



**150 YEARS**  
OF ADVANCING  
**PUBLIC  
HEALTH**

# Massachusetts Department of Public Health

## PUBLIC HEALTH COUNCIL

February 17, 2021

*Please standby – the meeting will begin shortly*

*Today's presentation is available on the [mass.gov/dph](https://mass.gov/dph) website under "Upcoming Events" by clicking on the February 17 Public Health Council listing*



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# Vaccine rollout



Mass. Public Health @MassDPH · Feb 8

Thanks to the Barnstable County Department of Health and Environment and the Community Health Center of Cape Cod for hosting a COVID-19 vaccination clinic this weekend! #TrustTheFacts #GetTheVax @BCHDCapeCod @CHCofCapeCod



4

9



You Retweeted



BNHC (Brockton, MA) @BrocktonNHC · Feb 8

WE TOOK OUR SHOT! How 'bout you? Hundreds of our staff have received the #COVID vaccine & couldn't feel happier or safer. Your turn is next! Watch for BNHC notices or visit [mass.gov/covidvaccine](https://mass.gov/covidvaccine) for registration! @MassLeague @MassGovernor @MassDPH @MassMedical @The\_BMC @NACHC



2

8

19



# New state public information campaign

- \$2.5M campaign
- Backed by research
- Uses trusted messengers
- Focus on safety and trust
- TV, radio, digital
- Assets in 11 languages
- February to June



# COVID Communications Advisory Group

Marlishia Aho	1199 SEIU Massachusetts
Justin Auguste	The Castle Group
Jennifer Berryman	UMASS Medical School
Isabel Gonzales-Webster	Worcester Interfaith
Kathleen Jeanty	Boston Public Health Commission
Juan Lopera	Tufts Health Plan
Nick Martin	Office of Mayor Marty Walsh
Sam Melnick	Mass Health & Hospital Association
Yadires Nova-Salcedo	TV Producer and Host
Kerin O'Toole	MA League of Community Health Centers
Christina Peaslee	Cape Cod Healthcare
Colette Phillips	Colette Phillips Communications
Bec Rollins	Pathfinder International
Dawn Sibor	MA Health Officers Association
Tanisha Sullivan	NAACP – Boston Branch
Sharon Torgerson	Mass General Brigham
Katherine (Swift) Udden	Massachusetts Medical Society
Gwendolyn Vansant	BRIDGE of the Berkshires

# Increasing Equity in Vaccine Awareness & Access

February 17, 2021

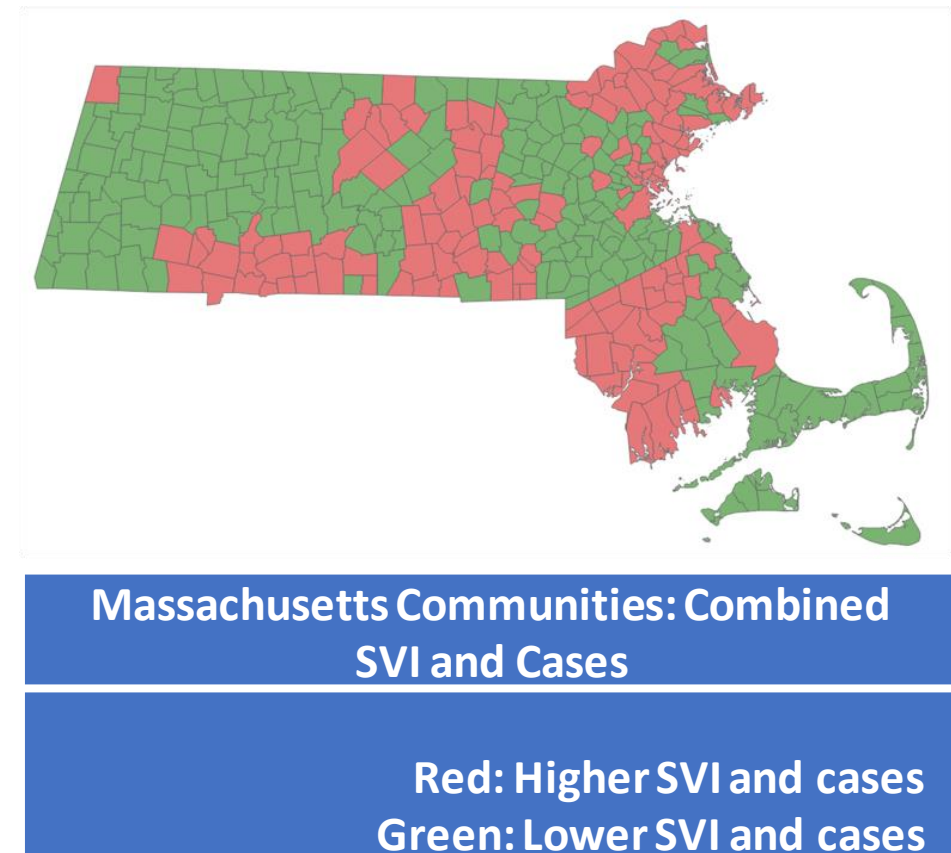
Public Health Council



# Process to Identify High Need Communities

Combining the CDC's [Social Vulnerability Index](#) (SVI) as well as case rates of COVID-19 in communities, and giving each equal (50%) weight, helped identify potential 'high need' communities in Massachusetts

- Analysis done in Fall 2020 by McKinsey in collaboration with external Vaccine Advisory Group
- Method uses county level SVI and city-level case rates
- List prioritizes 40% of all communities in the Commonwealth (shown in red on this map)
- List includes cities where case rates may be driven by congregate care sites, which have been prioritized within the phases of the vaccine deployment



# Top 20 Prioritized High Need Communities

## **N=20 Communities Listed in Alphabetical Order**

Boston

Brockton

Chelsea

Everett

Fall River

Fitchburg

Framingham

Haverhill

Holyoke

Lawrence

Leominster

Lowell

Lynn

Malden

Methuen

New Bedford

Randolph

Revere

Springfield

Worcester

1. Started with all cities and towns with the top SVI/Case Rate for COVID-19 (CDC model, per Advisory Committee, 40% of cities/towns) (n=141)
2. Ranked these by average daily case rate for COVID-19 for cities and towns (after excluding LTC, CF and towns <30K pop) (n=58)
3. Filtered by towns ranked in top 25 highest % Non-White/Persons of Color (n=17)
4. To include all the cities/towns in the top 15 average daily COVID-19 case rate, we added 3 additional towns (n=20)



# Invest in Community

**Context:** The pandemic is exacerbating pre-existing public health concerns; vaccine confidence relates to mistrust in the health system and differs by race/ethnicity and income. Engaging trusted messengers and reducing barriers (ability to receive vaccine from a trusted source, reducing transportation and language access barriers, etc.) will increase confidence.

**Goal:** To increase vaccine trust, and access, engage communities most affected by COVID-19 in the development, testing, and delivery of vaccine messaging, and use feedback to inform targeted community engagement, public awareness campaign, FAQs, social media, and other communications materials. Utilize CHWs and other trusted community members to address barriers to access. Develop tailored vaccination approaches to address logistical and operational requirements for vaccinations, including focus on cross-cutting populations, such as: indigenous people, individuals with disabilities and access and functional needs, those living in rural settings.

- Communications Campaign: [\*Trust the Facts. Get the Vax.\*](#)
- [Community Guide](#) to increase ease of access to [educational materials](#) and encourage community organizations to conduct their own vaccine education/outreach
  - Training webinars scheduled this & next week (~400 participants)
- Vaccine Ambassador program to support community-led education
- Partnership with Community & Faith Based Organizations in hardest hit communities to conduct tailored priority population outreach/education (HRiA-led; currently \$300k for 20 organizations)
- Partnership with Mass League of Community Health Centers: CHW Vaccine Ambassador program (\$1M); COVID-19 vaccine community engagement campaign (\$50k)

# Community-Driven Model

- Implement a **community-based and driven system**, designed around needs and assets for *each individual* community
- Focused on priority populations
- Designed to address equity needs and efficiency goals
- Introductory calls made 2/16
- Coordination through a **DPH Community Liaison** for each community (beginning Feb 22, 2021)
- Leverage and coordinate resources; existing and growing menu to customize support to address vaccine confidence, access and barriers

# DPH Liaison

As part of the outreach, a DPH Community Liaison will work to leverage and coordinate state resources and customize a menu of options to be offered to each community, which may include:

- Identifying gaps and mapping available resources to reduce barriers to vaccination
- Coordinating and supporting key stakeholders to maximize and align efforts, while synchronizing outreach, working closely with the Local Board of Health, local Community and Faith Based Organizations, Community Health Centers, and Community Health Workers who can support grassroots outreach to priority populations
- Developing population specific outreach activities and engagement strategies to help increase vaccine confidence
- Deploying DPH Vaccine Ambassadors to provide support for town-halls and other community forums to share [information and materials](#), including a [DPH forum guide and toolkit](#)
- Disseminating culturally appropriate translations of communications campaign materials, including: [Trust the Facts. Get the Vax. campaign materials](#) and [vaccine FAQs](#) in multiple languages.
- Hiring local residents to provide “boots on the ground” for neighborhood and local business outreach, which may include a door-knocking campaign to provide information and answer questions about vaccine efficacy and safety.

# Community-Driven Framework



# DPH Community Liaison Role

- Meets regularly with representatives from priority communities
- Assesses needs & identifies gaps
- Leverages and coordinates DPH, Command, and community resources to fill gaps
- Facilitates requests for any communication material development/review needs
- Identify barriers to vaccine access (transportation, scheduling, etc.) and inform solutions
- Connect priority populations with available vaccine



# Massachusetts Department of Public Health

## Determination of Need:

*Request by Emerson Endoscopy and Digestive Health Center, LLC  
for Substantial Change in Service*

Massachusetts Department of Public Health

COVID-19

Community Impact Survey (CCIS)

Preliminary Analysis Results

February 17, 2021



# CCIS TEAM MEMBERS

## **CCIS Project Leads**

Lauren Cardoso, Sanouri Ursprung, Beth Beatriz, Glory Song, Caroline Stack, Kathleen Fitzsimmons, Emily Sparer-Fine, Nicole Daniels, Lisa Bandoian, Heather Nelson, Amy Flynn, Lisa Arsenault

## **CCIS Analytic Team**

Beth Beatriz, Glory Song, Caroline Stack, Kathleen Fitzsimmons, Emily Sparer-Fine, Matthew Tumpney, Rebecca Han, Lauren Larochele, Arielle Coq, Anne Marie Matteucci, Lauren Fogharty, Vera Mouradian, Melody Kingsley, Ta Wei Lin, Anna Agan, Justine Egan, Allison Guarino, Elizabeth Showalter, Priyokti Rana, Lauren Cardoso, Sanouri Ursprung

## **CCIS Data to Action Workgroup**

Jessica del Rosario, Kim Etingoff, Lisa Bandoian, Andrea Mooney, Ben Kingston, Dawn Fukuda

## **CCIS Steering Committee**

Lauren Cardoso, Sanouri Ursprung, Beth Beatriz, Abbie Averbach, Ruth Blodgett, Ben Wood, Sabrina Selk

## **CCIS Data Dissemination Workgroup**

Beth Beatriz, Glory Song, Emily Sparer-Fine, Ta Wei Lin, Vera Mouradian

# 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

# OVERVIEW

1. Purpose and Approach of the Covid-19 Community Impact Survey (CCIS)
2. Preliminary Findings
  - Ability to mitigate individual risk of infection
  - Access to Testing
  - Access to Healthcare
  - Impact on Basic Needs
3. Converting these Data to Action with our partners
4. Appendix

# PURPOSE AND APPROACH

# 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

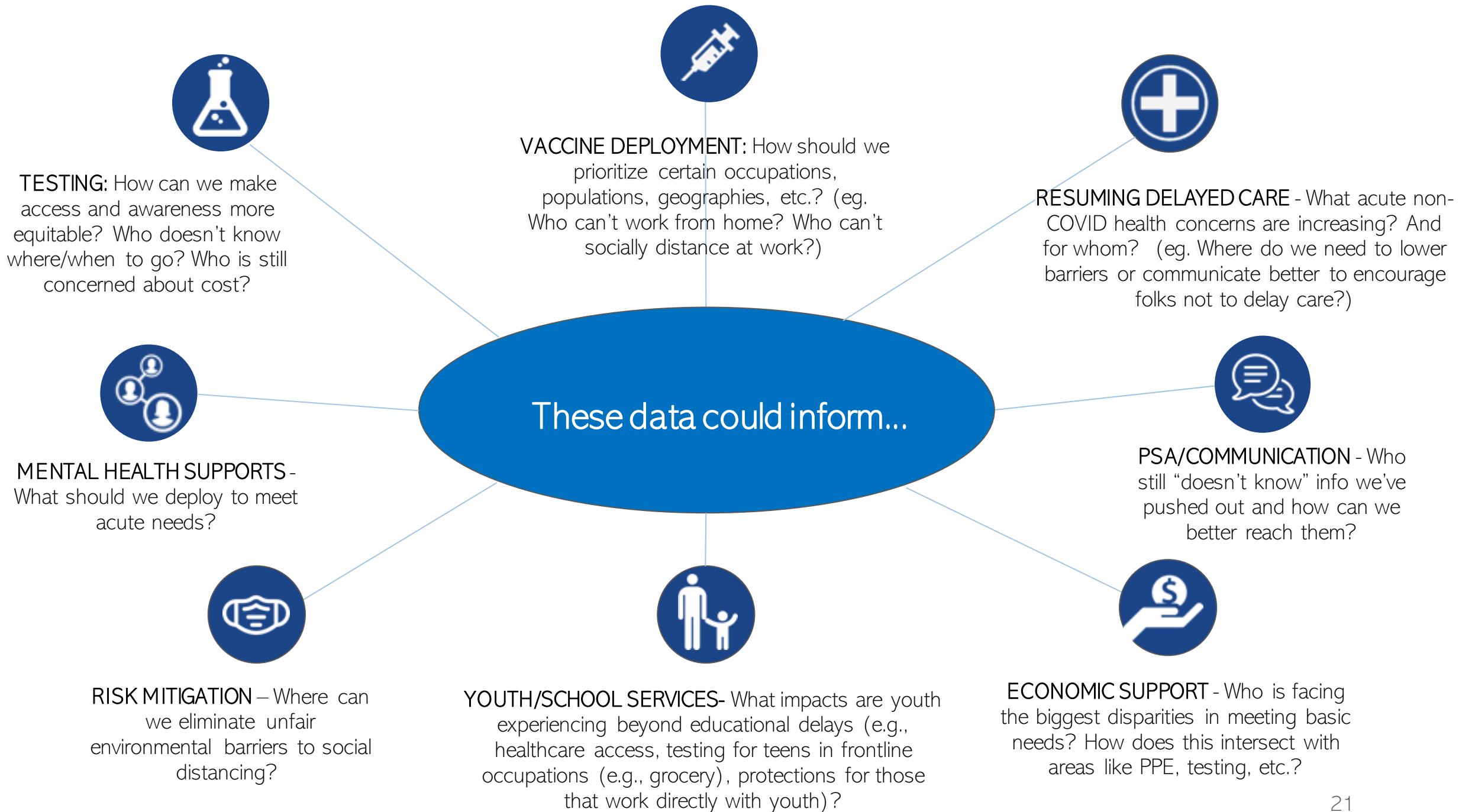
DPH conducted a survey to understand the specific needs of populations that have been disproportionately impacted by the pandemic, including its social and economic impacts.

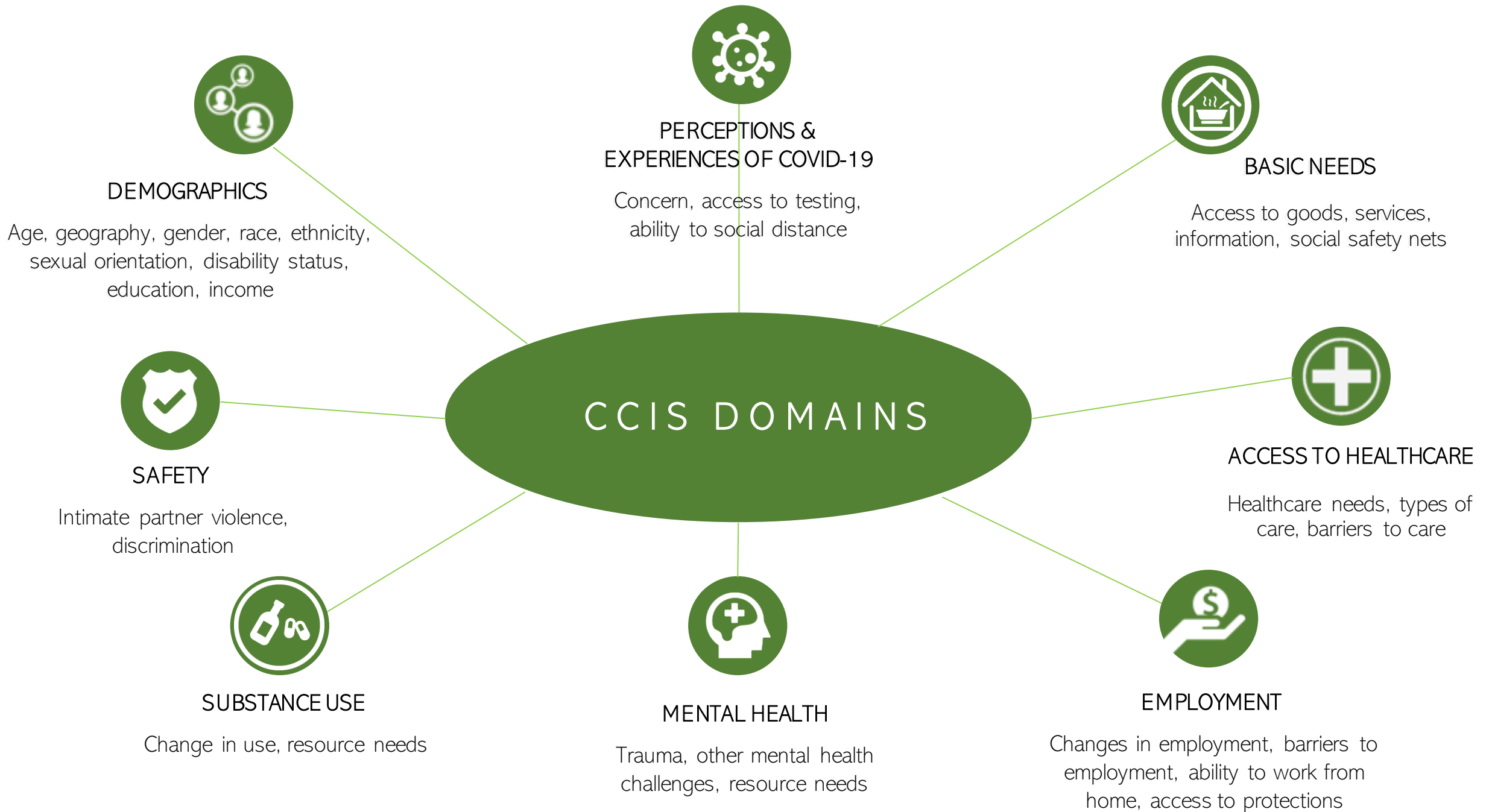


## Actions

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
- Available in 11 languages
- Employed a sampling strategy that ensured we reach key populations
- Weighted results to the state average
- Open ended questions captured previously unknown needs and barriers
- Recruited participants via network of community-based organizations (CBOs)

## 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 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

# PRELIMINARY RESULTS



Ability to mitigate  
individual risk of infection



Access to testing



Access to healthcare



Social Determinants of  
Health



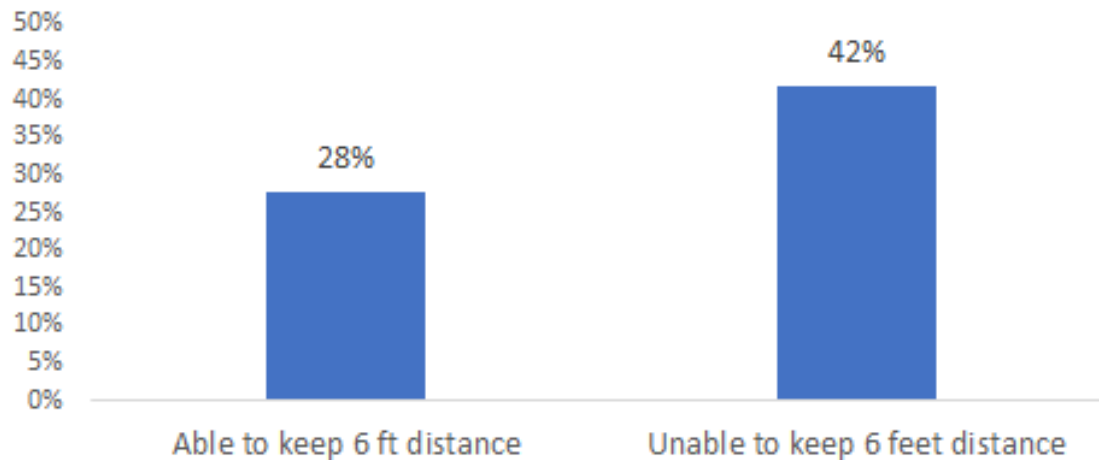
# ABILITY TO MITIGATE INDIVIDUAL RISK OF INFECTION

# 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.

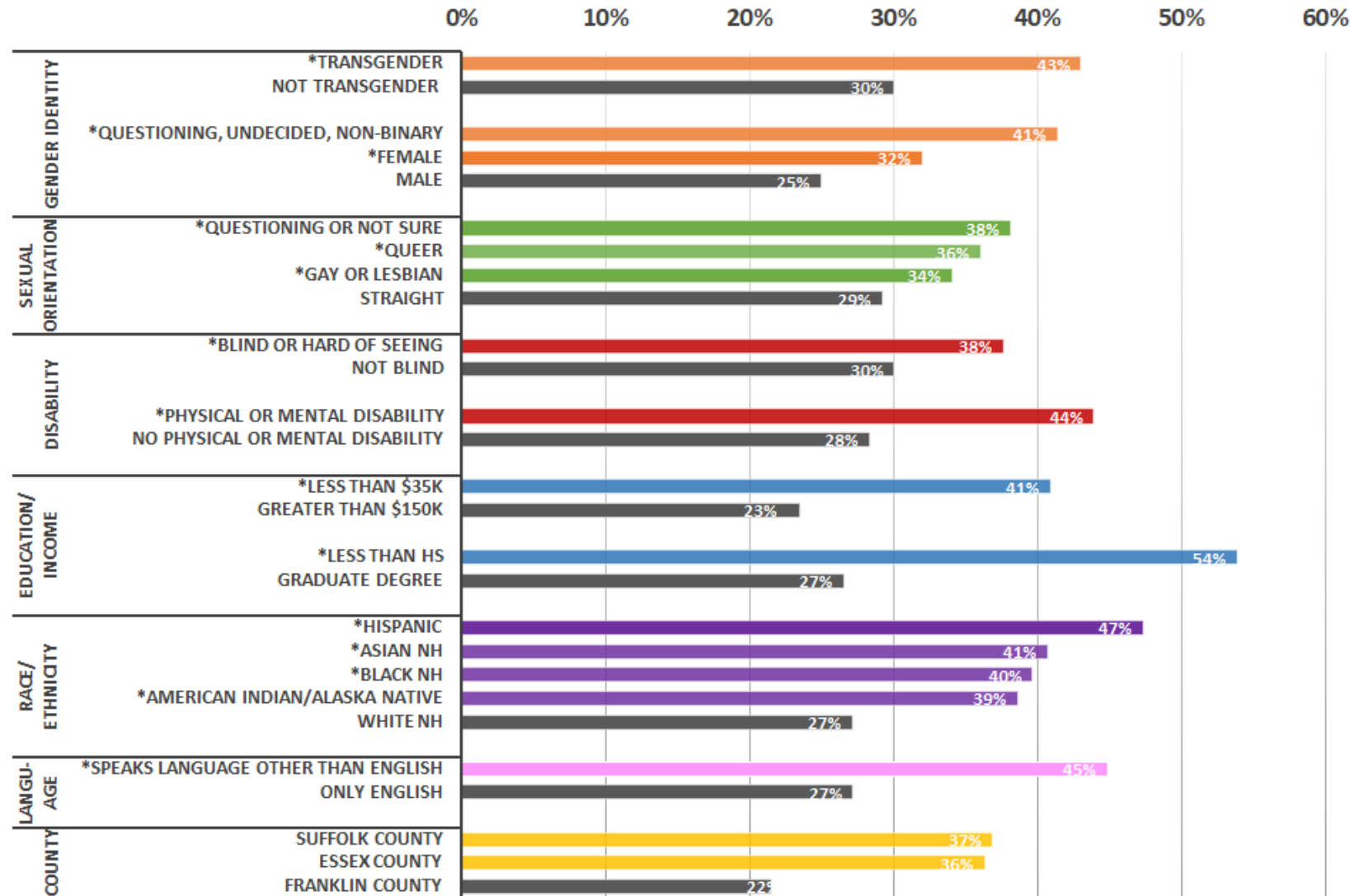
$p < 0.0001$

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



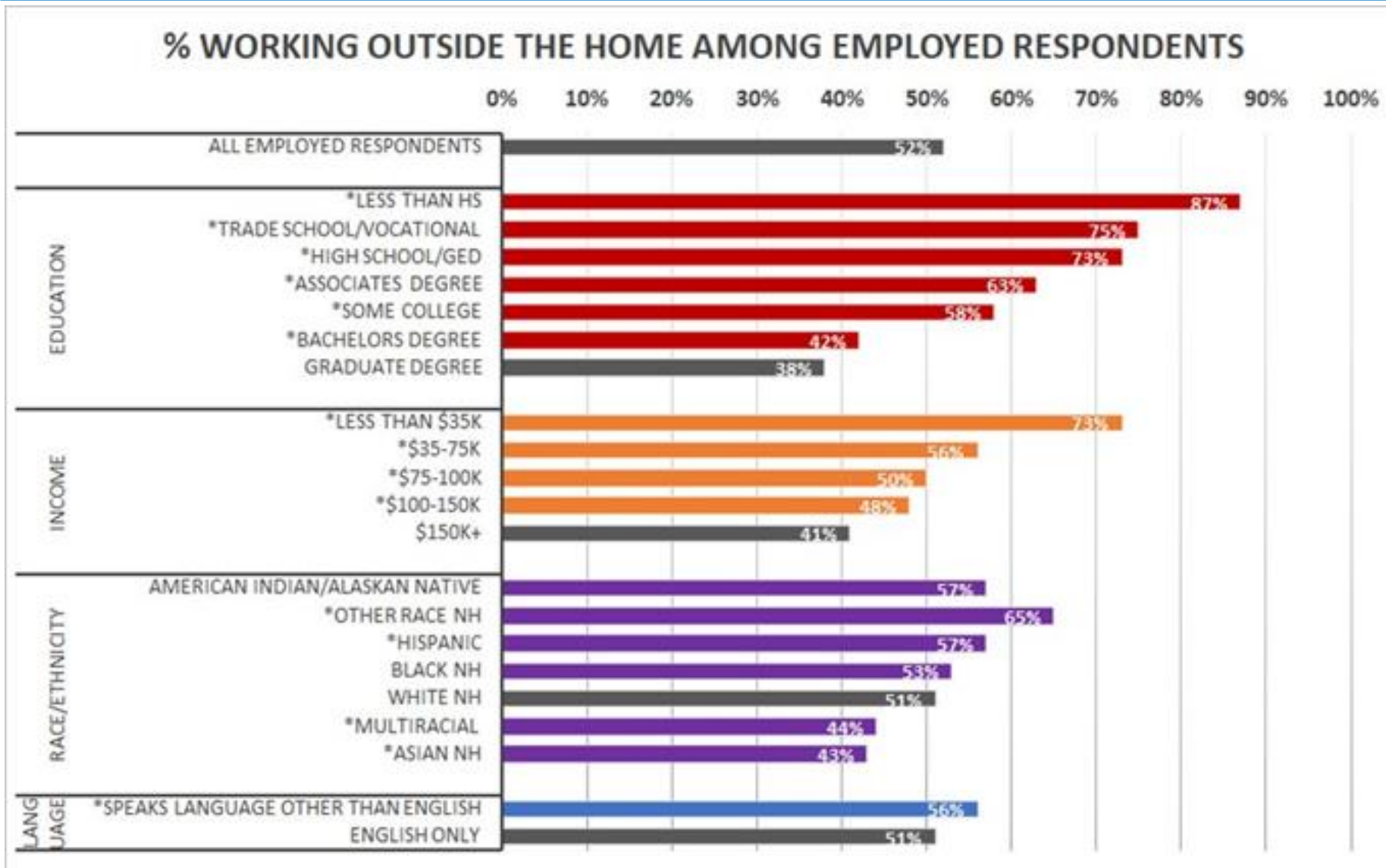
Populations most likely to say they are "very worried" about becoming infected with COVID-19 include:

- Transgender respondents
- Those who are **female** or **questioning** their gender identity
- LGBTQ+ respondents
- Blind/hard of seeing people
- People with **physical or mental disabilities**
- Respondents with lower **income** and/or lower **educational** attainment
- Persons of **color**
- Those who speak a **language** other than English

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



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.

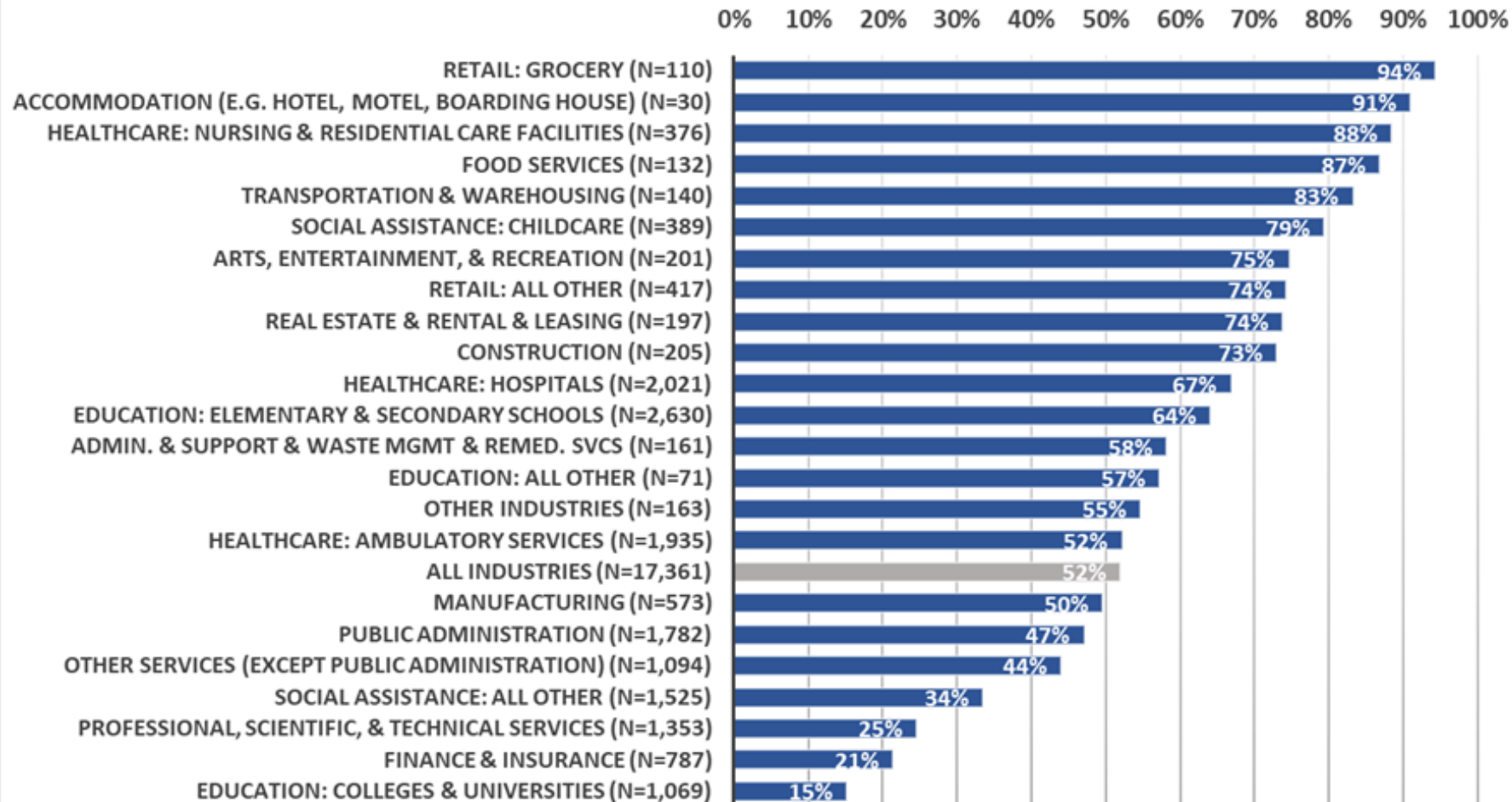


Half of all employed respondents worked a job outside the home, facing increased risk of exposure.

Workers in jobs outside the home tended to have lower educational attainment, lower wages, be people of color, and speak languages other than English.

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

PRELIMINARY FINDINGS – Statistical significance testing forthcoming.

# 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.



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.



Adults who worked **outside the home** were more than **two times** as likely to report **testing positive** compared to those who worked from home.



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

\*PRELIMINARY FINDINGS – Statistical significance testing forthcoming. Full industry breakdowns are provided in the appendix.

# 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.



# TESTING ACCESS

# 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 residents	51%
People with limited English proficiency	47%

# TESTING ACCESS

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

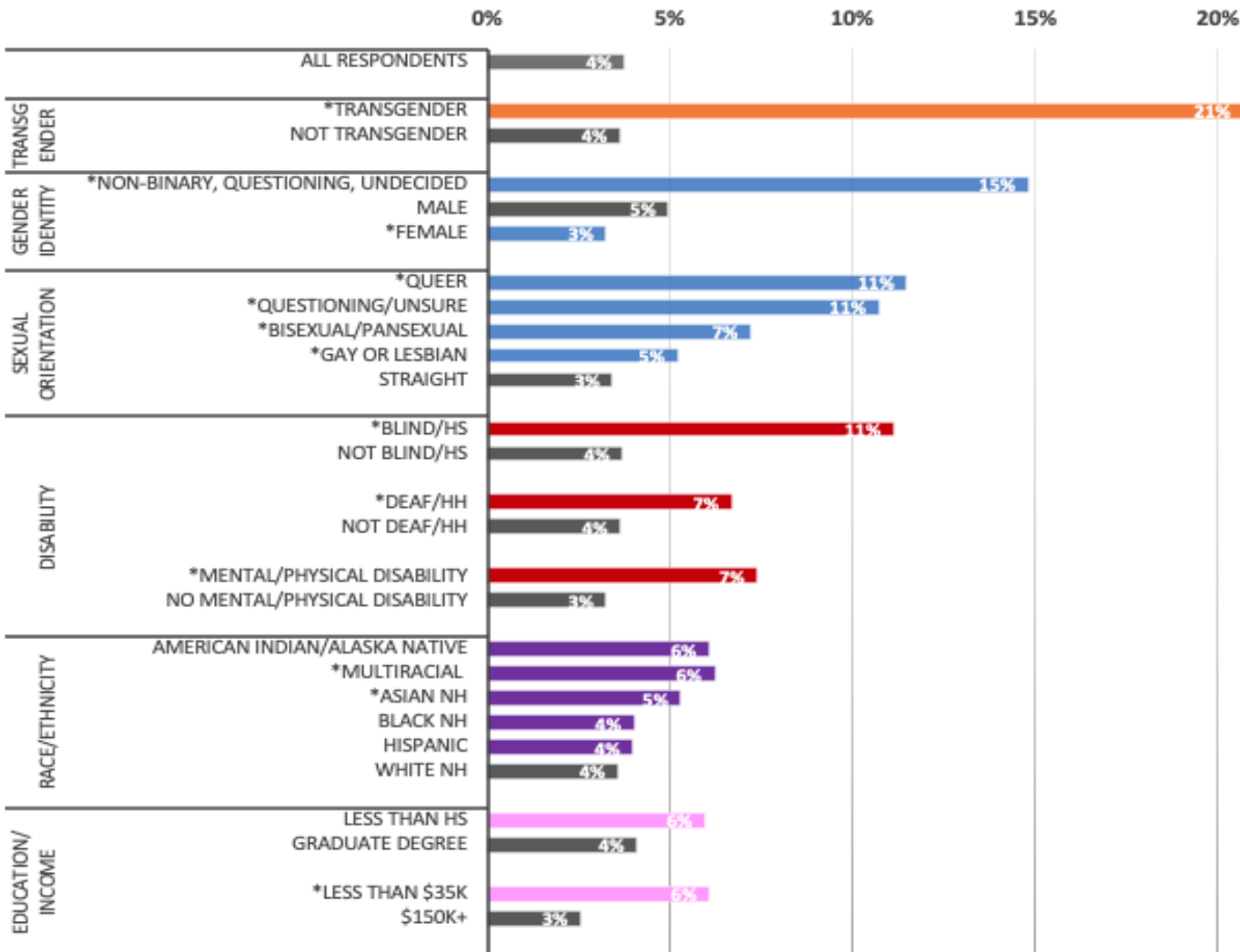
TOP REASONS FOR NOT BEING TESTED
1. Didn't meet testing criteria when had symptoms
2. Didn't know where to go
3. Lack of perceived exposure
4. Only had mild symptoms
5. Test was too expensive
6. Test wasn't available where I wanted to get tested

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**:

- Transgender Respondents
- Males and Non-binary respondents and respondents **questioning** their gender identity
- LGBTQ+ people
- Respondents with **disabilities**
- Am. Indian/Alaska Natives, Multiracial Respondents, and Asians
- 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 reference group*



# HEALTH CARE ACCESS & DELAYS

# 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.**



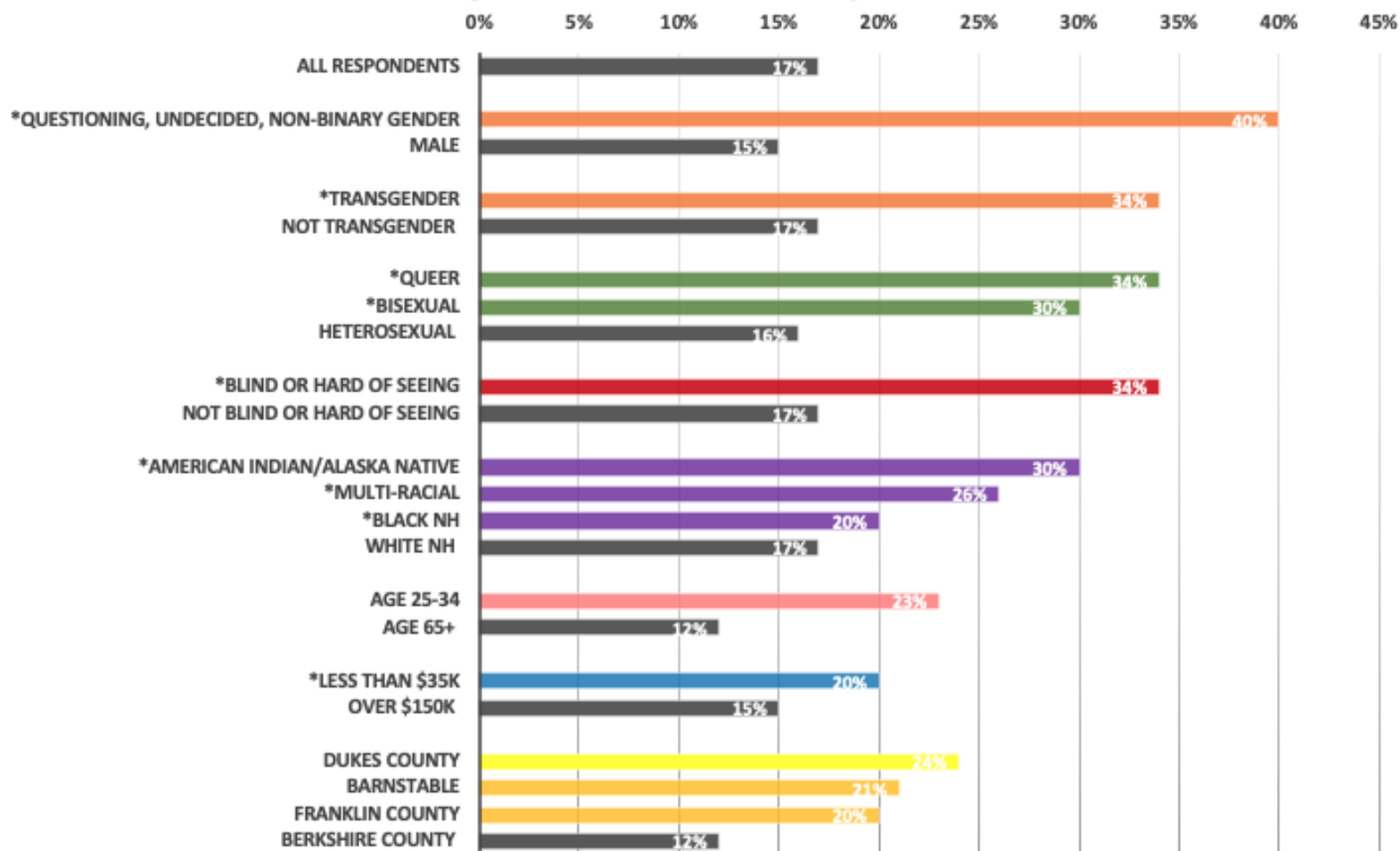
**60%** of those who needed care received **telehealth care via phone or video**, suggesting that the rapid scale-up of telehealth has been crucial.



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.

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

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 with questioning, undecided, non-binary gender
- Transgender respondents
- LGBTQ+ respondents
- Respondents with disabilities
- Am. Indian/Alaska Natives, Black, and Multiracial respondents
- Younger respondents
- Those with lower incomes

# 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.

## 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**

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 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"*

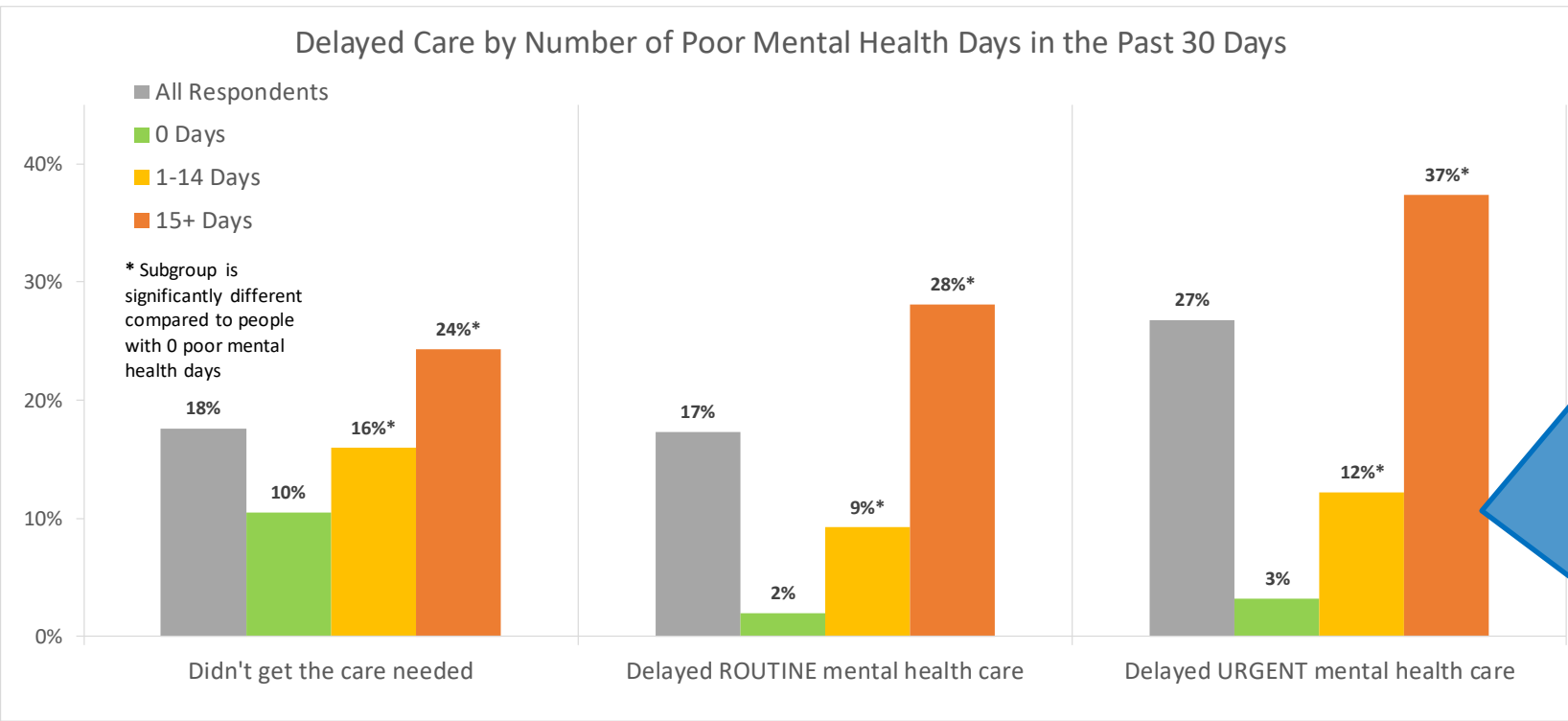


These populations were **2X** to **4X** as likely to have telehealth-related barriers:

- Less than HS education or \$35K income
- American Indian/Alaska Natives, Hispanic, 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

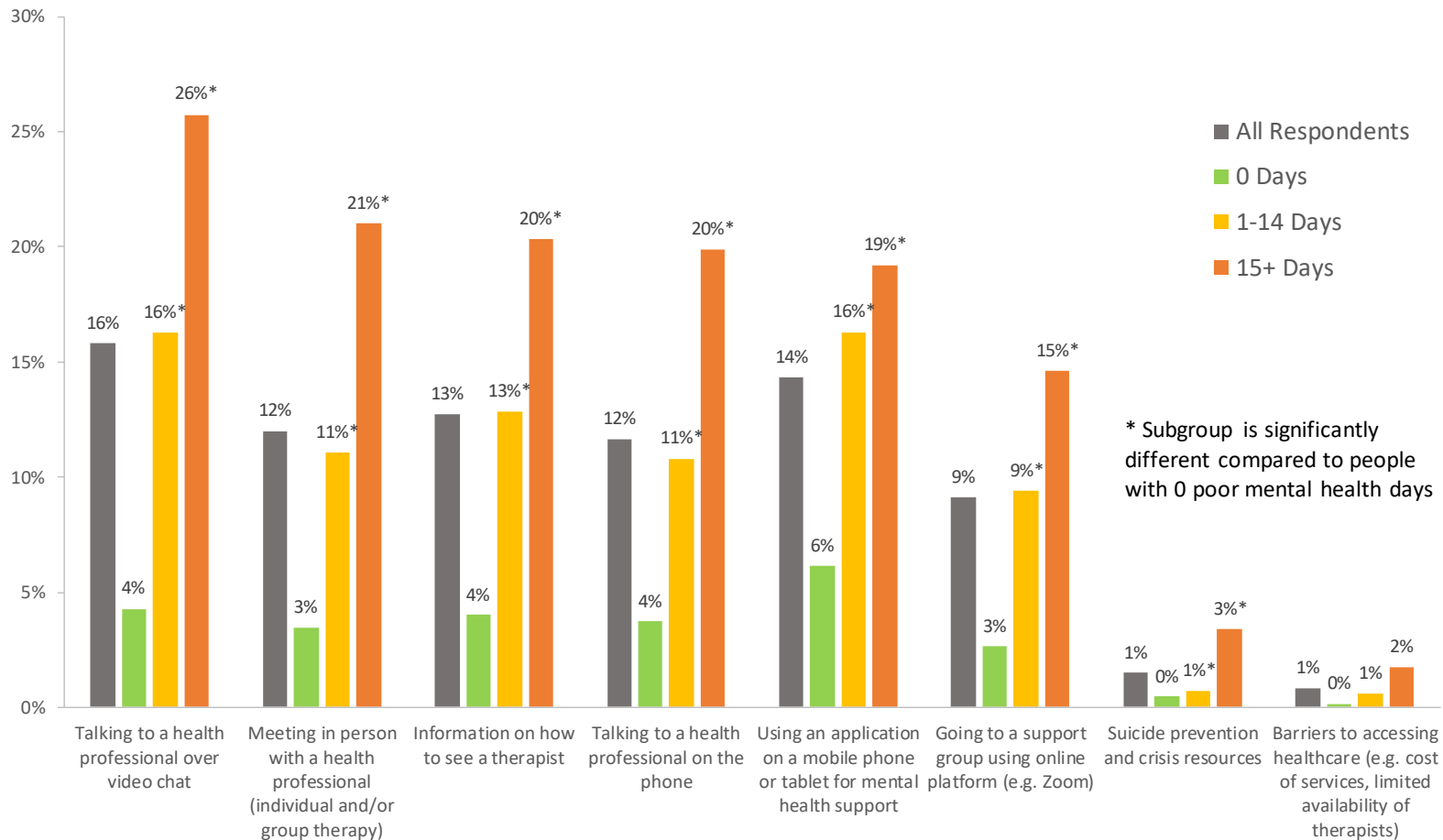
1. My appointment was cancelled/delayed (59%)
2. I was worried about getting COVID-19 from in-person care (27%)
3. I was worried I could not afford the care or my insurance didn't cover it (8%)
4. I did not have a private place for a phone call or video chat (7%)
5. I did not have safe transportation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



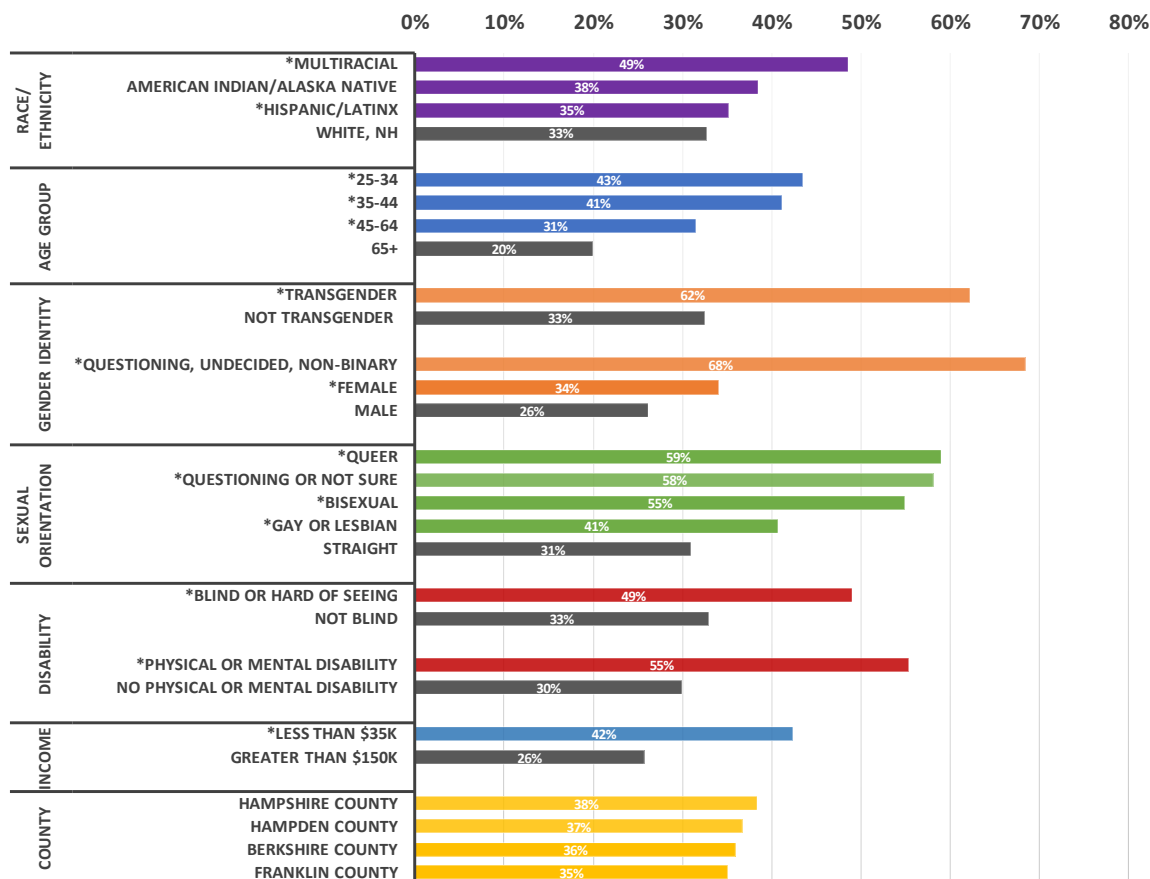
## TOP 5 RESOURCES REQUESTED by respondents with poor mental health

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

# MENTAL HEALTH STATUS

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.

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



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 poor mental health:

- Multiracial, American Indian/Alaska Natives respondents
- Transgender respondents, Non-binary respondents, and respondents questioning their gender identity
- LGBTQ+ respondents
- Respondents with disabilities
- Respondents with lower income

Similar patterns within and across demographic groups are seen among those who experienced 3+ PTSD-like reactions to COVID-19 in the past 30 days



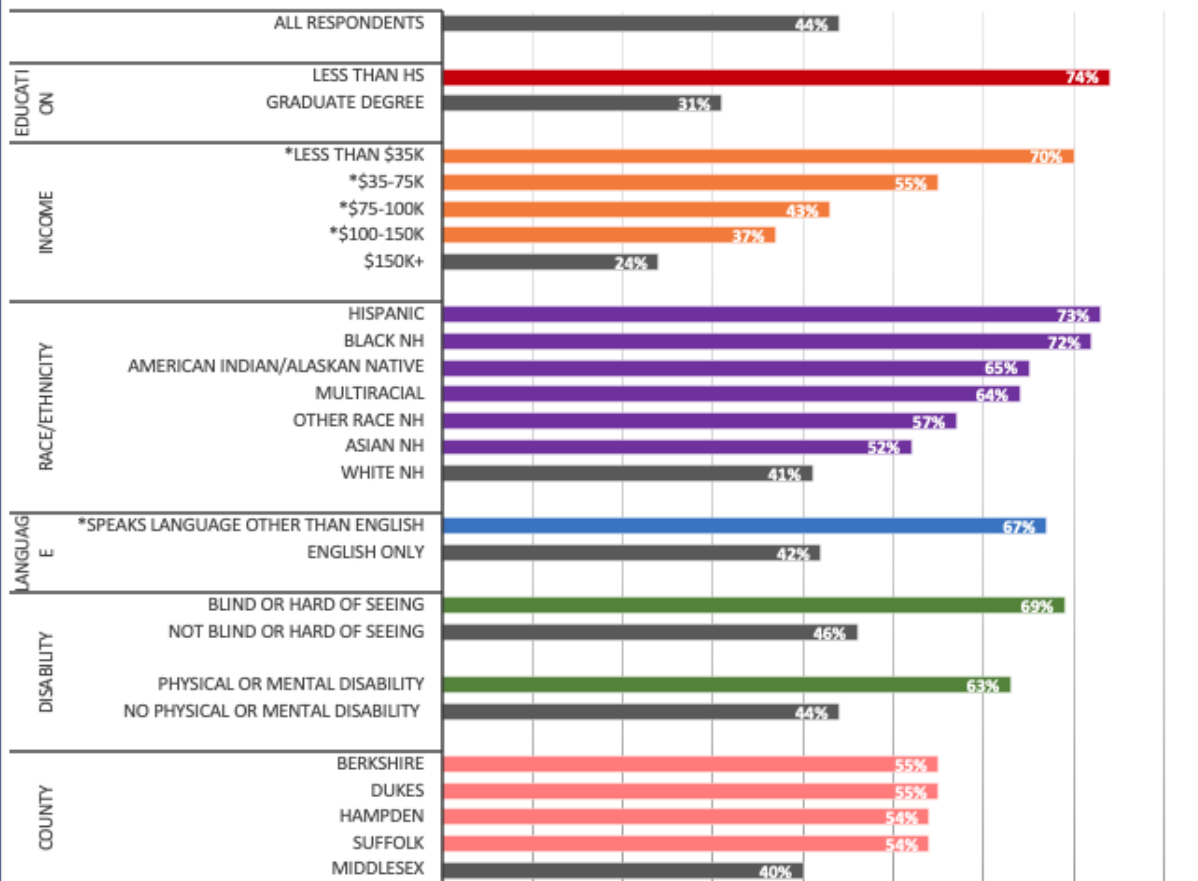
# SOCIAL DETERMINANTS OF HEALTH

# 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**

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



**EXPENSES/BILLS RESPONDENTS WERE MOST CONCERNED ABOUT PAYING**

% of Respondents

1. **Housing** (rent, mortgage, property taxes, condo fees, housing insurance)

28%

2. **Utilities** (cable, cell, electricity, water, gas, heating)

24%

3. **Debt** (credit card, student loan, bank fees)

21%

4. **Vehicle** (lease, car loan payment, car insurance)

15%

5. **Insurance** (health, disability, life)

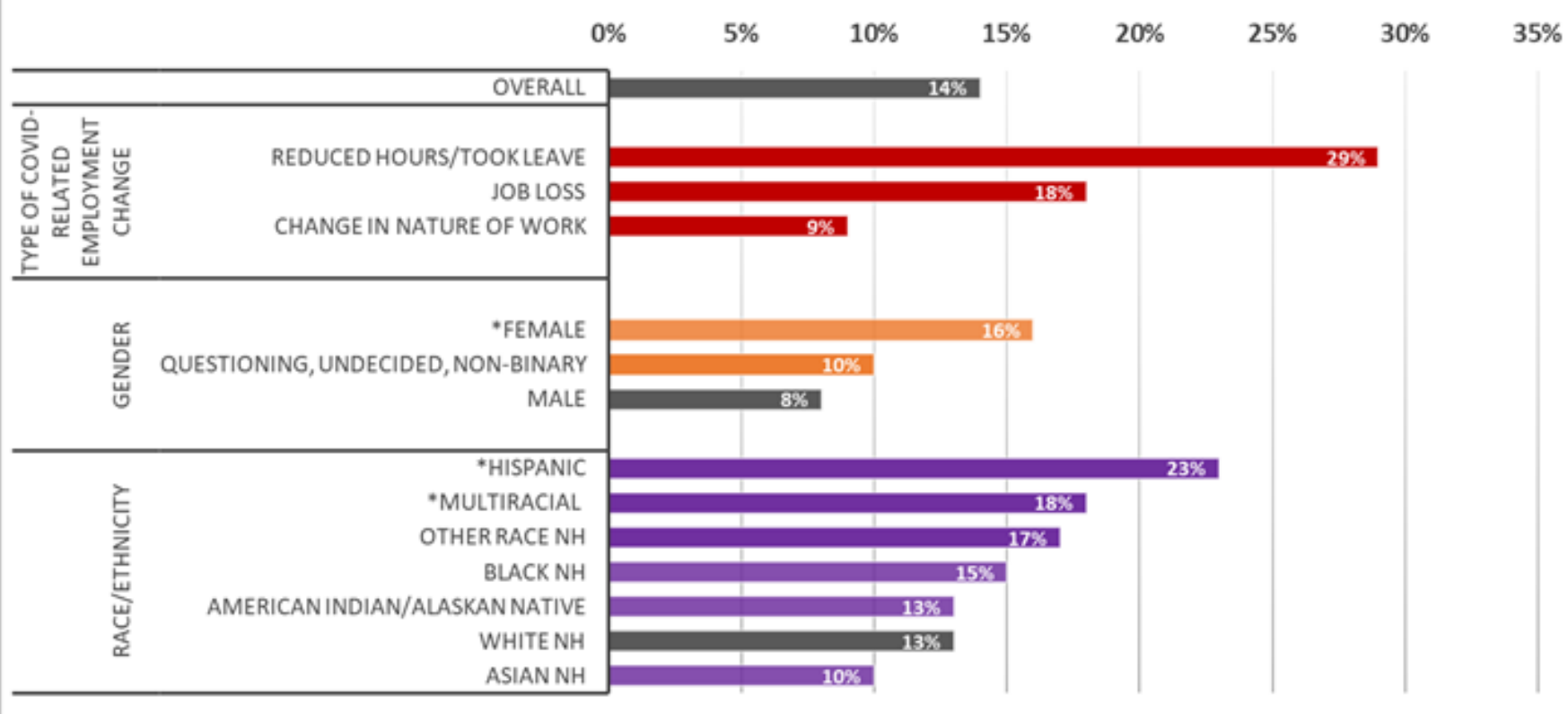
11%

Groups experiencing the greatest economic hardship:

- Low income & education
- Hispanics and Blacks
- Speak languages other than English
- Blind/ hard of seeing
- Mental or physical disability
- Residents of Hampden, Suffolk, Berkshire & Dukes

# DETERMINANTS OF HEALTH: CHILDCARE

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



Nearly 1 in 3 of employed adults who reduced their hours or took leave did so, at least in part, to take care of children.

Nearly 1 in 5 who lost their jobs cited needing to take care of children as a reason.

Females were twice as likely as males, and Hispanic adults almost twice as likely as White Non-Hispanic adults to change the status or nature of their employment to take care of children.

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

# 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



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%

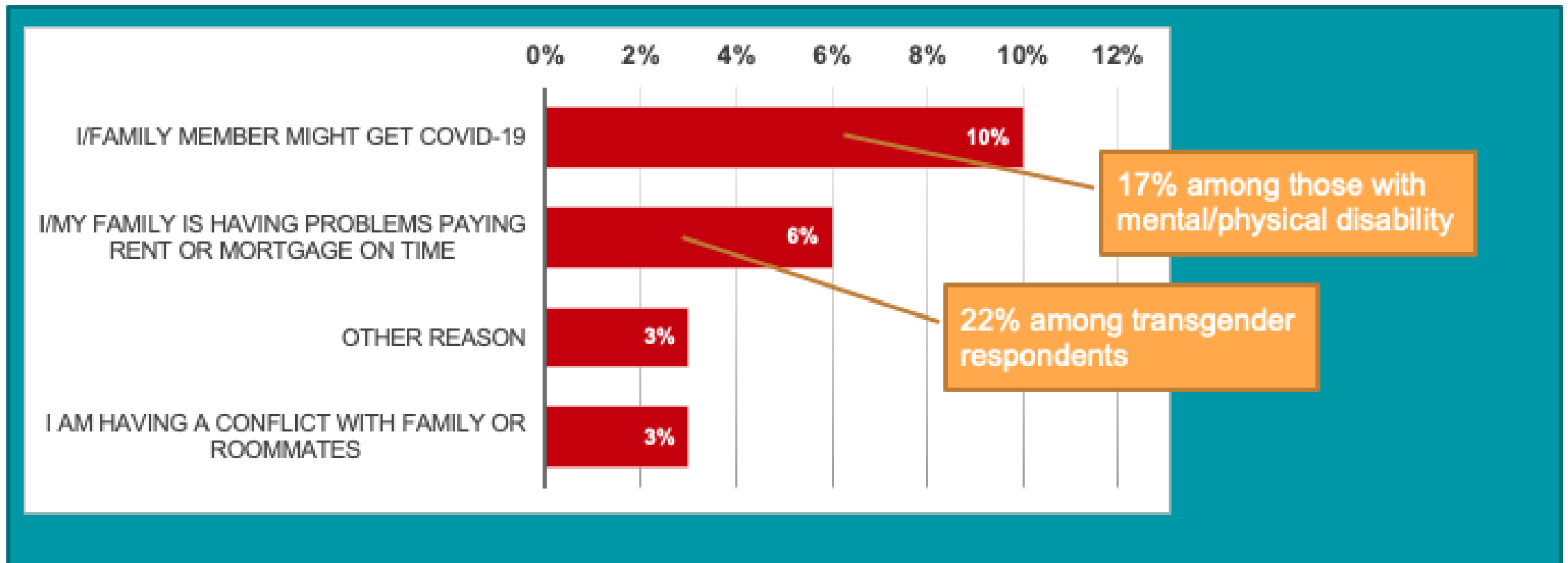
ETHNICITY	%
Cape Verdean	24%
Hispanic	24%
Salvadoran	23%
Vietnamese	23%
Haitian	20%

# DETERMINANTS OF HEALTH: HOUSING STABILITY

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

## Among them:

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





DATA TO ACTION

# ENGAGEMENT - OVERVIEW

We are getting input from both internal and external stakeholders in order to identify changes needed now and in future efforts.

- Internal = Bureaus, Offices, work groups
- External = engaged partners (i.e., HEAG, community partners)

Share findings and ask:

- How does this play out for you?
- How to overcome barriers?
- Actions to take now?

Focus on priority populations and geographies with racial justice reframing:

- Who benefits?
- Who decides? Who influences?
- Who could be harmed? How to mitigate?

# ENGAGEMENT – EXAMPLE

Key Finding: Current communication and dissemination channels may not be equally effective at reaching all populations (eg. Transgender, LGBTQ+, Males, those with disabilities , Am. Indian/Alaska Natives, Multiracial, Asians, low income, and those who speak languages other than English).

...suggesting adjusted media strategies, translations, and tailored community engagement should be considered for vaccine related communications to better reach these communities.

Heard: COVID-19 vaccine map on mass.gov is not accessible, need a table/grid with same information

Action Taken: Word and Excel document available for download, Word document could be hard to read, working to improve it now

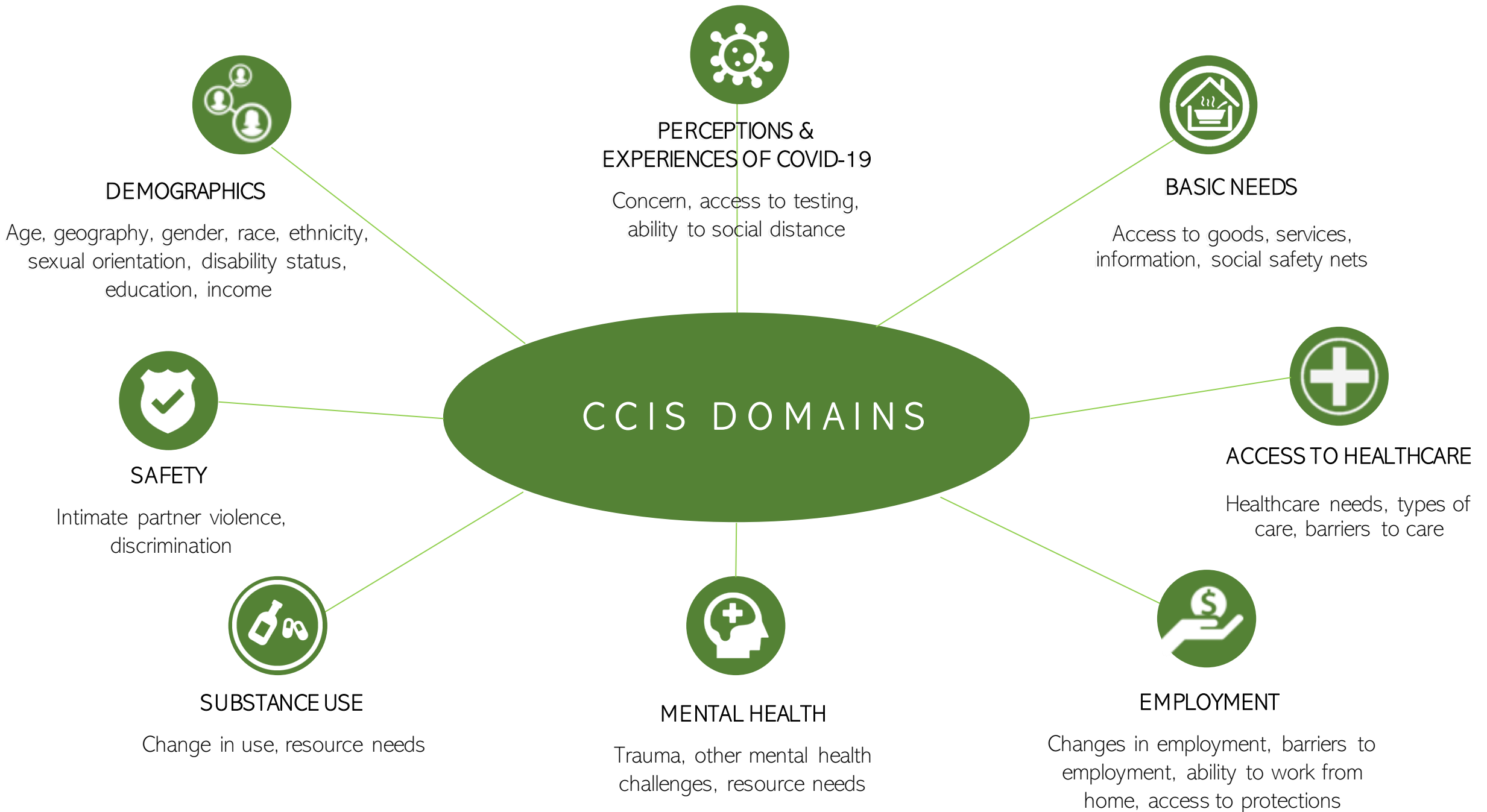
Heard: Not all Indigenous people are represented in this work, would prefer that DPH bring what they are planning to address needs to Indigenous people to provide feedback and make suggestions

Action Taken: Engage Tribal Partners Group, to discuss how best to do this (added to 2/16 meeting agenda)

QUESTIONS & FEEDBACK?

# APPENDIX

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



# 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?

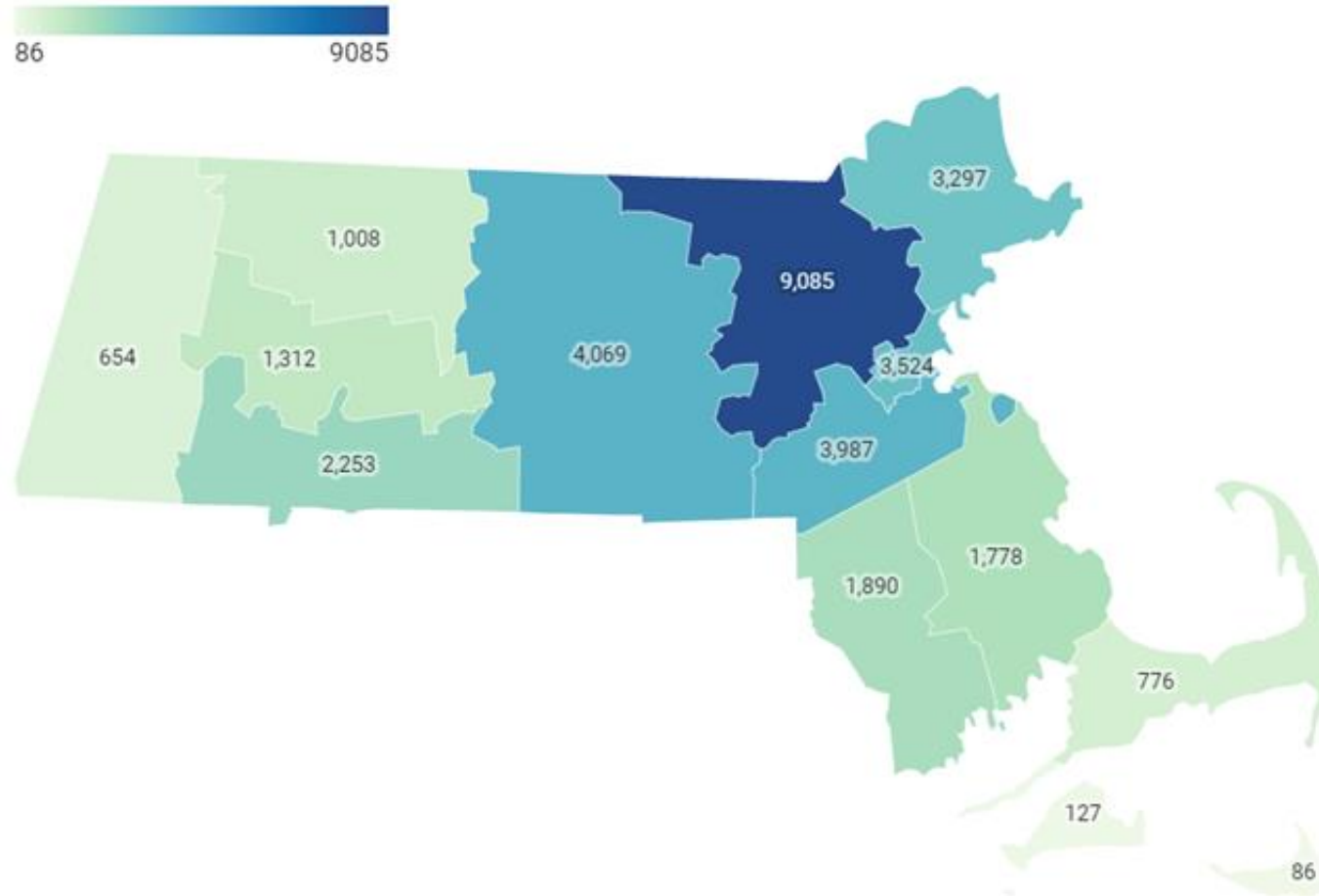
# Recruitment among priority populations was unprecedented

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
Age	<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
Race/Ethnicity	AI/AN	351	1.03
	Hispanic	2,506	7.38
	Multiracial	475	1.40
	Asian NH	1,188	3.50
	Black NH	1,162	3.42
	White NH	27,605	81.32
	Unknown/Other	661	1.95
Gender	Male	6,520	19.21
	Female	26,518	78.11
	Non-Binary	392	1.15
	Prefer not to answer	518	1.53
Transgender Identity	Transgender	245	0.73
	Not Transgender	32,500	96.29
	Not sure/DK/refuse	1,007	2.98

	Demographics	Freq.	Percent
Sexual Orientation	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
Survey Lang.	English	33,119	97.56
	Other	829	2.44
Disability Status <sup>1</sup>	Deaf/Hard to hear	922	2.72
	Blind/Hard to see	236	0.70
	Hard to concentrate	1,612	4.75
	Hard to walk	1,628	4.75
	Hard to dress/bath	370	1.09
	Trouble w/errands	838	2.47
	None	29,307	86.33
Income	<\$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
Education	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

<sup>1</sup>More granular disability definition forthcoming.

Note: numbers in this table are unweighted. Subsequent analyses are weighted to the state average



# ABILITY TO MITIGATE INDIVIDUAL RISK OF INFECTION

% “Very Worried” about Being Infected with COVID-1 9

	Demographics	Frequency	Weighted %
	Overall	9241	30%
Race/ Ethnicity	American Indian/Alaska Native	120	39%
	Hispanic/Latinx	1029	47%
	Multiracial, Non-Hispanic	148	34%
	Asian, Non-Hispanic	398	41%
	Black, Non-Hispanic	424	40%
	White, Non-Hispanic	6947	27%
	Other Race, Non-Hispanic	88	29%
	Unknown Race	87	27%
Age	25-34	1556	31%
	35-44	2339	30%
	45-64	3775	30%
	65+	1571	30%
Gender Identity	Male	1460	25%
	Female	7501	31%
	Questioning, Undecided, Non-binary	149	41%
Sexual Orientation	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 %
Transgender Experience	Transgender	97	43%
	Not Transgender	8801	30%
Income	<\$35K	1459	41%
	\$35-74,999K	2129	31%
	\$75-99,999K	1238	28%
	\$100-149,999K	1684	24%
	\$150K+	2020	23%
Educational Attainment	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%
Disability	Deaf/Hard of hearing	296	31%
	Blind/Trouble seeing	84	38%
	Mental/physical disability <sup>1</sup>	1248	44%
English language	Speaks language other than English	1973	45%

	Demographics	Frequency	Weighted %
County	Barnstable	189	24%
	Berkshire	155	25%
	Bristol	532	31%
	Dukes	31	29%
	Essex	1051	36%
	Franklin	216	22%
	Hampden	624	31%
	Hampshire	331	27%
	Middlesex	2473	30%
	Nantucket	23	30%
	Norfolk	1025	29%
	Plymouth	451	26%
	Suffolk	1131	37%
	Worcester	982	27%

Preliminary analysis. Statistical significance testing forthcoming.  
<sup>1</sup>More granular disability definition 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



# % Not Able to Keep 6 ft. Distance when Outside the Home

	Demographics	Frequency	Weighted %
	Overall	3559	11%
Race/ Ethnicity	American Indian/Alaska Native	47	15%
	Hispanic/Latinx	228	10%
	Multiracial, Non-Hispanic	64	15%
	Asian, Non-Hispanic	132	12%
	Black, Non-Hispanic	99	9%
	White, Non-Hispanic	2901	11%
	Other Race, Non-Hispanic	42	15%
	Unknown Race	46	17%
Age	25-34	963	17%
	35-44	994	12%
	45-64	1304	10%
	65+	298	6%
Gender Identity	Male	633	11%
	Female	2754	10%
	Questioning, Undecided, Non-binary	98	26%
Sexual Orientation	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 %
Transgender Experience	Transgender	54	22%
	Not Transgender	3358	11%
Income	<\$35K	473	12%
	\$35-74,999K	834	11%
	\$75-99,999K	497	11%
	\$100-149,999K	729	11%
	\$150K+	832	10%
Educational Attainment	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%
Disability	Deaf/Hard of hearing	106	11%
	Blind/Trouble seeing	45	20%
	Mental/physical disability <sup>1</sup>	480	15%
English language	Speaks language other than English	481	10%

	Demographics	Frequency	Weighted %
County	Barnstable	80	11%
	Berkshire	59	9%
	Bristol	193	11%
	Dukes	9	9%
	Essex	334	11%
	Franklin	101	11%
	Hampden	202	9%
	Hampshire	132	12%
	Middlesex	1022	12%
	Nantucket	11	12%
	Norfolk	357	9%
	Plymouth	180	10%
	Suffolk	462	13%
	Worcester	408	11%

Preliminary analysis. Statistical significance testing forthcoming.  
<sup>1</sup>More granular disability definition 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

# % Working Outside of the Home among Employed Residents

	Demographics	Frequency	Weighted %
	Overall	8786	52%
Race/ Ethnicity	American Indian/Alaska Native	84	57%
	Hispanic/Latinx	650	57%
	Multiracial, Non-Hispanic	97	44%
	Asian, Non-Hispanic	252	43%
	Black, Non-Hispanic	300	53%
	White, Non-Hispanic	7222	51%
	Other Race, Non-Hispanic	92	65%
	Unknown Race	89	58%
Age	25-34	1377	46%
	35-44	2167	48%
	45-64	4508	55%
	65+	734	58%
Gender Identity	Male	1734	55%
	Female	6832	51%
	Questioning, Undecided, Non-binary	76	43%
Sexual Orientation	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 %
Transgender Experience	Transgender	46	42%
	Not Transgender	8419	52%
Income	<\$35K	892	73%
	\$35-74,999K	1979	56%
	\$75-99,999K	1217	50%
	\$100-149,999K	1890	48%
	\$150K+	2329	41%
Educational Attainment	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%
Disability	Deaf/Hard of hearing	165	55%
	Blind/Trouble seeing	32	58%
	Mental/physical disability <sup>1</sup>	501	54%
English language	Speaks language other than English	1314	56%

Preliminary analysis. Statistical significance testing forthcoming.

County level estimates not available at this time.

<sup>1</sup>More granular disability definition 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

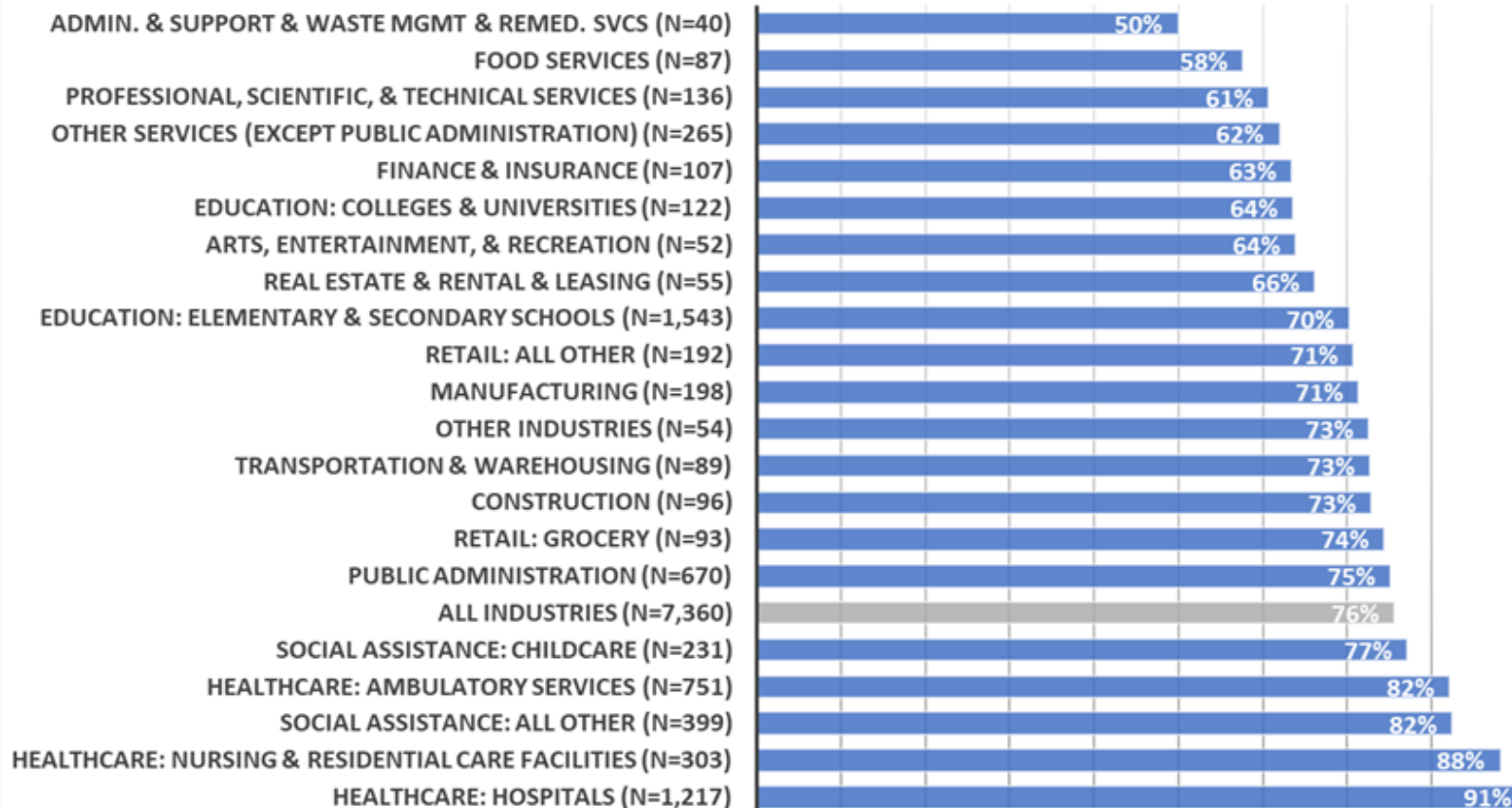
# EMPLOYER PROVIDED PPE



## EMPLOYER PROVIDED PERSONAL PROTECTIVE EQUIPMENT (PPE):

% AMONG ADULTS WORKING OUTSIDE THE HOME BY INDUSTRY GROUP

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

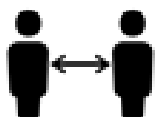


Overall, 76% of adults working outside the home reported that their employer provided PPE.

Across industry groups, the percentage ranged from 50% in Administrative Support and Waste Management to 91% in Healthcare: Hospitals.

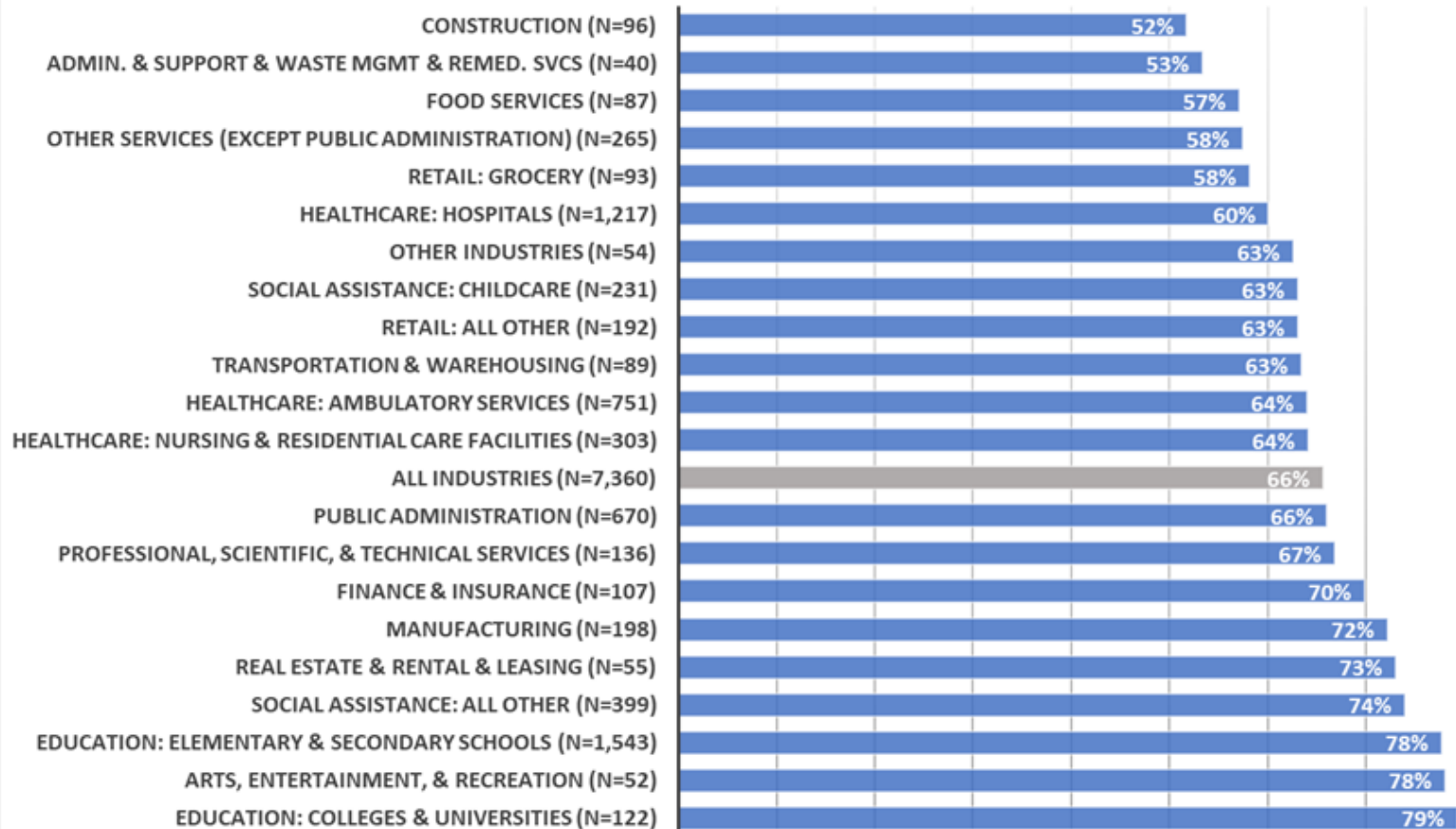
Notes: 1) "Retail: Grocery" includes CIC 4970 Grocery Stores, 4980 Specialty Food Stores, 5090 Gas Stations [includes those with convenient stores]; 2) Other Industries includes Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 3) Estimates were suppressed for Education: All Other; Accommodation due to insufficient data; 4) Preliminary findings - statistical significance testing forthcoming.

# EMPLOYER IMPLEMENTED SOCIAL DISTANCING



## EMPLOYER IMPLEMENTED SOCIAL DISTANCING: % AMONG ADULTS WORKING OUTSIDE THE HOME BY INDUSTRY GROUP

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



Overall, 66% of adults working outside the home reported that their employer implement social distancing at work.

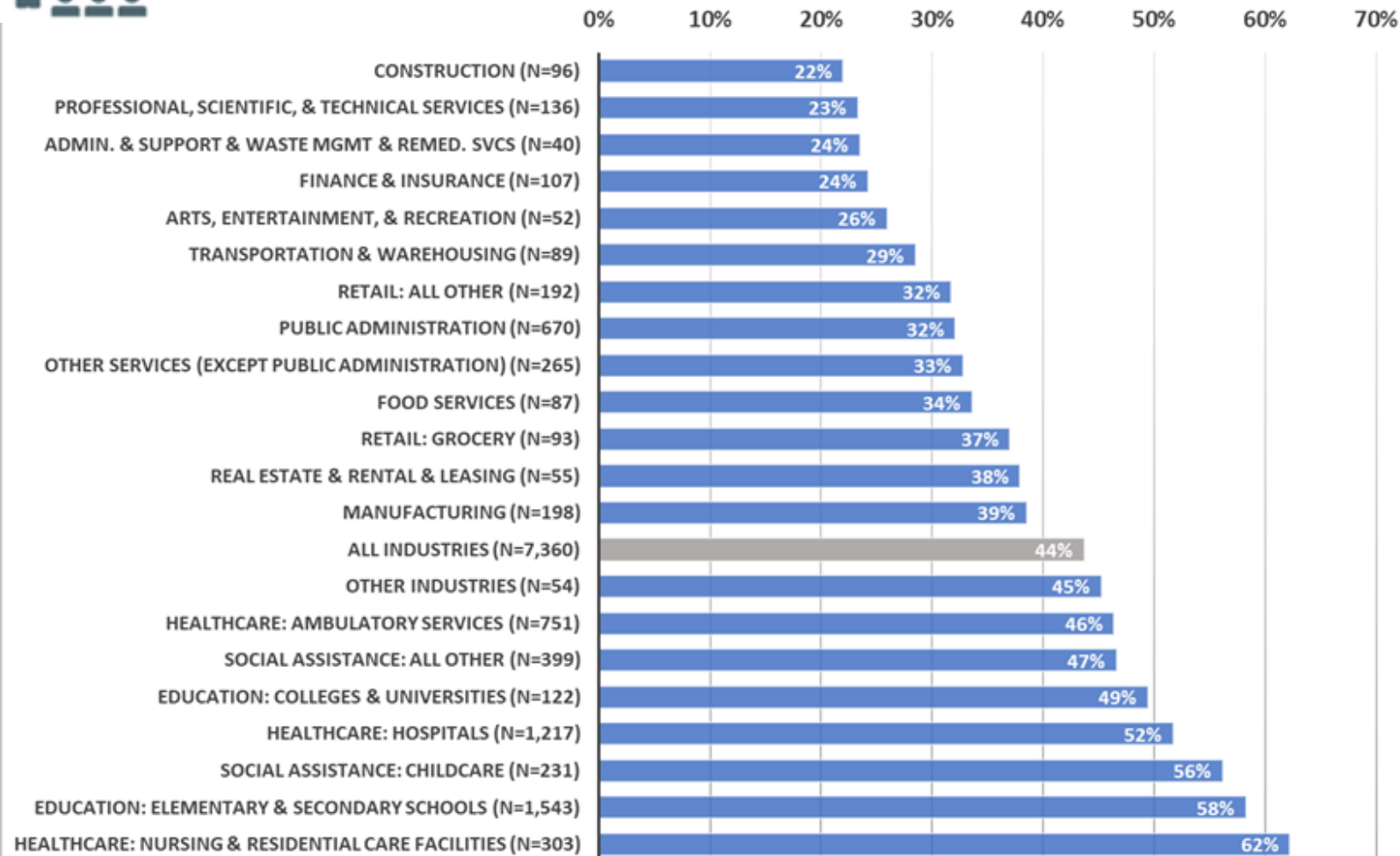
Across industry groups, the percentage ranged from 52% in Construction to 79% in Education: Colleges and Universities.

Notes: 1) "Retail: Grocery" includes CIC 4970 Grocery Stores, 4980 Specialty Food Stores, 5090 Gas Stations [includes those with convenient stores]; 2) Other Industries includes Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 3) Estimates were suppressed for Education: All Other; Accommodation due to insufficient data; 4) Preliminary findings - statistical significance testing forthcoming.

# EMPLOYER PROVIDED ADDITIONAL HEALTH AND SAFETY TRAINING



## EMPLOYER PROVIDED ADDITIONAL HEALTH AND SAFETY TRAINING: % AMONG ADULTS WORKING OUTSIDE THE HOME BY INDUSTRY GROUP



Overall, 44% of adults working outside the home reported that their employer provided additional health and safety training.

Across industry groups, the percentage ranged from 22% in Construction to 62% in Healthcare: Nursing and Residential Care Facilities.

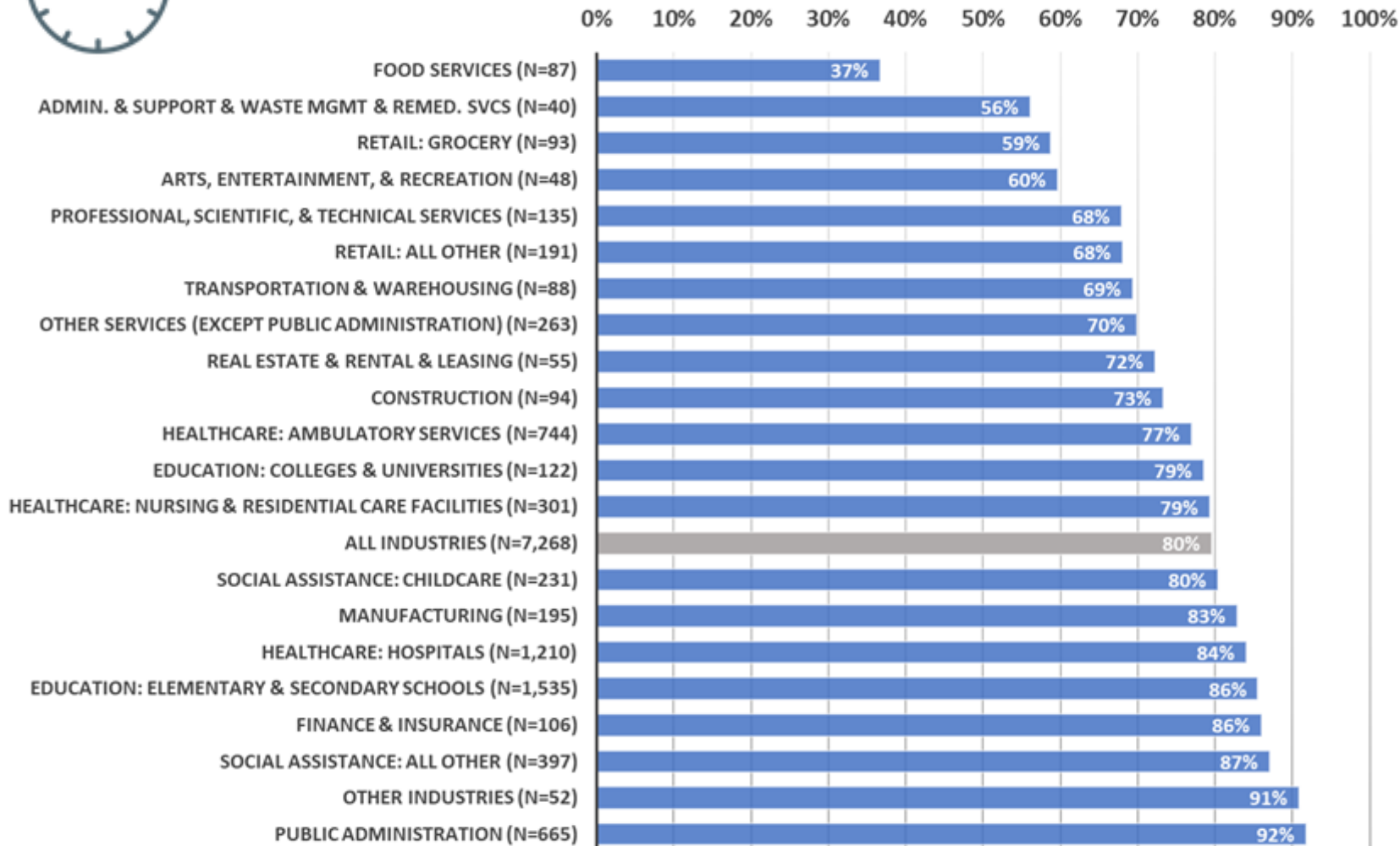
Notes: 1) "Retail: Grocery" includes C1C 4970 Grocery Stores, 4980 Specialty Food Stores, 5090 Gas Stations [includes those with convenient stores]; 2) Other Industries includes Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 3) Estimates were suppressed for Education: All Other; Accommodation due to insufficient data; 4) Preliminary findings - statistical significance testing forthcoming.



# PAID SICK LEAVE



## PAID SICK LEAVE: % AMONG ADULTS WORKING OUTSIDE THE HOME BY INDUSTRY GROUP



Overall, **80%** of adults working outside the home **reported they had paid sick leave.**

Across industry groups, the percentage ranged from **37%** in Food Services to **92%** in Public Administration.

Notes: 1) "Retail: Grocery" includes CUC 4970 Grocery Stores, 4980 Specialty Food Stores, 5090 Gas Stations [includes those with convenient stores]; 2) Other Industries includes Mining; Agriculture, Forestry, Fishing and Hunting; Utilities; Wholesale Trade; Management of Companies and Enterprises; Military; 3) Estimates were suppressed for Education: All Other; Accommodation due to insufficient data; 4) Preliminary findings - statistical significance testing forthcoming.



# TESTING ACCESS

# % Ever been Tested for COVID-19

	Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %
	Overall	14319	44%	Transgender Experience	Transgender	133	57%		Barnstable	264	37%
Race/ Ethnicity	American Indian/Alaska Native	164	52%	Income	Not Transgender	13731	44%		Berkshire	227	34%
	Hispanic/Latinx	1156	51%		<\$35K	1607	41%		Bristol	726	41%
	Multiracial, Non-Hispanic	226	48%		\$35-74,999K	3125	46%		Dukes	75	63%
	Asian, Non-Hispanic	421	37%		\$75-99,999K	1892	44%		Essex	1460	47%
	Black, Non-Hispanic	544	52%		\$100-149,999K	2898	44%		Franklin	416	37%
	White, Non-Hispanic	11551	42%		\$150K+	4013	45%		Hampden	865	42%
	Other Race, Non-Hispanic	139	47%	Educational Attainment	Less than high school	142	40%		Hampshire	533	40%
	Unknown Race	118	35%		High school or GED	815	39%		Middlesex	4075	46%
Age	25-34	2923	52%		Trade/ vocational school	360	42%		Nantucket	32	37%
	35-44	3590	43%		Some college	1125	43%		Norfolk	1579	42%
	45-64	5924	44%		Associates Degree	1039	44%		Plymouth	643	37%
	65+	1882	36%		Bachelors Degree	4438	45%		Suffolk	1916	59%
					Graduate Degree	6377	47%		Worcester	1474	38%
Gender Identity	Male	2667	43%	Disability	Deaf/Hard of hearing	396	44%				
	Female	11267	44%		Blind/Trouble seeing	103	46%				
	Questioning, Undecided, Non-binary	207	53%		Mental/physical disability <sup>1</sup>	1309	45%				
Sexual Orientation	Asexual	248	42%	English language	Speaks language other than English	2233	47%				
	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%								

Preliminary analysis. Statistical significance testing forthcoming.  
<sup>1</sup>More granular disability definition 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





# HEALTH CARE ACCESS & DELAYS

% Who have not gotten the medical care that they needed since July 2020

	Demographics	Frequency	Weighted %
	Overall	4326	17%
Race/ Ethnicity	American Indian/Alaska Native	71	30%
	Hispanic/Latinx	252	15%
	Multiracial, Non-Hispanic	84	26%
	Asian, Non-Hispanic	118	16%
	Black, Non-Hispanic	140	20%
	White, Non-Hispanic	3548	17%
	Other Race, Non-Hispanic	42	17%
	Unknown Race	71	30%
Age	25-34	908	23%
	35-44	1148	19%
	45-64	1764	17%
	65+	506	12%
Gender Identity	Male	682	15%
	Female	3424	17%
	Questioning, Undecided, Non-binary	109	40%
Sexual Orientation	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 %
Transgender Experience	Transgender	64	34%
	Not Transgender	4064	17%
Income	<\$35K	631	20%
	\$35-74,999K	978	18%
	\$75-99,999K	602	17%
	\$100-149,999K	798	15%
	\$150K+	1057	15%
Educational Attainment	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%
Disability	Deaf/Hard of hearing	155	18%
	Blind/Trouble seeing	57	34%
	Mental/physical disability <sup>1</sup>	Not available	Not available
English language	Speaks language other than English	584	16%

	Demographics	Frequency	Weighted %
County	Barnstable	128	21%
	Berkshire	72	12%
	Bristol	206	15%
	Dukes	22	24%
	Essex	342	15%
	Franklin	150	20%
	Hampden	267	17%
	Hampshire	167	18%
	Middlesex	1304	19%
	Nantucket	9	12%
	Norfolk	407	13%
	Plymouth	246	18%
	Suffolk	508	19%
	Worcester	489	16%

Preliminary analysis. Statistical significance testing forthcoming.  
<sup>1</sup>More granular disability definition forthcoming.  
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# % 15 or more Poor Mental Health Days in past 30 Days

	Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %						
	Overall	8973	33%	Transgender Experience	Transgender	134	62%	County	Barnstable	199	29%						
Race/ Ethnicity	American Indian/Alaska Native	113	38%	Income	Not Transgender	8480	33%		Berkshire	199	36%						
	Hispanic/Latinx	654	35%		Income	<\$35K	1312		42%	Bristol	451	31%					
	Multiracial, Non-Hispanic	165	49%			Income	\$35-74,999K		2163	35%	Dukes	30	24%				
	Asian, Non-Hispanic	221	25%				Income		\$75-99,999K	1302	33%	Essex	886	33%			
	Black, Non-Hispanic	285	32%						Income	\$100-149,999K	1792	31%	Franklin	304	35%		
	White, Non-Hispanic	7346	33%							Income	\$150K+	1998	26%	Hampden	671	37%	
	Other Race, Non-Hispanic	91	29%	Educational Attainment							Less than high school	104	36%	Hampshire	397	38%	
	Unknown Race	98	40%		Educational Attainment						High school or GED	543	32%	Middlesex	2423	33%	
	Age	25-34	1999			43%					Educational Attainment	Trade/ vocational school	245	33%	Nantucket	12	17%
35-44		2772	41%			Educational Attainment	Some college					859	38%	Norfolk	929	30%	
45-64		3466	31%				Educational Attainment		Associates Degree			686	35%	Plymouth	493	35%	
65+		736	20%						Educational Attainment	Bachelors Degree		2884	32%	Suffolk	966	35%	
Gender Identity		Male	1333							26%		Educational Attainment	Graduate Degree	3646	29%	Worcester	987
	Female	7264	34%							Disability			Deaf/Hard of hearing	237	34%		
	Questioning, Undecided, Non-binary	221	68%	Disability				Blind/Trouble seeing					83	49%			
Sexual Orientation	Asexual	202	39%		Disability			Mental/physical disability <sup>1</sup>					1393	55%			
	Bisexual and/or Pansexual	580	55%					English language			Speaks language other than English		1279	34%			
	Gay or Lesbian	439	41%														
	Straight (Heterosexual)	6994	31%														
	Queer	246	59%														
	I am questioning/ not sure of my sexuality	100	58%														

Preliminary analysis. Statistical significance testing forthcoming.

<sup>1</sup>More granular disability definition forthcoming.

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# DETERMINANTS OF HEALTH

# % Worried about paying for 1 or more types\* of expense or bills in the coming few weeks

	Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %		Demographics	Frequency	Weighted %
	Overall	11679	44%	<b>Transgender Experience</b>	Transgender	131	61%		Barnstable	151	40%
					Not Transgender	11044	43%		Berkshire	174	52%
<b>Race/ Ethnicity</b>	American Indian/Alaska Native	180	62%	<b>Income</b>	<\$35K	2318	67%		Bristol	409	43%
	Hispanic/Latinx	1386	70%		\$35-74,999K	3393	52%		Dukes	23	50%
	Multiracial, Non-Hispanic	213	61%		\$75-99,999K	1659	41%		Essex	821	50%
	Asian, Non-Hispanic	413	48%		\$100-149,999K	2067	35%		Franklin	216	42%
	Black, Non-Hispanic	652	69%		\$150K+	1618	21%		Hampden	647	53%
	White, Non-Hispanic	8538	38%	<b>Educational Attainment</b>	Less than high school	245	71%		Hampshire	249	43%
	Other Race, Non-Hispanic	139	55%		High school or GED	1044	50%		Middlesex	1485	37%
	Unknown Race	158	56%		Trade/ vocational school	442	51%		Nantucket	23	38%
<b>Age</b>	25-34	2585	57%		Some college	1382	53%		Norfolk	729	39%
	35-44	3358	52%		Associates Degree	1094	47%		Plymouth	436	50%
	45-64	4814	44%		Bachelors Degree	3708	38%		Suffolk	878	51%
	65+	922	25%		Graduate Degree	3745	28%		Worcester	774	39%
	65+	922	25%	<b>Disability</b>	Deaf/Hard of hearing	307	39%				
<b>Gender Identity</b>	Male	1975	40%		Blind/Trouble seeing	126	68%				
	Female	9265	44%		Mental/physical disability <sup>1</sup>	1047	61%				
	Questioning, Undecided, Non-binary	209	65%	<b>English language</b>	Speaks language other than English	1788	64%				
<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%								

Preliminary analysis. Statistical significance testing forthcoming.  
<sup>1</sup>More granular disability definition forthcoming.  
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## \* 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%
Race/ Ethnicity	American Indian/Alaska Native	118	45%
	Hispanic/Latinx	891	49%
	Multiracial, Non-Hispanic	116	38%
	Asian, Non-Hispanic	263	32%
	Black, Non-Hispanic	361	41%
	White, Non-Hispanic	4867	24%
	Other Race, Non-Hispanic	85	33%
	Unknown Race	83	34%
Age	25-34	1215	31%
	35-44	1844	31%
	45-64	2892	28%
	65+	833	22%
Gender Identity	Male	1231	25%
	Female	5311	28%
	Questioning, Undecided, Non-binary	102	34%
Sexual Orientation	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 %
Transgender Experience	Transgender	68	37%
	Not Transgender	6405	27%
Income	<\$35K	1566	48%
	\$35-74,999K	1840	31%
	\$75-99,999K	829	23%
	\$100-149,999K	1025	19%
	\$150K+	1013	13%
Educational Attainment	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%
Disability	Deaf/Hard of hearing	243	34%
	Blind/Trouble seeing	103	53%
	Mental/physical disability <sup>1</sup>	1159	46%
English language	Speaks language other than English	1582	44%

	Demographics	Frequency	Weighted %
County	Barnstable	164	30%
	Berkshire	165	32%
	Bristol	440	30%
	Dukes	33	35%
	Essex	763	34%
	Franklin	217	27%
	Hampden	632	37%
	Hampshire	211	20%
	Middlesex	1458	22%
	Nantucket	18	25%
	Norfolk	666	23%
	Plymouth	393	29%
	Suffolk	762	32%
	Worcester	844	26%

Preliminary analysis. Statistical significance testing forthcoming.  
<sup>1</sup>More granular disability definition forthcoming.  
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% Worried about getting face masks in the coming weeks

	Demographics	Frequency	Weighted %
	Overall	3787	14%
Race/ Ethnicity	American Indian/Alaska Native	70	24%
	Hispanic/Latinx	512	26%
	Multiracial, Non-Hispanic	83	24%
	Asian, Non-Hispanic	216	24%
	Black, Non-Hispanic	250	27%
	White, Non-Hispanic	2550	12%
	Other Race, Non-Hispanic	50	20%
	Unknown Race	56	20%
Age	25-34	774	18%
	35-44	975	16%
	45-64	1586	15%
	65+	452	11%
Gender Identity	Male	695	13%
	Female	2951	15%
	Questioning, Undecided, Non-binary	58	18%
Sexual Orientation	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 %
Transgender Experience	Transgender	36	16%
	Not Transgender	3557	14%
Income	<\$35K	810	25%
	\$35-74,999K	1014	16%
	\$75-99,999K	514	13%
	\$100-149,999K	587	10%
	\$150K+	591	7%
Educational Attainment	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%
Disability	Deaf/Hard of hearing	138	19%
	Blind/Trouble seeing	57	31%
	Mental/physical disability <sup>1</sup>	640	25%
English language	Speaks language other than English	1017	26%

	Demographics	Frequency	Weighted %
County	Barnstable	79	14%
	Berkshire	76	13%
	Bristol	224	14%
	Dukes	12	11%
	Essex	394	16%
	Franklin	94	10%
	Hampden	349	19%
	Hampshire	114	10%
	Middlesex	900	13%
	Nantucket	8	7%
	Norfolk	387	13%
	Plymouth	211	15%
	Suffolk	515	19%
	Worcester	414	13%

Preliminary analysis. Statistical significance testing forthcoming.  
<sup>1</sup>More granular disability definition forthcoming  
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% Worried about getting medication in the coming weeks

	Demographics	Frequency	Weighted %
	Overall	3535	14%
Race/ Ethnicity	American Indian/Alaska Native	69	25%
	Hispanic/Latinx	424	22%
	Multiracial, Non-Hispanic	72	21%
	Asian, Non-Hispanic	140	15%
	Black, Non-Hispanic	136	14%
	White, Non-Hispanic	2605	12%
	Other Race, Non-Hispanic	40	13%
	Unknown Race	49	20%
Age	25-34	640	15%
	35-44	901	14%
	45-64	1556	14%
	65+	438	11%
Gender Identity	Male	670	13%
	Female	2707	13%
	Questioning, Undecided, Non-binary	75	23%
Sexual Orientation	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 %
Transgender Experience	Transgender	61	30%
	Not Transgender	3308	13%
Income	<\$35K	715	22%
	\$35-74,999K	927	15%
	\$75-99,999K	469	12%
	\$100-149,999K	561	10%
	\$150K+	619	8%
Educational Attainment	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%
Disability	Deaf/Hard of hearing	136	20%
	Blind/Trouble seeing	66	35%
	Mental/physical disability <sup>1</sup>	744	28%
English language	Speaks language other than English	761	20%

	Demographics	Frequency	Weighted %
County	Barnstable	80	12%
	Berkshire	90	17%
	Bristol	221	15%
	Dukes	16	16%
	Essex	345	14%
	Franklin	104	13%
	Hampden	357	20%
	Hampshire	124	11%
	Middlesex	848	12%
	Nantucket	12	13%
	Norfolk	349	12%
	Plymouth	218	14%
	Suffolk	378	15%
	Worcester	385	11%

Preliminary analysis. Statistical significance testing forthcoming.  
<sup>1</sup>More granular disability definition forthcoming.  
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% Worried about getting broadband(internet) in the coming weeks

	Demographics	Frequency	Weighted %
	Overall	3434	13%
Race/ Ethnicity	American Indian/Alaska Native	75	25%
	Hispanic/Latinx	471	24%
	Multiracial, Non-Hispanic	73	22%
	Asian, Non-Hispanic	143	16%
	Black, Non-Hispanic	198	21%
	White, Non-Hispanic	2384	11%
	Other Race, Non-Hispanic	47	19%
	Unknown Race	43	16%
Age	25-34	580	14%
	35-44	904	15%
	45-64	1502	14%
	65+	448	10%
Gender Identity	Male	589	12%
	Female	2711	13%
	Questioning, Undecided, Non-binary	58	16%
Sexual Orientation	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 %
Transgender Experience	Transgender	41	18%
	Not Transgender	3217	13%
Income	<\$35K	738	23%
	\$35-74,999K	941	15%
	\$75-99,999K	460	12%
	\$100-149,999K	558	9%
	\$150K+	512	6%
Educational Attainment	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%
	Bachelors Degree	1024	10%
	Graduate Degree	1097	8%
Disability	Deaf/Hard of hearing	161	21%
	Blind/Trouble seeing	48	27%
	Mental/physical disability <sup>1</sup>	584	23%
English language	Speaks language other than English	871	22%

	Demographics	Frequency	Weighted %
County	Barnstable	81	12%
	Berkshire	113	21%
	Bristol	203	13%
	Dukes	13	8%
	Essex	374	15%
	Franklin	122	13%
	Hampden	355	18%
	Hampshire	137	13%
	Middlesex	710	11%
	Nantucket	7	10%
	Norfolk	292	10%
	Plymouth	178	12%
	Suffolk	409	16%
	Worcester	427	13%

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**150 YEARS**  
OF ADVANCING  
**PUBLIC  
HEALTH**

# Massachusetts Department of Public Health

***Next Meeting:***

**March 10, 2021**