors<sup>†</sup> were:

1. Severe stress, depression, nervousness, or anxiety\* (48%)
2. Oral/dental pain\* (34%)
3. Chronic disease flare-up (33%)
4. Allergic Reaction\* (24%)
5. Severe cold or flu symptoms\* (20%)

<sup>†</sup>Delays for these types of health issues were more common for those who reported experiencing IPV during Covid-19 than for those who did not.

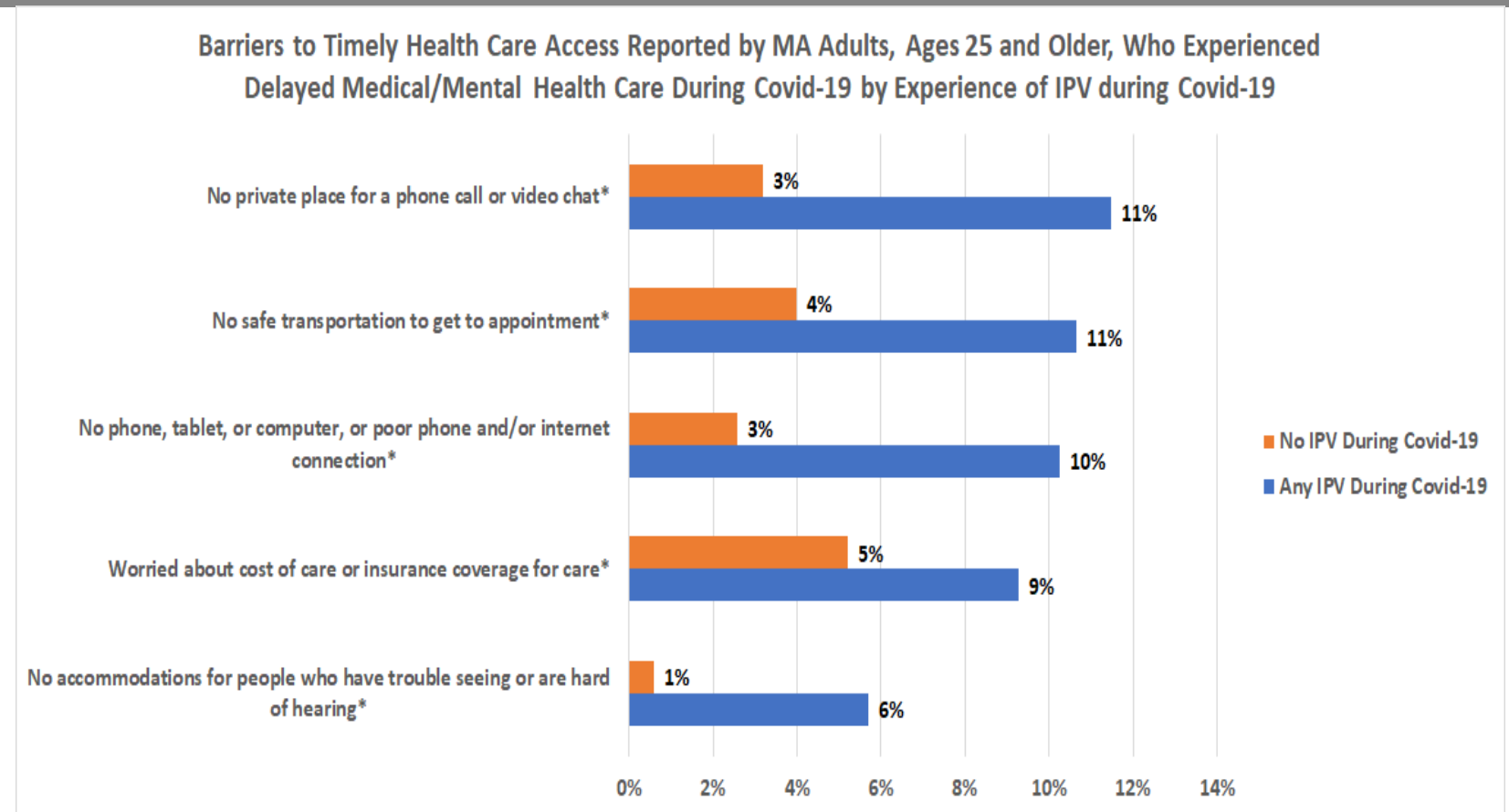
\*Difference relative to those who did not report experiencing IPV during Covid-19, but did report either a routine or urgent healthcare need, respectively, is statistically significant at  $p < .05$ . Note: Percentages in the “routine” and “urgent” textboxes are out of respondents who reported Any IPV During Covid-19 and Any Routine Healthcare Delays ( $n = 102$ ) and respondents reporting Any IPV During COVID-19 and Any Urgent Healthcare Delays ( $n = 57$ ), respectively.

# REASONS FOR DELAYS IN HEALTH CARE & IPV

The primary barriers to medical and/or mental health care faced by IPV survivors were **structural**, such as: lack of disability accommodations, transportation, insurance/cost barriers, and technology access.

Regardless of reported experience with IPV during Covid-19, the two most common barriers to timely health care access during this period were:

- ❖ Appointment cancellations, delays, and long wait times (55% of those who reported experiencing IPV and 60% of those who did not report IPV)
- ❖ Worry about catching Covid-19 by seeing a doctor in person (22% of those who reported experiencing IPV and 24% of those who did not report IPV)



\*Difference is statistically significant at  $p < .05$ . NOTE: Being in the same household as an abusive partner carries risks for telephone, text, and internet communications beyond privacy, as some abusive people actively monitor their partners' communications and use them as pretexts for more abuse. Percentages were out of 132 respondents who reported Any IPV During Covid-19 as well as Healthcare Delays of Any Kind and 3,075 respondents who reported No IPV During Covid-19, but Healthcare Delays of Any Kind.

# TESTING ACCESS BARRIERS & IPV

Those who reported experiencing IPV during Covid-19 also were **2-5 times more likely** to report structural barriers to testing, including not knowing where to go and cost and insurance barriers.

After not having symptoms, the top reasons for never having been tested among Survivors of IPV During Covid-19 were:

1) Had symptoms but didn't meet testing criteria	12%*	3x
2) Didn't know where to go	11%*	3x
3) Had mild symptoms	7%*	2.5x
4) Test was too expensive	6%*	2x
5) Didn't have health insurance	4%*	5x

Higher than those who did not report experiencing IPV during Covid-19

\*Differences were statistically significant at  $p < 0.05$ .

NOTE: Percentages are out of respondents reporting never having been tested for COVID-19 and Any IPV during COVID-19 (n = 270).

# KEY TAKEAWAYS

IPV survivors were more likely to experience:

- Job loss, reduction in work hours, and the need to take leave
- Concerns about housing stability, paying expenses, and meeting basic needs
- Poor mental health AND face structural barriers to accessing needed healthcare

Lack of social and economic resources and access to care both exacerbate the impacts of IPV and make survivors more vulnerable to abuse

Continuing non-traditional outreach and service provision approaches may expand access to resources for survivors in the context of a pandemic and after

# NEED IPV OR SEXUAL VIOLENCE RESOURCES?

**Call** SafeLink, the MA statewide toll-free domestic violence hotline: **(877) 785-2020**

Deaf and hard-of-hearing callers can reach SafeLink via **video relay service** using the main number **(877) 785-2020**, or by TTY at **(877) 521-2601**.

**Or, visit** <https://www.mass.gov/sexual-and-domestic-violence-prevention-and-services> for the contact information of agencies who serve:

- ❖ Sexual assault and rape survivors (Rape Crisis Centers)
- ❖ Domestic violence/IPV survivors and their children (through a variety of service models)
- ❖ People who abuse their intimate partners (MA-certified Intimate Partner Abuse Education Programs)

***“There are broad, long-term effects to affordable housing. People who are affordably housed earn more over their lifetime, they live longer, their children do better in school.”***

— Sarah Mickelson, Senior Director of Public Policy,  
National Low Income Housing Coalition



# HOUSING STABILITY

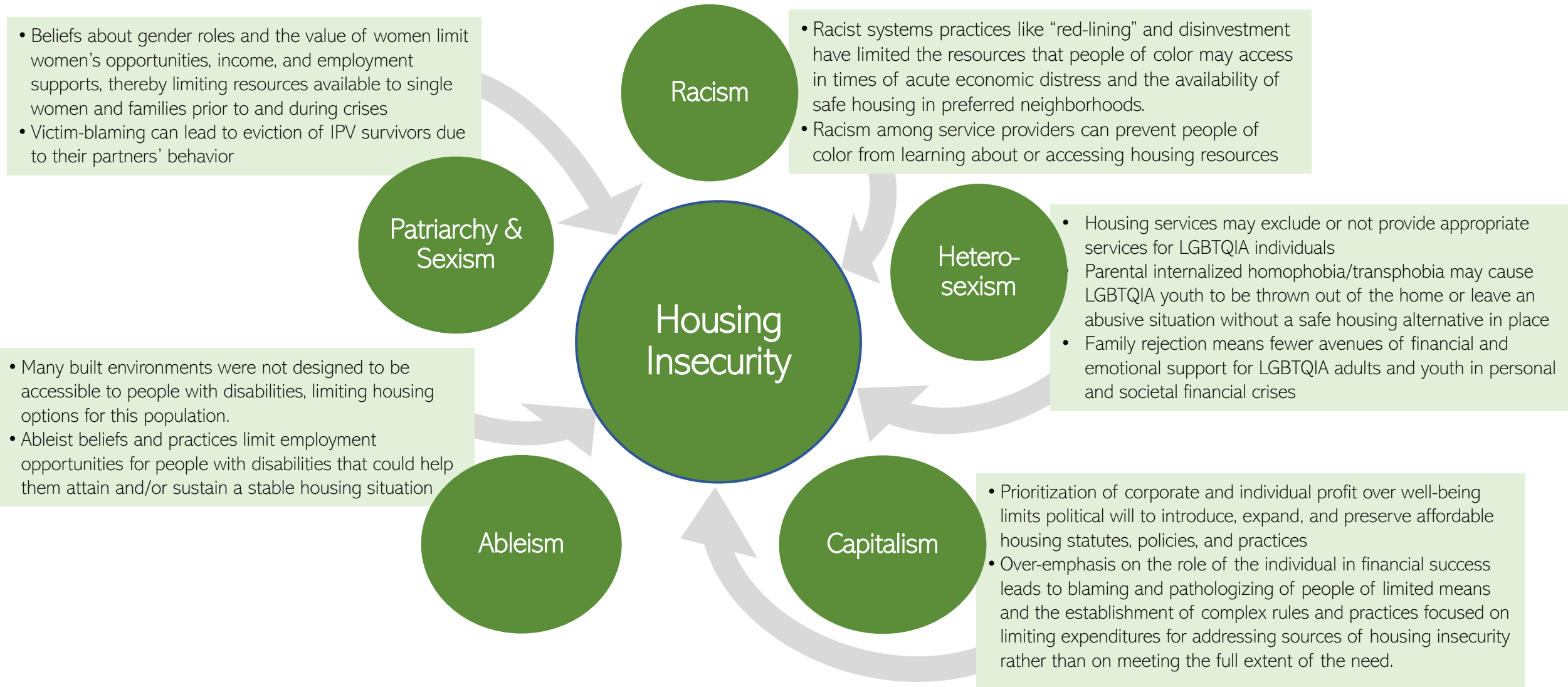
Ta-wei Lin  
Lisa Arsenault  
Tom Brigham  
Vera E. Mouradian  
Jennifer Halstrom

# FRAMING MATTERS

- Access to things like healthy food, safe housing, affordable medicine, technology, employment, and childcare are not separate issues from COVID-19.
- The pandemic's impact on people's ability to afford and access basic needs have changed lives and put people at greater risk for poor health – particularly among those already experiencing poor health outcomes.
- For housing in particular, COVID-19 has clearly underscored the importance of safe, stable, and affordable housing to health and has highlighted the social and economic costs of persistent inequalities and gaps in the safety net.
- This has enormous impacts on health and wellbeing.

# OPPRESSIVE SYSTEMS CREATE A SOCIAL ENVIRONMENT THAT ENABLES HOUSING INSECURITY

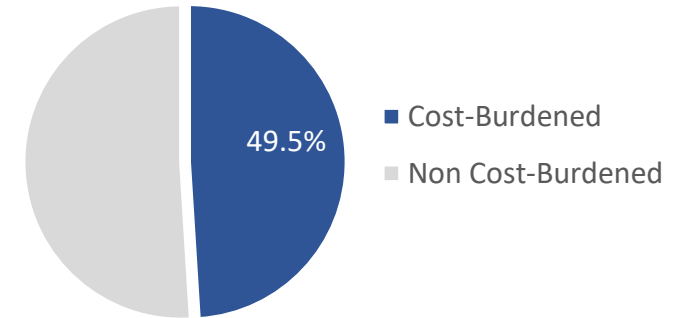
Layers of oppression make some people more vulnerable to the experience of housing insecurity



# PRE-PANDEMIC HOUSING COST BURDEN

- Housing affordability in MA was already an issue pre-pandemic
  - Nearly half of MA residents living in renter-occupied housing units were cost-burdened<sup>1</sup>
- Black and Hispanic renter households are disproportionately impacted by housing cost burden<sup>2</sup>
  - More than twice as likely to report being behind on housing payments and twice as likely to report being at risk for eviction than White renter households

Percent of MA Renter-Occupied Housing Units that are Cost-Burdened<sup>1</sup> (2015-2019)



Source: US Census ACS 5-Year Estimates, 2015-2019

**“Having to make those tradeoffs or worry about making next month’s rent can have huge implications in terms of high blood pressure, diabetes, heart disease, depression and other mental health illness.”**

— Megan Sandel, associate professor of pediatrics and of environmental health at Boston University

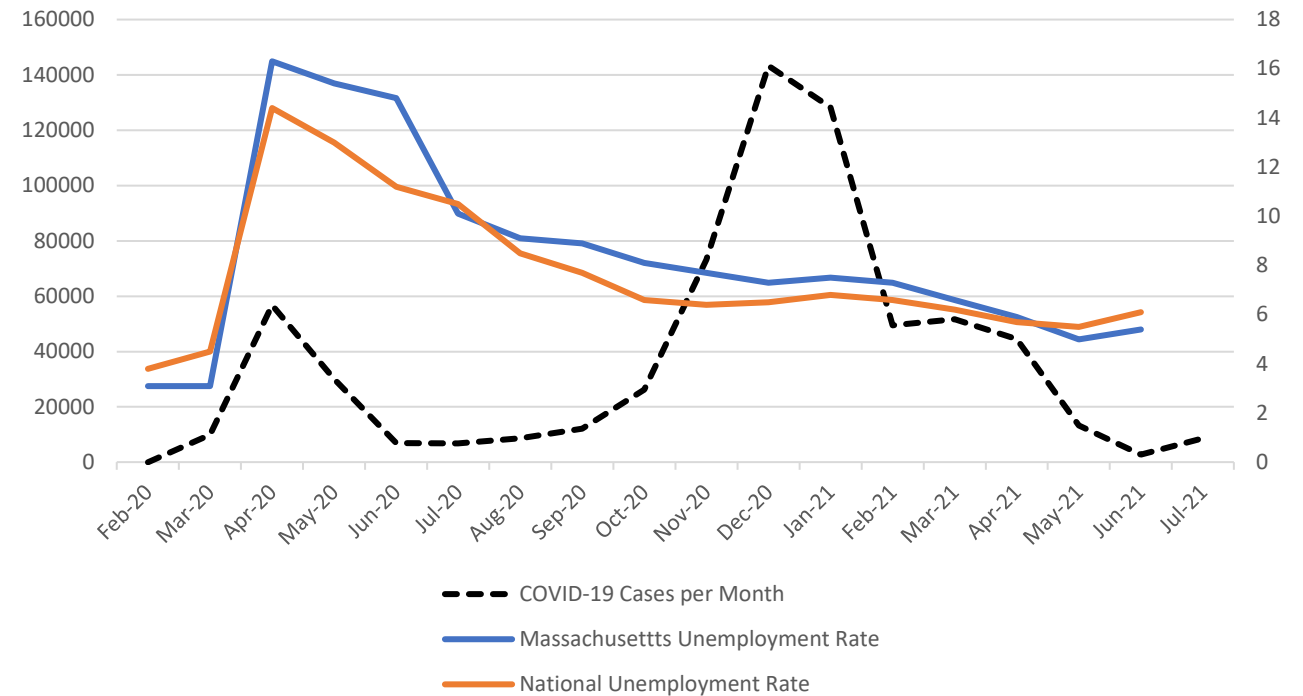
<sup>1</sup> Cost-burdened households spend 30% or more of their household income on housing costs

<sup>2</sup> <https://www.jchs.harvard.edu/blog/black-and-hispanic-renters-face-greatest-threat- eviction-pandemic>

# IMPACT OF PANDEMIC ON UNEMPLOYMENT IN MA

- Many residents abruptly lost income they relied on for housing and basic needs due to the pandemic
  - The unemployment rate spiked to over 16% in MA as of April 2020 along with the first wave of COVID-19 cases
- Unemployment disproportionately impacted lower wage industries and workers in the service sector
- Unemployment has remained high throughout the pandemic and still has not recovered to pre-pandemic levels

## State and Federal Unemployment Rate and Number of MA COVID-19 Cases per Month

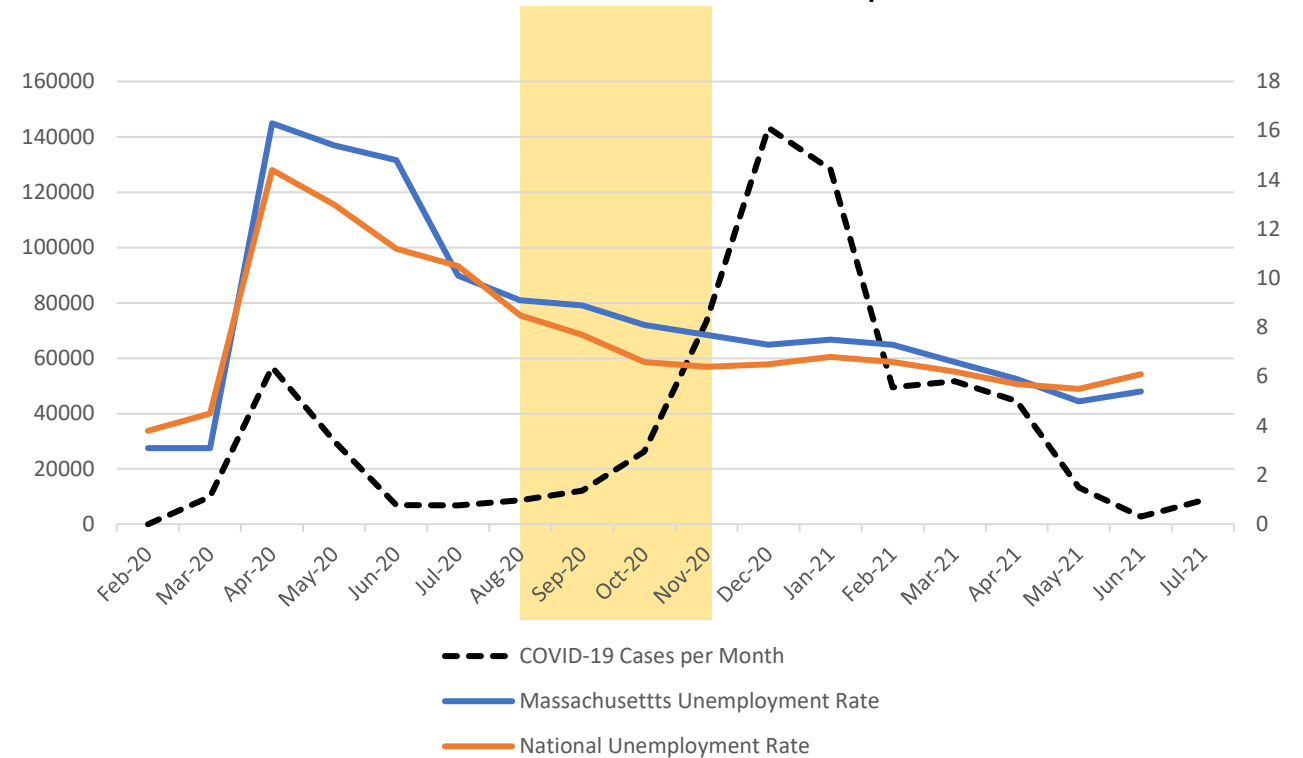


Source: MA Department of Unemployment Assistance, Economic Research Department - Labor Force and Unemployment Data 343

# TIMEFRAME FOR COVID COMMUNITY IMPACT SURVEY

- CCIS was administered from September through November 2020. During this time period:
  - Rapid rise in COVID-19 cases in MA
  - Massachusetts's temporary moratorium on non-essential evictions and foreclosures expired on October 17, 2020<sup>1</sup>
  - The Federal 'CDC' eviction moratorium in communities with high levels of community transmissions began in September 2020 (recently extended through October 2021)

State and Federal Unemployment Rate and Number of MA COVID-19 Cases per Month

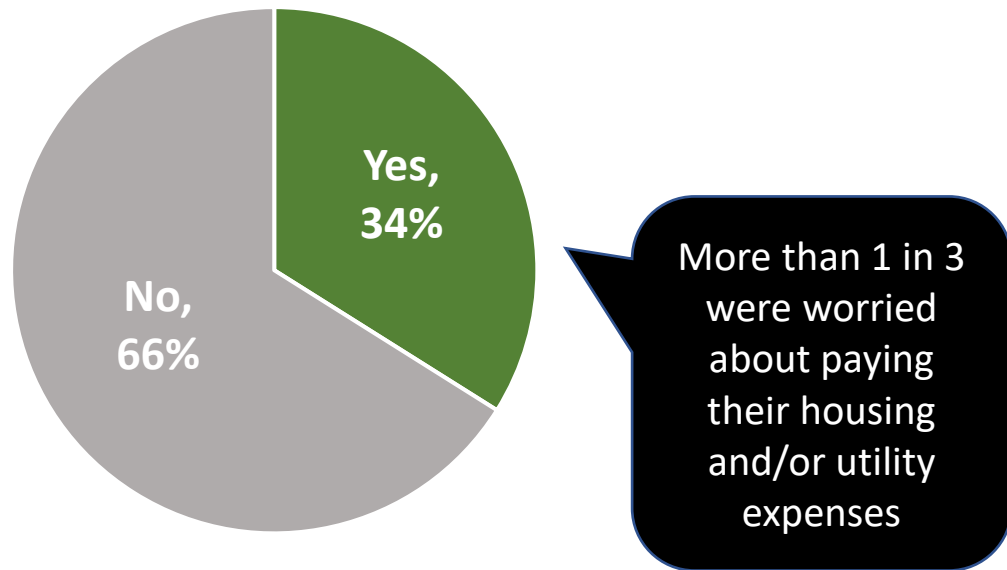


<sup>1</sup> While the MA eviction moratorium expired in October 2020, however many residents were still protected by the Federal CDC moratorium

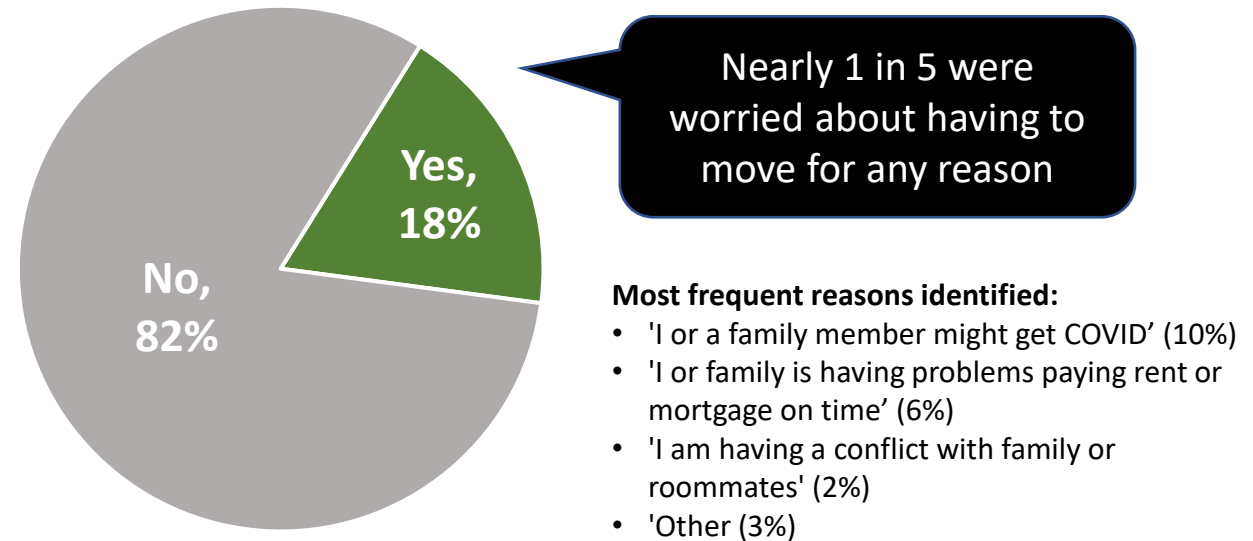
# HOUSING INDICATORS IN CCIS

CCIS respondents were asked: 1) About the expenses and bills they were most worried about paying in the next few weeks; 2) About reasons they worry may require them to move in the next few months

## Worried about Housing or Utilities Expenses



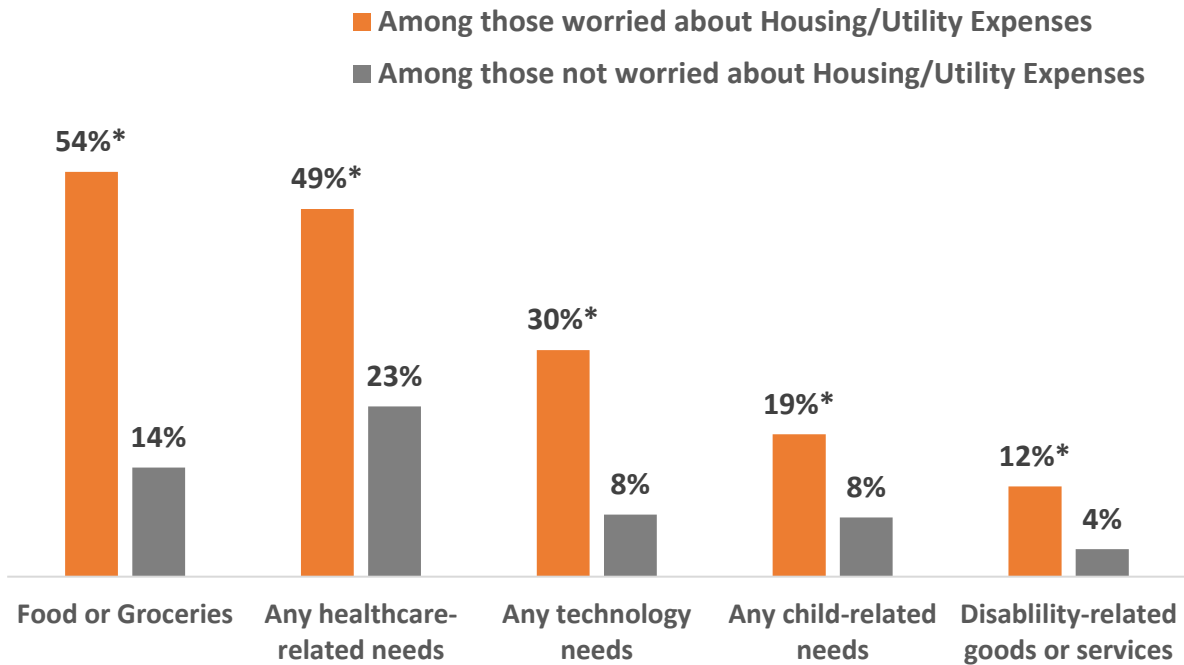
## Worried about Having to Move for any Reason



NOTE: Weighted percentages shown based on 30,743 unweighted responses to expenses question and 6,096 unweighted responses to the reasons to move question; All respondents took the survey between September and November 2020.

# CONCERN ABOUT HOUSING/UTILITY EXPENSES

Was highly associated with other COVID-related challenges and concerns



Individuals who were worried about housing/utility expenses were significantly more likely to be worried about getting each type of basic goods and services:

- 3.5x more likely to worry about Food or Groceries compared to those not worried about housing/utility expenses
- 2x more likely to worry about Healthcare Needs compared to those not worried about housing/utility expenses
- 3.5x more likely to worry about Technology Needs compared to those not worried about housing/utility expenses

\* Difference compared to 'not worried' is statistically significant (P<0.0001)

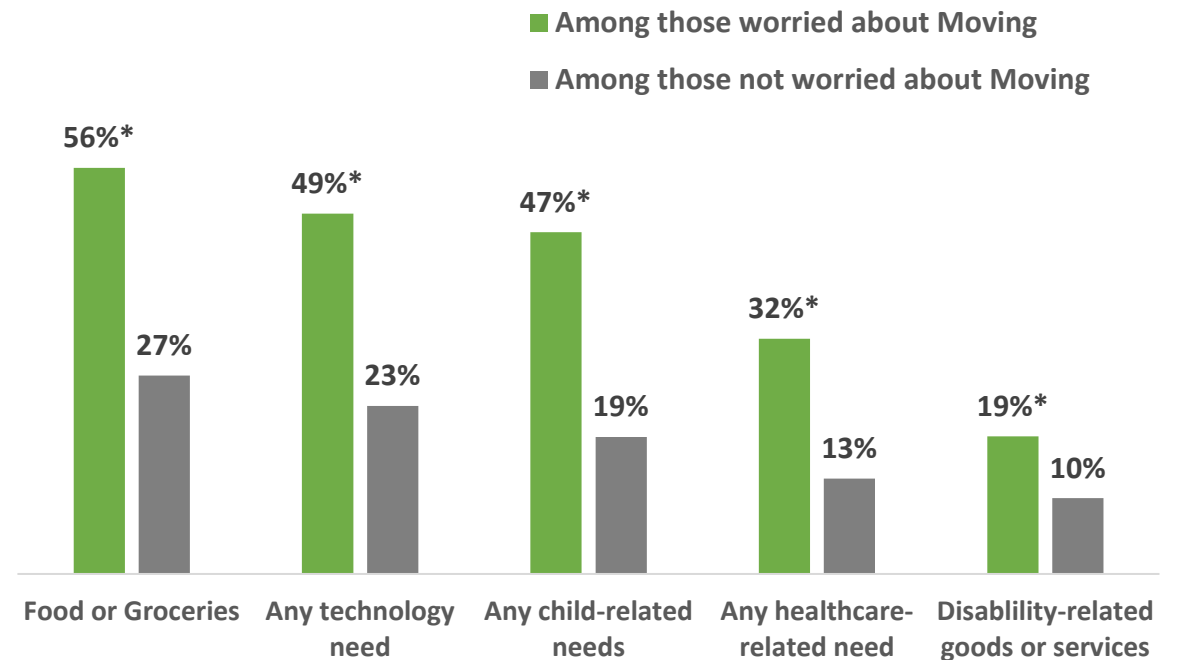
NOTE: Weighted percentages shown based on 30,743 unweighted responses to expenses question; All respondents took the survey between September and November 2020.

# CONCERN ABOUT MOVING

Was highly associated with other COVID-related challenges and concerns

Individuals who were worried moving for any reason were significantly more likely to be worried about getting each type of basic goods and services:

- 2x more likely to worry about Food or Groceries compared to those not worried about housing/utility expenses
- 2x more likely to worry about Technology Needs compared to those not worried about housing/utility expenses
- 2.5x more likely to worry about Child-related Needs compared to those not worried about housing/utility expenses

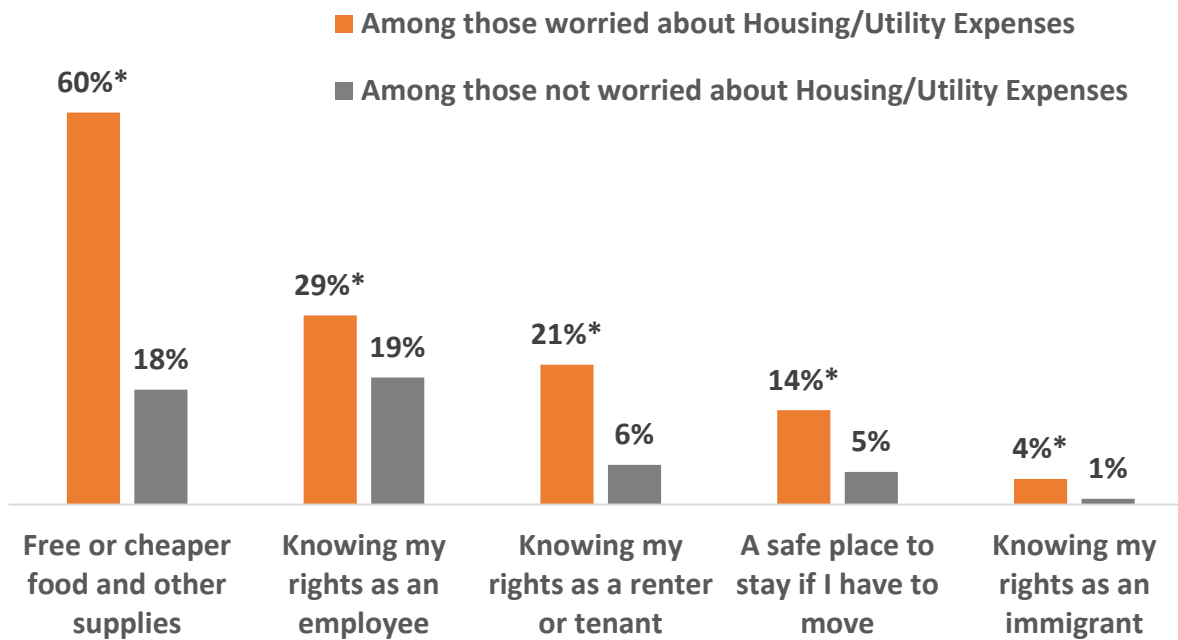


\* Difference compared to 'not worried' is statistically significant (P<0.0001)

NOTE: Weighted percentages shown based on 6,096 unweighted responses to the reasons to move question; All respondents took the survey between September and November 2020.

# CONCERN ABOUT HOUSING/UTILITY EXPENSES

Was highly associated with other COVID-related resource needs:



\* Difference compared to 'not worried' is statistically significant (P<0.0001)

NOTE: Weighted percentages shown based on 30,743 unweighted responses to expenses question; All respondents took the survey between September and November 2020.

Individuals who were worried about housing/utility expenses were significantly more likely to identify specific resources as helpful to them:

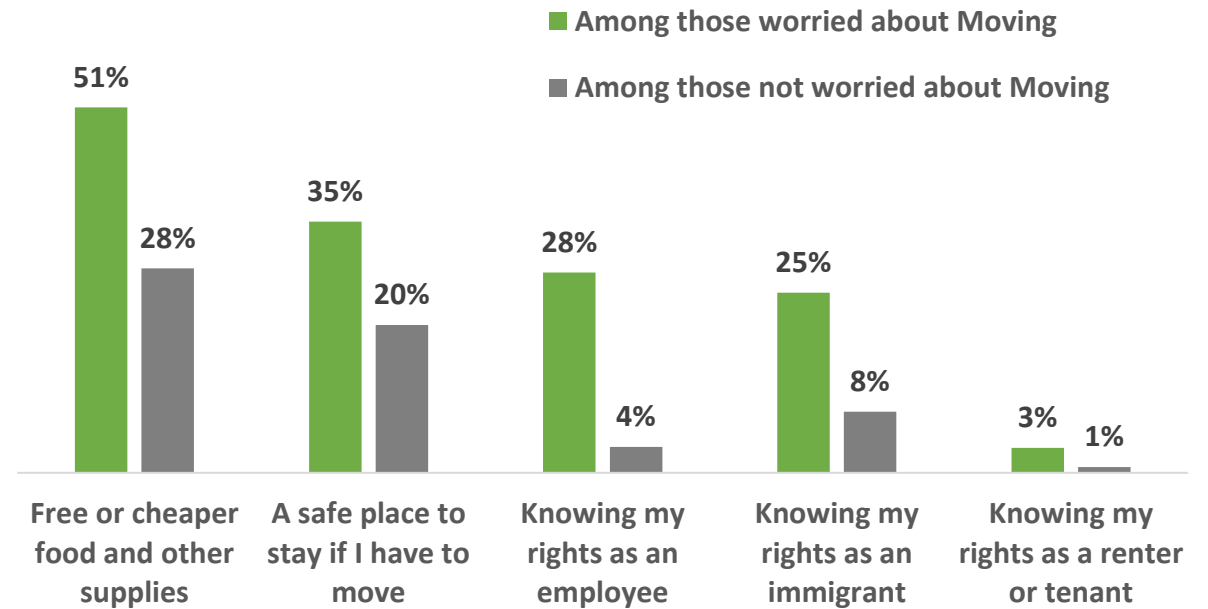
- 3x more likely to identify Free or Cheaper food and supplies as helpful compared to those not worried about housing/utility expenses
- 3x more likely to identify Knowledge about their rights as a renter or tenant as helpful compared to those not worried about housing/utility expenses
- 4x more likely to identify Knowledge about their rights as an immigrant as helpful compared to those not worried about housing/utility expenses

# CONCERN ABOUT MOVING

Was highly associated with other COVID-related resource needs:

Individuals who were worried moving for any reason were significantly more likely to identify specific resources as helpful to them:

- 1.8x more likely to identify **Free or Cheaper food and supplies as helpful** compared to those not worried about housing/utility expenses
- 7x more likely to identify **Knowledge about their rights as an employee as helpful** compared to those not worried about housing/utility expenses
- 3x more likely to identify **Knowledge about their rights as an immigrant as helpful** compared to those not worried about moving

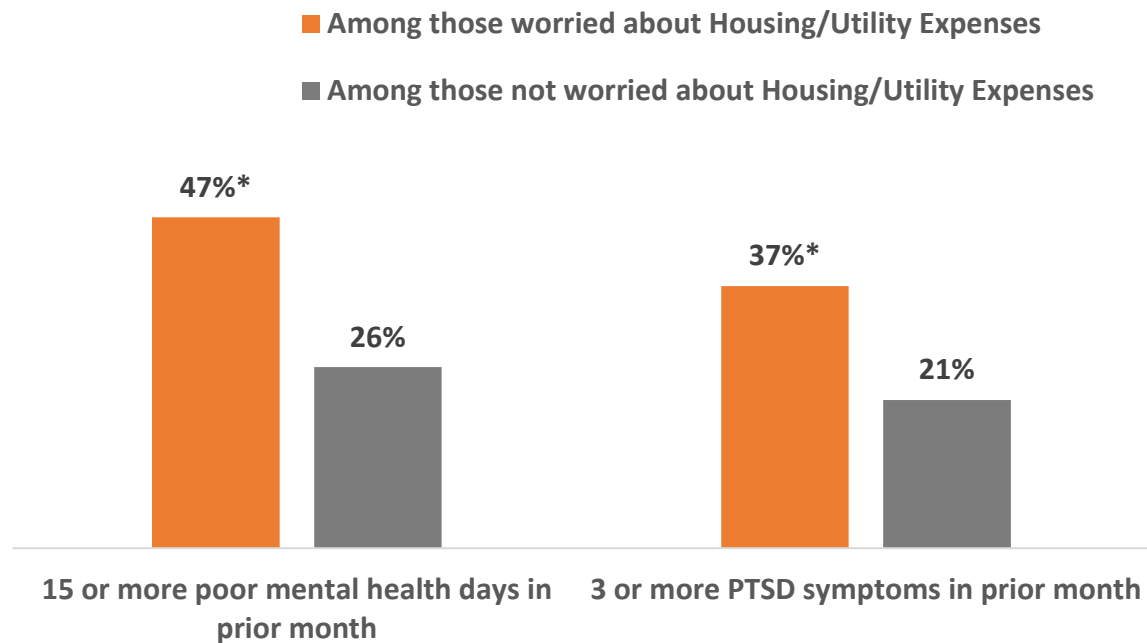


\* Difference compared to 'not worried' is statistically significant ( $P < 0.0001$ )

NOTE: Weighted percentages shown based on 6,096 unweighted responses to the reasons to move question; All respondents took the survey between September and November 2020.

# CONCERN ABOUT HOUSING/UTILITY EXPENSES

Was highly associated with indicators of poor mental health:



Individuals who were worried about housing/utility expenses were significantly more likely to report poor mental health days or PTSD symptoms:

- 1.8x more likely to report 15 or more poor mental health days in the prior month compared to those not worried about housing/utility expenses
- 1.7x more likely to report 3 or more PTSD symptoms in the prior month compared to those not worried about housing/utility expenses

\* Difference compared to 'not worried' is statistically significant (P<0.0001)

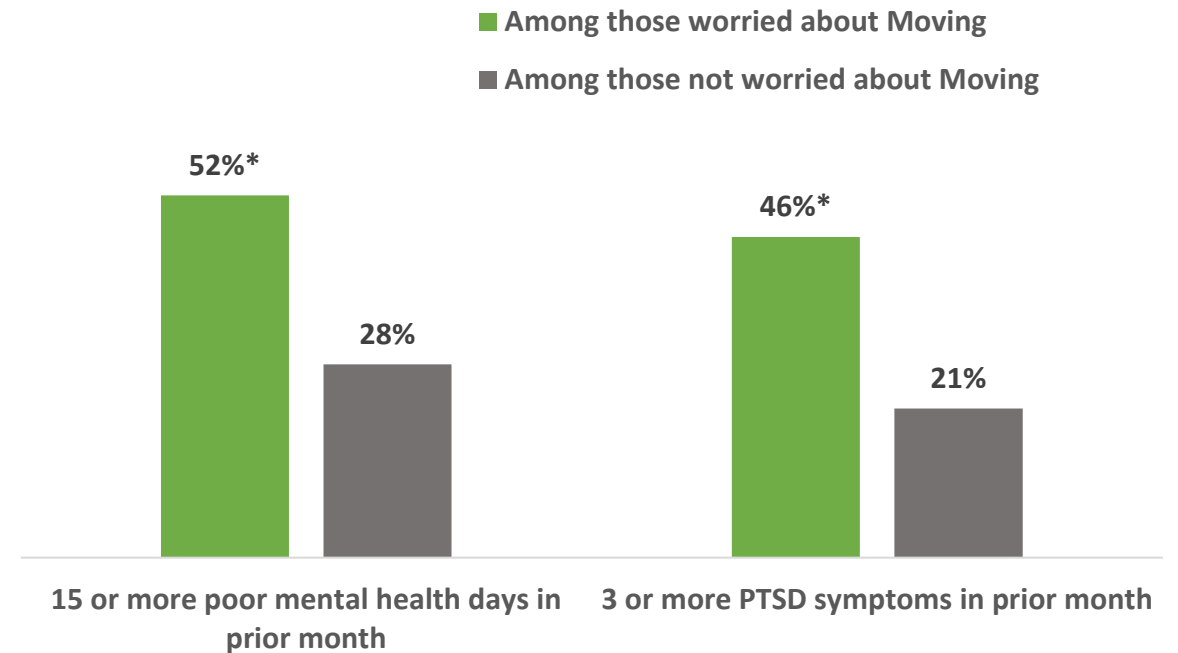
NOTE: Weighted percentages shown based on 30,743 unweighted responses to expenses question; All respondents took the survey between September and November 2020.

# CONCERN ABOUT MOVING

Was highly associated with indicators of poor mental health:

Individuals who were worried about housing/utility expenses were significantly more likely to report poor mental health days or PTSD symptoms:

- 1.8x more likely to report 15 or more poor mental health days in the prior month compared to those not worried about moving
- 2x more likely to report 3 or more PTSD symptoms in the prior month compared to those not worried about moving



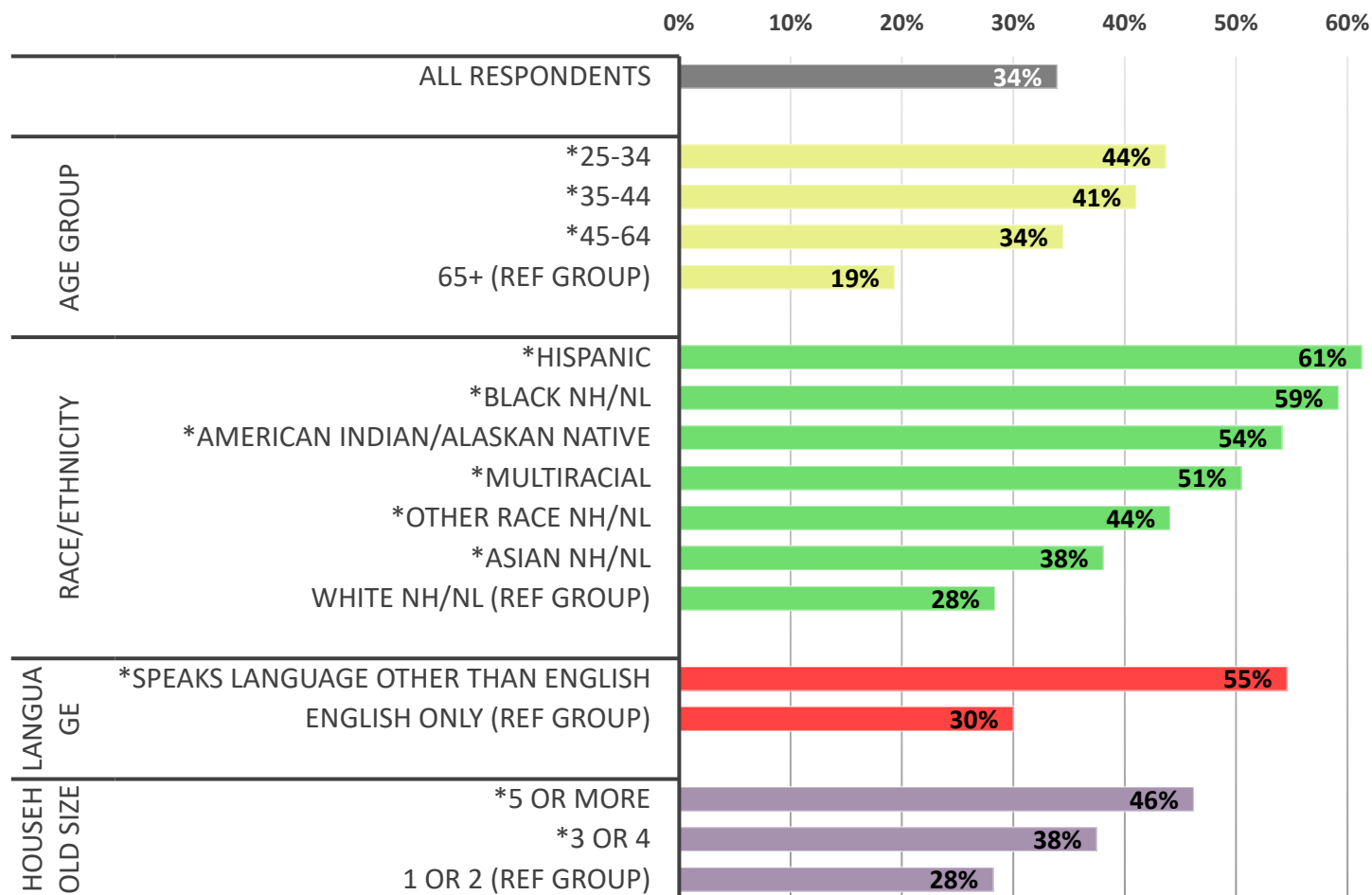
\* Difference compared to 'not worried' is statistically significant (P<0.0001)

NOTE: Weighted percentages shown based on 6,096 unweighted responses to the reasons to move question; All respondents took the survey between September and November 2020.

# CONCERN ABOUT HOUSING/UTILITY EXPENSES

Was more prevalent among many demographic groups:

**% WORRIED ABOUT: PAYING FOR HOUSING OR UTILITY EXPENSES**



Worry about paying for housing or utility expenses was reported:

- 2x more frequently among those age 25-34 years or 35 to 44 years
- 2x more frequently among those identifying as Hispanic or Black nH/nL
- Over 1.5x more frequently among those who speak a language other than English
- Over 1.5x more frequently among those with large household sizes (5+)

NOTE: NH/NL = non-Hispanic/non-Latinx; American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx; Weighted percentages shown based on the unweighted frequency of responses to expenses question within each demographic group which varied (30,743 total unweighted responses)

\* Difference compared to reference group is statistically significant (P<0.05)

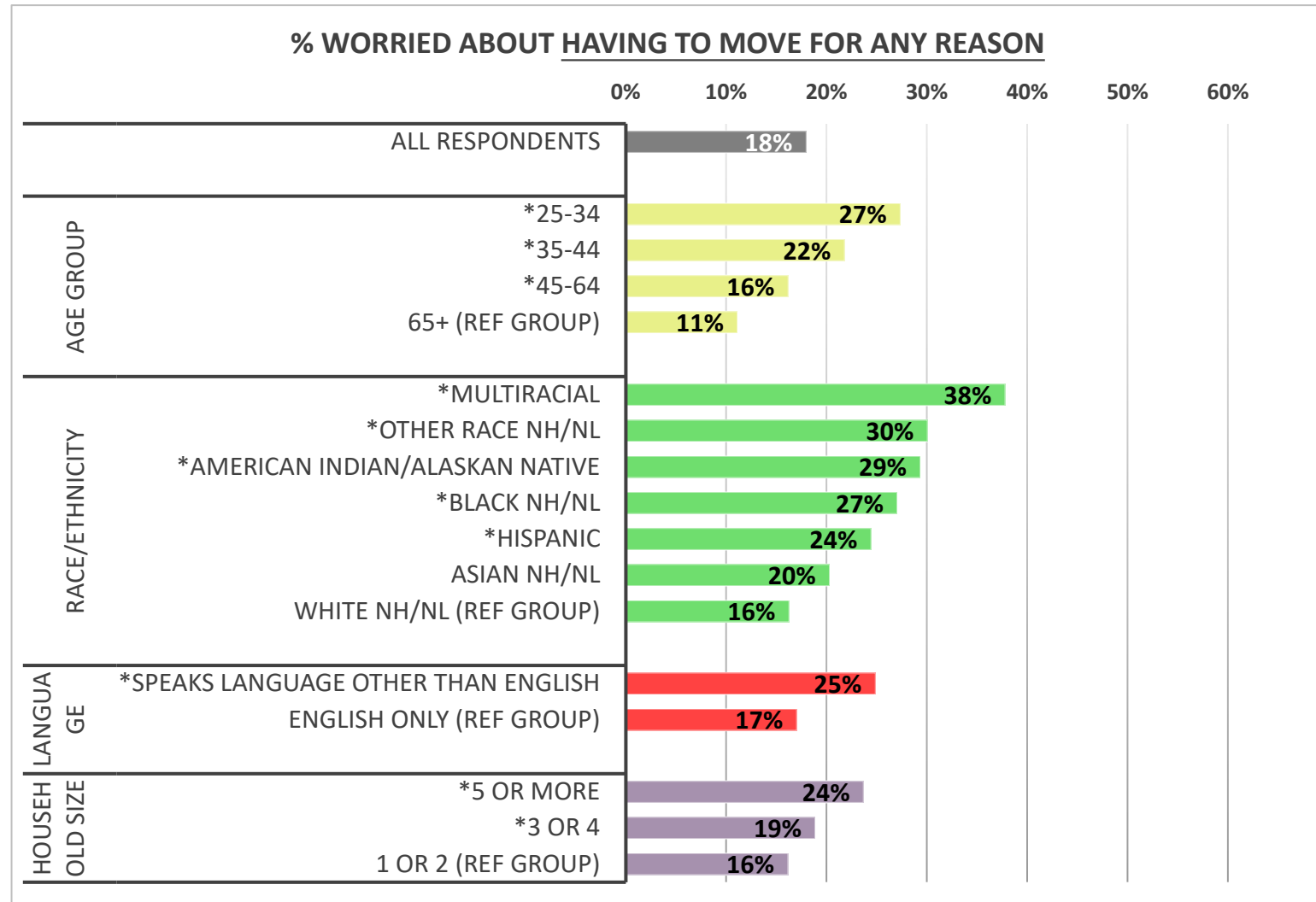
# CONCERN ABOUT MOVING

Was more prevalent among many demographic groups:

Worry about having to move for any reason was reported:

- **Over 2x more frequently** among those age 25-34 years
- **2x more frequently** among those identifying as Multiracial
- **1.5x more frequently** among those identifying as other race, AI/AN, or Black nH/nL
- **1.5x more frequently** among those with large household sizes (5+)

NOTE: NH/NL = non-Hispanic/non-Latinx; American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx; Weighted percentages shown based on the unweighted frequency of responses to reasons to move question within each demographic group which varied (6,096 total unweighted responses)

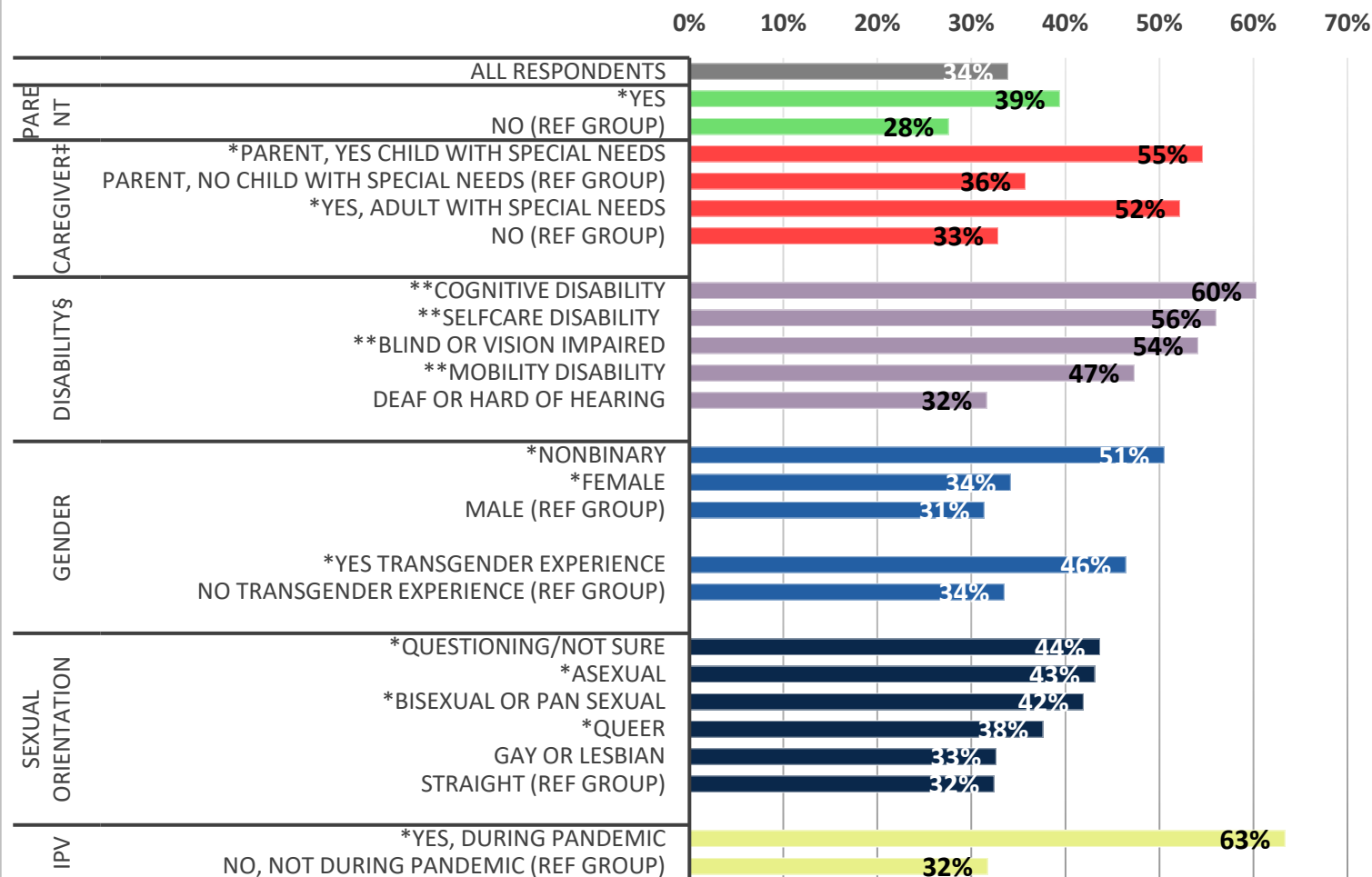


\* Difference compared to reference group is statistically significant (P<0.05)

# CONCERN ABOUT HOUSING/UTILITY EXPENSES

Was more prevalent among some sub-populations:

**% WORRIED ABOUT PAYING FOR: HOUSING OR UTILITY EXPENSES**



Worry about paying for housing or utility expenses was reported significantly more among:

- Parents
- Caregivers to a child or adult in the household with special health needs
- Individuals in most disability categories
- Individuals identifying as non-binary or of transgender experience
- Individuals whose sexual orientation is bisexual, a-sexual, or questioning/not sure
- Individuals experiencing IPV

NOTE: Weighted percentages shown based on the unweighted frequency of responses to expenses question within each population group which varied (30,743 total unweighted responses); ‡Caregiver questions were only asked of a random subset of all survey respondents (n=3,876 child question and n=6,751 adult question); §Disability categories are not mutually exclusive

\* Difference compared to reference group is statistically significant (P<0.05); \*\* Difference compared to respondents not indicating the specific disability is statistically significant (P<0.05)

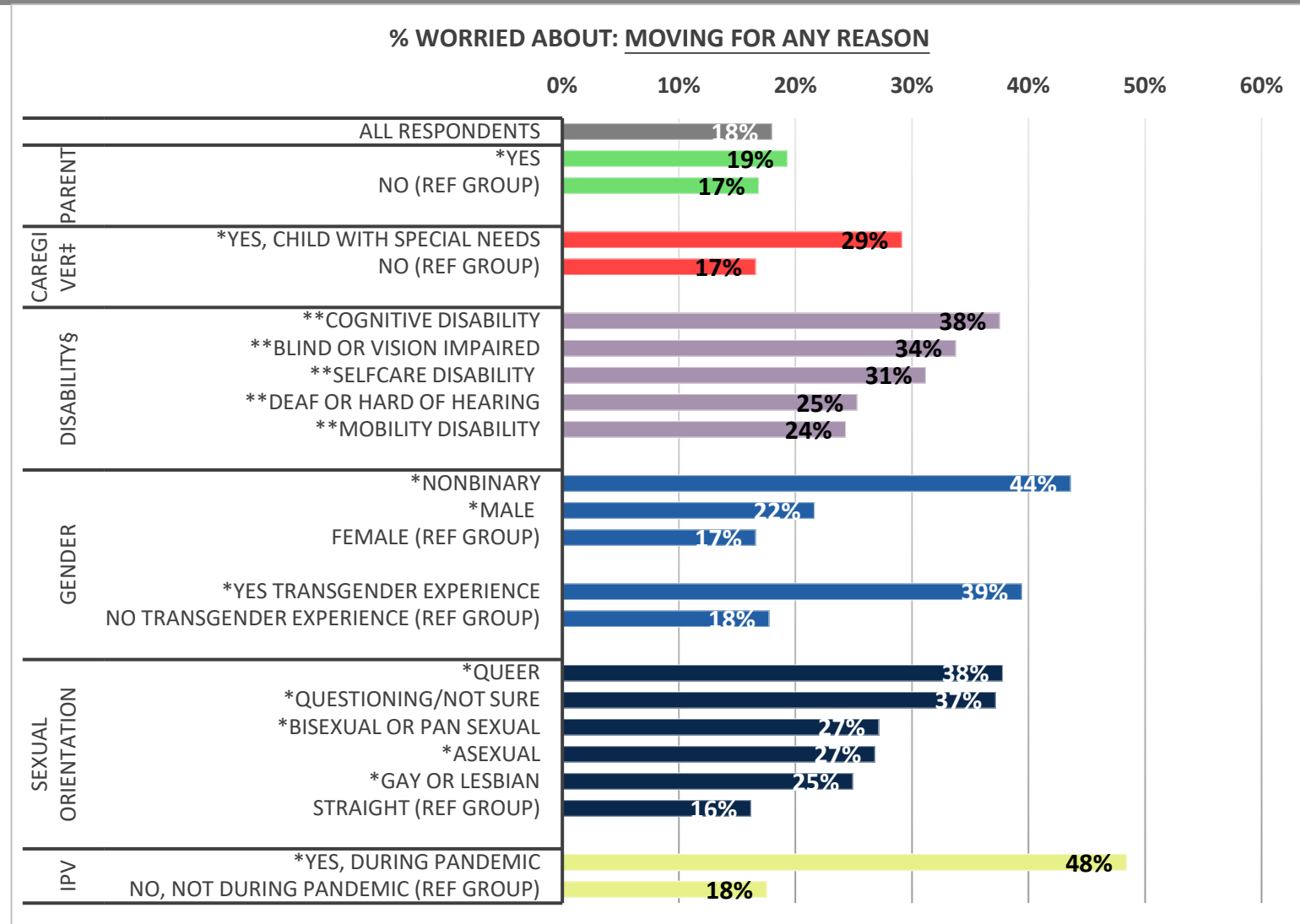
# CONCERN ABOUT MOVING

Was more prevalent among some sub-populations:

Worry about moving for any reason was reported significantly more among:

- Caregivers to a child with special needs
- Individuals in all disability categories
- Individuals identifying as non-binary or of transgender experience
- Individuals whose sexual orientation is queer or questioning/not sure
- Individuals experiencing IPV

NOTE: Weighted percentages shown based on the unweighted frequency of responses to reasons to move question within each demographic group which varied (6,096 total unweighted responses); ‡Caregiver question was only asked of a random subset of all survey respondents (n=3,876 child question); §Disability categories are not mutually exclusive

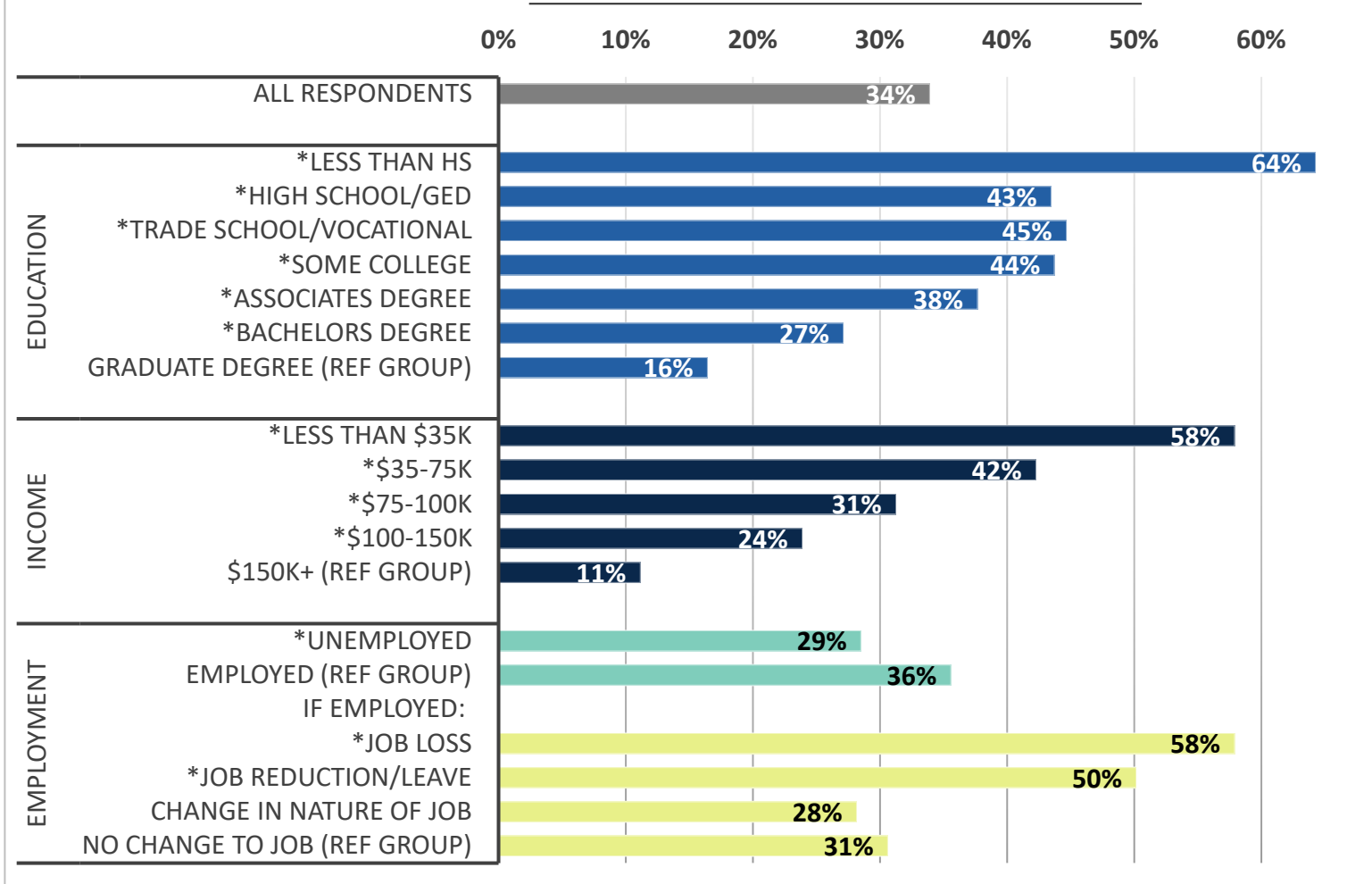


\* Difference compared to reference group is statistically significant (P<0.05); \*\* Difference compared to respondents not indicating the specific disability is statistically significant (P<0.05)

# CONCERN ABOUT HOUSING/UTILITY EXPENSES

Was more prevalent for those with lower education or income, and who experienced job loss:

**% WORRIED ABOUT: PAYING FOR HOUSING OR UTILITY EXPENSES**



Worry about paying for housing or utility expenses was reported:

- 4x more frequently among those with less than HS education
- Over 2x more frequently among those with HS/GED, trade/vocational school, or some college education
- 4 to 5x more frequently among those with household incomes less than \$75k
- Nearly 2x more frequently among those who experienced a job loss or job reduction/leave due to COVID

NOTE: Weighted percentages shown based on the unweighted frequency of responses to expenses question within each economic group which varied (30,743 total unweighted responses)

\* Difference compared to reference group is statistically significant (P<0.05)

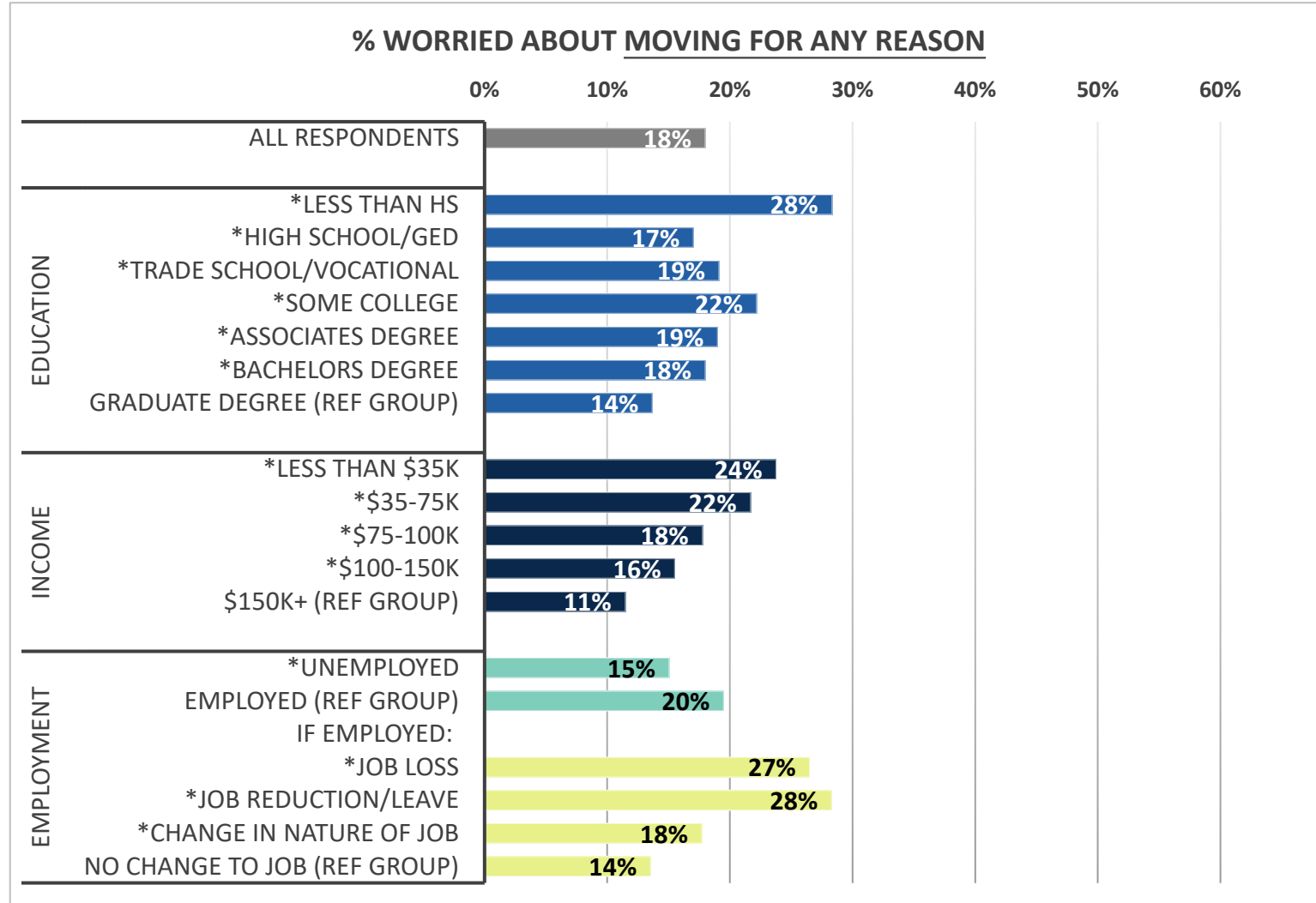
# CONCERN ABOUT MOVING

Was more prevalent among groups with lower education or income, and who experienced job loss:

Worry about having to move for any reason was reported:

- 2x more frequently among those with less than HS education
- 2x more frequently among those with household incomes less than \$75k
- 2x more frequently among those who experienced a job loss or job reduction/leave due to COVID

NOTE: Weighted percentages shown based on the unweighted frequency of responses to expenses question within each economic group which varied (6,096 total unweighted responses)

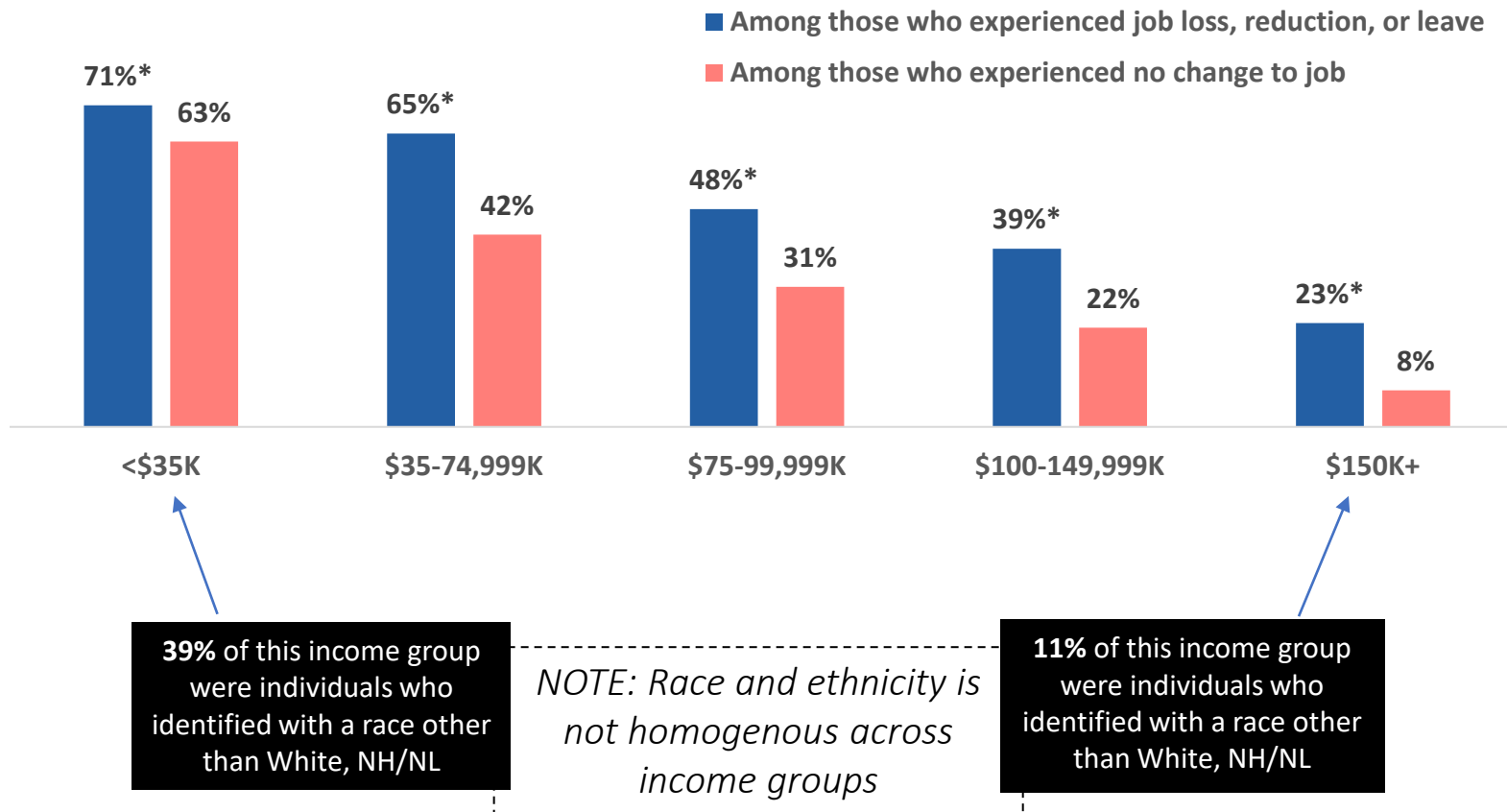


\* Difference compared to reference group is statistically significant (P<0.05)

# HOUSING INSECURITY, JOB LOSS, and ECONOMIC STRAIN

Concern for housing expenses high among lowest income group regardless of job status

Percent Worried about paying Housing or Utility Expenses, by Income Group



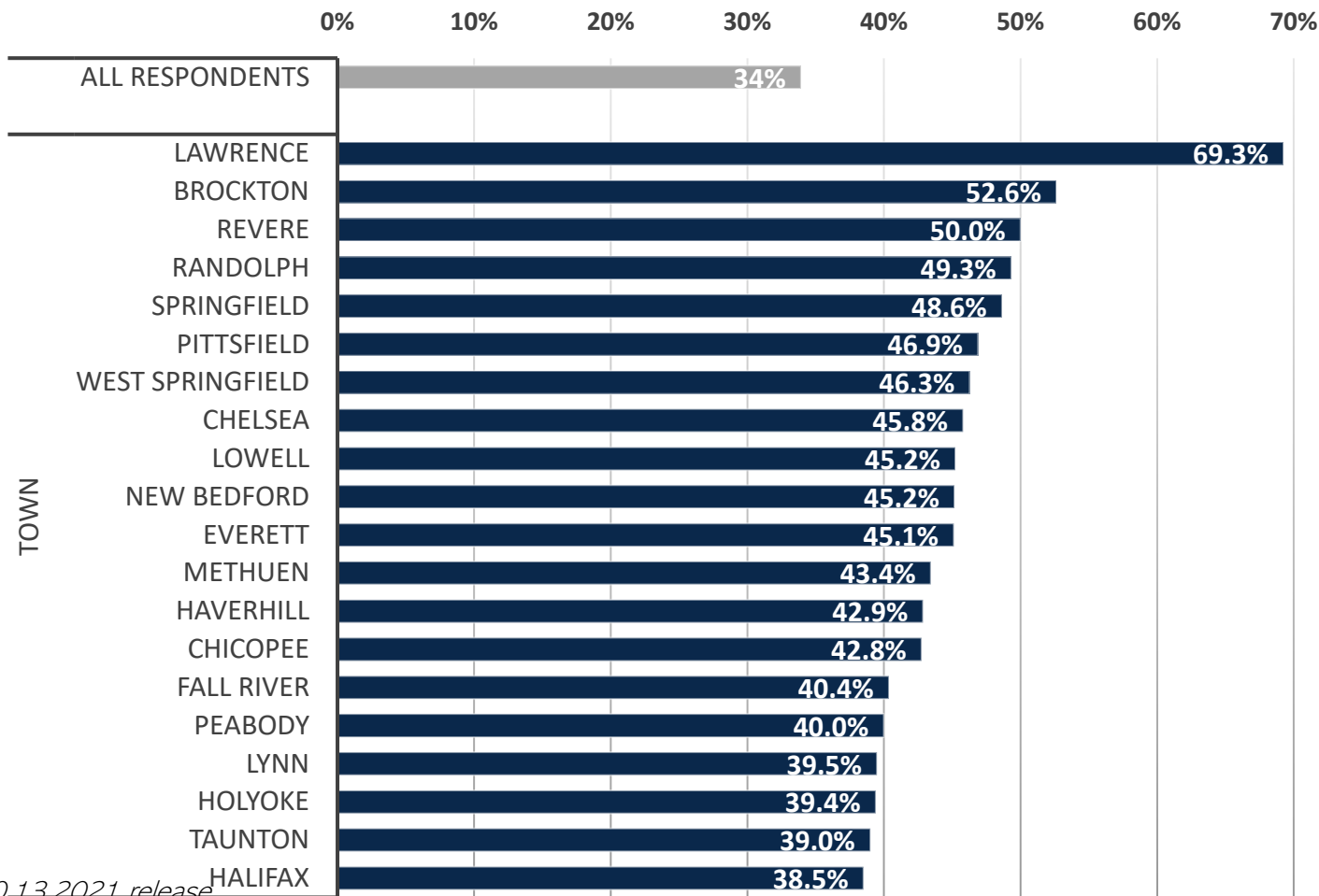
- Worry about housing/utility expenses was significantly higher among those experiencing a job loss, reduction, or leave compared to other job categories **within each income category**
- However, those in the lowest income group (<\$35k) were most concerned with housing/utility expenses, **regardless of job change category**
- This likely reflects the **high level of economic strain and concern around housing costs** that were present prior to COVID-pandemic for those with low incomes
- The race/ethnicity composition of income groups reflect **pre-existing and persistent economic inequities**

NOTE: Weighted percentages shown based on the unweighted frequency of responses to expenses question within each income group which varied (30,743 total unweighted responses)

\* Difference compared to those who experienced no change to job within income strata is statistically significant (P<0.05)

# TOP 20 CITIES/TOWNS BY CONCERN ABOUT HOUSING EXPENSE

**% WORRIED ABOUT PAYING FOR: HOUSING OR UTILITY EXPENSES**



Housing related concerns higher among residents within certain municipalities

- Nearly **7 in 10** respondents from Lawrence reported being worried about paying for housing/utility-related expenses
- **Approximately half** of respondents from Brockton, Revere, Randolph, and Springfield reported being worried about paying for housing/utility-related expenses; and these are towns that had a high proportions of respondent who identified with a race other than White, NH/NL

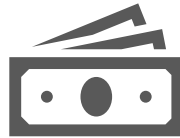
NOTE: Unweighted percentages shown based on the unweighted frequency of responses to expenses question within each geographic sample which varied (range: 107 in Chelsea to 444 in Springfield); geographies with fewer than 100 responses were excluded from this analysis

# HOUSING STABILITY & IPV

People who reported experiencing IPV during Covid-19 were more likely than those who did not to also report worries about housing expenses\* and needing to move soon\*.

1 in 2

Survivors were worried about paying housing-related expenses in the next few weeks.



Survivors were **3x** as likely to report being worried about needing to move in the next few weeks



1 in 4

Survivors reported that having "A safe place to stay if I have to move out of my current place" would be useful right now.



...And **7X** as likely to report being worried about needing to move because of conflict with roommates/family or because of experiencing abuse at home.



"Facing homelessness is one of our primary calls. Many of the people we provide services to have experienced job loss or they have been furloughed, exacerbating their financial insecurity. Many of those we provide services to have to sneak out of their homes or hide in a closet to call for assistance because the abuser is living with them.... It is much more dangerous [now] for many of those we serve."

-- MA IPV Service Provider's report to the DPH Division of Sexual and Domestic Violence Prevention and Services, February 2021

\*Difference is statistically significant at  $p < .05$ . Comparisons are to those who did not report experiencing IPV during Covid-19.

# QUALITATIVE DATA FROM DPH PROGRAMS\*

Many housing-related needs and challenges remain unaddressed

- Many needs and challenges identified within the CCIS continue to persist.
  - Significant increase in fiscal pressure for families who lost their job or had limited work schedules.
  - High unemployment rates for parents, with many reporting being laid off or unable to work due to childcare needs.
  - High rates of reported unemployment, housing instability, and homelessness for young parents.
- Many DPH programs are relying on emergency funding to help keep people housed.
  - High level of concern for how to continue to support residents when emergency resources and eviction moratorium ends.
- Many housing-related challenges exacerbated by the pandemic will remain or worsen in the upcoming year.
  - Not enough transitional housing placements for homeless youth.
  - Expected increase in rental costs.
- Programs working with youth and young parents reported seeing an increase in homeless youth, a population not captured in CCIS.
  - Individuals reported being evicted or being threatened with eviction despite eviction moratorium.

\* Qualitative data collected in July 2021 from Massachusetts Parents and Pregnant Teen Initiative (MPPTI), Division of Sexual and Domestic Violence Prevention and Services (DSDVPS), and Child and Youth Violence Prevention Unit

# FEDERAL AND STATE RESPONSE TO PANDEMIC

Increase in housing and emergency assistance resources, particularly for low-income households

## Residential Assistance for Families in Transition (RAFT)

- In January 2021, the RAFT benefit cap was raised to \$10,000 across the board.
- Eligible with incomes up to 50% of AMI, or 60% of AMI for people who are at risk of homelessness because of domestic violence.
- Reached 17,091 Unique households October 2020 – June 2021

## Emergency Assistance (EA) - HomeBASE

- In June 2021, ERAP-Enhanced HomeBASE became available.
- State FY21 budget removed language limiting families to a combined \$10,000 in assistance from both RAFT and HomeBASE within a given 12-month period.
- EA eligibility is determined by DHCD, with income eligibility based on Federal Poverty Guidelines (FPG).
- Reached 2,160 unique household October 2020 – June 2021

## Emergency Rental and Mortgage Assistance (ERMA)

- Launched in July 2020, provide up to \$4,000 within a given 12-month period for eligible households to assist with rent or mortgage arrears and/or with upcoming rent or mortgage payments.
- In January 2021, the ERMA benefit cap was raised to \$10,000.
- Eligible with incomes the 50-80% range of AMI.
- Reached 1,334 unique households October 2020 – June 2021

## Emergency Rental Assistance Program (ERAP)

- DHCD launched on March 22, 2021 - provides expanded relief for rent and utilities expenses to eligible tenants and their landlords, alongside existing RAFT and ERMA programs.
- Eligible with incomes up to 80% of AMI, must be at risk of homelessness or housing instability due directly or indirectly to COVID-19.
- Reached 11,310 unique households March 2021 – June 2021

# KEY TAKEAWAYS

- **Housing is health.** Having access to affordable, safe, and permanent home is closely tied to various health outcomes. Individuals who reported housing-related concerns were significantly more likely to report **poor mental health** outcomes.
- **Housing-related issues and inequities** in housing access and cost burden that existed pre-pandemic were **made worse** by the pandemic. Despite housing focused programs, such as the BSAS Low Threshold Permanent Housing and Support Services and Housing Stability Support, inequities persist. More work needs to be done to support housing stability and to end homelessness.
  - Large number of residents experienced job loss, reduction, or leave, impacting their ability to pay for housing and other basic needs like food, groceries, and health care.
  - Certain groups, including **people of color, parents and caregivers, individuals with disabilities, individuals who identify as nonbinary or transgender**, and those who have **experienced intimate partner violence** were significantly more likely to report housing-related concerns.



# POPULATION SPOTLIGHT: RURAL COMMUNITIES

Kirby Lecy  
Alana LeBron  
Ta-wei Lin

“Rural communities experience higher age-adjusted death rates and a higher number of potentially excess deaths from the five leading causes compared with urban areas. Higher death rates and potentially excess deaths are often associated with various interconnected societal, geographic, behavioral, and structural factors. Historic trends indicate that focusing on access to health care in rural areas of the United States alone is not sufficient to adequately address complex health outcomes, including mortality among rural populations.”

– Center for Disease Control and Prevention  
Rural MMWR Series



The Massachusetts Rural Council on Health (MARCH) has been an active partner in the CCIS Rural Data Spotlight. MARCH is the advisory council to the MA DPH State Office of Rural Health and is comprised of rural leaders from across the state representing many sectors.

MARCH provided direct outreach to rural communities for survey responses to ensure the rural voice and perspective was captured. They provided feedback on the data, raised up important themes, and helped identify next steps for data to action.

# FRAMING MATTERS

Rural communities have unique histories and experiences. Using equity focused frames allows us to understand their individual needs.

**Dominant frames** about rural communities see them as a **geographic** designation. According to this frame:

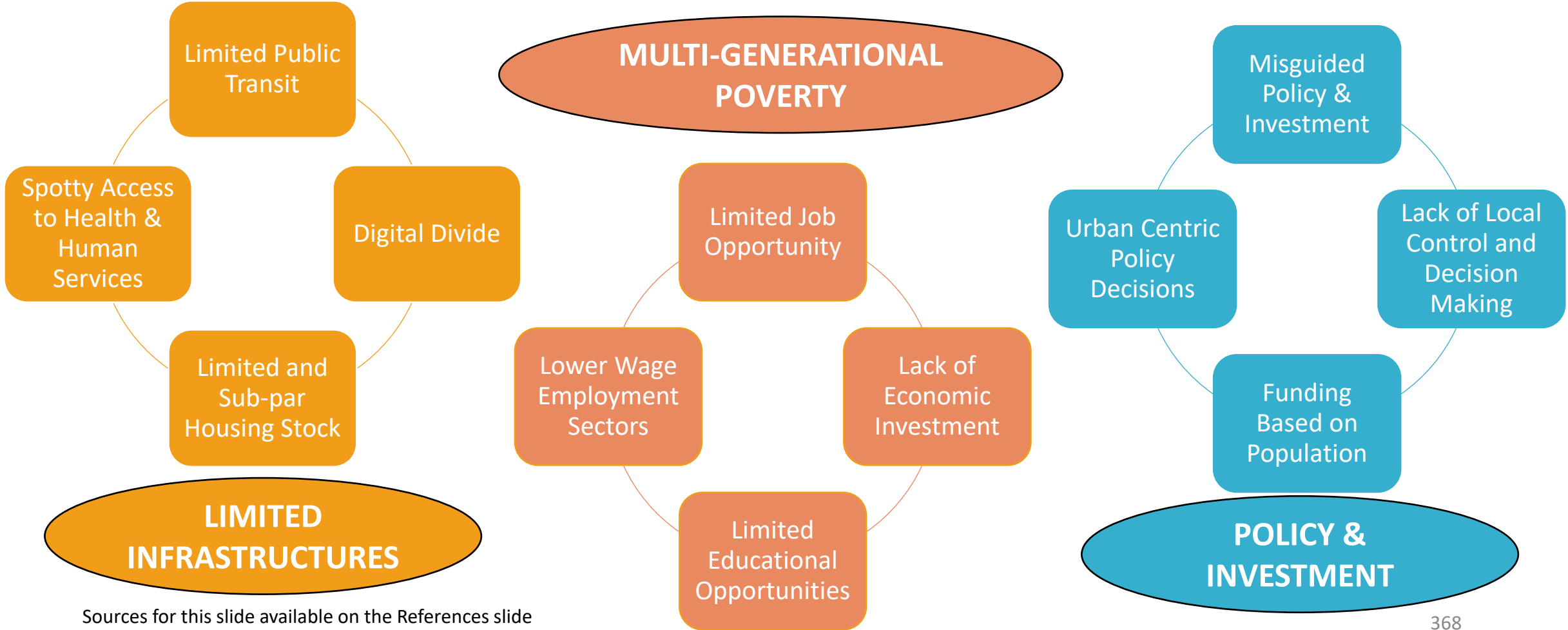
- Rural communities include areas with small population sizes and low population density.
- Rural areas are homogeneous.
- Rural communities are home to people who are less educated, politically conservative, and are not interested in getting the COVID-19 vaccine.

**Equity-focused frames** see rural communities as a **geography and culture**. According to this frame:

- Rural areas are made up of *diverse populations* and include individuals who have varying cultural and social beliefs.
- Rural communities are home to many vulnerable populations (seasonal workers, tribal populations, elders, LGBTQ, immigrant populations).
- Rural isolation can maximize the inequities these populations face.

# STRUCTURAL BARRIERS IMPACTING RURAL COMMUNITIES

Structural barriers are obstacles that collectively affect a group disproportionately and perpetuate or maintain stark disparities in outcomes. Understanding these factors helps us to interpret data and inform the actions we take.



Sources for this slide available on the References slide

# WHAT IS “RURAL”?

The Massachusetts DPH Rural Definition was created to better meet the program and policy needs of rural communities.

- There is no single definition of rural nationally.
- The MDPH State Office of Rural Health created a state definition framework in 2002 with guidance and input from rural stakeholders and leaders.
- MDPH State Office of Rural Health defines rural as towns that meet at least one of the following criteria:
  - Meet at least 1 of 3 federal rural definitions at the sub-county level (Census Bureau, OMB, or RUCAs).
  - Has a population <10,000 people and a population density below 500 people per square mile.
  - Has a hospital in the town that meets the state licensure definition of a small rural hospital or is a certified Critical Access Hospital.
  - Has a federally licensed Rural Health Clinic in the town.

# THE MDPH RURAL DEFINITION

Rural towns have a very low population density and large geographic spread which creates isolation.

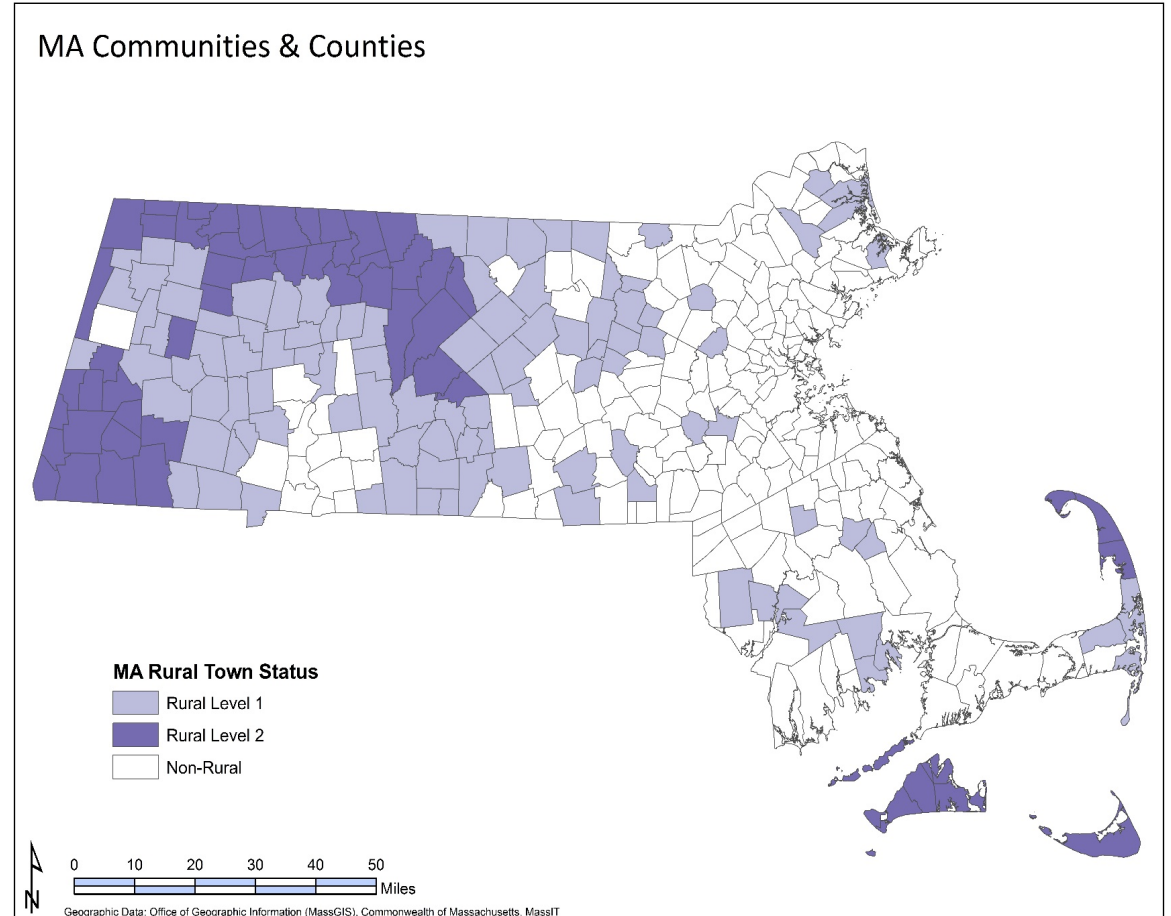
160 of  
Massachusetts'  
351 towns are  
designated  
Rural.

10% of  
Residents live in  
the 53% of  
land mass  
designated rural.

**The MDPH Rural  
Definition has two  
levels of rurality**

**RURAL LEVEL 2 TOWNS**  
are less populated,  
more remote, and  
isolated from urban core  
areas.

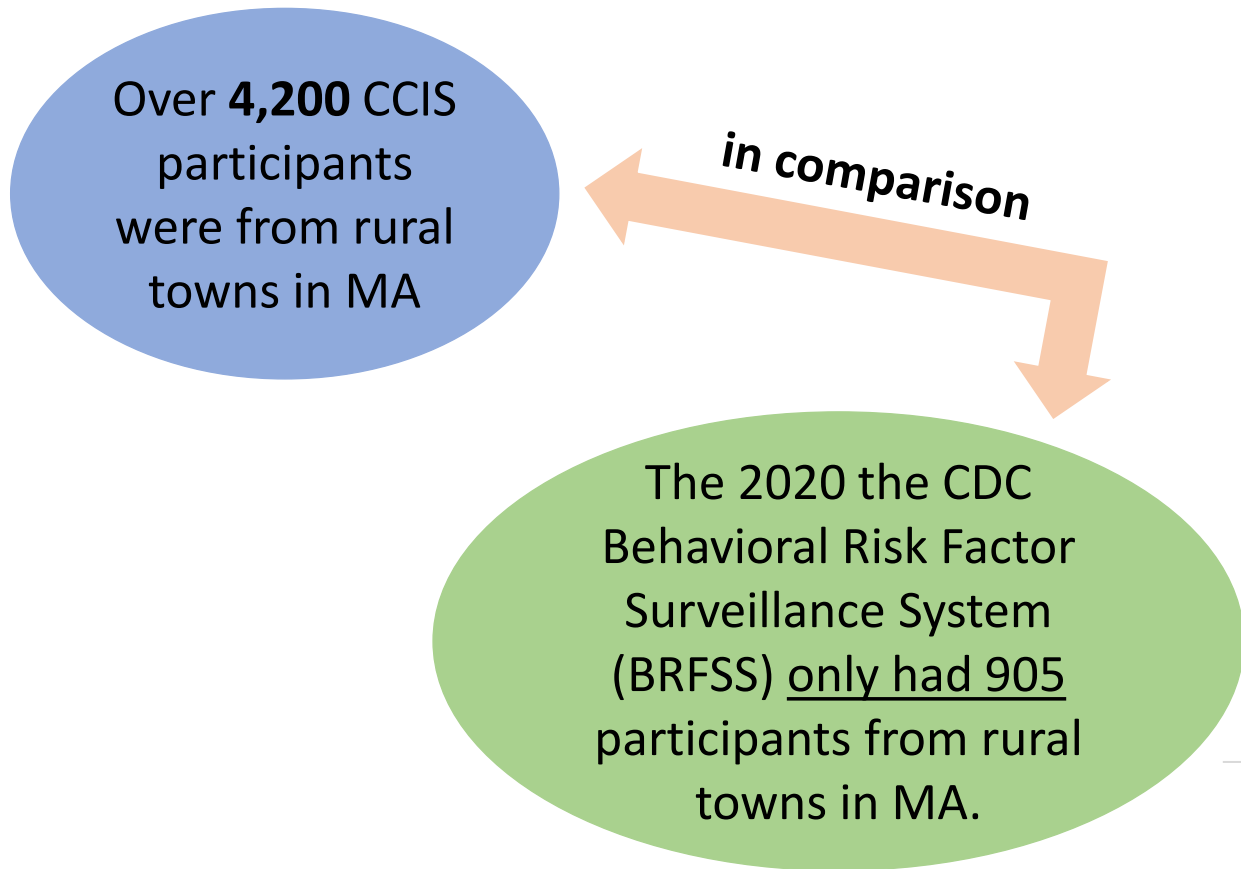
**RURAL LEVEL 1 TOWNS**  
have more population  
than level 2 and are  
closer to urban core  
areas.



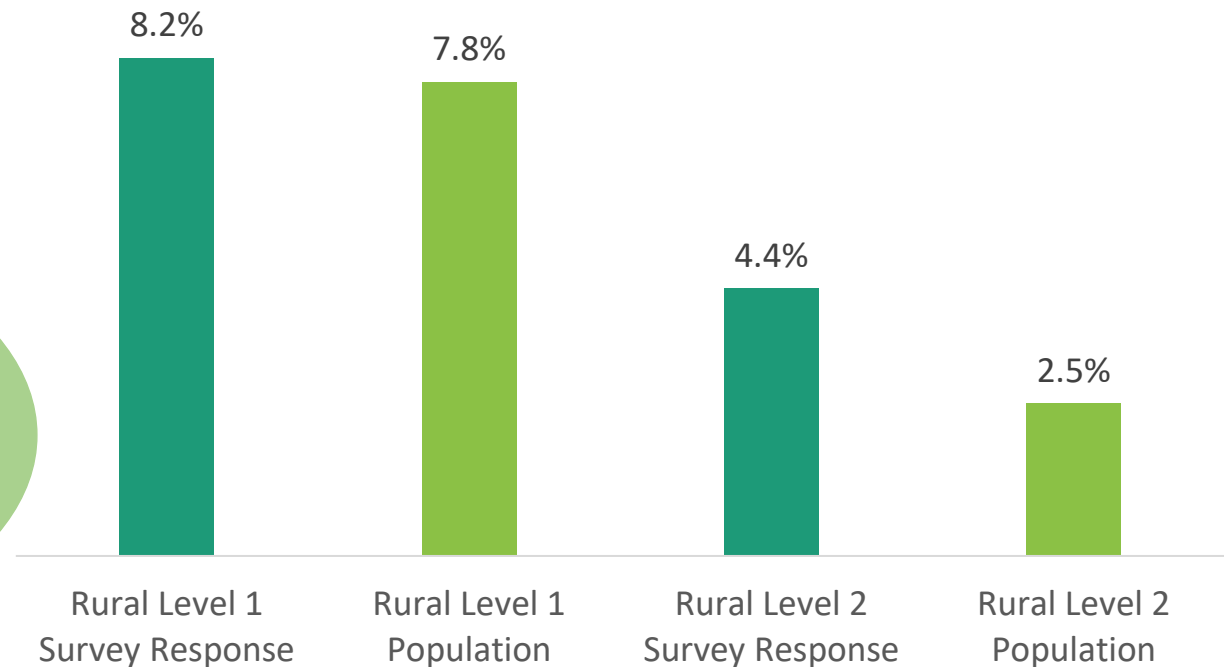
Source: MA State Office of Rural Health.

# CCIS IS ONE OF THE LARGEST SURVEILLANCE EFFORTS TO CAPTURE THE EXPERIENCES OF RURAL COMMUNITIES

MA CCIS begins to fill an important gap in COVID-19 data for rural communities.



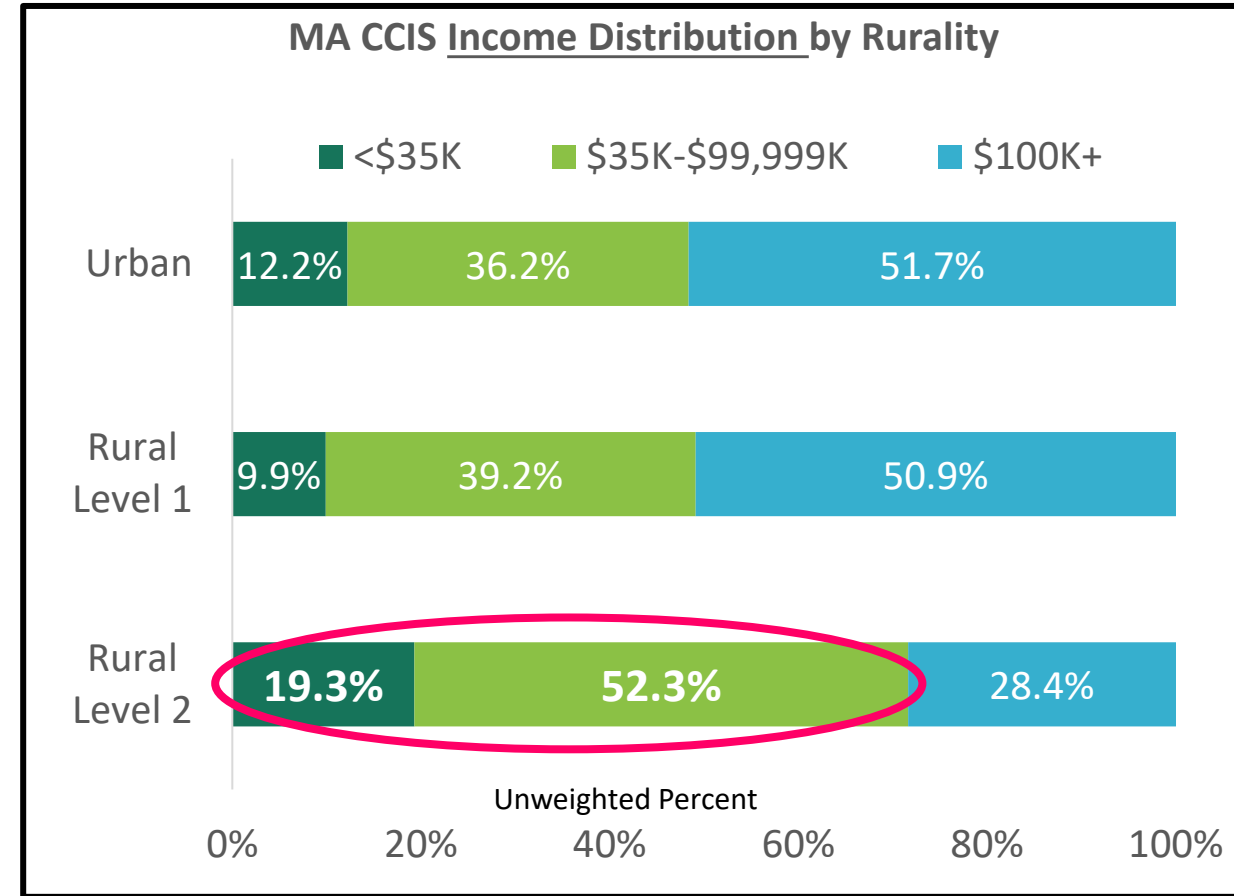
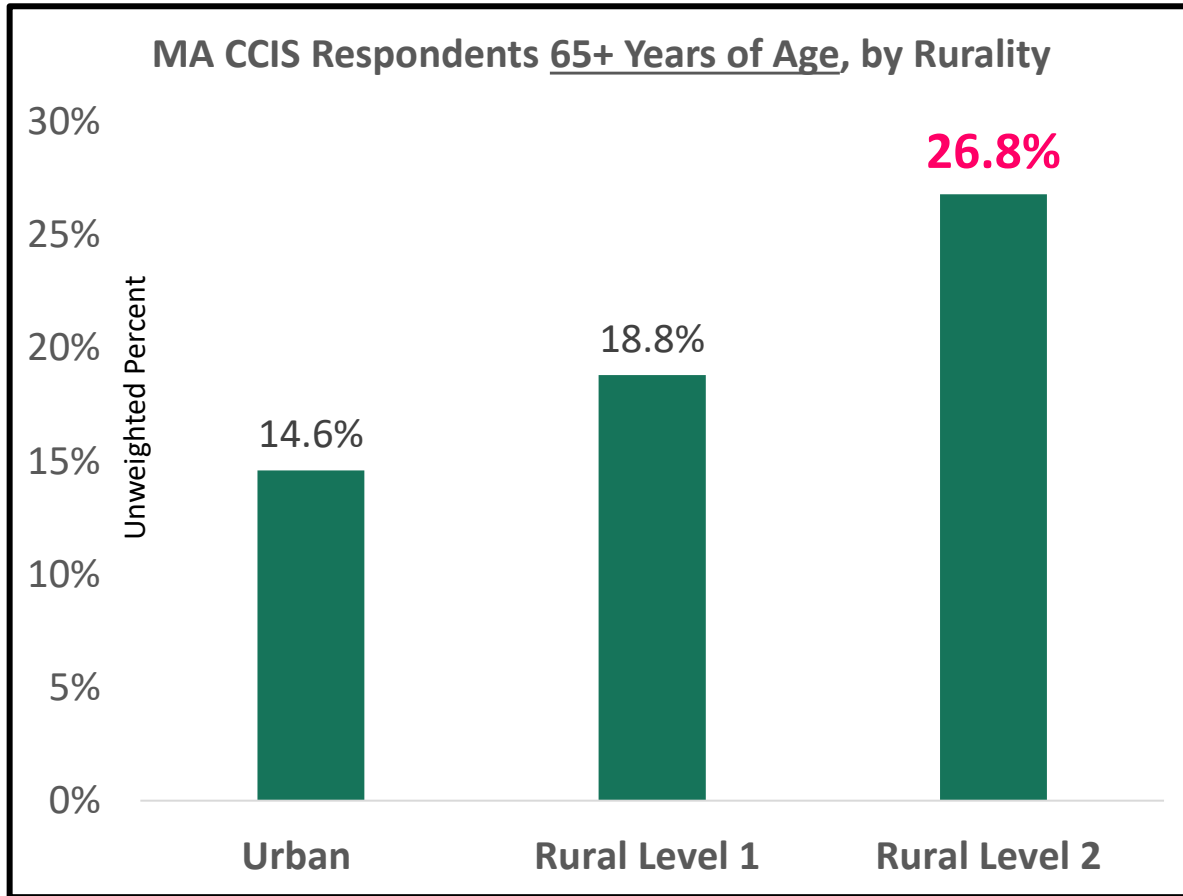
CCIS Survey Response and Rural Definition Population Levels by percent.



Note: Unweighted percentages shown based on 33,600 responses; All respondents took the survey between September and November 2020.

# AGE AND INCOME BY RURAL DESIGNATION

The more rural the community, the **older the population** is and the more likely they are to **be low to moderate income**.

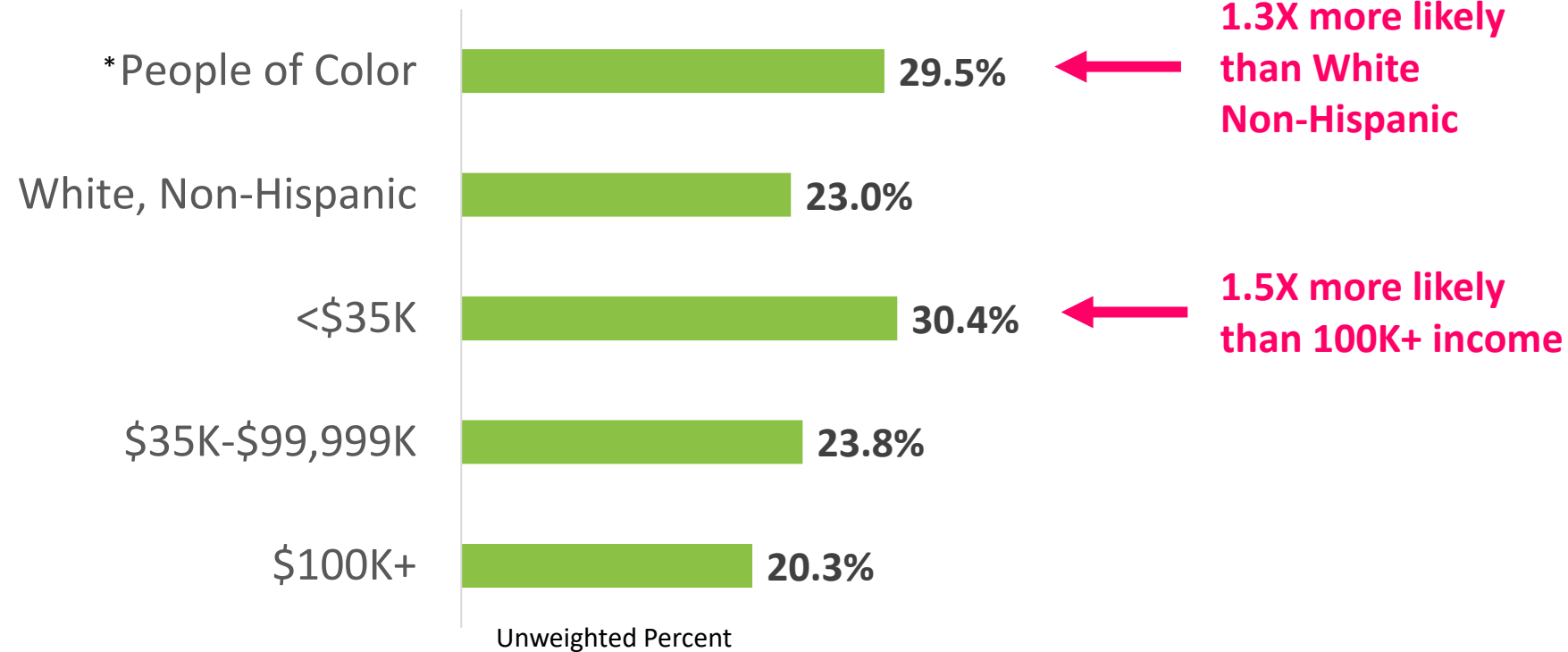


Note: Unweighted percentages shown based on 33,600 responses for age and 31,311 responses for income.

10.13.2021, release  
Difference in age and income distribution by rurality is statistically significant at  $p < 0.05$

# CONCERN ABOUT GETTING COVID-19 IS HIGHER AMONG RURAL RESPONDENTS OF COLOR AND WITH LOWER SOCIOECONOMIC STATUS

**Very Worried about Getting COVID-19 among Rural Respondents, by Race/Ethnicity & Income**



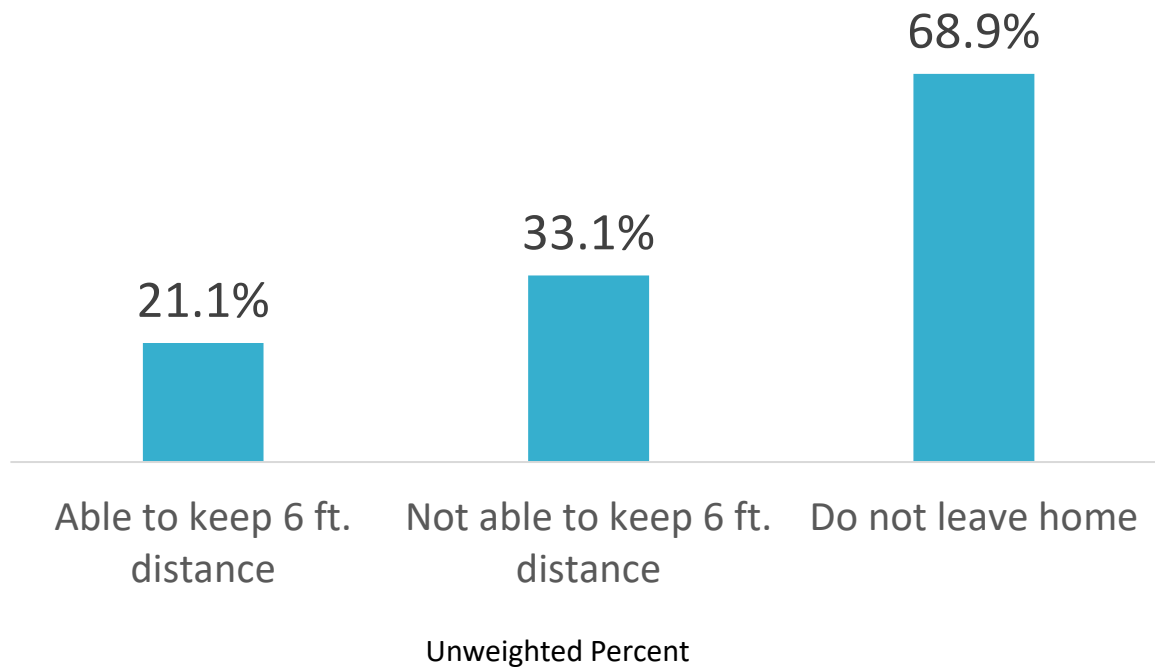
Rural Respondents were less worried overall about getting COVID-19, compared urban (29.3%) respondents. However, levels of concern were not the same across all rural populations. For example, people of color and residents with lower income reported higher levels of concern.

\*Note: While people of color may share some similar experiences, they are not a homogeneous racial/ethnic group. Due to small cell sizes, we have collapsed People of Color into one category to enable reporting of outcomes.

Difference in worry about COVID-19 by race/ethnicity and income is statistically significant at  $p < 0.05$  (among rural respondents)

# CONCERN ABOUT GETTING COVID-19 IS HIGHEST AMONG RURAL RESPONDENTS NOT ABLE TO KEEP 6 FT DISTANCE AND THOSE WHO DO NOT LEAVE HOME

## "Very Worried" about Getting COVID-19 among Rural Respondents, by Ability to Social Distance



Rural populations have higher populations of isolated elders who rely on family, neighbors, and outside services for access to basic needs.

Although these elders did not leave home, they still worried about contracting COVID 19.

# GOVERNMENT WEBSITES AND NEWS OUTLETS ARE MOST RELIABLE SOURCES OF COVID-19 INFORMATION FOR RURAL RESPONDENTS

Top sources for most reliable and up-to-date COVID-19 information among respondents, by rurality

	Urban	Rural Level 1	Rural Level 2
Government websites	60.7%	65.2%	60.1%
News outlets	63.2%	59.3%	65.2%
Community partners	19.1%	20.1%	22.0%
Government officials	14.7%	16.7%	13.2%
Social media	16.0%	11.9%	16.9%

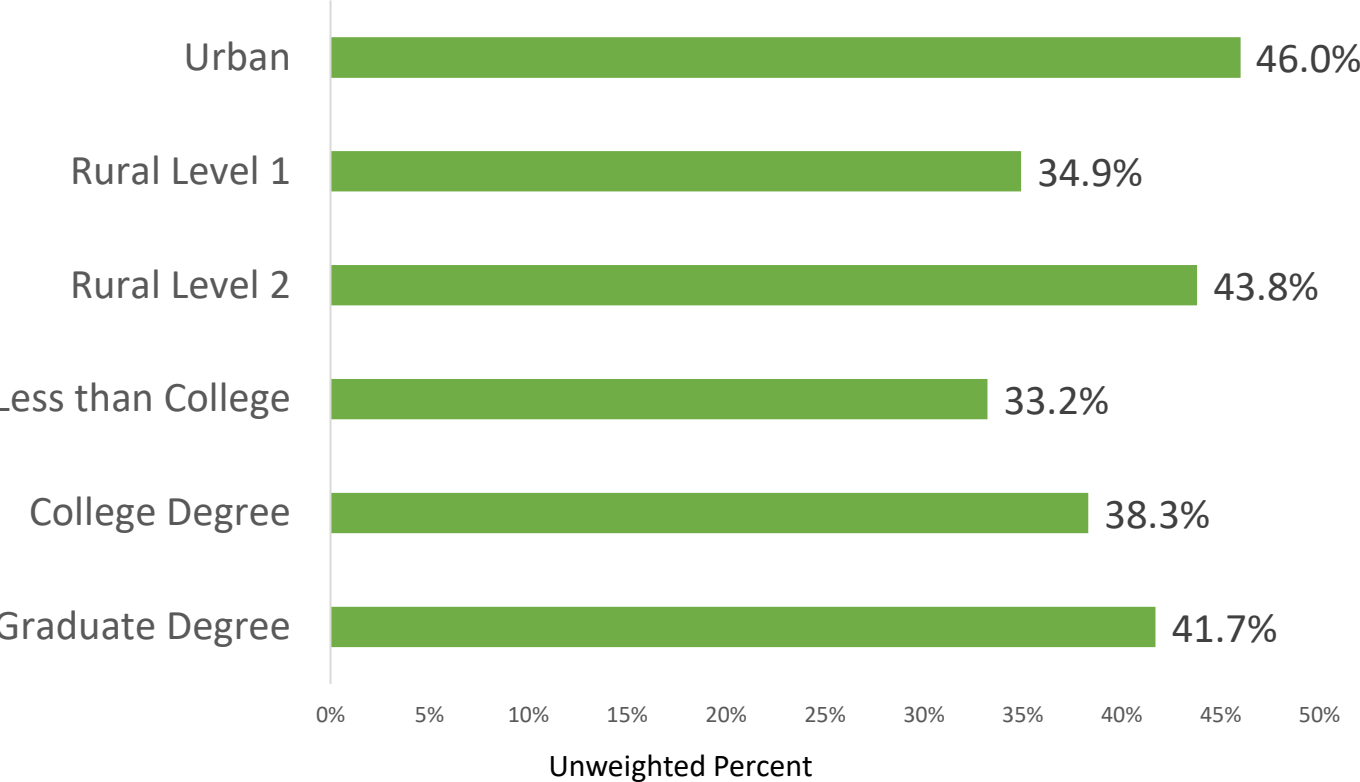
Unweighted percent

Note: Unweighted percentages shown based on 6,435 responses.

Difference in reliable and up-to-date COVID-19 information is statistically significant at  $p < 0.05$  for social media

# COVID-19 TESTING IS LOWER AMONG RURAL RESPONDENTS AND THOSE WITH LOWER SOCIOECONOMIC STATUS

**Ever Tested for COVID-19, by Rurality, and by Educational Attainment (among Rural Respondents)**



Access to COVID-19 testing in rural communities was limited at the time of survey (Sept.-Nov. 2020).

Access has improved but is still limited; many rural residents must travel over 20 miles to access a testing location and must book an appointment in advance.

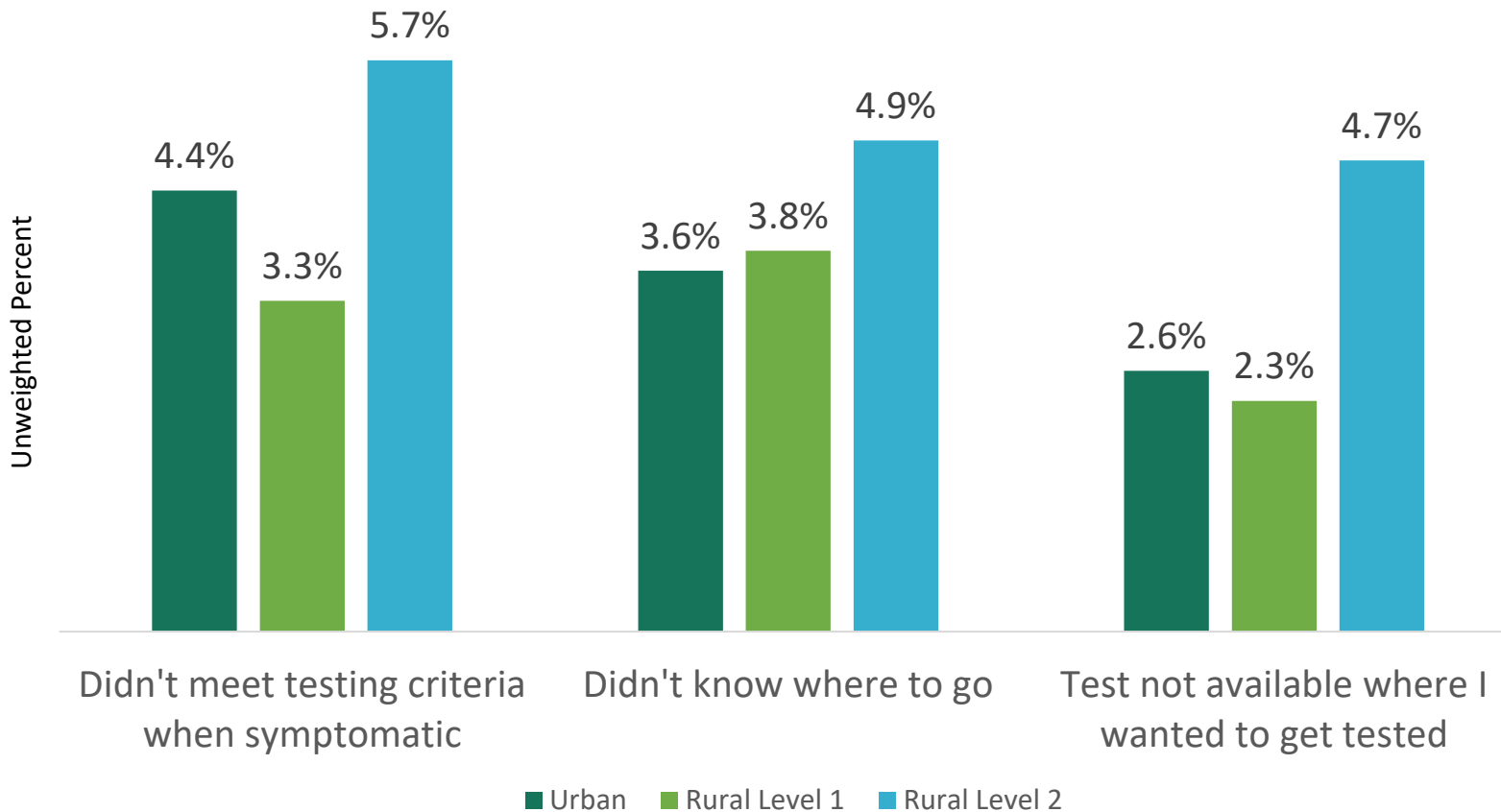
Rural areas lack pharmacy chains and urgent care locations who provided the bulk of testing services.

Note: Unweighted percentages shown based on 31,703 responses by rurality and 4,049 responses for educational attainment (among rural respondents).

Difference in COVID-19 testing by rurality and educational attainment is statistically significant at  $p < 0.05$

# TOP REASONS WHY RESPONDENTS IN RURAL REGIONS DID NOT GET A COVID-19 TEST

Top Reasons for Not Getting COVID-19 Test, by Rurality



Our most isolated rural communities had a lack of information and access to testing sites.

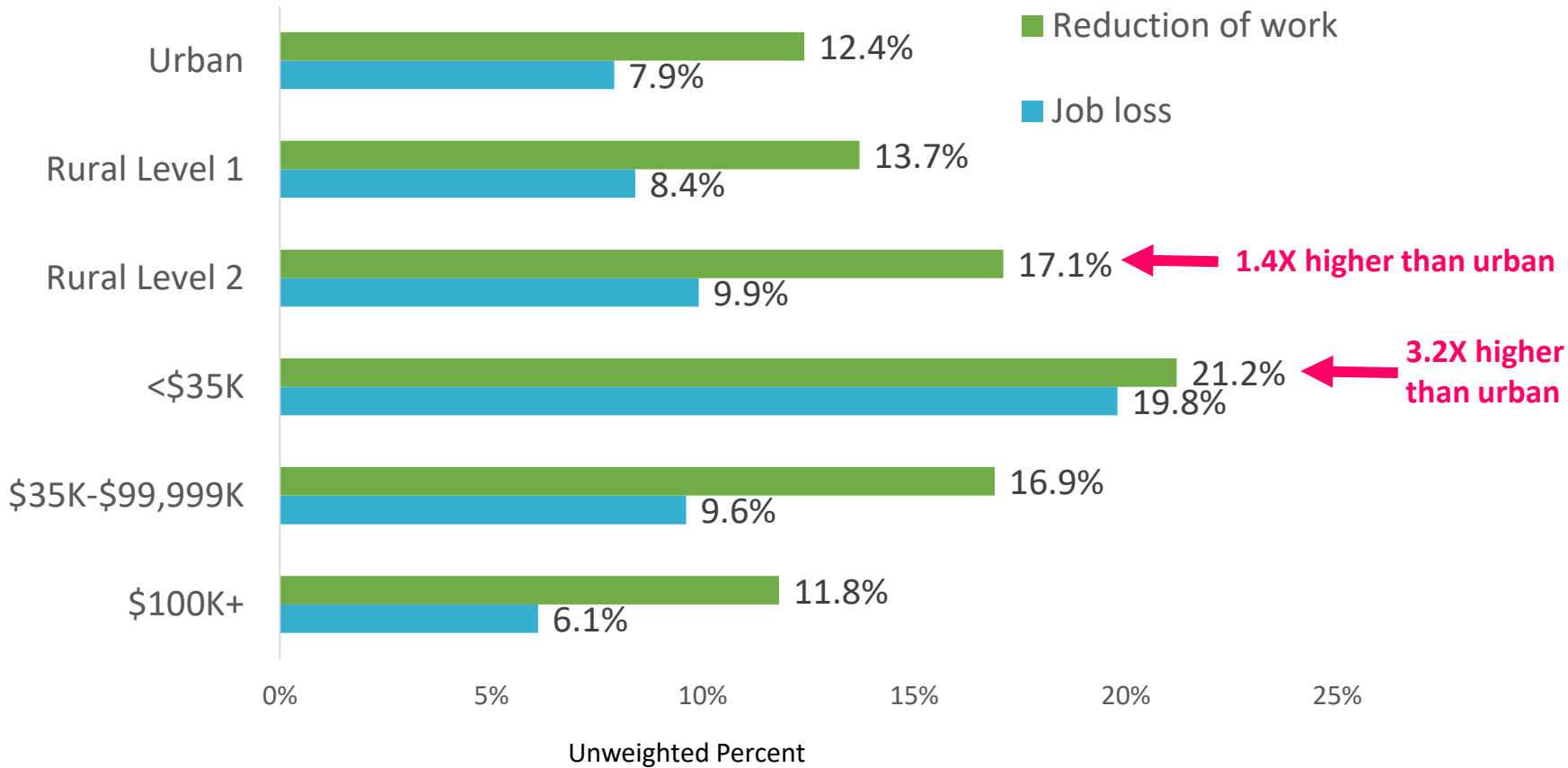
Future testing efforts in rural communities need to be more widespread and communicated through trusted local partners.

\*Note: The most common reason for not getting tested reported by MA CCIS respondents was due to not having symptoms of COVID-19. Data presented are for other reasons for not getting COVID-19 test. Unweighted percentages shown based on 17,398 responses.

Difference in reason for not getting COVID-19 testing by rurality is statistically significant at  $p < 0.05$  for "didn't meet testing criteria when symptomatic" and "test not available where I wanted to get tested." 10.13.2021 release 377

# JOB LOSS AND JOB REDUCTION

**Job Loss & Reduction of Work, by Rurality and Income  
(among Rural Respondents)**



Rural areas saw higher levels of job loss and reduction as compared to urban areas. With isolated rural (1.4 X) and lower income populations (3.2 X) having the largest reduction of work comparatively.

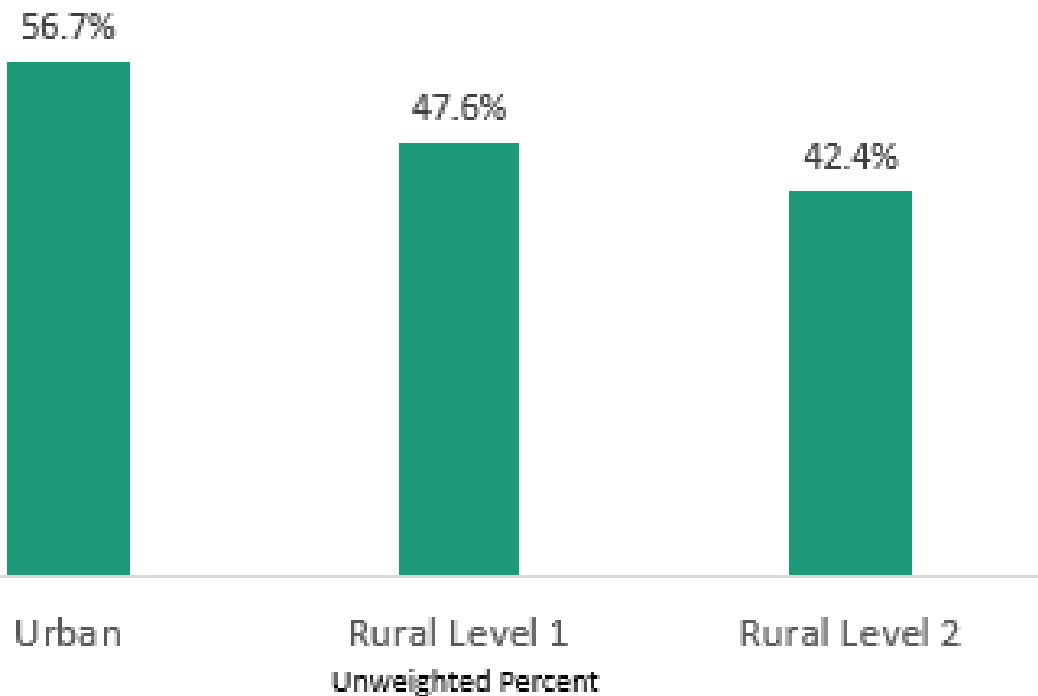
Note: Unweighted percentages shown based on 20,896 responses by rurality and 2,354 responses for income (among rural respondents).

10.13.2021 release  
 Difference in reduction of work by rurality is statistically significant at p < 0.05

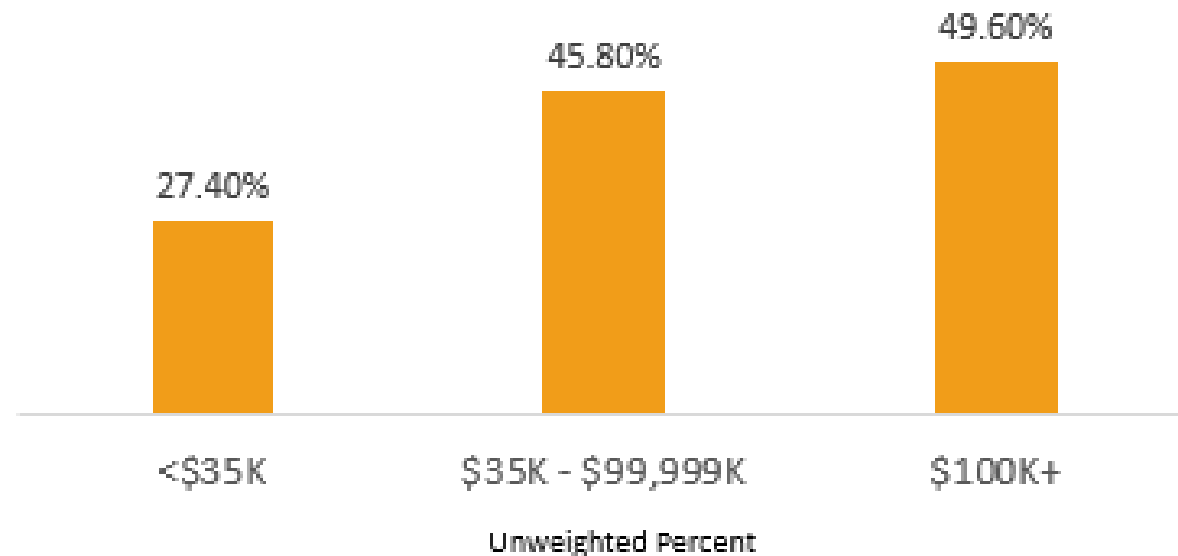
# RURAL AND RURAL LOW-INCOME RESPONDENTS ARE LESS LIKELY TO WORK FROM HOME

The top job sectors for rural communities are food service/accommodations and healthcare. These jobs sectors are less likely to have work from home options. The lack of broadband in rural areas also complicated work from home options.

### Working from Home by Rurality



### Rural Respondants Working from Home by Income

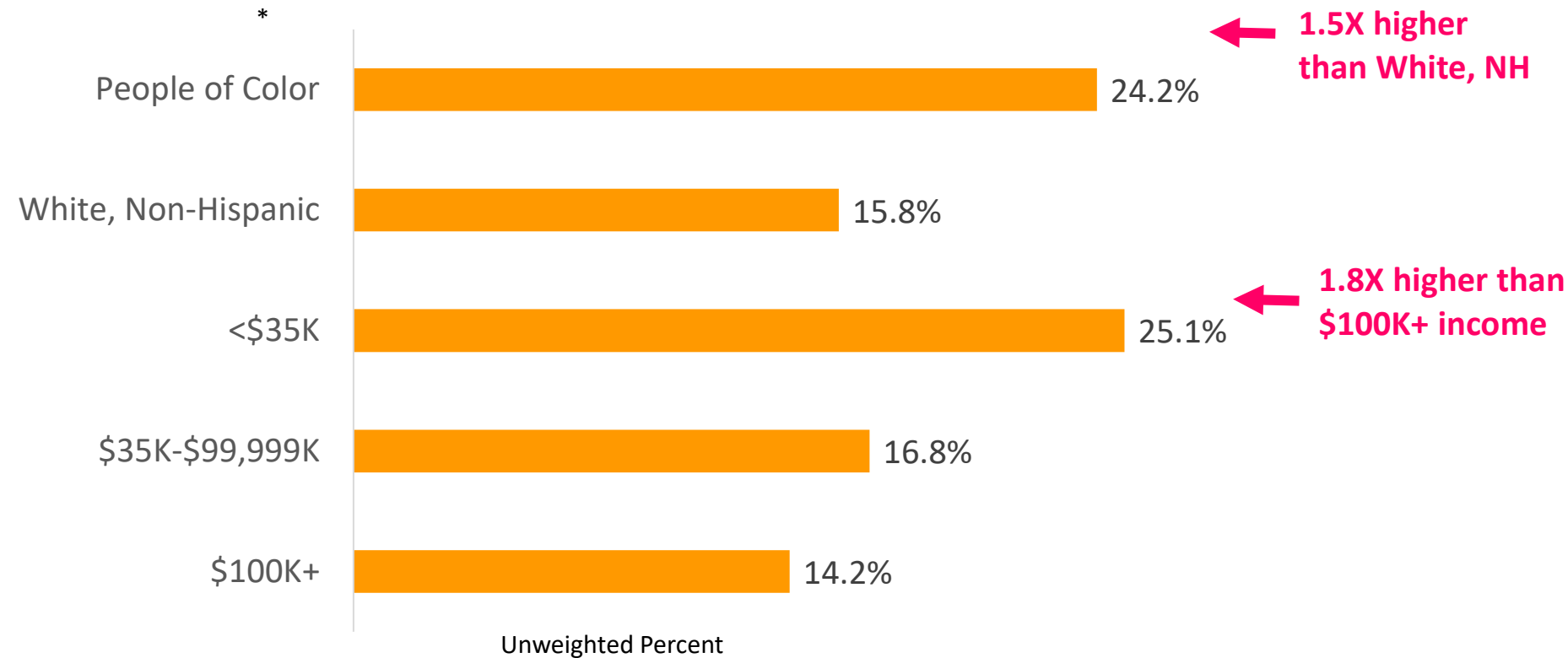


Note: Unweighted percentages shown based on 19,608 responses by rurality and 2,366 responses for age and 2,248 responses for income (among rural respondents).

Differences in working from home by rurality and income (among rural respondents) is statistically significant at p < 0.05

# PEOPLE OF COLOR & LOWER INCOME EXPERIENCED HIGHER RATES OF DELAYED MEDICAL CARE AMONG RURAL RESPONDENTS

Experienced Delayed Medical Care Since July 2020  
among Rural Respondents, by Race/Ethnicity &  
Income

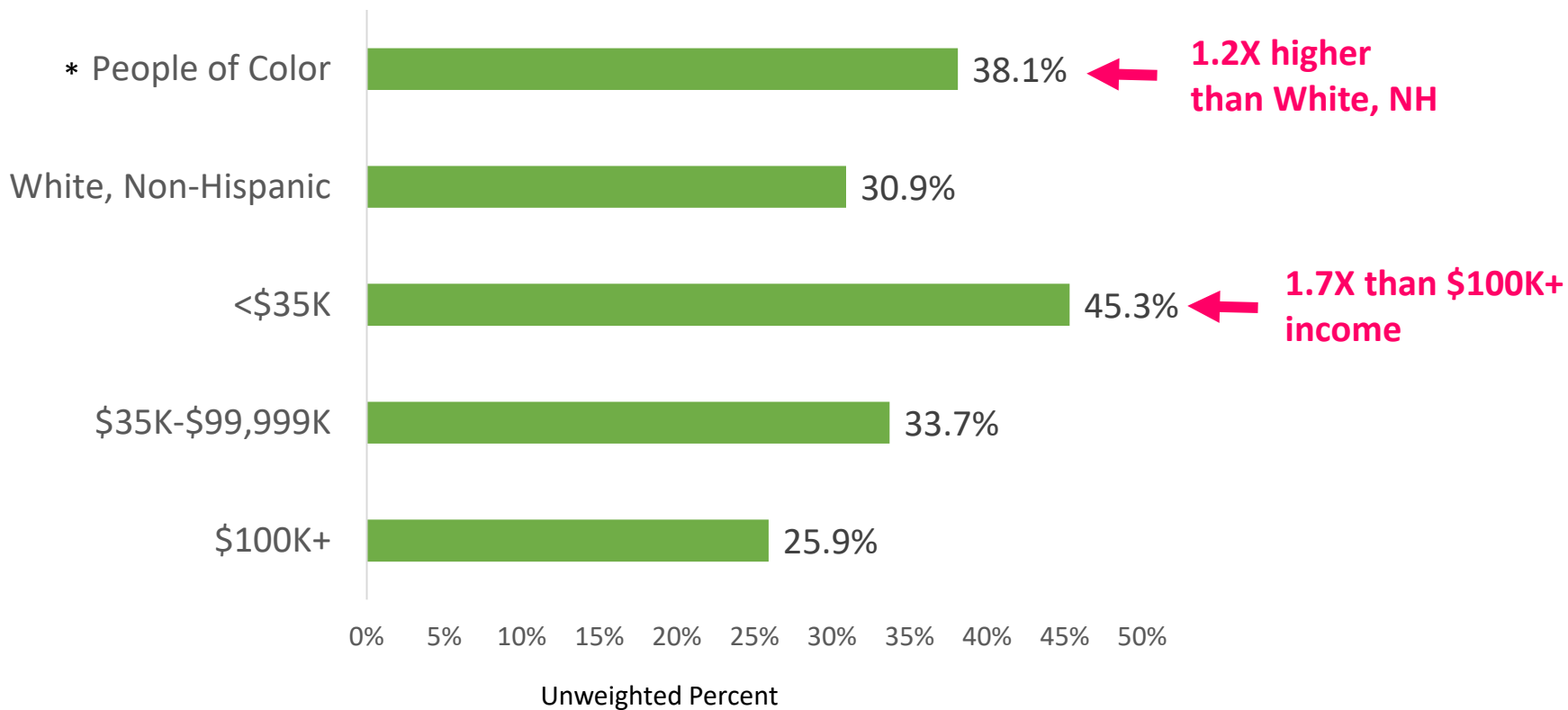


Pre COVID-19 there was already limited access to both primary and specialty clinical services in rural areas.

\*Note: While people of color may share some similar experiences, they are not a homogeneous racial/ethnic group. Due to small cell sizes, we have collapsed People of Color into one category to enable reporting of outcomes. Unweighted percentages shown based on 3,154 responses for race/ethnicity and 2,985 responses for income (among rural respondents).

# POOR MENTAL HEALTH STATUS MORE COMMON AMONG RESPONDENTS OF COLOR AND LOWER INCOME RESPONDENTS

## 15+ Poor Mental Health Days among Rural Respondents, by Race/Ethnicity and Income



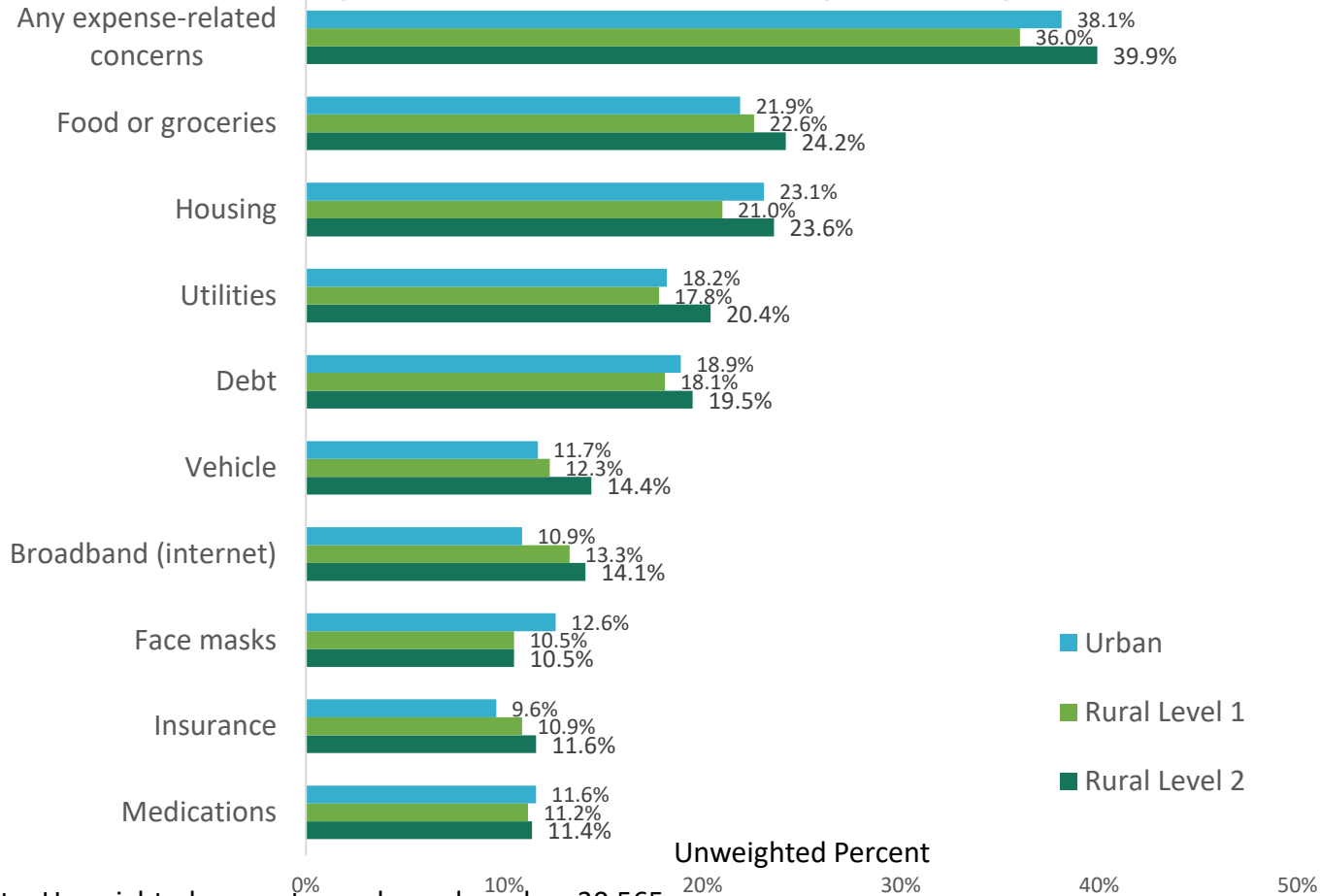
Although Mental Health has been a long-standing concern of rural communities', the allowance of telehealth (reimbursement) during COVID created a service rural residents did not have prior.

\*Note: While people of color may share some similar experiences, they are not a homogeneous racial/ethnic group. Due to small cell sizes, we have collapsed People of Color into one category to enable reporting of outcomes. Unweighted percentages shown based on 3,538 responses for race/ethnicity and 3,385 responses for income (among rural respondents).

Differences in mental well-being by race/ethnicity and income is statistically significant at  $p < 0.05$

# CONCERNS ABOUT MEETING BASIC NEEDS HIGHER AMONG MOST ISOLATED RURAL COMMUNITIES

Worry about Basic Needs, by Rurality



The most isolated rural communities reported higher rates of concern for nearly every basic need category compared to urban communities

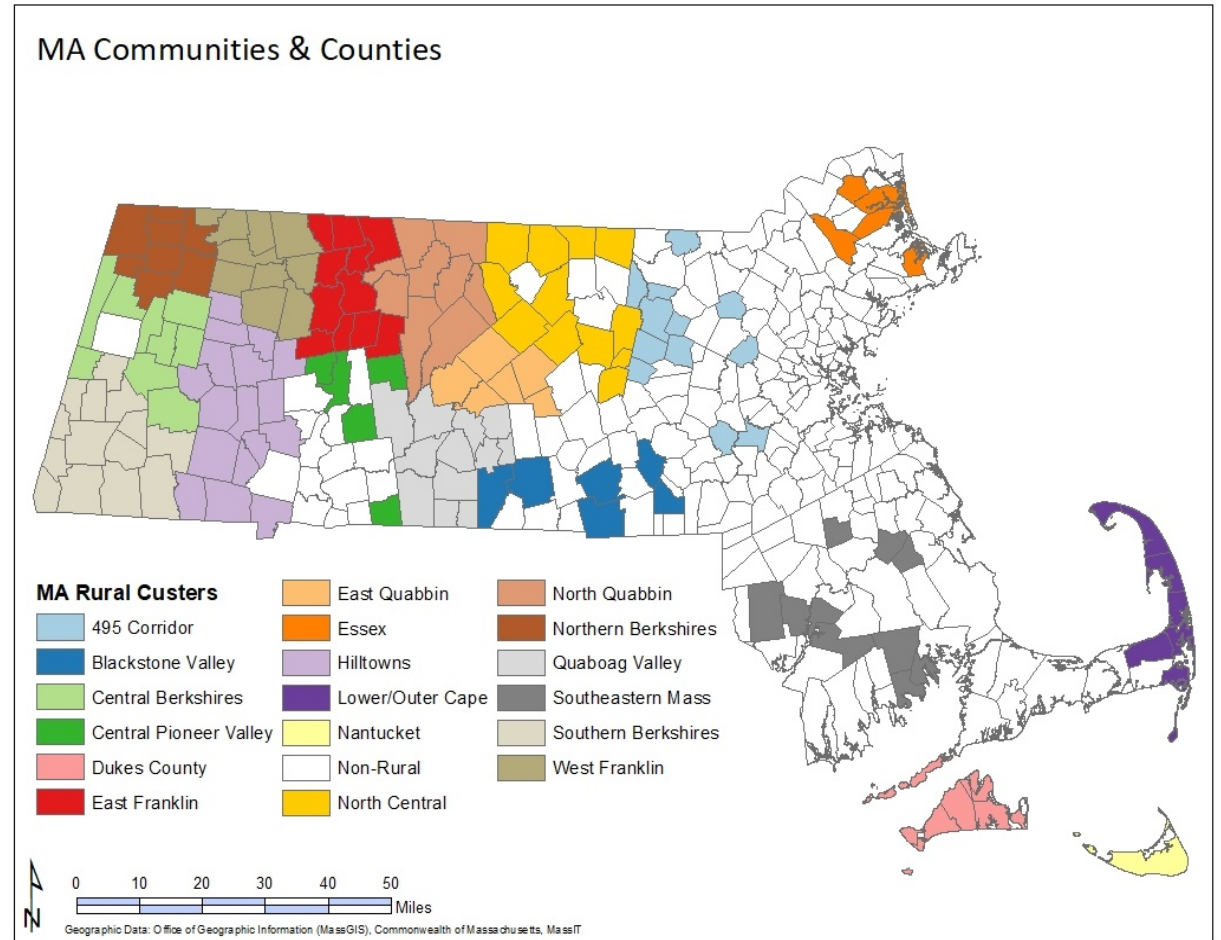
Note: Unweighted percentages shown based on 30,565 responses.

10.13.2021 release  
 Difference in worry about basic needs is statistically significant at  $p < 0.05$  for any expense-related needs, vehicle, broadband (internet), facemasks,

# MA DPH USES RURAL CLUSTERS TO UNDERSTAND DIFFERENT RURAL AREAS' UNIQUE NEEDS

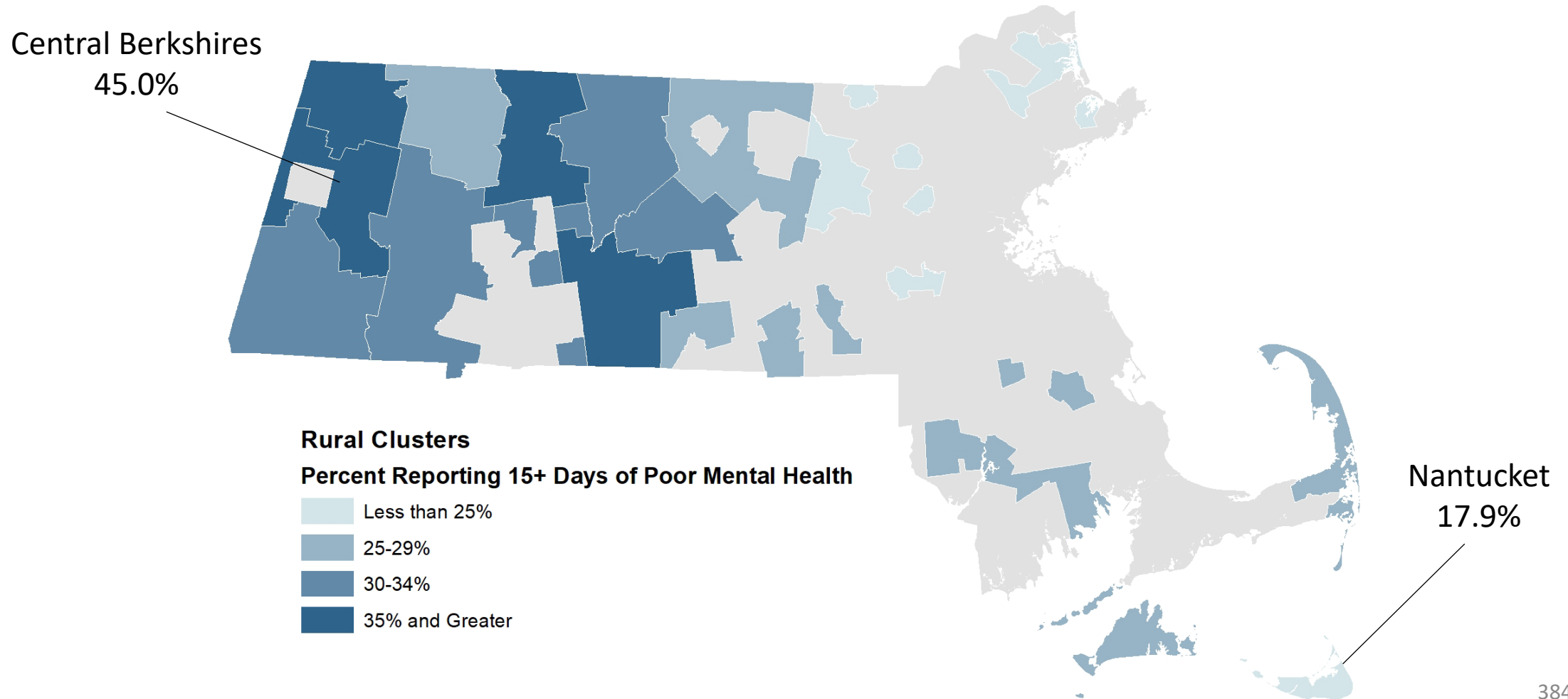
Grouping small rural towns allows for more granular data analysis. Working with the MA Rural Advisory Council on Health DPH created Rural Clusters that represent geographic areas that have been historically classified together through shared services, cultural commonality, or geographic cohesion

The 18 Rural Clusters allow us to look at data and trends across our rural areas to better understand unique needs and target resources.



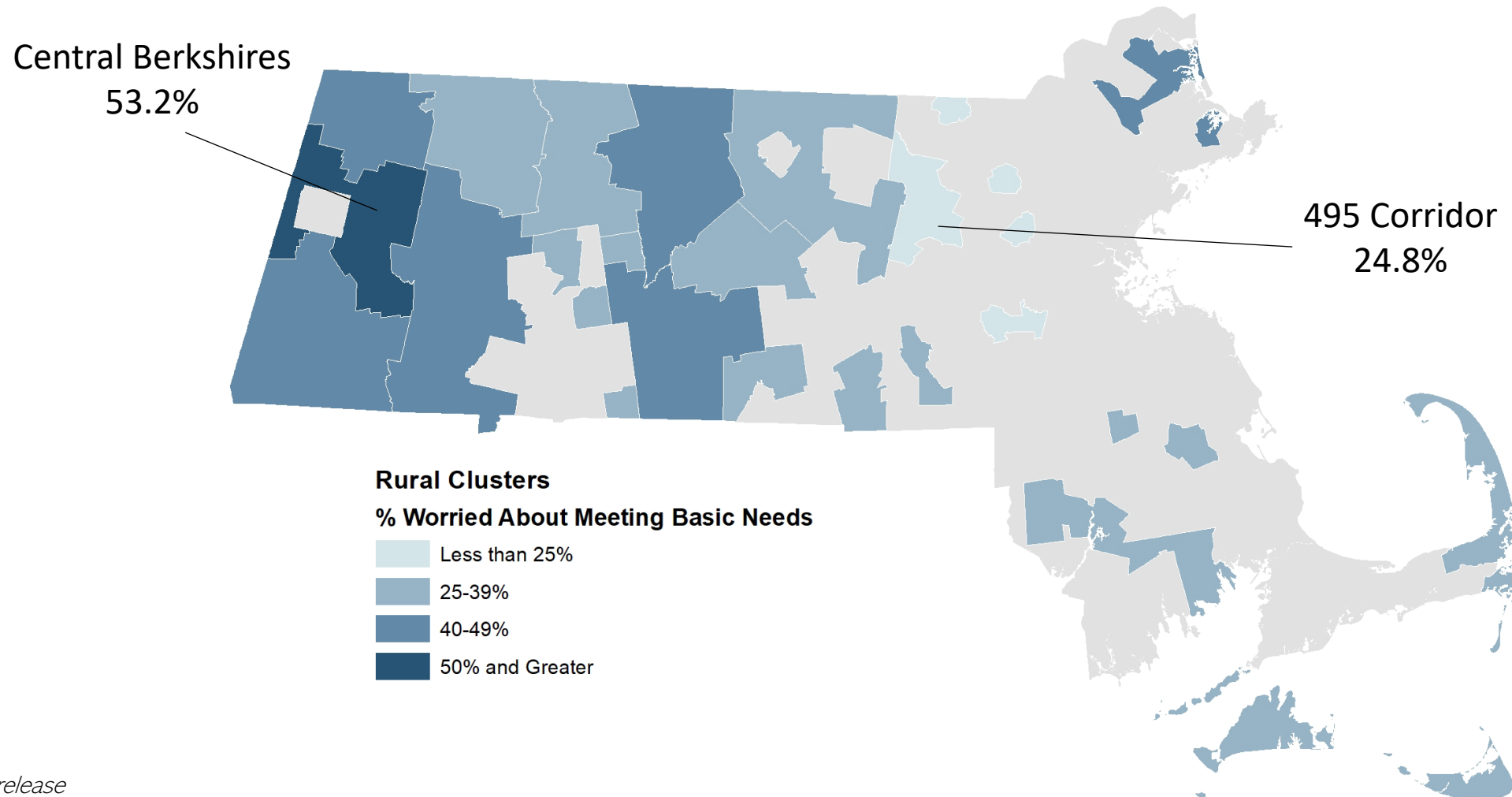
# MENTAL HEALTH NEEDS VARY GREATLY ACROSS RURAL CLUSTERS

Percent of Respondents Reporting 15 or More Days of Poor Mental Health in the Past 30 Days by Rural Cluster



# CONCERN ABOUT MEETING BASIC NEEDS VARY ACROSS RURAL CLUSTERS

Percent of Respondents Reporting Being Worried About Meeting One or More Basic Needs by Rural Cluster



# RURAL COMMUNITIES & COVID-19



Large populations of older residents are particularly vulnerable to COVID-19 morbidity and mortality



Transportation is barrier for those who do not have personal transportation & those who are uncomfortable driving to more urbanized areas



Rural residents who need MA Health transportation might need help navigating how to sign up



Limited access to health and social services



Increases in telehealth removes some barriers to health care & requires access to stable internet and computers - major inequities remain in access to telehealth



Pre-pandemic rural residents already struggled economically; rural economies are still recovering from the 2008 recession



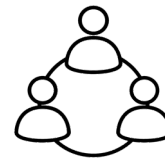
Many rural residents lost or reduced work due to the pandemic



Mistrust in government, experience with initial COVID-19 response, and past experiences with state agencies



There are pockets of vaccine hesitancy pre-pandemic in some rural communities



Many community-based organizations in rural communities work with rural residents and are important partners in COVID-19 response



Rural communities have been left out of most COVID-19 pandemic research

# KEY TAKEAWAYS

- MA CCIS highlights differences in the impact of the pandemic by rural context.
- Findings show that residents of more rural communities (rural level 2) have been more likely to report changes in job status and less likely to be able to work from home.
- Patterns indicate racial/ethnic and socioeconomic disparities in COVID concerns, access to COVID testing, the opportunity to work from home, access to medical care, and mental well-being.
- Findings suggest that it is important to consider the unique and shared experiences across multiple rural sub-groups, including by rural context, race/ethnicity, age, income, and educational attainment.
- There are important socioeconomic differences in rural communities (e.g., occupation, income, type of residence such as second home) that may obscure some patterns across rural areas.

# DATA TO ACTION

- Approach rural communities as a vulnerable population with unique health inequities and disparities, not just a geographic area.
- Include rural communities in assessments of the impact of COVID-19 to inform short- and long-term recovery policies.
- COVID-19 recovery plans may look different from those designed for non-rural communities and need to be tailored to rural regions. The same approach may not work in each rural region.
- Fund and partner with rural communities to work on solutions in their own regions since every community and local infrastructure (e.g., public health, social services, health care) is different.
- Invest resources to collect data about rural communities and disaggregate rural communities when possible (e.g., rural levels, rural areas).

The MDPH State Office of Rural Health (SORH) has been working with rural stakeholders, DPH programs, and federal partners to meet the unique needs of rural Massachusetts. The Massachusetts Council on Rural Health has worked with the SORH to develop Rural Data Standards, design rural led programming, and create a new COVID rural vaccine equity initiative. Initiatives like these need to continue with strong support from all sectors to make lasting change for rural residents.

# HAVE QUESTIONS ABOUT RESOURCES FOR RURAL COMMUNITIES?

For more state information and a list of resources for rural communities, visit the MA State Office of Rural Health website at: <https://www.mass.gov/state-office-of-rural-health> or contact Kirby Lecy, Project Coordinator for the State Office of Rural Health at [kirby.lecy@mass.gov](mailto:kirby.lecy@mass.gov) or (617) 549 - 6423

For national information and resources related to rural health you can visit the Rural Health Information Hub <https://www.ruralhealthinfo.org/>





*"In order to build the health and safety for Massachusetts, policy makers must develop rural competencies to fully understand and address rural population needs."*

*- Rebecca Bialecki*

*Executive Director of the MassHire Franklin Hampshire Workforce Board*

# REFERENCES

**Limited Job Opportunities -Lower Wage Employment Sectors** - The 2017 Workforce Development and Labor Force Review - <https://masshirecwb.com/wp-content/uploads/2021/04/MaWorkforceLaborAreaReviewPY2017.pdf>

**Lack of Public Transportation- Digital Divide - Limited Educational Opportunities** *Massachusetts Rural Policy Plan*. Rural Policy Advisory Commission. Massachusetts EOHHS - [https://frcog.org/wp-content/uploads/2019/10/Rural\\_Policy\\_Plan\\_10.01.19.pdf](https://frcog.org/wp-content/uploads/2019/10/Rural_Policy_Plan_10.01.19.pdf)

**Lack of Healthcare & Human Services** – HRSA Data Warehouse – HPSA FIND (Health Professional Shortage Areas) - <https://data.hrsa.gov/tools/shortage-area/hpsa-find>

**Policy & Funding Decisions** – Investing in Rural America – Senate Joint Economic Committee - [https://www.jec.senate.gov/public/\\_cache/files/ed5bf0b5-dd14-473f-acdc-fd86ba98a6e1/investing-in-rural-america.pdf](https://www.jec.senate.gov/public/_cache/files/ed5bf0b5-dd14-473f-acdc-fd86ba98a6e1/investing-in-rural-america.pdf)

Counting for Dollars, Metropolitan Policy Program – [https://www.brookings.edu/wp-content/uploads/2016/06/0309\\_census\\_report.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/0309_census_report.pdf)

**Urban Centric Policy Decisions** - Defining and Describing Rural: Implications for Rural Special Research and Policy <https://journals.sagepub.com/doi/10.1177/875687051603500302>



# YOUTH SURVEY

Elizabeth Beatriz, PhD

Justine Egan, MPH

Allison Guarino, MPH

Beatriz Pazos Vautin, MPH

# FRAMING MATTERS

Despite the common belief that youth are not impacted or worried about COVID-19, the data shows us that youth are deeply concerned and have been significantly impacted by the pandemic, especially youth of color, LGBTQA youth, youth with disabilities, and young parents.

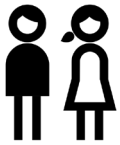
# YOUTH CCIS RESPONDENTS PROFILE



3,052 youth ages 14-24  
took the survey



32% speak a language other than  
English at home



46% under 18 years old  
54% 18 and over



21% youth with disabilities



39% working youth

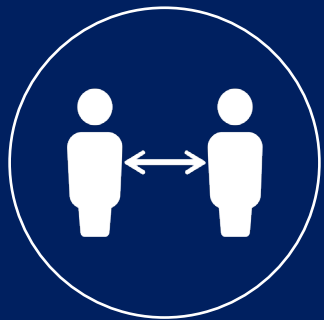
The CCIS worked intentionally to reach diverse youth populations by **partnering with community-based organizations** serving youth in MA, as well as communities most impacted by COVID-19



Artwork by Farah Jeune

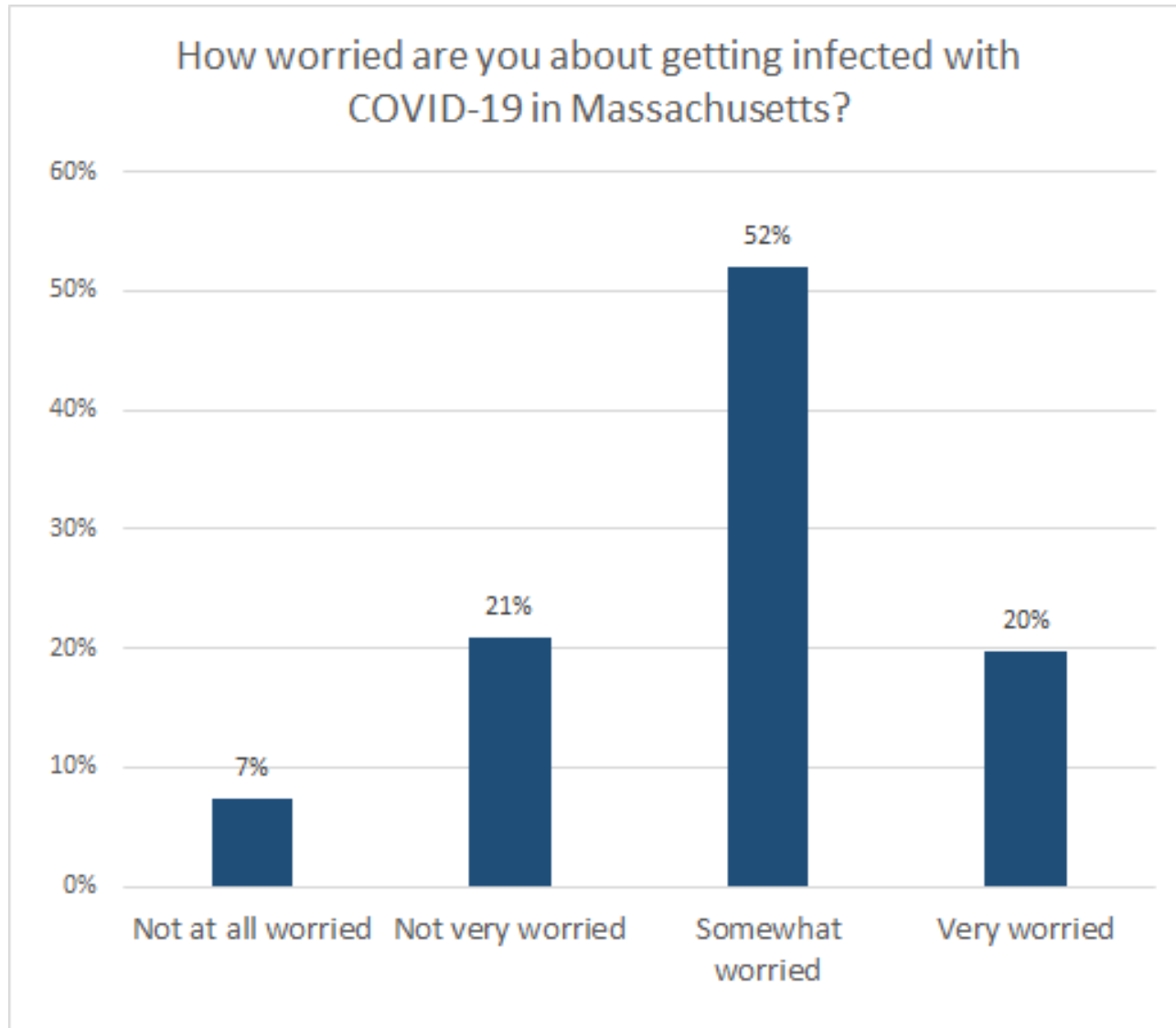
# YOUTH SURVEY QUESTIONS & WEIGHTING

- There were two versions of the survey questions: adult (n=33,000) and youth (n=3,000). Due to their unique needs, young parents (n=148) received the adult questions.
- Adult & youth results were weighted to the state distribution. Different weights were used for each population.
- Data on young parents were unweighted due to methodological considerations.



# YOUTH EXPERIENCE WITH COVID-19

# YOUTH PERCEPTION OF COVID-19 RISK



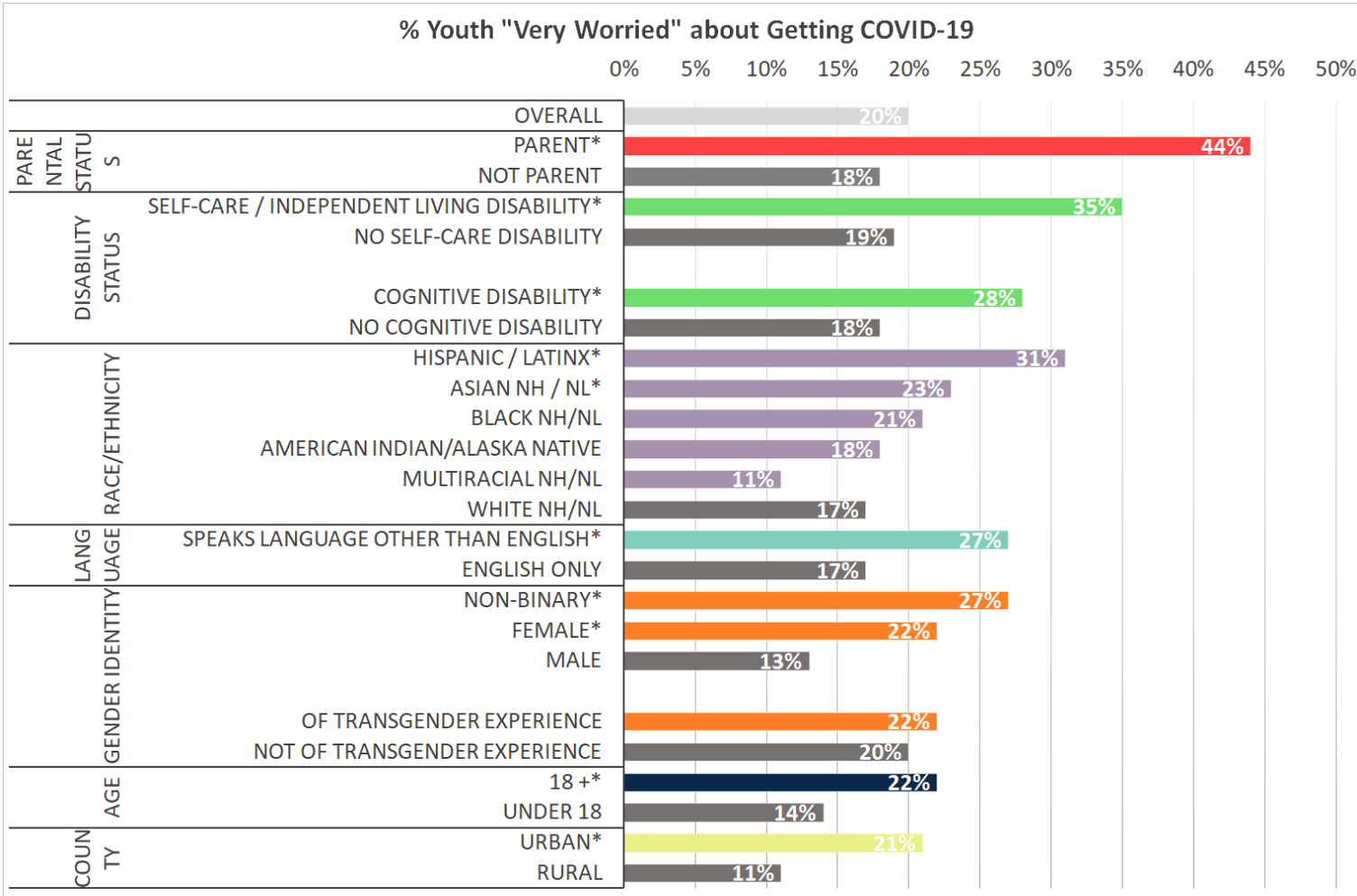
Contradicting some narratives in the media about youth not being concerned about the risks of COVID-19, 72% of Massachusetts youth reported being "somewhat" or "very" worried about getting infected with COVID-19.

# YOUTH PERCEPTION OF COVID-19 RISK

72% of Massachusetts youth reported being "somewhat" or "very" worried about getting infected with COVID-19

% Youth "Very Worried" about Getting COVID-19

0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50%

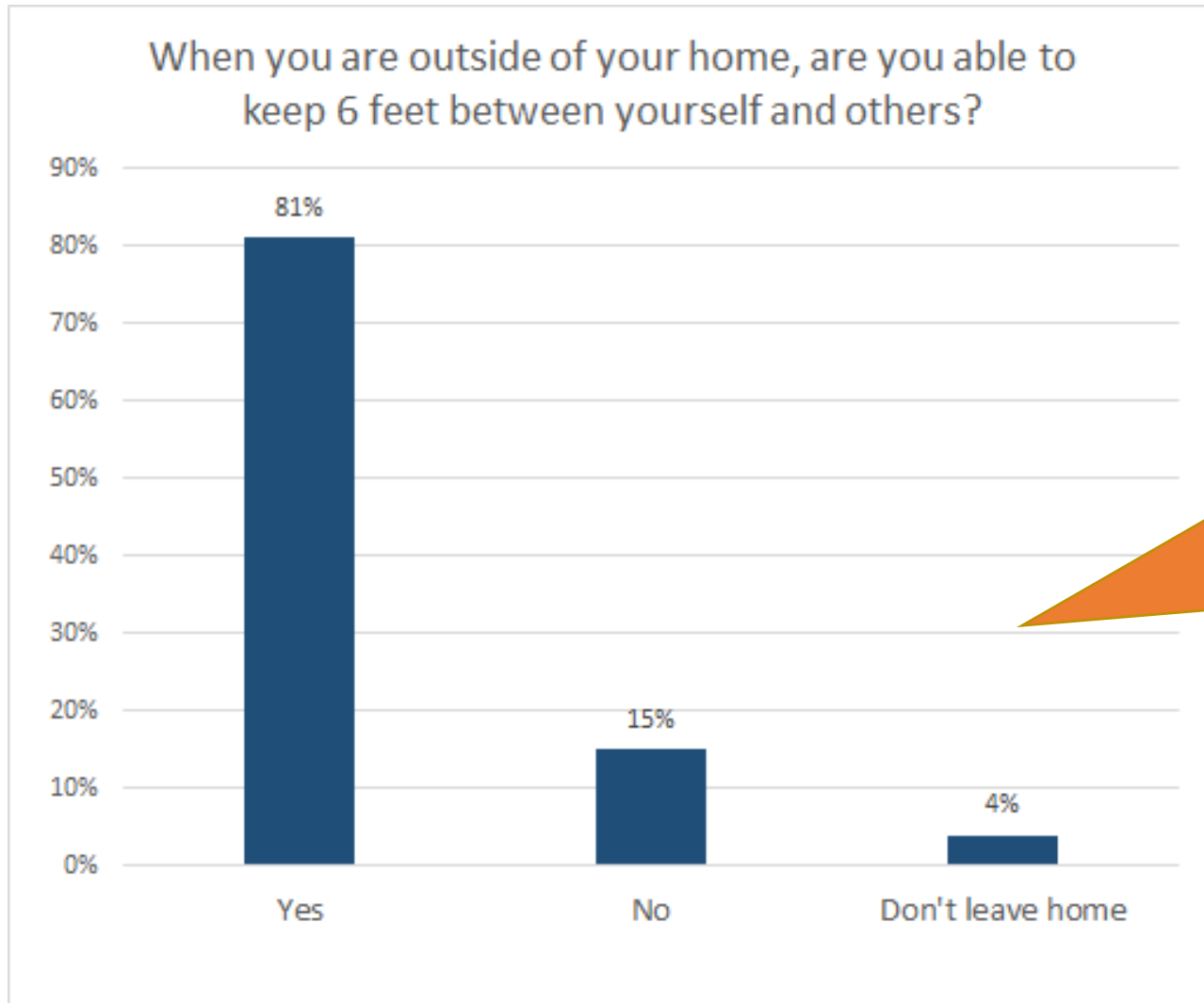


Youth most likely to report being “very worried” about getting COVID-19 are:

- Young parents
- Youth with disabilities
- Hispanic/Latinx youth
- Youth who speak a language other than English
- Non-binary youth

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaska Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# YOUTH EXPERIENCE WITH COVID-19



Youth over the age of 18 (18%) and youth with disabilities (20%) were more likely to report not being able to keep distance.

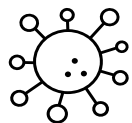
Among youth reporting not being able to keep 6 feet distance, the top reasons for this are:

- “The place where I buy **groceries** is crowded” (56%)
- “In order to do my **work**, I need to be physically close to others” (48%)
- “My **workplace** is crowded” (42%)
- “The **streets** where I live are crowded” (27%)

# YOUTH EXPERIENCE WITH COVID-19

Certain groups of youth were more likely to report testing positive for, being exposed to, or losing someone due to COVID-19.

Compared to all youth respondents:



- Young parents (6%) and Black nH/nL youth (6%) were 2x as likely to report testing positive for COVID-19 (3%)



- Young parents (14%) and Hispanic/Latinx youth (13%) were more than twice as likely to report having a household member who tested positive for COVID-19 (6%)



- Young parents (14%), American Indian/Alaska Native youth (13%), and Black nH/nL youth (11%) were 2x as likely to report losing someone close to them due to COVID-19 (6%)

# YOUTH EXPERIENCE WITH COVID-19

Certain groups of youth were more likely to report testing positive for, being exposed to, or losing someone due to COVID-19.

Youth Population	Tested positive for COVID-19	Household member tested positive for COVID-19	Lost someone close due to COVID-19
All Youth	3%	6%	6%
American Indian / Alaska Native	**	**	13%
Black, nH/nL youth	6%	6%	11%
Hispanic/Latinx youth	5%	13%	9%
Young parents	6%	14%	14%
Youth who speak a language other than English	4%	9%	9%

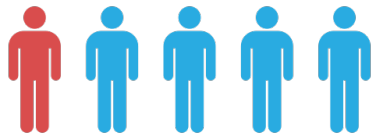
Data notes: 1) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaska Native" includes Hispanic/Latinx; 4) \* \*\*indicated data is suppressed due to small numbers; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.



# YOUTH RESPONSIBILITIES

# CHANGES IN YOUTH RESPONSIBILITIES

Youth have been asked to take on more adult responsibilities, including providing childcare for their families



More than 1 in 5 (21%) Hispanic/Latinx youth report having to babysit or watch their siblings more during the COVID-19 pandemic



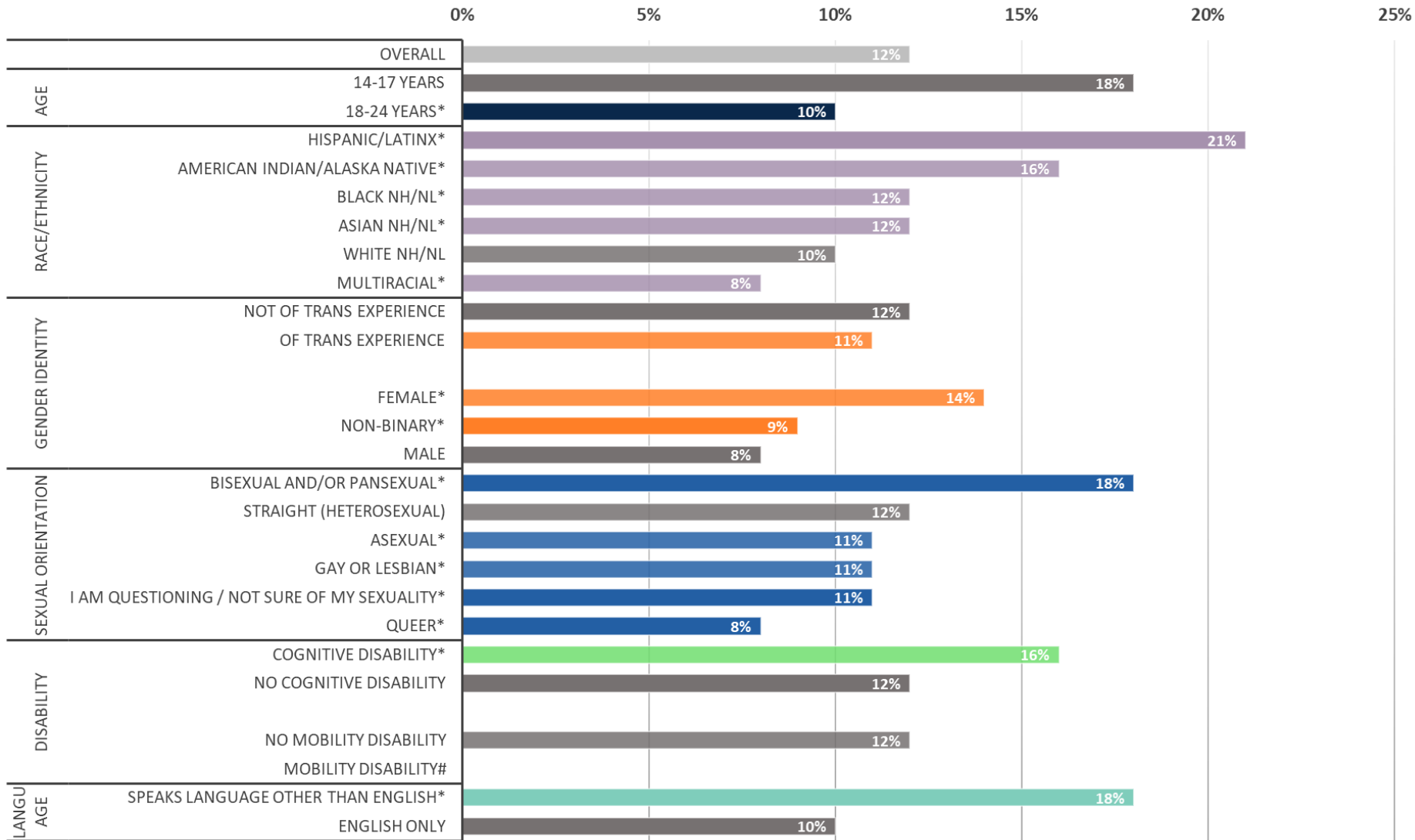
Youth who speak a language other than English (18%) are more likely to be asked to watch their siblings, compared to youth who only speak English (11%)



Youth with cognitive disabilities (16%) are also more likely than youth without cognitive disabilities (11%) to have to babysit their siblings more often

# CHANGES IN YOUTH RESPONSIBILITIES

**% MA Youth Who Have to Babysit their Siblings More Often due to COVID-19**

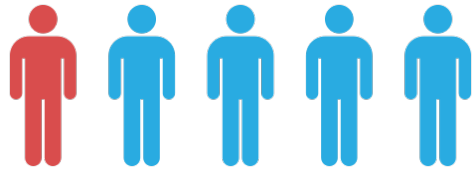


Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaska Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF); 5) # denotes data suppressed due to small numbers; 6) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# CHANGES IN YOUTH RESPONSIBILITIES

Youth have been asked to take on more adult responsibilities, including providing **financial support** to their families.

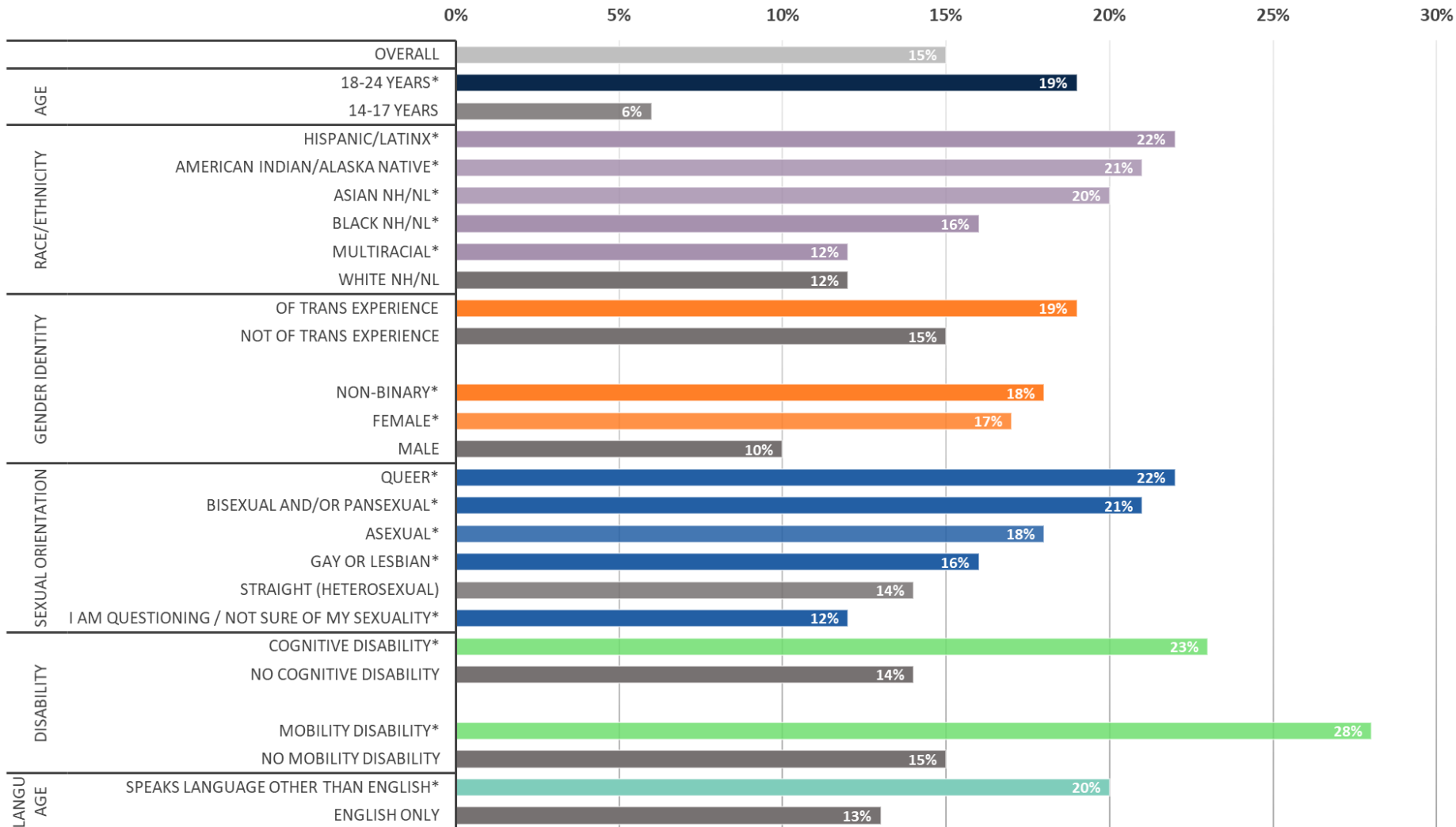
More than 1 in 5 youth in many populations have had to help their families financially more during COVID-19:



- Youth of Color (22% of Hispanic/Latinx youth, 20% of Asian nH/nL youth, 20% of American Indian/Alaska Native youth)
- Youth with disabilities (28% of youth with a mobility disability and 23% of youth with a cognitive disability)
- Youth who speak a language other than English (20%)

# CHANGES IN YOUTH RESPONSIBILITIES

## % MA Youth Who Have to Help Their Families Financially More Often due to COVID-19



Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaska Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF); 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# YOUTH CONCERNS ABOUT BASIC NEEDS

More than 85% of youth are "not very worried" about food, housing, or paying for cell phones. Certain groups of youth are much more likely to be worried.



- 1 in 4 Hispanic/Latinx youth, Black nH/nL youth, youth with disabilities, non-binary youth, and queer youth are worried about getting enough food.



- Youth with disabilities are **3 times** as likely to be worried about having a place to live compared to youth without disabilities. **Hispanic/Latinx and American Indian/Alaska Native youth are 3 times** as likely and **Black nH/nL youth are 2 times** as likely to be worried about having a place to live compared to White nH/nL youth.

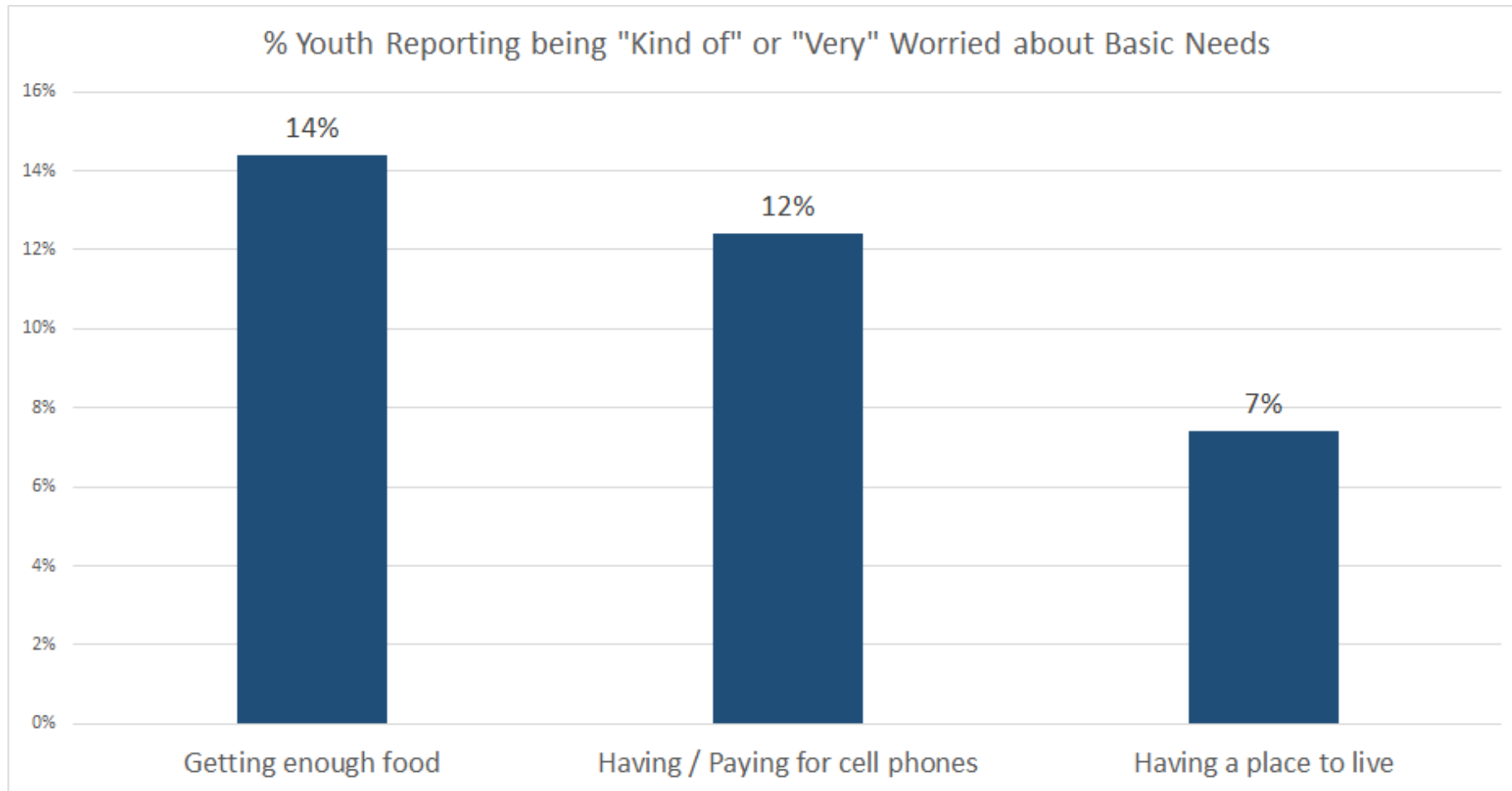


- Youth with disabilities, Hispanic/Latinx youth, and Black nH/nL youth are more than **2 times as likely** to be worried about paying for a cell phone compared to all youth.



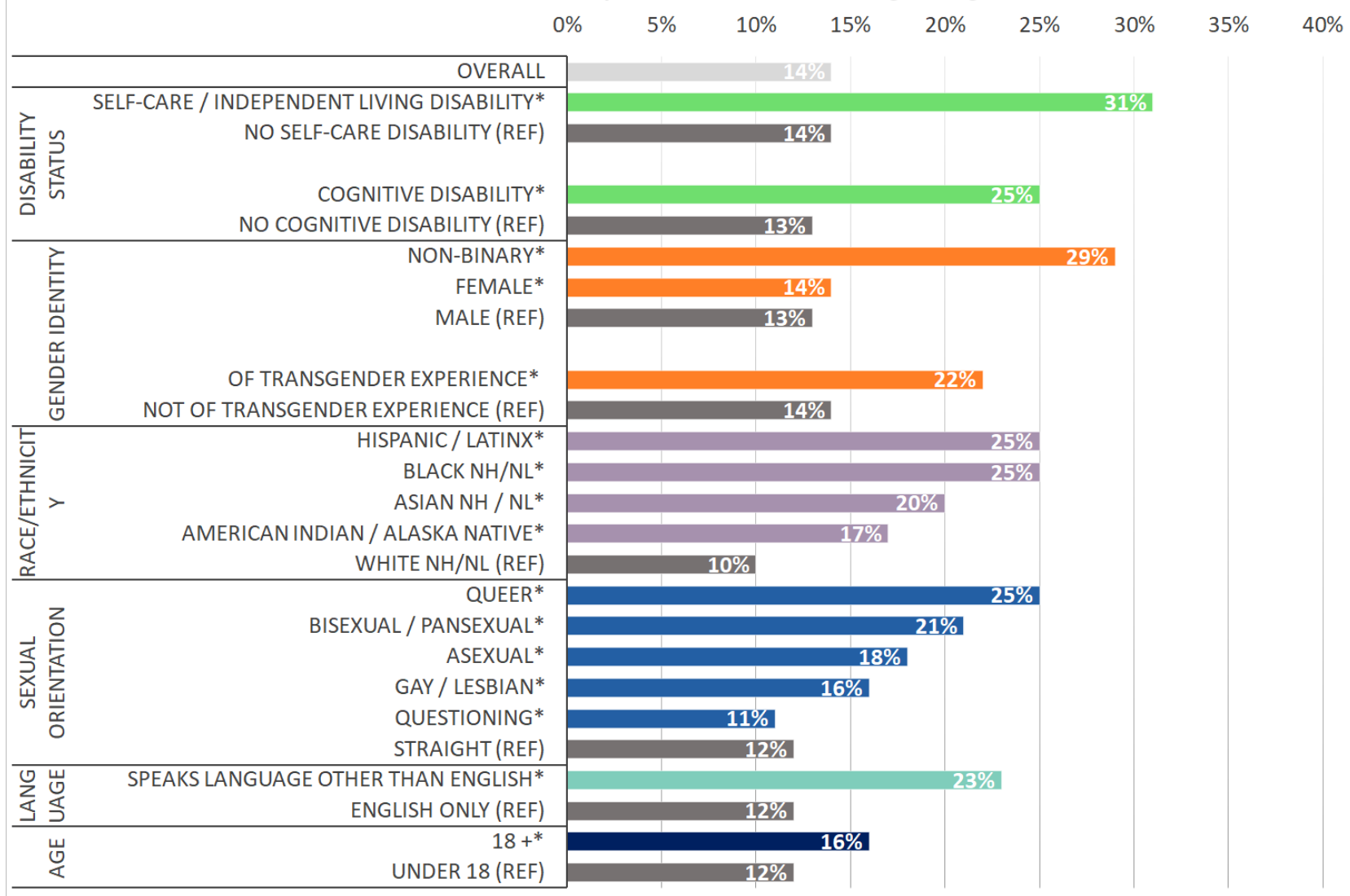
- **Nearly half of young parents** are worried about housing expenses.

# YOUTH CONCERNS ABOUT BASIC NEEDS



# YOUTH CONCERNS ABOUT BASIC NEEDS

% Youth "Kind of" or "Very Worried" about Getting Enough Food



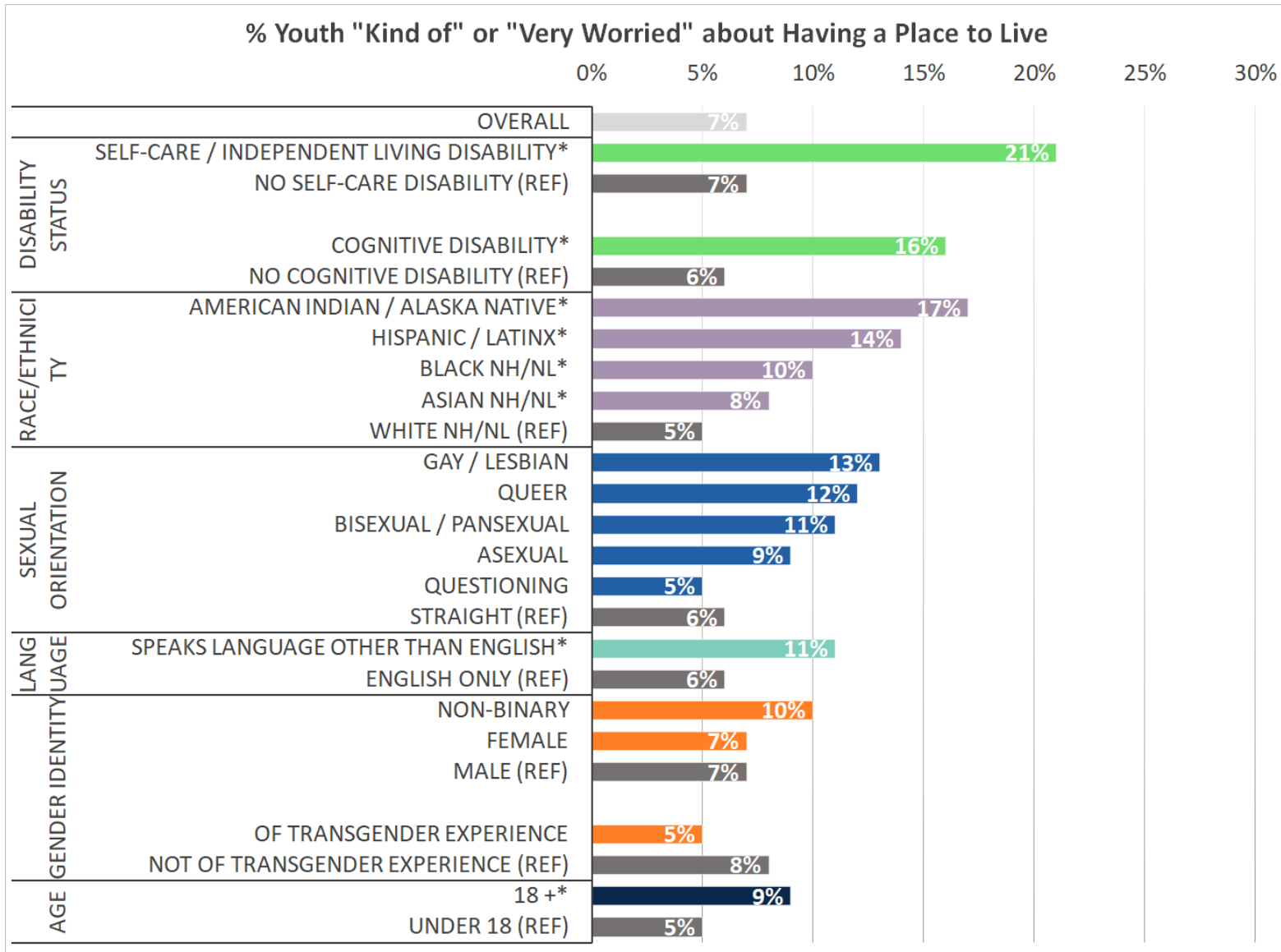
Youth more likely to report being very worried about getting enough food are:

- Youth with disabilities
- Non-binary youth
- Hispanic/Latinx youth
- Black nH/nL youth
- Asian nH/nL youth
- Queer youth
- Bisexual/pansexual youth
- Youth who speak a language other than English

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. 2) "nH/nL"=non-Hispanic/non-Latinx; 3)"American Indian/Alaska Native" includes Hispanic/Latinx; 4)\* denotes rate is significantly different (p<0.05) compared to the reference group (REF); 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# YOUTH CONCERNS ABOUT BASIC NEEDS

% Youth "Kind of" or "Very Worried" about Having a Place to Live



Youth most likely to report being very worried about having a place to live are:

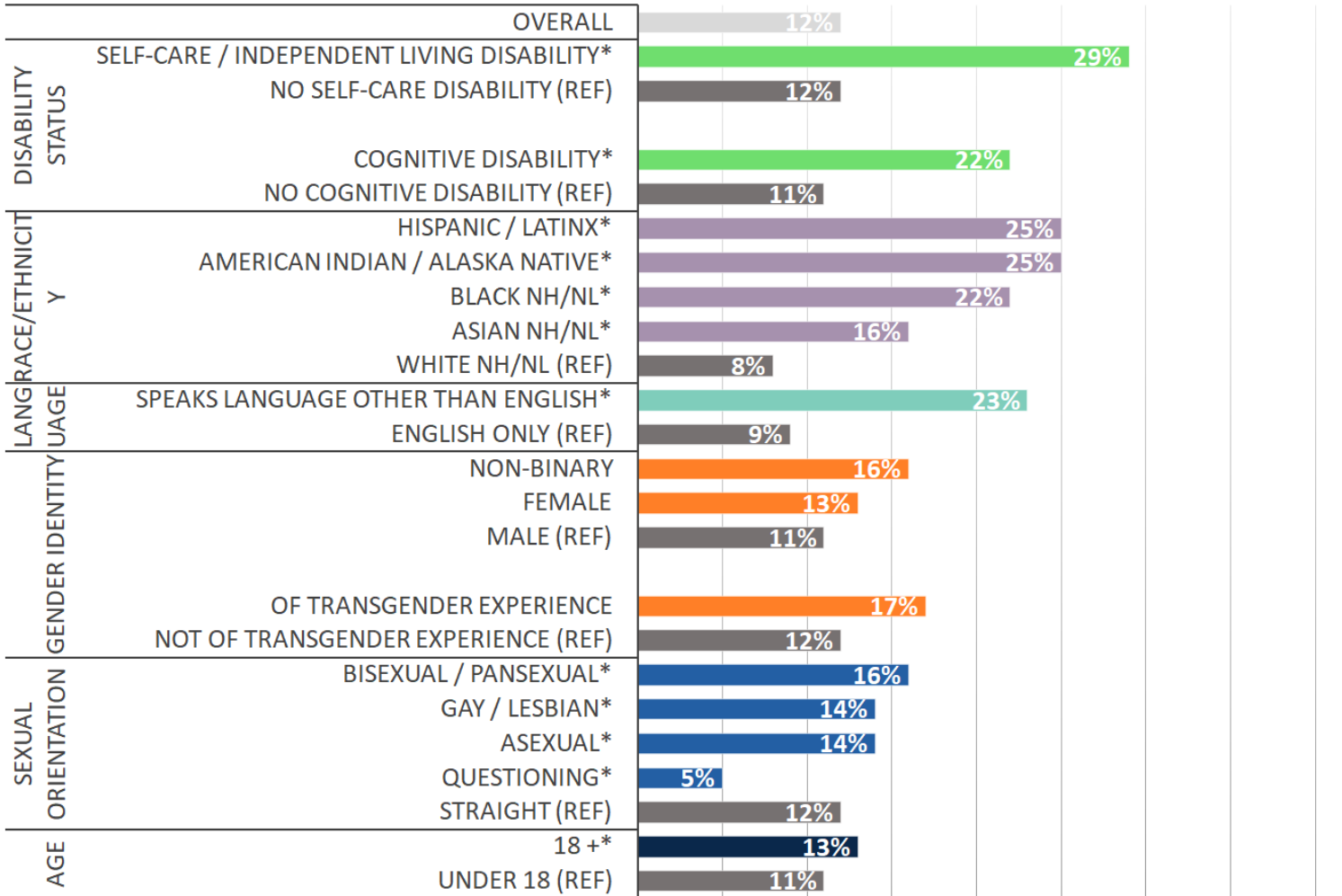
- Youth with disabilities
- Non-binary youth
- American Indian/Alaska Native youth
- Hispanic/Latinx youth
- LGBTQ+ youth
- Youth who speak a language other than English
- Youth over the age of 18

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaska Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF); 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# YOUTH CONCERNS ABOUT BASIC NEEDS

% Youth "Kind of" or "Very Worried" about Paying for Cell Phones

0% 5% 10% 15% 20% 25% 30% 35% 40%



Youth more likely to report being very worried about paying for cell phones are:

- Youth with disabilities
- Non-binary youth
- Hispanic/Latinx youth
- Black nH/nL youth
- American Indian/Alaska Native youth
- Youth who speak a language other than English

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. 2) Data for those who identified as "queer" was suppressed due to small numbers; 3) "nH/nL"=non-Hispanic/non-Latinx; 4) "American Indian/Alaskan Native" includes Hispanic/Latinx; 5) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group (REF); 6) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.



# YOUTH MENTAL HEALTH

# IMPACT ON YOUTH MENTAL HEALTH

Almost half of all youth in MA (48%) report feeling sad or hopeless almost every day for 2 weeks or more in a row that they stopped doing some usual activities.

This is 21% percent higher than the Youth Risk Behavior Survey (MA YRBS: 27% in 2017)



78% of youth of transgender experience report feeling sad or hopeless every day for 2+ weeks, as well 83% of Non-binary youth and 84% of queer youth



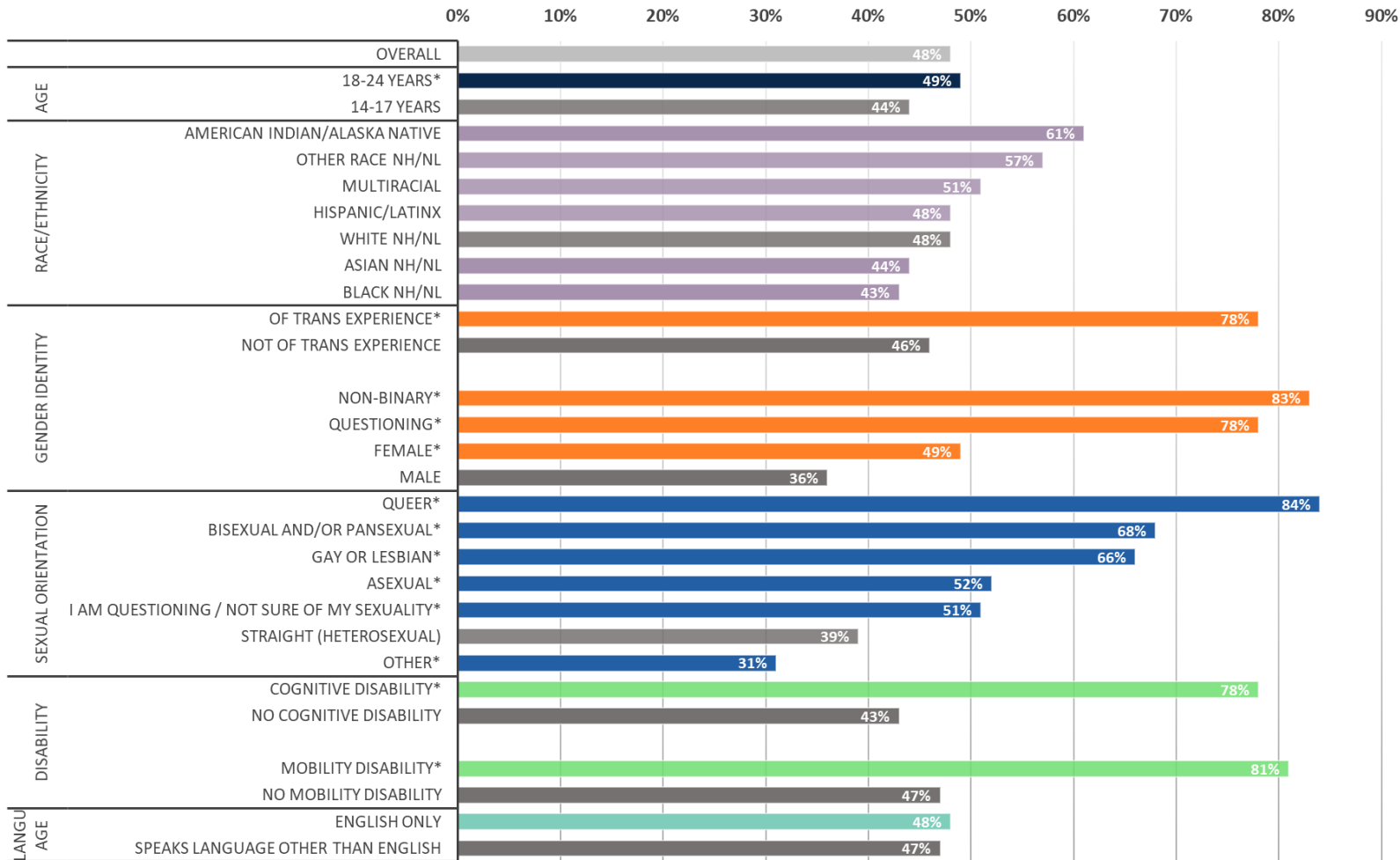
75% of youth with any disability report feeling sad or hopeless every day for 2+ weeks



Over half (55%) of working youth report feeling sad or hopeless every day for 2+ weeks

# IMPACT ON YOUTH MENTAL HEALTH

**% MA Youth Feeling Sad or Hopeless Every Day for 2+ Weeks**



LGBQA youth, youth of trans experience, and youth with disabilities are experiencing the greatest inequities when it comes to mental health concerns during the pandemic

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. 2) "nH/nL"=non-Hispanic/non-Latinx; 4) "American Indian/Alaskan Native" includes Hispanic/Latinx; 5) \* denotes rate is significantly different (p<0.05) compared to the reference group (REF); 6) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# IMPACT ON YOUTH MENTAL HEALTH

Youth are experiencing PTSD-like reactions during COVID-19

10% of LGBQA and Youth of Trans Experience need access to suicide and crisis resources



61% of Queer youth have had 3+ PTSD reactions, 55% of Non-binary youth have had 3+ PTSD reactions, and 53% of youth of transgender experience have had 3+ PTSD reactions during COVID-19



More than 2x the amount of youth with a disability (46%) reported 3+ PTSD reactions during COVID-19, compared to youth without a disability (22%)



31% of working youth, compared to 22% of non-working youth, reported 3+ PTSD reactions during COVID-19

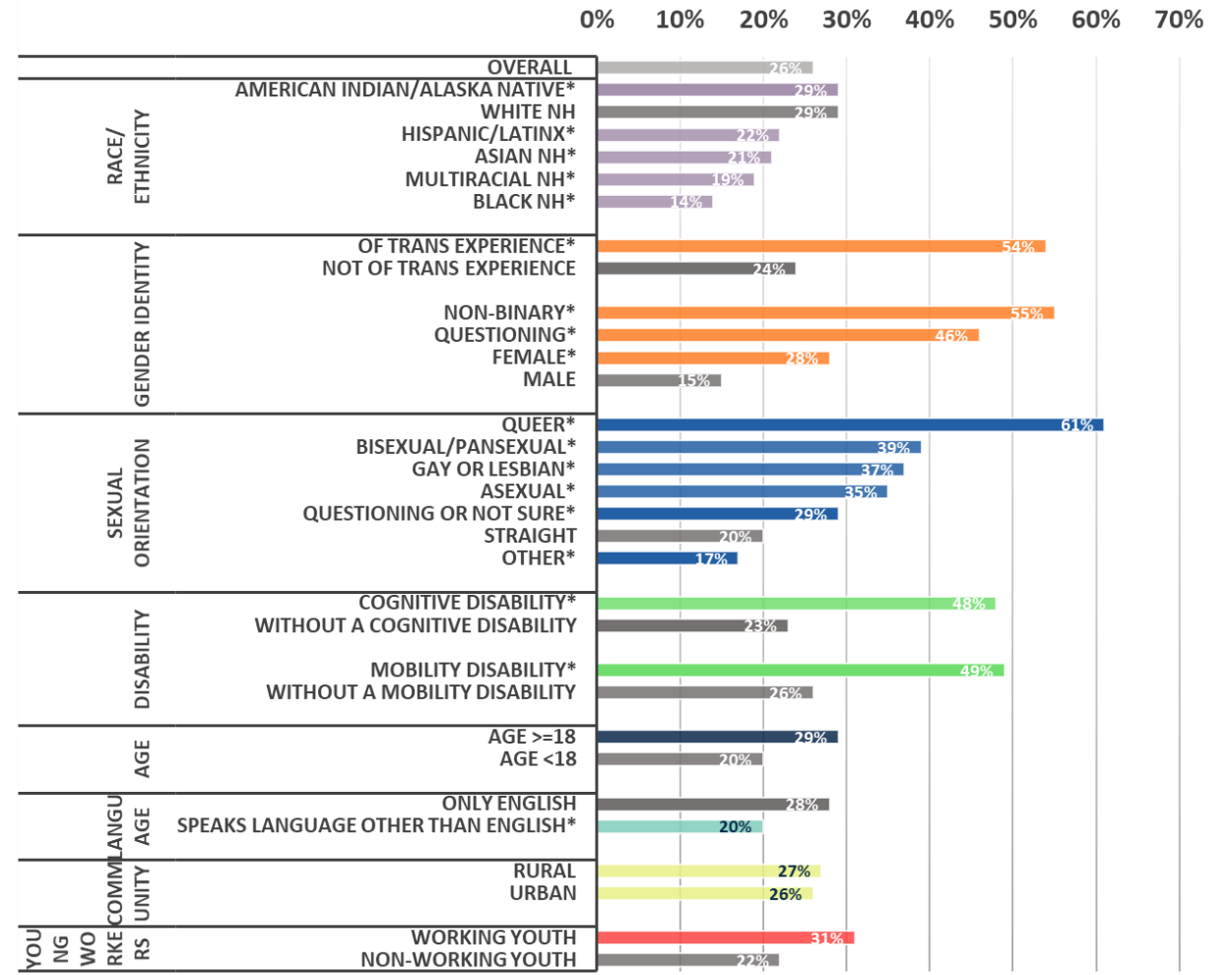
# IMPACT ON YOUTH MENTAL HEALTH

## How has the pandemic impacted all residents' mental health?

- Respondents were asked how many times they had any of the following reactions to the COVID-19 outbreak in the past month:
  - Having nightmares or thinking about it when you didn't want to
  - Going out of your way to avoid situations
  - Constantly being on guard, watchful, or easily startled
  - Feeling numb or detached
  - Feeling guilty or unable to stop blaming yourself

\*This question was adapted from "Primary Care PTSD Screen for DSM-5 (PC-PTSD-5)"  
 Reference: Prins, A., Bovin, M. J., Kimerling, R., Kaloupek, D. G, Marx, B. P., Pless Kaiser, A., & Schnurr, P. P. (2015). Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) [Measurement instrument]. Available from <https://www.ptsd.va.gov>

MA Youth who have 3+ PTSD reactions during COVID-19



\* denotes statistically significant findings

# IMPACT ON YOUTH MENTAL HEALTH

Youth need resources to improve their mental health and wellbeing

Among youth who reported feeling sad or hopeless every day for 2+ weeks or more, at least 1 in 3 youth:



Need information on how to access a therapist (35% of youth)



Need access to in person individual or group therapy (35% of youth)



Need an application on a mobile phone or tablet for mental health (33% of youth)

# IMPACT ON YOUTH MENTAL HEALTH

Youth who experienced the highest inequities during the COVID-19 pandemic are most in need of resources to improve their mental health and wellbeing

Youth who need information on how to access a therapist:

- ✓ 49% of vision impaired youth
- ✓ 40% of gay or lesbian youth



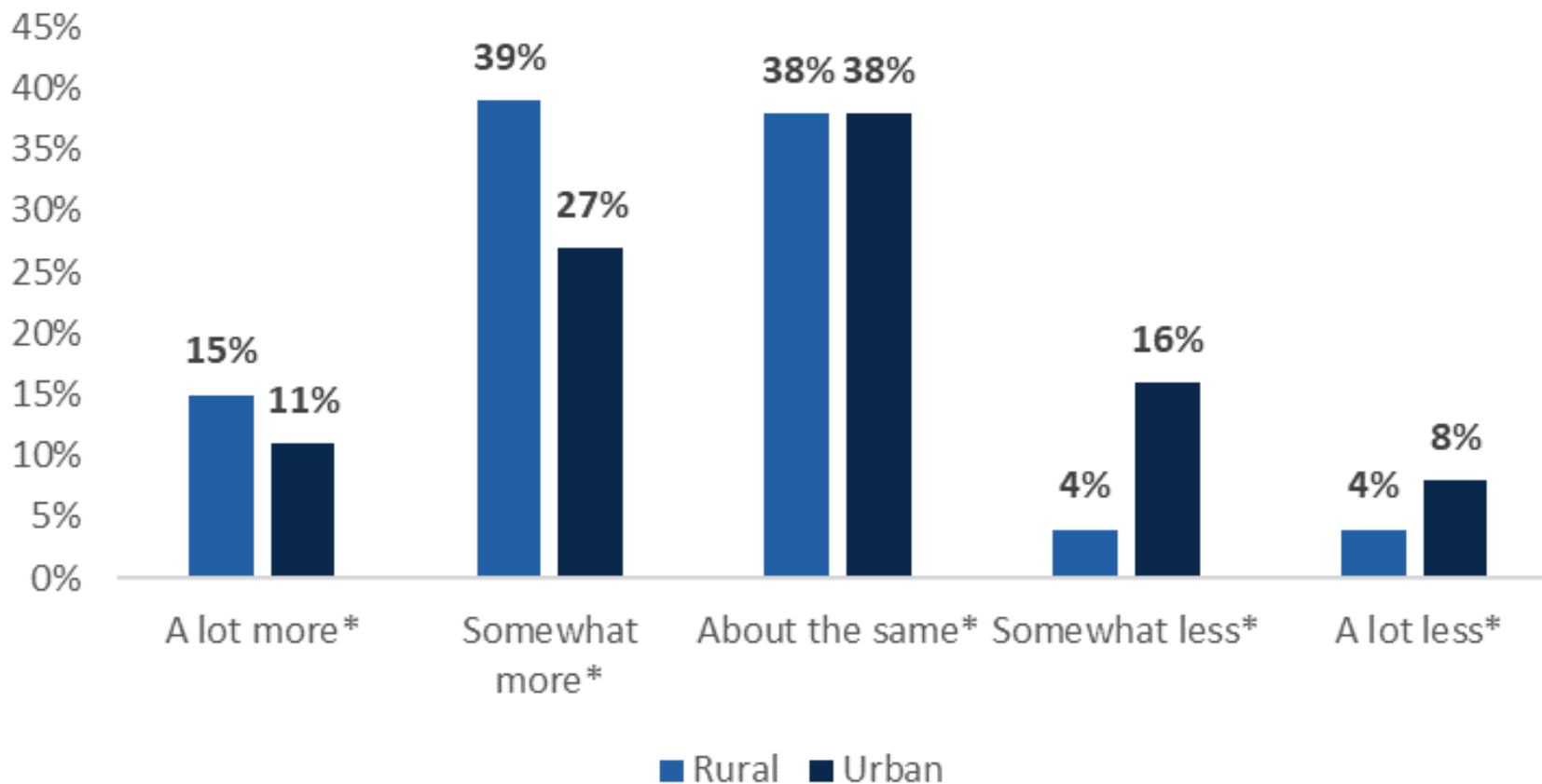
Asian nH/nL youth (35%) were **significantly more likely to request information on how to access a therapist** compared to white nH/nL youth (28%)



# YOUTH SUBSTANCE USE

# CHANGES IN SUBSTANCE USE

## Changes in Youth Substance Use, Rural v. Urban



Youth living in rural areas were significantly more likely to report more substance use since the pandemic began, compared to youth living in urban areas

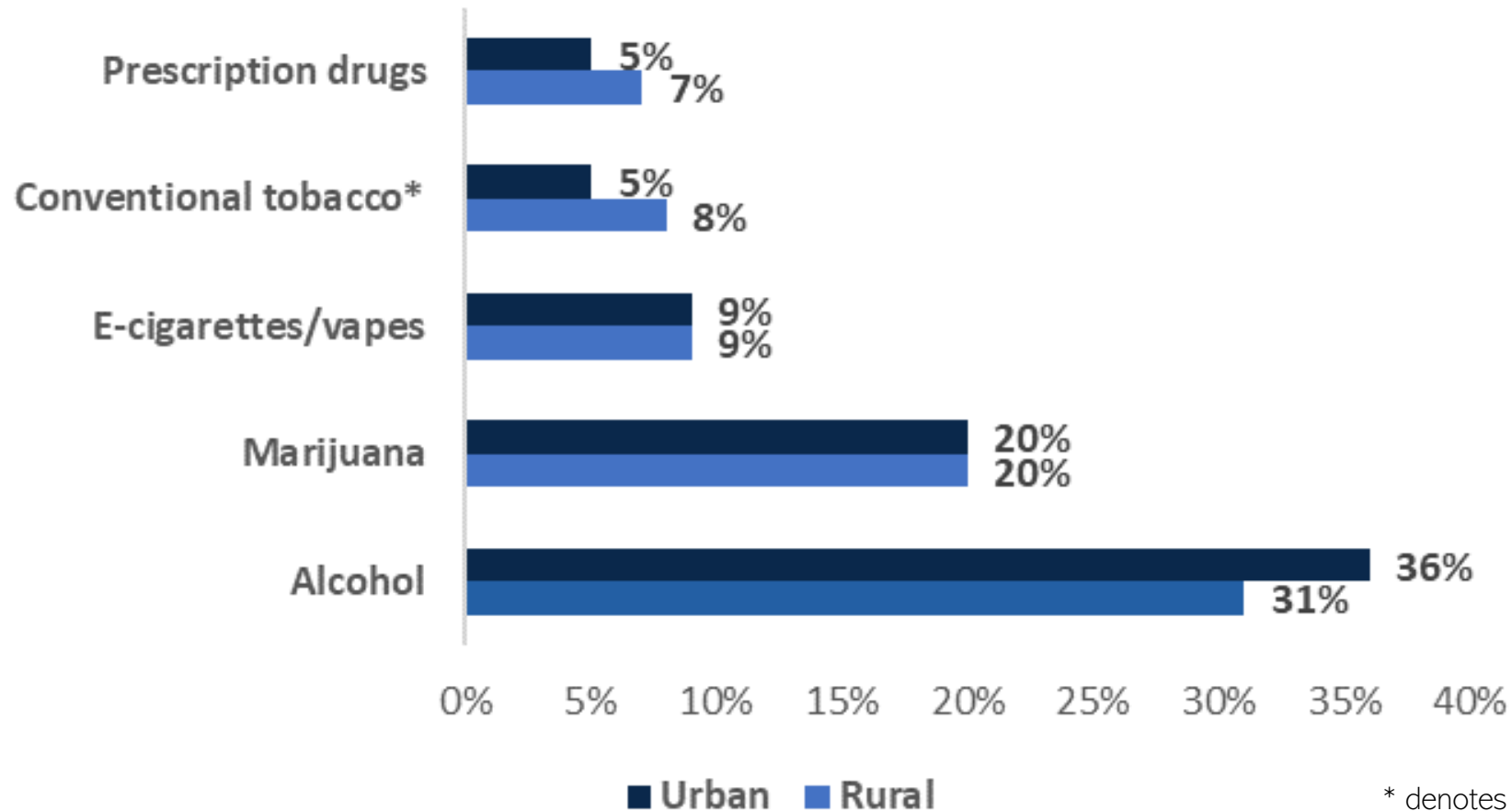
Youth living in urban areas were significantly more likely to report less substance use compared to youth living in rural areas

The most requested resources youth need right now are in person therapy\* (14% of youth living in rural areas and 7% of youth living in urban areas) and peer support\* (9% of youth living in rural areas and 3% of youth living in urban areas)

\* denotes statistically significant findings

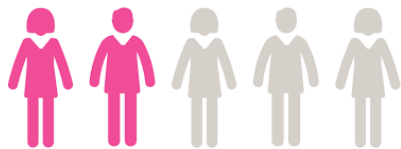
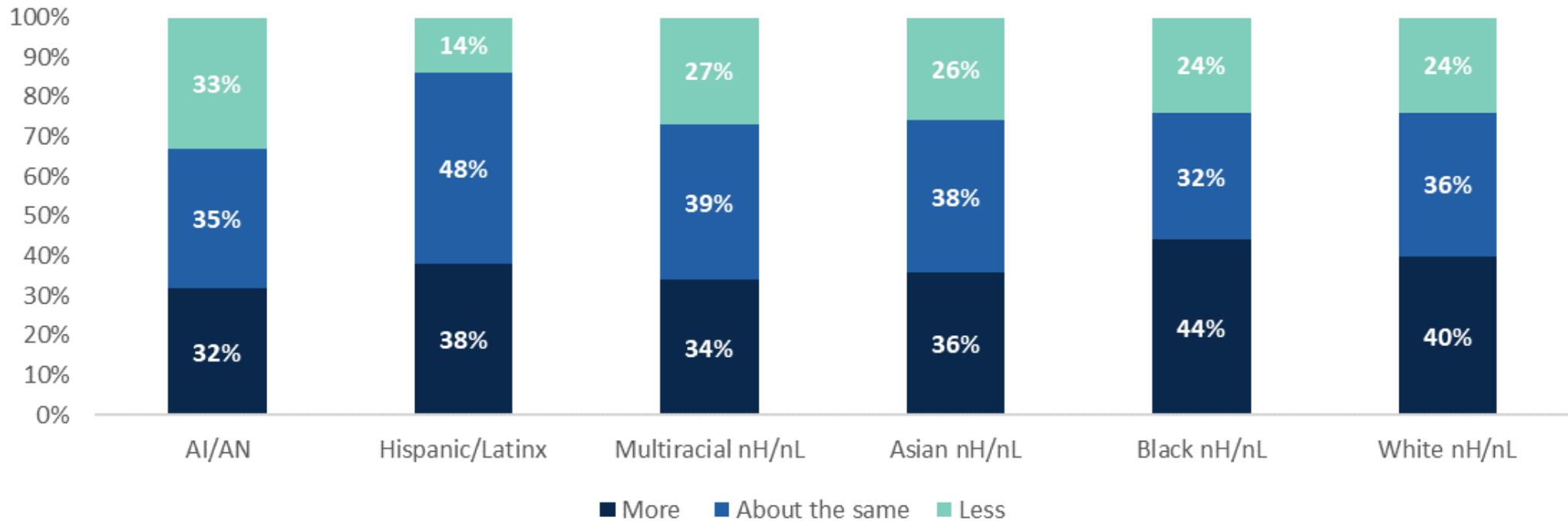
# TYPES OF SUBSTANCES USED

Types of Substances Used by Youth,  
Urban v. Rural



# CHANGES IN SUBSTANCE USE

## Changes in Youth Substance Use during COVID-19, by Race/Ethnicity



More than 2 in 5 (44%) of Black nH/nL youth report using more substances during the COVID-19 pandemic began

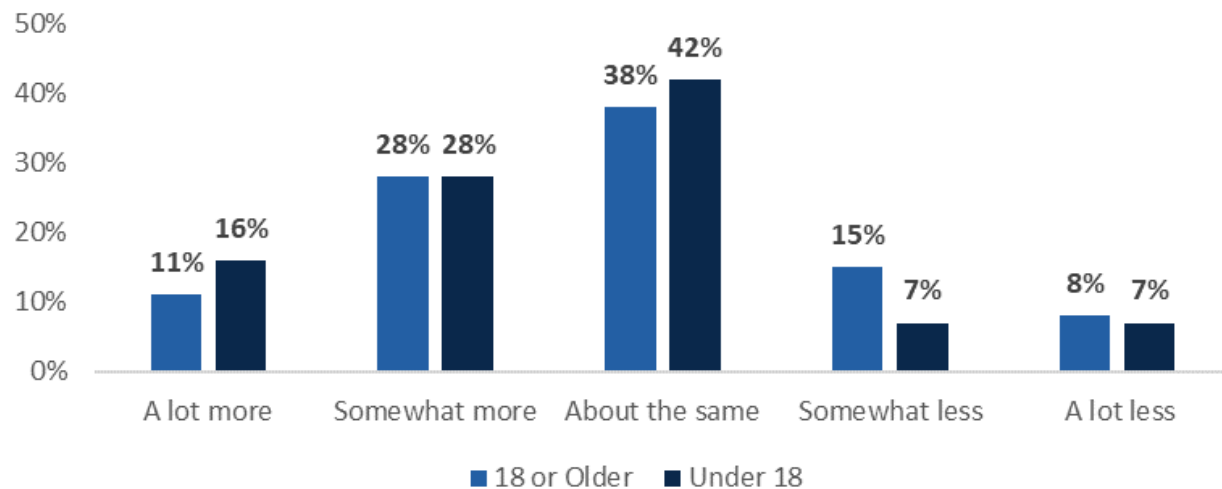


Hispanic/Latinx youth are reporting 2x a lot more substance (17%) use than AI/AN youth (8%), Multiracial nH/nL youth (8%), and Black nH/nL youth (8%)

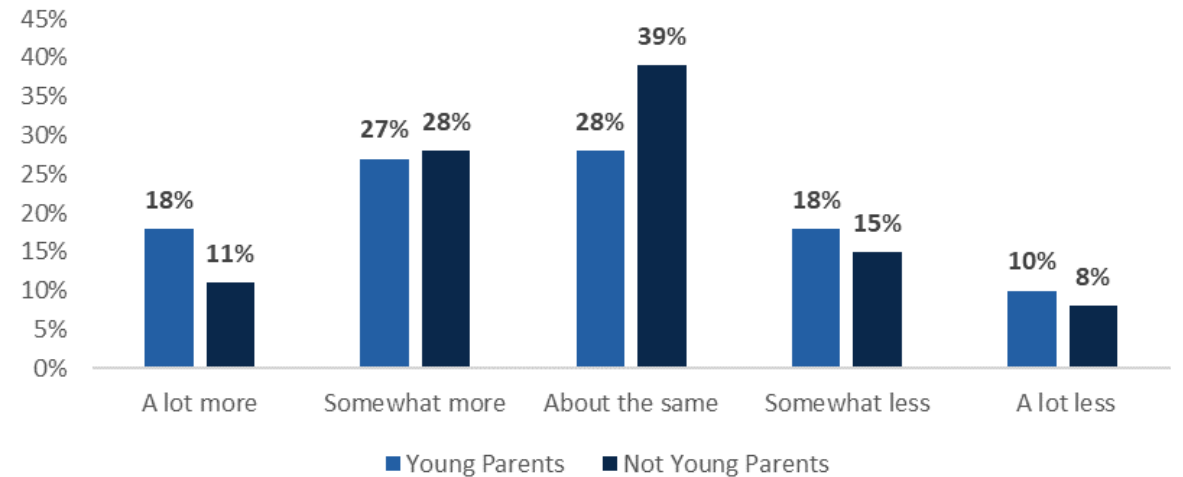
# CHANGES IN SUBSTANCE USE

Older youth (age 18 and older) report using more substances compared to younger youth (under 18 years old)

Changes in Youth Substance Use during COVID-19, by age group



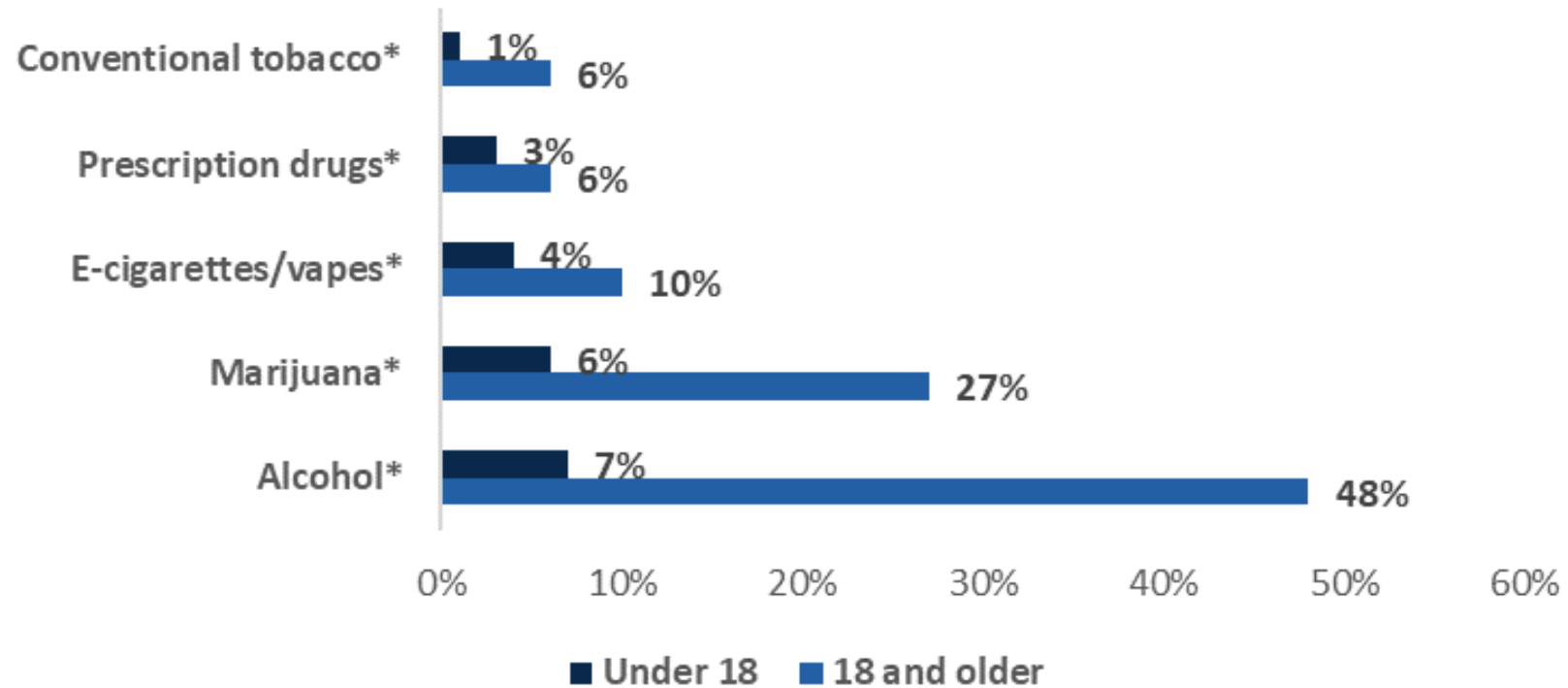
Changes in Youth Substance Use during COVID-19, by youth parenting status



Young parents report using more substances than youth who are not parenting

# TYPES OF SUBSTANCES USED

Types of Substances Used by Youth,  
<18 v 18 +



38% of youth 18 and older and 83% of youth under 18 did not report using substances in the past 30 days\*

\* denotes statistically significant findings

# KEY TAKEAWAYS: YOUTH

"Solutions" to the pandemic have not addressed the experiences and/or needs of youth.

The consequences are felt acutely and in lasting ways:

- Youth are deeply concerned and have been significantly impacted by the pandemic, especially youth of color, LGBTQA youth, youth with disabilities, and young parents.
- Many youth are facing early parentification and are concerned about providing the basic needs for their families.
- The pandemic has had a significant impact on the mental health of youth.



# YOUTH EDUCATION & EMPLOYMENT

# FRAMING MATTERS


Despite the common belief that youth are not impacted or worried about COVID-19, the data shows us that youth are deeply concerned and have been significantly impacted by the pandemic, especially youth of color, LGBTQA youth, youth with disabilities, and young parents.

- Work can be protective or harmful for all workers. Before and during the pandemic, youth worked in industries that required them to work outside the home, which was a risk factor for exposure to COVID-19. Risk factors related to work and COVID-19 were disproportionately spread among specific groups of young workers.

# FRAMING MATTERS

- Youth may not be the first group we think of when considering the impacts of the pandemic, our survey responses suggest that they have had to adapt to a changing educational system while being an essential part of the workforce. To understand the immediate and lasting impact of the pandemic on youth, we must consider both.
- Every year, the summer is an essential transition time for youth, but summer 2021 is especially important. As we reopen and plan for the future, we must make sure youth have access to vaccines and ensure safe spaces for youth, both as students and as workers.

# COVID-19 AND SCHOOL

 1 in 3 surveyed youth reported worrying about continuing their education last fall (2020-21)

Certain groups were even more likely to report being worried about continuing their education.

- 58% of youth with a self-care/independent living disability
- 56% of youth with a cognitive disability
- 51% of youth of transgender experience
- 46% of non-binary youth
- 44% of Hispanic/Latinx youth
- 42% of AI/AN youth
- 40% of Black, nH/nL youth
- 40% of Multiracial, nH/nL youth

These youth were **also** more likely to report being worried about:

Getting supports needed to engage in school, particularly remotely, such as:



Getting help with homework



Accessing an affordable internet connection



Accessing computers, laptops, or tablets

Economic stressors in their family that may impact their ability to fully engage in their education, such as:



Finding a job for themselves

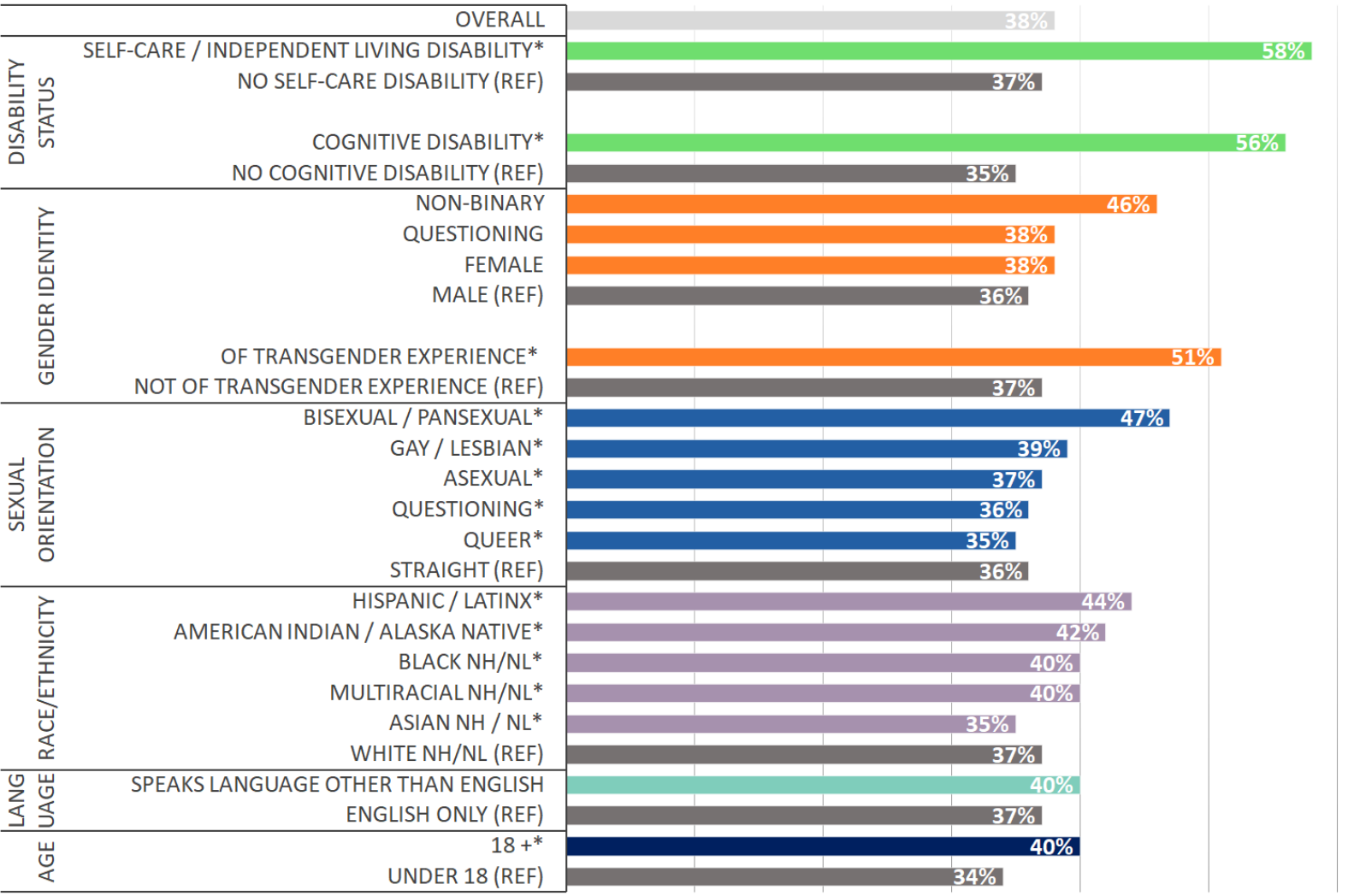


Someone in their family keeping a job or finding a job

# YOUTH CONCERNS ABOUT EDUCATION

% Youth Worried about Continuing their Education in the Fall

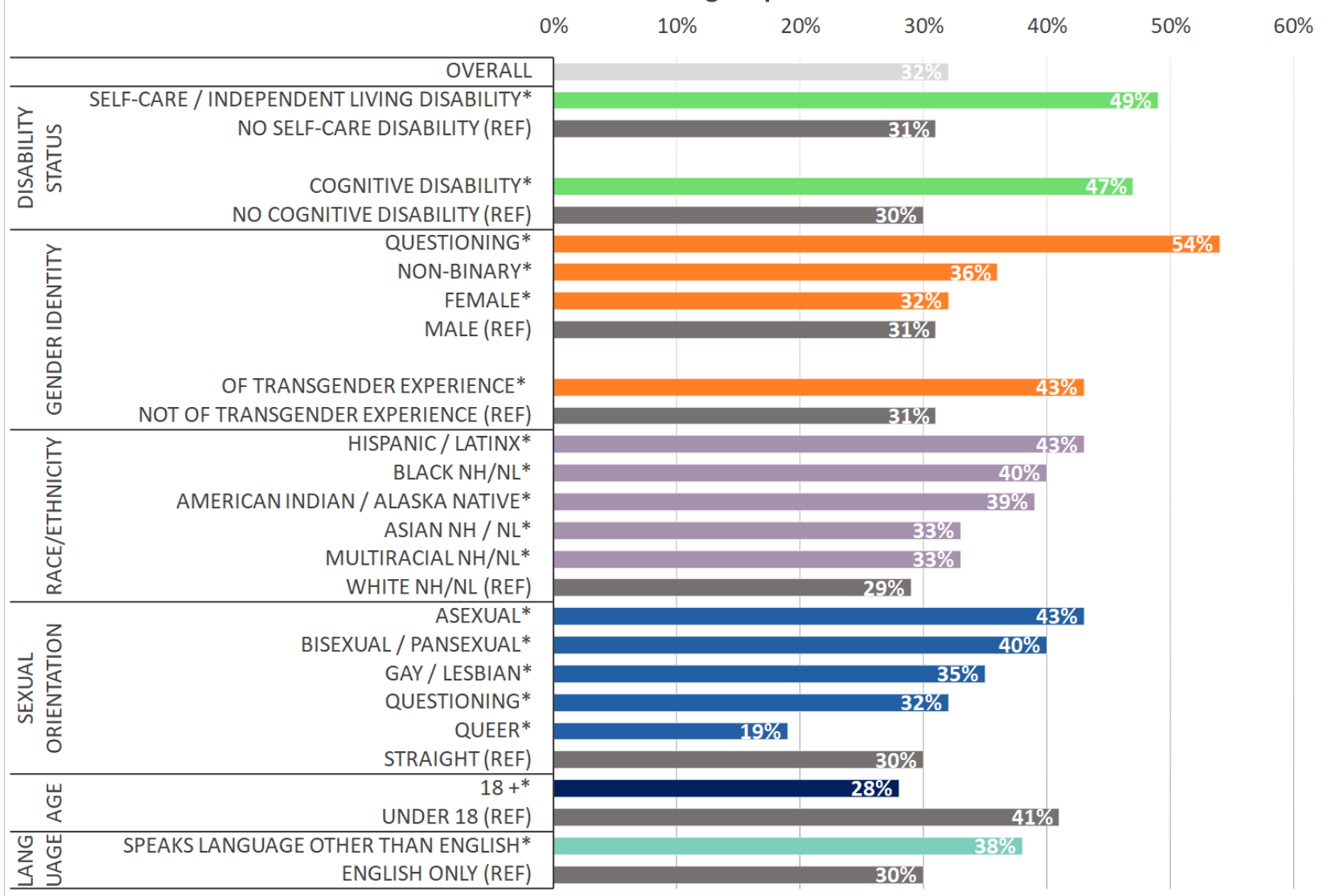
0% 10% 20% 30% 40% 50% 60%



Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# YOUTH CONCERNS ABOUT EDUCATION

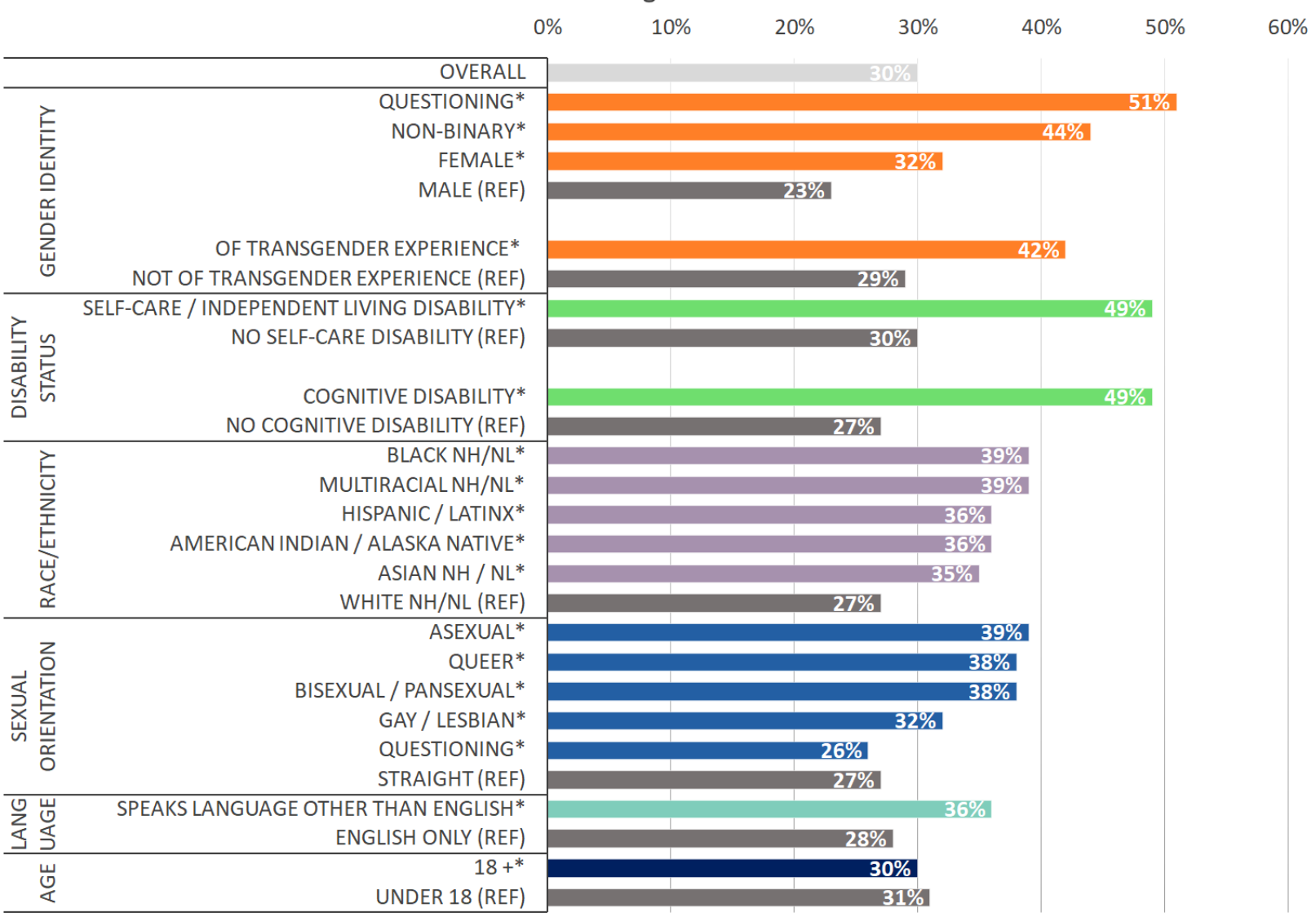
% Youth Worried about Getting Help with Homework



Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# YOUTH CONCERNS ABOUT EDUCATION

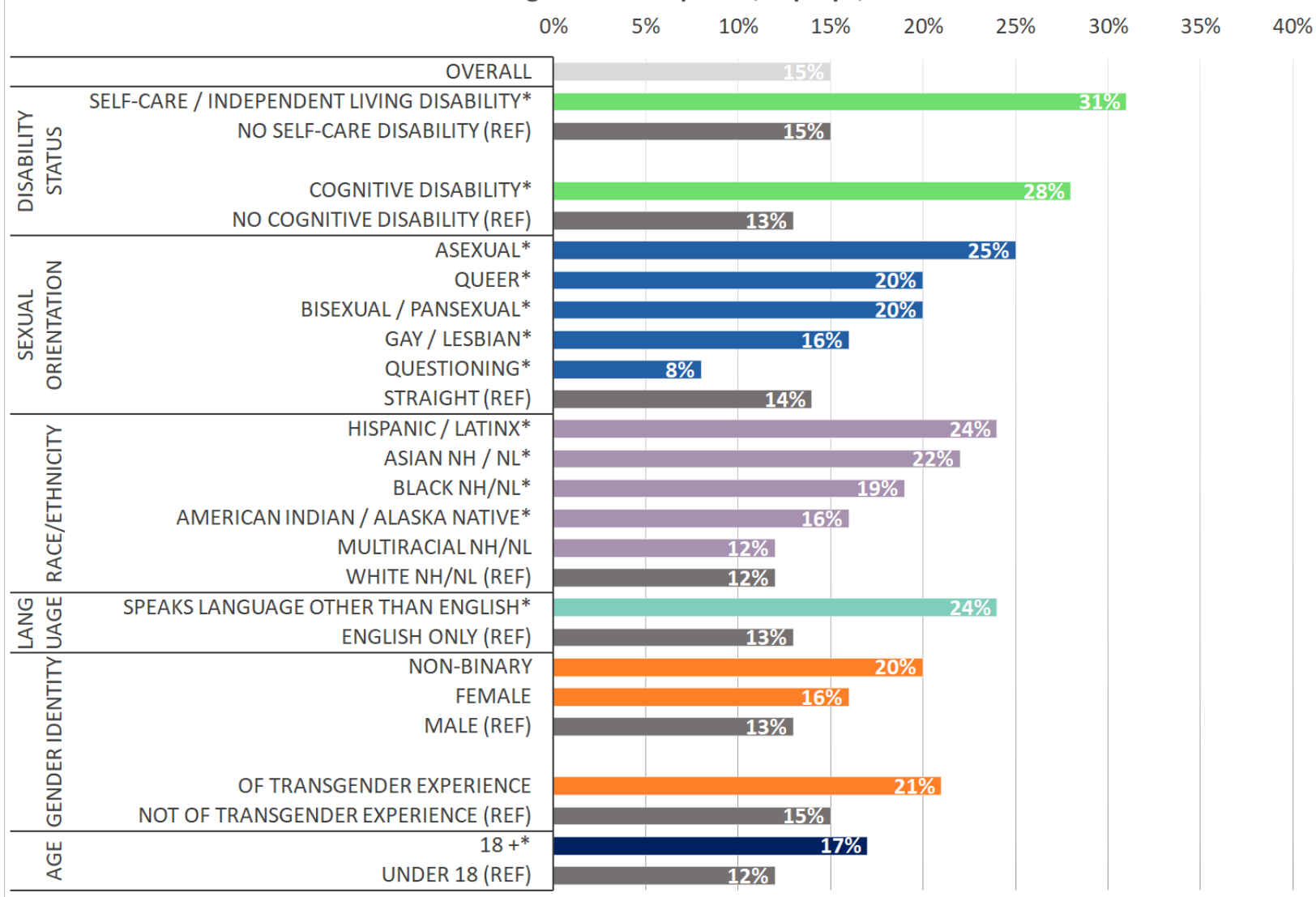
**% Youth Worried about Getting Affordable Internet Connection**



Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# YOUTH CONCERNS ABOUT EDUCATION

% Youth Worried about Getting All the Computers, Laptops, or Tablets that We Need



Surveyed youth more likely to report being very worried about getting the technological devices that they need:

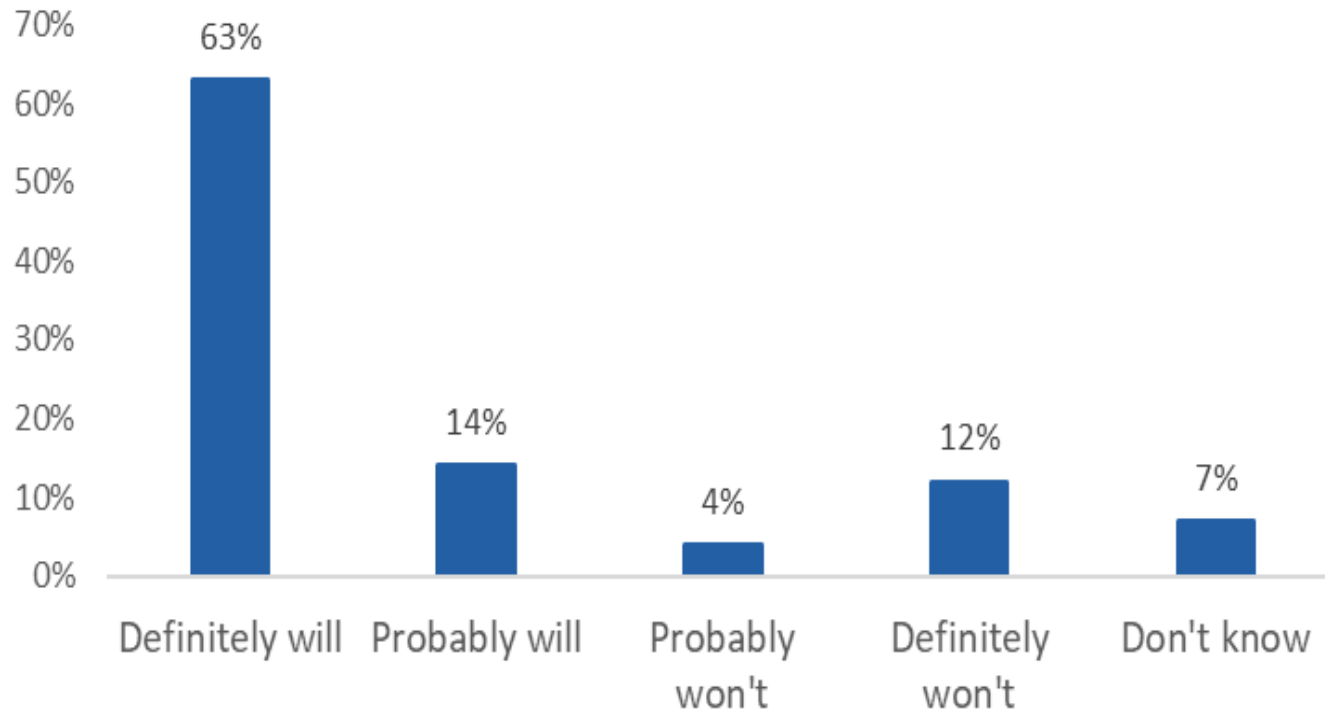
- Youth with disabilities
- Non-binary youth
- Hispanic/Latinx youth
- Black NH/NL youth
- Asian NH/NL youth
- Queer youth
- Bisexual/pansexual youth
- Youth who speak a language other than English

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# COVID AND SCHOOL

23% of surveyed youth said they definitely/probably won't or don't know if they will continue with their education.

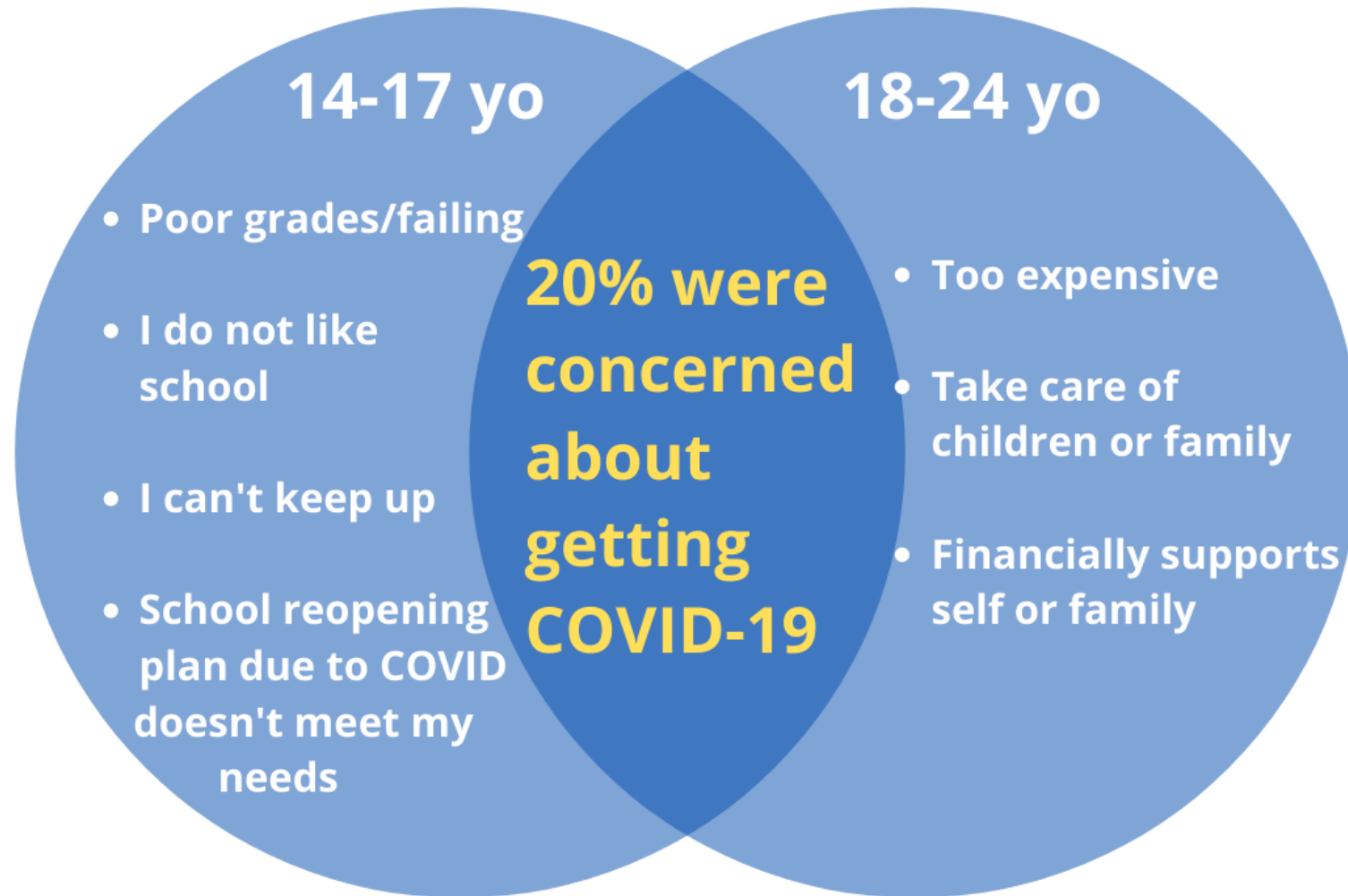
How likely is it that you will continue your education this year?



Besides reporting graduation as the reason for not continuing education, the most common reasons were:

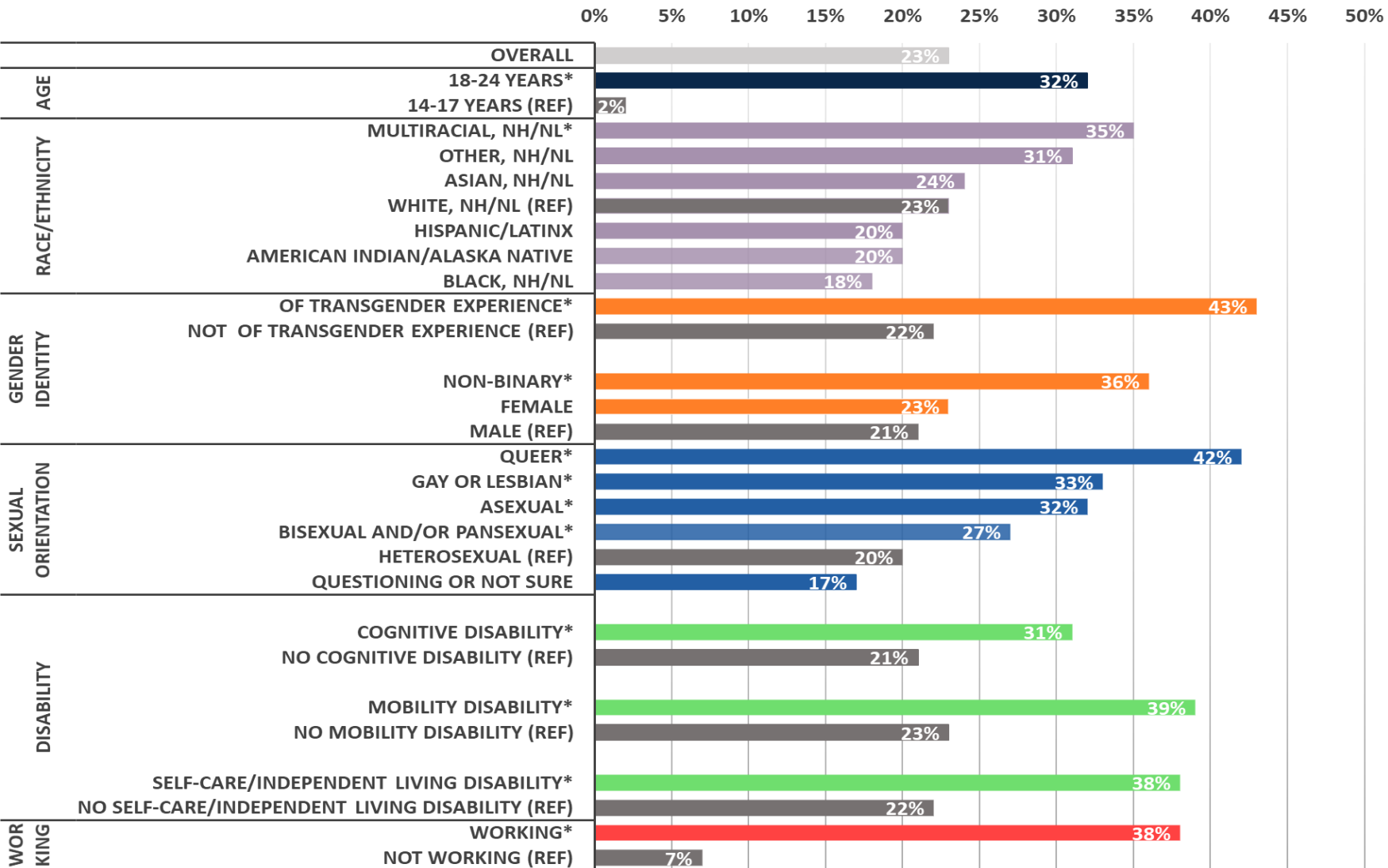
- Tuition is too expensive (28%)
- I have to financially support myself or my family (20%)
- I don't feel safe returning to school because of COVID-19 (20%)
- My school's plan for opening due to COVID-19 doesn't meet my needs (13%)

## Reasons for not continuing school in the fall



# COVID AND EDUCATION

% Youth who Definitely/Probably Won't or Don't Know if they Will Continue their Education in the Fall

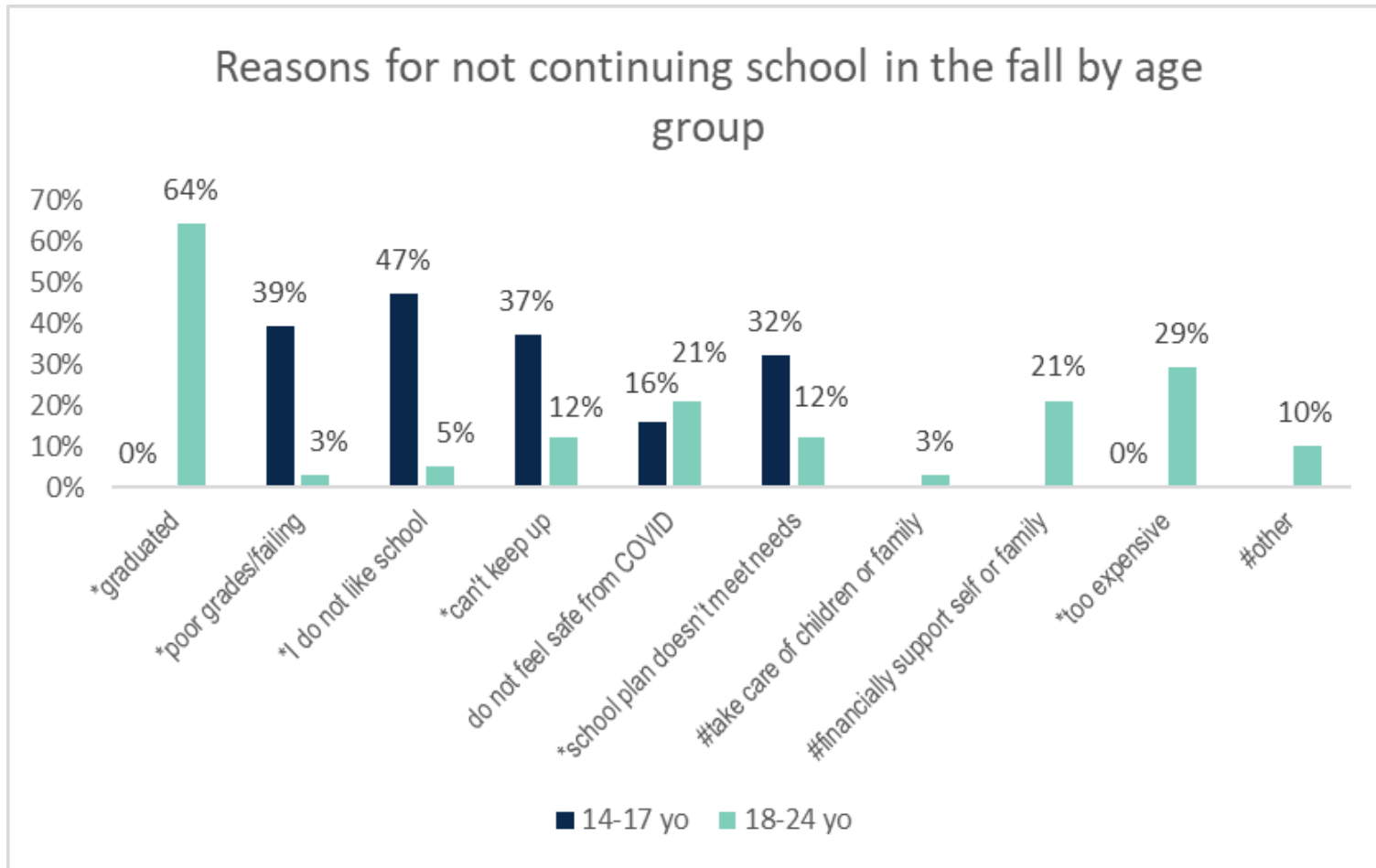


Surveyed youth more likely to report not continuing their education in the fall (2020):

- Youth over age 18
- Multiracial youth
- Youth of transgender experience
- Queer youth
- Gay or Lesbian youth
- Asexual youth
- Bisexual and/or pansexual youth
- Youth with disabilities
- Working youth

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# COVID AND EDUCATION



- Both age groups had concerns about getting COVID-19 while attending school.
- Younger youth were more likely to not continue school this year for reasons related to not liking school or bad grades.
- Older youth were more likely to not continue school year because they graduated or financial reasons.

Data notes: 1) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 2) # denotes are suppressed due to small numbers; 3) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# RESOURCES NEEDED FOR SCHOOL & WORK



9% wanted help getting a computer, tablet, or phone

- 33% of youth who are blind/vision impairment
- 19% of youth with a mobility disability
- 18% of youth with a self-care/independent living disability
- 14% of Asian, nH/nL youth
- 14% of Hispanic/Latinx youth
- 14% of Black, nH/nL youth
- 12% of youth who speak a language other than English



17% wanted a tutor to help with homework

- 49% of youth who are blind/vision impairment
- 30% of youth with a mobility disability
- 26% of youth with a self-care/independent living disability
- 24% of youth with a cognitive disability
- 23% of Hispanic/Latinx youth
- 23% of Black, nH/nL youth
- 23% of youth under age 18
- 19% of youth who speak a language other than English

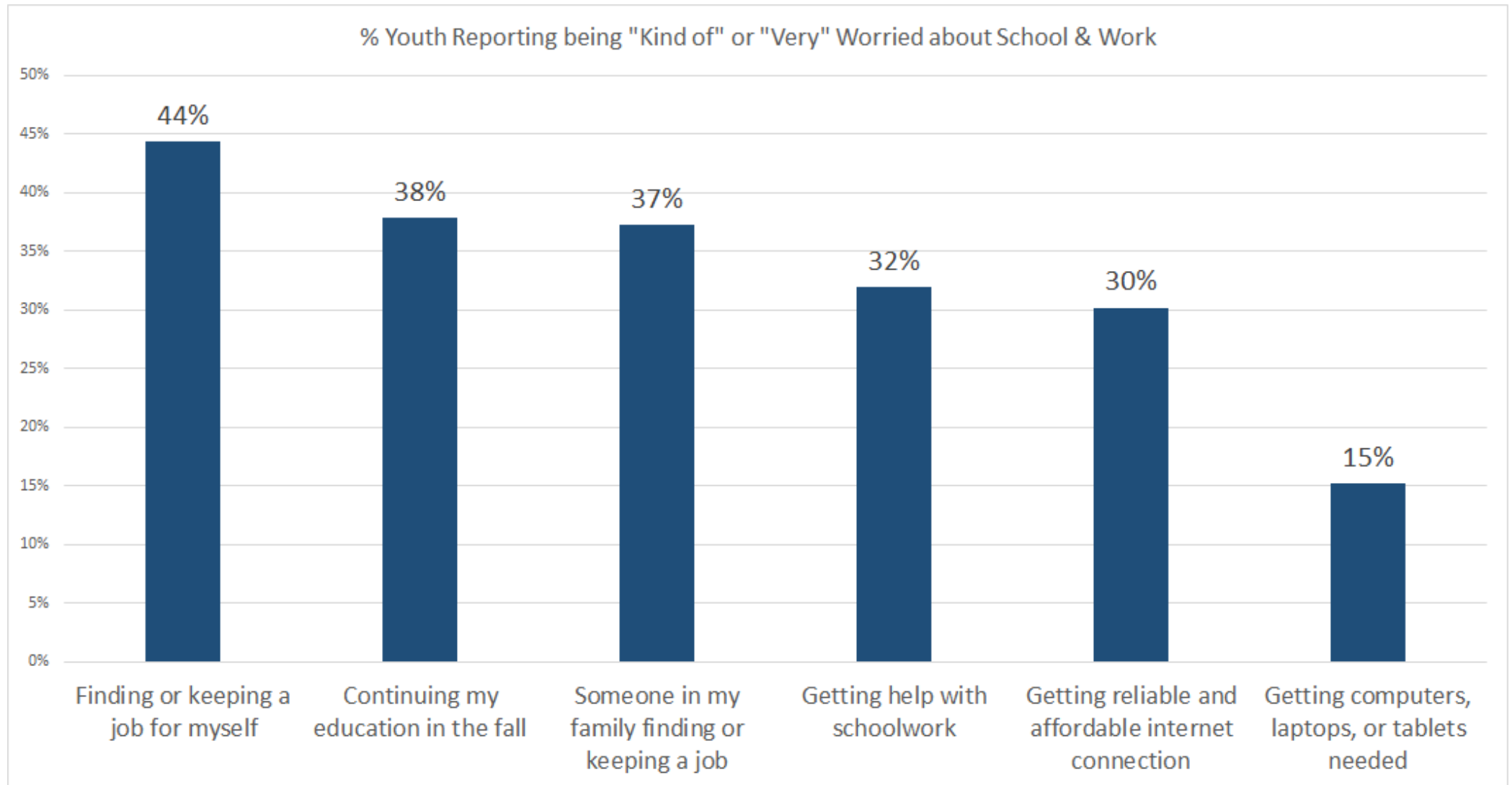


28% wanted help finding a job

- 42% of youth with a self-care/independent living disability
- 42% of AI/AN youth
- 36% of Asian, nH/nL
- 36% of Hispanic/Latinx youth
- 36% of youth who speak a language other than English
- 34% of Black, nH/nL youth
- 34% of youth with a cognitive disability

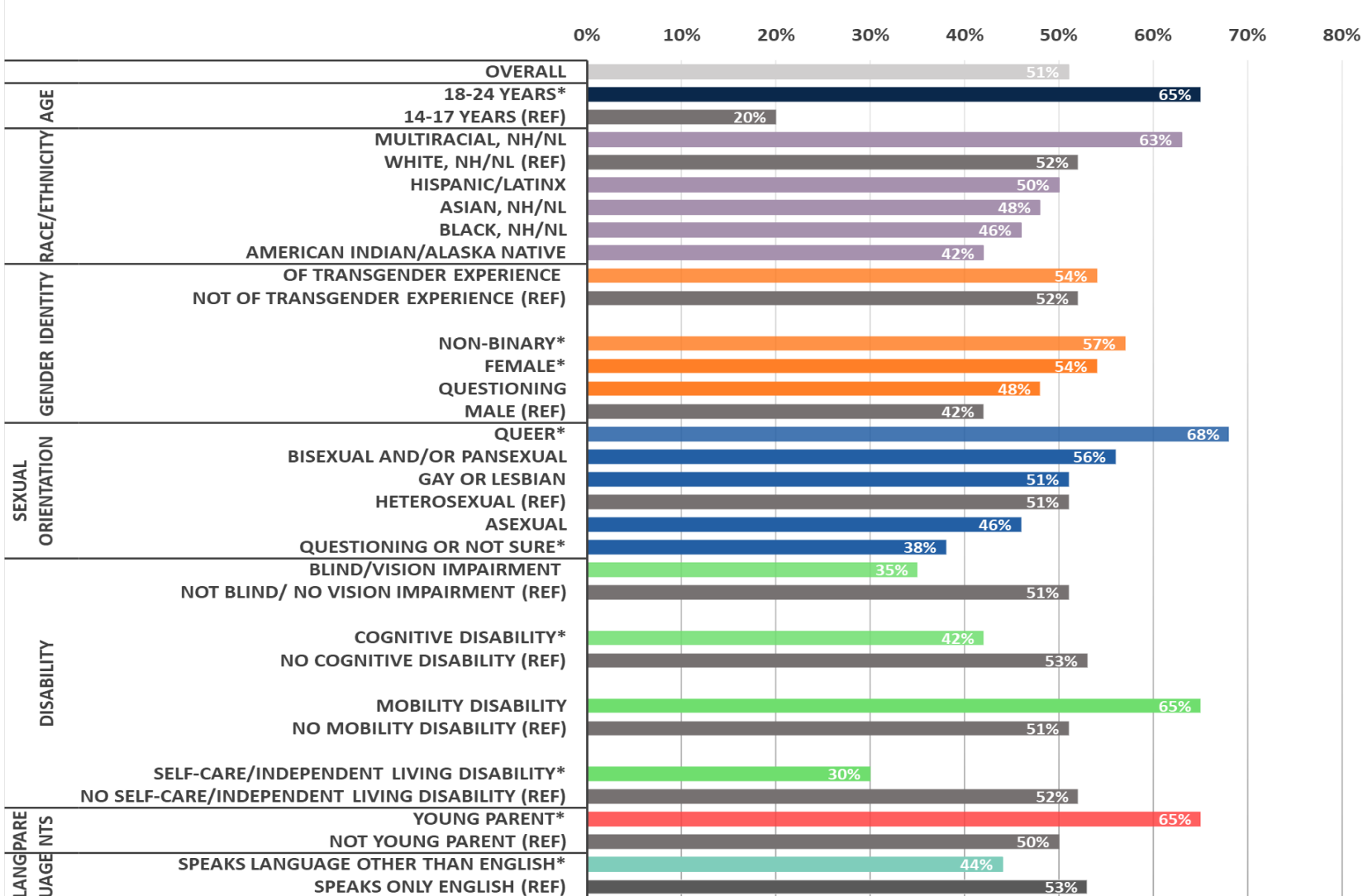
51% of youth were employed in the past year.

# YOUTH CONCERNS ABOUT WORK & SCHOOL



# YOUTH EMPLOYMENT

% Youth who were Employed in the past year



51% of surveyed youth were employed in the past year.

Populations **most likely** to be employed were:

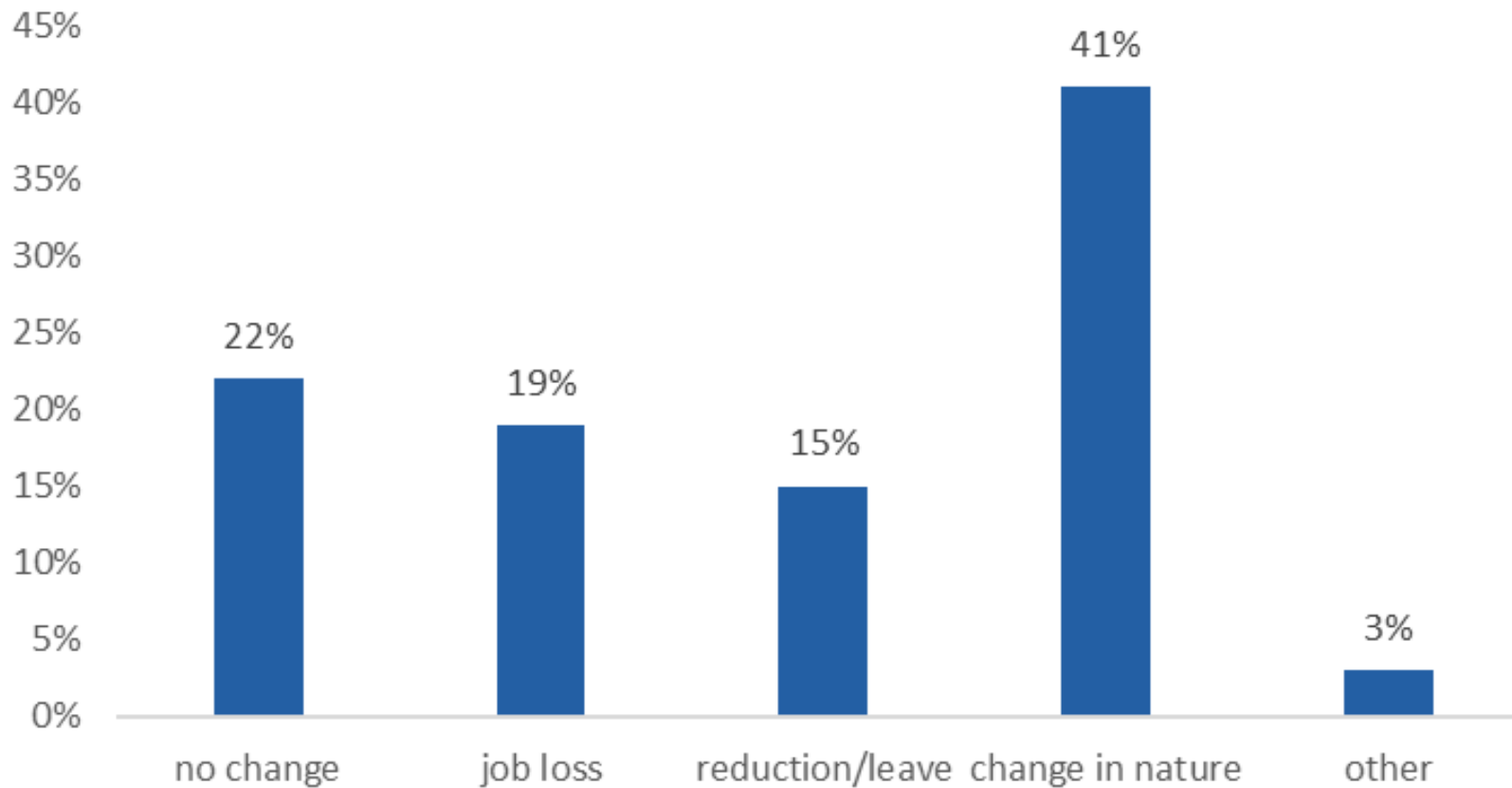
- Youth over 18
- Non-binary youth
- Females
- Queer youth
- Youth questioning their sexual identity
- Young parents
- Youth who speak English
- Youth without a cognitive disability
- Youth without a self-care disability

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# CHANGE IN NATURE OF WORK

51% of surveyed youth were employed in the past year

% youth among those employed in the past year



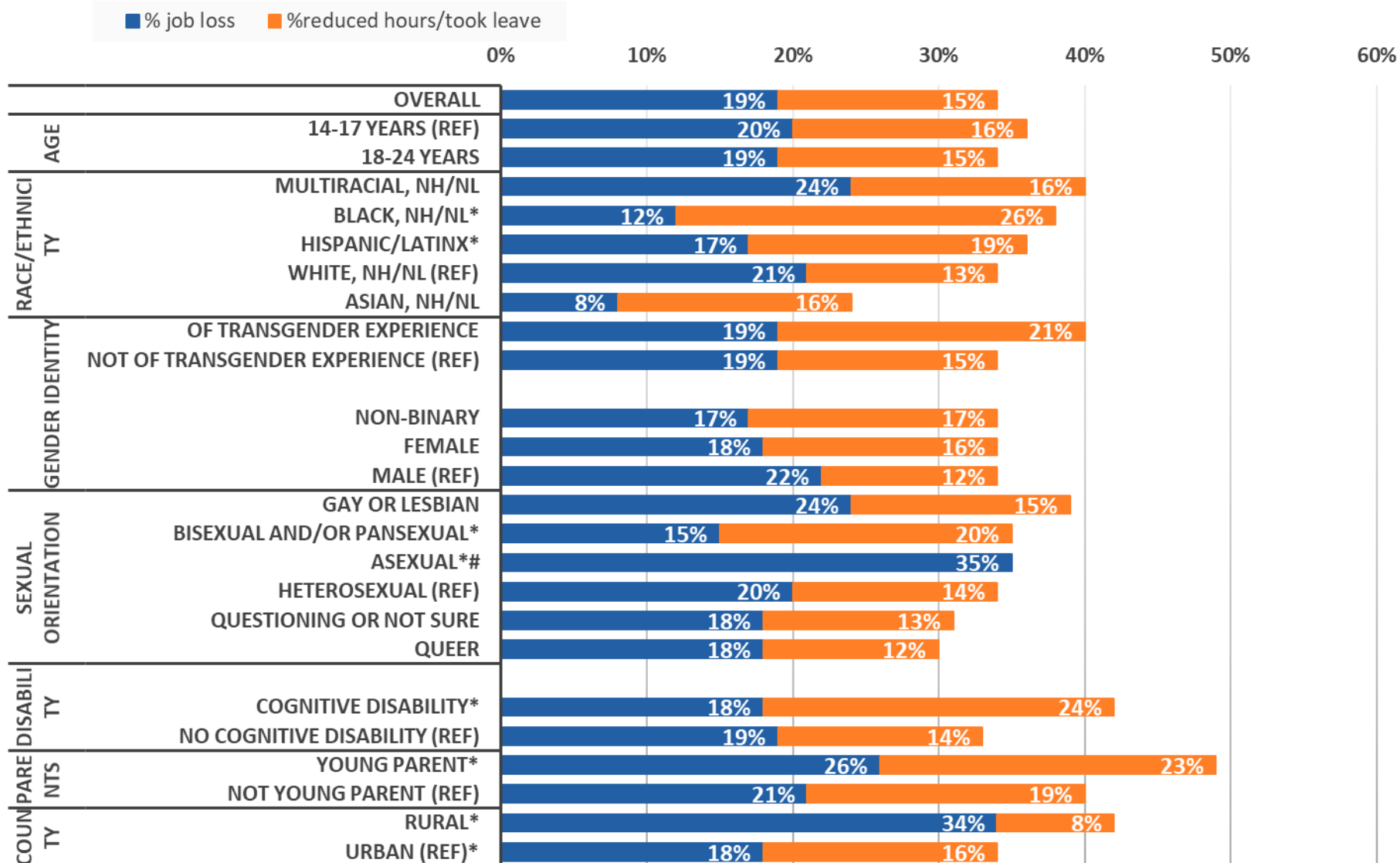
Overall, nearly 8 in 10 surveyed youth employed in the past year reported changes in their employment due to the pandemic:

1 in 3 surveyed youth reported job loss, reduced hours, or taking leave. Those **most likely** to do so were:

- Black, nH/nL
- Hispanic/Latinx
- Bisexual/Pansexual youth
- Youth with a cognitive disability
- Young parents
- Youth living in a rural area

# JOB LOSS AND REDUCED HOURS/TOOK LEAVE

% Youth Employed in the Past Year who reported Job Loss or Reduced hours/Took Leave



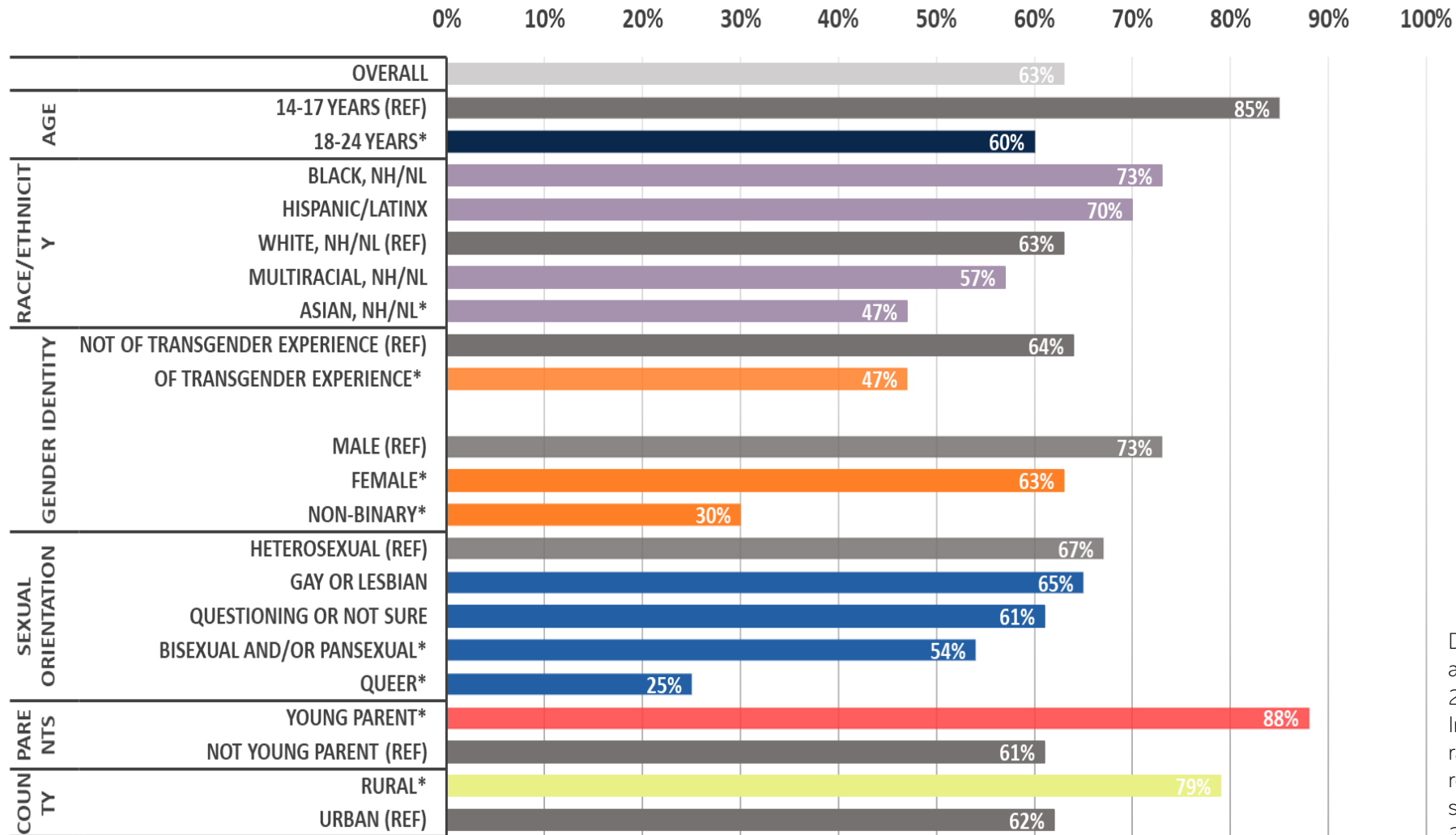
Populations **most likely** to lose their job or reduce hours/take a leave from work were:

- Black, nH/nL
- Hispanic/Latinx
- Bisexual/Pansexual youth
- Youth with a cognitive disability
- Young parents
- Youth living in a rural area

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) \* denotes rate is significantly different (p<0.05) compared to the reference group; 4) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# WORKING OUTSIDE THE HOME

% Youth who Work Outside the Home among those Employed



63% of surveyed youth worked outside the home.

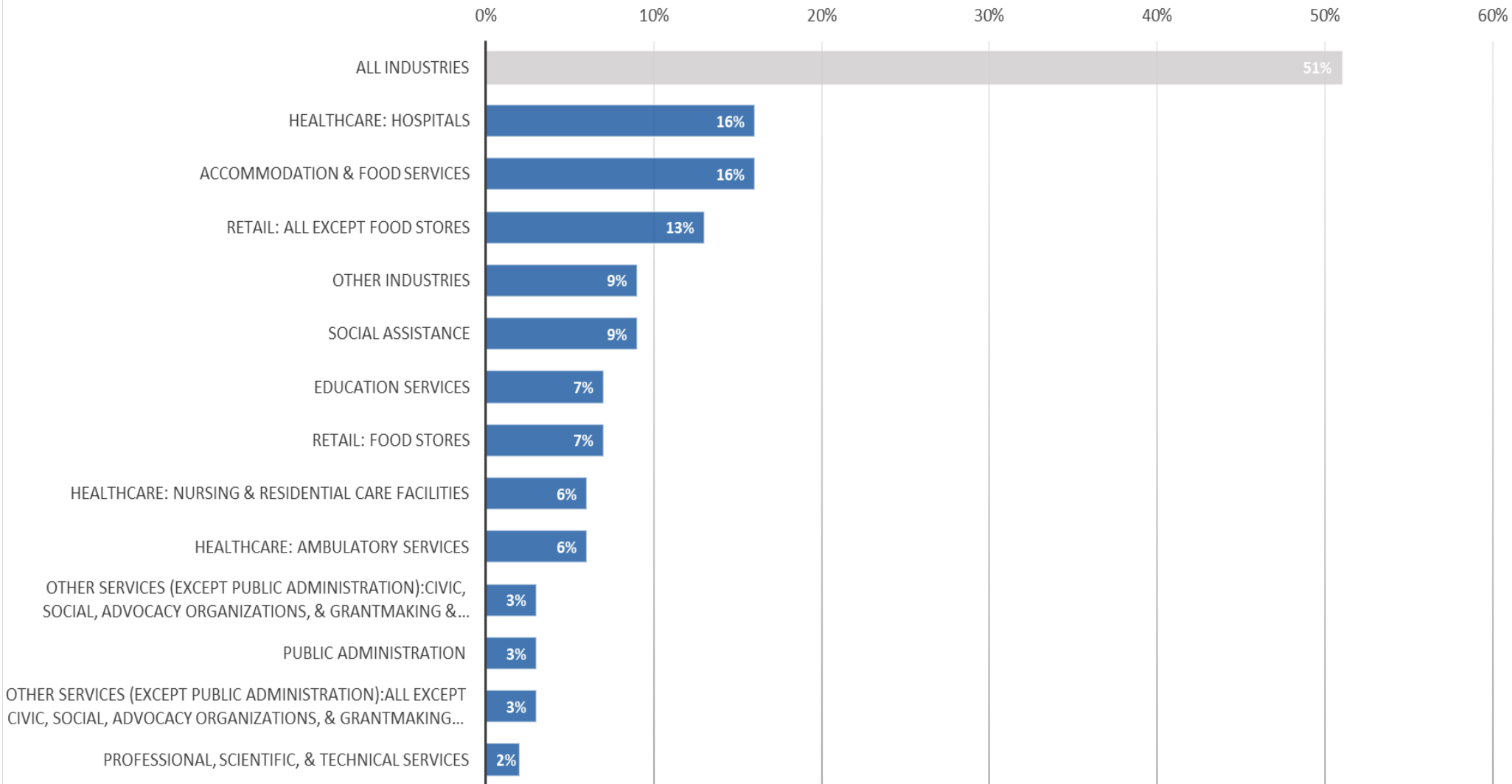
Populations **most likely** to work outside the home were:

- Youth younger than 18
- Youth not of transgender experience
- Males
- Young Parents
- Youth living in rural areas

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# WORKING OUTSIDE THE HOME

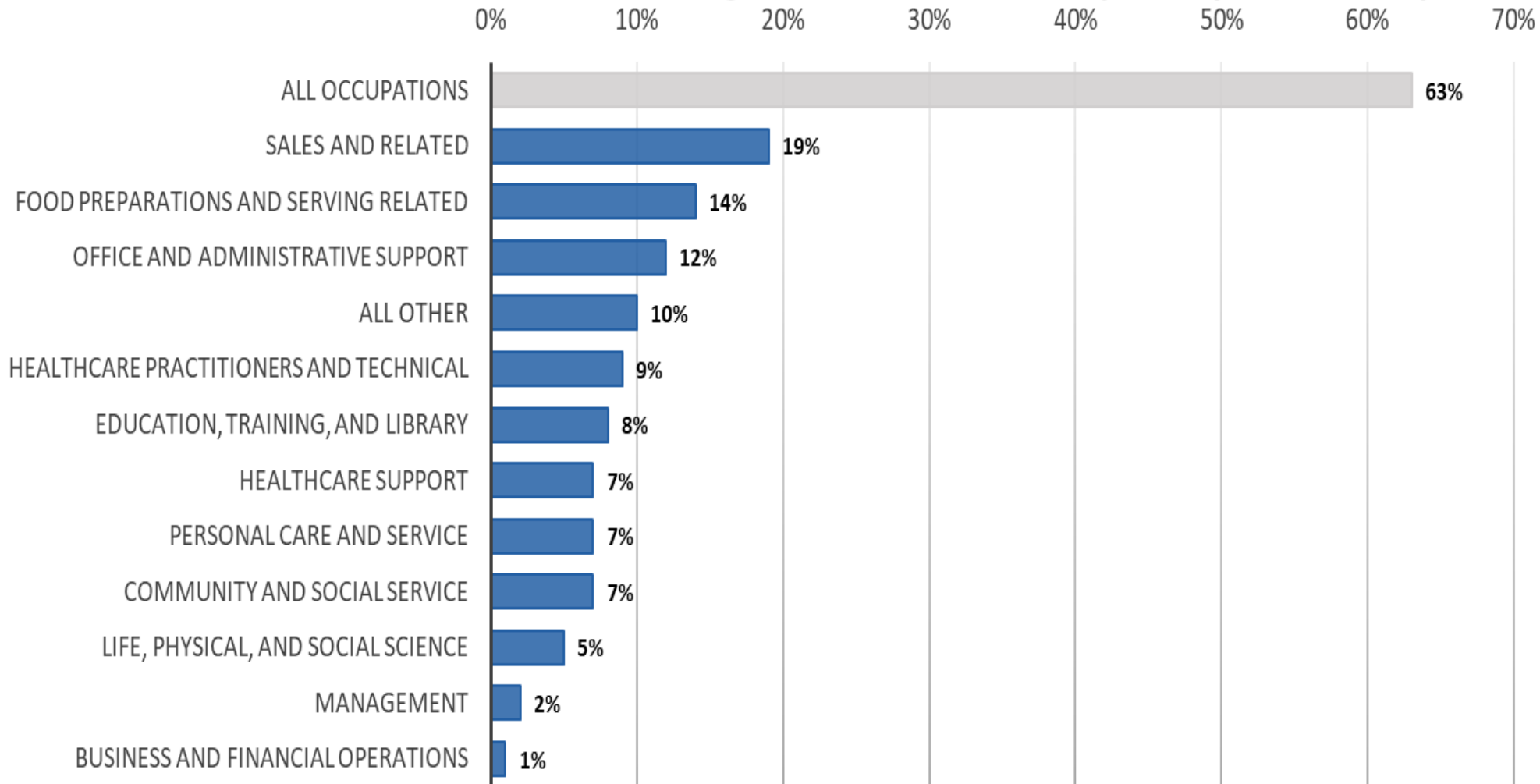
## Percent of Youth Working Outside the Home by Industry Group



Data notes: 1) Industry groups are based on Bureau of Census Industry Codes (CIC); 2) retail food stores = grocery stores, specialty food stores, gas stations [includes those with convenient stores]; 3) "other industries" = Agriculture, Forestry, Fishing & Hunting; Utilities; Construction; Manufacturing; Wholesale Trade; Transportation & Warehousing; Information; Finance & Insurance; Real Estate & Rental & Leasing; Admin. & Support & Waste Mgmt & Remed. Svcs; Arts, Entertainment, & Recreation; 4) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# WORKING OUTSIDE THE HOME

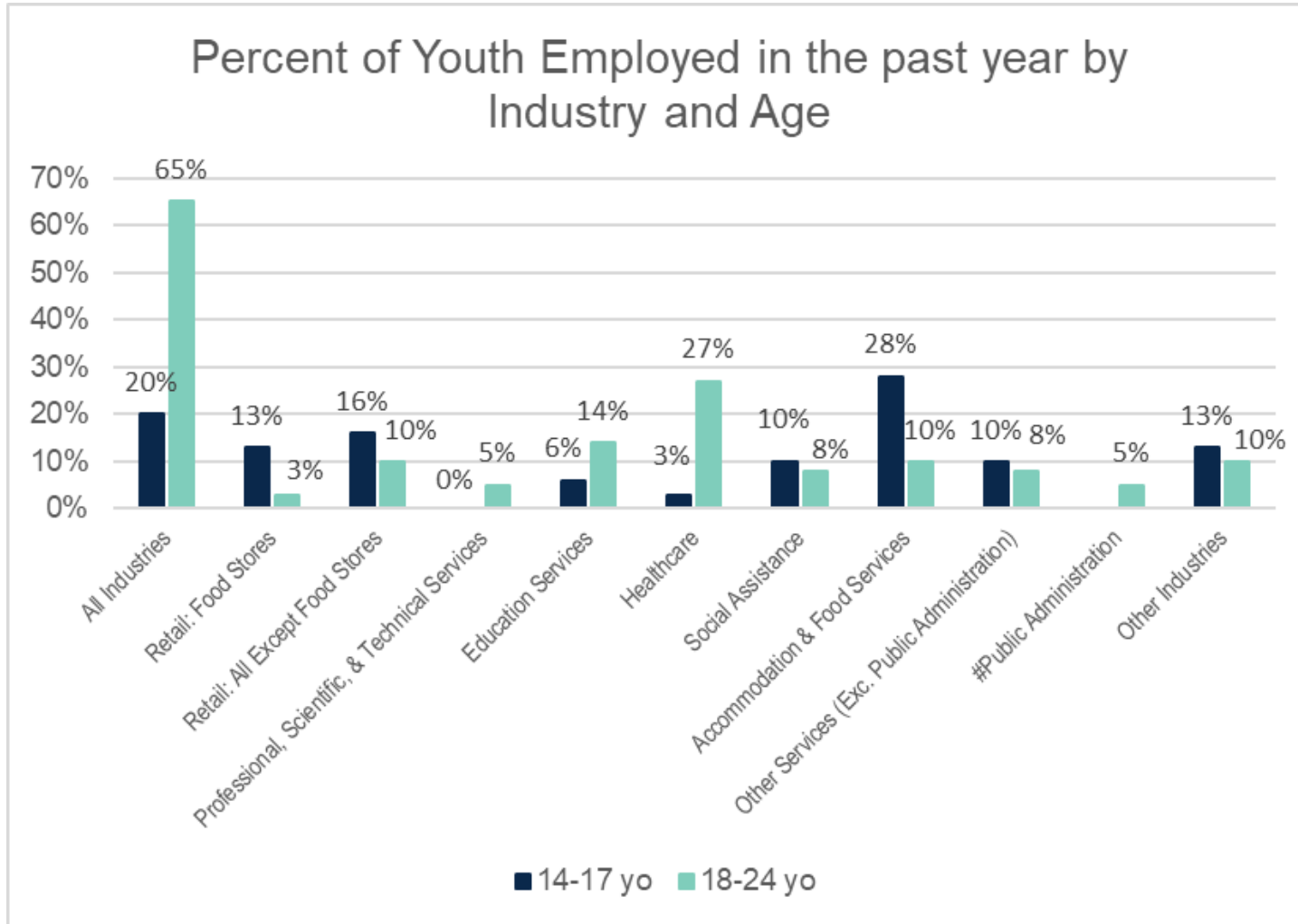
## Percent of Youth Working Outside the Home by Occupation Group



Data notes: 1) occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "other occupations" = Computer & Mathematical; Architecture & Engineering; Legal; Arts, Design, Entertainment, Sports, & Media; Protective Service; Building & Grounds Cleaning & Maintenance; Farming, Fishing, & Forestry; Construction & Extraction; Installation, Maintenance, & Repair; Production; Transportation & Material Moving; 3) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# WHERE ARE YOUTH WORKING?

Surveyed youth worked in industries hit very hard by the pandemic



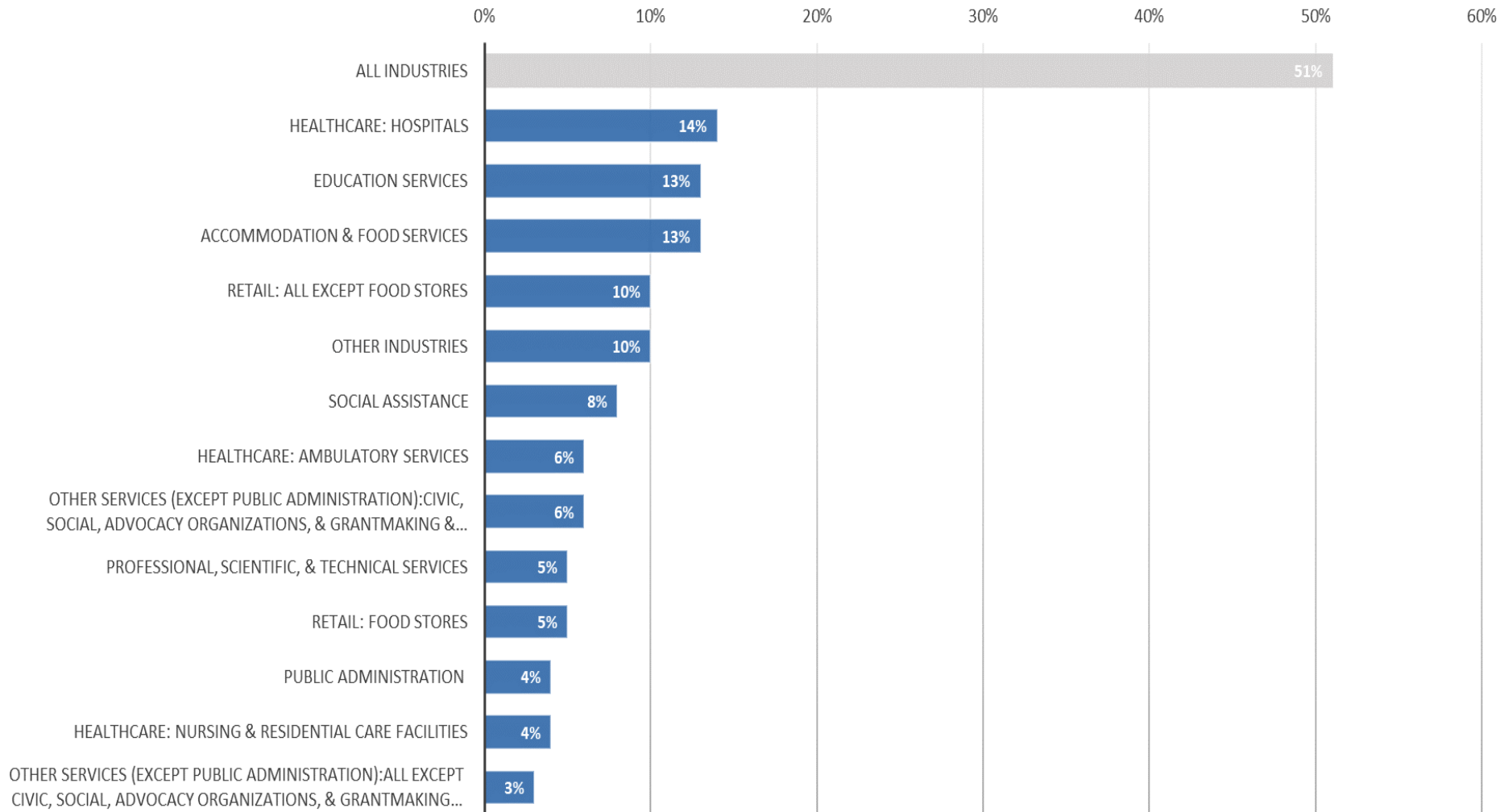
Nearly 3 in 5 (57%) younger youth worked in accommodation & food services, or retail.

2 in 5 (41%) older youth worked in healthcare or education.

Data notes: 1) Industry groups are based on Bureau of Census Industry Codes (CIC); 2) retail: food stores = grocery stores, specialty food stores, gas stations [includes those with convenient stores]; 3) "other industries" = Agriculture, Forestry, Fishing & Hunting; Utilities; Construction; Manufacturing; Wholesale Trade; Transportation & Warehousing; Information; Finance & Insurance; Real Estate & Rental & Leasing; Admin. & Support & Waste Mgmt & Remed. Svcs; Arts, Entertainment, & Recreation; 4) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# WHERE ARE YOUTH WORKING?

## Percent of Youth Employed in the past year by Industry Group

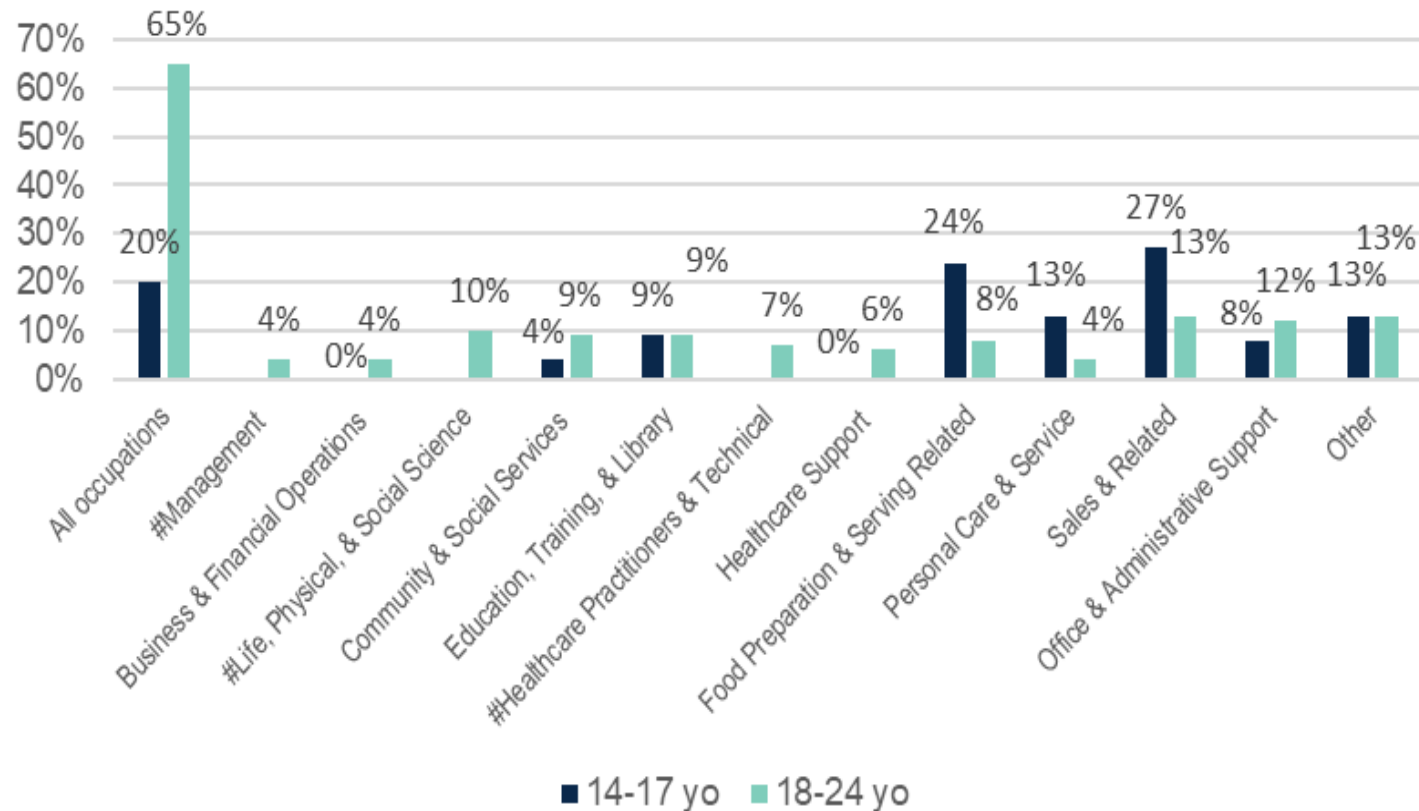


Data notes: 1) Industry groups are based on Bureau of Census Industry Codes (CIC); 2) retail food stores = grocery stores, specialty food stores, gas stations [includes those with convenient stores]; 3) "other industries" = Agriculture, Forestry, Fishing & Hunting; Utilities; Construction; Manufacturing; Wholesale Trade; Transportation & Warehousing; Information; Finance & Insurance; Real Estate & Rental & Leasing; Admin. & Support & Waste Mgmt & Remed. Svcs; Arts, Entertainment, & Recreation; 4) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# WHAT JOBS ARE YOUTH DOING?

Reopening, recovery, and vaccine plans need to include youth as many worked in jobs which were lost during the pandemic. This is particularly important in coming summer months when many youth work.

Percent of Youth Employed in the past year by Occupation and Age



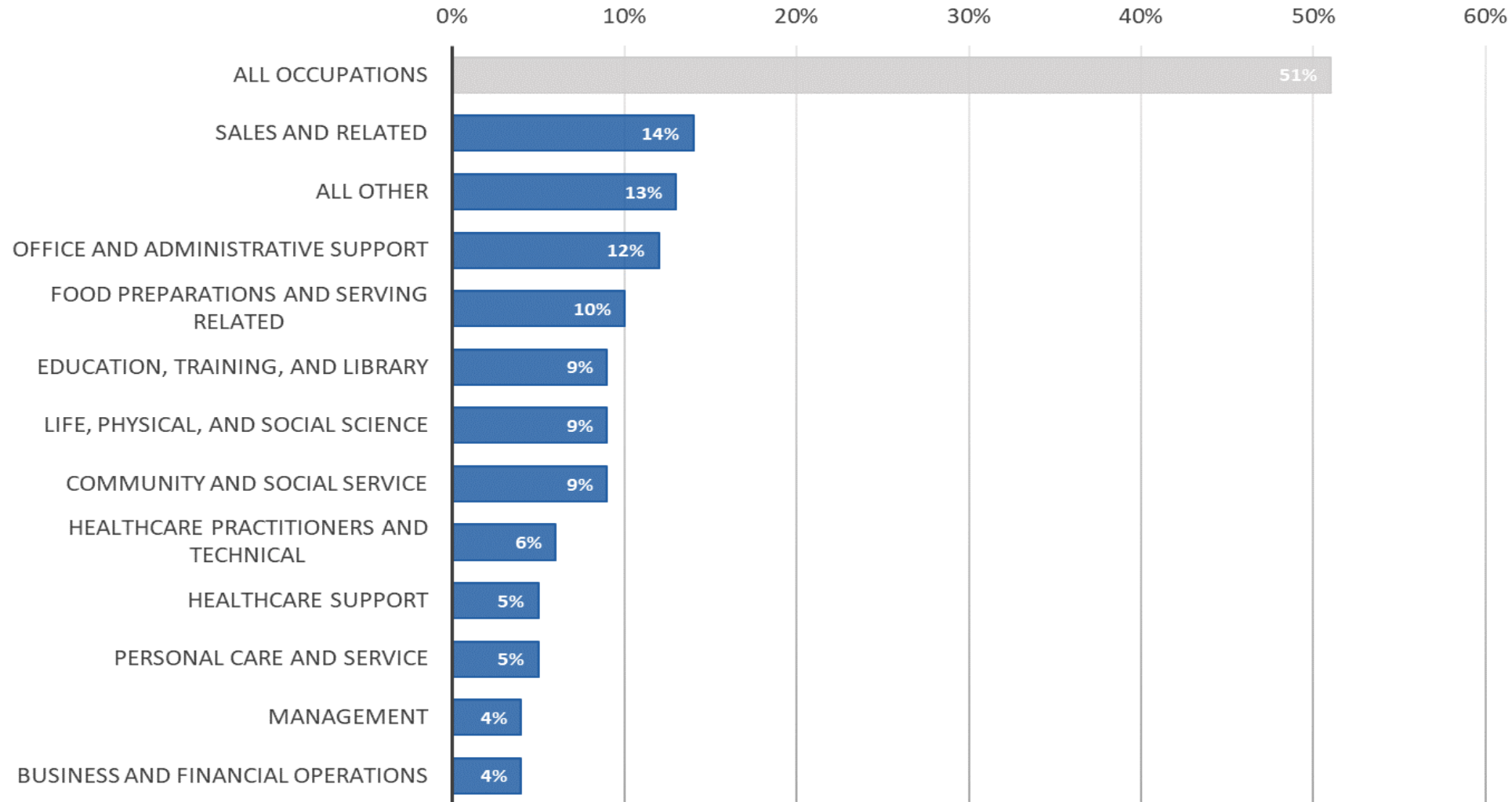
1 in 2 (51%) younger youth worked in sales and related jobs, or food preparation and serving jobs.

1 in 4 (25%) older youth worked in sales and related jobs, or office and administrative support jobs

Data notes: 1) occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "other occupations" = Computer & Mathematical; Architecture & Engineering; Legal; Arts, Design, Entertainment, Sports, & Media; Protective Service; Building & Grounds Cleaning & Maintenance; Farming, Fishing, & Forestry; Construction & Extraction; Installation, Maintenance, & Repair; Production; Transportation & Material Moving; 3) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# WHAT JOBS ARE YOUTH DOING?

## Percent of Youth Employed in the past year by Occupation Group



Data notes: 1) occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "other occupations" = Computer & Mathematical; Architecture & Engineering; Legal; Arts, Design, Entertainment, Sports, & Media; Protective Service; Building & Grounds Cleaning & Maintenance; Farming, Fishing, & Forestry; Construction & Extraction; Installation, Maintenance, & Repair; Production; Transportation & Material Moving; 3) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# EMPLOYER PROVIDED PROTECTIVE MEASURES



**3 in 5** working youth worked a job outside of the home facing increased risk of exposure to COVID-19.

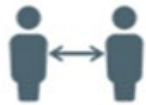
Certain groups were even more likely to work outside the home.

- 88% of young parents
- 85% of youth under age 18
- 79% of youth living in rural areas
- 73% of males
- 64% of youth of non transgender experience

Among those working outside the home many youth were not able to access workplace protections



**2 in 5** respondents worked in places that did not provide personal protective equipment (PPE).



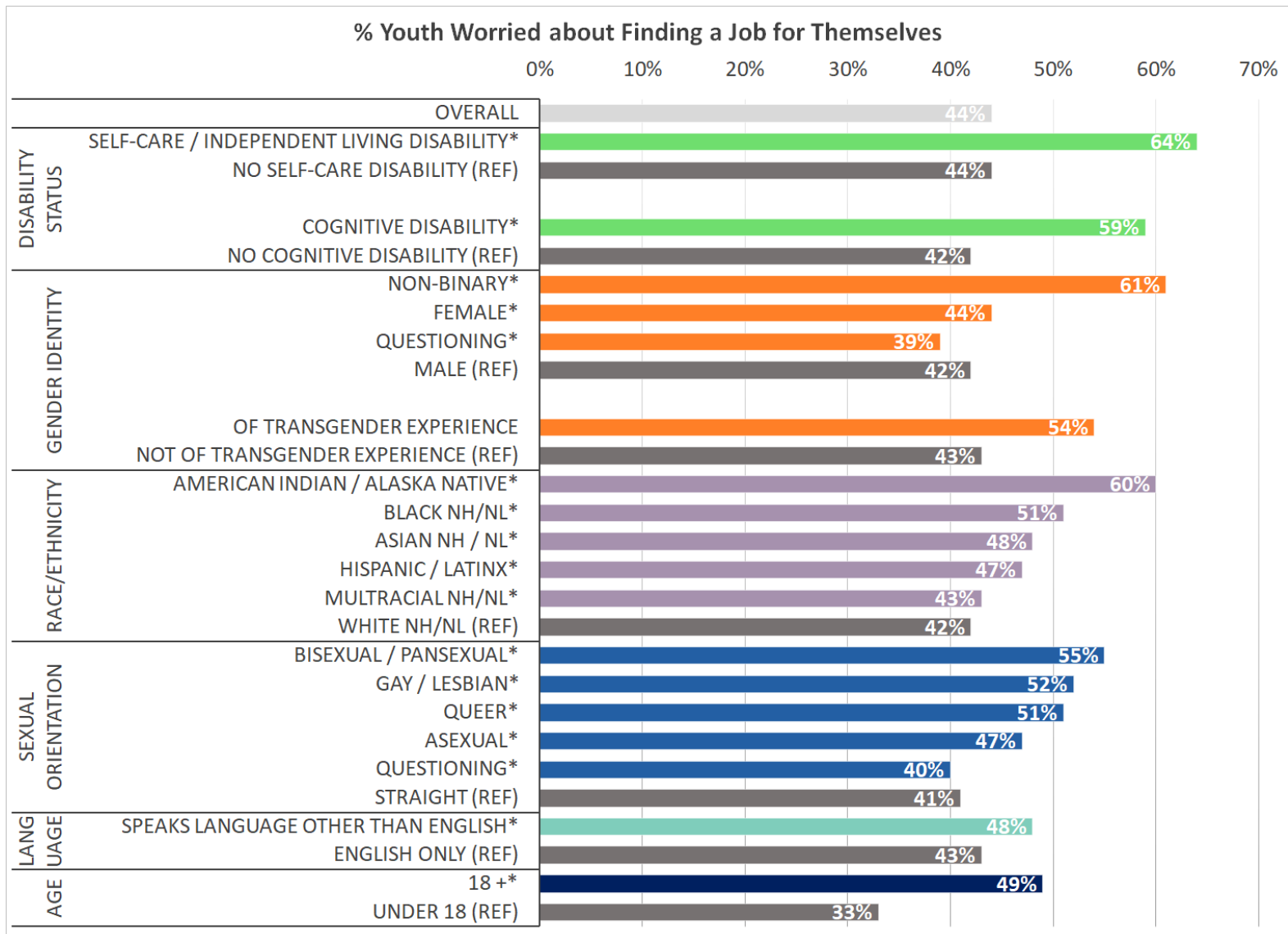
**2 in 5** respondents worked in places that did not implement social distancing.



**3 in 5** respondents worked in places that did not provide additional health & safety training.

This lack of workplace protections was even more pronounced for younger youth, bisexual youth, and youth of color.

# YOUTH CONCERNS ABOUT EMPLOYMENT



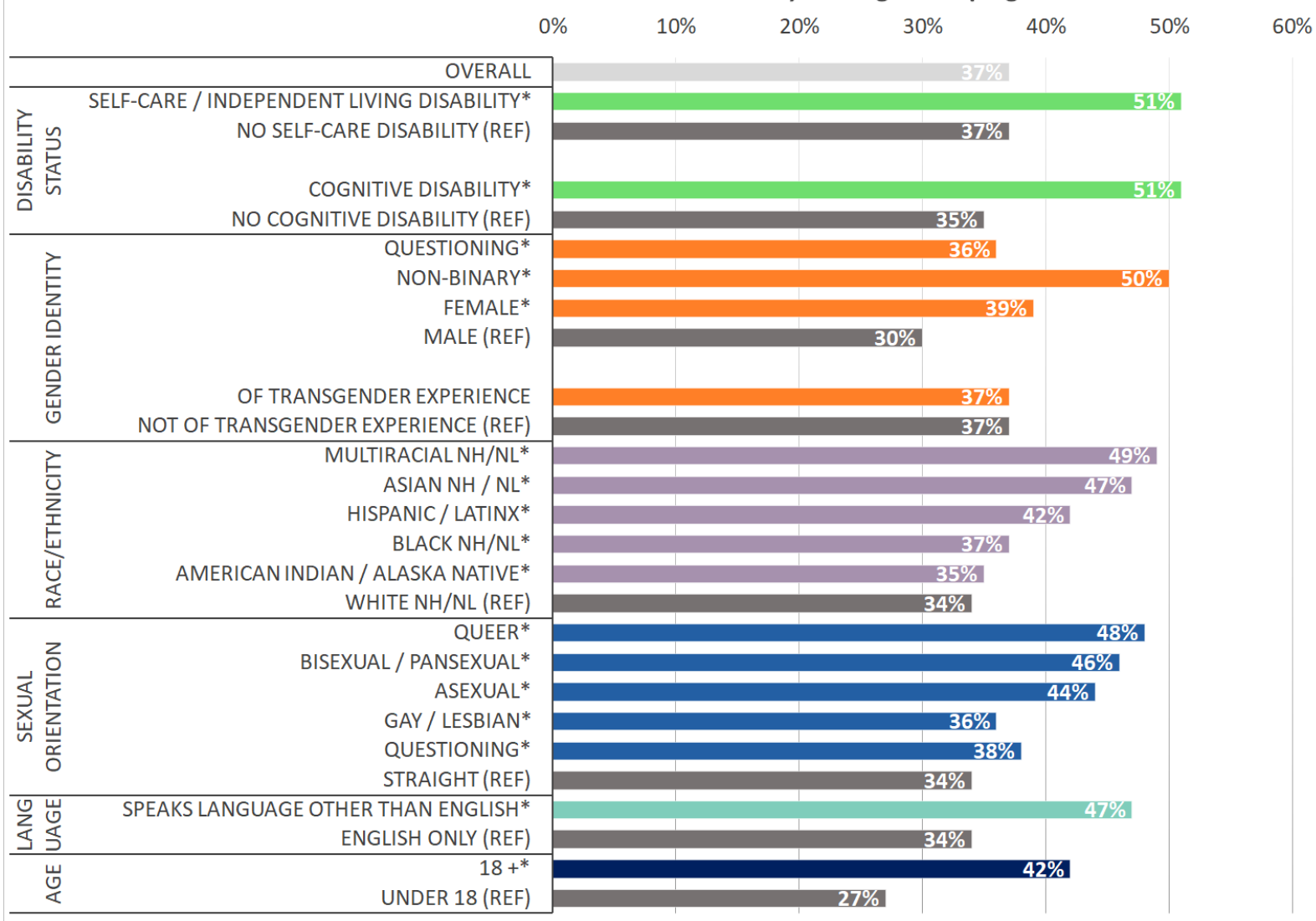
Surveyed youth more likely to report being very worried about finding a job are:

- Youth with disabilities
- Non-binary youth
- Hispanic/Latinx youth
- Black NH/NL youth
- Asian NH/NL youth
- Queer youth
- Bisexual/pansexual youth
- Youth who speak a language other than English

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# YOUTH CONCERNS ABOUT EMPLOYMENT

% Youth Worried about Someone in their Family Finding or Keeping a Job



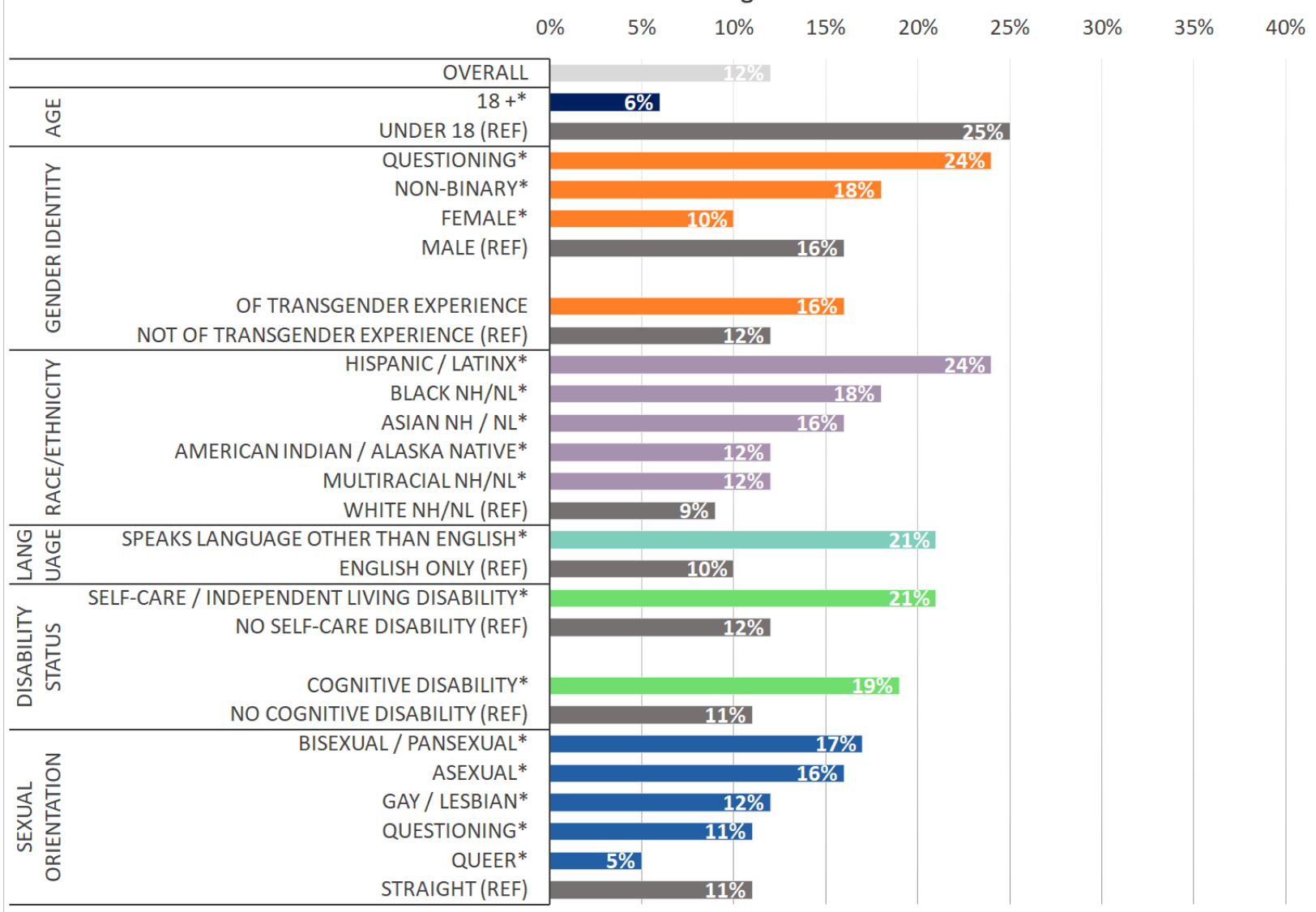
Surveyed youth more likely to report being very worried about someone in their family finding or keeping a job:

- Youth with disabilities
- Non-binary youth
- Hispanic/Latinx youth
- Black NH/NL youth
- Asian NH/NL youth
- Queer youth
- Bisexual/pansexual youth
- Youth who speak a language other than English

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female. Those "questioning/unsure of their gender identity" was suppressed due to small numbers; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# YOUTH CONCERNS ABOUT EMPLOYMENT

**% Youth Worried about Getting a Work Permit**



Surveyed youth more likely to report being very worried about getting a work permit:

- Youth under age 18
- Questioning youth
- Hispanic/Latinx youth
- Black NH/NL youth
- Asian NH/NL youth
- Youth who speak a language other than English
- Youth with disabilities

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years.

# KEY TAKEAWAYS: YOUTH EDUCATION & EMPLOYMENT

The pandemic has had a significant impact on youth's education and employment – as reopening continues, policies must include youth and take into consideration that:

- Youth have been asked to work and continue their education while helping out at home more during the pandemic.
- Many youth work in industries and occupations hard hit by the pandemic. Youth were twice as likely as adults to lose their jobs in the past year.
- Youth who graduated during the pandemic may have had difficulty entering the workforce due to the pandemic.

The future economic, social and political impacts from COVID will be acutely felt by youth for years to come.



# YOUNG PARENTS

Elizabeth Beatriz, PhD  
Justine Egan, MPH  
Allison Guarino, MPH  
Beatriz Pazos Vautin, MPH



# FRAMING MATTERS

- Though not often highlighted as a priority population, survey responses suggest that young parents have faced a confluence of pressures during the pandemic, ranging from grief due to lost loved ones, unstable housing or job loss, or significant stress related to balancing caregiving with paid work. These significant impacts must be considered in recovery planning.
- Young parents are both young people in a critical period of development, and caregivers of infants or young children in a critical period of development. Among youth, the needs of young parents are particularly consequential because of this intergenerational impact. Despite the social supports available during the pandemic, such as housing and food assistance, young parents may not be able to access some of these resources.

# YOUNG PARENT EXPERIENCE WITH COVID-19

Young parents were more likely to report testing positive for and losing someone due to COVID-19 compared to other youth.

Compared to all youth respondents:

-  • Young parent respondents (6%) were 2x more likely to report testing positive for COVID-19 (3%)
-  • Young parent respondents (14%) were 2x more likely to report losing someone close to them due to COVID-19 (6%)

Young parent respondents were more than 4 times as likely to have a household member test positive for COVID-19 compared to older parents.

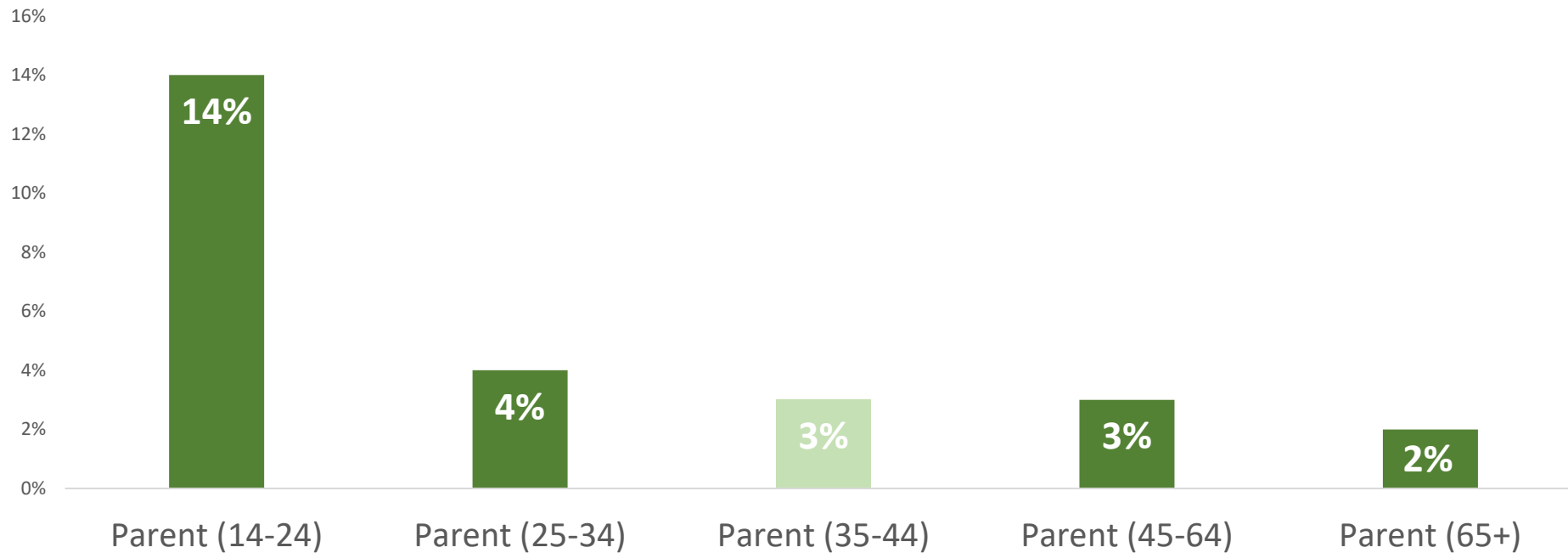
Compared to parents aged 35-44:

-  • Young parent respondents (14%) were 4.6x more likely to report having a household member test positive for COVID-19 (3%)

# YOUNG PARENT EXPERIENCE WITH COVID-19

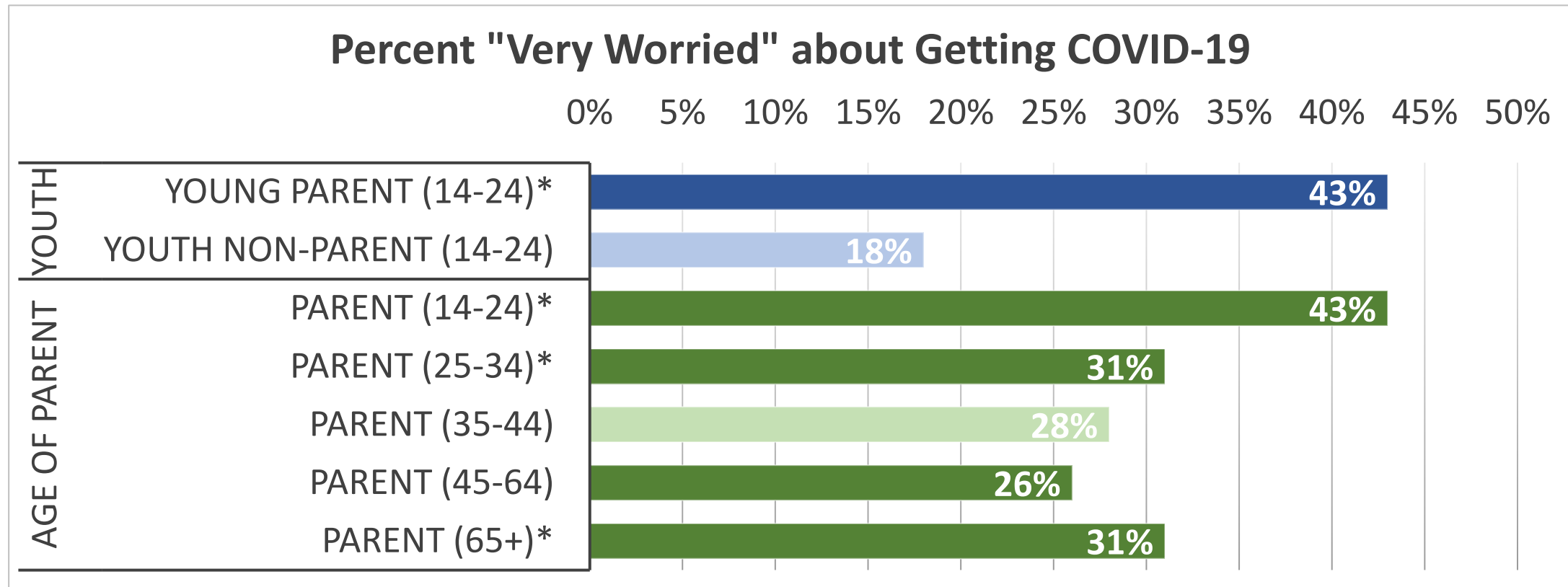
Young parent respondents were 4.6 times as likely to have a household member test positive for COVID-19 compared to older parents.

Percent of Parents Having a Household Member Test Positive for COVID-19



# PERCEPTION OF COVID-19 RISK

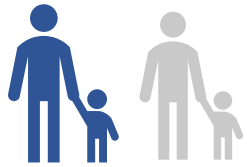
Young parent respondents were more than 2x as likely to be very worried about getting COVID-19 compared to other youth and 1.4x as likely to be very worried compared to older parents.



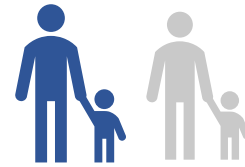
Data notes: 1) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 2) reference groups are youth non-parent and parents aged 35-44; 3) All percentages are unweighted.

# YOUNG PARENTS, EMPLOYMENT, & BASIC NEEDS

Young parent respondents were especially hit by job loss (many due to caretaking responsibilities) which impacts their ability to meet basic needs from housing to formula or diapers for their children.



1 in 2 employed young parents lost their jobs or reduced hours/took leave.



50% of young parents who reduced hours/took leave and 38% who lost jobs listed needing to take care of children as a reason.

More than 80% of young parent respondents report at least one unmet household need.

Compared to parents aged 35-44, young parent survey respondents were:



26% more likely to identify any household need (83% vs. 66%)



37% more likely to identify any child need (48% vs. 35%)



Twice as likely to reduce hours/take leave or lose their job (among employed parents)



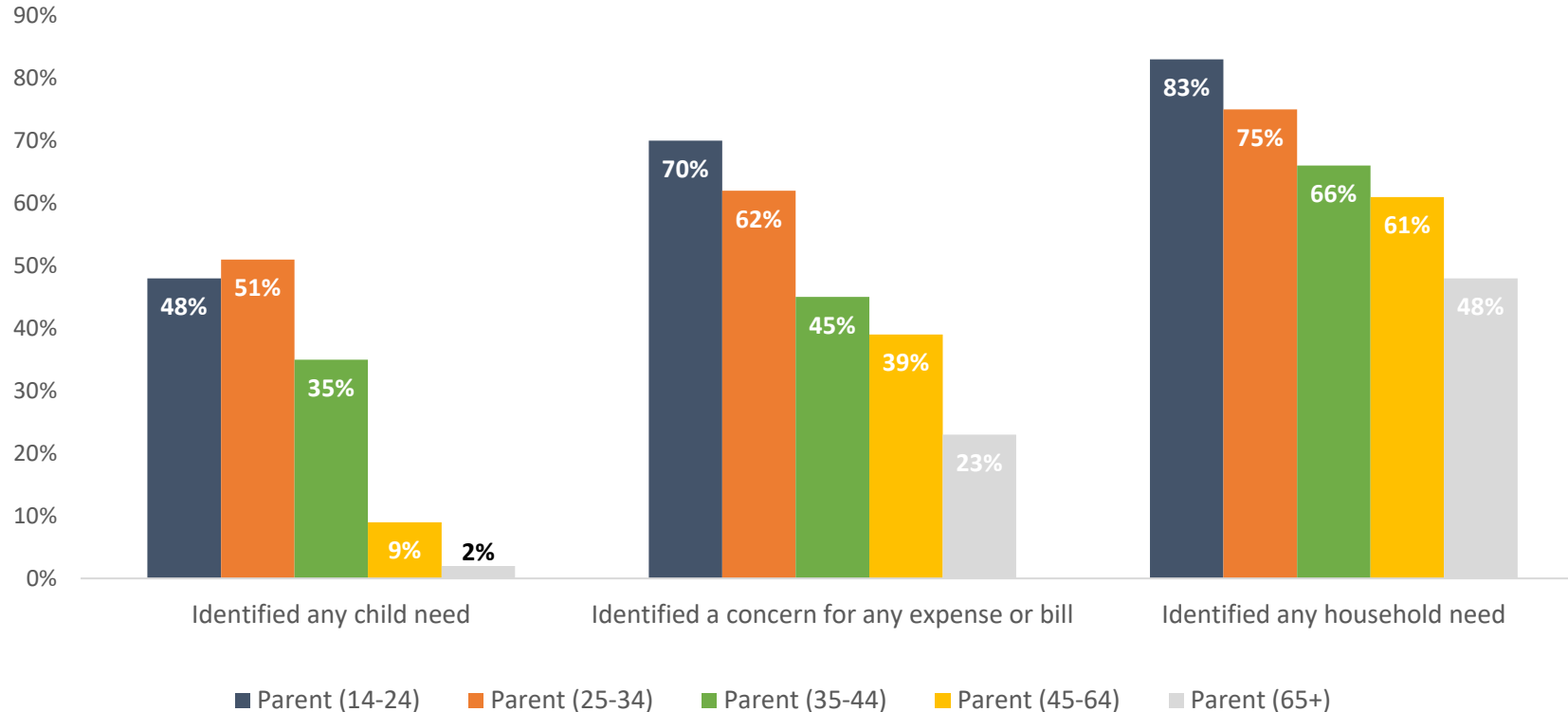
56% more likely to identify a concern for any expense of bill (70% vs. 45%)

\* **Child need** includes: childcare, emergency childcare, diapers, wipes, formula, baby food, assistance with school/remote schooling; **Household need** includes: food, groceries, cleaning products, hygiene products, paper products, face masks; **Concern for any expense** includes housing, utilities, vehicle, debt, insurance, school/daycare

# BASIC NEEDS AMONG YOUNG PARENTS

Younger parents are more likely to report any household needs, any child needs, and concern about any expenses compared to older parents.

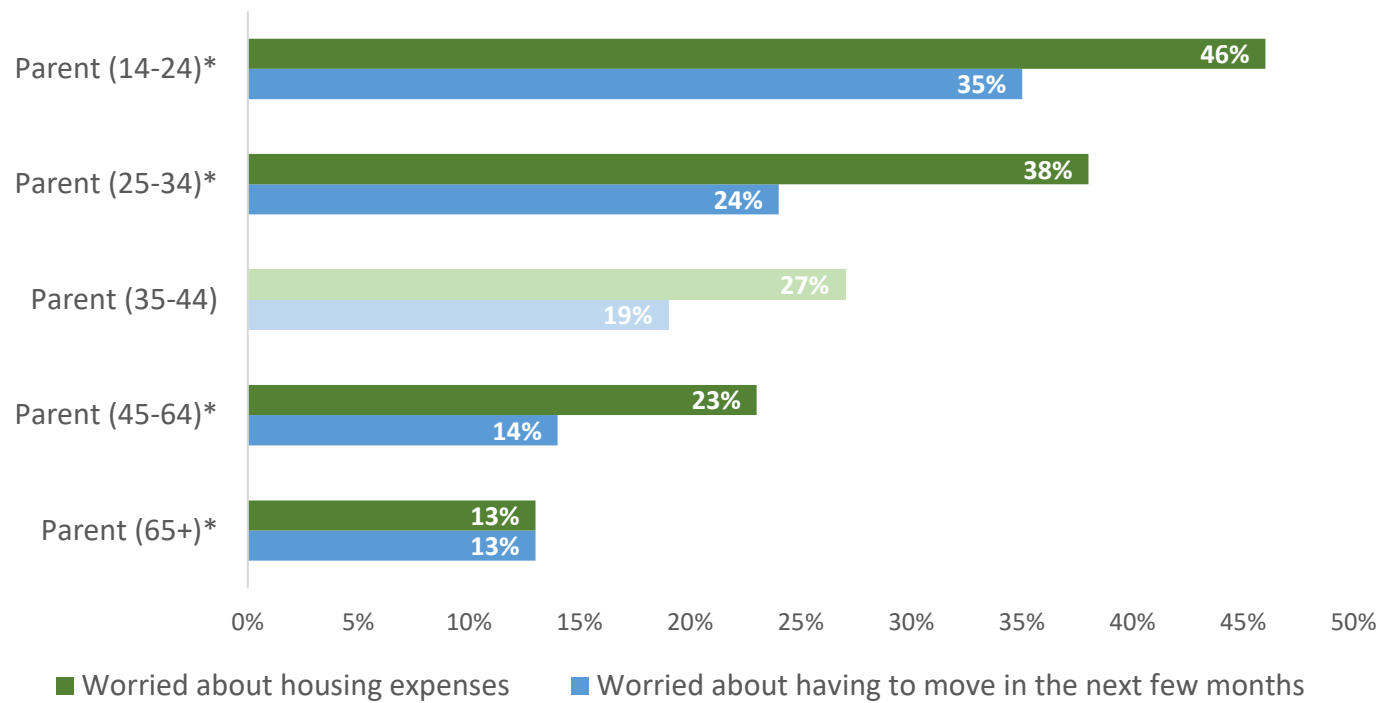
Percent Parents Identifying Household, Child, or Expense Related Needs by Age



# HOUSING NEEDS AMONG YOUNG PARENTS

1 in 2 young parent respondents reported being worried about housing.  
This is 2x higher than older parents (aged 35-44) and 6x higher than other youth

Percent Parents Worried about Housing by Age



“...it's just a lot of very huge, lack of affordability and stuff, and there's a lot of people right now that I know, especially with children, who are struggling and they're, they're being told the waitlist is at least 15 years long.”<sup>1</sup>  
--MA young person living in Lynn

Source: (1) Umass Amherst interview with Lynn Community Action Board (CAB), unpublished.

# UNSTABLE HOUSING & YOUTH

Young parents who are homeless or have unstable housing are at risk of a range of health outcomes including violence



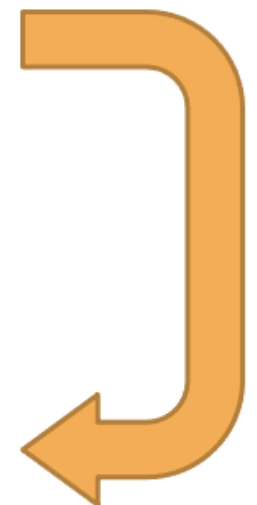
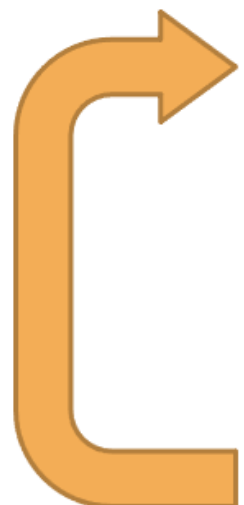
Young parents who are homeless are more likely to experience IPV, postpartum depression<sup>1</sup>, concerns over expenses, & poor mental health.



Transactional sex may be used by housing and food insecure youth – including through online dating apps – to meet needs.<sup>2</sup>



IPV often leads to homelessness among survivors. Homelessness<sup>3,4,5</sup> in turn puts people at risk for sexual assault and trafficking,<sup>4,5</sup> creating a reinforcing cycle.

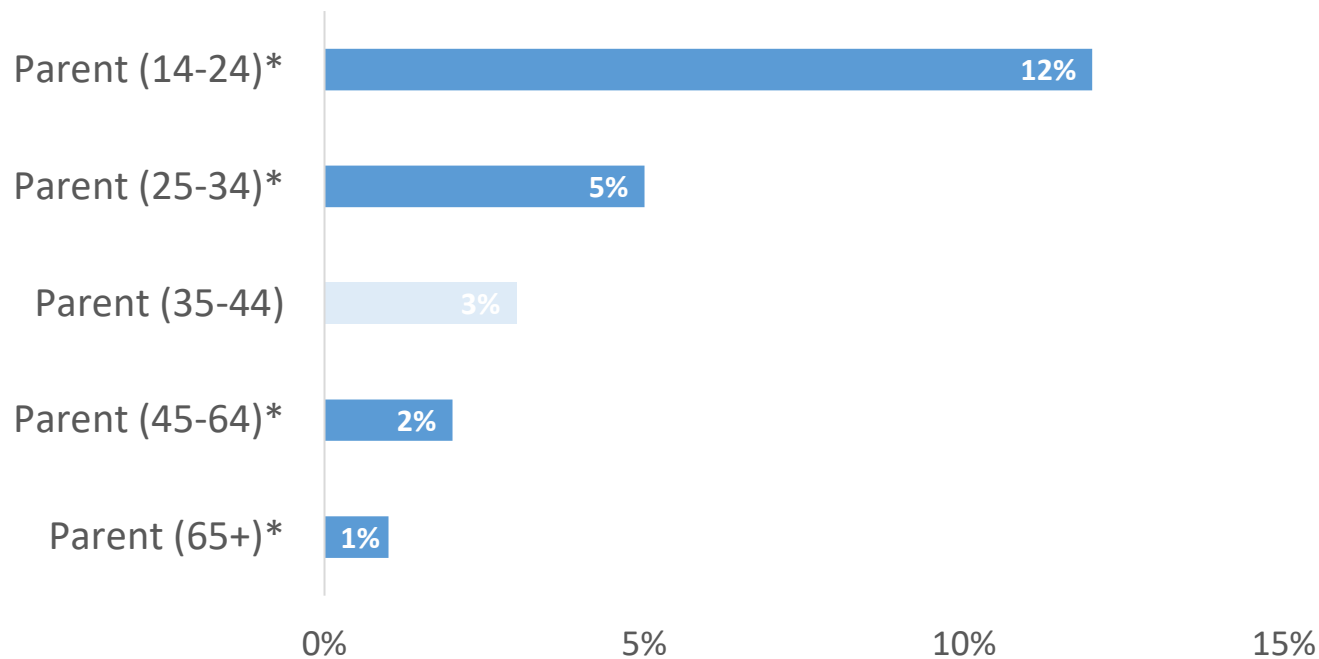


Sources: (1) Crawford, D. M., Trotter, E. C., Sittner Hartshorn, K. J., & Whitbeck, L. B. (2011). Pregnancy and mental health of young homeless women. *American Journal of Orthopsychiatry*, 81 (2), 173–183. doi: 10.1111/j.1939-0025.2011.01086.x (2) Umass Amherst interview with Lynn Community Action Board (CAB), unpublished. (3) Breiding, M.J., Chen J., & Black, M.C. (2014). Intimate Partner Violence in the United States — 2010. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. (4) Jasinski, J. L., Wesely, J. K., Mustaine, E., & Wright, J. D. (2005). *The experience of violence in the lives of homeless women: A research report (Document No. 211976)*. Retrieved from the U.S. Department of Justice, Office of Justice Programs: <http://www.ncjrs.gov/pdffiles1/nij/grants/211976.pdf> (5) Tyler, K. A., Whitbeck, L. B., Hoyt, D. R. & Cauce, A. M. (2004). Risk Factors for Sexual Victimization Among Male and Female Homeless and Runaway Youth. *Journal of Interpersonal Violence*, 19, 503-520. <https://doi.org/10.1177/0886260504262961>

# EXPERIENCES WITH VIOLENCE DURING THE PANDEMIC

Young parent respondents on the survey were 4 times as likely to report intimate partner violence (IPV) during the pandemic compared to parents aged 35-44.

Percent Parents Reporting IPV by Age



Negative mental health effects, including depression, anxiety, and post-traumatic stress disorder, due to experiencing events that might be life-threatening (like a pandemic) are more likely for people who also have had other traumatic experiences like IPV, so they may be especially in need of services and support.

Data notes: 1) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 2) reference groups is parents aged 35-44; 3) All percentages are unweighted.

# EXPERIENCES WITH VIOLENCE DURING THE PANDEMIC

So if there is a teen that, for some reason they were kicked out or homeless...they may have to turn to sex work in order to provide for themselves. That's a big risk factor. Also you know young adults and teens are doubled up in living situations, either with strangers or with family members that could open up other opportunities for risk. ...I wonder if it could open up other opportunities for somebody to be victimized or taken advantage of, not just physically, but you know, whatever. So I think that that's definitely a big one, if a young adult child doesn't feel like they have a safe place to call home, that could lead to other things.”<sup>2</sup>

--MA young person living in Lynn

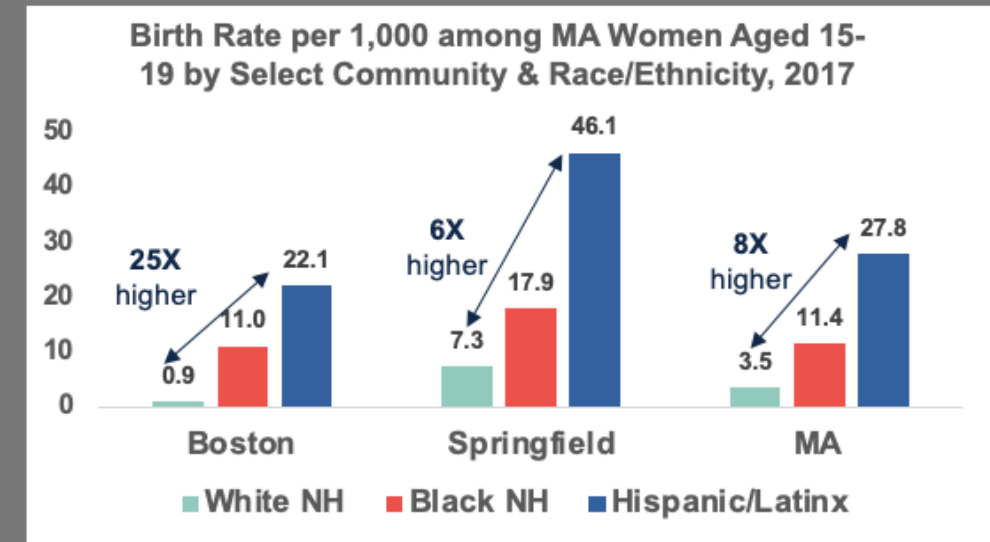
# WHERE ARE YOUNG PARENTS IN MASSACHUSETTS?

Young parents are concentrated in areas hardest hit by the pandemic

Many of the towns with the highest teen birth rates, also are those hardest hit by COVID infections

Chelsea
Lawrence
New Bedford
Springfield
Lynn

Even within a single community, historic disinvestment and structural drivers have created racial inequities in the teen birth rate.



# YOUNG PARENTS HAVE MULTIPLE NEEDS



Young women in foster care are more than twice as likely to become pregnant by age 19<sup>1</sup>



Adolescent mothers are more likely to feel depressed compared to mothers aged 30-39<sup>2</sup>



44% of 18-25 year old females and 18% of 18-25 year old males experiencing homelessness nationally are parents<sup>3</sup>



Mothers aged 15-19 in MA are 25% less likely to receive adequate prenatal care compared to all MA mothers<sup>4</sup>

“I thought...I didn't really vibe with professional people because I feel like they are not down to earth. I felt like I had to put on a mask with these people with all smiles...that's why I wasn't open to help at all from anyone.”  
– MA young parent

**Sources:** (1) The National Campaign to Prevent Teen and Unplanned Pregnancy. *Briefly: It's Your Responsibility to Talk to Youth: Pregnancy Prevention for Youth in Foster Care*. Available at: <http://www.centerforchildwelfare.org/kb/resource/ItsYourResponsibility.pdf>; (2) MA Pregnancy Risk Assessment & Monitoring System, 2015-2016; (3) Dworsky, A., Morton, M. H., Samuels, G. M. (2018). *Missed opportunities: Pregnant and parenting youth experiencing homelessness in America*. Chicago, IL: Chapin Hall at the University of Chicago.; (4) MA Registry of Vital Records & Statistics, MA Department of Public Health

# KEY TAKEAWAYS: YOUNG PARENTS

**Supports for young parents are urgently needed.** The impact of the pandemic on young parents could be multi-generational as it **affects both youth/parent development and infant & child development.**

- Half of employed young parents **reduced their hours/lost jobs** (twice as high as older parents).
- More than 80% of young parents **have at least one unmet household need.**
- Young parents experienced **intimate partner violence** at significantly higher rates than older parents .
- Nearly half of young parents are **concerned about housing expenses.**
- Concerns about housing, childcare, expenses, and IPV contribute significantly to the mental and physical health of both **young parents and their children.**
- Inequities are concentrated geographically

# DATA TO ACTION

Key Finding: More than 80% of young parents are worried about household needs, 70% are worried about paying expenses, and 46% are concerned about housing.

Heard: Young parents are struggling to meet basic needs and the difficulty in meeting those needs has the potential to interfere with child and family physical and mental health.

## Actions Taken:

- DPH is partnering with the Department of Transitional Assistance and Department of Public Health to distribute COVID response funds for assisting young families through the MA Pregnant & Parenting Teen Initiative (MPPTI).
- MPPTI is working with local agencies to tailor programming to meet the basic needs of young parents. Over 300 young parents have already been served across the state in high need communities.
- DPH is exploring opportunities to partner with youth housing and homelessness organizations.



# YOUTH SAFETY AND ACCESS TO HEALTH CARE

Elizabeth Beatriz, PhD  
Justine Egan, MPH  
Allison Guarino, MPH  
Beatriz Pazos Vautin, MPH

# FRAMING MATTERS

During the pandemic, many youth experienced multiple changes at once: youth were taken out of school and adapted to schooling online; young people were isolated from their friends, peers, and trusted adults outside of their families; youth access to healthcare declined; and young people took on surrogate parenting roles to support their families. Many youth also experienced discrimination during the pandemic and endured heightened racial trauma associated with the protests that took place in the summer of 2020.

While major decisions around the COVID-19 pandemic have been made by adults, the pandemic and other current events have significantly affected youth health, especially mental health. Youth voice should be taken into consideration by decision-makers.

# YOUTH CCIS RESPONDENTS PROFILE



3,052 youth ages 14-24  
took the survey



32% speak a language other than  
English at home



46% under 18 years old  
54% 18 and over



21% youth with disabilities



39% working youth

The CCIS worked intentionally to reach diverse youth populations by **partnering with community-based organizations** serving youth in MA, as well as communities most impacted by COVID-19



Artwork by Farah Jeune



# DISCRIMINATION AND YOUTH

# DISCRIMINATION AGAINST YOUTH

9% of youth experienced discrimination during the pandemic\*

**Youth of color experienced high rates of discrimination compared to White, nH/nL youth.**

- Asian, nH/nL youth 10x higher (32% v 3%)
- Youth of Other Races 8x higher (24% v 3%)
- Black, nH/nL and Multiracial nH/nL youth 6X higher (19% v 3%, 18% v 3%)
- Hispanic and American Indian/Alaska Native youth nearly 5X higher (14% v 3%, 14% v 3%)

**Youth who speak a language other than English were 4x as likely to report discrimination compared to youth who only spoke English (20% v 5%).**

**Youth who identify as Other sexual orientation were nearly 2x as likely to report experiencing discrimination compared to heterosexual youth (16 % v 9%).**

**Young parents were nearly 2x as likely to experience discrimination compared to youth non-parents (16% v 9%).**

\* In answer to a question about racial/ethnic discrimination during the pandemic.

NOTE: The number of respondents answering the discrimination question is = 2,469. Effective sample size = 2,304.

# DISCRIMINATION AGAINST YOUTH

Youth experienced many forms of discrimination.

## 15% COVID-related

Asian, nH/nL youth were most likely to report being told that they were responsible for COVID

*"Since I'm Asian somehow I'm at fault for the virus"*

## 7% Other Identities

Several youth were discriminated against because of their religion or sexual orientation

*"People made islamophobic comments about me and my family near 9/11"*

## 24% Verbal Comments

Youth reported being called racial slurs, and being verbally harassed in public

*"Someone told me to go back to my country"*

## 7% Racial Profiling

Youth reported being followed in stores, accused of stealing, and stopped by police

*"I was just followed around in the store, stopped by police"*

## 20% Other/Unspecified

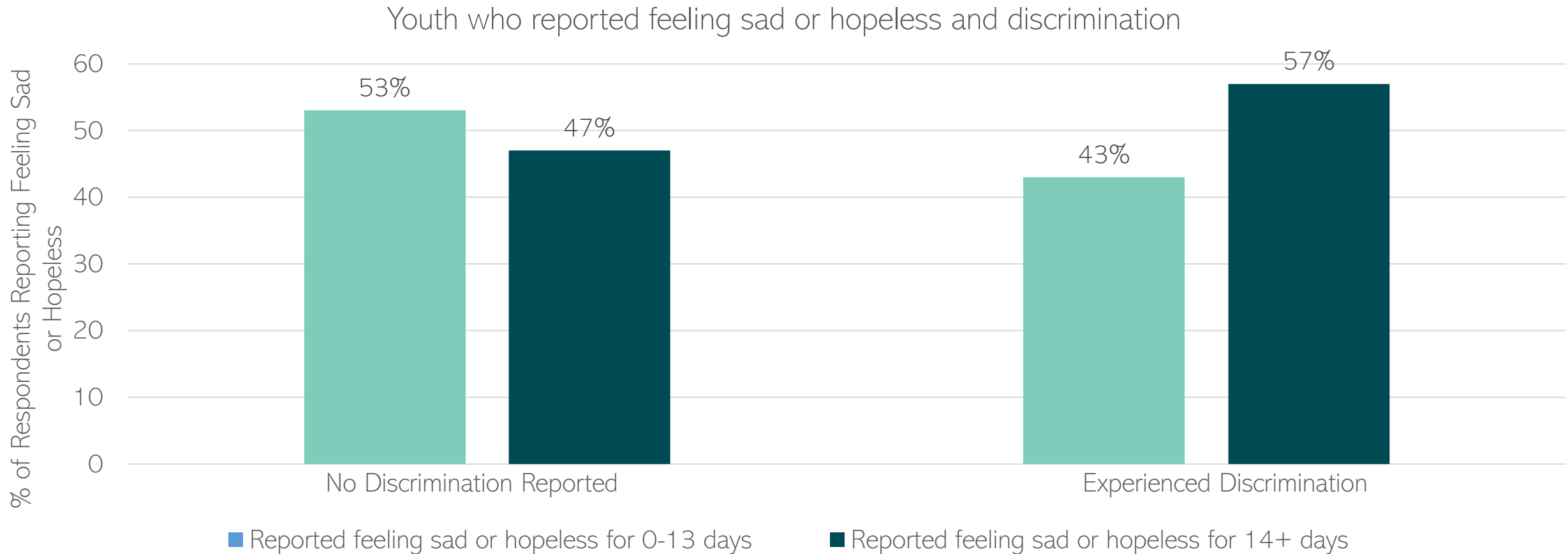
Other youth experienced other forms of discriminations such as online bullying or didn't specify exactly how they have been discriminated against

*"People giving dirty stares and staying away from me"*

NOTE: The number of respondents reporting experiencing any discrimination = 253. Effective sample size = 223.

# DISCRIMINATION AND MENTAL HEALTH

Youth that experienced discrimination were significantly more likely to report having worse mental health.

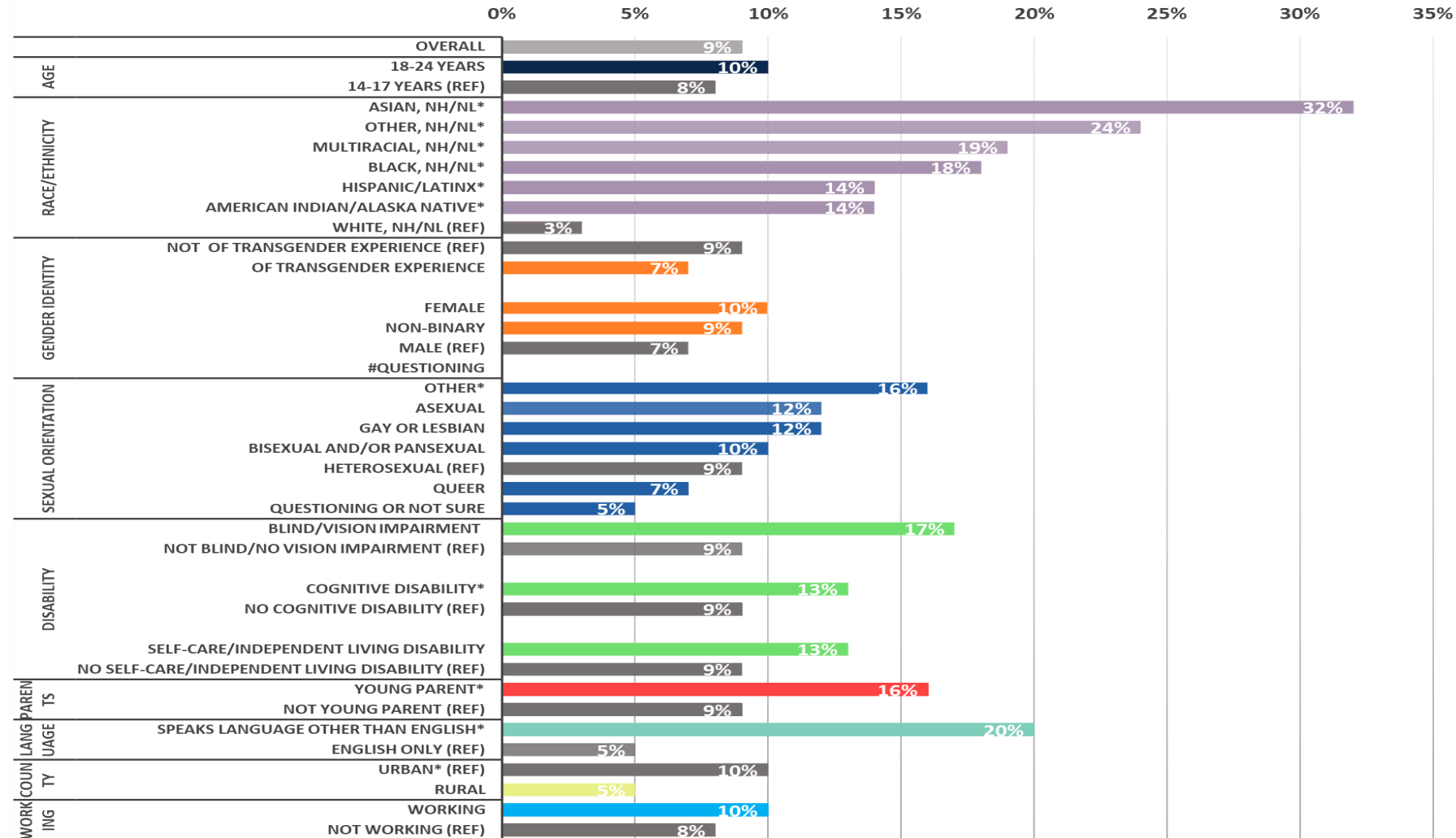


Data notes; 1) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 2) The number of respondents who answered the discrimination question is = 2,469. Effective sample size = 2,304.

10.13.2021 release

# DISCRIMINATION AGAINST YOUTH

MA youth who experienced discrimination based on race/ethnicity

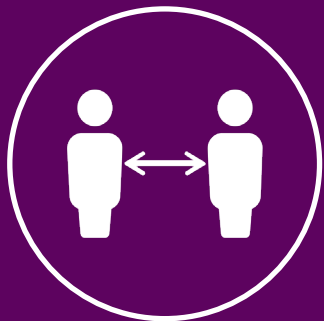


Overall, 9% of youth reported experiencing discrimination.

Youth who were more likely to experience discrimination included:

- Youth of color
- Non-binary youth
- Young parents
- Youth who spoke a language other than English
- Youth living in urban areas
- Youth with cognitive disability

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 6) The number of respondents who answered the discrimination question is = 2,469. Effective sample size = 2,304.



# YOUTH SAFETY

# YOUTH & SAFETY DURING COVID-19

While 65% of youth feel very safe in their neighborhoods, in terms of crime or violence, certain groups of youth are less likely to report feeling safe.



Youth with cognitive disabilities are 20% less likely to feel very safe in their neighborhoods compared to youth without cognitive disabilities



Youth in urban communities are 27% less likely to feel very safe in their neighborhoods compared to youth in rural communities



LGBTQ+ youth are between 13-21% less likely to feel very safe in their neighborhoods compared to straight youth

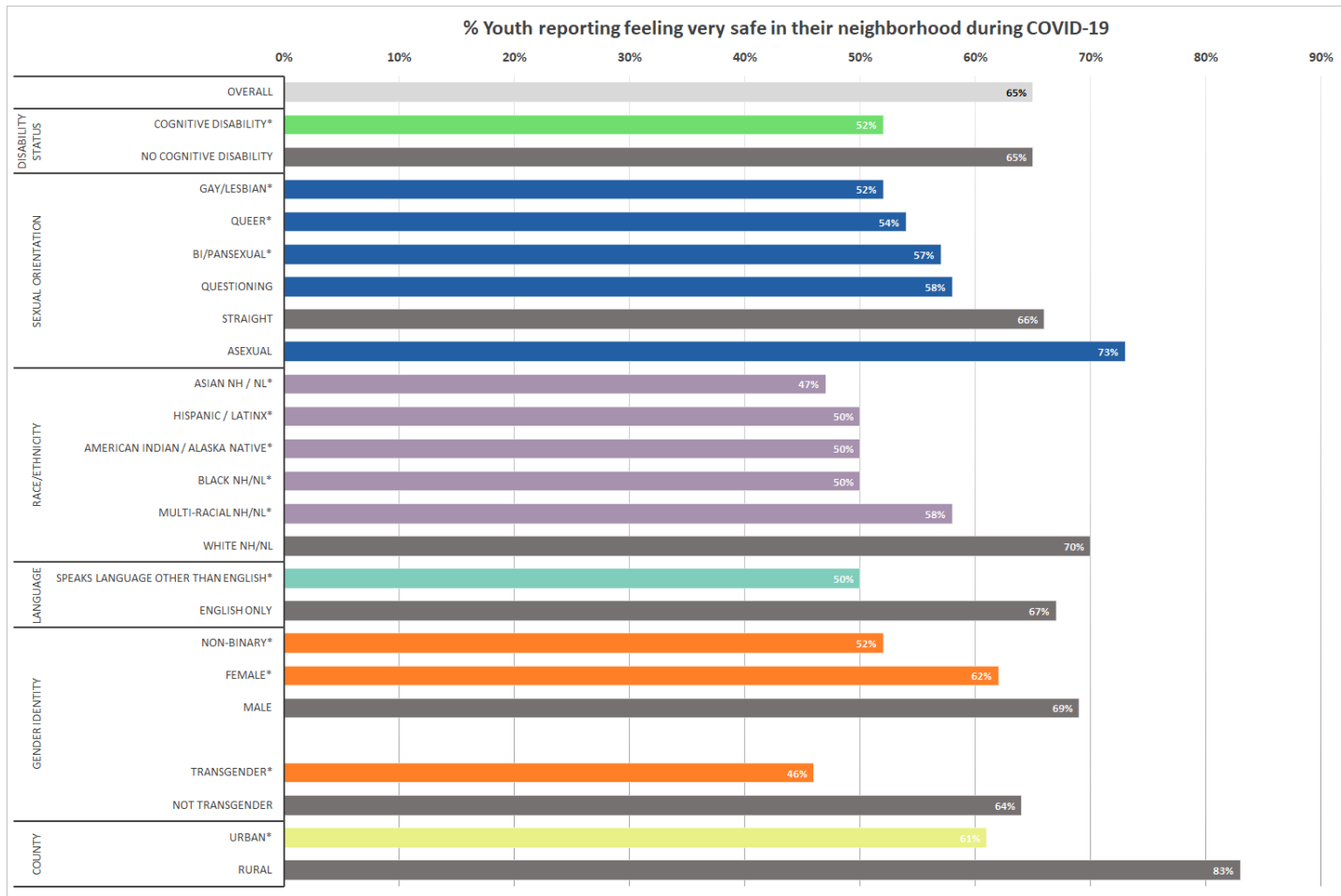


Youth of color are between 17-32% less likely to report feeling safe compared to White NH/NL youth

# YOUTH & SAFETY DURING COVID-19

Certain groups of youth were significantly less likely to report feeling very safe from crime and violence in their neighborhoods.

% Youth reporting feeling very safe in their neighborhood during COVID-19



Overall, 65% of youth reported feeling very safe in their neighborhoods.

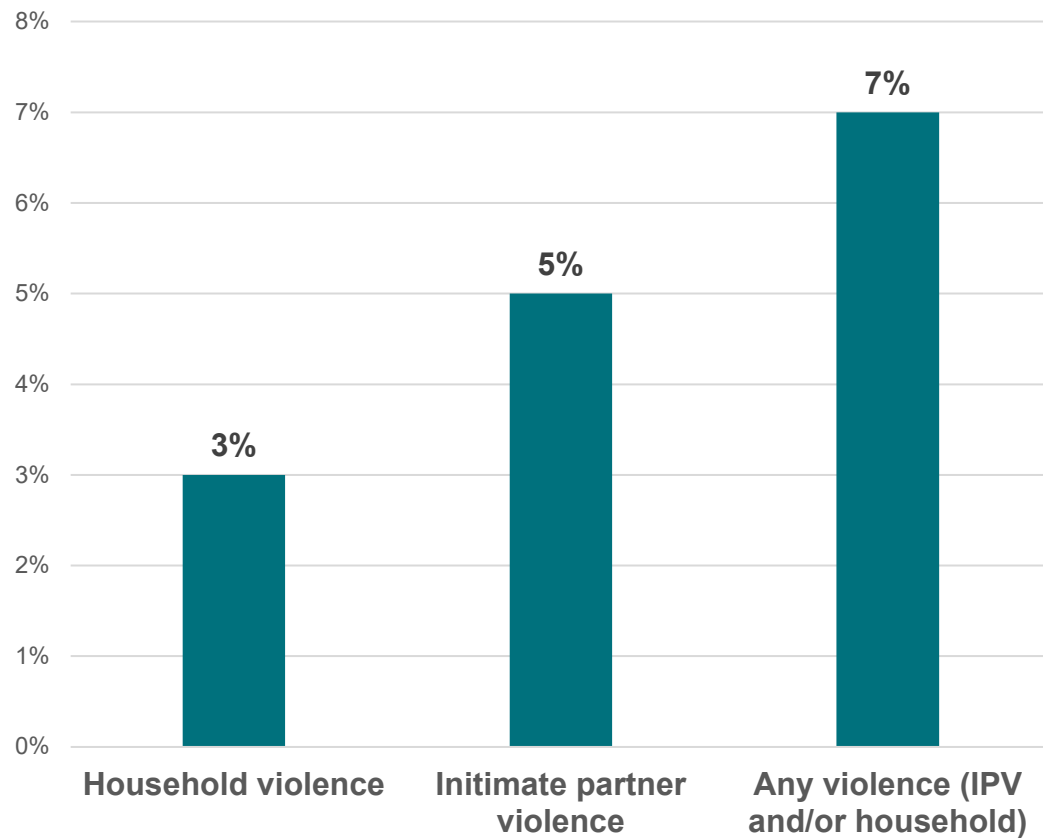
Youth who were less likely to feel safe included:

- Youth with cognitive disabilities
- Youth of color
- Gay/lesbian youth, queer youth, and bi/pansexual youth
- Non-binary youth
- Transgender youth
- Youth who speak a language other than English
- Youth living in urban areas

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 6) The number of respondents = 2,376. Effective sample size = 2,316.

# YOUTH EXPERIENCE WITH VIOLENCE DURING COVID-19

Percent of Youth Reporting Violence During the COVID-19 Pandemic in Massachusetts



**Household violence:** You or someone you live with was hurt or threatened by someone in your household during the first 6-8 months after the COVID-19 pandemic began in March 2020

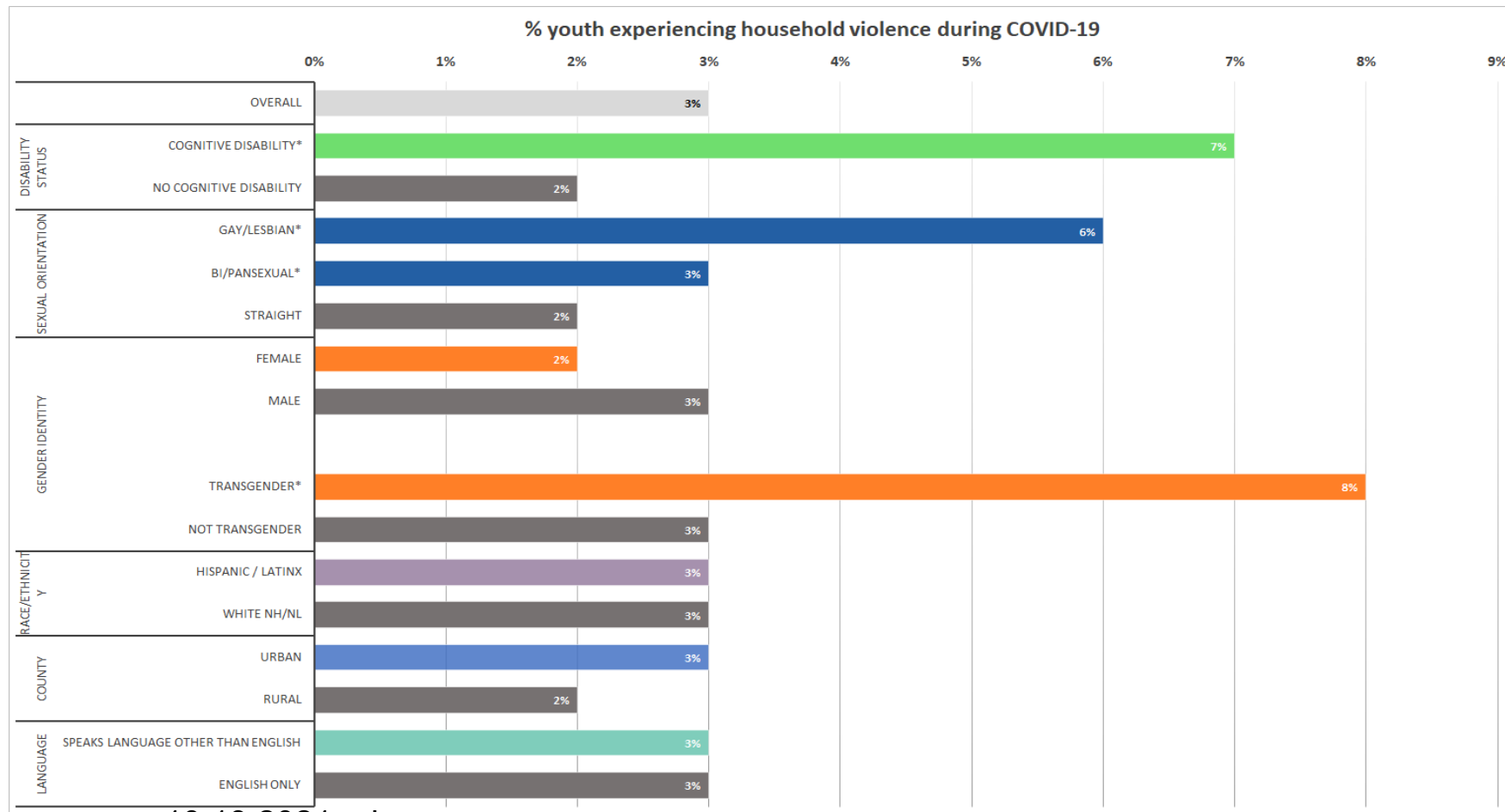
**Intimate partner violence (IPV):** Someone you were dating or married to controlled or coerced you through monitoring your phone, stopping you from doing things you wanted to do, other coercion, or physically hurt you during the first 6-8 months of the pandemic

**Any violence:** includes IPV and/or household violence during the first 6-8 months of the pandemic

Data notes: 1) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 6) The number of respondents = 1,998. Effective sample size = 1,997.

# YOUTH EXPERIENCE WITH HOUSEHOLD VIOLENCE DURING COVID-19

Youth with disabilities, transgender youth, and gay/lesbian youth were between 2-3 times as likely to experience household violence during COVID-19 compared to youth overall.



Overall, 3% of youth reported household violence during the pandemic.

Youth who were more likely to report household violence included:

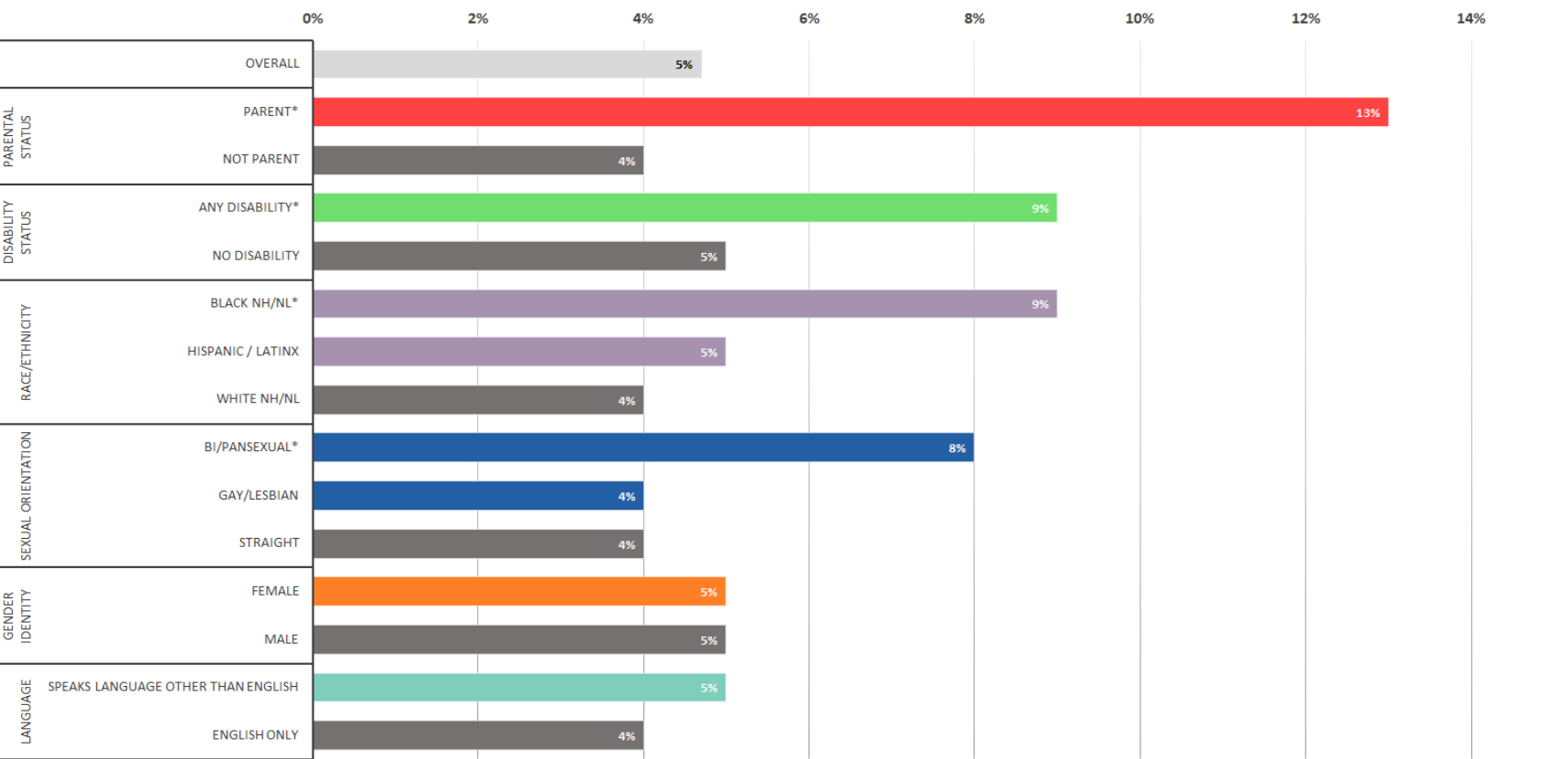
- Youth with cognitive disabilities
- Transgender youth
- Gay/lesbian youth
- Bi/pansexual youth

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 6) The number of respondents = 2,364. Effective sample size = 2,308.

# YOUTH EXPERIENCE WITH INTIMATE PARTNER VIOLENCE DURING COVID-19

Young parents were 3 times as likely to experience IPV compared to youth who were not parents. Youth with disabilities, Black NH/NL youth, and bi/pansexual youth were 2 times as likely to experience IPV during COVID-19 compared to other youth.

% Youth experiencing IPV during COVID-19



Overall, 5% of youth reported IPV during the pandemic.

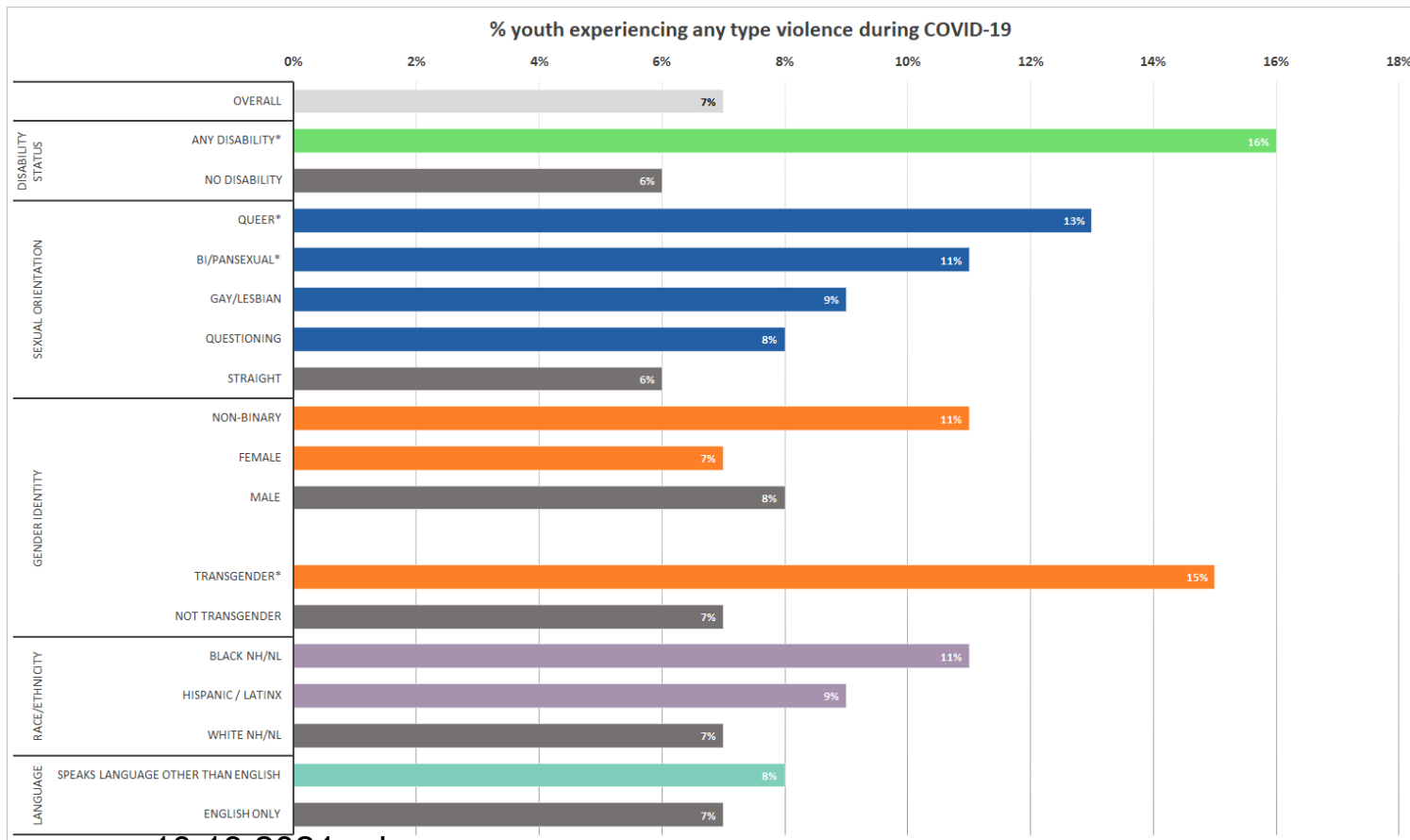
Youth who were more likely to report IPV included:

- Young parents
- Youth with disabilities
- Black NH/NL youth
- Bi/pansexual youth

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 6) The number of respondents = 1,998. Effective sample size = 1,997.

# YOUTH EXPERIENCE WITH ANY TYPE OF VIOLENCE DURING COVID-19

Young with disabilities were 2.6 times as likely to experience any violence during the pandemic compared to youth without disabilities. Transgender youth were 2 times as likely to report violence compared to non transgender youth.



Overall, 7% of youth reported any type of violence during the pandemic.

Youth who were more likely to report violence were:

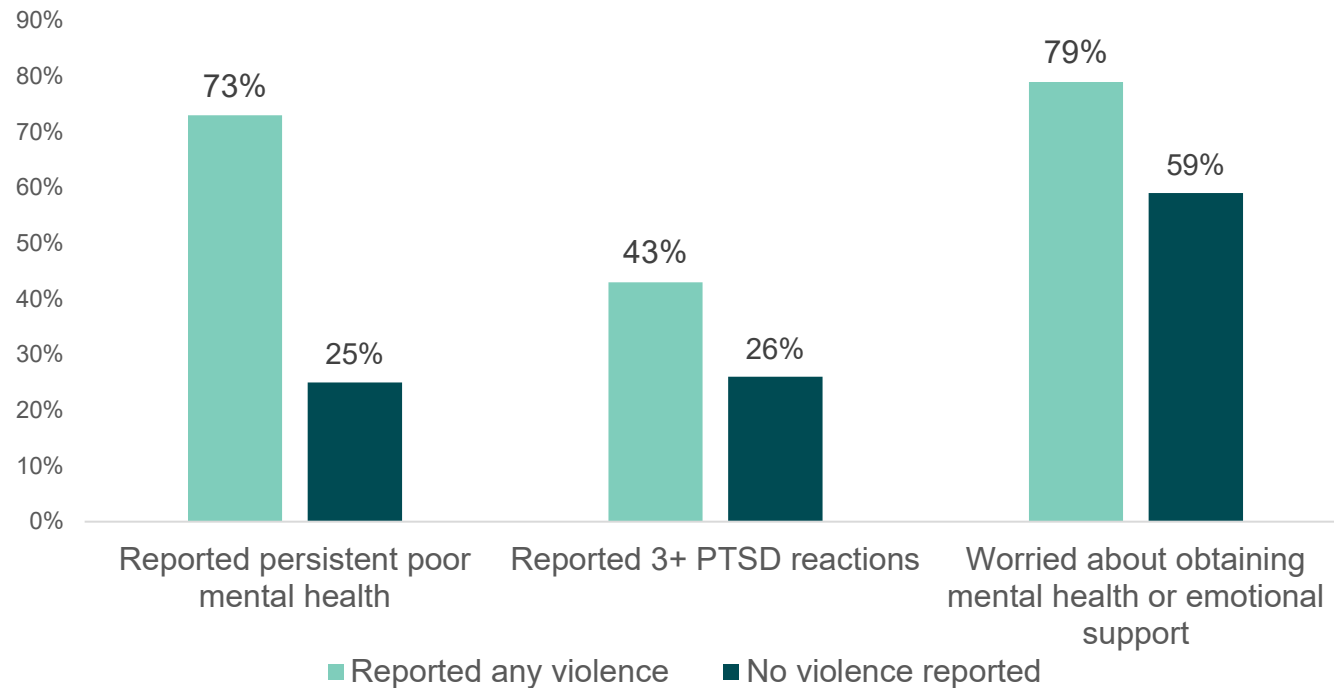
- Youth with disabilities
- Transgender youth
- Queer and bi/pansexual youth

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different ( $p < 0.05$ ) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 6) The number of respondents = 1,896. Effective sample size = 1,898.

# YOUTH MENTAL HEALTH AND VIOLENCE

Youth experiencing violence were 3 times as likely to report persistent poor mental health and 1.6 times as likely to report 3 or more PTSD reactions during the pandemic compared to youth who did not experience violence.

Youth Mental Health by Experience with Any Violence



Persistent poor mental health is defined as reporting feeling so sad or hopeless for two weeks or more in a row during the past 12 months that you stopped doing some usual activities.

PTSD reactions include:

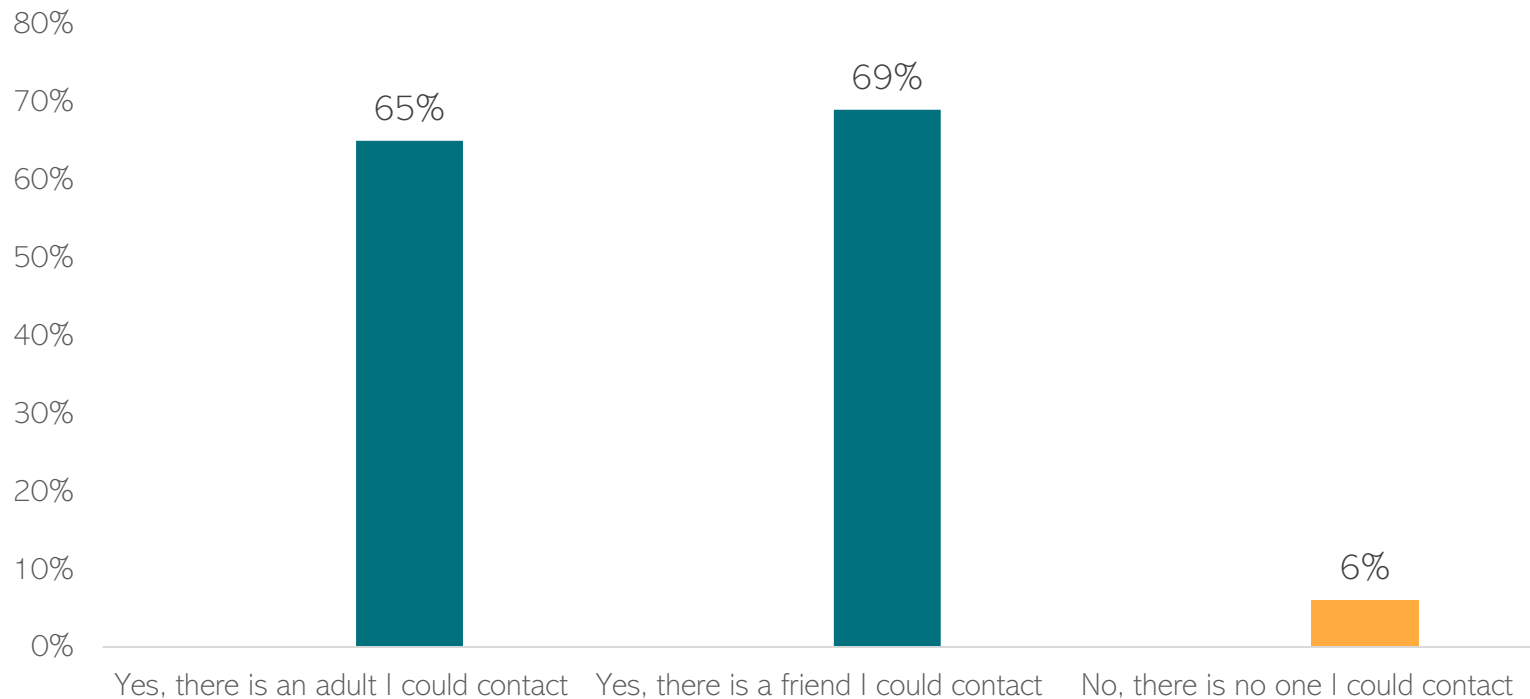
- Having nightmares or thinking about COVID-19 when you did not want to
- Trying not to think about it or going out of your way to avoid situations that reminded you of it
- Being constantly on guard, watchful, or easily startled
- Feeling numb or detached from people, activities, or your surroundings
- Feeling guilty or unable to stop blaming yourself or others for it or any problems it may have caused

Data notes: 1) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 2) Differences in mental health were statistically significant ( $p < 0.05$ ). 3) The number of respondents = 1,896. Effective sample size = 1,898.

# YOUTH RELATIONSHIPS DURING COVID-19

Most youth report they have someone outside of their home they could contact about a problem.  
Having a trusted adult to talk to is a protective factor for youth.

Right now, if you needed help with a personal problem, is there someone you think you could contact outside of your home?



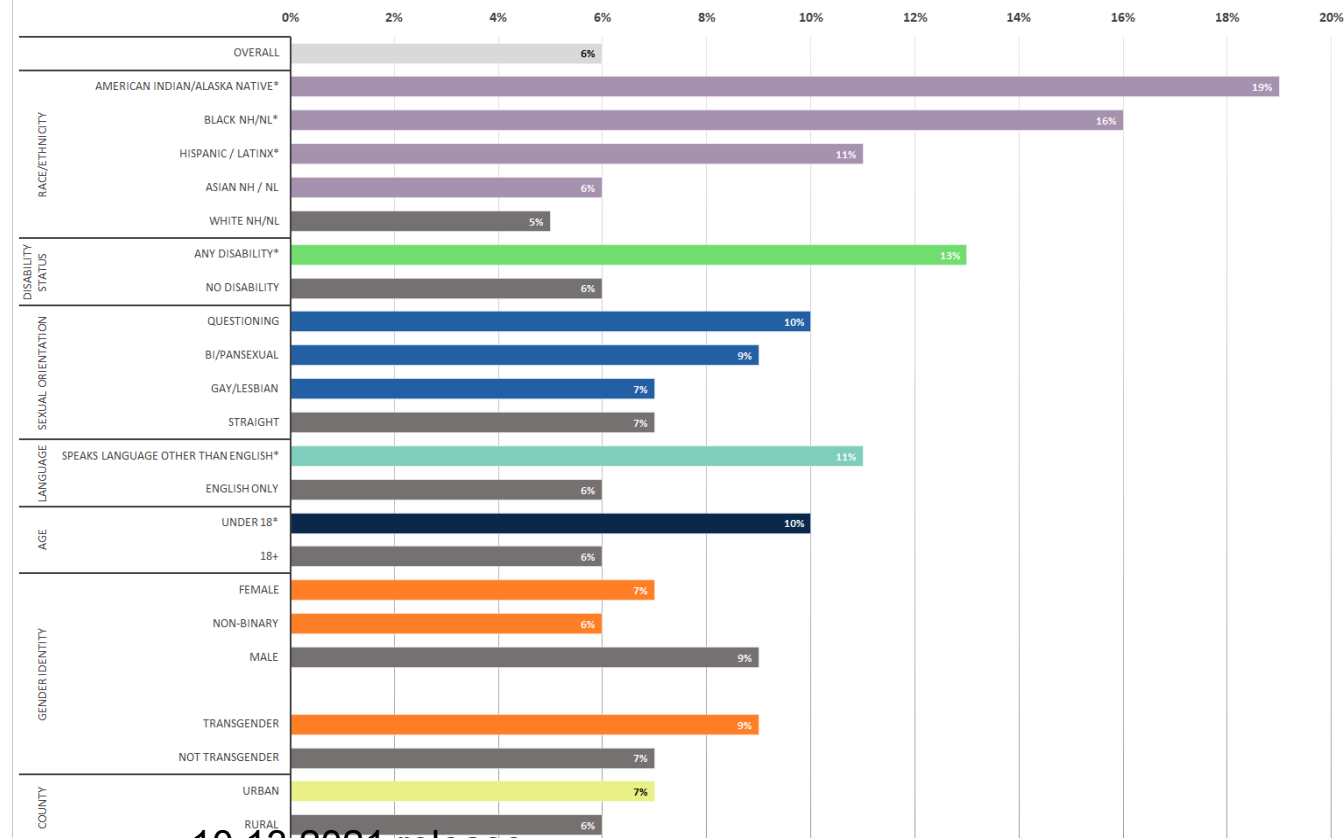
- 65% of youth said there was an adult they could talk to outside of their home during COVID-19
- 75% of MA youth reported having an adult or teacher at school they can talk to about a problem prior to the pandemic (MA YRBS, 2017)

Data notes: 1) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 2) Differences in mental health were statistically significant ( $p < 0.05$ ). 3) The number of respondents = 2,419. Effective sample size = 2,353.

# YOUTH RELATIONSHIPS DURING COVID-19

American Indian/Alaska Native youth, Black youth, and Hispanic/Latinx youth are 3 times as likely as White youth and youth with disabilities are 2 times as likely as youth without disabilities to report not having a person to talk to outside of their home.

% Youth reporting they do not have anyone to contact about a problem during COVID-19



Overall, 6% of youth reported that they did not have someone outside of their home to talk to about a problem during the pandemic.

Youth who were less likely to have a trusted person outside of their home were:

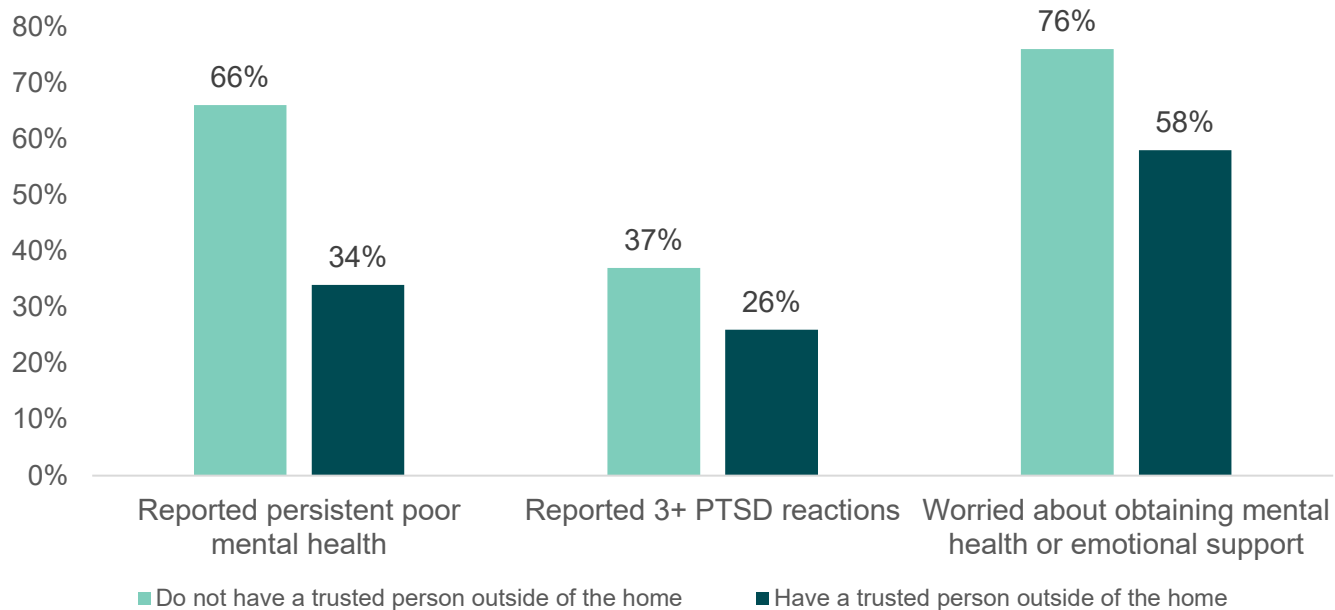
- Youth of color
- Youth with disabilities
- Youth who speak a language other than English
- Youth under the age of 18

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) \* denotes rate is significantly different (p<0.05) compared to the reference group; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 6) The number of respondents = 1,896. Effective sample size = 1,898.

# YOUTH MENTAL HEALTH & RELATIONSHIPS

Youth who do not have someone to contact outside of their home about a problem are more likely to report persistent poor mental health and concern about emotional support.

### Youth Mental Health by Having a Trusted Relationship Outside of the Home



Persistent poor mental health is defined as reporting feeling so sad or hopeless for two weeks or more in a row during the past 12 months that you stopped doing some usual activities.

PTSD reactions include:

- Having nightmares or thinking about COVID-19 when you did not want to
- Trying not to think about it or going out of your way to avoid situations that reminded you of it
- Being constantly on guard, watchful, or easily startled
- Feeling numb or detached from people, activities, or your surroundings
- Feeling guilty or unable to stop blaming yourself or others for it or any problems it may have caused

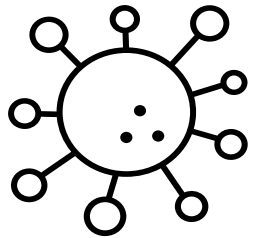
Data notes: 1) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 2) Differences in mental health were statistically significant ( $p < 0.05$ ). 3) The number of respondents = 1,896. Effective sample size = 1,898.



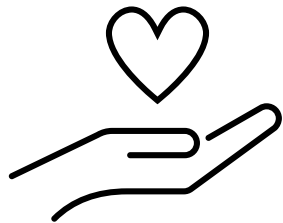
# YOUTH ACCESS TO HEALTH CARE

# IMPACT ON YOUTH ACCESS TO CARE

In many ways, youth were able to get access to health care during the pandemic



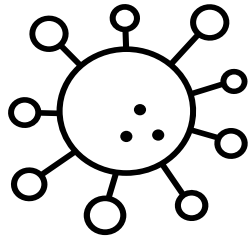
46% of all youth were able to see a provider in-person during COVID-19



36% of all youth were able to see a provider by phone or video during COVID-19

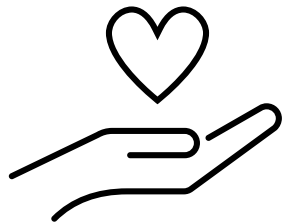
# IMPACT ON YOUTH ACCESS TO CARE

However, youth had concerns about getting medical care during COVID-19



57% of youth who were unable to get care during COVID-19 were seeking routine check ups

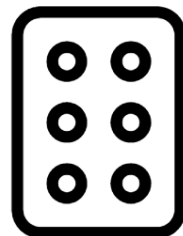
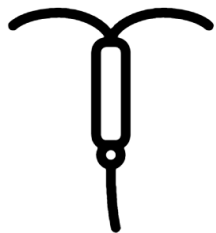
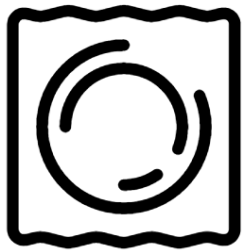
Almost 1/3 of youth who were unable to get health care (29%) were worried about getting COVID if they sought out medical care



16% of youth had other responsibilities, like taking care of siblings, that prevented them from seeking medical care during the pandemic

# IMPACT ON YOUTH ACCESS TO CARE

Youth had concerns about getting sexual and reproductive health care during COVID-19



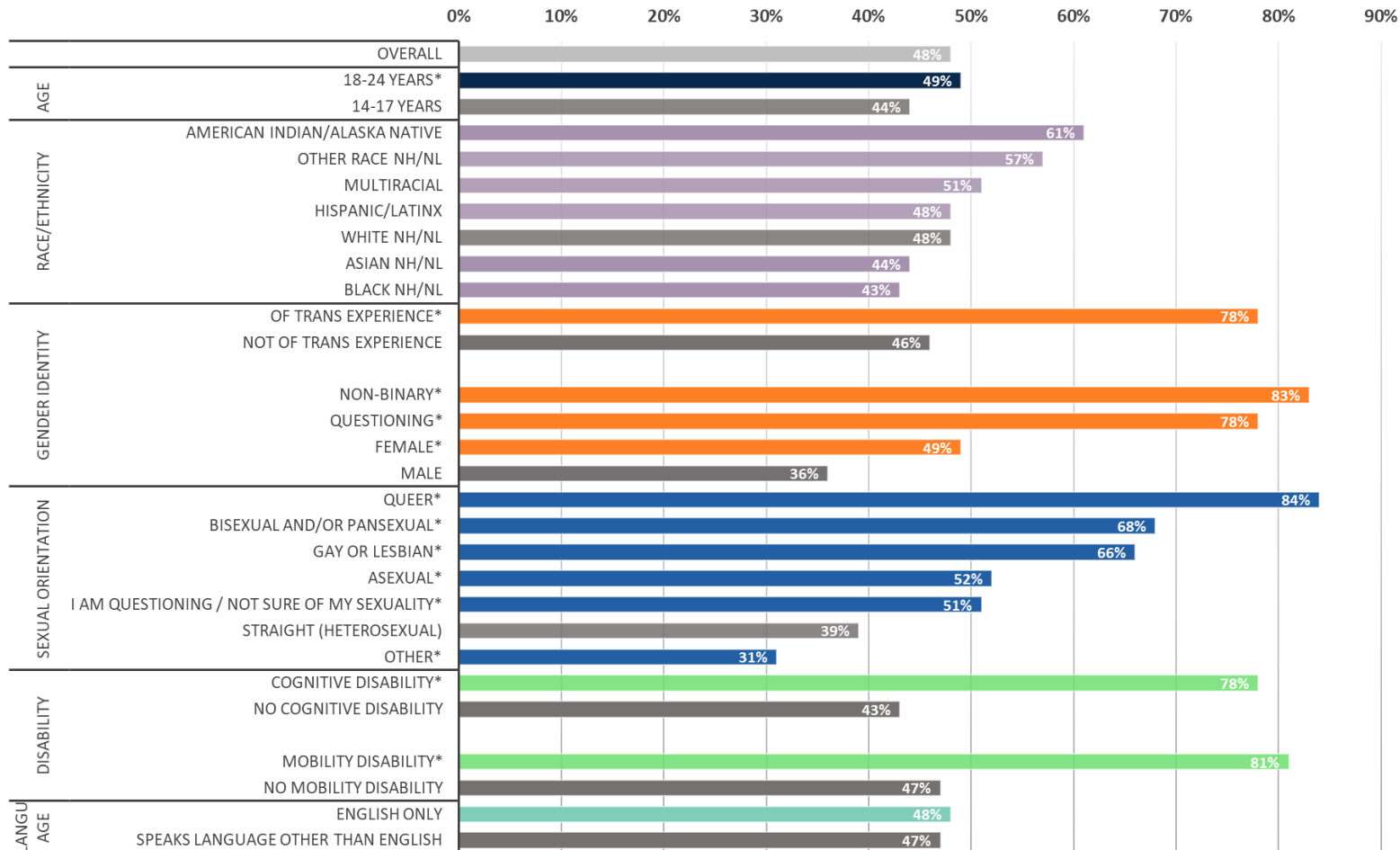
23% of youth who could not see a provider during the pandemic wanted to see a sexual and reproductive health provider

This almost 2x as high for queer youth-  
41% of queer youth could not see a sexual and reproductive health provider but wanted to during the pandemic

# IMPACT ON YOUTH MENTAL HEALTH

As seen before, youth mental health was greatly impacted during COVID-19

% Youth Feeling Sad or Hopeless Every Day for 2+ Weeks



LGBTQ+ youth and youth with disabilities are experiencing the greatest inequities when it comes to persistent mental health concerns during the pandemic

NOTE: \* denotes statistically significant findings (p<0.05). The number of respondents responding to questions related to their mental health= 2483. Effective sample size = 2428.

# IMPACT ON YOUTH ACCESS TO CARE

Youth had concerns about getting mental health care during COVID-19

48% of all youth reported poor mental health during the pandemic

37% of youth who were unable to get health care, wanted to see a doctor or counselor to get help dealing with stress, depression, nervousness, or anxiety, including:



67%\* of youth of transgender experience

54% of non-binary youth

42% of Black nH/nL youth

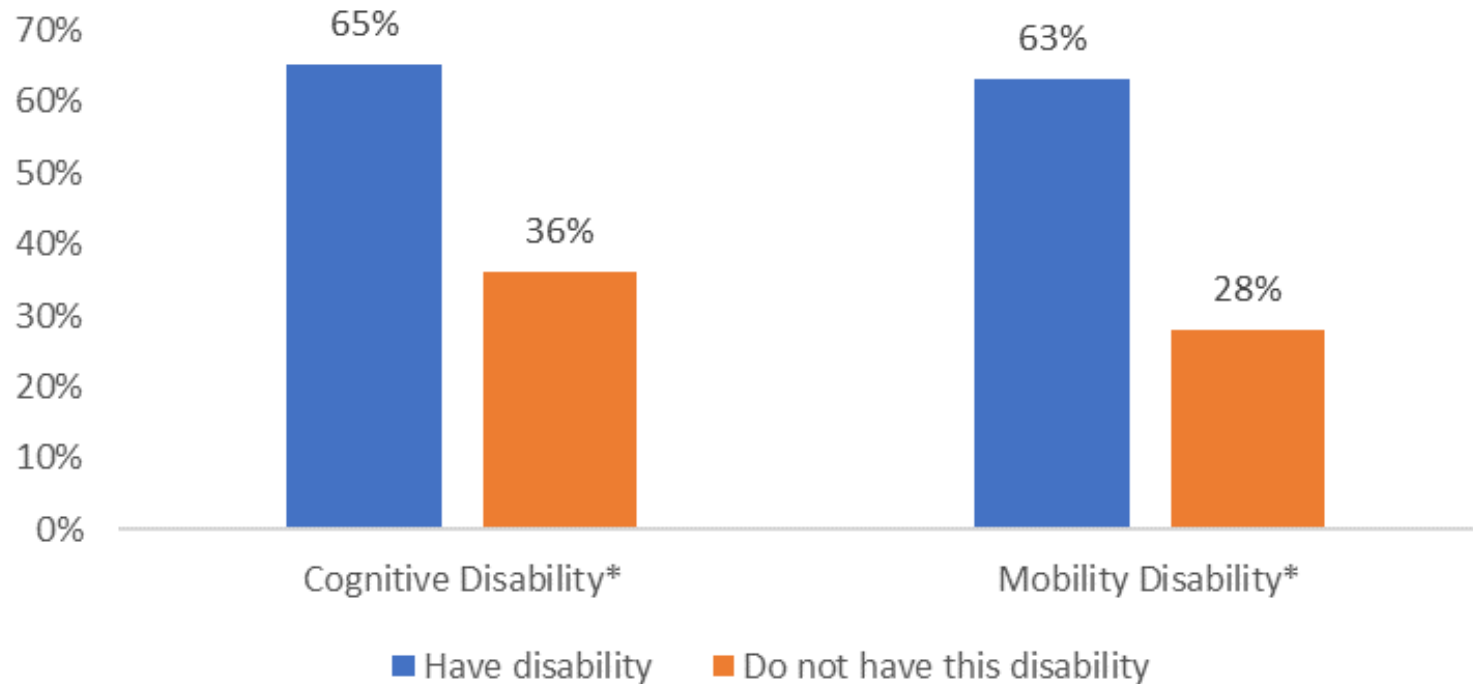
41% of Hispanic/Latinx youth

NOTE: \* denotes statistically significant findings ( $p < 0.05$ ). The number of respondents responding to questions related to their mental health = 2483. Effective sample size = 2428. The number of respondents reporting inaccess to health care = 298. Effective sample size = 322.

# IMPACT ON YOUTH ACCESS TO CARE

## Youth with disabilities had concerns about getting mental health care during COVID-19

Differences in Desire for Mental Health Supports  
Among Youth with Disabilities



Youth with cognitive disabilities were **1.8x** as likely to want to have accessed mental health care during the pandemic and not been able to get it, compared to youth without cognitive disabilities

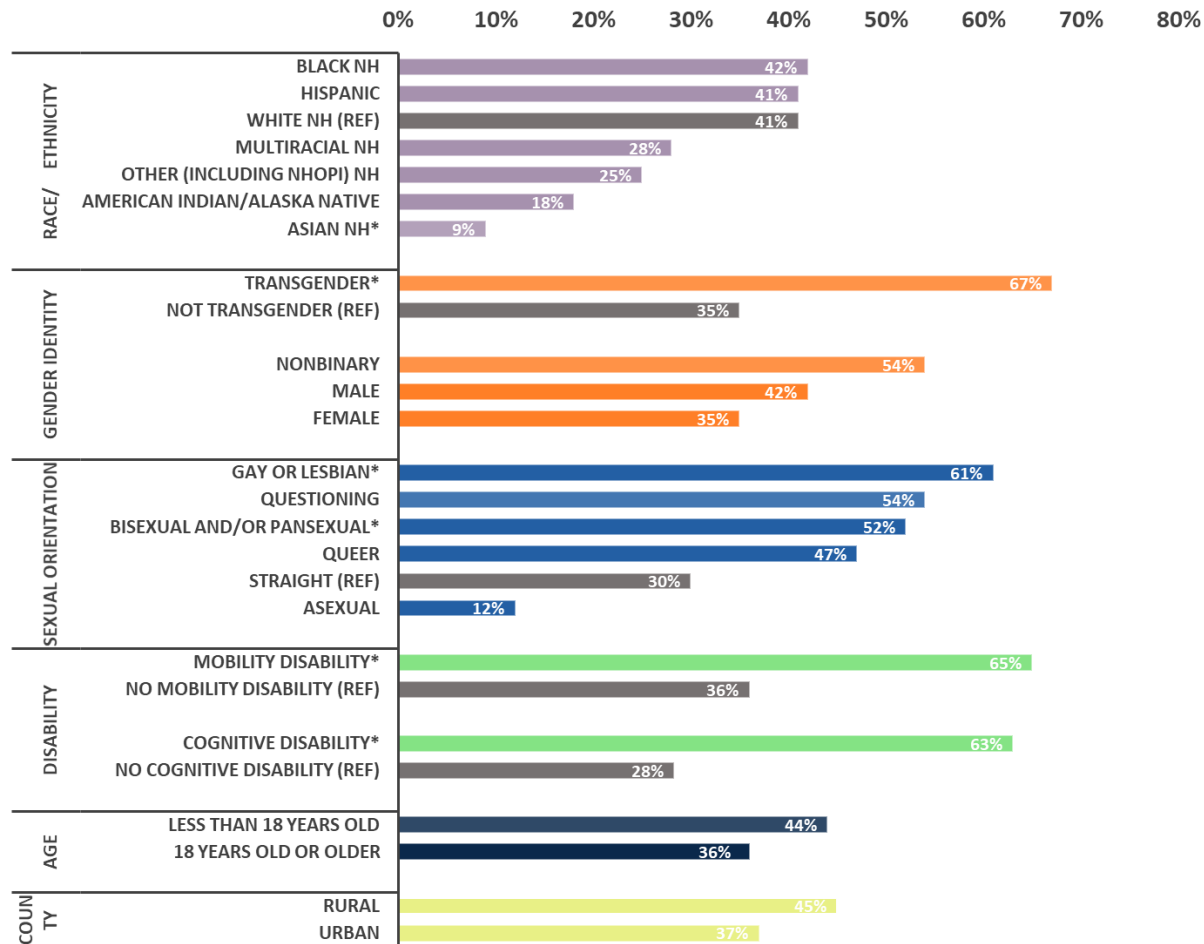
Youth with mobility disabilities were **2.3x** as likely to want to have accessed mental health care during the pandemic and not been able to get it, compared to youth without mobility disabilities

NOTE: \* denotes statistically significant findings (p<0.05). The number of respondents reporting inaccess to health care = 298. Effective sample size = 322.

# IMPACT ON YOUTH ACCESS TO CARE

Many youth report being unable to get mental health care during COVID-19

% youth unable to get mental health care during COVID-19



Youth who most commonly reported wanting to see a provider to get help with dealing with stress, depression, nervousness, or anxiety included:

- Youth with disabilities
- LGBTQA youth
- Youth of transgender experience

Data notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) "nH/nL"=non-Hispanic/non-Latinx; 3) "American Indian/Alaskan Native" includes Hispanic/Latinx; 4) Other race includes Native Hawaiian Pacific Islander; 5) All percentages are weighted to the statewide age and race/ethnicity distribution of those 14-24 years; 6) The number of respondents reporting inaccess to health care = 298. Effective sample size = 322.

# IMPACT ON YOUTH ACCESS TO CARE

## Youth had concerns about getting mental health care during COVID-19



If you or someone you love are in crisis, call the National Suicide Prevention Lifeline, 1-800-273-8255, to speak with a trained volunteer

Among youth who wanted mental health resources but could not access them during COVID-19, **19%\*** of them reported wanting suicide and crisis resources.

While we would expect some youth who want access to mental health support would be in crisis, this highlights the critical need of increased mental health care for young people.

NOTE: Percentages statistically significant ( $p < 0.05$ ). The number of respondents reporting wanting mental health resources and unable to get them = 108. Effective sample size = 115.

# KEY TAKEAWAYS: YOUTH

- Youth of color were more likely than White NH/NL youth to experience safety concerns, such as discrimination during the pandemic and not feeling safe from violence in their neighborhoods.
- Youth with disabilities and LGBTQ+ youth were more likely than other groups of youth to report experiencing any type of violence, including household and intimate partner violence
- While many youth were able to access health care, many groups of youth were unable to get access to care, particularly those who wanted mental health care and support (37% of youth)
- Youth mental health is impacted by these health and safety concerns – youth experiencing discrimination or violence were more likely to report persistent poor mental health
- Increasing access to health care and healthy relationships outside the home could mitigate some mental health concerns
- Having someone to talk to about a problem outside of the home was associated with less reported persistent poor mental health, but the groups that reported not having someone to talk to were also the groups that experienced more discrimination, violence, and difficulty accessing healthcare.

# KEY TAKEAWAYS: YOUTH

These findings underscore the need for continued commitment to youth-serving programs that are trauma-informed, reduce barriers for youth, promote protective factors and center youth who are facing multiple challenges, such as LGBTQ youth, youth of color and youth with mental health challenges.

Examples of these programs and initiatives at MDPH include:

- Safe Spaces for LGBTQ Youth
- School-based health center program
- Suicide prevention program
- Sexual and reproductive health program
- Healthy relationships grant
- Adolescent Sexuality Education (ASE) program
- Office of Youth and Young Adult Services
- Massachusetts Pregnant and Parenting Teen Initiative

They also underscore the importance of a spectrum of approaches to meet the complex needs of youth (e.g. promoting access to the National Suicide Prevention Hotline, 1-800-273-8255, while also preventing violence against youth and promoting youth strengths and supports).

# YOUTH SAMPLE

	Population	Sample Size
	Total	3052
Race/ Ethnicity	American Indian/Alaska Native	63
	Asian, nH/nL	278
	Black, nH/nL	221
	Hispanic/Latinx	675
	Multiracial, nH/nL	104
	Other, nH/nL	44
	White, nH/nL	1608
	Age	<18
	18+	1652
Geography	Rural	203
	Urban	2785
Language	English only	2056
	Speaks lang other than Eng.	991

	Population	Sample Size
Sexual Orientation	Asexual	71
	Bisexual and/or Pansexual	445
	Gay or Lesbian	175
	Straight (Heterosexual)	2023
	Queer	81
	Questioning	137
	Other; Don't understand; prefer not answer	101
	Transgender	Of transgender experience
	Not of transgender exp.	2816
Gender Identity	Male only	789
	Female only	2059
	Non-binary	128
	Questioning	31
	Other	36

	Population	Sample Size
Disability	Deaf/hard of hearing	24
	Blind/ vision impairment	44
	Cognitive disability	414
	Mobility disability	40
	Self-care/independent living disability	133
Working/ employed youth	Yes	1190
	No	1318
Young parents	Yes	148
	No	2904

Note: May not sum to total due to missing data for some questions.  
Includes respondents under the age of 25 (both from youth survey and young parents who took the adult survey)

# DATA TO ACTION

Jessica del Rosario

Kim Etingoff

Jennica Allen

Ben Wood

# DATA TO ACTION

We are getting input from both internal and external stakeholders in order to convert these data to action.

## INTERNAL GROUPS

Established a Data to Action (DTA) Workgroup to convene Bureaus, Offices, work groups etc. in integrating findings into DPH actions.

*Eg. integrate population specific lessons learned into the launch of the Vaccine Equity Initiative among the top 20 impacted towns/cities*

## COLLABORATORS

We are eliciting input from our advisory groups (eg. HEAG, Tribal Partners) to help us interpret and identify possible actions resulting from the data.

*Eg. improve accessible options on the vaccine website after hearing from external partners that existing measures still posed accessibility barriers*

## LOCAL PARTNERS

We are also providing the data presented here by granular geographies, and populations. to equip our local partners in tailoring their own pandemic response.

*Eg. Providing data by race, ethnicity groups, sexual orientation, gender identity, transgender status, types of disability, income, education, language spoken, geography, rural cluster, age, etc.*



### COMMUNICATION / PSAs

How can we utilize alternative channels to reach key populations (not currently being reach)? What modes to use?



### SDOH OVERLAP

How do we address the multiple layers of barriers and burden?



### ACCESSIBILITY

How can we improve accessibility of information and services (e.g., language, technology, cultural competence of providers)?

### RESOURCE INFORMATION

How can we help people access needed supports, services, and resources?



### HEALTH LITERACY & TRUST

How can we craft understandable messaging that also addresses concerns and fears not just recommended actions?



### HEALTHCARE CAPACITY

How can we increase appointments, telehealth infrastructure, culturally competent providers, CHWs?



### EMPLOYMENT

How can we promote more equitable worker protections (physical conditions, testing, and benefits/leave)?



### TELEHEALTH & TECHNOLOGY

How can we reduce technology-related barriers to accessing services?

# DATA TO ACTION – EXAMPLE

## Actions Taken Related to Key Finding for YOUTH

Bureau/Program	Action Taken
BCHAP/MA Pregnant and Parenting Teen Initiative (with DTA)	<ul style="list-style-type: none"><li>• Included FTEs for a mental health staff to be available for young families to provide referrals, 1:1 conversations and have families connected to counseling needs</li><li>• Support young parents/families have food, basic needs, diapers, formulas, housing payments, other bills are paid despite employment loss.</li></ul>
BCHAP/Division of Child/Adolescent and Reproductive Health	<ul style="list-style-type: none"><li>• “We got us” project aimed at young people and youth-serving providers, including school-based health centers looking at medical racism, vaccine hesitancy and vaccine questions</li><li>• School Health services contracts were flexible to address BH needs.</li><li>• Posted RFR for Tele-Behavioral Health in Schools pilot</li><li>• Youth Mental Health First Aid through Suicide Prevention program - in-depth course on mental health and suicide, designed for those who work with youth; trained 2 DPH staff</li></ul>

# DATA TO ACTION – EXAMPLE

## Actions Taken Related to Key Finding for PEOPLE WITH DISABILITIES

Bureau/Program	Action Taken
BFHN/Family TIES and Early Intervention Parent Leadership Project	<ul style="list-style-type: none"><li>Collected and shared resources for families of children with special health needs, focusing on identifying community resources such as food pantries, grants for technology, PPE, etc.; supported service providers to deliver PPE and durable medical equipment to vulnerable families of children with special health needs</li></ul>
BFHN/ Universal Newborn Hearing Screening Program (UNHS)	Distributed videos in ASL via Facebook and emails to distribution list
COVID-19 Command Center	Review, edit, produce vaccine material (i.e., format, language, print/web) to increase accessibility for people with disabilities

# DATA TO ACTION – EXAMPLE

Actions Taken Related to Key Finding for

Black, Latinx, American Indian & Alaska Native, Asian Populations

Bureau/Program	Action Taken
BFHN/DCYSHN Community Support Line	Assisted Phase 1 vaccine priority caregivers by fielding vaccine-related phone calls, working individually with callers to facilitate access to the vaccine. As part of their comprehensive intake process, they engaged more families in accessing other needed services for families of children and youth with special health needs and helped with problem solving vaccine and other issues in multiple languages
BCHAP/Suicide Prevention Program	<ul style="list-style-type: none"><li>• Expanded provider services such as supporting provider to establish new groups offered in Portuguese and Haitian Creole</li><li>• With DMH and through federal funding, supported tribal communities to increase mental and behavioral health support by purchasing Zoom for a few tribal members</li></ul>

# DATA TO ACTION – EXAMPLE

Actions Taken Related to Key Finding for

Black, Latinx, American Indian & Alaska Native, Asian Populations

Bureau/Program	Action Taken
Division of Health Professional Licensure/BHPL	The Language Access Plan ensures meaningful access to MDPH services, programs and activities on part of persons who self-identify as having limited English Proficiency (LESP) or prefer a different language
COVID-19 Command Center	<ul style="list-style-type: none"><li>• Review, edit, produce vaccine material in multiple languages</li><li>• Fund community-based organizations in 20 priority communities to connect specific populations with vaccine materials</li><li>• Create Community Liaison program to increase connectivity between DPH and 20 priority communities</li></ul>

# DATA TO ACTION– EXAMPLE

Key Finding: Certain groups of youth were more likely to report testing positive for, being exposed to, or losing someone due to COVID-19: American Indian/Alaska Native, Black non-Hispanic, Latinx, young parents, speak a language other than English

Heard: Youth are getting conflicting messaging about re-opening without having access to a vaccine for those <16; impacts of the pandemic are going to be long lasting

## Actions Taken:

- Presented findings, gathered feedback, and facilitated data to action conversations to the DPH Youth Vaccine Workgroup, the Positive Youth Development Roundtable, and the Division of Child/Adolescent Health and Reproductive Health
- Will be presenting findings to the Young Parent Statewide Convening in May

# DATA TO ACTION – EXAMPLE

Key Finding: Substance Use – Respondents are burdened with a range of social determinant related needs, and are more likely to delay care

Heard: Need to increase integration of mental health and substance use disorder services, address recent changes in substances used, and provide for basic needs and wrap-around support

Action Taken: BSAS' comprehensive portfolio of programs/initiatives, including:

- Funding triage-urgent care centers to address co-occurring MH/SUD, allowing for immediate access at the initial point of care
- Reinforcing the use of Screening, Brief Intervention and Referral to Treatment (SBIRT) to address increased alcohol consumption during COVID
- Addressing stimulant use by allowing admissions into MAT Enhanced settings
- Leverage use of telehealth for induction/intake for Medications for Opioid Use Disorder (MOUD), including telehealth induction on buprenorphine and naltrexone and promoting the use of telehealth by reimbursing providers for patient cell phones/data plans
- Providing recovery-based/culturally-responsive services for Black and Latino men at risk of fatal overdoses following release from incarceration
- Increasing investments in new and existing housing-related initiatives, including expanding low threshold/housing first and recovery housing programs

# DATA TO ACTION – EXAMPLE

Key Finding: Parents and Families – Parents and guardians have additional stressors during the pandemic, including balancing childcare and making ends meet. **Parents worried about paying for expenses were 88% more likely to report poor mental health.**

Heard: Parents, particularly younger parents and parents of children with special healthcare needs, need flexible services to meet their needs

## Actions Taken:

- Expanded the Massachusetts Pregnant and Parenting Teens Initiative (MPPTI) in collaboration with DTA
- Collaborate with Young Parent Statewide Convening to share results, gather feedback, and discuss implications
- Shared with programs aimed at providing flexible, multigenerational support to families, including Project LAUNCH and the Division of Children and Youth with Special Healthcare Needs

# DATA TO ACTION – EXAMPLE

Key Finding: The effect of COVID-19 on workers in Massachusetts has been severe, and has disproportionately impacted specific groups of workers

Heard: As we move continue to make efforts to increase vaccination efforts state-wide, as well as ensure that other COVID-19 prevention strategies are in place, we need to recognize that work is an important contributor to COVID-19 risk.

## Action Taken:

- Community Liaisons to the 20 VEI communities are being briefed on the CCIS employment findings. We are also adding contextual information about the employment make-up of the 20 communities prioritized in the Vaccine Equity Initiative to help increase vaccinations of high-risk worker populations in those communities.
- Advocating for employee centric considerations in vaccination uptake efforts such as appointments available outside of regular working hours, increased mobile units, educating employers about tax credits, etc.
- We have met with the HEAG as well as our OHSP Advisory Board to strategize about ways to engage with workers and employers and are working to implement these ideas.

# DATA TO ACTION – EXAMPLE

Key Finding: Mental Health - Requests for suicide prevention and crisis management resources were as high as 11% among certain subpopulations and was the highest among Transgender respondents, non-binary respondents, and respondents questioning their gender identity.

Heard: Need to expand and adapt services

Action Taken: DPH's Suicide Prevention Program with intra- & inter-agency partners:

- Supporting expanded/adapted services including offering virtual support groups, new in-language groups, tele-check calls, peer programs (for youth and attempt survivors)
- Increased support to crisis centers who provide emotional support for those experiencing suicidal crisis or emotional pain, contracted with Riverside Trauma Center to provide services to schools/communities after the death of a youth by suicide
- New/modified online training modules on Behavioral Health among Older Adults, providing suicide prevention training to MA Corrections, first offering for state employees, Zero Suicide monthly learning series provided to health care, behavioral health care and community organizations in southeast MA, trainings for the public, Annual Suicide Prevention Conference to be held virtually 5/19 & 5/20

# DATA TO ACTION – EXAMPLE

Key Finding: Certain groups of youth were more likely to report testing positive for, being exposed to, or losing someone due to COVID-19: American Indian/Alaska Native, Black non-Hispanic, Latinx, young parents, speak a language other than English

Heard: Youth are getting conflicting messaging about re-opening without having access to a vaccine for those <16; impacts of the pandemic are going to be long lasting

## Actions Taken:

- Presented findings, gathered feedback, and facilitated data to action conversations to the DPH Youth Vaccine Workgroup, the Positive Youth Development Roundtable, and the Division of Child/Adolescent Health and Reproductive Health
- Will be presenting findings to the Young Parent Statewide Convening in May

# DATA TO ACTION – EXAMPLE

Key Finding: 63% of currently working youth worked outside of the home during the past year.

Heard: Youth are an integral part of the workforce and need to be included in efforts to vaccinate and protect workers across the Commonwealth. Strategies for connecting with youth at work may differ from adults at work.

## Actions Taken:

- Developing a resource list that municipalities can use to support employers in employee vaccination efforts, efforts and COVID-19 mitigation, with some youth specific outreach materials
- Explore opportunities to partner with youth organizations about work-related COVID-19 risk factors and vaccination strategies for youth.
- Explore opportunities for vaccine ambassadors to include information specific to youth especially when giving presentations to municipalities or employers.

# DATA TO ACTION – EXAMPLE

Key Finding: 28% of youth reported that finding a job would be helpful.

Heard: There are many jobs in trade industries and not enough skilled workers to fill them. The cost of college is making many youth not continue their education beyond high school.

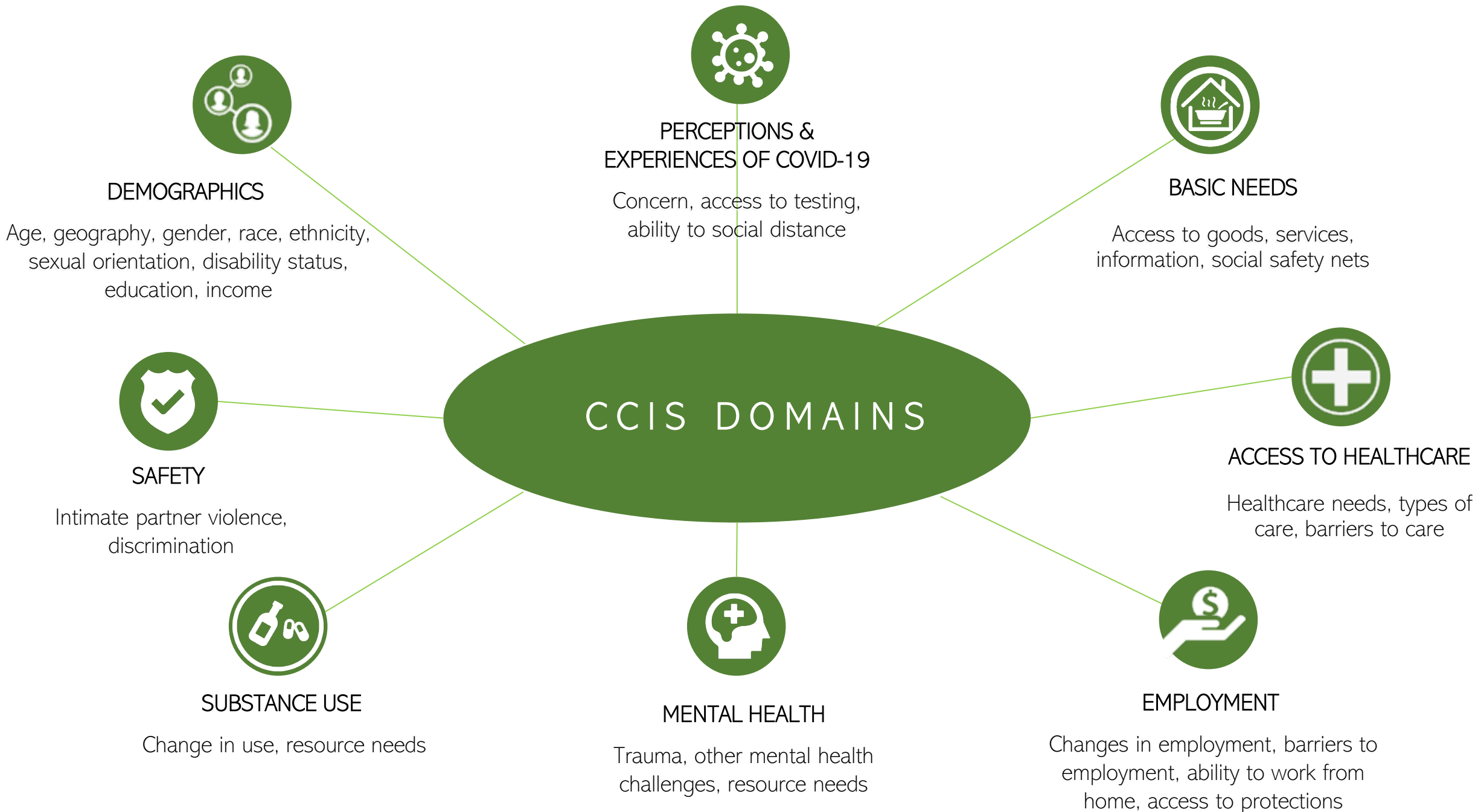
## Actions Taken:

- The Occupational Health Surveillance Program (OHSP) coordinates the MA Youth Employment and Safety Team (MA YES TEAM), a multi-agency group that aims to keep youth safe at work including in state funded summer work programs.
- Some vocational schools are partnering with industry to use the shops after school hours to offer training programs for young adults and adults through the evening academies and Technical Institute programs.
- Some vocational schools are partnering with public school districts to allow students in the public school to take afternoon classes at the vocational school through the After Dark Program.

# THANK YOU!

For more details please visit <https://www.mass.gov/covidsurvey>

# APPENDIX



# Survey Questions

## Demographics

What city or town do you live in?	Were you pregnant during the COVID-19 outbreak or did you give birth since February 2020?
How many people - adults and children - currently live with you, including yourself?	When did you give birth?
How many people who are over 60 years old currently live with you, including yourself?	After the start of the COVID-19 outbreak, did your birth plans change?
Are you a caretaker of an adult(s) with special needs in your household?	What is the highest grade or year of school you have finished?
Are you a parent/guardian of a child or youth with special health care needs?	In 2019, what was your total annual household income before taxes?
Please select all that apply to you: <ul style="list-style-type: none"> <li>• I am deaf or hard of hearing.</li> <li>• I am blind or I have trouble seeing even when I am wearing glasses.</li> <li>• I have trouble concentrating, remembering, or making decisions because of a physical, mental, or emotional condition.</li> <li>• I have trouble walking or climbing stairs.</li> <li>• I have trouble getting dressed or taking a bath or shower.</li> <li>• I have difficulty doing errands alone such as visiting a doctor's office or shopping.</li> <li>• None of the above apply to me.</li> </ul>	Have you ever been sentenced to stay overnight or longer in any type of corrections institution? Examples include a jail or prison.
	What is your sexual orientation?
	What is your current gender identity?
	Are you transgender or of transgender experience?
	Are you Hispanic or Latino?

# Survey Questions

## Demographics

What is your race? Select all that apply.

What is your ethnicity? Select all that apply.

(For English Survey) Do you speak language(s) other than English at home?

Which language(s) do you speak at home?

(For Non-English Surveys) How well do you speak English?

## Perceptions & Experiences of COVID-19

How worried are you about getting infected with COVID-19 in Massachusetts?

Please select the two sources that you go to for the most reliable and up-to-date information about COVID-19.

When you are outside of the home are you able to keep 6 feet between yourself and others?

Why not? Check all that apply

## Perceptions & Experiences of COVID-19

Do you agree or disagree with the following statements? My community is receiving adequate support to:

- Prevent the spread of COVID-19
- Protect workers from COVID-19
- Ensure medical facilities have the capacity to treat everyone who is sick or injured?
- Help people who have lost income
- Help businesses recover

Have you had fever and/or cough or shortness of breath and/or muscle aches or loss of sense of taste or smell in the last 30 days?

Did you ever get tested for COVID-19?

Why didn't you get tested? Select all that apply.

Have you or anyone you know tested positive for COVID-19? Select all that apply.

Has someone close to you died from COVID-19?

# Survey Questions

## Healthcare Access

Do you currently have any of the following health conditions? Select all that apply.

Since July 1, 2020, what has been your experience with trying to see a doctor, counselor or another medical professional? Select all that apply.

For the care you did not get, why did you want to see a doctor or counselor at that time? Select all that apply.

What type(s) of regular care or check-up did you need at that time? Select all that apply.

What condition(s) did you need emergency or urgent care for at the time? Select all that apply.

Why were you not able to get care at the time? Select all that apply.

What type(s) of health insurance do you currently have? Select all that apply.

Has your health insurance changed since the COVID-19 outbreak?

## Basic Needs

Which of the following basic needs are you worried about getting for you and your family? This could be now or in the next couple of weeks. Select all that apply.

- Household Items
- Healthcare and medication
- Technology
- Childcare supplies
- Other

Which of these would be helpful to you right now? Select all that apply. (Food, help getting benefits, knowledge about rights, accessible services – translation, disability, childcare, other)

Which types of expenses or bills are you most worried about paying in the next few weeks?

Are you worried about any of these that will require you to move out of where you live in the next few months? Select all that apply.

Have you applied to any of these financial supports since the beginning of the COVID-19 outbreak? What is the status of your application?

# Survey Questions

## Mental Health

Now thinking about your mental health, which includes stress, depression, and problems with emotions, on how many days during the past 30 days was your mental health not good?

In the past month, have you had three or more of the following reactions to things you've seen, heard, or experienced related to the COVID-19 outbreak:

- Had nightmares or thought about it when you did not want to?
- Tried not to think about it or went out of your way to avoid situations that reminded you of it?
- Been constantly on guard, watchful, or easily startled?
- Felt numb or detached from people, activities, or your surroundings?
- Felt guilty or unable to stop blaming yourself or others for it or any problems it may have caused?

Which of these resources would be most helpful to you right now to help you with your mental health and well-being? Select all that apply.

## Substance Use

During the past 30 days, have you used any of the following products  
Select all that apply.

Compared to before the COVID-19 outbreak (February 2020), how often are you using these products now?

Which of the following resources would be most helpful to you right now? Select all that apply.

## Employment/Income

Which of the following best describes your current work situation?  
(Employed, Retired, unemployed, furloughed, etc.)

What kind of work do/did you do? For example, registered nurse, janitor, cashier, auto mechanic. If you have more than one job, please answer for your primary job.

What kind of business do you work in? For example, hospital, elementary school, manufacturing, restaurant. If you have more than one job, please answer for your primary job.

# Survey Questions

## Employment/Income

Has your employer given you any of the following to protect you against COVID-19? Select all that apply.

If you are currently working, do you have paid sick leave you can use through your employer?

Was your employment status or the nature of your work changed in any of the following ways due to COVID-19? Select all that apply.

Why did your employment status or the nature of your work change? Select all that apply

## Safety

Since COVID-19 began (March 10, 2020), has someone you were dating or married to physically hurt you? (i.e. being shoved, slapped, hit, kicked, punched, strangled, forced into sexual activity, or anything that could have caused an injury)

Since COVID-19 began (March 10, 2020), has someone you were dating or married to done any of the following: monitored your cell phone, called or texted you a lot to ask where you were, stopped you from doing things with friends, been angry if you were talking to someone else, or prevented you from going to school or work (including remotely)?

For which of the following topics would online support be most helpful to you or someone you know right now? Please select all that apply:

Discrimination can refer to harmful words and behaviors aimed at you because of your race or ethnicity. Since the COVID-19 outbreak began (March 10, 2020), have you experienced any form of discrimination because of your race or ethnicity?

In what way(s) did you experience discrimination?

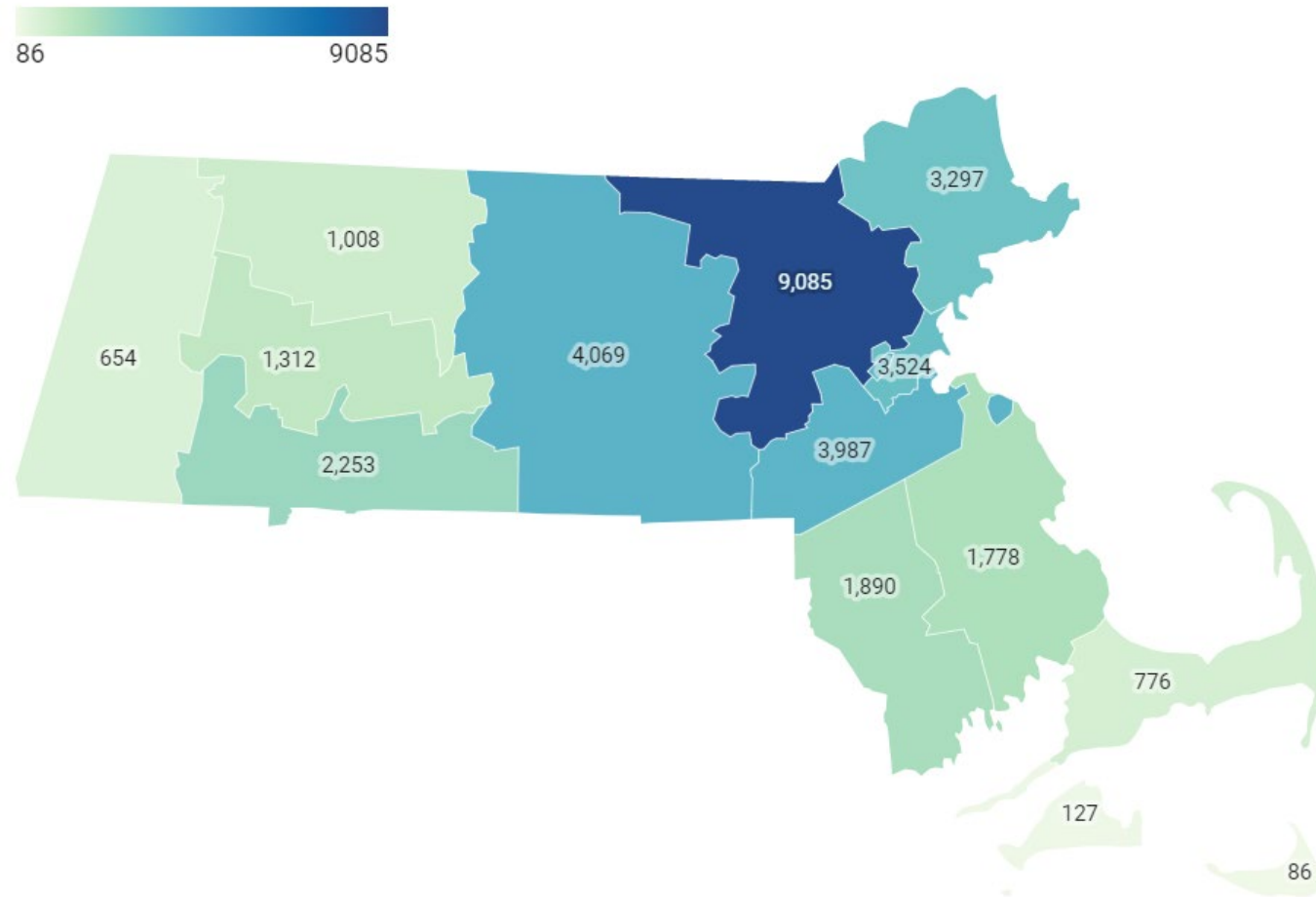
# Recruitment among priority populations was unprecedented

Priority Populations	2018 MA BRFSS	2020 CCIS Final Sample	Magnitude of Difference
<b>Overall sample</b>	6,669	<b>33,948</b>	<b>5X</b>
<b>Race/Ethnicity</b>			
Hispanic	522	2,506	<b>5X</b>
Black NH	365	1,162	<b>3X</b>
Asian NH	248	1,188	<b>5X</b>
Amer. Ind/Alaska Nat	35	351	<b>10X</b>
<b>Disability Status</b>			
Deaf/Hard of hearing	427	922	<b>2X</b>
Blind/Hard to see	258	236	On par
<b>Lesbian, Gay, Bisexual +</b>	359	3,931	<b>10X</b>
<b>Non-English Speakers</b>	158 (in 2 languages)	829 (in 8 languages)	<b>5X</b>

This number of responses will enable us to conduct the critical subanalysis needed to understand the specific needs and experiences of these groups and to prioritize our deployment of resources to address them.

# Recruitment efforts were overwhelmingly successful

## CCIS Response by County



For example, more people responded from western and central MA alone, than in the entire 2019 BRFSS statewide sample.

# Demographics of the sample

	Demographics	Freq.	Percent
<b>Age</b>	<25*	148	0.44
	25-35	6,726	19.81
	36-49	11,785	34.71
	50-64	10,012	29.49
	65+	5,277	15.54
	<b>Race/Ethnicity</b>	Am Indian/Alaska Native	351
Hispanic/Latinx		2,506	7.38
Multiracial, nH/nL		475	1.40
Asian/Pacific Islander, nH/nL		1,188	3.50
Black, nH/nL		1,162	3.42
White, nH/nL		27,605	81.32
Unknown/Other		661	1.95
<b>Gender</b>	Male	6,520	19.21
	Female	26,518	78.11
	Non-Binary	392	1.15
	Prefer not to answer	518	1.53
<b>Transgender Identity</b>	Of transgender experience	245	0.73
	Not of transgender experience	32,500	96.29
	Not sure/Dont know/refused	1,007	2.98
<b>Survey Lang.</b>	English	33,119	97.56
	Other	829	2.44

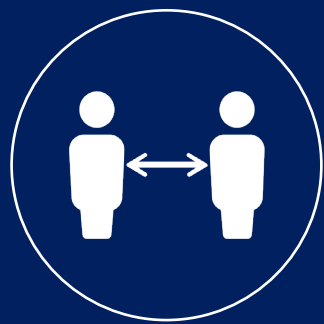
	Demographics	Freq.	Percent
<b>Sexual Orientation</b>	Asexual	646	1.92
	Bisexual	1,252	3.73
	Gay/Lesbian	1,352	4.03
	Heterosexual	29,231	84.08
	Queer	464	1.38
	Questioning	217	0.65
	Other/DK/refuse	1,414	4.21
<b>Disability Status</b>	Deaf/Hard to hear	920	2.72
	Blind/With vision impairment	233	0.69
	Cognitive disability	1,588	4.70
	Mobility disability	1,622	4.80
	Self-care/Independent living disability	912	2.70
	<b>Income</b>	<\$35K	3,961
\$35-74,999K		7,163	22.67
\$75-99,999K		4,532	14.34
\$100-149,999K		6,851	21.68
\$150K+		9,089	28.77
<b>Education</b>	Less than HS	446	1.32
	High school or GED	2,279	6.73
	Trade /Vocational	905	2.67
	Some college	2,798	8.26
	Associates degree	2,484	7.33
	Bachelor's degree	10,635	31.39
	Graduate degree	14,338	42.31

Notes: numbers in this table are unweighted. Subsequent analyses were weighted to the state average

nH/nL = non-Hispanic/non-Latinx;

American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx

Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity



# APPENDIX : ABILITY TO MITIGATE INDIVIDUAL RISK OF INFECTION

# % "Very Worried" about Being Infected with COVID-19

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>9241</b>	<b>30%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	120	39%
	Hispanic/Latinx	1029	47%
	Multiracial, nH/nL	148	34%
	Asian/Pacific Islander, nH/nL	398	41%
	Black, nH/nL	424	40%
	White, nH/nL	6947	27%
	Other Race, nH/nL	88	29%
	Unknown Race	87	27%
	<b>Age</b>	25-34	1556
35-44		2339	30%
45-64		3775	30%
65+		1571	30%
<b>Gender Identity</b>	Male	1460	25%
	Female	7501	31%
	Questioning, Undecided, Non-binary	149	41%
<b>Sexual Orientation</b>	Asexual	202	33%
	Bisexual and/or Pansexual	373	32%
	Gay or Lesbian	425	34%
	Straight (Heterosexual)	7450	29%
	Queer	155	36%
	I am questioning / not sure of my sexuality	71	38%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	97	43%
	Not of transgender experience	8801	30%
<b>Income</b>	<\$35K	1459	41%
	\$35-74,999K	2129	31%
	\$75-99,999K	1238	28%
	\$100-149,999K	1684	24%
	\$150K+	2020	23%
<b>Educational Attainment</b>	Less than high school	197	54%
	High school or GED	735	34%
	Trade/ vocational school	255	29%
	Some college	864	33%
	Associates Degree	705	30%
	Bachelors Degree	2690	27%
	Graduate Degree	3773	27%
<b>Disability</b>	Deaf/Hard of hearing	296	31%
	Blind/Vision Impairment	84	38%
	Cognitive Disability	664	45%
	Mobility Disability	696	45%
	Self-care/independent living disability	453	52%
<b>English language</b>	Speaks language other than English	1973	45%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	189	25%
	Berkshire	155	25%
	Bristol	532	29%
	Dukes	31	25%
	Essex	1051	34%
	Franklin	216	22%
	Hampden	624	29%
	Hampshire	331	26%
	Middlesex	2473	28%
	Nantucket	23	28%
	Norfolk	1025	27%
	Plymouth	451	27%
	Suffolk	1131	34%
Worcester	982	25%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity

# % Not Able to Keep 6 ft. Distance when Outside the Home

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>3559</b>	<b>11%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	47	15%
	Hispanic/Latinx	228	10%
	Multiracial, nH/nL	64	15%
	Asian/Pacific Islander, nH/nL	132	12%
	Black, nH/nL	99	9%
	White, nH/nL	2901	11%
	Other Race, nH/nL	42	15%
	Unknown Race	46	17%
	<b>Age</b>	25-34	963
35-44		994	12%
45-64		1304	10%
65+		298	6%
<b>Gender Identity</b>	Male	633	11%
	Female	2754	10%
	Questioning, Undecided, Non-binary	98	26%
<b>Sexual Orientation</b>	Asexual	61	10%
	Bisexual and/or Pansexual	240	19%
	Gay or Lesbian	168	14%
	Straight (Heterosexual)	2787	10%
	Queer	87	20%
	I am questioning / not sure of my sexuality	39	19%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	54	22%
	Not of transgender experience	3358	11%
<b>Income</b>	<\$35K	473	12%
	\$35-74,999K	834	11%
	\$75-99,999K	497	11%
	\$100-149,999K	729	11%
	\$150K+	832	10%
<b>Educational Attainment</b>	Less than high school	36	9%
	High school or GED	187	8%
	Trade/ vocational school	107	12%
	Some college	319	12%
	Associates Degree	258	10%
	Bachelors Degree	1189	12%
	Graduate Degree	1457	11%
<b>Disability</b>	Deaf/Hard of hearing	106	11%
	Blind/Vision Impairment	45	20%
	Cognitive Disability	341	21%
	Mobility Disability	179	10%
	Self-care/independent living disability	143	16%
<b>English language</b>	Speaks language other than English	481	10%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	80	11%
	Berkshire	59	9%
	Bristol	193	11%
	Dukes	9	7%
	Essex	334	11%
	Franklin	101	10%
	Hampden	202	10%
	Hampshire	132	11%
	Middlesex	1022	12%
	Nantucket	11	13%
	Norfolk	357	9%
	Plymouth	180	11%
	Suffolk	462	14%
Worcester	408	11%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity

# % Working Outside of the Home among Employed Residents by Demographics

	Demographics	Frequency	Weighted %
	Overall	8786	52%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	84	57%
	Hispanic/Latinx	650	57%
	Multiracial, nH/nL	97	44%
	Asian/Pacific Islander, nH/nL	252	43%
	Black, nH/nL	300	53%
	White, nH/nL	7222	51%
	Other Race, nH/nL	92	65%
	Unknown Race	89	58%
	<b>Age (years)</b>	25-34	1377
35-44		2167	48%
45-64		4508	55%
65+		734	58%
<b>Gender Identity</b>	Male	1734	55%
	Female	6832	51%
	Questioning, Undecided, Non-binary	76	43%
<b>Sexual Orientation</b>	Asexual	186	64%
	Bisexual and/or Pansexual	255	36%
	Gay or Lesbian	349	47%
	Straight (Heterosexual)	7403	52%
	Queer	76	33%
	I am questioning / not sure of my sexuality	51	52%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	46	42%
	Not of transgender experience	8419	52%
<b>Income</b>	<\$35K	892	73%
	\$35-74,999K	1979	56%
	\$75-99,999K	1217	50%
	\$100-149,999K	1890	48%
	\$150K+	2329	41%
<b>Educational Attainment</b>	Less than high school	68	87%
	High school or GED	657	73%
	Trade/ vocational school	300	75%
	Some college	789	58%
	Associates Degree	812	63%
	Bachelors Degree	2658	42%
	Graduate Degree	3486	38%
<b>Disability</b>	Deaf/Hard of hearing	165	55%
	Blind/ People with vision impairment	32	58%
	Cognitive disability	297	56%
	Mobility disability	221	53%
	Self-care/ Independent-living disability	99	59%
<b>English language</b>	Speaks language other than English	1314	56%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	253	58%
	Berkshire	242	64%
	Bristol	608	56%
	Dukes	37	54%
	Essex	886	47%
	Franklin	292	53%
	Hampden	676	50%
	Hampshire	321	41%
	Middlesex	1966	37%
	Nantucket	32	73%
	Norfolk	1008	44%
	Plymouth	535	53%
	Suffolk	767	37%
Worcester	1143	48%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity

## % Working Outside of the Home among Employed Residents by Industry Group

Industry Group	Frequency	Weighted %
<b>All Industries</b>	<b>8786</b>	<b>52%</b>
Construction	132	73%
Manufacturing	221	50%
Retail: Grocery	100	94%
Retail: All Other	266	74%
Transportation & Warehousing	107	83%
Finance & Insurance	132	21%
Real Estate & Rental & Leasing	133	74%
Professional, Scientific, & Technical Services	300	25%
Admin. & Support & Waste Mgmt & Remed. Svcs	83	58%
Education: Elementary & Secondary Schools	1593	64%
Education: Colleges & Universities	140	15%
Education: All Other	39	57%
Healthcare: Ambulatory Services	895	52%
Healthcare: Hospitals	1230	67%
Healthcare: Nursing & Residential Care Facilities	314	88%
Social Assistance: Childcare	306	79%
Social Assistance: All Other	426	34%
Arts, Entertainment, & Recreation	140	75%
Accommodation (e.g. hotel, motel, boarding house)	27	91%
Food Services	113	87%
Other Services (Except Public Administration)	382	44%
Public Administration	689	47%
Other Industries	69	55%

Notes: 1) Industry groups are based on Bureau of Census Industry Codes (CIC); 2) "Retail: Grocery" includes Grocery Stores, Specialty Food Stores, Gas Stations [includes those with convenient stores]; 3) Other Industries includes Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 4) Preliminary findings - statistical significance testing forthcoming; 5) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# % with Employer-provided Protective Measures among Adults Working Outside the Home by Industry Group

Industry Group	Personal Protective Equipment (PPE)		Implemented Social Distancing		Additional Health and Safety Training		Sick Leave	
	Frequency	Weighted %	Frequency	Weighted %	Frequency	Weighted %	Frequency	Weighted %
<b>All Industries</b>	<b>5559</b>	<b>76%</b>	<b>5038</b>	<b>66%</b>	<b>3424</b>	<b>44%</b>	<b>5978</b>	<b>80%</b>
Construction	63	73%	50	52%	21	22%	70	73%
Manufacturing	141	71%	148	72%	82	39%	164	83%
Retail: Grocery	69	74%	57	58%	33	37%	53	59%
Retail: All Other	132	71%	119	63%	62	32%	132	68%
Transportation & Warehousing	65	73%	57	63%	28	29%	62	69%
Finance & Insurance	65	63%	74	70%	30	24%	91	86%
Real Estate & Rental & Leasing	36	66%	39	73%	17	38%	39	72%
Professional, Scientific, & Technical Services	81	61%	96	67%	34	23%	98	68%
Admin. & Support & Waste Mgmt & Remed. Svcs	20	50%	23	53%	7	24%	24	56%
Education: Elementary & Secondary Schools	1062	70%	1227	78%	917	58%	1341	86%
Education: Colleges & Universities	75	64%	104	79%	66	49%	102	79%
Healthcare: Ambulatory Services	624	82%	490	64%	357	46%	590	77%
Healthcare: Hospitals	1130	91%	768	60%	652	52%	1025	84%
Healthcare: Nursing & Residential Care Facilities	271	88%	195	64%	193	62%	248	79%
Social Assistance: Childcare	182	77%	149	63%	141	56%	188	80%
Social Assistance: All Other	331	82%	309	74%	203	47%	354	87%
Arts, Entertainment, & Recreation	37	64%	38	78%	12	26%	30	60%
Food Services	50	58%	49	57%	31	34%	37	37%
Other Services (Except Public Administration)	165	62%	164	58%	88	33%	196	70%
Public Administration	506	75%	445	66%	231	32%	610	92%
Other Industries	42	73%	37	63%	25	45%	46	91%

Notes: 1) Industry groups are based on Bureau of Census Industry Codes (CIC); 2) "Retail: Grocery" includes Grocery Stores, Specialty Food Stores, Gas Stations [includes those with convenient stores]; 3) "Other Industries" includes Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 4) Estimates for "Education: All Other" and "Accommodation" were suppressed due to insufficient data; 5) Preliminary findings - statistical significance testing forthcoming; 6) Estimates are weighted to the state average.



# APPENDIX : TESTING ACCESS

# % Ever been Tested for COVID-19

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>14319</b>	<b>44%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	164	52%
	Hispanic/Latinx	1156	51%
	Multiracial, nH/nL	226	48%
	Asian, nH/nL	421	37%
	Black, nH/nL	544	52%
	White, nH/nL	11551	42%
	Other Race, nH/nL	139	47%
	Unknown Race	118	35%
	<b>Age</b>	25-34	2923
35-44		3590	43%
45-64		5924	44%
65+		1882	36%
<b>Gender Identity</b>	Male	2667	43%
	Female	11267	44%
	Non-binary, genderqueer, not exclusively M/F	169	53%
	Questioning/unsure	27	52%
<b>Sexual Orientation</b>	Asexual	248	42%
	Bisexual and/or Pansexual	629	50%
	Gay or Lesbian	690	54%
	Straight (Heterosexual)	11717	43%
	Queer	272	61%
	I am questioning / not sure of my sexuality	108	52%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	133	57%
	Not of transgender experience	13731	44%
<b>Income</b>	<\$35K	1607	41%
	\$35-74,999K	3125	46%
	\$75-99,999K	1892	44%
	\$100-149,999K	2898	44%
	\$150K+	4013	45%
<b>Educational Attainment</b>	Less than high school	142	40%
	High school or GED	815	39%
	Trade/ vocational school	360	42%
	Some college	1125	43%
	Associates Degree	1039	44%
	Bachelors Degree	4438	45%
	Graduate Degree	6377	47%
<b>Disability</b>	Deaf/Hard of hearing	396	44%
	Blind/People with vision impairment	103	46%
	Cognitive disability	746	48%
	Mobility disability	675	45%
<b>English language</b>	Self-care/ Independent-living disability	363	42%
	Speaks language other than English	2110	47%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	264	35%
	Berkshire	227	37%
	Bristol	726	41%
	Dukes	75	62%
	Essex	1460	48%
	Franklin	416	43%
	Hampden	865	41%
	Hampshire	533	43%
	Middlesex	4075	48%
	Nantucket	32	39%
	Norfolk	1579	42%
	Plymouth	643	39%
	Suffolk	1916	58%
Worcester	1474	39%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity



# APPENDIX : HEALTH CARE ACCESS & DELAYS

# % Who have not gotten the medical care that they needed since July 2020

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>4326</b>	<b>17%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	71	30%
	Hispanic/Latinx	252	15%
	Multiracial, nH/nL	84	26%
	Asian/Pacific Islander, nH/nL	118	16%
	Black, nH/nL	140	20%
	White, nH/nL	3548	17%
	Other Race, nH/nL	42	17%
	Unknown Race	71	30%
	<b>Age</b>	25-34	908
35-44		1148	19%
45-64		1764	17%
65+		506	12%
<b>Gender Identity</b>		Male	682
	Female	3424	17%
	Nonbinary, genderqueer, not exclusively M/F	87	38%
	Questioning/not sure	14	43%
<b>Sexual Orientation</b>	Asexual	70	15%
	Bisexual and/or Pansexual	291	30%
	Gay or Lesbian	186	18%
	Straight (Heterosexual)	3378	16%
	Queer	113	34%
	I am questioning / not sure of my sexuality	42	31%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	64	34%
	Not of transgender experience	4064	17%
<b>Income</b>	<\$35K	631	20%
	\$35-74,999K	978	18%
	\$75-99,999K	602	17%
	\$100-149,999K	798	15%
	\$150K+	1057	15%
<b>Educational Attainment</b>	Less than high school	41	16%
	High school or GED	220	13%
	Trade/ vocational school	121	19%
	Some college	378	19%
	Associates Degree	319	18%
	Bachelors Degree	1382	18%
	Graduate Degree	1859	17%
<b>Disability</b>	Deaf/Hard of hearing	155	18%
	Blind/ People with vision impairment	57	34%
	Cognitive disability	436	31%
	Mobility disability	349	24%
<b>English language</b>	Self-care/ Independent-living disability	253	32%
	Speaks language other than English	554	17%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	128	21%
	Berkshire	72	15%
	Bristol	206	15%
	Dukes	22	25%
	Essex	342	14%
	Franklin	150	19%
	Hampden	267	17%
	Hampshire	167	16%
	Middlesex	1304	19%
	Nantucket	9	16%
	Norfolk	407	14%
	Plymouth	246	19%
	Suffolk	508	20%
	Worcester	489	16%

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity

# % 15 or more Poor Mental Health Days in past 30 Days

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>8973</b>	<b>33%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	113	38%
	Hispanic/Latinx	654	35%
	Multiracial, nH/nL	165	49%
	Asian/Pacific Islander, nH/nL	221	25%
	Black, nH/nL	285	32%
	White, nH/nL	7346	33%
	Other Race, nH/nL	91	29%
	Unknown Race	98	40%
	<b>Age</b>	25-34	1999
35-44		2772	41%
45-64		3466	31%
65+		736	20%
<b>Gender Identity</b>	Male	1333	26%
	Female	7264	34%
	Questioning, Undecided, Non-binary	221	68%
<b>Sexual Orientation</b>	Asexual	202	39%
	Bisexual and/or Pansexual	580	55%
	Gay or Lesbian	439	41%
	Straight (Heterosexual)	6994	31%
	Queer	246	59%
	I am questioning / not sure of my sexuality	100	58%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	134	62%
	Not of transgender experience	8480	33%
<b>Income</b>	<\$35K	1312	42%
	\$35-74,999K	2163	35%
	\$75-99,999K	1302	33%
	\$100-149,999K	1792	31%
	\$150K+	1998	26%
<b>Educational Attainment</b>	Less than high school	104	36%
	High school or GED	543	32%
	Trade/ vocational school	245	33%
	Some college	859	38%
	Associates Degree	686	35%
	Bachelors Degree	2884	32%
<b>Disability</b>	Graduate Degree	3646	29%
	Deaf/Hard of hearing	237	34%
	Blind/ People with vision impairment	83	49%
	Cognitive disability	989	72%
	Mobility disability	565	44%
<b>English language</b>	Self-care/ Independent-living disability	410	56%
	Speaks language other than English	1279	34%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	199	30%
	Berkshire	199	36%
	Bristol	451	30%
	Dukes	30	29%
	Essex	886	33%
	Franklin	304	35%
	Hampden	671	36%
	Hampshire	397	35%
	Middlesex	2423	32%
	Nantucket	12	18%
	Norfolk	929	29%
	Plymouth	493	35%
	Suffolk	966	34%
	Worcester	987	30%

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity



# APPENDIX : SOCIAL DETERMINANTS OF HEALTH

# % Worried about paying for 1 or more types\* of expense or bills in the coming few weeks

	Demographics	Frequency	Weighted %
	Overall	11679	44%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	180	62%
	Hispanic/Latinx	1386	70%
	Multiracial, nH/nL	213	61%
	Asian/Pacific Islander, nH/nL	413	48%
	Black, nH/nL	652	69%
	White, nH/nL	8538	38%
	Other Race, nH/nL	139	55%
	Unknown Race	158	56%
	<b>Age</b>	25-34	2585
35-44		3358	52%
45-64		4814	44%
65+		922	25%
<b>Gender Identity</b>	Male	1975	40%
	Female	9265	44%
	Nonbinary, genderqueer, not exclusively M/F	168	66%
	Questioning/not sure	27	63%
<b>Sexual Orientation</b>	Asexual	290	52%
	Bisexual and/or Pansexual	567	55%
	Gay or Lesbian	462	44%
	Straight (Heterosexual)	9297	42%
	Queer	214	55%
	I am questioning / not sure of my sexuality	98	58%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	131	61%
	Not of transgender experience	11044	43%
<b>Income</b>	<\$35K	2318	67%
	\$35-74,999K	3393	52%
	\$75-99,999K	1659	41%
	\$100-149,999K	2067	35%
	\$150K+	1618	21%
<b>Educational Attainment</b>	Less than high school	245	71%
	High school or GED	1044	50%
	Trade/ vocational school	442	51%
	Some college	1382	53%
	Associates Degree	1094	47%
	Bachelors Degree	3708	38%
	Graduate Degree	3745	28%
<b>Disability</b>	Deaf/Hard of hearing	307	39%
	Blind/ People with vision impairment	126	68%
	Cognitive disability	982	71%
	Mobility disability	787	55%
	Self-care/ Independent-living disability	522	65%
<b>English language</b>	Speaks language other than English	2408	64%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	151	21%
	Berkshire	174	29%
	Bristol	409	24%
	Dukes	23	20%
	Essex	821	28%
	Franklin	216	23%
	Hampden	647	32%
	Hampshire	249	21%
	Middlesex	1485	18%
	Nantucket	23	30%
	Norfolk	729	20%
	Plymouth	436	27%
	Suffolk	878	28%
Worcester	774	21%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

**\* Types of expenses include:**

- Housing (Rent, mortgage, property taxes, condo fees, housing insurance)
- Utilities: Cable, cell, electricity, water, gas, heating
- Debt: Credit card debt, student loan debt, bank fees
- School tuition / Daycare cost
- Vehicle: Lease, car loan payment, car insurance
- Insurance: Health insurance, disability insurance, life insurance
- Others

# % Worried about getting food or groceries in the coming weeks

	Demographics	Frequency	Weighted %
	Overall	6784	28%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	118	45%
	Hispanic/Latinx	891	49%
	Multiracial, nH/nL	116	38%
	Asian/Pacific Islander, nH/nL	263	32%
	Black, nH/nL	361	41%
	White, nH/nL	4867	24%
	Other Race, nH/nL	85	33%
	Unknown Race	83	34%
	<b>Age</b>	25-34	1215
35-44		1844	31%
45-64		2892	28%
65+		833	22%
<b>Gender Identity</b>	Male	1231	25%
	Female	5311	28%
	Nonbinary, genderqueer, not exclusively M/F	84	37%
	Questioning/not sure	15	30%
<b>Sexual Orientation</b>	Asexual	186	36%
	Bisexual and/or Pansexual	275	31%
	Gay or Lesbian	245	26%
	Straight (Heterosexual)	5445	27%
	Queer	99	26%
	I am questioning / not sure of my sexuality	48	32%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	68	37%
	Not of transgender experience	6405	27%
<b>Income</b>	<\$35K	1566	48%
	\$35-74,999K	1840	31%
	\$75-99,999K	829	23%
	\$100-149,999K	1025	19%
	\$150K+	1013	13%
<b>Educational Attainment</b>	Less than high school	191	56%
	High school or GED	760	37%
	Trade/ vocational school	308	37%
	Some college	890	35%
	Associates Degree	694	31%
	Bachelors Degree	2050	21%
	Graduate Degree	1877	14%
<b>Disability</b>	Deaf/Hard of hearing	243	34%
	Blind/ People with vision impairment	103	53%
	Cognitive disability	684	53%
	Mobility disability	614	45%
	Self-care/ Independent-living disability	423	53%
<b>English language</b>	Speaks language other than English	1497	43%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	164	23%
	Berkshire	165	28%
	Bristol	440	26%
	Dukes	33	28%
	Essex	763	26%
	Franklin	217	23%
	Hampden	632	31%
	Hampshire	211	17%
	Middlesex	1458	18%
	Nantucket	18	23%
	Norfolk	666	19%
	Plymouth	393	25%
	Suffolk	762	24%
Worcester	844	23%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity

# % Worried about getting face masks in the coming weeks

	Demographics	Frequency	Weighted %
	Overall	3787	14%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	70	24%
	Hispanic/Latinx	512	26%
	Multiracial, nH/nL	83	24%
	Asian/Pacific Islander, nH/nL	216	24%
	Black, nH/nL	250	27%
	White, nH/nL	2550	12%
	Other Race, nH/nL	50	20%
	Unknown Race	56	20%
	<b>Age</b>	25-34	774
35-44		975	16%
45-64		1586	15%
65+		452	11%
<b>Gender Identity</b>	Male	695	13%
	Female	2951	15%
	Nonbinary, genderqueer, not exclusively M/F	50	20%
	Questioning/not sure	8	20%
<b>Sexual Orientation</b>	Asexual	105	20%
	Bisexual and/or Pansexual	161	15%
	Gay or Lesbian	151	14%
	Straight (Heterosexual)	3004	14%
	Queer	53	12%
	I am questioning / not sure of my sexuality	32	21%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	36	16%
	Not of transgender experience	3557	14%
<b>Income</b>	<\$35K	810	25%
	\$35-74,999K	1014	16%
	\$75-99,999K	514	13%
	\$100-149,999K	587	10%
	\$150K+	591	7%
<b>Educational Attainment</b>	Less than high school	108	31%
	High school or GED	342	17%
	Trade/ vocational school	147	17%
	Some college	430	17%
	Associates Degree	385	17%
	Bachelors Degree	1116	11%
	Graduate Degree	1247	9%
<b>Disability</b>	Deaf/Hard of hearing	138	19%
	Blind/ People with vision impairment	57	31%
	Cognitive disability	369	27%
	Mobility disability	351	25%
	Self-care/ Independent-living disability	253	32%
<b>English language</b>	Speaks language other than English	961	26%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	79	11%
	Berkshire	76	13%
	Bristol	224	13%
	Dukes	12	10%
	Essex	394	13%
	Franklin	94	10%
	Hampden	349	17%
	Hampshire	114	9%
	Middlesex	900	11%
	Nantucket	8	10%
	Norfolk	387	11%
	Plymouth	211	13%
	Suffolk	515	16%
Worcester	414	11%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity

# % Worried about getting medication in the coming weeks

	Demographics	Frequency	Weighted %
	Overall	3535	14%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	69	25%
	Hispanic/Latinx	424	22%
	Multiracial, nH/nL	72	21%
	Asian/Pacific Islander, nH/nL	140	15%
	Black, nH/nL	136	14%
	White, nH/nL	2605	12%
	Other Race, nH/nL	40	13%
	Unknown Race	49	20%
	<b>Age</b>	25-34	640
35-44		901	14%
45-64		1556	14%
65+		438	11%
<b>Gender Identity</b>	Male	670	13%
	Female	2707	13%
	Nonbinary, genderqueer, not exclusively M/F	61	23%
	Questioning/not sure	11	24%
<b>Sexual Orientation</b>	Asexual	90	17%
	Bisexual and/or Pansexual	184	19%
	Gay or Lesbian	147	15%
	Straight (Heterosexual)	2791	13%
	Queer	72	19%
	I am questioning / not sure of my sexuality	30	17%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	61	30%
	Not of transgender experience	3308	13%
<b>Income</b>	<\$35K	715	22%
	\$35-74,999K	927	15%
	\$75-99,999K	469	12%
	\$100-149,999K	561	10%
	\$150K+	619	8%
<b>Educational Attainment</b>	Less than high school	90	27%
	High school or GED	322	16%
	Trade/ vocational school	153	18%
	Some college	424	16%
	Associates Degree	329	15%
	Bachelors Degree	1077	11%
	Graduate Degree	1131	9%
<b>Disability</b>	Deaf/Hard of hearing	136	20%
	Blind/ People with vision impairment	66	35%
	Cognitive disability	446	33%
	Mobility disability	388	27%
	Self-care/ Independent-living disability	272	34%
<b>English language</b>	Speaks language other than English	715	20%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	80	11%
	Berkshire	90	15%
	Bristol	221	13%
	Dukes	16	14%
	Essex	345	12%
	Franklin	104	11%
	Hampden	357	18%
	Hampshire	124	10%
	Middlesex	848	10%
	Nantucket	12	16%
	Norfolk	349	10%
	Plymouth	218	14%
	Suffolk	378	12%
Worcester	385	10%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity

# % Worried about getting broadband(internet) in the coming weeks

	Demographics	Frequency	Weighted %
	Overall	3434	13%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	75	25%
	Hispanic/Latinx	471	24%
	Multiracial, nH/nL	73	22%
	Asian/Pacific Islander, nH/nL	143	16%
	Black, nH/nL	198	21%
	White, nH/nL	2384	11%
	Other Race, nH/nL	47	19%
	Unknown Race	43	16%
	<b>Age</b>	25-34	580
35-44		904	15%
45-64		1502	14%
65+		448	10%
<b>Gender Identity</b>	Male	589	12%
	Female	2711	13%
	Nonbinary, genderqueer, not exclusively M/F		
<b>Sexual Orientation</b>	Questioning/not sure	58	16%
	Asexual	93	16%
	Bisexual and/or Pansexual	140	16%
	Gay or Lesbian	128	12%
	Straight (Heterosexual)	2739	13%
	Queer	52	12%
	I am questioning / not sure of my sexuality	27	17%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	41	18%
	Not of transgender experience	3217	13%
<b>Income</b>	<\$35K	738	23%
	\$35-74,999K	941	15%
	\$75-99,999K	460	12%
	\$100-149,999K	558	9%
<b>Educational Attainment</b>	\$150K+	512	6%
	Less than high school	76	21%
	High school or GED	326	16%
	Trade/ vocational school	148	17%
	Some college	417	16%
	Associates Degree	339	15%
<b>Disability</b>	Bachelors Degree	1024	10%
	Graduate Degree	1097	8%
	Deaf/Hard of hearing	161	21%
<b>English language</b>	Blind/ People with vision impairment	48	27%
	Cognitive disability	354	27%
	Mobility disability	305	22%
	Self-care/ Independent-living disability	197	25%
	Speaks language other than English	871	22%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	81	11%
	Berkshire	113	19%
	Bristol	203	12%
	Dukes	13	11%
	Essex	374	13%
	Franklin	122	13%
	Hampden	355	18%
	Hampshire	137	11%
	Middlesex	710	9%
	Nantucket	7	9%
	Norfolk	292	8%
	Plymouth	178	11%
	Suffolk	409	13%
Worcester	427	12%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity



# APPENDIX : MENTAL HEALTH

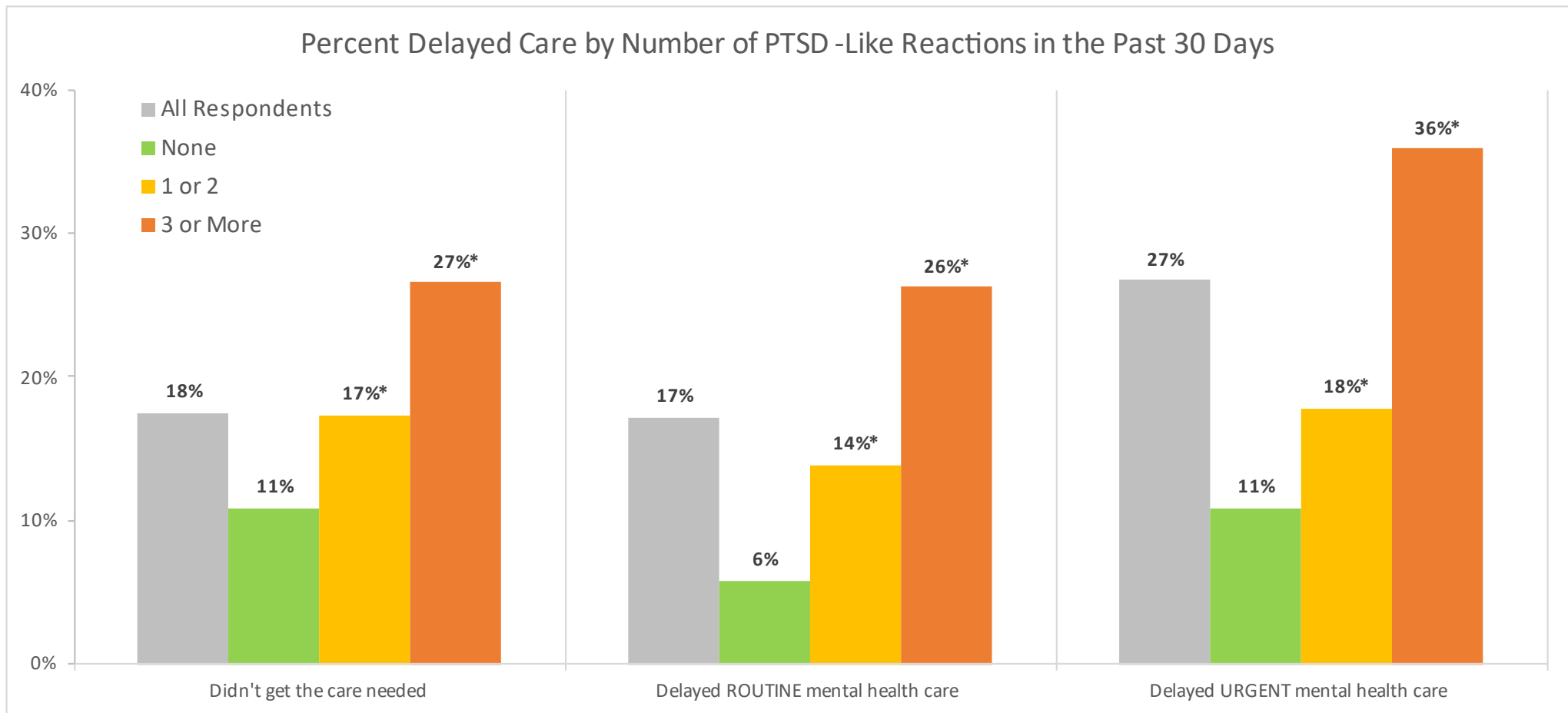
# PTSD MENTAL HEALTH INDICATOR

## How has the pandemic impacted all residents' mental health?

- Screening for community-wide post-traumatic stress disorder (PTSD) has been done in past community surveys that assessed populations' reactions to a natural disasters, epidemics, and other traumatic events
- The CCIS question was adapted from "Primary Care PTSD Screen for DSM-5 (PC-PTSD-5)," a screening tool developed for use in primary care settings for determining if referral for PTSD (due to any traumatic experience) might be advisable
- In figures, this variable is labeled as "3+ PTSD-like reactions"
- Respondents were asked how many times they had any of the following reactions to the COVID-19 outbreak in the past month:
  - Having nightmares or thinking about it when you didn't want to
  - Going out of your way to avoid situations
  - Constantly being on guard, watchful, or easily startled
  - Feeling numb or detached
  - Feeling guilty or unable to stop blaming yourself
- Reference: Prins, A., Bovin, M. J., Kimerling, R., Kaloupek, D. G, Marx, B. P., Pless Kaiser, A., & Schnurr, P. P. (2015). Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) [Measurement instrument]. Available from <https://www.ptsd.va.gov>

# DELAY IN HEALTH CARE

Respondents who reported having any PTSD-like reactions were more likely to experience delayed care, including routine and urgent mental health care, compared to those who reported having no PTSD-like reactions.

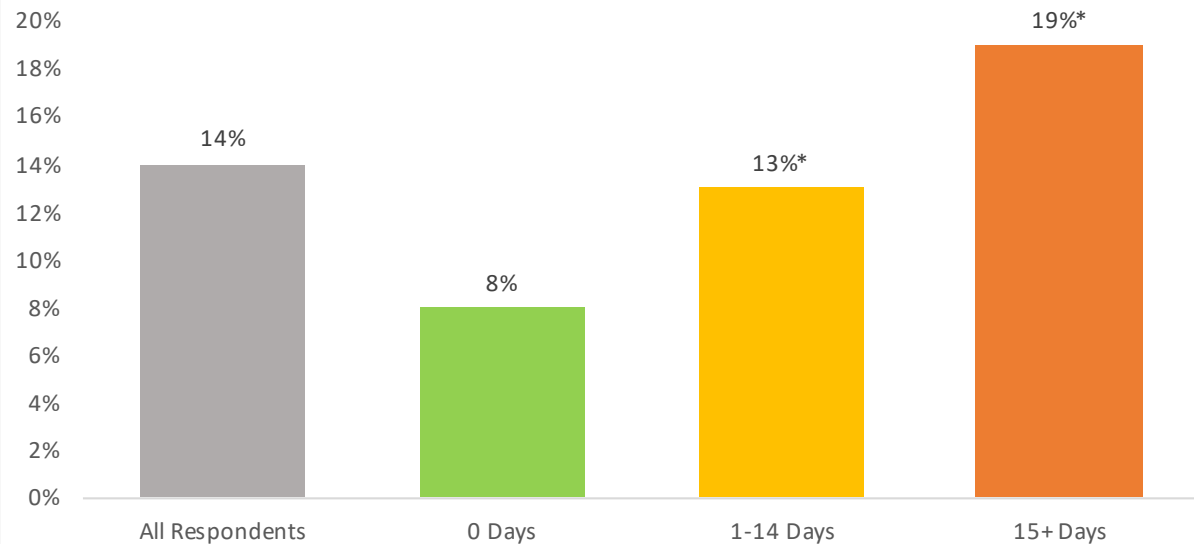


\* subgroup is significantly different compared to respondents with 0 poor mental health days at the  $p < 0.05$  level

# CHANGE IN EMPLOYMENT OR JOB NATURE - CHILDCARE

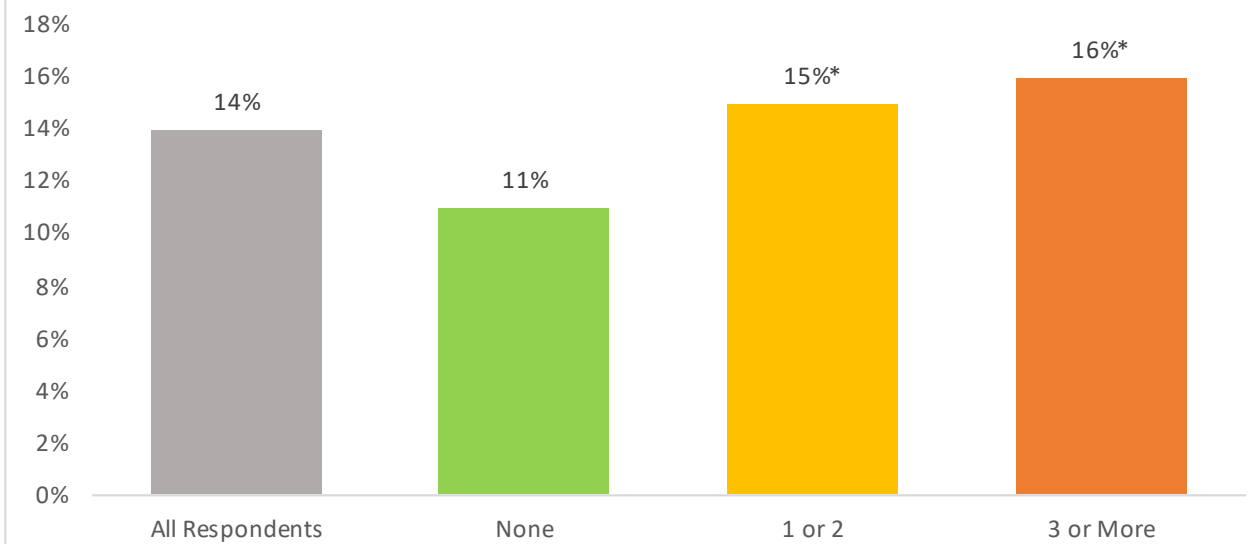
Across both mental health indicators, respondents who experienced poor mental health were more likely to have a change in employment to take care of their child/children compared to those who reported no experiences of poor mental health.

Percent of Respondents Employed in the Past Year who had a Change in Employment to Take Care of Their Child/Children by Number of Poor Mental Health Days in the Past 30 Days



\* Subgroup is significantly different compared to people with 0 poor mental health days at the  $p < 0.05$  level

Percent of Respondents Employed in the Past Year who had a Change in Employment to Take Care of Their Child/Children by Number of PTSD-like Reactions in the Past 30 Days

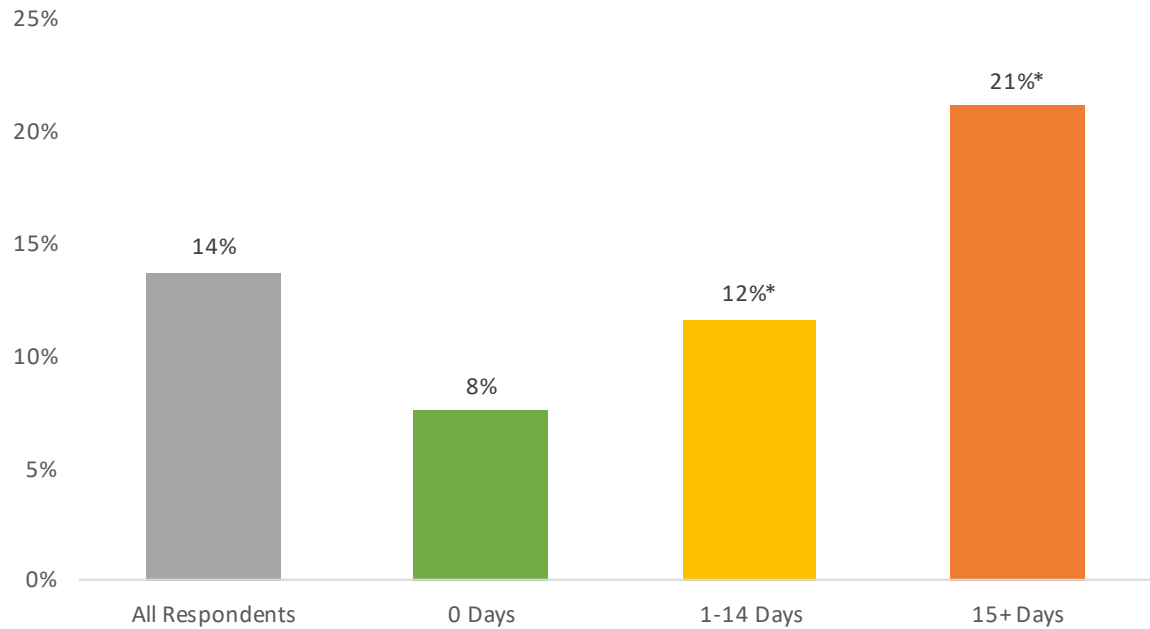


\* Subgroup is significantly different compared to people with no PTSD-like reactions at the  $p < 0.05$  level

# WORRIED ABOUT GETTING MEDICATION

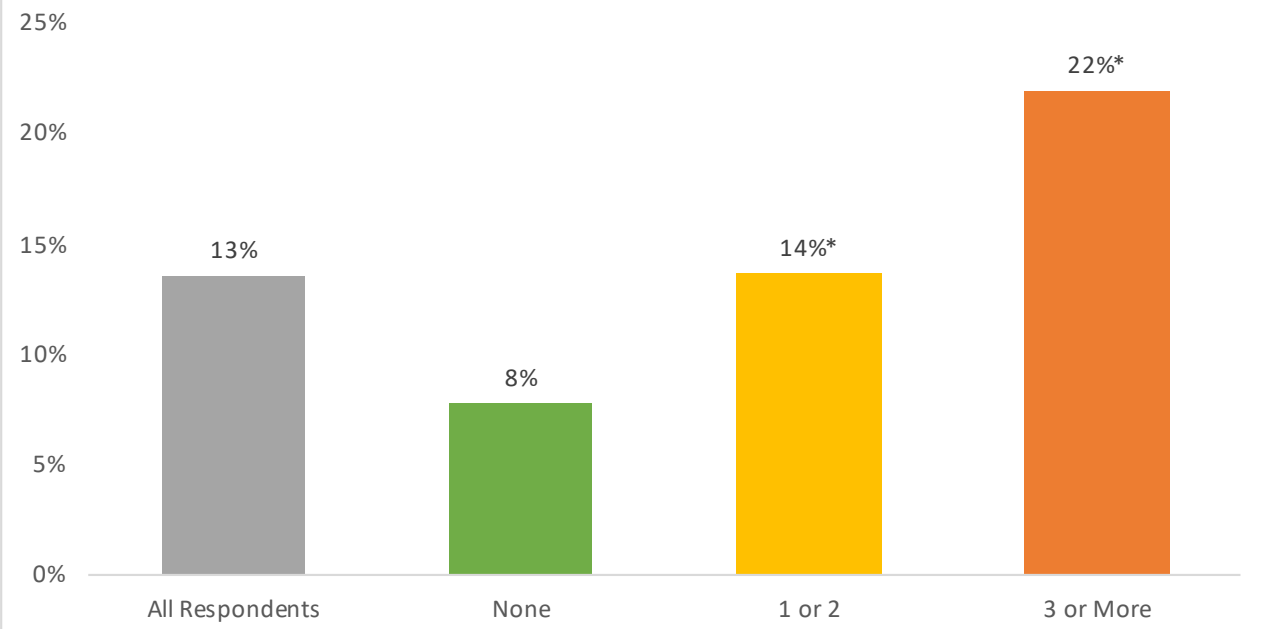
Across both mental health indicators, respondents who experienced poor mental health were more likely to be worried about getting medication compared to those who reported no experiences of poor mental health.

Percent of Respondents Worried about Getting Medication by Number of Poor Mental Health Days in the Past 30 Days



\* Subgroup is significantly different compared to people with 0 poor mental health days at the  $p < 0.05$  level

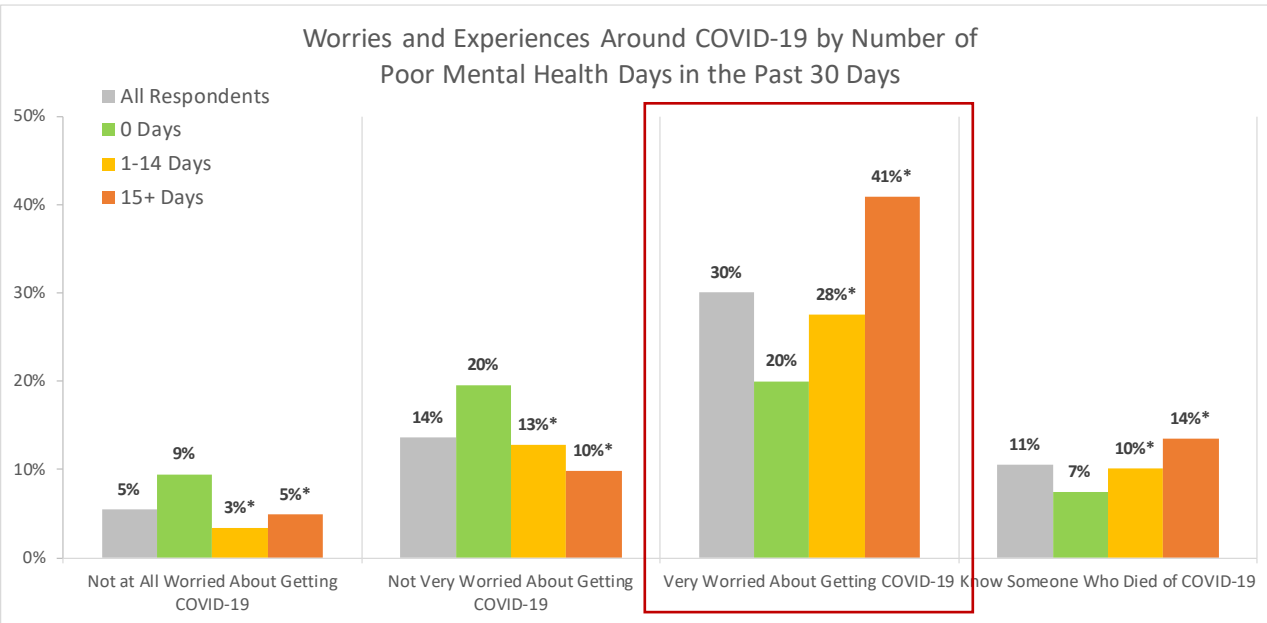
Percent of Respondents Worried about Getting Medication by Number of PTSD-like Reactions in the Past 30 Days



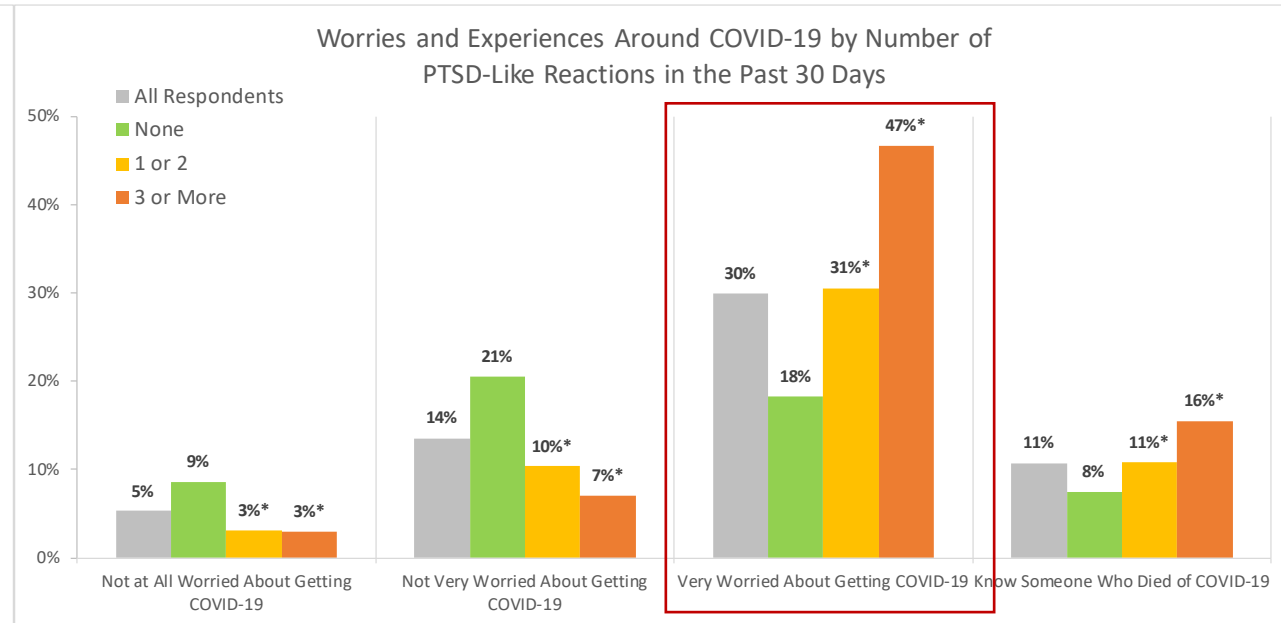
\* Subgroup is significantly different compared to people with no PTSD-like reactions at the  $p < 0.05$  level

# WORRIES AND EXPERIENCES AROUND COVID

Across both mental health indicators, the proportion of respondents who are “very worried about getting COVID-19” is highest among those experiencing poor mental health. They are also more likely to know someone close to them who died of COVID-19.



\* Subgroup is significantly different compared to people with 0 poor mental health days at the  $p < 0.05$  level

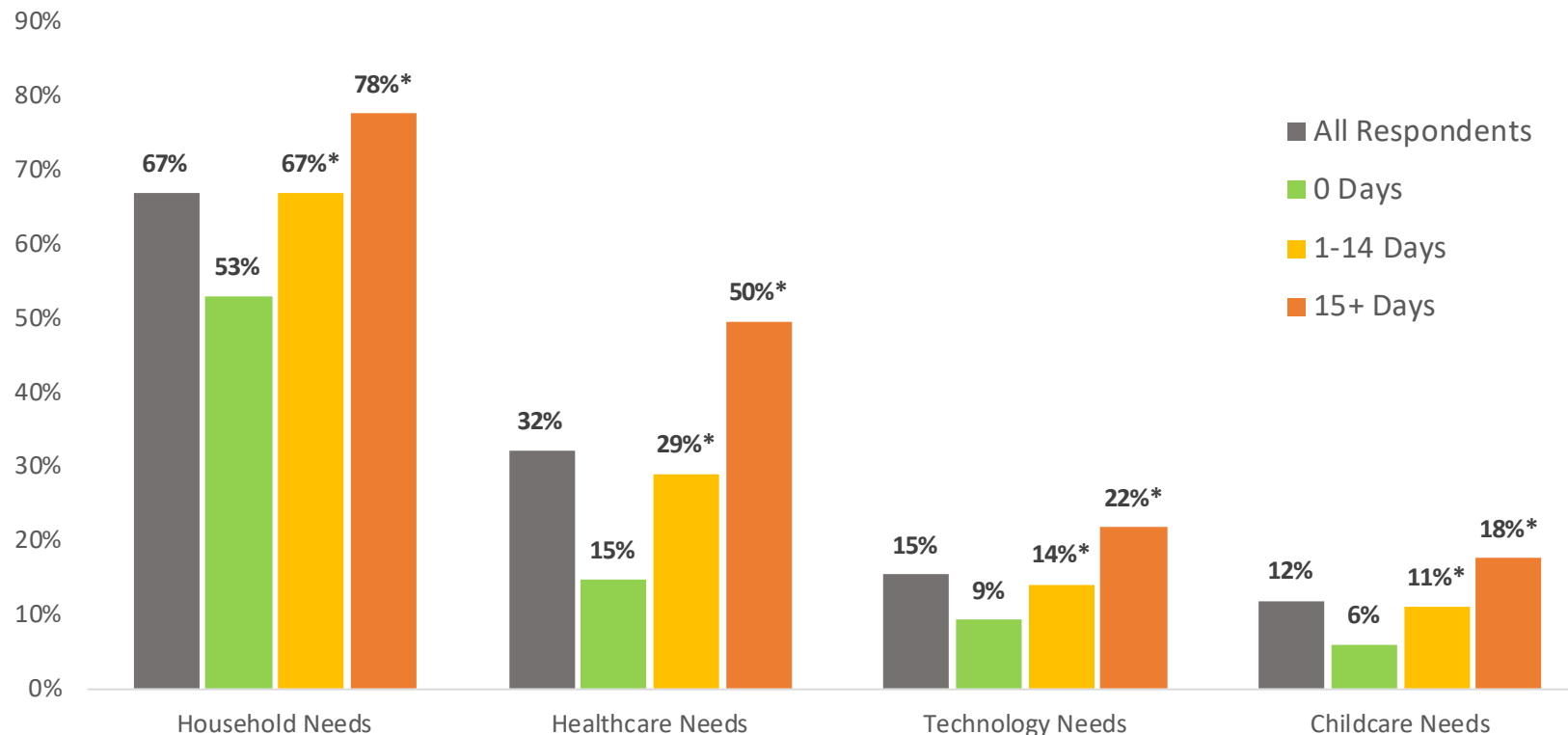


\* Subgroup is significantly different compared to people with no PTSD-like reactions at the  $p < 0.05$  level

# WORRIED ABOUT BASIC NEEDS

Respondents who reported any days of poor mental health were more likely to worry about basic needs compared to those reporting 0 days of poor mental health.

Percent of Respondents Worried About at Least One Basic Need by Number of Poor Mental Health Days in the Past 30 Days



\* Subgroup is significantly different compared to people with 0 poor mental health days at the  $p < 0.05$  level

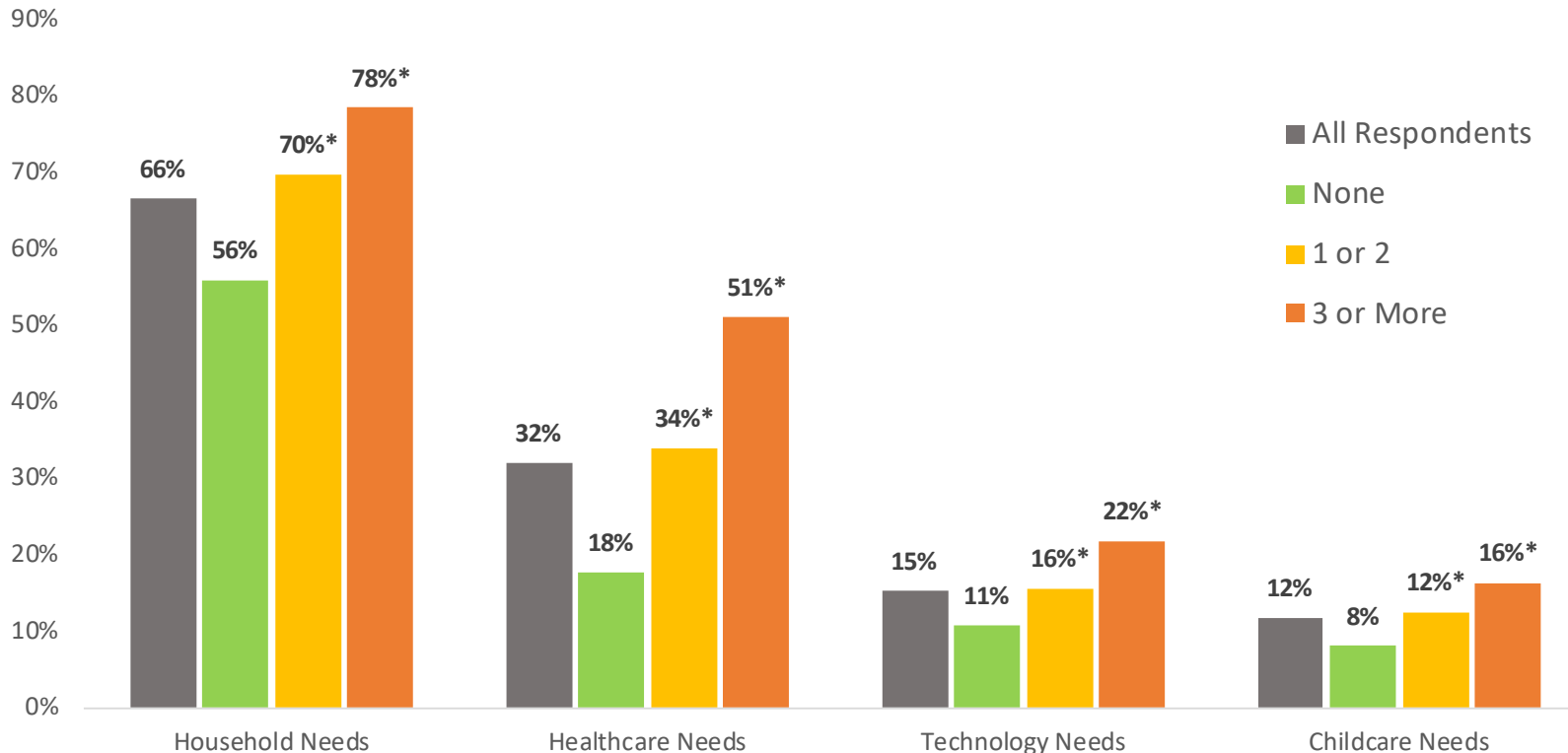
## TOP BASIC NEEDS WORRIED ABOUT BY RESPONDENTS WITH POOR MENTAL HEALTH

1. Cleaning Products (56%)
2. Free/Cheaper Food and Other Supplies (42%)
3. Paper Products (41%)
4. Food or Groceries (40%)
5. Mental or Emotional Support (33%)

# WORRIED ABOUT BASIC NEEDS

Respondents experiencing any PTSD-like reactions were more likely to worry about basic needs compared to those who experienced no PTSD-like reactions.

Percent of Respondents Worried About at Least One Basic Need by Number of PTSD-Like Reactions in the Past 30 Days



\* Subgroup is significantly different compared to people with no PTSD-like reactions at the  $p < 0.05$  level

## TOP BASIC NEEDS WORRIED ABOUT BY RESPONDENTS WITH 3+ PTSD-LIKE REACTIONS

1. Cleaning Products (59%)
2. Paper Products (42%)
3. Free/Cheaper Food and Other Supplies (41%)
4. Food or Groceries (40%)
5. Mental or Emotional Support (33%)

# WORRIED ABOUT EXPENSES

Respondents who reported any days of poor mental health were more likely to worry about paying expenses and bills compared to those who experienced 0 days of poor mental health.

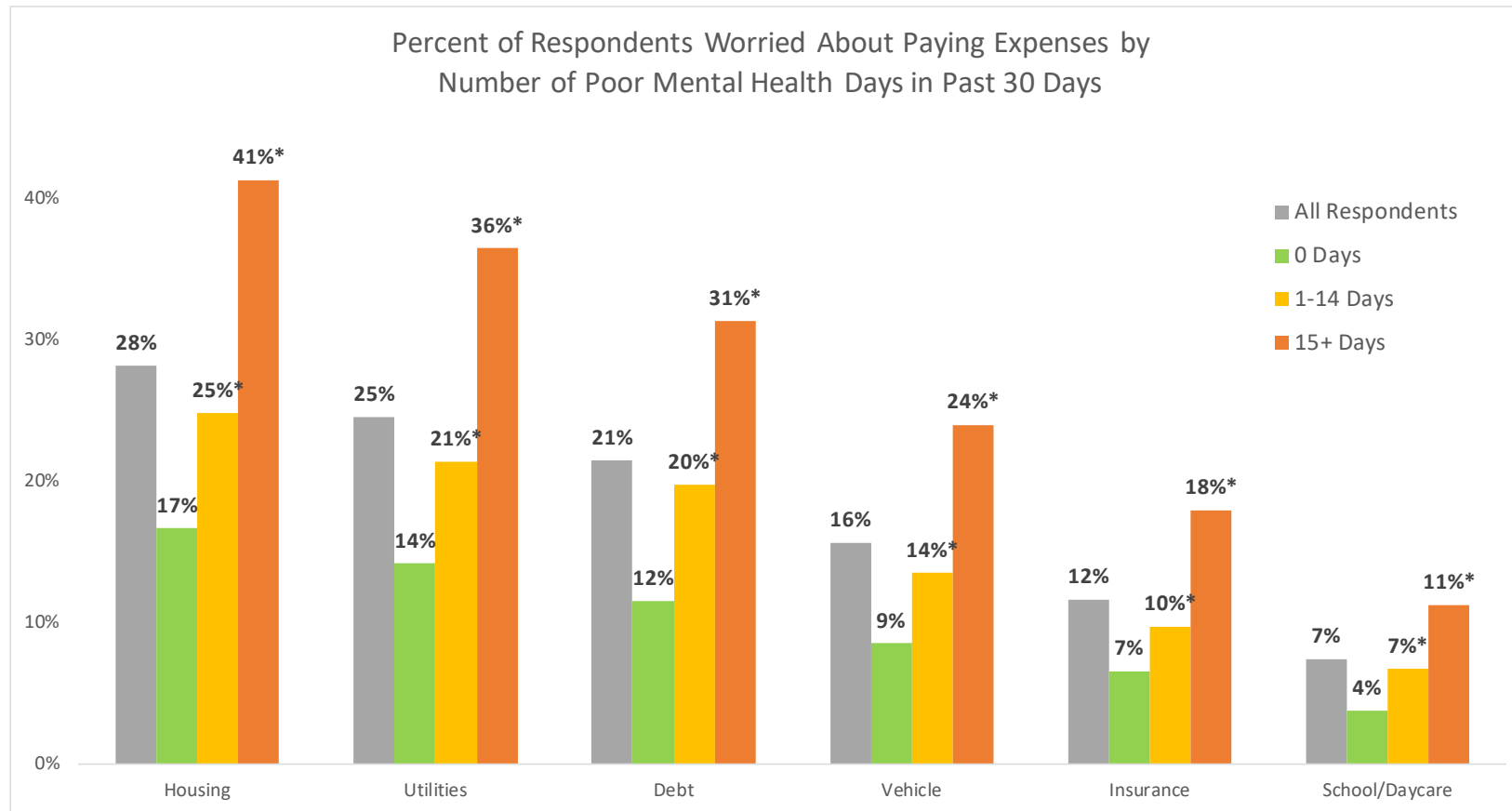
The top expenses people are most concerned about are:

- 1) **Housing** e.g., Rent, mortgage, property taxes, condo fees, housing insurance
- 2) **Utilities** e.g., Cable, cell phone, electricity, water, gas, heating
- 3) **Debt** e.g., Credit card debt, student loan debt, bank fees

Among respondents with poor mental health:

- **60%** reported being worried about paying at least one expense
- **45%** reported being worried about paying at least two expenses
- **30%** reported being worried about paying at least three expenses

Those who experienced 3+ PTSD-like reactions to COVID-19 in the past 30 days had nearly identical proportions of respondents worried about expenses as those with poor mental health



\* Subgroup is significantly different compared to people with 0 poor mental health days at the  $p < 0.05$  level

# WORRIED ABOUT EXPENSES

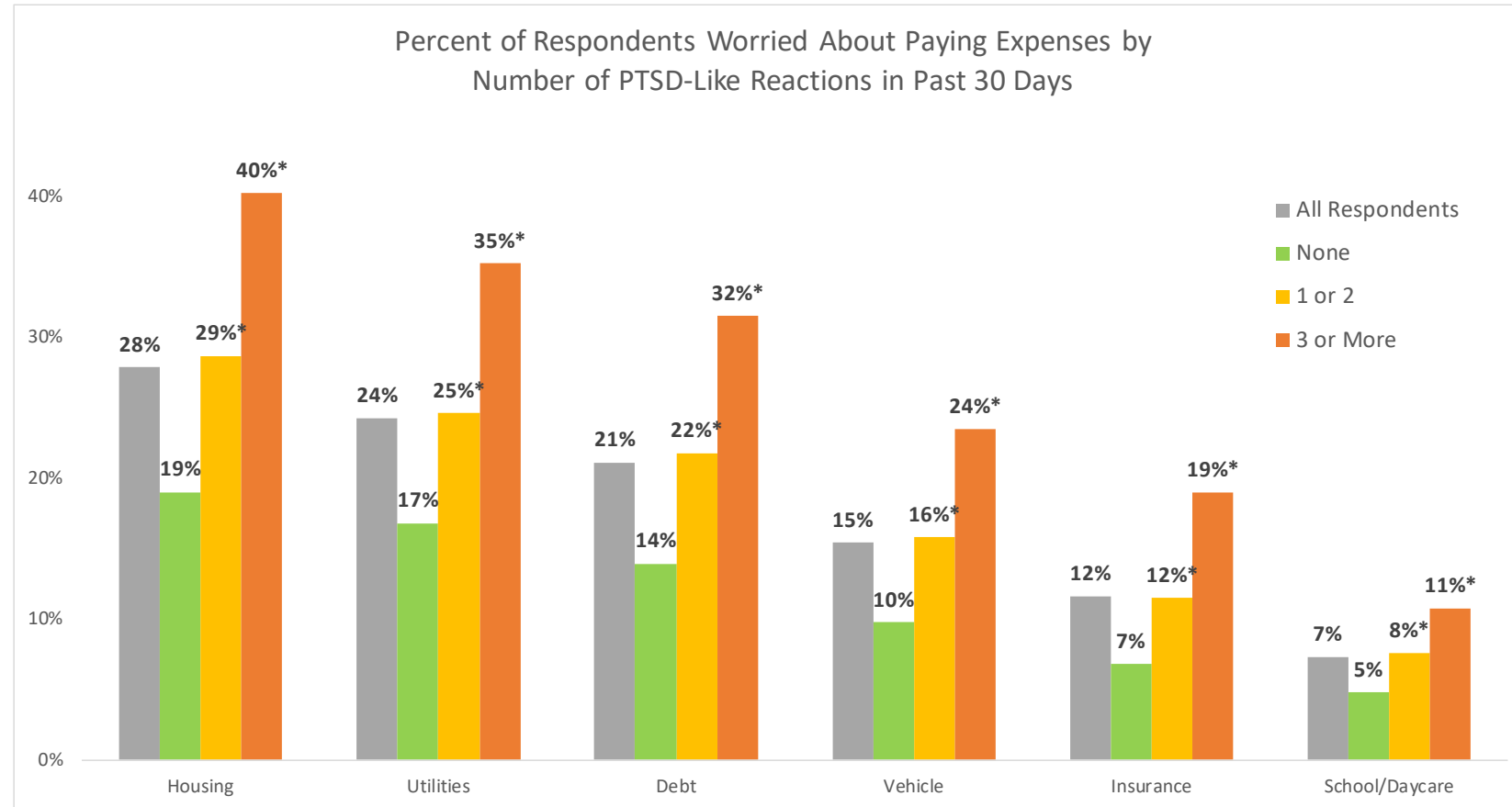
Respondents experiencing any PTSD-like reactions were more likely to worry about paying expenses and bills compared to those who experienced no PTSD-like reactions.

The distribution of those worried about expenses based on the number of PTSD-like reactions is very similar to the distribution by days of poor mental health

Among respondents with 3+ PTSD-like reactions:

- 60% reported being worried about paying at least one expense
- 44% reported being worried about paying at least two expenses
- 30% reported being worried about paying at least three expenses

These proportions are nearly identical to ones among those who are experiencing 15+ days of poor mental health

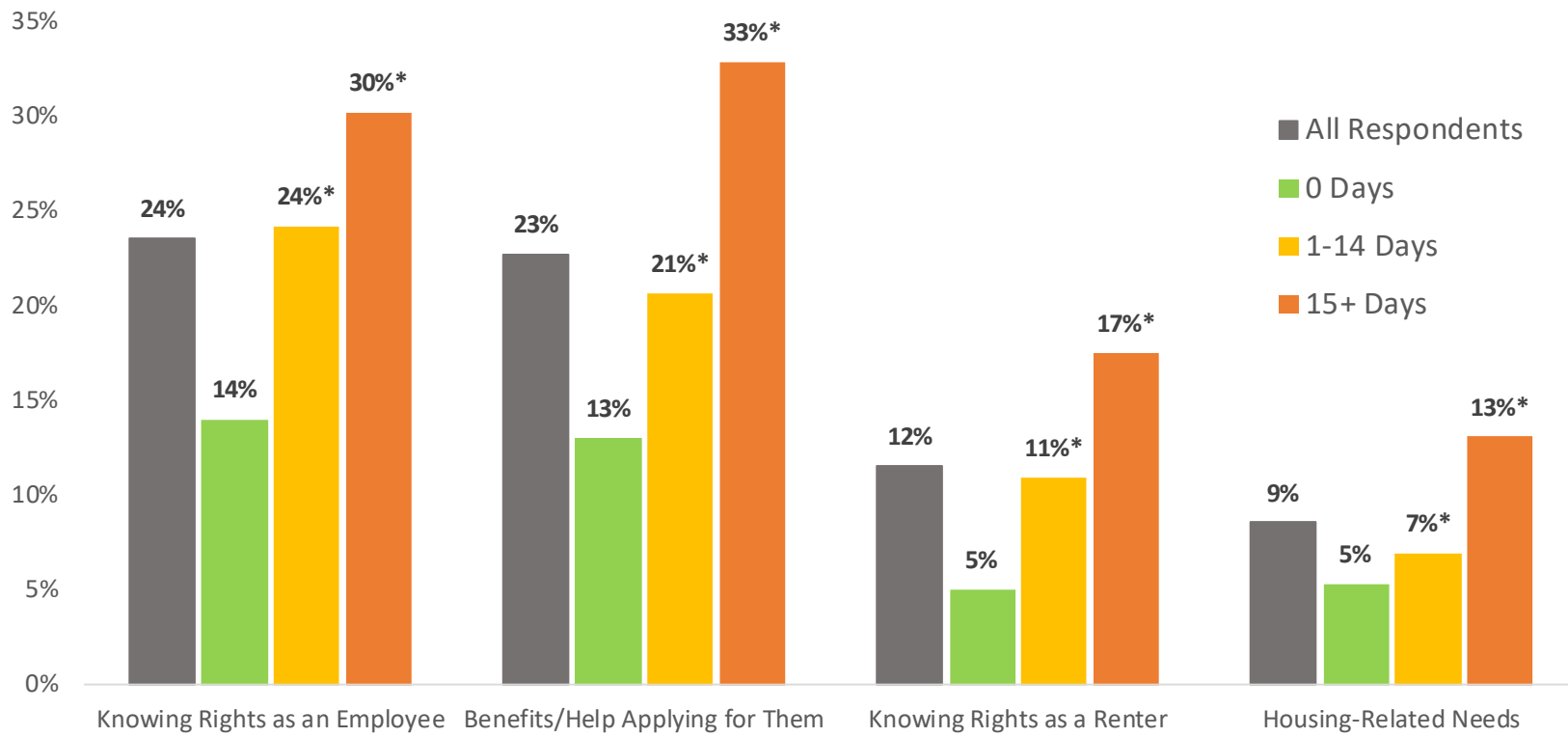


\* Subgroup is significantly different compared to people with no PTSD-like reactions at the  $p < 0.05$  level

# CONNECTION TO RESOURCES

Respondents who reported any days of poor mental health were more likely to request information that would be helpful to them compared to those reporting 0 days of poor mental health.

Percent of Respondents Reporting What Information would be Helpful to Them by Number of Poor Mental Health Days in the Past 30 Days



Respondents with 15+ days of poor mental health reported **2x –3x higher rates** for information that would be helpful to them compared to respondents who reported 0 days of poor mental health.

Information that would be most helpful for respondents with poor mental health are:

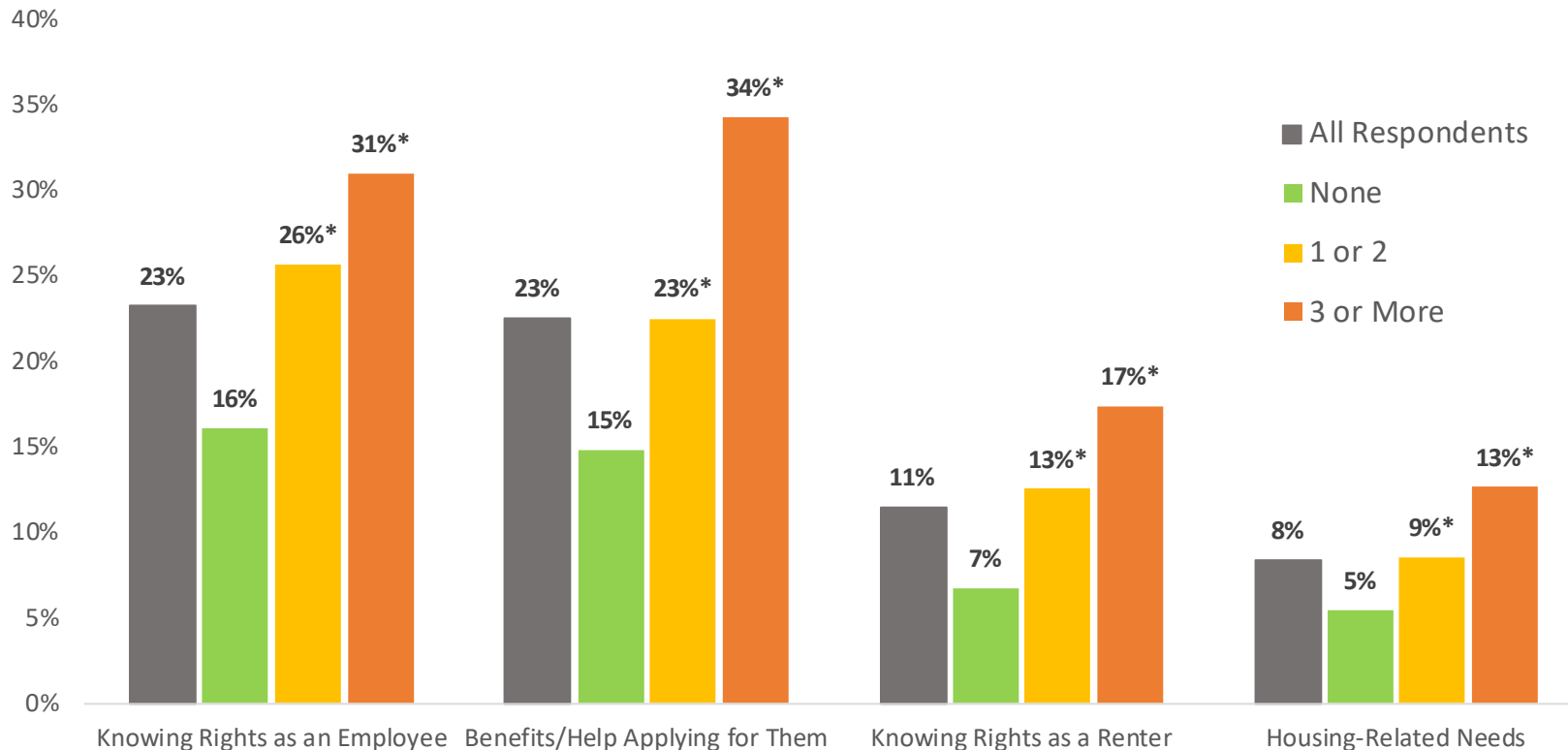
- 1) Knowing Rights as an Employee
- 2) Benefits & Help Applying for them
- 3) Knowing Rights as renters

\* Subgroup is significantly different compared to people with 0 poor mental health days at the  $p < 0.05$  level

# CONNECTION TO RESOURCES

Respondents experiencing any PTSD-like reactions were more likely to request information that would be helpful to them compared to those who experienced no PTSD-like reactions.

Percent of Respondents Reporting What Information would be Helpful to Them by Number of PTSD-Like Reactions in the Past 30 Days



Respondents with 3+ PTSD-like reactions reported **2x –2.5x higher rates for information** that would be helpful to them compared to respondents who reported no PTSD-like reactions.

Information that would be most helpful for respondents with poor mental health are:

- 1) Knowing Rights as an Employee
- 2) Benefits & Help Applying for them
- 3) Knowing Rights as renters

\* Subgroup is significantly different compared to people with no PTSD-like reactions at the  $p < 0.05$  level

# % 15 or more Poor Mental Health Days in past 30 Days

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>8973</b>	<b>33%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	113	38%
	Hispanic/Latinx	654	35%
	Multiracial, Non-Hispanic	165	49%
	Asian, Non-Hispanic	221	25%
	Black, Non-Hispanic	285	32%
	White, Non-Hispanic	7346	33%
	Other Race, Non-Hispanic	91	29%
	Unknown Race	98	40%
	<b>Age</b>	25-34	1999
35-44		2772	41%
45-64		3466	31%
65+		736	20%
<b>Gender Identity</b>	Male	1333	26%
	Female	7264	34%
	Nonbinary, genderqueer, not exclusively M/F	175	68%
<b>Sexual Orientation</b>	I am questioning/not sure of my gender Identity	37	79%
	Asexual	202	39%
	Bisexual and/or Pansexual	580	55%
	Gay or Lesbian	439	41%
	Straight (Heterosexual)	6994	31%
	Queer	246	59%
	I am questioning / not sure of my sexuality	100	58%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Transgender	134	62%
	Not Transgender	8480	33%
<b>Income</b>	<\$35K	1312	42%
	\$35-74,999K	2163	35%
	\$75-99,999K	1302	33%
	\$100-149,999K	1792	31%
	\$150K+	1998	26%
<b>Educational Attainment</b>	Less than high school	104	36%
	High school or GED	543	32%
	Trade/ vocational school	245	33%
	Some college	859	38%
	Associates Degree	686	35%
	Bachelors Degree	2884	32%
<b>Disability</b>	Graduate Degree	3646	29%
	Deaf/Hard of hearing	237	34%
	Blind/Vision Impairment	83	49%
	Cognitive Disability	989	72%
	Mobility Disability	565	44%
<b>English language</b>	Self-Care/ Independent Living Disability	410	56%
	Speaks language other than English	1198	33%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	199	30%
	Berkshire	199	36%
	Bristol	451	30%
	Dukes	30	29%
	Essex	886	33%
	Franklin	304	35%
	Hampden	671	36%
	Hampshire	397	35%
	Middlesex	2423	32%
	Nantucket	12	18%
	Norfolk	929	29%
	Plymouth	493	35%
Suffolk	966	34%	
Worcester	987	30%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: results are only weighted to the state average, and as such should be interpreted with caution when comparing across smaller geographies or special populations

# % 3 or more PTSD-like reactions in past month

	Demographics	Frequency	Weighted %	
	<b>Overall</b>	<b>7620</b>	<b>27%</b>	
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	109	39%	
	Hispanic/Latinx	528	28%	
	Multiracial, Non-Hispanic	138	41%	
	Asian, Non-Hispanic	164	20%	
	Black, Non-Hispanic	203	24%	
	White, Non-Hispanic	6312	26%	
	Other Race, Non-Hispanic	73	25%	
	Unknown Race	93	37%	
	<b>Age</b>	25-34	1747	36%
		35-44	2237	32%
45-64		2966	26%	
65+		670	16%	
<b>Gender Identity</b>	Male	1127	21%	
	Female	6175	27%	
	Nonbinary, genderqueer, not exclusively M/F	171	64%	
<b>Sexual Orientation</b>	I am questioning/not sure of my gender Identity	29	67%	
	Asexual	152	29%	
	Bisexual and/or Pansexual	547	50%	
	Gay or Lesbian	413	38%	
	Straight (Heterosexual)	5870	24%	
	Queer	237	55%	
	I am questioning / not sure of my sexuality	90	54%	

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Transgender	129	60%
	Not Transgender	7222	26%
<b>Income</b>	<\$35K	1021	31%
	\$35-74,999K	1790	29%
	\$75-99,999K	1073	26%
	\$100-149,999K	1534	25%
	\$150K+	1837	23%
	<b>Educational Attainment</b>	Less than high school	74
High school or GED		400	23%
Trade/ vocational school		197	26%
Some college		642	28%
Associates Degree		540	26%
Bachelors Degree		2488	28%
Graduate Degree		3271	26%
<b>Disability</b>	Deaf/Hard of hearing	201	26%
	Blind/Vision Impairment	69	41%
	Cognitive Disability	785	57%
	Mobility Disability	441	33%
	Self-Care/ Independent Living Disability	335	45%
<b>English language</b>	Speaks language other than English	962	27%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	170	25%
	Berkshire	166	31%
	Bristol	385	25%
	Dukes	31	29%
	Essex	770	28%
	Franklin	269	30%
	Hampden	487	27%
	Hampshire	359	32%
	Middlesex	2099	27%
	Nantucket	17	25%
	Norfolk	806	25%
	Plymouth	383	27%
	Suffolk	871	30%
Worcester	789	23%	

Preliminary analysis. Statistical significance testing forthcoming.

Note: results are only weighted to the state average, and as such should be interpreted with caution when comparing across smaller geographies or special populations



# APPENDIX: EMPLOYMENT

# % of Employed Residents Experiencing Job Loss Due to the Pandemic

	Demographics	Frequency	Weighted %
	Overall	1677	10%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	26	16%
	Hispanic/Latinx	124	11%
	Multiracial, Non-Hispanic	26	11%
	Asian, Non-Hispanic	52	11%
	Black, Non-Hispanic	46	8%
	White, Non-Hispanic	1362	10%
	Other Race, Non-Hispanic	18	14%
	Unknown Race	23	19%
	<b>Age</b>	25-34	398
35-44		488	11%
45-64		655	8%
65+		136	12%
<b>Gender Identity</b>	Male	315	10%
	Female	1295	10%
	Non-binary	29	19%
	Questioning/Not sure	--	--
<b>Sexual Orientation</b>	Asexual	42	15%
	Bisexual and/or Pansexual	84	12%
	Gay or Lesbian	65	9%
	Straight (Heterosexual)	1320	10%
	Queer	40	17%
	Questioning/Not sure	15	10%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Transgender	28	20%
	Not Transgender	1589	10%
<b>Income</b>	<\$35K	336	22%
	\$35-74,999K	424	10%
	\$75-99,999K	203	9%
	\$100-149,999K	306	8%
	\$150K+	315	6%
	<b>Educational Attainment</b>	Less than high school	34
High school or GED		136	13%
Trade/ vocational school		75	16%
Some college		194	13%
Associates Degree		164	11%
Bachelors Degree		589	9%
Graduate Degree		484	5%
<b>Disability</b>	Deaf/Hard of hearing	39	15%
	Blind/Vision impairment	7	7%
	Cognitive disability	143	20%
	Mobility disability	72	16%
<b>English language</b>	Self care/ Independent living disability	44	23%
	Speaks language other than English	240	11%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	49	11%
	Berkshire	35	9%
	Bristol	92	8%
	Dukes	--	--
	Essex	149	8%
	Franklin	54	9%
	Hampden	106	7%
	Hampshire	71	8%
	Middlesex	453	8%
	Nantucket	--	--
	Norfolk	180	8%
	Plymouth	83	8%
	Suffolk	176	8%
	Worcester	218	9%

Notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) - - indicates suppression due to insufficient data; 3) Percentages (except county) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts. Unweighted percentages should NOT be compared to weighted percentages.

# % of Employed Residents who Reduced Hours of Work or Took Leave Due to the Pandemic

	Demographics	Frequency	Weighted %
	Overall	2658	14%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	36	20%
	Hispanic/Latinx	216	17%
	Multiracial, Non-Hispanic	51	21%
	Asian, Non-Hispanic	77	11%
	Black, Non-Hispanic	102	15%
	White, Non-Hispanic	2126	14%
	Other Race, Non-Hispanic	24	17%
	Unknown Race	26	14%
	<b>Age</b>	25-34	590
35-44		916	17%
45-64		989	12%
65+		163	12%
<b>Gender Identity</b>	Male	402	12%
	Female	2160	15%
	Non-binary	48	20%
	Questioning/Not sure	6	20%
<b>Sexual Orientation</b>	Asexual	50	14%
	Bisexual and/or Pansexual	155	20%
	Gay or Lesbian	100	12%
	Straight (Heterosexual)	2125	14%
	Queer	61	17%
	Questioning/Not sure	31	24%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of transgender experience	40	23%
	Not of transgender experience	2534	14%
<b>Income</b>	<\$35K	345	22%
	\$35-74,999K	675	16%
	\$75-99,999K	371	14%
	\$100-149,999K	533	11%
	\$150K+	600	10%
<b>Educational Attainment</b>	Less than high school	24	22%
	High school or GED	186	18%
	Trade/ vocational school	96	20%
	Some college	261	17%
	Associates Degree	224	15%
	Bachelors Degree	846	12%
<b>Disability</b>	Graduate Degree	1018	11%
	Deaf/Hard of hearing	57	20%
	Blind/Vision impairment	18	31%
	Cognitive disability	178	24%
	Mobility disability	96	20%
<b>English language</b>	Self-care/Independent-living disability	52	23%
	Speaks language other than English	402	16%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	45	10%
	Berkshire	67	17%
	Bristol	150	13%
	Dukes	10	15%
	Essex	230	12%
	Franklin	106	18%
	Hampden	225	15%
	Hampshire	141	17%
	Middlesex	690	12%
	Nantucket	7	16%
	Norfolk	270	11%
	Plymouth	125	12%
	Suffolk	301	13%
Worcester	286	11%	

Notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) - - indicates suppression due to insufficient data; 3) Percentages (except county) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts. Unweighted percentages should NOT be compared to weighted percentages.

# % of Employed Residents Experiencing Job Loss or Reduced Hours of Work/Took Leave Due to the Pandemic by Industry Group

Industry Group	Job Loss		Reduced Hours/Took Leave	
	Frequency	Weighted %	Frequency	Weighted %
<b>All Industries</b>	<b>1448</b>	<b>10%</b>	<b>2376</b>	<b>15%</b>
Construction	32	18%	37	18%
Manufacturing	59	12%	100	17%
Retail: Grocery	20	15%	40	29%
Retail: All Other	119	25%	100	22%
Transportation & Warehousing	24	16%	46	26%
Finance & Insurance	25	3%	57	9%
Real Estate & Rental & Leasing	10	11%	13	10%
Professional, Scientific, & Technical Services	93	10%	174	13%
Admin. & Support & Waste Mgmt & Remed. Svcs	36	26%	24	15%
Education: Elementary & Secondary Schools	149	7%	260	12%
Education: Colleges & Universities	88	10%	138	13%
Education: All Other	15	25%	14	21%
Healthcare: Ambulatory Services	137	8%	315	16%
Healthcare: Hospitals	78	4%	271	14%
Healthcare: Nursing & Residential Care Facilities	34	8%	68	18%
Social Assistance: Childcare	74	17%	60	15%
Social Assistance: All Other	53	3%	214	13%
Arts, Entertainment, & Recreation	79	39%	38	21%
Accommodation (e.g. hotel, motel, boarding house)	49	63%	16	21%
Food Services	109	48%	67	27%
Other Services (Except Public Administration)	114	13%	161	16%
Public Administration	37	3%	137	7%
Other Industries	14	13%	26	14%

Notes: 1) Industry groups are based on Bureau of Census Industry Codes (CIC); 2)"Retail: Grocery" includes Grocery Stores, Specialty Food Stores, Gas Stations [includes those with convenient stores]; 3) Other Industries includes Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

## % of Employed Residents Experiencing Job Loss or Reduced Hours of Work/Took Leave Due to the Pandemic by Occupation Group

Occupation Group	Job Loss		Reduced Hours/ Took Leave	
	Frequency	Weighted %	Frequency	Weighted %
<b>All Occupations</b>	<b>1473</b>	<b>10%</b>	<b>2325</b>	<b>15%</b>
Management	180	7%	250	9%
Business & Financial Operations	89	10%	107	10%
Computer & Mathematical	37	5%	84	11%
Architecture & Engineering	13	7%	51	17%
Life, Physical, & Social Science	28	4%	81	10%
Community & Social Services	76	4%	228	12%
Legal	10	4%	36	10%
Education, Training, & Library	185	10%	262	14%
Arts, Design, Entertainment, Sports, & Media	78	22%	48	12%
Healthcare Practitioners & Technical	138	5%	408	16%
Healthcare Support	30	11%	60	23%
Protective Service	7	5%	19	12%
Food Preparation & Serving Related	96	44%	66	30%
Building & Grounds Cleaning & Maintenance	19	19%	28	25%
Personal Care & Service	104	26%	95	25%
Sales & Related	120	20%	119	21%
Office & Administrative Support	185	10%	286	14%
Construction & Extraction	14	18%	17	23%
Production	26	18%	35	25%
Transportation & Material Moving	27	21%	33	29%
Other Occupations	11	19%	12	18%

Notes: 1) Occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "Other Occupations" = Farming, Fishing & Forestry; "Installation, Maintenance, & Repair"; and Military occupations.; 3) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# % Working Outside of the Home among Employed Residents by Industry Group

Industry Group	Frequency	Weighted %
<b>All Industries</b>	<b>8786</b>	<b>52%</b>
Construction	132	73%
Manufacturing	221	50%
Retail: Grocery	100	94%
Retail: All Other	266	74%
Transportation & Warehousing	107	83%
Finance & Insurance	132	21%
Real Estate & Rental & Leasing	133	74%
Professional, Scientific, & Technical Services	300	25%
Admin. & Support & Waste Mgmt & Remed. Svcs	83	58%
Education: Elementary & Secondary Schools	1593	64%
Education: Colleges & Universities	140	15%
Education: All Other	39	57%
Healthcare: Ambulatory Services	895	52%
Healthcare: Hospitals	1230	67%
Healthcare: Nursing & Residential Care Facilities	314	88%
Social Assistance: Childcare	306	79%
Social Assistance: All Other	426	34%
Arts, Entertainment, & Recreation	140	75%
Accommodation (e.g. hotel, motel, boarding house)	27	91%
Food Services	113	87%
Other Services (Except Public Administration)	382	44%
Public Administration	689	47%
Other Industries	69	55%

Notes: 1) Industry groups are based on Bureau of Census Industry Codes (CIC); 2) "Retail: Grocery" includes Grocery Stores, Specialty Food Stores, Gas Stations [includes those with convenient stores]; 3) Other Industries includes Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

## % Working Outside of the Home among Employed Residents by Occupation Group

Occupation Group	Frequency	Weighted %
<b>All Occupations</b>	<b>7726</b>	<b>53%</b>
Management	1010	41%
Business & Financial Operations	272	29%
Computer & Mathematical	91	13%
Architecture & Engineering	75	31%
Life, Physical, & Social Science	199	29%
Community & Social Services	588	35%
Legal	79	24%
Education, Training, & Library	1163	56%
Arts, Design, Entertainment, Sports, & Media	271	56%
Healthcare Practitioners & Technical	1664	73%
Healthcare Support	220	89%
Protective Service	136	89%
Food Preparation & Serving Related	106	97%
Building & Grounds Cleaning & Maintenance	112	93%
Personal Care & Service	315	88%
Sales & Related	337	66%
Office & Administrative Support	796	49%
Construction & Extraction	66	89%
Production	90	83%
Transportation & Material Moving	90	98%
Other Occupations	46	80%

Notes: 1) Occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "Other Occupations" = Farming, Fishing & Forestry; "Installation, Maintenance, & Repair"; and Military occupations.; 3) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

## % "Very" Worried about Getting COVID-19 among Respondents Working Outside the Home by Occupation Group

Occupation Group	Frequency	Weighted %
<b>All Occupations</b>	<b>2333</b>	<b>28%</b>
Management	216	23%
Business & Financial Operations	52	21%
Computer & Mathematical	23	26%
Architecture & Engineering	20	25%
Life, Physical, & Social Science	46	25%
Community & Social Services	161	30%
Legal	24	27%
Education, Training, & Library	380	36%
Arts, Design, Entertainment, Sports, & Media	97	37%
Healthcare Practitioners & Technical	390	23%
Healthcare Support	64	30%
Protective Service	13	12%
Food Preparation & Serving Related	36	42%
Building & Grounds Cleaning & Maintenance	45	45%
Personal Care & Service	110	39%
Sales & Related	84	27%
Office & Administrative Support	198	25%
Construction & Extraction	13	21%
Production	30	32%
Transportation & Material Moving	37	41%
Other Occupations	--	--

Notes: 1) Occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "Other Occupations" = Farming, Fishing & Forestry; "Installation, Maintenance, & Repair"; and Military occupations.; 3) The estimate for "Other Occupations" was suppressed due to insufficient data 4) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# % with Employer-provided Protective Measures among Adults Working Outside the Home by Occupation Group

Occupation Group	Personal Protective Equipment (PPE)		Implemented Social Distancing		Additional Health and Safety Training		Paid Sick Leave	
	Frequency	Weighted %	Frequency	Weighted %	Frequency	Weighted %	Frequency	Weighted %
<b>All Occupations</b>	<b>4994</b>	<b>77%</b>	<b>4522</b>	<b>67%</b>	<b>3090</b>	<b>44%</b>	<b>5327</b>	<b>80%</b>
Management	752	84%	719	80%	496	50%	828	90%
Business & Financial Operations	111	72%	116	74%	57	36%	146	88%
Computer & Mathematical	43	75%	45	69%	24	39%	60	91%
Architecture & Engineering	42	67%	44	70%	19	24%	53	90%
Life, Physical, & Social Science	110	81%	102	73%	58	40%	117	84%
Community & Social Services	387	74%	383	74%	246	47%	449	86%
Legal	21	35%	32	70%	8	31%	32	66%
Education, Training, & Library	690	67%	825	72%	590	55%	907	82%
Arts, Design, Entertainment, Sports, & Media	31	57%	40	64%	10	19%	38	65%
Healthcare Practitioners & Technical	1471	92%	1046	63%	903	55%	1333	83%
Healthcare Support	173	91%	111	57%	93	50%	139	74%
Protective Service	123	86%	84	61%	74	57%	125	89%
Food Preparation & Serving Related	58	59%	56	55%	37	35%	51	52%
Building & Grounds Cleaning & Maintenance	42	58%	29	34%	17	24%	37	49%
Personal Care & Service	138	71%	96	46%	82	39%	122	61%
Sales & Related	136	64%	135	60%	68	29%	137	62%
Office & Administrative Support	515	68%	532	70%	240	32%	606	81%
Construction & Extraction	34	75%	26	58%	12	25%	30	65%
Production	43	61%	42	60%	25	32%	47	68%
Transportation & Material Moving	46	70%	36	51%	20	29%	43	65%
Other Occupations	28	84%	23	60%	11	36%	27	82%

Notes: 1) Occupation groups are based on Bureau of Census Occupation Codes (COC); 2) "Other Occupations" = Farming, Fishing & Forestry; "Installation, Maintenance, & Repair"; and Military occupations.; 3) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# % with Employer-provided Protective Measures among Adults Working Outside the Home by Industry Group

Industry Group	Personal Protective Equipment (PPE)		Implemented Social Distancing		Additional Health and Safety Training		Sick Leave	
	Frequency	Weighted %	Frequency	Weighted %	Frequency	Weighted %	Frequency	Weighted %
<b>All Industries</b>	<b>5559</b>	<b>76%</b>	<b>5038</b>	<b>66%</b>	<b>3424</b>	<b>44%</b>	<b>5978</b>	<b>80%</b>
Construction	63	73%	50	52%	21	22%	70	73%
Manufacturing	141	71%	148	72%	82	39%	164	83%
Retail: Grocery	69	74%	57	58%	33	37%	53	59%
Retail: All Other	132	71%	119	63%	62	32%	132	68%
Transportation & Warehousing	65	73%	57	63%	28	29%	62	69%
Finance & Insurance	65	63%	74	70%	30	24%	91	86%
Real Estate & Rental & Leasing	36	66%	39	73%	17	38%	39	72%
Professional, Scientific, & Technical Services	81	61%	96	67%	34	23%	98	68%
Admin. & Support & Waste Mgmt & Remed. Svcs	20	50%	23	53%	7	24%	24	56%
Education: Elementary & Secondary Schools	1062	70%	1227	78%	917	58%	1341	86%
Education: Colleges & Universities	75	64%	104	79%	66	49%	102	79%
Healthcare: Ambulatory Services	624	82%	490	64%	357	46%	590	77%
Healthcare: Hospitals	1130	91%	768	60%	652	52%	1025	84%
Healthcare: Nursing & Residential Care Facilities	271	88%	195	64%	193	62%	248	79%
Social Assistance: Childcare	182	77%	149	63%	141	56%	188	80%
Social Assistance: All Other	331	82%	309	74%	203	47%	354	87%
Arts, Entertainment, & Recreation	37	64%	38	78%	12	26%	30	60%
Food Services	50	58%	49	57%	31	34%	37	37%
Other Services (Except Public Administration)	165	62%	164	58%	88	33%	196	70%
Public Administration	506	75%	445	66%	231	32%	610	92%
Other Industries	42	73%	37	63%	25	45%	46	91%

Notes: 1) Industry groups are based on Bureau of Census Industry Codes (CIC); 2) "Retail: Grocery" includes Grocery Stores, Specialty Food Stores, Gas Stations [includes those with convenient stores]; 3) "Other Industries" includes Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 4) Estimates for "Education: All Other" and "Accommodation" were suppressed due to insufficient data; 5) Percentages are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

# % with Employer-provided Personal Protective Equipment among Adults Working Outside the Home

	Demographics	Frequency	Weighted %
	Overall	5559	76%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	53	78%
	Hispanic/Latinx	381	65%
	Multiracial, Non-Hispanic	60	81%
	Asian, Non-Hispanic	151	70%
	Black, Non-Hispanic	197	75%
	White, Non-Hispanic	4623	77%
	Other Race, Non-Hispanic	45	69%
	Unknown Race	49	71%
	<b>Age</b>	25-34	1955
35-44		2768	47%
45-64		4962	53%
65+		652	52%
<b>Gender Identity</b>	Male	1079	77%
	Female	4371	76%
	Non-binary	30	67%
	Questioning/Not sure	--	--
<b>Sexual Orientation</b>	Asexual	114	67%
	Bisexual and/or Pansexual	149	77%
	Gay or Lesbian	206	73%
	Straight (Heterosexual)	4768	77%
	Queer	37	69%
	Questioning/Not sure	36	82%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Transgender	62	32%
	Not Transgender	9986	51%
<b>Income</b>	<\$35K	443	66%
	\$35-74,999K	1251	75%
	\$75-99,999K	800	80%
	\$100-149,999K	1265	78%
	\$150K+	1556	81%
	<b>Educational Attainment</b>	Less than high school	31
High school or GED		390	69%
Trade/ vocational school		194	78%
Some college		505	76%
Associates Degree		592	80%
Bachelors Degree		1740	78%
Graduate Degree		2096	74%
<b>Disability</b>	Deaf/Hard of hearing	96	79%
	Blind/Vision impairment	--	--
	Cognitive disability	155	67%
	Mobility disability	114	66%
	Self care/ Independent living disability	44	69%
<b>English language</b>	Speaks language other than English	690	66%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	173	80%
	Berkshire	165	82%
	Bristol	406	74%
	Dukes	--	--
	Essex	564	76%
	Franklin	183	78%
	Hampden	492	78%
	Hampshire	188	76%
	Middlesex	1128	74%
	Nantucket	--	--
	Norfolk	661	78%
	Plymouth	372	78%
	Suffolk	471	72%
	Worcester	701	72%

Notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) - - indicates suppression due to insufficient data; 3) Percentages (except county) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts. Unweighted percentages should NOT be compared to weighted percentages.

# % with Social Distancing Implemented at Work among Adults Working Outside the Home

	Demographics	Frequency	Weighted %
	Overall	5038	66%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	46	67%
	Hispanic/Latinx	365	60%
	Multiracial, Non-Hispanic	45	49%
	Asian, Non-Hispanic	142	62%
	Black, Non-Hispanic	165	63%
	White, Non-Hispanic	4202	67%
	Other Race, Non-Hispanic	39	60%
	Unknown Race	34	44%
	<b>Age</b>	25-34	1958
35-44		2756	44%
45-64		4945	51%
65+		658	50%
<b>Gender Identity</b>	Male	997	65%
	Female	3956	66%
	Non-binary	22	54%
	Questioning/Not sure	--	--
<b>Sexual Orientation</b>	Asexual	111	67%
	Bisexual and/or Pansexual	129	62%
	Gay or Lesbian	186	65%
	Straight (Heterosexual)	4338	67%
	Queer	33	61%
	Questioning/Not sure	--	--

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Transgender	74	35%
	Not Transgender	9972	48%
<b>Income</b>	<\$35K	368	54%
	\$35-74,999K	1139	66%
	\$75-99,999K	722	67%
	\$100-149,999K	1141	67%
	\$150K+	1450	73%
	<b>Educational Attainment</b>	Less than high school	33
High school or GED		336	61%
Trade/ vocational school		148	60%
Some college		422	63%
Associates Degree		476	64%
Bachelors Degree		1527	68%
<b>Disability</b>	Graduate Degree	2090	74%
	Deaf/Hard of hearing	78	62%
	Blind/Vision impairment	--	--
	Cognitive disability	136	55%
<b>English language</b>	Mobility disability	118	73%
	Self care/ Independent living disability	36	60%
	Speaks language other than English	646	60%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	151	70%
	Berkshire	130	65%
	Bristol	379	69%
	Dukes	--	--
	Essex	495	66%
	Franklin	165	70%
	Hampden	439	69%
	Hampshire	188	76%
	Middlesex	1035	68%
	Nantucket	--	--
	Norfolk	564	66%
	Plymouth	333	70%
	Suffolk	413	63%
	Worcester	699	72%

Notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) - - indicates suppression due to insufficient data; 3) Percentages (except county) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts. Unweighted percentages should NOT be compared to weighted percentages.

# % with Employer-provided Additional Health and Safety Training among Adults Working Outside the Home

	Demographics	Frequency	Weighted %
	Overall	3424	44%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	29	42%
	Hispanic/Latinx	220	37%
	Multiracial, Non-Hispanic	37	39%
	Asian, Non-Hispanic	95	39%
	Black, Non-Hispanic	108	40%
	White, Non-Hispanic	2889	45%
	Other Race, Non-Hispanic	27	43%
	Unknown Race	19	36%
	<b>Age</b>	25-34	1291
35-44		1897	30%
45-64		3259	33%
65+		404	29%
<b>Gender Identity</b>	Male	636	43%
	Female	2734	44%
	Non-binary	17	40%
	Questioning/Not sure	--	--
<b>Sexual Orientation</b>	Asexual	69	40%
	Bisexual and/or Pansexual	92	44%
	Gay or Lesbian	142	47%
	Straight (Heterosexual)	2958	45%
	Queer	19	35%
	Questioning/Not sure	18	38%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Transgender	43	19%
	Not Transgender	6628	31%
<b>Income</b>	<\$35K	230	34%
	\$35-74,999K	720	41%
	\$75-99,999K	487	44%
	\$100-149,999K	797	48%
	\$150K+	1055	53%
<b>Educational Attainment</b>	Less than high school	17	31%
	High school or GED	212	37%
	Trade/ vocational school	106	43%
	Some college	280	42%
	Associates Degree	320	43%
	Bachelors Degree	1024	46%
<b>Disability</b>	Graduate Degree	1458	52%
	Deaf/Hard of hearing	53	43%
	Blind/Vision impairment	--	--
	Cognitive disability	96	39%
	Mobility disability	58	30%
<b>English language</b>	Self care/ Independent living disability	20	27%
	Speaks language other than English	420	39%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	123	57%
	Berkshire	81	40%
	Bristol	247	45%
	Dukes	--	--
	Essex	338	45%
	Franklin	115	49%
	Hampden	300	47%
	Hampshire	115	47%
	Middlesex	681	45%
	Nantucket	--	--
	Norfolk	402	47%
	Plymouth	234	49%
	Suffolk	265	41%
	Worcester	490	51%

Notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) - - indicates suppression due to insufficient data; 3) Percentages (except county) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts. Unweighted percentages should NOT be compared to weighted percentages.

# % with Paid Sick Leave among Adults Working Outside the Home

	Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %
	Overall	5978	80%	<b>Transgender Experience</b>	Transgender	122	58%
					Not Transgender	16466	76%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	49	69%	<b>Income</b>	<\$35K	381	58%
	Hispanic/Latinx	386	65%		\$35-74,999K	1367	80%
	Multiracial, Non-Hispanic	61	74%		\$75-99,999K	867	84%
	Asian, Non-Hispanic	155	73%		\$100-149,999K	1404	86%
	Black, Non-Hispanic	209	80%		\$150K+	1700	88%
	White, Non-Hispanic	5013	82%		<b>Educational Attainment</b>	Less than high school	28
	Other Race, Non-Hispanic	55	84%	High school or GED		414	74%
	Unknown Race	50	64%	Trade/ vocational school		189	75%
	<b>Age</b>	25-34	3331	70%		Some college	503
35-44		4866	75%	Associates Degree		602	82%
45-64		7905	80%	Bachelors Degree		1830	83%
65+		958	71%	Graduate Degree	2401	86%	
<b>Gender Identity</b>	Male	1181	82%	<b>Disability</b>	Deaf/Hard of hearing	91	72%
	Female	4682	79%		Blind/Vision impairment	--	--
	Non-binary	27	70%		Cognitive disability	148	59%
	Questioning/Not sure	--	--		Mobility disability	124	70%
<b>Sexual Orientation</b>	Asexual	130	77%		Self care/ Independent living disability	30	41%
	Bisexual and/or Pansexual	151	70%		<b>English language</b>	Speaks language other than English	727
	Gay or Lesbian	224	78%				
	Straight (Heterosexual)	5130	81%				
	Queer	37	64%				
	Questioning/Not sure	36	76%				

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	178	83%
	Berkshire	164	82%
	Bristol	470	86%
	Dukes	--	--
	Essex	601	81%
	Franklin	197	86%
	Hampden	523	84%
	Hampshire	199	82%
	Middlesex	1226	82%
	Nantucket	--	--
	Norfolk	678	81%
	Plymouth	395	84%
	Suffolk	487	76%
	Worcester	806	84%

Notes: 1) "Non-binary" includes respondents identifying as non-binary, genderqueer, not exclusively male or female; 2) - - indicates suppression due to insufficient data; 3) Percentages (except county) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts. Unweighted percentages should NOT be compared to weighted percentages.



# APPENDIX: SUBSTANCE USE

# % Alcohol Use in past 30 Days

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>16,008</b>	<b>49%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	117	36%
	Hispanic/Latinx	695	29%
	Multiracial, Non-Hispanic	226	52%
	Asian, Non-Hispanic	325	29%
	Black, Non-Hispanic	314	31%
	White, Non-Hispanic	14,113	54%
	Other Race, Non-Hispanic	110	35%
	Unknown Race	108	39%
	<b>Age</b>	25-34	2,988
35-44		4,228	53%
45-64		6,604	50%
65+		2,188	41%
<b>Gender Identity</b>	Male	3,434	56%
	Female	12,209	48%
	Nonbinary	147	54%
	Questioning/not sure of gender Identity	26	45%
<b>Sexual Orientation</b>	Asexual	224	39%
	Bisexual and/or Pansexual	694	59%
	Gay or Lesbian	721	56%
	Straight (Heterosexual)	13,491	50%
	Queer	258	60%
	Questioning / not sure of sexuality	103	51%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Transgender	120	55%
	Not Transgender	15,490	49%
<b>Income</b>	<\$35K	1,029	29%
	\$35-74,999K	2,948	45%
	\$75-99,999K	2,206	53%
	\$100-149,999K	3,599	58%
	\$150K+	5,441	68%
<b>Educational Attainment</b>	Less than high school	50	17%
	High school or GED	554	31%
	Trade/ vocational school	282	38%
	Some college	1,050	46%
	Associates Degree	907	45%
	Bachelors Degree	5,357	59%
	Graduate Degree	7,787	62%
	Deaf/Hard of hearing	362	38%
<b>Disability</b>	Blind/Vision Impairment	53	23%
	Cognitive Disability	597	38%
	Mobility Disability	459	30%
	Self-Care/ Independent Living Disability	191	24%
	<b>English language</b>	Speaks language other than English	1,357

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	419	61%
	Berkshire	300	54%
	Bristol	799	51%
	Dukes	54	50%
	Essex	1,503	55%
	Franklin	504	56%
	Hampden	859	46%
	Hampshire	678	59%
	Middlesex	4,624	60%
	Nantucket	42	61%
	Norfolk	1,935	59%
	Plymouth	792	54%
	Suffolk	1,605	55%
	Worcester	1,854	54%

Preliminary analysis. Statistical significance testing forthcoming.

Note: results are only weighted to the state average, and as such should be interpreted with caution when comparing across smaller geographies or special populations

# % Marijuana Use in past 30 Days

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>3,857</b>	<b>14%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	52	16%
	Hispanic/Latinx	223	11%
	Multiracial, Non-Hispanic	81	24%
	Asian, Non-Hispanic	69	8%
	Black, Non-Hispanic	113	13%
	White, Non-Hispanic	3,238	14%
	Other Race, Non-Hispanic	42	15%
	Unknown Race	39	21%
	<b>Age</b>	25-34	1,153
35-44		1,119	17%
45-64		1,272	11%
65+		313	7%
<b>Gender Identity</b>	Male	968	18%
	Female	2,709	12%
	Nonbinary	115	44%
	Questioning/not sure of gender Identity	13	30%
<b>Sexual Orientation</b>	Asexual	58	12%
	Bisexual and/or Pansexual	371	35%
	Gay or Lesbian	253	25%
	Straight (Heterosexual)	2,868	12%
	Queer	152	35%
	Questioning / not sure of sexuality	47	21%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Transgender	87	39%
	Not Transgender	3,653	13%
<b>Income</b>	<\$35K	546	16%
	\$35-74,999K	981	15%
	\$75-99,999K	534	14%
	\$100-149,999K	817	14%
	\$150K+	869	12%
	<b>Educational Attainment</b>	Less than high school	36
High school or GED		217	12%
Trade/ vocational school		102	13%
Some college		382	17%
Associates Degree		226	11%
Bachelors Degree		1,406	16%
Graduate Degree		1,486	12%
<b>Disability</b>		Deaf/Hard of hearing	96
	Blind/Vision Impairment	14	8%
	Cognitive Disability	368	25%
	Mobility Disability	172	12%
	Self-Care/ Independent Living Disability	125	16%
<b>English language</b>	Speaks language other than English	354	9%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	100	15%
	Berkshire	97	17%
	Bristol	188	12%
	Dukes	17	16%
	Essex	368	13%
	Franklin	181	20%
	Hampden	288	15%
	Hampshire	235	20%
	Middlesex	1,003	13%
	Nantucket	--	--
	Norfolk	345	10%
	Plymouth	158	11%
	Suffolk	469	16%
	Worcester	397	12%

Preliminary analysis. Statistical significance testing forthcoming.

-- indicates suppression due to insufficient data.

Note: results are only weighted to the state average, and as such should be interpreted with caution when comparing across smaller geographies or special populations

# % Conventional Tobacco Use in past 30 Days

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>2,266</b>	<b>11%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	47	19%
	Hispanic/Latinx	166	10%
	Multiracial, Non-Hispanic	44	17%
	Asian, Non-Hispanic	33	4%
	Black, Non-Hispanic	80	13%
	White, Non-Hispanic	1,851	11%
	Other Race, Non-Hispanic	25	13%
	Unknown Race	20	10%
	<b>Age</b>	25-34	406
35-44		594	12%
45-64		1,047	12%
65+		219	7%
<b>Gender Identity</b>	Male	578	13%
	Female	1,632	11%
	Nonbinary	19	9%
	Questioning/not sure of gender Identity	--	--
<b>Sexual Orientation</b>	Asexual	53	14%
	Bisexual and/or Pansexual	104	13%
	Gay or Lesbian	103	12%
	Straight (Heterosexual)	1,853	11%
	Queer	35	10%
	Questioning / not sure of sexuality	13	11%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Transgender	18	10%
	Not Transgender	2,177	11%
<b>Income</b>	<\$35K	497	18%
	\$35-74,999K	685	14%
	\$75-99,999K	307	10%
	\$100-149,999K	363	8%
	\$150K+	346	6%
	<b>Educational Attainment</b>	Less than high school	53
High school or GED		319	17%
Trade/ vocational school		137	17%
Some college		380	16%
Associates Degree		278	14%
Bachelors Degree		597	6%
Graduate Degree		500	4%
<b>Disability</b>		Deaf/Hard of hearing	56
	Blind/Vision Impairment	18	15%
	Cognitive Disability	210	19%
	Mobility Disability	164	14%
	Self-Care/ Independent Living Disability	122	18%
<b>English language</b>	Speaks language other than English	288	9%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	68	9%
	Berkshire	61	14%
	Bristol	183	14%
	Dukes	8	12%
	Essex	205	9%
	Franklin	86	12%
	Hampden	220	16%
	Hampshire	90	12%
	Middlesex	447	9%
	Nantucket	6	7%
	Norfolk	207	9%
	Plymouth	149	14%
	Suffolk	242	12%
	Worcester	290	13%

Preliminary analysis. Statistical significance testing forthcoming.

-- indicates suppression due to insufficient data.

Note: results are only weighted to the state average, and as such should be interpreted with caution when comparing across smaller geographies or special populations

# % Increased Substance Use Compared to Prior to COVID-19 Outbreak (February 2020)

	Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %		Demographics	Frequency	Unweighted %	
	<b>Overall</b>	<b>7,441</b>	<b>39%</b>	<b>Transgender Experience</b>	Transgender	99	61%	<b>County</b>	Barnstable	167	35%	
					Not Transgender	7,153	39%		Berkshire	140	39%	
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	77	44%	<b>Income</b>	<\$35K	722	44%		Bristol	361	38%	
	Hispanic/Latinx	397	47%			\$35-74,999K	1,501		40%	Dukes	22	35%
	Multiracial, Non-Hispanic	124	48%			\$75-99,999K	989		37%	Essex	731	42%
	Asian, Non-Hispanic	141	40%			\$100-149,999K	1,561		37%	Franklin	249	41%
	Black, Non-Hispanic	171	41%			\$150K+	2,385		40%	Hampden	446	41%
	White, Non-Hispanic	6,425	38%	<b>Educational Attainment</b>	Less than high school	49	45%		Hampshire	318	40%	
	Other Race, Non-Hispanic	48	34%			High school or GED	344		39%	Middlesex	2,168	42%
	Unknown Race	58	47%			Trade/ vocational school	156		38%	Nantucket	14	30%
						Some college	605		41%	Norfolk	849	39%
<b>Age</b>	25-34	1,487	46%			Associates Degree	429		36%	Plymouth	382	41%
	35-44	2,347	50%			Bachelors Degree	2,480		40%	Suffolk	773	42%
	45-64	3,002	39%			Graduate Degree	3,373		39%	Worcester	795	37%
	65+	605	24%									
<b>Gender Identity</b>	Male	1,394	35%	<b>Disability</b>	Deaf/Hard of hearing	142	30%					
	Female	5,834	40%			Blind/Vision Impairment	35	39%				
	Nonbinary	110	53%			Cognitive Disability	504	52%				
	Questioning/not sure of gender Identity	16	51%			Mobility Disability	264	36%				
<b>Sexual Orientation</b>	Asexual	125	45%			Self-Care/ Independent Living Disability	165	42%				
	Bisexual and/or Pansexual	444	51%		<b>English language</b>	Speaks language other than English	692	44%				
	Gay or Lesbian	386	47%									
	Straight (Heterosexual)	6,040	38%									
	Queer	164	52%									
	Questioning / not sure of sexuality	53	41%									

Preliminary analysis. Statistical significance testing forthcoming.  
 Note: results are only weighted to the state average, and as such should be interpreted with caution when comparing across smaller geographies or special populations



# APPENDIX: PARENTS & FAMILIES

# Demographics of the sample, Parents >24 years old

	Demographics	Freq.	Percent
<b>Total</b>	<b>Total Parents or Guardians</b>	<b>19,233</b>	
<b>Age</b>	25-35	1,955	10.16
	36-49	6,717	34.92
	50-64	9,128	47.46
	65+	1,433	7.45
<b>Race/Ethnicity</b>	Am Indian/Alaska Native	198	1.03
	Hispanic/Latinx	1,613	8.39
	Multiracial, nH/nL	254	1.32
	Asian/Pacific Islander, nH/nL	688	3.58
	Black, nH/nL	724	3.76
	White, nH/nL	15,356	79.84
	Unknown/Other	400	2.08
<b>Gender</b>	Male	3,419	17.78
	Female	15,404	80.09
	Nonbinary, Genderqueer	76	0.40
	I am questioning/not sure of my gender identity	16	0.08
	Other/DK/refuse	318	1.65
<b>Transgender Identity</b>	Of transgender experience	60	0.31
	Not of transgender experience	18,468	96.44
	Not sure/DK/refused	621	3.23
<b>Language Spoken</b>	English Only	15,942	83.02
	Speaks Language Other than English	3,260	16.98

	Demographics	Freq.	Percent
<b>Sexual Orientation</b>	Asexual	646	1.92
	Bisexual	1,252	3.73
	Gay/Lesbian	1,352	4.03
	Heterosexual	29,231	84.08
	Queer	464	1.38
	Questioning	217	0.65
	Other/DK/refuse	1,414	4.21
<b>Disability Status</b>	Deaf/Hard to hear	920	2.72
	Blind/With vision impairment	233	0.69
	Cognitive disability	1,588	4.70
	Mobility disability	1,622	4.80
	Self-care/Independent living disability	912	2.70
<b>Income</b>	<\$35K	3,961	12.54
	\$35-74,999K	7,163	22.67
	\$75-99,999K	4,532	14.34
	\$100-149,999K	6,851	21.68
	\$150K+	9,089	28.77
<b>Education</b>	Less than HS	446	1.32
	High school or GED	2,279	6.73
	Trade /Vocational	905	2.67
	Some college	2,798	8.26
	Associates degree	2,484	7.33
	Bachelor's degree	10,635	31.39
	Graduate degree	14,338	42.31

Notes: numbers in this table are unweighted. Subsequent analyses were weighted to the state average, Table includes all parents > 24 years old. Subsequent analyses will spotlight the experiences of parents 14-24  
nH/nL = non-Hispanic/non-Latinx; American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx. Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity



APPENDIX  
POPULATION SPOTLIGHT:  
ASIAN AMERICAN/PACIFIC  
ISLANDER RESIDENTS

# Demographics of the CCIS AAPI sample

	Demographics	Freq.	Percent
<b>Age</b>	25-34	347	29%
	35-44	395	33%
	45-64	375	32%
	65+	66	6%
<b>Gender</b>	Male	317	27%
	Female	840	71%
	Non-Binary	12	1%
	Prefer not to answer	11	1%
<b>Transgender Identity</b>	Transgender	7	1%
	Not Transgender	1103	94%
	Not sure/DK/refuse	68	6%
<b>Sexual Orientation</b>	Asexual	29	2%
	Bisexual	42	4%
	Gay/Lesbian	25	2%
	Heterosexual	924	79%
	Queer	14	1%
	Questioning	13	1%
	Other/DK/refuse	124	11%

	Demographics	Freq.	Percent
<b>Speak Language other than English</b>	English	398	34%
	Languages other than English	785	66%
<b>Disability Status</b>	Deaf/Hard of hearing	20	2%
	Blind/ People with vision impairment	*	*
	Cognitive disability	37	3%
	Mobility disability	21	2%
	Self-care/ Independent-living disability	26	2%
<b>Income</b>	<\$35K	149	14%
	\$35-74,999K	228	21%
	\$75-99,999K	127	12%
	\$100-149,999K	215	20%
	\$150K+	354	33%
<b>Education</b>	Less than HS	30	3%
	High school or GED	62	5%
	Trade /Vocational	14	1%
	Some college	32	3%
	Associates degree	39	3%
	Bachelor's degree	376	32%
	Graduate degree	629	53%

	Demographics	Freq.	Percent
<b>Counties</b>	Barnstable	*	*
	Berkshire	6	<1%
	Bristol	12	1%
	Essex	45	4%
	Franklin	7	<1%
	Hampden	29	2%
	Hampshire	12	1%
	Middlesex	467	40%
	Norfolk	171	14%
	Plymouth	16	1%
	Suffolk	191	16%
Worcester	221	19%	



# APPENDIX POPULATION SPOTLIGHT: HISPANIC/LATINX RESIDENTS

# Demographics of the CCIS Hispanic/Latinx sample (n=2432)

	Demographics	Freq.	Percent
<b>Age</b>	25-34	695	37%
	35-44	791	24%
	45-64	853	33%
	65+	93	7%
<b>Gender</b>	Male	373	16%
	Female	2001	82%
	Non-Binary	21	1%
	Q/Not Sure/Oth/DU	10	<1%
<b>Transgender Identity</b>	Transgender	18	1%
	Not Transgender	2290	95%
	Not sure/DK/PNTA	98	5%
<b>Sexual Orientation</b>	Asexual	73	3%
	Bisexual	80	3%
	Gay/Lesbian	74	3%
	Heterosexual	1919	78%
	Queer	25	1%
	Questioning/NS	16	1%
	Other/DU/PNTA	124	11%

	Demographics	Freq.	Percent
<b>Speak Language other than English</b>	English	552	18%
	Languages other than English	1875	82%
<b>Disability Status</b>	Deaf/Hard of hearing	34	2%
	Blind/ People with vision impairment	24	1%
	Cognitive disability	171	8%
	Mobility disability	105	6%
	Self-care/ Independent-living disability	81	4%
<b>Income</b>	<\$35K	755	46%
	\$35-74,999K	755	33%
	\$75-99,999K	226	7%
	\$100-149,999K	269	8%
	\$150K+	278	6%
<b>Education</b>	Less than HS	172	11%
	High school or GED	384	24%
	Trade /Vocational	107	7%
	Some college	359	22%
	Associates degree	245	15%
	Bachelor's degree	593	14%
	Graduate degree	560	8%

	Demographics	Freq.	Percent
<b>Counties</b>	Barnstable	20	1%
	Berkshire	42	2%
	Bristol	63	3%
	Dukes	*	*
	Essex	461	20%
	Franklin	18	1%
	Hampden	430	21%
	Hampshire	29	1%
	Middlesex	465	16%
	Nantucket	*	*
	Norfolk	184	6%
	Plymouth	62	2%
	Suffolk	451	19%
Worcester	221	7%	

## Demographics of the CCIS Hispanic/Latinx sample (n=2432), continued

	Demographics	Freq.	Percent
Industry	Construction	17	2%
	Manufacturing	59	5%
	Retail	47	4%
	Transportation & Warehousing	18	2%
	Information	10	<1%
	Finance & Insurance	49	3%
	Real Estate & Rental & Leasing	16	1%
	Professional, Scientific & Technical Services	53	3%
	Admin & Support & Waste Management & Remediation Services	29	3%
	Education Services	211	12%
	Healthcare	372	26%
	Social Assistance	228	17%
	Arts, Entertainment, & Recreation	11	1%
	Accommodation & Food Services	51	5%
	Other Services	142	10%
	Public Administration	105	6%
Other Industries	12	1%	



# APPENDIX POPULATION SPOTLIGHT: BLACK RESIDENTS

# Demographics of the CCIS Black sample

	Demographics	Freq.	Percent
<b>Age</b>	25-34	261	23%
	35-44	314	27%
	45-64	477	41%
	65+	101	9%
<b>Gender</b>	Male	199	17%
	Female	931	81%
	Non-Binary	*	*
	Prefer not to answer	*	*
<b>Transgender Identity</b>	Transgender	6	1%
	Not Transgender	1108	97%
	Not sure/DK/refuse	33	3%
<b>Sexual Orientation</b>	Asexual	36	3%
	Bisexual	45	4%
	Gay/Lesbian	30	3%
	Heterosexual	925	82%
	Queer	14	1%
	Questioning	8	1%
	Other/DK/refuse	72	6%

	Demographics	Freq.	Percent
<b>Speak Language other than English</b>	English	808	70%
	Languages other than English	342	30%
<b>Disability Status</b>	Deaf/Hard of hearing	8	1%
	Blind/ People with vision impairment	11	1%
	Cognitive disability	65	6%
	Mobility disability	74	6%
	Self-care/ Independent-living disability	35	3%
<b>Income</b>	<\$35K	248	23%
	\$35-74,999K	430	39%
	\$75-99,999K	156	14%
	\$100-149,999K	148	14%
	\$150K+	110	10%
<b>Education</b>	Less than HS	21	2%
	High school or GED	118	10%
	Trade /Vocational	53	5%
	Some college	160	14%
	Associates degree	114	10%
	Bachelor's degree	343	30%
	Graduate degree	342	30%

	Demographics	Freq.	Percent
<b>Counties</b>	Barnstable	9	1%
	Berkshire	11	1%
	Bristol	47	4%
	Dukes	*	*
	Essex	56	5%
	Franklin	*	*
	Hampden	115	10%
	Hampshire	14	1%
	Middlesex	179	16%
	Nantucket	*	*
	Norfolk	151	13%
	Plymouth	99	9%
	Suffolk	403	35%
Worcester	57	5%	

# % Reported Experiencing IPV During Covid-19

	Demographics	Frequency	Weighted %
	<b>Overall</b>	<b>572</b>	<b>2%</b>
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	15	5%
	Hispanic/Latinx	52	3%
	Multiracial, nH/nL	16	6%
	Asian, nH/nL	30	4%
	Black, nH/nL	28	4%
	White, nH/nL	415	2%
	Other Race, nH/nL	8	5%
	Unknown Race	8	6%
	<b>Age</b>	25-34	146
35-44		201	4%
45-64		193	2%
65+		32	1%
<b>Gender Identity</b>	Male	147	3%
	Female	394	2%
	Non-binary, Genderqueer, Not Exclusively M/F	18	7%
<b>Sexual Orientation</b>	Asexual	19	5%
	Bi/Pansexual	37	4%
	Gay or Lesbian	21	3%
	Heterosexual	431	2%
	Queer	20	5%
	I am questioning / not sure of my sexuality	8	9%

	Demographics	Frequency	Weighted %
<b>Transgender Experience</b>	Of Trans Experience	13	7%
	Not of Trans Experience	531	2%
<b>Income</b>	<\$35K	100	3%
	\$35-74,999K	146	3%
	\$75-99,999K	83	3%
	\$100-149,999K	107	2%
	\$150K+	116	1%
	<b>Educational Attainment</b>	Less than high school	9
High school or GED		29	2%
Trade/ vocational school		23	3%
Some college		76	3%
Associates Degree		47	2%
Bachelors Degree		193	2%
Graduate Degree		193	2%
<b>Disability</b>	Deaf/Hard of hearing	22	4%
	Blind/Vision Impairment	14	5%
	Cognitive Disability	76	6%
	Mobility Disability	42	3%
	Self-Care/ Independent Living Disability	34	5%
<b>English language</b>	Speaks language other than English	105	3%

	Demographics	Frequency	Unweighted %
<b>County</b>	Barnstable	13	2%
	Berkshire	20	4%
	Bristol	22	2%
	Dukes	#	#
	Essex	44	2%
	Franklin	31	4%
	Hampden	48	3%
	Hampshire	37	3%
	Middlesex	122	2%
	Nantucket	#	#
	Norfolk	56	2%
	Plymouth	39	3%
	Suffolk	68	3%
Worcester	70	2%	

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts

Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

Unweighted percentages should NOT be compared to weighted percentages.

nH/nL = non-Hispanic/non-Latinx;  
 American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx  
 Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity.

'Any IPV' includes report from respondent of physical, sexual, and/or controlling forms of IPV experienced during the first six to eight months of the Covid-19 pandemic.



# APPENDIX: YOUTH SURVEY

# YOUTH SAMPLE

	Population	Sample Size
	Total	3052
Race/Ethnicity	American Indian/Alaska Native	63
	Asia, nH/nL	278
	Black, nH/nL	221
	Hispanic/Latinx	675
	Multiracial, nH/nL	104
	Other, nH/nL	44
	White, nH/nL	1608
	Age	<18
	18+	1652
Geography	Rural	203
	Urban	2785

Language	English only	2056
	Speaks lang other than Eng.	991

	Population	Sample Size
Sexual Orientation	Asexual	71
	Bisexual and/or Pansexual	445
	Gay or Lesbian	175
	Straight (Heterosexual)	2023
	Queer	81
	Questioning	137
	Other; Don't understand; prefer not answer	101
	Transgender	Of transgender experience
	Not of transgender exp.	2816
Gender Identity	Male only	789
	Female only	2059
	Non-binary	128
	Questioning	31
	Other	36

	Population	Sample Size
Disability	Deaf/hard of hearing	24
	Blind/ vision impairment	44
	Cognitive disability	414
	Mobility disability	40
	Self-care/independent living disability	133
	Working/ employed youth	Yes
No		1318
Young parents	Yes	148
	No	2904

Note: May not sum to total due to missing data for some questions.  
Includes respondents under the age of 25 (both from youth survey and young parents who took the adult survey)



# APPENDIX: YOUNG PARENTS

# YOUNG PARENT SAMPLE (n=148)

	Population	Sample Size
Age	14-17 years	26
	18-20 years	40
	21- 24 years	82
County	Barnstable	<5
	Berkshire	<5
	Bristol	<5
	Essex	43
	Hampden	25
	Hampshire	<5
	Middlesex	19
	Norfolk	12
	Plymouth	6
	Suffolk	21
Worcester	11	

	Population	Sample Size
Sexual Orientation	LGBQA	22
	Straight (Heterosexual)	105
	Other; Don't understand; prefer not answer	20
Transgender	Of transgender experience	<5
	Not of transgender exp.	134
	Don't understand; prefer not answer	11
Gender Identity	Male only	30
	Female only	111
	Other (non-binary, don't understand, prefer not to answer)	7

	Population	Sample Size
Race/ Ethnicity	American Indian / Alaska Native	8
	Hispanic / Latinx	74
	Multiracial	<5
	Asian nH/nL	5
	Black nH/nL	9
	White nH/nL	44
	Unknown	6
Language	English only	72
	Language other than English	76
Disability status	No disability	117
	Has mental or physical disability	31

Note: May not sum to total due to missing data for some questions.

# YOUNG PARENT SAMPLE (n=148)

	Population	Sample Size
Education	Less than high school	52
	High school or GED	37
	Trade school / Vocational school	6
	Some college	24
	Associates degree	7
	Bachelor's degree	14
	Graduate degree	6
Working/ employed	Yes	67
	No	41

	Population	Sample Size
Income	<\$35K	80
	\$35 – 74,999K	23
	\$75K+	12
Household Size	1-2	25
	3	48
	4	33
	5	41

Note: May not sum to total due to missing data for some questions.



# APPENDIX: SAFETY - INTIMATE PARTNER VIOLENCE

# % Reported Experiencing IPV During Covid-19

	Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %		
	<b>Overall</b>	<b>572</b>	<b>2%</b>										
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	15	5%	<b>Transgender Experience</b>	Of Trans Experience	13	7%	<b>Ethnicity</b> (selected from presentation)	Cambodian	5	9%		
	Hispanic/Latinx	52	3%		<b>Income</b>	Not of Trans Experience	531		2%	Cape Verdean	7	8%	
	Multiracial, nH/nL	16	6%	<\$35K		100	3%		Asian Indian	18	8%		
	Asian, nH/nL	30	4%	\$35-74,999K		146	3%		Caribbean Islander	11	6%		
	Black, nH/nL	28	4%	\$75-99,999K		83	3%		African	6	5%		
	White, nH/nL	415	2%	\$100-149,999K		107	2%		Native American	18	5%		
	Other Race, nH/nL	8	5%	\$150K+		116	1%		African American	27	5%		
	Unknown Race	8	6%	<b>Educational Attainment</b>		Less than high school	9		3%	Dominican	13	4%	
	<b>Age</b>	25-34	146			4%	High school or GED		29	2%	<b>Rural Designation</b>	Rural Level 2	37
		35-44	201		4%	Trade/ vocational school	23		3%	Rural Level 1		65	3%
45-64		193	2%		Some college	76	3%	Urban	467	2%			
65+		32	1%		Associates Degree	47	2%		<b>Demographics</b>	<b>Frequency</b>	<b>Unweighted %</b>		
<b>Gender Identity</b>	Male	147	3%		Bachelors Degree	193	2%	<b>County</b>	Barnstable	13	2%		
	Female	394	2%		Graduate Degree	193	2%		Berkshire	20	4%		
	Non-binary, Genderqueer, Not Exclusively M/F	18	7%		Deaf/Hard of hearing	22	4%		Bristol	22	2%		
<b>Sexual Orientation</b>	Asexual	19	5%	Blind/Vision Impairment	14	5%	Dukes		#	#			
	Bi/Pansexual	37	4%	Cognitive Disability	76	6%	Essex		44	2%			
	Gay or Lesbian	21	3%	Mobility Disability	42	3%	Franklin		31	4%			
	Heterosexual	431	2%	Self-Care/ Independent Living Disability	34	5%	Hampden		48	3%			
	Queer	20	5%	<b>English language</b>	Speaks language other than English	105	3%		Hampshire	37	3%		
	I am questioning / not sure of my sexuality	8	9%						Middlesex	122	2%		

Note: All percentages presented here (except County) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts. Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution. Unweighted percentages should NOT be compared to weighted percentages.

10.3.2021 release  
6.9.21 release

nH/nL = non-Hispanic/non-Latinx; American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx. Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity. 'Any IPV' includes report from respondent of physical, sexual, and/or controlling forms of IPV experienced during the first six to eight months of the Covid-19 pandemic.



# APPENDIX: HOUSING STABILITY

# Population Who Reported Being Worried About Housing/Utility Expenses

	Demographics	Frequency	Weighted %
	<b>Overall</b>	8,397	33.9%
<b>Race/Ethnicity</b>	American Indian/Alaska Native	149	2.1%
	Hispanic / Latinx	1166	17.1%
	Multiracial, nH/nL	163	2.1%
	Asian, nH/nL	319	3.2%
	Black, nH/nL	533	6.9%
	White, nH/nL	5840	66.2%
	Other race, nH/nL	112	1.3%
	Unknown	115	1.2%
	<b>Age Group</b>	25-34	1806
35-44		2402	20.9%
45-64		3509	40.6%
65+		680	13.2%
<b>Language Spoken</b>	English Only	6423	74.4%
	Language Other than English	1958	25.6%
<b>Household Size</b>	1 or 2	3457	41.5%
	3 or 4	3594	42.3%
	5 or more	1325	16.2%
<b>Rural Designation</b>	Rural Level 2	405	4.8%
	Rural Level 1	648	7.8%
	Urban	7307	87.4%
<b>Gender</b>	Male	1475	17.9%
	Female	6599	78.7%
	Non-binary, Genderqueer, Not Exclusively M/F	147	1.4%
	Of Trans Experience	99	1.0%
<b>Transgender Experience</b>	Not of Trans Experience	7917	94.8%

	Demographics	Frequency	Weighted %
<b>Sexual Orientation</b>	Asexual	236	3.0%
	Bisexual or Pan sexual	396	4.4%
	Gay or Lesbian	309	3.3%
	Straight	6642	80.0%
	Queer	142	1.3%
	Questioning/not sure	71	0.8%
<b>Income</b>	<\$35k	1981	33.5%
	\$35-74,999K	2634	34.7%
	\$75-99,999K	1217	12.9%
	\$100-149,999K	1312	12.8%
	\$150K+	817	6.2%
<b>Education</b>	Less than high school	224	4.7%
	High school or GED	908	18.5%
	Trade school/Vocational school	383	7.6%
	Some college	1145	22.8%
	Associates degree	882	17.6%
	Bachelor's degree	2642	19.3%
<b>Employment</b>	Graduate degree	2198	9.6%
	Unemployed	1308	22.4%
<b>Job Status Change of Those Employed:</b>	Employed	6525	77.6%
	No Change	1431	23.4%
<b>Parent</b>	Change in nature	2230	29.6%
	Reduction/Leave	1105	18.2%
	Job loss	867	15.1%
	Yes	3191	37.8%
<b>If Parent, Child Has Special Healthcare Needs</b>	No	5206	62.2%
	Yes	308	28.9%
<b>Caregiver to Adult in Household</b>	No	769	71.1%
	Yes	145	8.9%
	No	1508	91.1%

	Demographics	Frequency	Weighted %
<b>Disability Status</b>	Deaf or hard of hearing	233	3.4%
	Blind or vision impaired	101	1.5%
	Cognitive disability	797	11.0%
	Mobility disability	646	10.0%
	Selfcare disability	433	6.9%
	None	1045	15.4%
<b>Poor Mental Health Days in Past 30 Days</b>	1 to 14 Days	2972	37.5%
	15 or more Days	3608	47.1%
	3 or more	2934	37.3%
<b>PTSD Symptoms</b>	1 or two	2653	34.1%
	None	2054	28.7%
<b>Substance Use</b>	No Use	3325	44.4%
	Any Use	4704	55.7%
<b>If any substance use:</b>	More Use	2309	48.4%
	About the Same	1682	36.1%
	Less Use	706	15.5%
<b>Intimate Partner Violence During COVID</b>	No	6711	95.5%
	Yes	304	4.6%

Note: All percentages presented here (except Rural Designation) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts. Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

nH/nL = non-Hispanic/non-Latinx;  
American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx

# Population Who Reported Being Worried About Moving for Any Reason

	Demographics	Frequency	Weighted %
	<b>Overall</b>	1,014	18.2%
<b>Race/Ethnicity</b>	American Indian/Alaska Native	18	2.4%
	Hispanic / Latinx	95	12.7%
	Multiracial, nH/nL	22	2.1%
	Asian, nH/nL	40	3.3%
	Black, nH/nL	44	5.0%
	White, nH/nL	765	16.3%
	Other race, nH/nL	13	30.1%
	Unknown	17	30.4%
	<b>Age Group</b>	25-34	257
35-44		277	20.1%
45-64		370	35.9%
65+		110	14.0%
<b>Language Spoken</b>	English Only	837	79.4%
	Language Other than English	177	20.6%
<b>Household Size</b>	1 or 2	431	43.5%
	3 or 4	428	40.7%
	5 or more	152	15.9%
<b>Rural Designation</b>	Rural Level 2	47	4.7%
	Rural Level 1	82	8.2%
	Urban	876	87.2%
<b>Gender</b>	Male	225	24.3%
	Female	739	16.6%
	Non-binary, Genderqueer, Not Exclusively M/F	25	2.3%
	Transgender Experience	24	2.4%
<b>Transgender Experience</b>	Not of Trans Experience	948	93.5%

	Demographics	Frequency	Weighted %
<b>Sexual Orientation</b>	Asexual	29	4.0%
	Bisexual or Pan sexual	56	5.5%
	Gay or Lesbian	57	5.3%
	Straight	763	73.9%
	Queer	30	2.7%
<b>Income</b>	<\$35k	170	25.3%
	\$35-74,999K	284	33.3%
	\$75-99,999K	150	13.9%
	\$100-149,999K	173	15.6%
	\$150K+	176	12.0%
<b>Education</b>	Less than high school	20	3.8%
	High school or GED	71	13.6%
	Trade school/Vocational school	33	6.0%
	Some college	110	21.1%
	Associates degree	84	16.2%
	Bachelors degree	339	24.5%
	Graduate degree	357	18.2%
<b>Employment</b>	Unemployed	166	22.4%
	Employed	782	77.6%
<b>Job Status Change of Those Employed:</b>	No Change	142	18.1%
	Change in nature	317	13.6%
	Reduction/Leave	132	19.4%
	Job loss	86	34.2%
<b>Parent</b>	Yes	579	57.7%
	No	435	42.3%
<b>If Parent, Child Has Special Healthcare Needs</b>	Yes	179	32.2%
	No	396	67.8%

	Demographics	Frequency	Weighted %
<b>Disability Status</b>	Deaf or hard of hearing	45	6.2%
	Blind or vision impaired	17	2.1%
	Cognitive disability	122	14.7%
	Mobility disability	85	10.2%
	Selfcare disability	65	7.5%
	<b>Poor Mental Health Days in Past 30 Days</b>	None	108
1 to 14 Days		360	34.9%
15 or more Days		474	51.6%
<b>PTSD Symptoms</b>	3 or more	435	45.7%
	1 or two	312	31.1%
	None	196	23.2%
<b>Substance Use</b>	No Use	344	37.7%
	Any Use	629	62.3%
<b>If any substance use:</b>	More Use	329	52.7%
	About the Same	206	33.4%
	Less Use	92	13.8%
<b>Intimate Partner Violence During COVID</b>	No	798	93.6%
	Yes	50	6.4%

Note: All percentages presented here (except Rural Designation) are weighted to the statewide age and educational distribution of those 25 years old or older in Massachusetts. Data presented at sub-state geographies (county, rural cluster, municipality) were NOT weighted to the statewide age and educational distribution of those 25 years or older in MA since the age and educational distributions within those geographies may be different than the statewide distribution.

nH/nL = non-Hispanic/non-Latinx;  
American Indian/Alaska Native includes respondents who identify as Hispanic/Latinx

Questioning/undecided/non-binary gender identity includes respondents identifying as non-binary, genderqueer, not exclusively male or female, and questioning/unsure of their gender identity.



# APPENDIX POPULATION SPOTLIGHT: RURAL COMMUNITIES

# DEMOGRAPHIC CHARACTERISTICS OF MA CCIS RESPONDENTS, BY RURAL LEVEL, UNWEIGHTED

	Rural Level 1 (n=2,764)		Rural Level 2 (n=1,491)		Urban (n=29,345)		p-value
	n	Unweighted %	n	Unweighted %	n	Unweighted %	
Age							<0.0001
25-34 years	309	11.2	171	11.5	5378	18.3	
35-44 years	665	24.1	299	20.1	7633	26.0	
45-64 years	1271	46.0	621	41.7	12040	41.0	
65+ years	519	18.8	400	26.8	4294	14.6	
Gender Identity							<0.0001
Male	525	19.0	282	18.9	5647	19.2	
Female	2165	78.3	1149	77.1	22942	78.2	

# DEMOGRAPHIC CHARACTERISTICS OF MA CCIS RESPONDENTS, BY RURAL LEVEL, UNWEIGHTED

	Rural Level 1 (n=2,764)		Rural Level 2 (n=1,491)		Urban (n=29,345)		p-value
	n	Unweighted %	n	Unweighted %	n	Unweighted %	
Race/Ethnicity							<0.0001
Hispanic or Latinx	57	2.1	42	2.8	2322	7.9	
Other People of Color*	114	4.1	55	3.7	1687	5.8	
White, non-Hispanic	2564	92.8	1347	90.3	23492	80.1	
Language Spoken at Home							<0.0001
English only	2606	94.7	1396	93.9	24713	84.4	
Language other than English	146	5.3	91	6.1	4578	15.6	
Income							<0.0001
<\$35K	258	9.9	267	19.3	3320	12.2	
\$35K-\$99,999K	1020	39.2	723	52.3	9889	36.2	
\$100K+	1323	50.9	393	28.4	14118	51.7	

\*Note: Due to small cell sizes (n<30) & effort to present racial/ethnic identification of respondents at a more granular level, collapsed non-Hispanic/Latinx racially/ethnically minoritized groups into "Other People of Color" category. Did not report out descriptive information for respondents with an "unknown" race due to small cell size (n<30).

# DEMOGRAPHIC CHARACTERISTICS OF MA CCIS RESPONDENTS, BY RURAL LEVEL, UNWEIGHTED

	Rural Level 1 (n=2,764)		Rural Level 2 (n=1,491)		Urban (n=29,345)		p-value
	n	Unweighted %	n	Unweighted %	n	Unweighted %	
Education*							<0.0001
High school or GED	206	7.5	113	7.6	1907	6.5	
Trade school/vocational school	89	3.2	50	3.4	757	2.6	
Some college	269	9.8	153	10.3	2336	8.0	
Associates degree	277	10.1	154	10.3	2026	6.9	
Bachelors degree	855	31.0	469	31.5	9239	31.5	
Graduate degree	1045	37.9	530	35.6	12677	43.3	
Disability Status							<0.0001
Report 1+ disability	304	11.0	231	15.5	3181	10.8	
Report no disability	2460	89.0	1260	84.5	26164	89.2	
Household size							<0.0001
1 person	296	10.7	293	19.7	4552	15.6	
2 people	936	33.9	603	40.5	8845	30.2	
3 people	527	19.1	245	16.5	5856	20	
4 people	641	23.2	233	15.7	6500	22.2	
5+ people	360	13.0	114	7.7	3522	12.0	

# MA CCIS MAIN OUTCOMES BY RURAL LEVEL, UNWEIGHTED

	Rural Level 1		Rural Level 2		Urban		p-value
	n	Unweighted %	n	Unweighted %	n	Unweighted %	
Very worried about getting COVID-19	623	23.4	334	23.2	8232	29.3	<0.0001
Not able to keep 6 ft. distance outside home	263	9.9	146	10.1	3135	11.2	0.26
Currently employed	1683	90.5	839	89.2	18258	90.4	0.43
Working from home	758	47.6	328	42.4	9774	56.7	<0.0001
Working outside of the home	834	52.4	446	57.6	7468	43.3	<0.0001
Change in Employment Status							
No change	508	30.8	215	26.4	5176	28.1	0.03
Job loss	139	8.4	81	9.9	1448	7.9	0.08
Reduction of work	226	13.7	139	17.1	2282	12.4	<0.0001
Change in nature of work	702	42.6	338	41.5	8787	47.7	<0.0001
Other	75	4.6	42	5.2	738	4.0	0.17
Ever tested for COVID-19	916	34.9	625	43.8	12718	46.0	<0.0001
Delayed care needed since July 2020	309	15.0	218	19.3	3781	17.4	<0.01
Delayed routine care only	200	74.6	138	72.3	2399	73.1	0.82
Delayed urgent care only	37	13.8	31	16.2	540	16.4	0.53
Delayed both routine & urgent care	31	11.6	22	11.5	345	10.5	0.79
Mental health							
15+ poor mental health days	699	30.2	421	33.5	7807	32.3	0.07
3+ PTSD-like reactions in past month	600	25.6	364	28.8	6621	27.1	0.12
Concerns about basic needs							
Any expense-related concerns	912	36.0	550	39.9	10153	38.1	0.04
Housing	532	21.0	325	23.6	6145	23.1	0.05
Utilities	451	17.8	281	20.4	4842	18.2	0.10
Vehicle	311	12.3	199	14.4	3112	11.7	0.01
Debt	458	18.1	269	19.5	5024	18.9	0.50
Insurance	277	10.9	160	11.6	2555	9.6	0.01
Food or groceries	573	22.6	334	24.2	5847	21.9	0.11
Face masks	267	10.5	145	10.5	3356	12.6	0.00
Medications	283	11.2	157	11.4	3084	11.6	0.82
Broadband (internet)	336	13.3	195	14.1	2893	10.9	<0.0001

# MA CCIS MAIN OUTCOMES AMONG RURAL RESPONDENTS BY RACE/ETHNICITY, UNWEIGHTED

	People of Color		White, NH		p-value
	n	%	n	%	
Very worried about getting COVID-19	81	29.5	867	23.0	0.01
Not able to keep 6 ft. distance outside home	33	12.0	369	9.8	0.21
Currently employed	163	87.2	2328	90.3	0.17
Working from home	69	45.7	1008	46.1	0.92
Change in Employment Status					
No change	35	20.4	678	29.9	0.01
Job loss	20	11.6	198	8.7	0.20
Reduction of work	32	18.6	331	14.6	0.16
Change in nature of work	78	45.4	952	42.0	0.40
Other	7	4.1	106	4.7	0.71
Ever tested for COVID-19	117	43.0	1407	37.6	0.07
Delayed care needed since July 2020	50	24.2	466	15.8	<0.01
Delayed routine care only	28	62.2	304	75.3	0.06
Delayed urgent care only	9	20.0	56	13.9	0.27
Delayed both routine & urgent care	8	17.8	44	10.9	0.17
Mental health					
15+ poor mental health days	90	38.1	1019	30.9	0.02
3+ PTSD-like reactions in past month	84	36.2	864	25.9	<0.0001
Concerns about basic needs					
Any expense-related concerns	137	52.7	1298	36.0	<0.0001
Housing	96	36.9	746	20.7	<0.0001
Utilities	79	30.4	638	17.7	<0.0001
Vehicle	57	21.9	444	12.3	<0.0001
Debt	61	23.5	653	18.1	0.03
Insurance	42	16.2	383	10.6	0.01

# MA CCIS MAIN OUTCOMES AMONG RURAL RESPONDENTS BY AGE, UNWEIGHTED

	25-34 years		35-44 years		45-64 years		65+ years		p-value
	n	%	n	%	n	%	n	%	
Very worried about getting COVID-19	94	20.6	196	21.3	436	23.8	231	25.9	0.06
Not able to keep 6 ft. distance outside home	79	17.3	107	11.6	180	9.9	43	4.8	<0.0001
Currently employed	302	86.0	646	89.6	1328	91.4	246	89.5	0.02
Working from home	152	55.5	291	49.2	552	43.8	91	37.8	<0.0001
Change in Employment Status									
No change	65	19.7	173	27.0	409	31.9	76	36.4	<0.0001
Job loss	44	13.3	61	9.5	91	7.1	24	11.5	<0.01
Reduction of work	59	17.9	121	18.9	162	12.6	23	11.0	<0.0001
Change in nature of work	149	45.2	260	40.5	550	42.8	81	38.8	0.37
Other	13	3.9	27	4.2	72	5.6	5	2.4	0.14
Ever tested for COVID-19	220	49.2	338	37.4	703	38.6	280	31.7	<0.0001
Delayed care needed since July 2020	82	23.1	118	17.5	236	16.6	91	12.3	<0.0001
Delayed routine care only	51	68.0	73	69.5	163	78.4	51	71.8	0.20
Delayed urgent care only	11	14.7	18	17.1	25	12.0	14	19.7	0.38
Delayed both routine & urgent care	13	17.3	14	13.3	20	9.6	6	8.5	0.24
Mental health									
15+ poor mental health days	173	44.4	318	40.1	501	31.0	128	16.6	<0.0001
3+ PTSD-like reactions in past month	146	37.2	245	30.8	438	26.9	135	17.1	<0.0001
Concerns about basic needs									
Any expense-related concerns	219	51.9	404	46.5	680	38.7	159	18.4	<0.0001
Housing	127	30.1	241	27.8	400	22.8	89	10.3	<0.0001
Utilities	104	24.6	216	24.9	335	19.1	77	8.9	<0.0001
Vehicle	100	23.7	156	18.0	214	12.2	40	4.6	<0.0001
Debt	128	30.3	208	24.0	322	18.3	69	8.0	<0.0001
Insurance	63	14.9	104	12.0	215	12.2	55	6.4	<0.0001

# MA CCIS MAIN OUTCOMES AMONG RURAL RESPONDENTS BY INCOME, UNWEIGHTED

	<\$35K		\$35K-\$99,999K		\$100K+		p-value
	n	%	n	%	n	%	
Very worried about getting COVID-19	153	30.4	397	23.8	339	20.3	<0.0001
Not able to keep 6 ft. distance outside home	65	12.9	178	10.7	156	9.4	<0.0001
Currently employed	215	80.2	1018	89.1	1169	93.2	<0.0001
Working from home	55	27.4	433	45.8	546	49.6	<0.0001
Change in Employment Status							
No change	54	24.9	276	27.2	359	32.0	0.02
Job loss	43	19.8	97	9.6	69	6.1	<0.0001
Reduction of work	46	21.2	171	16.9	132	11.8	<0.0001
Change in nature of work	64	29.5	422	41.6	509	45.3	<0.0001
Other	10	4.6	48	4.7	54	4.8	0.99
Ever tested for COVID-19	183	37.0	609	36.9	665	40.2	0.25
Delayed care needed since July 2020	101	25.1	218	16.8	182	14.2	<0.0001
Delayed routine care only	52	61.9	137	72.9	129	79.1	0.02
Delayed urgent care only	18	21.4	28	14.9	19	11.7	0.12
Delayed both routine & urgent care	14	16.7	23	12.2	15	9.2	0.23
Mental health							
15+ poor mental health days	194	45.3	495	33.7	386	25.9	<0.0001
3+ PTSD-like reactions in past month	156	36.4	427	28.8	336	22.4	<0.0001
Concerns about basic needs							
Any expense-related concerns	292	61.5	686	42.9	419	26.2	<0.0001
Housing	195	41.1	410	25.6	218	13.7	<0.0001
Utilities	193	40.6	354	22.1	151	9.5	<0.0001
Vehicle	119	25.1	255	15.9	116	7.3	<0.0001
Debt	135	28.4	341	21.3	224	14.0	<0.0001
Insurance	85	17.9	210	13.1	122	7.6	<0.0001

# MA CCIS MAIN OUTCOMES AMONG RURAL RESPONDENTS BY EDUCATIONAL ATTAINMENT, UNWEIGHTED

	Less than College		College Degree		Graduate Degree		p-value
	n	%	n	%	n	%	
Very worried about getting COVID-19	283	22.1	291	22.7	381	24.9	0.16
Not able to keep 6 ft. distance outside home	157	12.3	128	10.0	124	8.1	0.01
Currently employed	686	87.5	813	88.7	1020	93.1	<0.0001
Working from home	186	29.2	371	49.6	529	54.2	<0.0001
Change in Employment Status							
No change	235	33.8	234	29.0	253	26.4	<0.01
Job loss	79	11.4	83	10.3	58	6.1	<0.0001
Reduction of work	126	18.1	130	16.1	109	11.4	<0.0001
Change in nature of work	228	32.8	328	40.6	484	50.5	<0.0001
Other	27	3.9	33	4.1	55	5.7	0.13
Ever tested for COVID-19	419	33.2	486	38.3	633	41.7	<0.0001
Delayed care needed since July 2020	158	16.8	179	17.9	189	15.2	0.23
Delayed routine care only	93	69.4	115	73.7	129	76.8	0.35
Delayed urgent care only	21	15.7	25	16.0	22	13.1	0.72
Delayed both routine & urgent care	20	14.9	16	10.3	17	10.1	0.35
Mental health							
15+ poor mental health days	374	35.8	356	31.4	390	28.1	<0.0001
3+ PTSD-like reactions in past month	294	28.1	295	25.8	373	26.4	0.44
Concerns about basic needs							
Any expense-related concerns	568	47.6	456	37.0	434	29.3	<0.0001
Housing	370	31.0	263	21.4	222	15.0	<0.0001
Utilities	352	29.5	216	17.5	161	10.9	<0.0001
Vehicle	241	20.2	156	12.7	111	7.5	<0.0001
Debt	273	22.9	228	18.5	225	15.2	<0.0001
Insurance	184	15.4	143	11.6	109	7.4	<0.0001