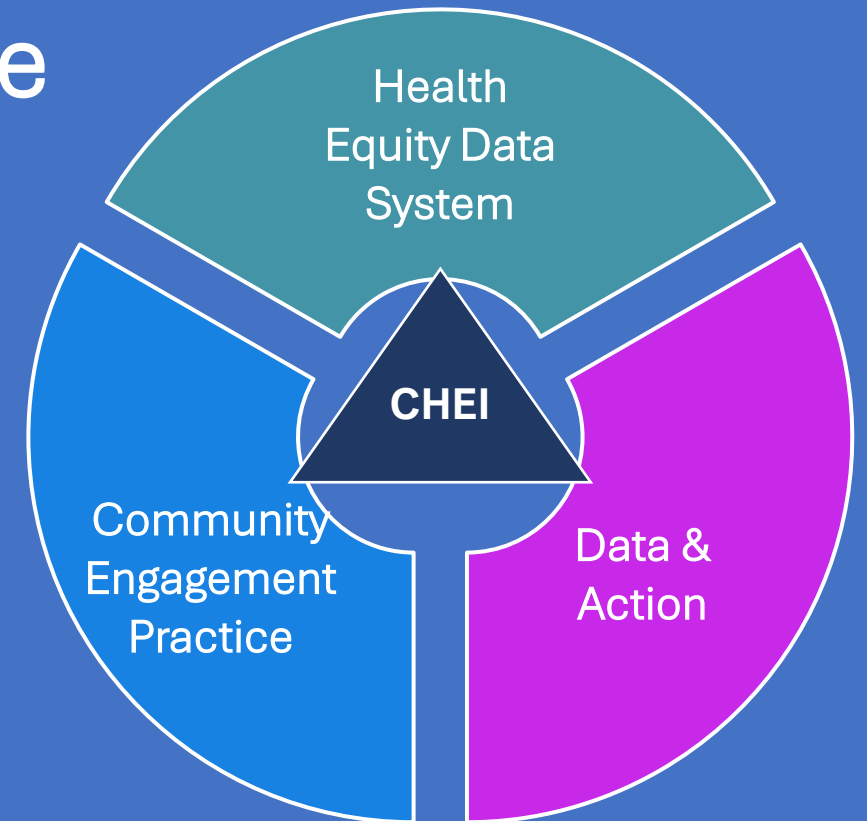




MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

Community Health Equity Initiative (CHEI)

Community Health Equity Survey 2023
Overview and Early Key Findings



CONTENTS



- ❖ History & Background
- ❖ Overview of the CHEI Model
- ❖ Community Health Equity Survey (CHES) 2023 Methods
 - Survey Development
 - Survey Dissemination Strategies
 - Sample Goals for Communities of Focus
- ❖ CHES 2023 Early Key Findings
- ❖ Upcoming Communication & Dissemination Products

HISTORY OF CHEI



INEQUITIES FROM THE COVID-19 PANDEMIC

The COVID-19 pandemic continues to have a devastating impact on the health of Massachusetts residents and has made worse many inequities that existed before the pandemic.

NEEDS HIGHLIGHTED BY THE PANDEMIC



TIMELY DATA

on emerging health topics and social and structural drivers of health



MEANINGFUL ENGAGEMENT

of community and government partners to better identify needs and coordinate public health response



VOICES AND EXPERIENCES OF RESIDENTS

particularly those hidden or underrepresented in existing data systems



DATA & ACTION CHANNELS

through partnership building and better connections with public health programs & policies

COVID-19 COMMUNITY IMPACT SURVEY (CCIS)



Goal of CCIS 2020

To better understand how communities have been disproportionately impacted by the pandemic, including health, social, and economic impacts.



- CCIS online survey administered between Sept- Nov 2020.
- Available in 11 languages
- Received 33,000+ adult responses and 3,000+ youth responses



Recruitment strategies developed for communities of focus, including:

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



Used a mixed-methods approach that included focus groups and open-ended questions to capture previously unknown needs and barriers

CCIS KEY SUCCESSES



Coordination during public health action requires relationship-building, planning, and communication



CCIS helped to identify and fill important data gaps along the continuum of downstream health outcomes to upstream determinants of health



CCIS helped to mobilize partners and networks across DPH throughout the survey process.



CCIS was a key data source that informed policy and practice change with community partners, DPH, and other state agencies.



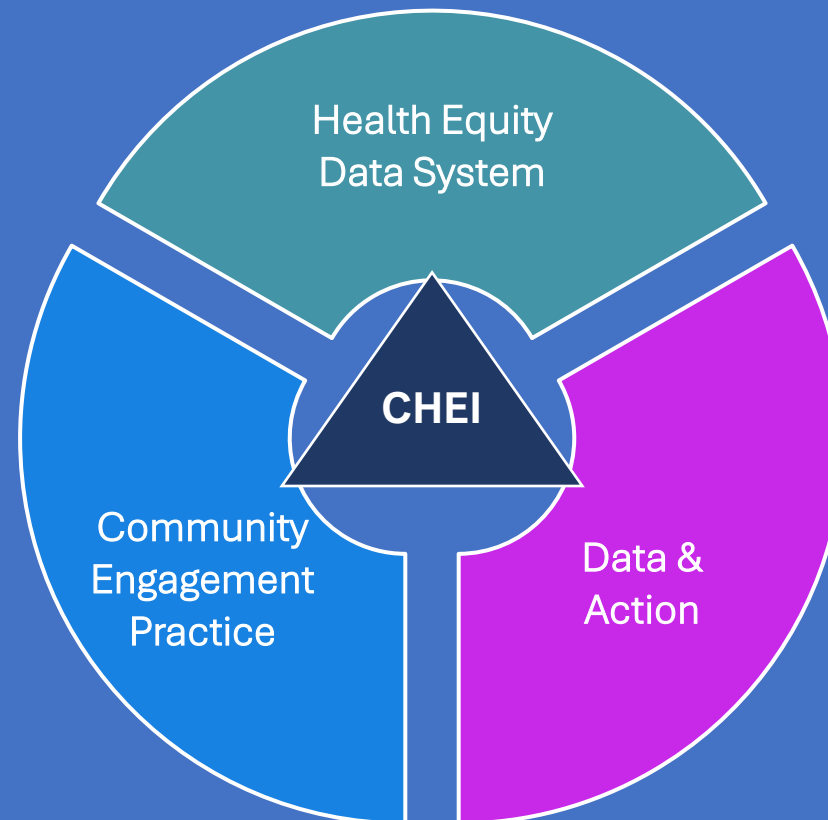
CCIS helped to strengthen trust in communities through authentic engagement and partnership with various priority communities

CHEI MODEL: FOUNDATIONAL PILLARS

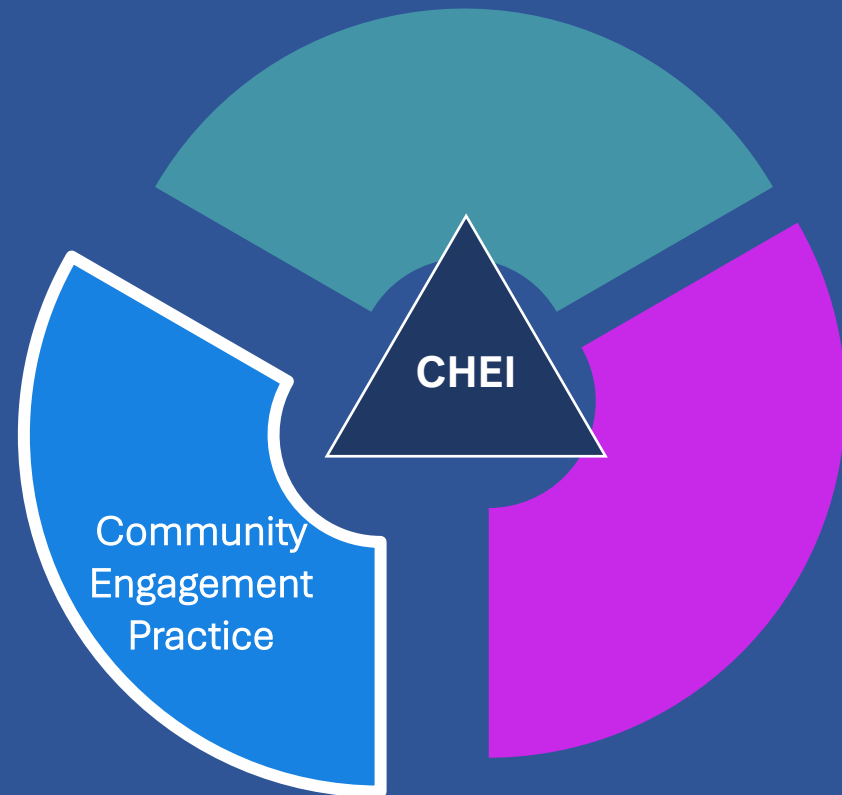


CHEI promotes the health of Massachusetts residents and reduces health inequities through a **Health Equity Data and Response System**.

This public health system is built upon **Three Foundational Pillars**:



CHEI COMMUNITY ENGAGEMENT PRACTICE



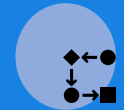
Community Engagement Goals and Commitments



Fostering collaboration with DPH, sister agency, and community partners



Prioritizing communities that are most impacted by health inequities



Engaging with and deferring to partners throughout all stages of CHEI



Promoting accessibility and cultural appropriateness within the CHEI Health Equity Data System



Supporting partners in using CHEI data to implement changes to advance health equity.

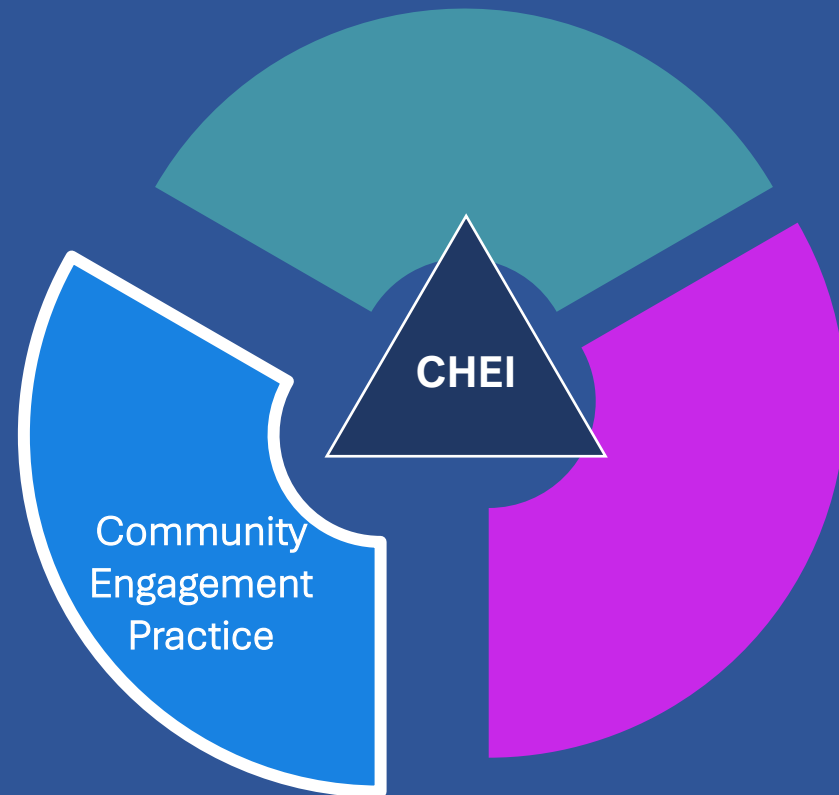


Increasing visibility of the health equity data and data & action frameworks.

CHEI COMMUNITY ENGAGEMENT PRACTICE

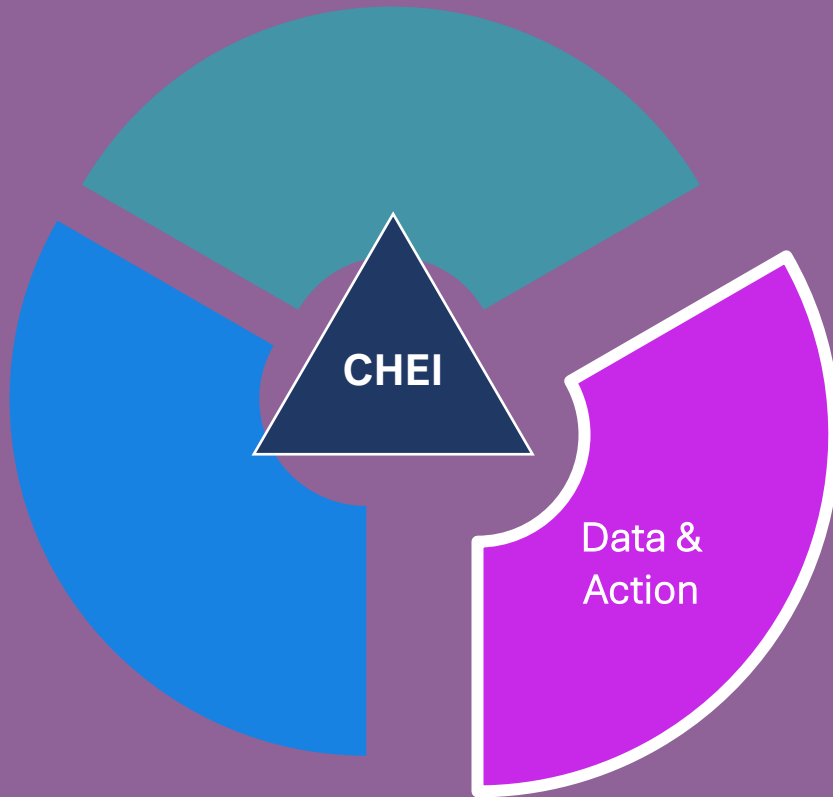


Strategies to Meet Goals for Engagement



- Hold **Listening Sessions** with DPH, state agency, and community partners to identify data gaps and prioritize survey topics.
- Convene **DPH Advisory Groups** of subject matter experts from across the various Bureaus and Offices of DPH.
- Establish a **Community Engagement Advisory Council** comprising residents and organizations reflective of CHES communities of focus to build relationships, trust, and bidirectional channels for collaboration with community partners.
- Conduct **Direct Partner Outreach** to DPH, sister agency, and community partners from the existing CCIS/CHEI partner network.
- Provide partners with **Resources and Capacity-building Support** in the form of mini-grants, participation stipends, and technical assistance to participate in all stages of the CHES process.
- Hold **Collaborative Data Analysis Sessions** to ensure that data analysis is responsive to partner needs and inclusive of community context.

CHEI DATA & ACTION



Using Results to Drive Change & Advance Equity



Work with partners to identify pathways for public health action



Make data resources and findings publicly available



Incorporate Data & Action focus into CHEI Health Equity Data System



Provide capacity-building support through the regional data & action support team

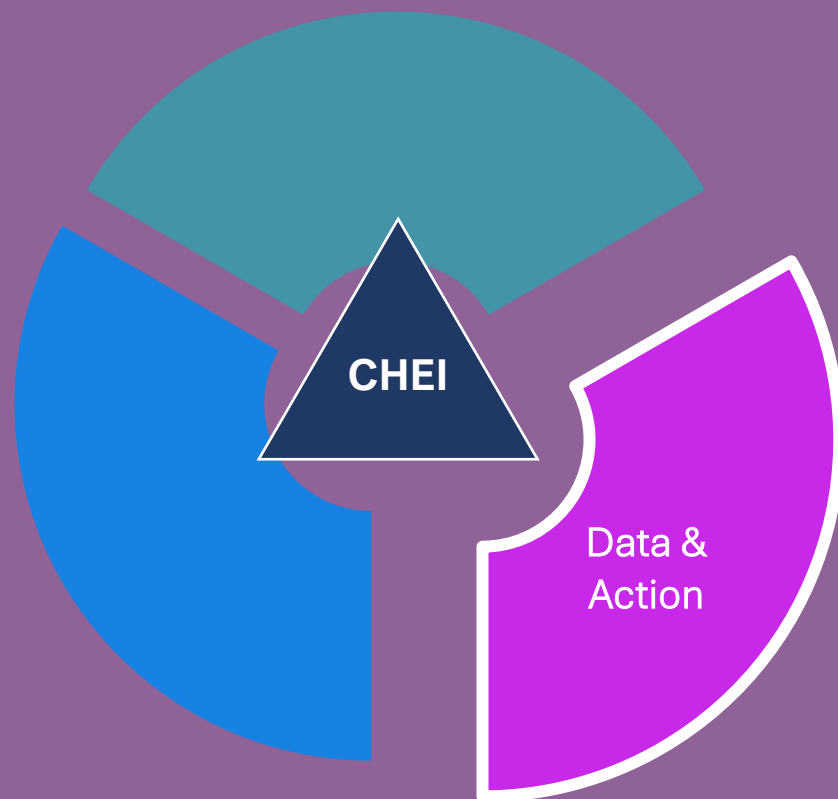


Engage partners in Collaborative Data Analysis process



Support DPH programs and initiatives in using CHEI data to inform action

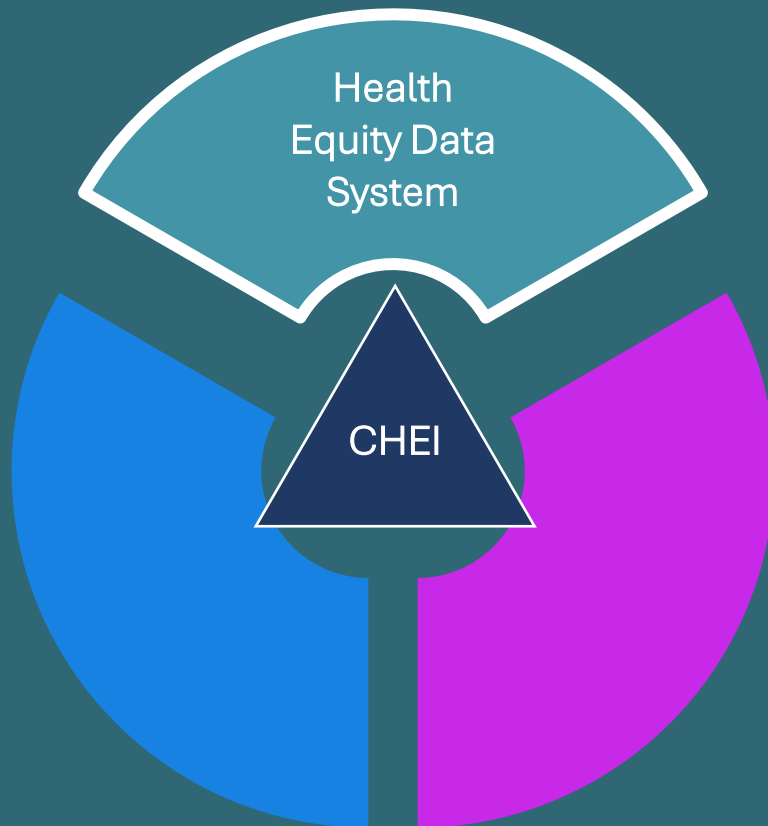
CHEI DATA & ACTION



Ways CHEI Can Support DPH Programs and Initiatives

- **Needs Assessment:** Using CHEI data to better identify and quantify needs within communities and connect those needs with social drivers of health.
- **Prioritization:** Using findings and recommendations from CHEI to help set new priorities or strengthen the evidence base for existing priorities for programs and initiatives.
- **Root Cause Framing:** Using the CHEI Health Inequities Framework (Figure 1) to help programs identify and focus on mid and upstream drivers of health inequities.
- **Community Engagement and Data & Action Frameworks:** Sharing frameworks and lessons learned from the CHEI community engagement and data & action frameworks with partners so they can incorporate strategies and best practices in their work.
- **Resource Allocation:** Helping programs use CHEI data and other data sources to inform allocation of limited resources using an equity lens.
- **Securing Resources & Funding:** Using CHEI data and findings to inform and strengthen grant applications and other funding opportunities.
- **Policy and Advocacy:** Using CHEI findings and recommendations developed in collaboration with community partners to better advocate for and bring about policy and systems change.

CHEI HEALTH EQUITY DATA SYSTEM



Key Attributes of the CHEI Health Equity Data System



Mixed Methods Approach:
Collecting quantitative and qualitative data through the **Community Health Equity Survey** and **CHEI Community Evaluators**



Equity Focus:
Collecting data along the **health inequity pathway**, including root causes of health inequity

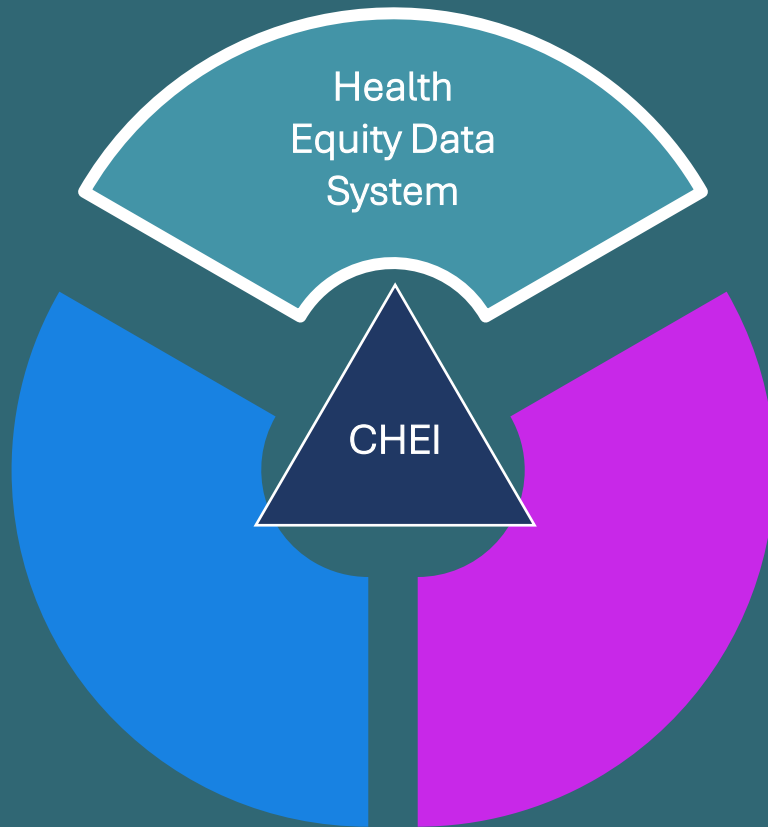


Centering Community:
Focusing on **communities that are often underrepresented** in public health data



Actionability and Timeliness:
Gathering data on **current public health priority areas** to identify need and potential areas for **public health action**

CHEI HEALTH EQUITY DATA SYSTEM



Primary Data Sources of the Health Equity Data System

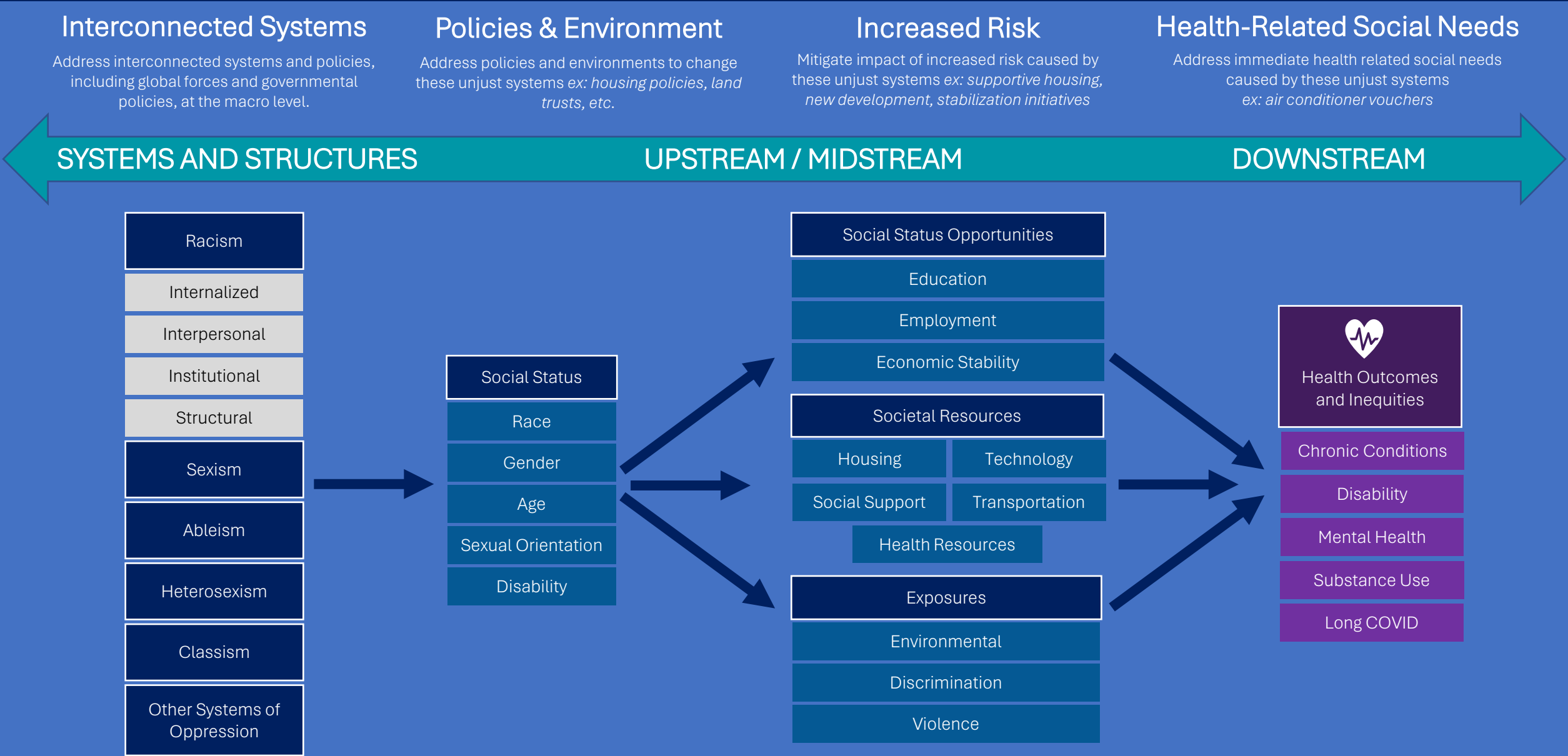
Community Health Equity Survey (CHES)

Population-based survey to gather data along the health inequity pathway, better understand the most pressing needs facing Massachusetts residents, and help DPH, sister agencies and communities change conditions that get in the way of health.

CHEI Community Evaluators

In collaboration with Tufts Interdisciplinary Evaluation Research (TIER), CHEI community evaluators use a community-based participatory research approach to conduct qualitative evaluation projects on topics that are important to them and their communities.

CHEI Health Inequities Framework



Community Health Equity Survey (CHES) 2023

CHES 2023 PRINCIPLES AND COMMITMENTS



Gathering Data Along the Health Inequity Pathway

Commitment:

- Collecting data to connect downstream health outcomes to midstream, upstream and groundwater determinants of health

Center Communities with Lived Experiences of Inequities

Connecting Quantitative and Qualitative Data

Prioritizing Timely and Actionable Data

CHES 2023 PRINCIPLES AND COMMITMENTS



Gathering Data Along the Health Inequity Pathway



Center Communities with Lived Experiences of Inequities

Commitments:

- Explicitly naming Communities of Focus and engaging them in all stages of CHEI
- Partnering with residents and organizations to make decisions around survey content and dissemination strategies
- Make available flexible mini-grant dollars to support survey outreach
- Increase accessibility of the survey through translation of materials in 10 most spoken non-English languages and ASL

Connecting Quantitative and Qualitative Data

Prioritizing Timely and Actionable Data

CHES 2023 PRINCIPLES AND COMMITMENTS



Gathering Data Along the Health Inequity Pathway

Center Communities with Lived Experiences of Inequities



Connecting Quantitative and Qualitative Data

Commitments:

- Include open-ended response options for select survey questions to allow respondents to share their experiences and add important context to their responses
- Connect CHES results to the Community Evaluator-led qualitative research projects

Prioritizing Timely and Actionable Data

CHES 2023 PRINCIPLES AND COMMITMENTS



Gathering Data Along the Health Inequity Pathway

Center Communities with Lived Experiences of Inequities

Connecting Quantitative and Qualitative Data



Prioritizing Timely and Actionable Data

Commitments:

- Work with community, DPH, and state agency partners during survey development to identify data needs and prioritize actionable data
- Create opportunities for collaborative data analysis to help make meaning of data collected and support the development of recommended actions.
- Share information back to the community by making results publicly available
- Provide data and capacity-building support to partners

CHES 2023 METHODOLOGY OVERVIEW



Take the Community Health Equity Survey

A healthier community starts with your voice.



- CHES is an innovative, community-based survey administered to **residents aged 14 and older**
- Utilizes a **non-probability quota sampling** methodology
 - Sample goals were set for Communities of Focus to ensure representation and sufficient sample sizes for granular and intersectional analyses.
 - Non-random sampling with community outreach strategies to meet sample goals.
- **Sample weights** were created using propensity score model weights to better align the survey sample to statewide race & ethnicity, gender, age, and education distribution.
- Data collection was open from **July 31 through October 31, 2023.**

CHES 2023 SURVEY INSTRUMENT



- **Online Survey**

- REDCap browser-based platform
- Accessible through phone, tablet, computer

- **Available in 11 most common languages spoken in MA**

- ASL version made available in 2024

- **Paper Survey Option**

- Available to partners to increase accessibility to geographies and populations where online surveys may be challenging to access.

The screenshot shows the 'Community Health Equity Survey 2023' language selection screen. At the top right, there are links for 'English', a speaker icon, and a grid icon. Below the title, there are buttons for various languages: Arabic, Cape Verdean Creole, Chinese (Simplified), Chinese (Traditional), English (selected with a checkmark), Haitian Creole, Khmer, Portuguese, Russian, Spanish, and Vietnamese. Below the language buttons, there is a list of radio button options for taking the survey in different languages, including English, Spanish, Portuguese, Kreyòl ayisyen, Vietnamese, Simplified Chinese, Traditional Chinese, and others. At the bottom right, there is a 'reset' link and a 'Next Page >>' button.

CHEI 2023 COMMUNITIES OF FOCUS

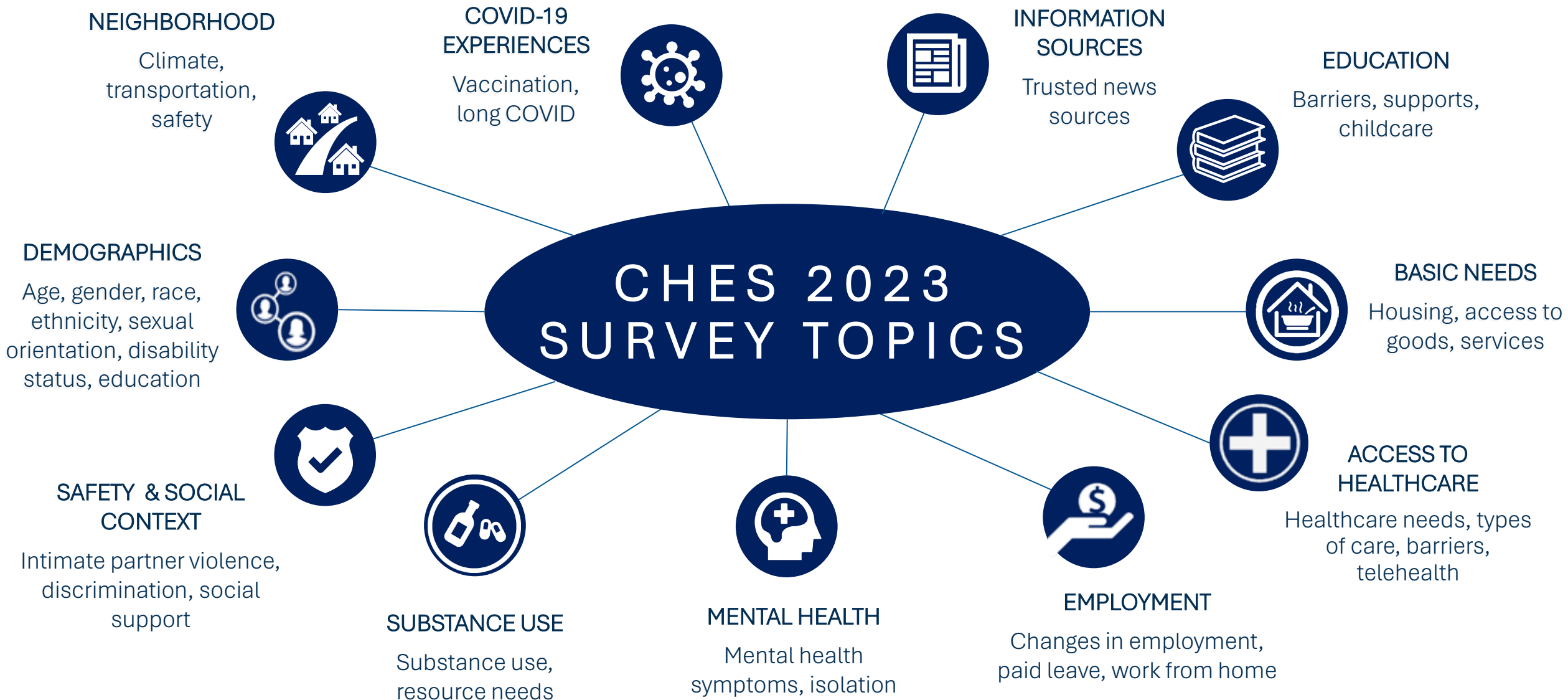


Centering communities that are often underrepresented in data systems and most impacted by health inequities

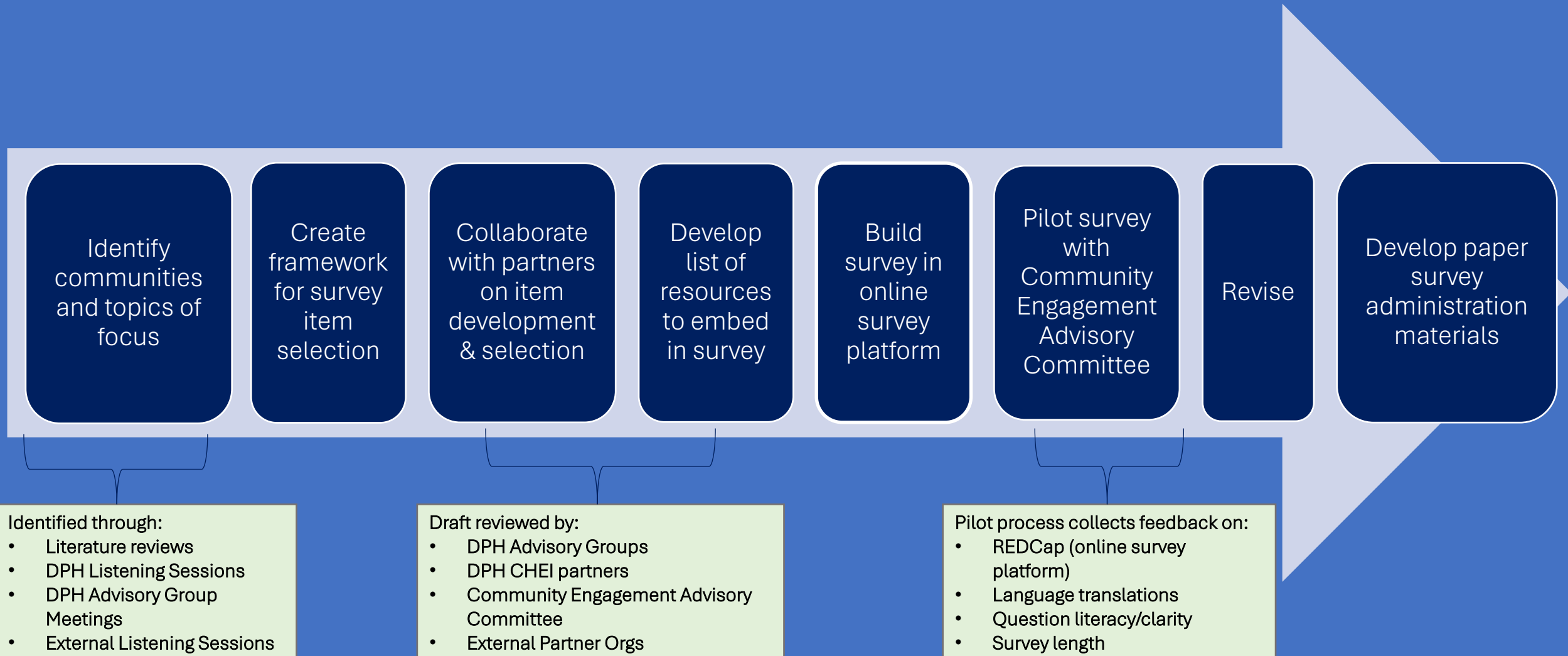
- Older adults (age 60+)
- Parents and caregivers of children and youth with special health care needs
- Parents under 25
- People identifying as LGBTQ+
- People of color(including, American Indian/Alaska Native, Asian American/ Pacific Islanders, Black, and Hispanic/ Latino/a/e residents)

- People whose primary language is not English
- People with disabilities
- People with immigration experience
- Pregnant people and parents of young children
- Rural residents
- Veterans
- Youth and young adults (age 14-24)

CHES 2023 SURVEY TOPICS



CHES 2023 SURVEY DEVELOPMENT STAGES



CHES 2023 ENGAGEMENT STRATEGIES



Listening Sessions

DPH Advisory Groups

Community Engagement Advisory Council (CEAC)

During the CHES 2023 survey development process, the CHEI team received nearly 1000 pieces of feedback from over 100 partners that were used to inform the final survey

CHES 2023 ENGAGEMENT STRATEGIES



Listening Sessions

- Held 6 listening sessions for DPH partners and 2 listening sessions for community partners to identify data gaps and prioritize survey topics.
- **DPH Bureaus and Offices represented:**
 - BCHAP, BEH, BFHN, BIDLS, BSAS, OHE, OLRH, OPEM, OPH
 - **Community participants included:**
 - Advocacy groups, hospitals, school districts, community action agencies, tribal health organizations, municipal governments, community development corporations, immigration support centers, and more.
 - **Discussion topics:**
 - What information do you want to know about your community that you can't get somewhere else?
 - How could this data inform your work? (E.g., organizational goals, resource allocation, advocacy)
 - How can we make this survey accessible and comfortable for your community to participate?
 - **Results:**
 - Partner feedback used to inform question development and prioritization for the first draft of the survey.

CHES 2023 ENGAGEMENT STRATEGIES



DPH Advisory Groups

- Convened advisory groups of subject matter experts from across the various DPH Bureaus and Offices to provide content knowledge and survey guidance.

• Purpose:

- To establish a channel to seek input on survey content from subject matter experts at DPH.

• Structure:

- 8 total advisory groups focused on CHES survey topics:
 - Healthcare Access
 - Experiences with COVID-19
 - Basic Needs
 - Mental Health
 - Neighborhood & Built Environment
 - Employment
 - Education
 - Safety & Social Context

• Results:

- Input used to prioritize topics and survey constructs for inclusion on survey.
- Advisory group members reviewed & provided feedback on survey questions and response options.
- Members pilot tested survey and provided feedback on length, usability, and wording.

CHES 2023 ENGAGEMENT STRATEGIES



Community Engagement Advisory Council (CEAC)

- Established to build relationships and establish a channel for bidirectional collaboration with community partners. The CEAC was tasked with piloting the survey and providing feedback.
-
- **Structure:**
 - ~35 members attended five 1.5-hour meetings from April to November 2023 and reviewed survey materials outside of meetings (compensation provided).
 - Committee members included the below partners from across MA:
 - Community action agencies
 - Tribal health providers
 - Community development corporations
 - Immigration support providers
 - Health service providers
 - **Results:**
 - Feedback and direction on survey content was incorporated into CHES to the maximum extent possible.
 - Suggestions ensured that wording was appropriate and accessible to community members.
 - Co-created strategies for recruitment of residents in communities of focus.

CHES 2023 RECRUITMENT STRATEGIES



Survey Promotion and Outreach Strategies Included:



Trusted Community Partner Outreach

- Over 200 partners mobilized their networks to promote the survey
- Strategies including social media, radio, newsletters, and in-person outreach



Flexible Community Mini-grants

Community partners received funds to support direct survey outreach, including:

- Staff time for recruitment/survey administration
- Stipends to survey respondents



Survey Promotion Toolkits

- Flyers, emails, social media posts, templates, & virtual backgrounds were prepared and piloted with partners
- Available in 11 languages



Paid & Earned Media

- DPH's press release led to coverage within local and statewide news organizations
- Paid media included local newspapers, radio, digital ad buys, and TikTok videos

CHES 2023 RECRUITMENT STRATEGIES



Examples of Partner Survey Outreach Activities

Social media post from **Philippine-American Mainstream Advocacy for Nonpartisan Associations**

The Massachusetts Department of Public Health is seeking feedback from the Filipino community of MA to address health inequities.

[LEARN ABOUT THE INITIATIVE!](#)

Custom flier created by **Ohketeau**



Social media post from **PureSpark**



Survey event hosted by **Black Autism Coalition**



Survey event hosted by **Dominican Development Center**



CHES 2023 RECRUITMENT STRATEGIES



Survey Promotion Toolkits Available to Help Partners Promote CHES 2023

Survey Promotion Toolkits

Available in 11 languages

- Flyers & Posters
- Key Talking Points
- Social Media Content
- Email Templates
- Virtual Meeting Backgrounds

Email Templates for Survey Promotion

Email Templates for Survey Promotion

Use the below email template to get the Doc out about the survey! These templates include language to use in emails to potential survey takers and language to use in emails to partner organizations to encourage participation in survey distribution and outreach.

[Download the Survey Taker Email template \(English\)](#)

[Download Partner Outreach Email template \(English\)](#)



Community Health Equity Survey Promotion Toolkits

Access the Community Health Equity Survey in multiple languages

Use the free promotional toolkit resources to help promote the Community Health Equity Survey. The promotional toolkit resources on this page include flyers, key messaging, social media content, and more. All resources are available in 11 languages.

What would you like to know

Community Health Equity Survey Promotion Toolkit (English) →

Community Health Equity Survey Promotion Toolkit (Haitian Creole) →

Community Health Equity Survey Promotion Toolkit (Arabic) →

Community Health Equity Survey Promotion Toolkit (Russian) →

Community Health Equity Survey Promotion Toolkit (Spanish) →

Community Health Equity Survey Promotion Toolkit (Simplified Chinese) →

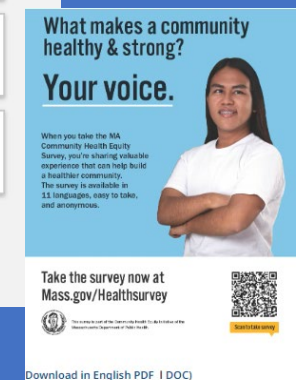
Community Health Equity Survey Promotion Toolkit (Traditional Chinese) →

Community Health Equity Survey Promotion Toolkit (Khmer) →

Community Health Equity Survey Promotion Toolkit (Portuguese) →

Community Health Equity Survey Promotion Toolkit (Cape Verdean Creole) →

Community Health Equity Survey Promotion Toolkit (Vietnamese) →



[Download in English PDF | DOC](#)



[Download in English PDF | DOC](#)



CHES 2023 RECRUITMENT STRATEGIES



Paid and Earned Media Strategies to Promote CHES 2023

[DPH Press Release](#) published at survey launch



Earned Media Coverage from local and statewide news media outlets, including:

- **WGBH:** [Community health survey aimed at addressing inequities in Massachusetts](#)
- **WCVB:** [Massachusetts Department of Public Health circulating Community Health Equity Survey](#)
- **WJAR:** [Massachusetts Department of Public Health launches survey to improve community health](#)
- **Boston Herald:** [Massachusetts Department of Public Health wants residents to fill out survey 'to improve the health of people'](#)
- **El Planeta:** [Una encuesta que ayudará a mejorar la salud de las personas en Massachusetts ya está disponible](#)
- **Western Mass News:** [Mass DPH seeking input on community health challenges](#)
- **Charleston Patriot Bridge:** [Department of Public Health Launches Statewide Survey To Improve Community Health](#)



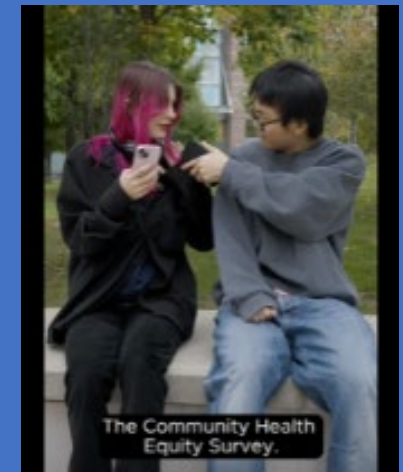
Paid Media Strategies

Ad Buys in Local Newspapers



Ad in El Mundo
Boston newspaper

TikTok Video Ads



TikTok videos created
by youth from
Artists from Humanity

CHES 2023 SAMPLE GOAL DEVELOPMENT



Sample goals were developed for each Community of Focus to:

- Promote representation from communities often underrepresented in public health data
- Ensure adequate power for granular and intersectional analyses
- Inform survey dissemination and recruitment strategies

Community of Focus sample goals included the following **Respondent Characteristics**:

- | | | |
|-------------------------|----------------------|--------------------------|
| • Age | • Parenthood | • Transgender experience |
| • Race/ethnicity | • Immigration | • Preferred language |
| • Disability | • Sexual orientation | • Geography |
| • Pregnancy/post-partum | • Gender | • Veteran status |

Criteria used to establish sample goals included:

- Estimated effect sizes for key CHES outcomes and predictors
- DPH Confidentiality Procedures' reporting and confidentiality guidelines
- MA population estimates (American Community Survey 2022)

CHES 2023 SAMPLE GOALS & FINAL SAMPLE



	Community of Focus	Sample Goal	CHES 2023 Sample
Overall	Total Sample	12000	18276
	Youth (14-17)	2000	2070
Age	Young Adults (18-24)	2000	1163
	Older Adults (60+)	2500	5799
Race/Ethnicity	American Indian / Alaska Native	300	397
	Asian & Pacific Islander	1200	1210
	Black	1200	1607
	Hispanic / Latine-o-a	1200	1970
	Middle Eastern North African	400	173
People with Disability	Youth (14-17)	300	461
	Blind / Vision Impairment	200	443
	Cognitive Disability	300	1614
	Deaf / Hard of Hearing	300	725
	Mental Health Disability	^	954
	Mobility Disability	300	1113
	Self-Care/Independent Living Disability	300	939
	Intellectual/Learning Disability	300	396

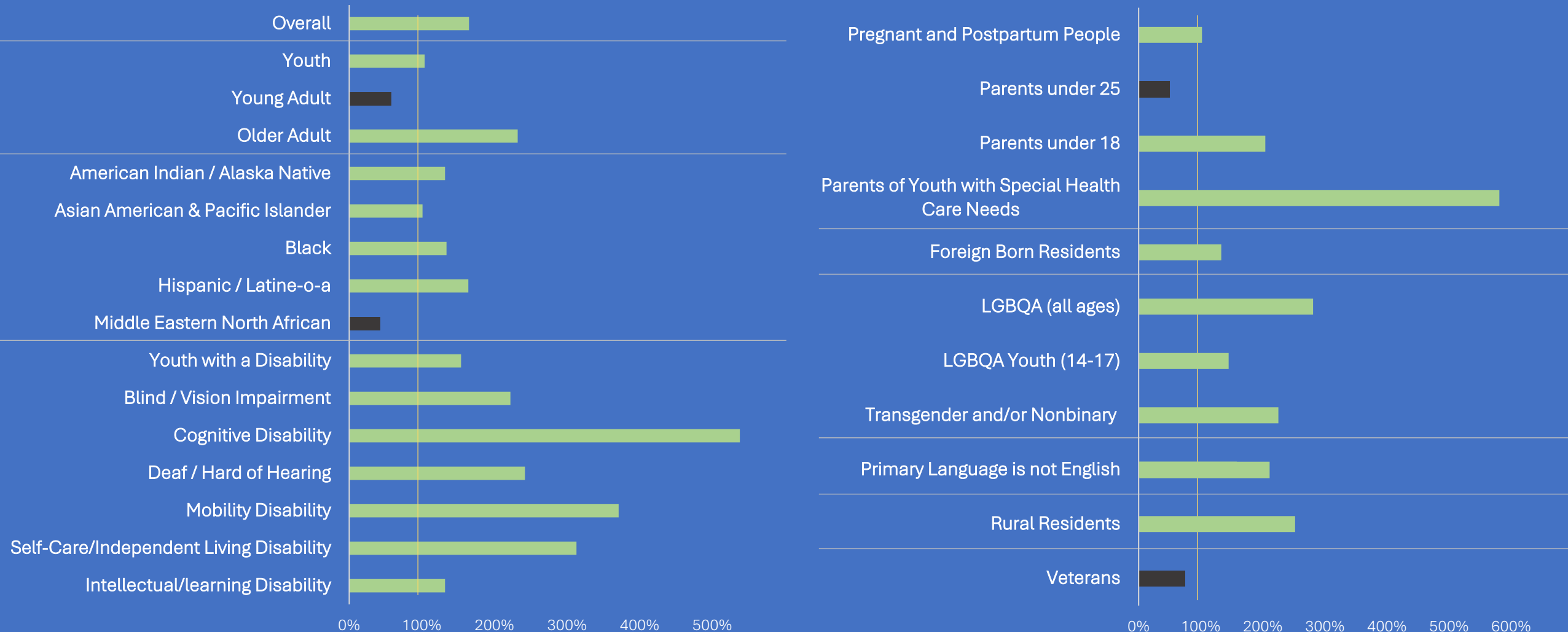
^ No sample goal set

	Community of Focus	Sample Goal	CHES 2023 Sample
Parents and Pregnant People	Pregnant and Postpartum	300	307
	Parents under 25	300	149
	Parents/Caregivers of Youth with Special Health Care Needs	300	1744
Immigrants	Foreign-born	2100	2794
LGBTQA+	All Ages	1000	2962
	Youth (14-17)	300	436
	Transgender and/or Nonbinary	300	676
Preferred Language is not English	Adult (25+)	800	1849
	Youth & Young Adult (14-24)	400	700
Rural Residents	All Ages	1200	3023
Veterans	Civilian Veterans	600	452

CHES 2023 SAMPLE GOAL RESULTS



Percent of Sample Goals Reached by Community of Focus:



CHES 2023 SAMPLE GOAL ACHIEVEMENTS



CHES engagement & dissemination strategies were effective in reaching nearly all CHES sample goals.



Overall Participation exceeded CHES 2023 sample goal by **65%**.

Sampling goals were exceeded for nearly all Communities of Focus, including:

- **American Indian/Alaska Native, Asian American & Pacific Islander, Black, and Hispanic/Latine-o-a** groups
 - Overall, **residents of color** represented a greater proportion of participants in CHES 2023 compared to CCIS 2020 (29.7% vs. 18.7%)
- **Youth**, age 14-17 (n=2,070)
- **All people with disability groups**
- **Pregnant and postpartum people** (n= 307)
- **Foreign-born residents** (n=2,800)
- **LGBTQA+ residents** (n=2962)
- **Transgender and/or nonbinary residents** (n=676)
- **Rural residents** (n= 3023)

CHES 2023 EARLY KEY FINDINGS



The following section highlights key findings from early analyses conducted from CHES 2023 data.

Goals for this section:

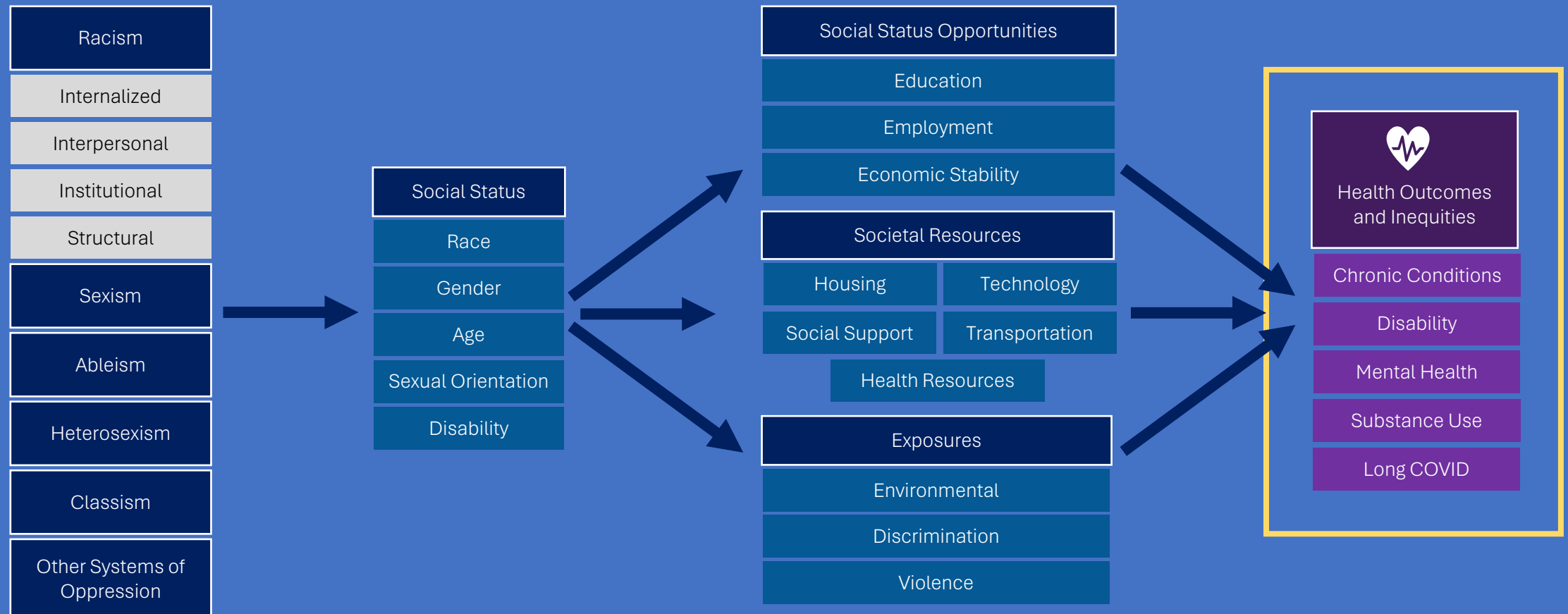
- **Explore Data** across the various **CHES 2023 Topics**.
- **Highlight Inequities** in downstream health outcomes and key drivers of health across the **Communities of Focus**.
- Provide examples of how CHES data will be used to **Support Public Health Action**.
- **Preview Upcoming CHEI Data and Communication Products** to be released in 2024.

Findings in this section are a small subset of those that will be highlighted in upcoming topic and population spotlights. The spotlights will showcase more granular and intersectional analyses from Collaborative Data Analysis sessions conducted with internal and community partners.

CHES 2023 EARLY KEY FINDINGS



Inequities in Health Outcomes and Health Behaviors



HEALTH OUTCOMES AND BEHAVIORS



Mental Health

Psychological Distress¹

Overall, **17.3% of adults** and **26.6% of youth** reported very high psychological distress in the past month.

26.4% of parents of a child/youth with a disability or special health need (CYSHN) reported very high psychological distress in the past month.

Youth with a self-care/independent living disability were **3.6 times as likely** to report very high psychological distress compared to youth without a disability (64.7%* vs. 17.8%).

Suicidal Ideation

Overall, **7.4% of adults** and **14.6% of youth** reported past year suicidal ideation.

Adults with transgender experience were **6.4 times as likely** to report suicidal ideation compared to adults without transgender experience (40.3%* vs 6.3%).

18.5%* of youth living in a rural area (level 2) reported past year suicidal ideation, **1.3 times** the percentage of youth living in urban areas.

1. CHES includes a 5-point version of the Kessler Psychological Distress Scale to measure psychological distress.

*Difference is statistically significant at $p < .05$.

HEALTH OUTCOMES AND BEHAVIORS



COVID-19

Long COVID¹

Overall, **22% of adults** reported ever having Long COVID.

26.2%* of adults living in **rural (level 2) areas** reported ever having Long COVID, compared to 21.1% of adults living in urban areas.

Female respondents were **1.4* times** as likely and **non-binary adult respondents** were **twice as likely** to report ever having Long COVID as compared to male respondents.

21.1% of White adults, 29.6% of Hispanic or Latine-o-a adults, and 36.5% of adults identifying as American Indian/Alaska Native adults reported ever having Long COVID.

COVID-19 Vaccinations

58%* of Black adults and **51.3%* of Hispanic adults** reported receiving a COVID-19 vaccination or booster in the past 12 months compared to 69.8% of White adults.

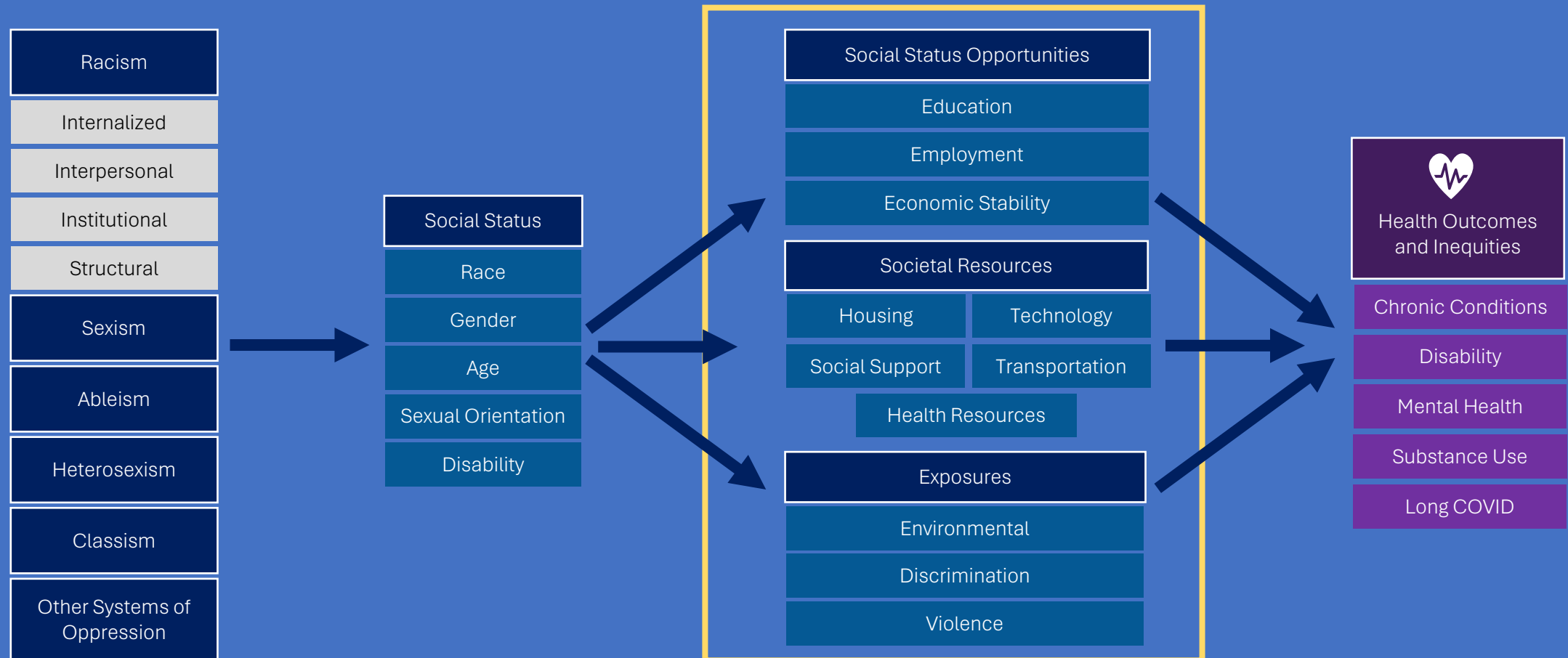
Upcoming data releases will dive deeper into vaccine motivations and barriers and preferred vaccine locations for different communities of focus.

1. The question to capture Long COVID included in CHES 2023 was adapted from the Behavioral Risk Factor Surveillance Survey (BRFSS) and the California Health Interview Survey (CHIS). *Difference is statistically significant at $p < .05$.

CHES 2023 EARLY KEY FINDINGS



Exploring Drivers of Health Inequities



SOCIETAL RESOURCES



Housing

Overall, **19.4% of adults** reported being worried about paying for housing.

Over 1 in 3 adults of transgender experience reported being worried about paying for housing (36.6%*), about twice the rate compared to adults without transgender experience.

Adults who identified as **Hispanic/Latine-o-a** were **twice as likely** to report being worried about paying for housing compared to White adults (33.6%* vs 17.0%).

The upcoming **CHES 2023 Housing Spotlight** will highlight findings from additional housing-related indicators such as current living situation (including those that reported having no steady place to live), reasons for housing instability, and experience of housing problems such as mold, noise, and pests.

*Difference is statistically significant at $p < .05$.

SOCIETAL RESOURCES



Technology Access

Overall, **3% of adults** reported not having internet access and **9.3% of adults** reported having poor internet access.

Adults living in rural areas (rural level 1) were **1.5 times as likely** to report having poor internet access compared to adults living in urban areas (12.3%* vs 8.4%).

Adults 75 and older were **1.7 times as likely** to report not having internet access compared to adults 74 and younger (5.0%* vs. 2.9%).

Youth who prefer to speak a language other than English were **4.0* times as likely** to report having no internet where they live compared to those youth who prefer to speak English.

*Difference is statistically significant at $p < .05$.

SOCIETAL RESOURCES



Transportation

Overall, **7% of adults** reported not being able to get where they need to go safely, comfortably, and easily and **12.6% of adults** reported having trouble paying for transportation related costs.

Adults identifying as American Indian or Alaska Native were **1.5 times as likely** to report trouble paying for transportation related costs compared to White adults (16.8%* vs 11.4%).

Adults with transgender experience were **2.6 times as likely** to report they are not able to get where they need to go safely, comfortably, and easily compared to those without transgender experience (16.9%* vs 6.6%).

*Difference is statistically significant at $p < .05$.

SOCIETAL RESOURCES



Health Care & Access

Unmet Health Care Needs

Overall, **15.2% of adults** reported having an unmet health care need in the past year and **14.8%** reported having trouble paying for health care related costs.

Adults who identify as Middle Eastern or North African were **2.3 times as likely** to report having an unmet health care need in the past year compared to white adults (31.3%* vs. 13.6%).

Youth who prefer to speak a language other than English were **nearly twice as likely** to report an unmet mental health care need (27.3%* vs. 14.9% English).

*Difference is statistically significant at $p < .05$.

MATERNAL & REPRODUCTIVE HEALTH



Mental Health Outcomes

37.3%* of pregnant or postpartum adults reported high or very high psychological distress¹ in the past month compared to 30.9% non-pregnant/postpartum adults.

Pregnant or postpartum adults were **1.3 times as likely** to report feeling usually or always isolated compared to non-pregnant/postpartum adults (16.8%* vs 12.7%).

Maternal & Reproductive Healthcare Access

Overall, **7.7% of adults** reported it would be 'very hard' to schedule and get an appointment for an abortion if they or someone they knew needed one.

Compared to US-born respondents, **adults born in a country other than the U.S** were **4 times as likely** to report that it would be 'very hard' to schedule or get an appointment for an abortion (22.9%* vs. 5.7%).

1 out of 5 pregnant or postpartum adults reported trouble paying for healthcare (21.8%* vs. 15.0% non-pregnant/postpartum adults).

Housing Resources

Pregnant or postpartum adults were **2.2 as likely** to report worry over losing or the lack of steady housing compared to non-pregnant/postpartum adults (20.8%* vs. 9.5%).

52.2%* of pregnant or postpartum adults reported issues with their housing including lead paint/pipes, pests, mold/water leaks, noise, and overcrowding, vs. 36.6% non-pregnant/postpartum adults.

1. CHES includes a 5-point version of the Kessler Psychological Distress Scale to measure psychological distress.

*Difference is statistically significant at $p < .05$.

SOCIAL STATUS OPPORTUNITIES



Education

Youth who identify as **bisexual or pansexual** were **4.8* times as likely** to report educational challenges due to not feeling safe at school in the past year compared to their straight peers.

22.0% of youth born outside of the US reported they benefited from school programs to reduce bullying, violence, or racism, compared to 18.9% of youth born in the US.¹



Employment

Overall, **20.9% of respondents** reported having multiple jobs and **75.3%** reported having paid sick leave at work.

27.8%* of Black respondents reported having multiple jobs compared to 19.7% of White respondents. Among those with **transgender experience**, **27.4%*** reported having multiple jobs compared to 20.6% of respondents without transgender experience.

57.7%* of Hispanic/Latine-o-a respondents reported having paid sick leave at work compared to 78.1% of White respondents. Among those who were born outside of the US, 62.2% reported having paid sick leave at work.

*Difference is statistically significant at $p < .05$. 1. $p = 0.2989$

SOCIAL STATUS OPPORTUNITIES



Economic Stability

Overall, **35.2% of adults** reported having trouble paying for at least one basic need, including housing, transportation, food or groceries, health care, and childcare.

Overall, **16.5% of adults** reported not having enough money at the end of the month.

Among **adults who reported having a mental health disability**, **74.3%** have trouble paying for at least one basic need, **53.6%** reported applying for or receiving economic assistance and **46.5%** reported that they do not have enough money at the end of the month.

48.4%* of American Indian or Alaskan Native adults, **55.9%* of Black adults**, and **55.5%* of Hispanic or Latine-o-a adults** reported having trouble paying for at least one basic need compared to 31.0% of White adults.

*Difference is statistically significant at $p < .05$.

HEALTH-RELATED EXPOSURES



Environmental Exposures

Over two-thirds of adults (67.2%) reported experiencing some form of climate-related impact in the past 5 years, including flooding, extreme temperatures, and being unable to work due to the weather.

76.7%* of adults living in rural areas reported experiencing some form of climate related impact in the past 5 years compared to 65.2% of adults living in urban areas.

Adults who identify as **Middle Eastern or North African** were **1.3 times as likely** to report feeling unwell in the past five years due to poor air quality, heat or allergies compared to White adults (50.2%* vs. 39.8%).

Youth living in rural areas (rural level 2) were **1.2 times** as likely to report feeling unwell in the past five years due to poor air quality, heat, or allergies compared to youth living in urban areas (29.1% vs. 24%)¹.

*Difference is statistically significant at $p < .05$. 1. $p = 0.1525$.

HEALTH-RELATED EXPOSURES



Discrimination

Overall, **18% of adult respondents** and **19.6% of youth respondents** reported experiencing some form of discrimination in the past year.

Black adults were **twice as likely** to report experiencing some form of discrimination in the past year compared to White respondents (30.4%* vs 15.3%). **33.9% of American Indian / Alaska Native respondents** and **31.4% of Middle Eastern or North African adults** reported experiencing some form of discrimination in the past year.

Youth who identify as non-binary were **3.7* times as likely** to report past year discrimination compared to their female peers.

*Difference is statistically significant at $p < .05$.

HEALTH-RELATED EXPOSURES



Violence

Intimate Partner Violence

Overall, **29.7% of adults** reported ever experiencing intimate partner violence (IPV) (**4.5%** in the past year).

Adults who were pregnant or postpartum were **nearly three times as likely** to report IPV in the past year, compared to 4.3% of females overall (12.5% vs 4.3%).

Among **adults who identify as queer**, **53.8%** reported ever experiencing IPV.

Sexual Violence

Overall, **21% of adults** reported ever experiencing sexual violence (**1.4%** in the past year).

Among **adults who identify as queer**, **55.9%** reported ever experiencing sexual violence.

Neighborhood Violence

Overall, **12.5% of adults** reported experiencing neighborhood violence somewhat or very often.

Black adults were **4.1 times as likely** to report experiencing neighborhood violence somewhat or very often as compared to White adults (33.9%* vs. 8.2%).

*Difference is statistically significant at $p < .05$. 1. $p = 0.1525$.

CHES 2023 SUPPORTING DATA & ACTION



- **CHEI Regional Data & Action Providers** are available to provide data & action support to community partner, including providing customized local & regional data and data & action capacity-building support.
 - Current Providers: Metropolitan Area Planning Council, Public Health Institute of Western MA, and Coalition for Healthier Greater Worcester
- CHES 2023 data can be used to support the work of the **Department of Public Health**.
 - CHEI team will work to support programs and initiatives across DPH in using CHES findings and recommendations for policy and practice change.
 - CHEI can be used to inform DPH-wide initiatives and priority areas, including Vaccine Equity Initiative, Advancing Health Equity in Massachusetts, emergency preparedness, climate justice, reproductive health access, and others.

CHES 2023 QUESTIONNAIRE TOPICS

DEMOGRAPHICS	ADULT	YOUTH
Age	X	X
Residence (city/town)	X	X
Education	X	X
Race/ethnicity	X	X
Disability	X	X
Sexual Orientation	X	X
Gender	X	X
Transgender Experience	X	X
Parent/Primary Caregiver	X	X
Parent/Primary Caregiver of Child w/Special Health Care Need	X	X
Caregiver of Adult	X	
Incarceration History	X	
Veteran Status	X	
Preferred Language	X	X
English Proficiency	X	X
Country of Birth	X	X
BASIC NEEDS	ADULT	YOUTH
Difficulty Paying for Basic Needs	X	
Applied for/Received Benefits	X	
Economic Security (<i>including food security</i>)	X	X
Internet Access	X	X
Housing Stability	X	X
NEIGHBORHOOD & BUILT ENVIRONMENT	ADULT	YOUTH
Problems w/Housing	X	X
Neighborhood Accessibility/Transportation	X	X
Neighborhood Violence	X	X
Climate Change Impacts	X	X

SAFETY & SOCIAL CONTEXT	ADULT	YOUTH
Social Support (<i>questions differ for adults/youth</i>)	X	X
Family Responsibilities		X
Intimate Partner Violence	X	X
Household Violence		X
Sexual Violence	X	X
Discrimination	X	X
EMPLOYMENT	ADULT	YOUTH
Employment Status	X	
Past-Year Employment		X
Multiple Jobs	X	
Industry/Occupation	X	X
Employment Change & Reason	X	
Telework status	X	
Paid Sick Leave (<i>access, likelihood of using, reason</i>)	X	
HEALTHCARE ACCESS	ADULT	YOUTH
Health Insurance Type	X	
Usual Source of Health Care	X	X
Chronic Conditions	X	X
Pregnancy Status	X	X
Health Care Type Needed, Accessed or Delayed	X	X
Abortion Access	X	X
Telehealth Use	X	
EDUCATION	ADULT	YOUTH
Homeschool Status		X
Challenges to Learning		X
Support at School		X
Harassment by School Staff		X
Sex Ed/Health Class (<i>participation, class topics</i>)		X

PARENTS	ADULT	YOUTH
# Children/Youth w/Special Health Care Need (CYSHCN)	X	X
Disability & Age of CYSHCN	X	X
Provider & CYSHCN	X	X
Access to Regular Childcare	X	X
Delayed MH care for child	X	X
MENTAL HEALTH	ADULT	YOUTH
Psychological Distress (K-5)	X	X
Social Isolation	X	X
Poor MH Days (Past-Month)	X	
Sad/Hopeless 2 weeks (Past-Year)		X
Suicidal Ideation & Attempt	X	X
SUBSTANCE USE	ADULT	YOUTH
Substance Use by Type	X	X
Substance Use Resource by Type (<i>accessed & preferred</i>)	X	X
Substance Use Resource Setting (<i>preferred</i>)	X	X
COVID-19 EXPERIENCES	ADULT	YOUTH
Past-Year COVID Vaccine (<i>status, motivation, hesitancy</i>)	X	
Preferred COVID Vaccine Location	X	X
Long COVID & Treatment Access	X	
Death of Caregiver or Family Member to COVID		X
INFORMATION SOURCES	ADULT	YOUTH
Usual Information Sources	X	X

2023 CHES ADULT SAMPLE (n=16206)

	Demographics	Freq.	Percent
Age	18-24	1164	7.18
	25-34	2128	13.13
	35-44	2837	17.51
	45-64	5853	36.12
	65-74	2994	18.47
	75+	1230	7.59
Race/ Ethnicity	Am Indian/Alaska Native	346	2.26
	Asian/Pacific Islander, nH/nL	918	5.99
	Black, nH/nL	1027	6.71
	Hispanic or Latine/a/o	1506	9.83
	Middle Eastern/North African	117	0.76
	White, nH/nL	11068	72.28
	Multiracial, nH/nL	228	1.49
	Other, nH/nL	103	0.67
Gender	Man, boy, male	3395	21.24
	Nonbinary	380	2.38
	Woman, girl, female	11611	72.63
	Questioning/undecided	58	.036
	Other	7	0.04
	Don't Understand/Prefer not to answer	536	3.35
Transgender Identity	Of transgender experience	365	2.30
	Not of transgender experience	14680	92.60
	Not sure	115	0.73
	Don't Understand/Prefer not to answer	693	4.37
Survey Lang.	English	15319	94.56
	Other	882	5.44

nH/nL = non-Hispanic/non-Latine;
American Indian/Alaska Native includes respondents who identify as Hispanic/Latine
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

	Demographics	Freq.	Percent
Sexual Orientation	Asexual	332	2.07
	Bisexual/Pansexual	890	5.54
	Gay/Lesbian	714	4.44
	Heterosexual	12224	76.07
	Queer	401	2.50
	Questioning	109	0.68
	Other	20	0.12
	Don't Understand/Prefer not to answer	1379	8.58
Disability Status	Blind/With vision impairment	377	2.40
	Cognitive disability	1327	8.44
	Deaf/Hard of hearing	705	4.48
	Learning/Intellectual disability	323	2.05
	Mental health disability	772	4.91
	Mobility disability	1084	6.89
	Self-care/Independent living disability	811	5.2
	Other disability	1373	8.73
	No disability	11367	72.29
	Prefer not to answer	479	3.05
Economic Stability	Not enough money at end of month	2363	14.65
	Just enough money at end of month	4482	27.79
	Some money left over at end of month	7832	48.56
	Not sure / Prefer not to answer	1453	9.01
Education	Less than HS	809	5.08
	High school or GED	1281	8.05
	Trade /Vocational	490	3.08
	Some college	1624	10.20
	Associates degree	1267	7.96
	Bachelor's degree	4325	27.17
	Graduate degree	5886	36.97
	Other	238	1.49

2023 CHES YOUTH SAMPLE (n=2070)

	Demographics	Freq.	Percent
Age	14-17	2070	100.00
Race/ Ethnicity	Am Indian/Alaska Native	39	1.97
	Asian/Pacific Islander, nH/nL	125	6.31
	Black, nH/nL	191	9.64
	Hispanic or Latine/a/o	406	20.48
	Middle Eastern/North African	44	2.22
	White, nH/nL	1091	55.05
	Multiracial, nH/nL	80	4.04
	Other, nH/nL	6	0.30
Gender	Woman, girl, female	1189	57.86
	Man, boy, male	708	34.45
	Nonbinary	77	3.75
	Questioning/undecided	21	1.02
	Prefer not to answer	54	2.63
Transgender Identity	Of transgender experience	92	4.49
	Not of transgender experience	1823	88.93
	Not sure	48	2.34
	Don't Understand/Prefer not to answer	87	4.24
Sexual Orientation	Asexual	54	2.62
	Bisexual/Pansexual	251	12.17
	Gay/Lesbian	80	3.88
	Heterosexual	1424	69.03
	Queer	40	1.94
	Questioning	47	2.28
	Other	11	0.53
	Don't Understand/Prefer not to answer	156	0.82

	Demographics	Freq.	Percent
Disability Status	Blind/With vision impairment	66	3.37
	Cognitive disability	287	14.66
	Deaf/Hard of hearing	20	1.02
	Learning/Intellectual disability	73	3.73
	Mental health disability	182	9.30
	Mobility disability	29	1.48
	Self-care/Independent living disability	128	6.54
	Other disability	64	3.27
	No disability	1398	71.4
	Prefer not to answer	99	5.06
Food Security	Worried about getting food in past month: Never	1744	84.46
	Worried about getting food in past month: Sometimes	259	12.54
	Worried about getting food in past month: A lot	62	3.00
Education	7 th	6	0.29
	8 th	29	1.40
	9 th	451	21.80
	10 th	589	28.47
	11 th	514	24.84
	12 th	447	21.60
	High School/GED	5	0.24
	Some College	7	0.34
	Dropped Out	6	0.29
	Prefer not to answer	15	0.72
Survey Lang.	English	2027	97.92
	Other	43	2.08

nH/nL = non-Hispanic/non-Latine; American Indian/Alaska Native includes respondents who identify as Hispanic/Latine
 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

2023 CHES TOTAL SAMPLE (N=18276)

	Demographics	Freq.	Percent
Age	14-17	2070	11.33
	18-24	1164	6.37
	25-34	2128	11.64
	35-44	2837	15.52
	45-64	5853	32.03
	65-74	2994	16.38
	75+	1230	6.73
Race/ Ethnicity	Am Indian/Alaska Native	385	2.23
	Asian/Pacific Islander, nH/nL	1043	6.03
	Black, nH/nL	1218	7.04
	Hispanic or Latine/a/o	1912	11.06
	Middle Eastern/North African	161	0.93
	White, nH/nL	12159	70.30
	Multiracial, nH/nL	308	1.78
	Other, nH/nL	109	0.63
Gender	Woman, girl, female	11611	72.63
	Man, boy, male	3395	21.24
	Nonbinary	380	2.38
	Prefer not to answer	442	2.76
	Questioning/undecided	58	.036
	Other	7	0.04
Transgender Identity	Of transgender experience	365	2.30
	Not of transgender experience	14680	92.60
	Not sure	115	0.73
	Don't Understand/Prefer not to answer	693	4.37

	Demographics	Freq.	Percent
Sexual Orientation	Asexual	332	2.07
	Bisexual/Pansexual	890	5.54
	Gay/Lesbian	714	4.44
	Heterosexual	12223	76.06
	Queer	401	2.50
	Questioning	108	0.67
	Other	34	0.21
	Don't Understand/Prefer not to answer	1368	8.51
Disability Status	Blind/With vision impairment	443	2.51
	Cognitive disability	1614	9.13
	Deaf/Hard of hearing	725	4.10
	Learning/Intellectual disability	396	2.24
	Mental health disability	954	5.40
	Mobility disability	1113	6.29
	Self-care/Independent living disability	939	5.31
	Other disability	1437	8.13
	No disability	12765	72.19
	Prefer not to answer	578	3.27
Education	Less than HS	809	5.08
	High school or GED	1281	8.05
	Trade /Vocational	490	3.08
	Some college	1624	10.20
	Associates degree	1267	7.96
	Bachelor's degree	4325	27.17
	Graduate degree	5886	36.97
	Other	238	1.49
Survey Lang.	English	2027	97.92
	Other	43	2.08

nH/nL = non-Hispanic/non-Latinx;
American Indian/Alaska Native includes respondents who identify as Hispanic/Latine
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

CHEI Community Engagement Advisory Committee (CEAC)

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

- [Allston Brighton Health Collaborative Asian Task Force Against Domestic Violence \(ATASK\)](#)
- [Authentic Caribbean Foundation](#)
- [Black Literacy and Arts Collaborative](#)
- [Boston Children's Hospital Office of Community Health](#)
- [Cambodian Mutual Assistance Association](#)
- [Casa Project of Worcester County](#)
- [Health Equity Partnership of North Central Massachusetts \(CHNA 9\)](#)
- [DEAF, Inc.](#)
- [Dignity Alliance Massachusetts](#)
- [Disability Policy Consortium](#)
- [Greater Lawrence Community Action Council](#)
- [Haitian Community Partners](#)
- [Immigrants' Assistance Center](#)
- [Justice 4 Housing](#)
- [Massachusetts Alliance of Portuguese Speakers](#)
- [Massachusetts Councils on Aging](#)
- [Massachusetts Association of Community Development Corporations](#)
- [Multicultural AIDS Coalition](#)
- [New American Association of Massachusetts](#)
- [New England Rural Health Association](#)
- [North American Indian Center of Boston](#)
- [Ohketeau Cultural Center](#)
- [Outer Cape Health Services](#)
- [PureSpark](#)
- [Quaboag Hills Substance Use Alliance](#)
- [Revitalize CDC](#)
- [Somali Parents Advocacy Center for Education](#)
- [Springfield Family Resource Center](#)
- [Springfield Mass in Motion](#)
- [Stavros](#)
- [YMCA of Greater Boston](#)

CHES Survey Dissemination Mini-Grantees

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

- The Arc of Massachusetts
- Authentic Caribbean Foundation Inc.
- Berkshire Area Health Education Center, Inc
- Black Autism Coalition
- Boston Chinatown Neighborhood Center
- Boston Lesbian Gay Urban Foundation
- Brazilian Women's Group
- Breaktime United, Inc.
- Cambiando el mundo de personas con Discapacidades
- Cambodian Mutual Assistance Association of Greater Lowell, Inc.
- The Care Center
- Centro Comunitario de Trabajadores
- Chappaquiddick Tribe of The Wampanoag Indian Nation Corporation
- Chappaquiddick Wampanoag Tribe
- CHD's Big Brothers Big Sisters of Hampshire County
- Chelsea Black Community
- Coalition for a Healthy Greater Worcester
- Community Action Agency of Somerville
- Community Action Pioneer Valley
- Community Economic Development Center
- Developmental Evaluation and Adjustment Facilities, Inc. (DEAF, Inc.)
- Disability Policy Consortium
- Dominican Development Center
- Enlace de Familias de Holyoke/ Holyoke Family Network Inc.
- Fishing Partnership Support Services
- Greater Fall River RE-CREATION
- Haitian Community Partners Foundation
- Health Equity Partnership of North Central MA (CHNA9)
- Health Imperatives
- Herring Pond Wampanoag Tribe
- Hilltown CDC
- Immigrants' Assistance Center
- Islamic Society of Boston
- JAHAN Women and Youth Intercultural, Inc
- Justice For Housing Inc
- La Colaborativa
- Latinas413
- Latino Education Institute
- Latinx In Action
- Lawrence Prospera
- LEO Inc.
- LGBT Asylum Task Force
- Making Opportunity Count
- Mary Lyon Foundation
- Massachusetts Alliance of Portuguese Speakers (MAPS)
- Montague Catholic Social Ministries
- Mystic Valley YMCA
- Native American Lifelines
- New American Association of MA
- Nipmuc Nation Tribal Council
- North Quabbin Community Coalition
- Ohketeau Cultural Center
- Open Sky – Safe Homes Program
- Outer Cape Health Services
- Out at Home - The Home for Little Wanderers
- Out MetroWest
- Out Now
- Partners for Youth with Disabilities
- Pioneer Valley Workers Center
- PureSpark
- Quaboag Valley Community Development Corporation
- Quincy Asian Resources, Inc. (QARI)
- Roca Inc.
- Saheli
- Somali Parents Advocacy Center for Education (SPACE)
- Somerville Public Schools - Somerville Family Learning Collaborative
- Southeast Asian Coalition of Central MA
- Tan Chingfen Graduate School of Nursing at UMass Chan Medical School
- Tapestry Health Systems, Inc.
- The Association of Haitian Women in Boston
- The Care Center
- The Vietnamese American Civic Association
- Uhai for Health Inc
- Vietnamese American Initiative for Development (VietAID)
- Vim Berkshires
- Voices of The Community
- Volunteers in Medicine
- Waltham Partnership for Youth
- Wampanoag Tribe of Gay Head (Aquinnah)
- WestMass ElderCare, Inc.
- We Thrive, Inc.
- Wildflower Alliance (under the umbrella of the Western Mass Training Consortium)
- Youth on Fire
- YWCA Central Massachusetts