Denver Health Community Health Needs Assessment 2023

Prepared by Laura Podewils and Stephanie Phibbs, September 2023

Dear Denver Community,

Since 1860, Denver Health has provided health and healing to the Denver community, consistently identifying and addressing the city's most pressing health needs. When we published our first Community Health Needs Assessment (CHNA) in 2020, we were in the middle of a pandemic and responding to calls for racial justice in the wake of protests related to George Floyd's murder. As a result of the COVID-19 crisis and deeper reckoning with inequality, our society is more aware of how social and political contexts shape health. The work to address these challenges has developed stronger and deeper community connections. We are most proud to see how much we can accomplish when we work together.

With all this shared history, Denver Health is especially grateful for the input we received from community members and local organizations for the 2023 Denver Health CHNA. Through this assessment process, we identified three priorities that we know will resonate with our readers because they address our community needs:

1. Access to care
2. Behavioral health (mental health and substance use)
3. Housing and homelessness

These priorities will guide our Community Benefit Implementation Plan's objectives, projects, metrics and partners. We are grateful for the existing and new partnerships that will be formed to make the difference we are committed to having in these areas. We know we are in this together and appreciate all of your engagement.

Sincerely,

Donna Lynne, DrPH
Chief Executive Officer

Executive Summary

Purpose

As part of the Affordable Care Act (ACA) signed in 2010, non-profit hospitals in the United States are required to conduct Community Health Needs Assessments (CHNA) every three years and then create implementation plans to address prioritized health needs.[1] Because Denver Health and Hospital Authority (Denver Health; DH) is a governmental entity, DH was not subject to this ACA requirement. However, in 2019 Colorado passed House Bill 1320 that aimed to increase community benefit transparency and accountability among Colorado hospitals.[2,3] This legislation expanded the requirements of a CHNA and implementation plan every three years to include Denver Health Medical Center (DH) and the University of Colorado Hospital, in addition to non-profit hospitals. Under this legislation, hospitals are also required to provide annual financial and activity reports and hold an annual public meeting to gain input on implementation plan activities.

In accordance with House Bill 1320, Denver Health produced its first CHNA in 2020 and has been reporting progress on addressing prioritized needs annually. In 2020, three priority areas were identified in DH's CHNA: 1) enhancing behavioral health and substance use services, 2) improving child health and well-being, and 3) enhancing economic opportunity in Denver through DH's Anchor Institution initiative. Since that time, the needs of our communities have been greatly impacted by the COVID-19 pandemic, which has included major shifts in our social structure, increased recognition of the role of structural racism and health disparities, and immense challenges to our mental well-being. This latest 2023 DH CHNA provides an updated portrait of community needs and will be used to organize and focus DH's community benefit efforts for the next three years (2024-2026).

Methods

This CHNA is informed by both opinions and perspectives collected directly from individual community members and individuals who represent various Denver-area constituencies, and secondary data from local, state, and national sources. The internal Denver Health Community Benefit Advisory Council applied the Colorado Health Assessment and Planning System Prioritization Scoring Tool, considering factors of health condition burden, health disparities, organizational priorities, evidence-based strategies for addressing needs, and staff and financial resources, to identify the top three priorities for the current CHNA.

Priority Health Needs

Community members independently identified the several health priorities. After review and scoring by the Denver Health Community Benefit Advisory Council and Approval by the Denver Health and Hospital Authority Board on September 21, 2023, the three priority areas of focus for the current CHNA are:

- Access to Care
- Behavioral Health (Mental Health and Substance Misuse)
- Housing and Homelessness

Next Steps

Over the next six months the Denver Health Community Benefit Advisory Council will work with internal and community stakeholders to develop our Community Benefit Implementation Plan that will address these priority areas, including key metrics for measurement.

Introduction and Background of Denver Health

Denver Health (DH) is a fully integrated academic safety-net health care system serving the city and county of Denver. DH is a Level-1 Trauma Center with a 525-bed hospital. It has 11 community-based Federally-Qualified Health Centers (FQHCs) in neighborhoods throughout Denver, 3 mobile units, 3 urgent care centers, 19 Denver School-Based Health clinics, LGTBQ+ Health Services, and a Center for Addiction Medicine with outpatient behavioral health services and an emergency and residential detoxification facility. In addition, DH provides care for persons in the Denver correctional and jail facilities. DH uses an integrated electronic health record (EHR), Epic, to support performance improvement for patient care as a Learning Health System. In addition, DH manages a health maintenance organization, the 911 medical response system for the City and County of Denver, the Rocky Mountain Poison and Drug Center, and a Public Health Institute.

The DH system is nationally recognized for its model of care delivery to underserved, indigent, and minority patients and for its growth and financial stability despite a patient population with low rates of health insurance. DH serves approximately 33% of Denver's adult and child residents and has a patient population that is approximately 50% Latino, 15% African American, and 30% white. In 2022 the system saw over 200,000 individuals in over 930,000 outpatient visits and 40,000 inpatient admissions. The payor mix in 2022 included 49.2% Medicaid, 20% Medicare, 7% Charity Care, 4% self-pay, and the remaining 19.8% from the Denver Health Medical Plan or private payor. 21% of Denver Health patients are uninsured compared to just 10% for other Colorado hospitals. DH has provided a total of $466 million dollars in uncompensated care between 2017-2022.

DH's integrated system provides opportunities to influence community well-being coupled with community engagement, a core organizational competency as a Learning Health System. DH's commitment to community well-being is reinforced by its role as an Anchor Institution. This emerging identity is exemplified by partnership with community agencies and patients to address social determinants of health. As an Anchor Institution, DH works with a broad range of community partners: Denver Public Schools (DPS), Denver Housing Authority, Colorado Coalition for the Homeless, Mental Health Center of Denver, neighborhood associations, social service agencies, and community-based organizations that serve vulnerable populations. As a major area employer in Denver County: 40% of the full-time DH workforce is from racial/ethnic minority communities.

DH Integrated System Components

EMERGENCY RESPONSE	TRAUMA CARE	INPATIENT CARE	OUTPATIENT CARE	RESEARCH & EDUCATION	PUBLIC HEALTH	DATA SYSTEMS	COMMUNITY PARTNERS
911 response, ambulance, paramedic detox services	urgent, emergency, trauma care	medical/ surgical, intensive care, behavioral health, addiction services	primary, dental, specialty, behavioral health, addiction, correctional care	learning health system, academic medical center with university partnerships	health promotion, education, advocacy, surveillance, disaster health	Epic EHR, integrated community-health data, distributed data networks, claims data	community advisory panel, community engagement committee of the board of directors

Community Served: City and County of Denver

Population Profile

The current population in the City and County of Denver includes an estimated 711,463 individuals, representing an 18% increase (107,049 individuals) since 2010, and a slight decrease in population size over the past few years.[4]
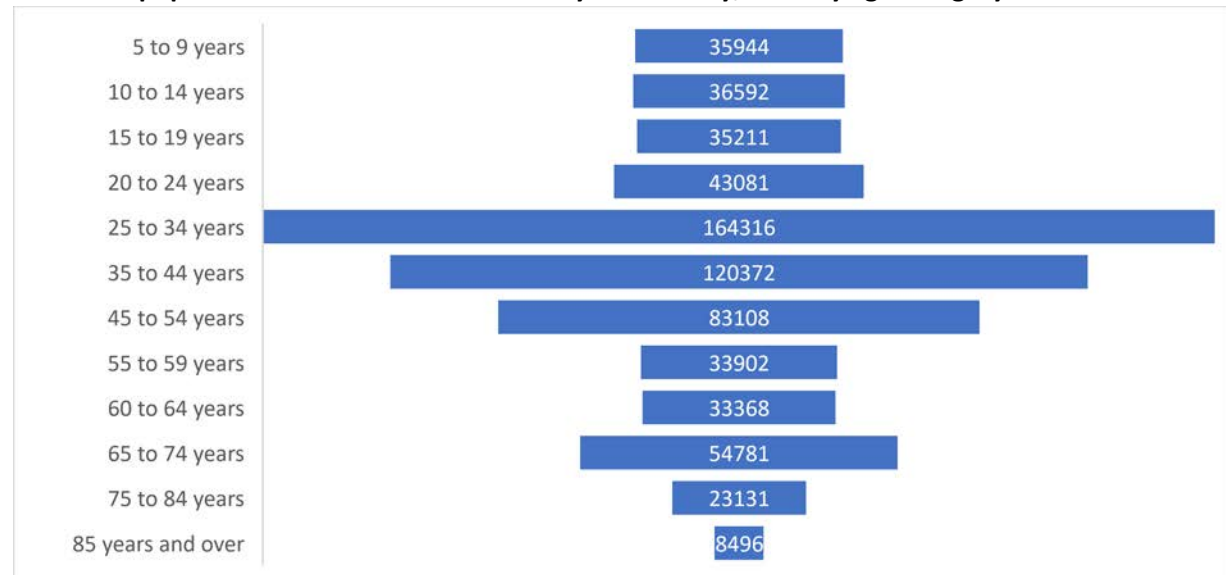
US Census population estimates, City and County of Denver, 2010-2021.
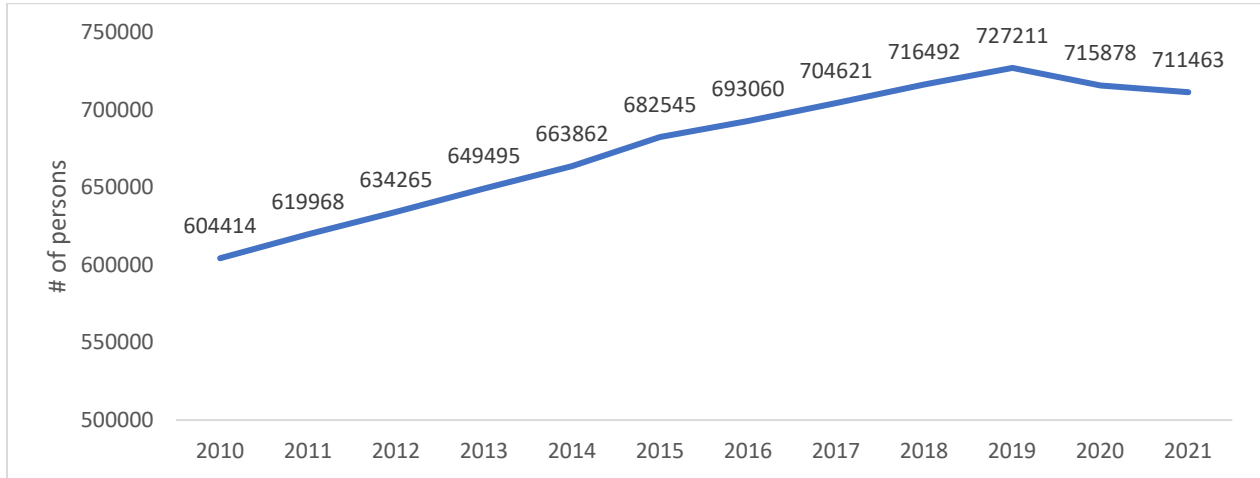
Source: US Census 1- and 5-year estimates for the City and County of Denver. https://data.census.gov/

Individuals aged 25-34 (23.1%) and 35-44 (16.9%) years represent the largest proportions of the Denver population; 11.2% of the population is aged 65 years of age or older, and 20.6% are less than 20 years of age. The population is almost evenly divided between males (50.3%, n=358,282) and females (49.6%, n=353,181). In 2022, 7.6% of the Denver population identified as gay, lesbian, or bisexual.[5]

US Census population estimates for Denver City and County, 2021 by age category.

Source: US Census 2021 1-year population estimates, City and County of Denver. https://data.census.gov/

Race, Ethnicity, Language, and Country of Birth

Denver's population is made up of individuals belonging to a diverse number of racial and ethnic identities: over half of the population identifies as non-Hispanic (NH) White (53.6%; n=381,270), 29%

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identify as Hispanic or Latino (n=206,207), 8.3% identify as Black or African American (n=59,195), and 4.8% (n=34,009) identify as belonging to 2 or more different races. Within the Hispanic and Latino population (n=206,207), 21.9% (n=155,551) identify as Mexican, 0.6% identify as Puerto Rican (n=4,593), 0.3% identify as Cuban (n=2,353), and 6.1% identify as other Hispanic or Latino (n=43,710).

Racial and Ethnic Background of Denver Population, 2021
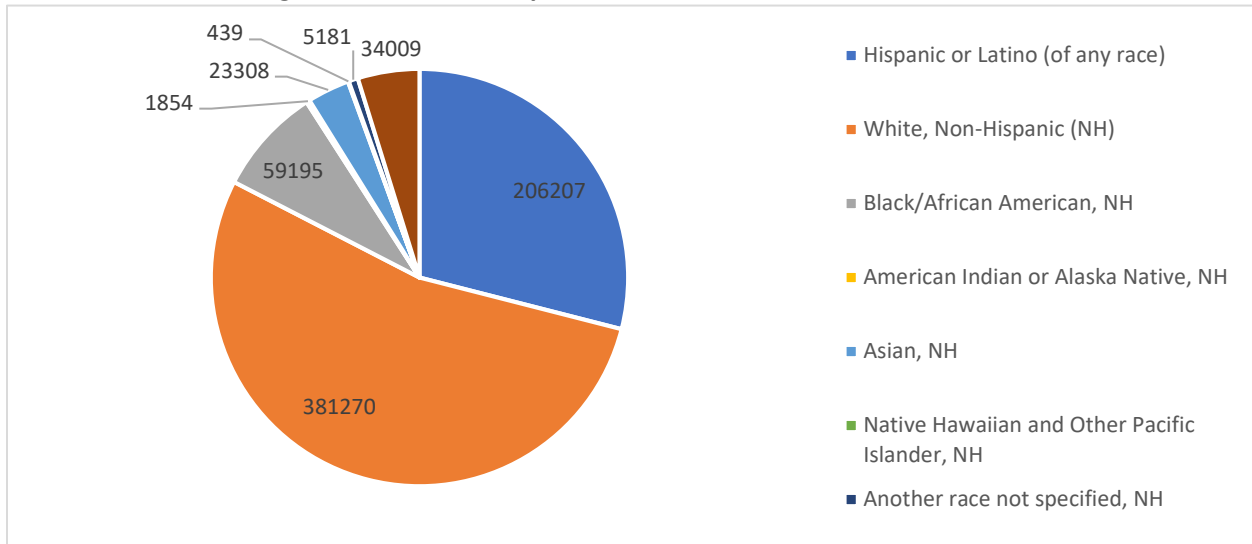
NH=non-Hispanic. Source: US Census 2021 1-year population estimates, City and County of Denver.
https://data.census.gov/

The majority (76.1%) of Denver residents aged 5 and over speak English only (n=511,315). The second most common language spoken is Spanish (n=113,941; 16.9%); an additional 2.8% (n=18,965) speak other Indo-European languages, 1.7% (n=11,355) Asian and Pacific Island languages, and 2.5% (n=16,726) speak other languages.

Primary languages spoken by Denver residents, 2021.
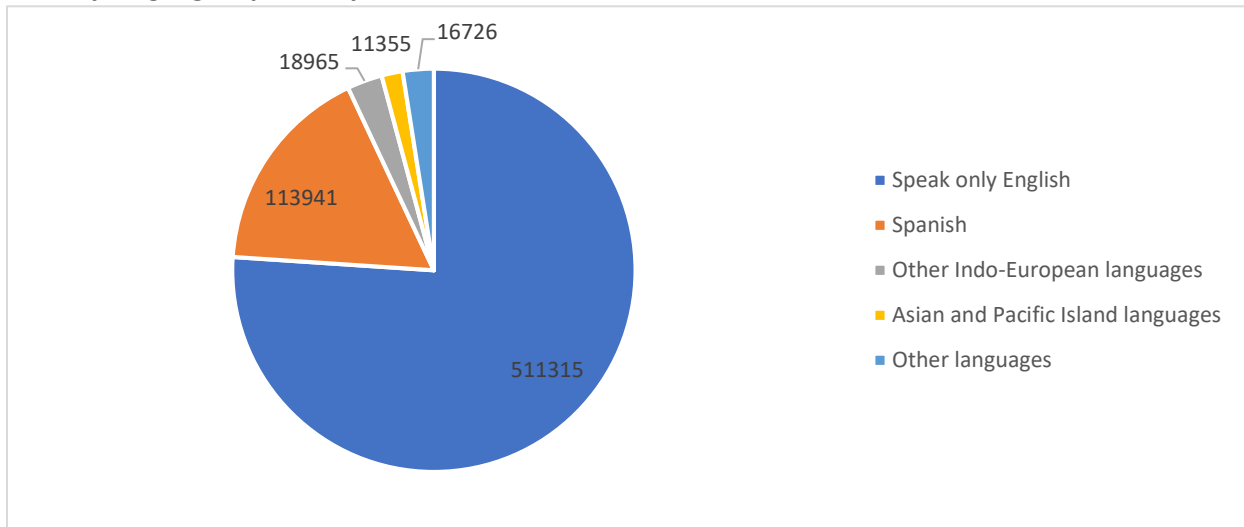
Source: US Census 2021 1-year population estimates, City and County of Denver, Language Spoken at Home.
https://data.census.gov/

Most of Denver residents were born in the United States (85.8%, n=610,343), though over half of US-born Denver residents were born in a state outside of Colorado (53.6%, n=326,900). Of US-born residents in Denver born outside of Colorado, 34.4% (n=112,492) were from the Midwest, 25.1%

(n=82,079) were from the South, 24.0% (n=78,425) were from other Western states, and 16.5% (n=53,904) were from the Northeast. Of the 101,120 Denver residents born outside of the United States, 46,492 (45.9%) were naturalized US citizens, and 54,628 (54.0%) had not yet achieved citizenship. Of the non-US born Denver residents, 54.8% (n=55,433) were from Latin America, 38.2% (n=38.592) were from other countries in North America, 19.3% (n=19.560) were from Asia, 13.0% (n=13,186) were from Africa, 9.8% (n=9,869) were from Europe, and 0.6% (n=620) were from other countries in the Oceania region.

Education, Employment, and Income

Over half (53.5%) of Denver residents aged 25 or older (n=521,474) have at least some college (n=107,392, 20.6%) or a Bachelor's degree (n=171,505, 32.9%). Yet, 9.1% (n=47,535) have less than a high school degree and for 15.3% (n=79,700), a high school degree is the highest level of education. A quarter of Denver residents aged 16 or older (n=592,643) are currently unemployed (25.8% unemployed, n=152,982) and 74.2% (n=439,661) are currently employed either full- or part-time. An estimated 11.6% of Denver residents are living at or below the federal poverty level, slightly higher than the average for Colorado (9.6%) and lower than the national average (12.6%).

CHNA Methods

Primary Data Collection

Primary data collection was also conducted, providing community perspectives on top health concerns in the Denver community. Three different strategies were employed, including a publicly advertised meeting, a survey distributed to hundreds of community contacts and internal advisory board members, and through a facilitated conversation with members attending a monthly Denver Health Community Advisory Meeting (See Appendices A-C for more details). More specifically:

- Denver Health's annual community benefit public meeting was advertised in three newspapers and distributed to nearly 200 community contacts in the community. Participants in that meeting were asked to identify the top health concerns of their community.
- Surveys for community and community organizational leaders and individual community members were distributed to Denver Health community contacts and to two different Denver Health community advisory groups, including Denver Health's Patient, Family and Advisory Committee and the Office of Research Community Advisory Panel.
- A facilitated conversation, based on the above survey, was also conducted within the DH Center for Addiction Medicine Community Advisory Meeting.

Secondary Data Collection

This report aimed to provide detailed sociodemographic and health statistics for the Denver County population. When possible, data for Denver County was presented in comparison to data for the state of Colorado and the United States.

Various national, state, and local resources were leveraged to summarize the most up to date data for key health indicators and domains, including:

- United States Census American Community Survey[4]
- Colorado Department of Public Health and Environment (CDPHE)[5]
- County Health Rankings & Roadmaps[7]
- Centers for Disease Control and Prevention (CDC) PLACES[8]
- Centers for Disease Control and Prevention (CDC)[9]

Identification and Prioritization of Denver Community Health Needs

Identification and prioritization of needs was conducted through a systematic process that considered primary and secondary data, and organizational expertise and review by a dedicated Denver Health Community Benefit Advisory Committee. The DH Committee Benefit Advisory Committee is made up of executive and clinical leaders across the Denver Health system, representing inpatient and ambulatory care, specialty care, government affairs, health equity, quality improvement, and research (Appendix D). The Committee is responsible for determining priority areas and developing a 3-year Community Benefit Implementation Plan and supporting annual reporting. The Implementation Plan will include process and outcome metrics. The Colorado Health Assessment and Planning System Prioritization Scoring Tool[6] was adapted to guide the Denver Health Community Benefit Advisory Committee prioritization of community health needs. The adapted tool involved scoring each health concern area on a scale of 1-3 (1 no, 2 somewhat, 3 yes) for each of the following criteria:

1. **Significance to public health**: whether the issue has a large health impact, and whether the burden in Denver is greater than state or national estimates
2. **Health disparities:** whether disparities exist by racial, ethnic, sexual orientation, gender, or other identities
3. **Evidence-based strategies available to impact the issue:** if there are local evidence-based strategies that have the ability to effectively impact the issue or concern
4. **Community support:** whether there is community support including political will to create change
5. **Capacity to address the issue:** whether the issue is aligned with core service areas or capacity, whether sufficient staff and expertise are available or obtainable
6. **Prior priority**: whether the issue was addressed in the previous Community Benefit Implementation Plan (Behavioral Health, Maternal/Child Health, Economic Opportunity)
7. **Funding:** whether there is sufficient funding or community partnerships to address the issue

Results: Primary Data

A total of 31 community partner members and 36 individual members of the community provided input on identifying the most important health needs in Denver. Community partners included representatives from local and state government, community and service organizations, health and mental health services, advocacy groups, and the education sector. Individual community participants included both DH patients and persons from the larger Denver community and represented geographic areas across metro Denver. Comprehensive data on community forum and survey respondents and results are available in Appendices A-C.

The table below provides a summary of the different health priorities identified by the different primary data collection methods, showing housing, access to care and mental health as most consistently identified across the different data collection methods.

	Public Meeting	Community Survey CBO	Community Survey Individual	Facilitated Survey CAM CAM
Housing	x	x	x	x
Access to care	x	x	x	

Community Connectedness	x	x		
Social support	x			
Mental Health		x	x	x
SUD		x		x
Healthcare Costs/Insurance			x	
Diabetes			x	

The survey and focus group participants were also asked what areas they thought Denver Health could impact and the following rankings resulted (1 = highest and 5 = lowest priory). All groups thought Denver Health could impact access to care, and different groups thought DH could impact each of the different areas to varying degrees.

	Community Survey – CBO	Community Survey - Individual	Facilitated Survey- CAM CAM
Housing			1
Access to care	1	1	2
Community Connectedness	4	2	
Social support			
Mental Health	2		3
SUD	5		
Healthcare Costs/Insurance	3	5	
Diabetes		3	
Adolescent Health		4	

Results: Secondary Data

Summary of 2023 Community Priorities Ascertained through Secondary Data Collection

Data comparing health behaviors and health conditions among residents in Denver County to other counties in Colorado[7] and the United States[7,8] were used to identify areas with greatest opportunity for improvement. Specific metrics that were of greater concern (i.e., greater burden or lower positive health behavior) in Denver compared to other Colorado counties and/or national statistics were identified, and included:

- Access to Care/Health Insurance[7,8]
- Air Pollution[7]
- Diabetes[7]
- Firearm Fatalities, Suicide, Homicides[7]
- Food Insecurity[7]
- Housing Instability/Homelessness[7]
- Low Birthweight Babies[7]
- Mental Health (poor mental health days)[7,8] (depression)[8]
- Preventive Care[8]
- Sexually Transmitted Infections, including HIV prevalence[7]
- Substance Misuse (smoking, drinking)[4,5] (drug overdose deaths)[7]
- Teen Births[7]

Overall Denver County Health Rankings

County Health Rankings for the United States consider health outcomes of longevity and quality of life, health behaviors, clinical care, social and economic factors, and physical environment.[7] In 2022, Denver County ranked 23rd highest in terms of overall health among the 59 counties in Colorado.

Compared to the United States, Denver County residents rate their overall and physical health more favorably but have a higher proportion of residents experiencing >=14 of the previous 30 days where their mental health status was not good.[8]

Prevalence (%) of population reporting unfavorable general, mental, or physical health, United States and Denver County, 2021.
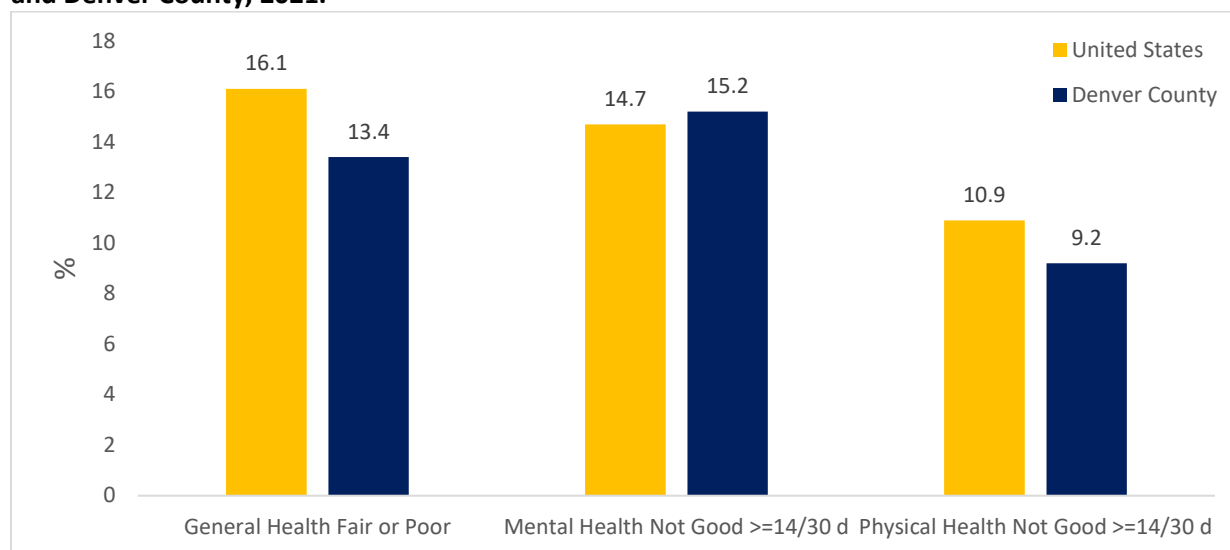
Source: Centers for Disease Control and Prevention (CDC). PLACES: Local Data for Better Health. 2021.
*https://places.cdc.gov/*

Vital Statistics – Births and Deaths

In 2022, there were 5,279 deaths among Denver residents (mortality rate 703.6/100,000 persons), representing 11.3% of all deaths in Colorado.[5] The mortality rate in Denver is higher than the overall state mortality rate (672.7/100,000). There were also 8,042 live births during the same year, representing 12.9% of the births in the state.

Leading Causes of Death

Cardiovascular heart disease (129.9/100,000 persons) and cancer (122.5/100,000 persons) are the top 2 leading causes of death in Denver County, followed by unintentional injuries (60.4/100,000 persons), chronic lower respiratory diseases (40.1/100,000) and cerebrovascular diseases/stroke (33.5/100,000).[2]

**Leading Causes of Death, Denver County, 2022. Numbers represent rates per 100,000 population.**
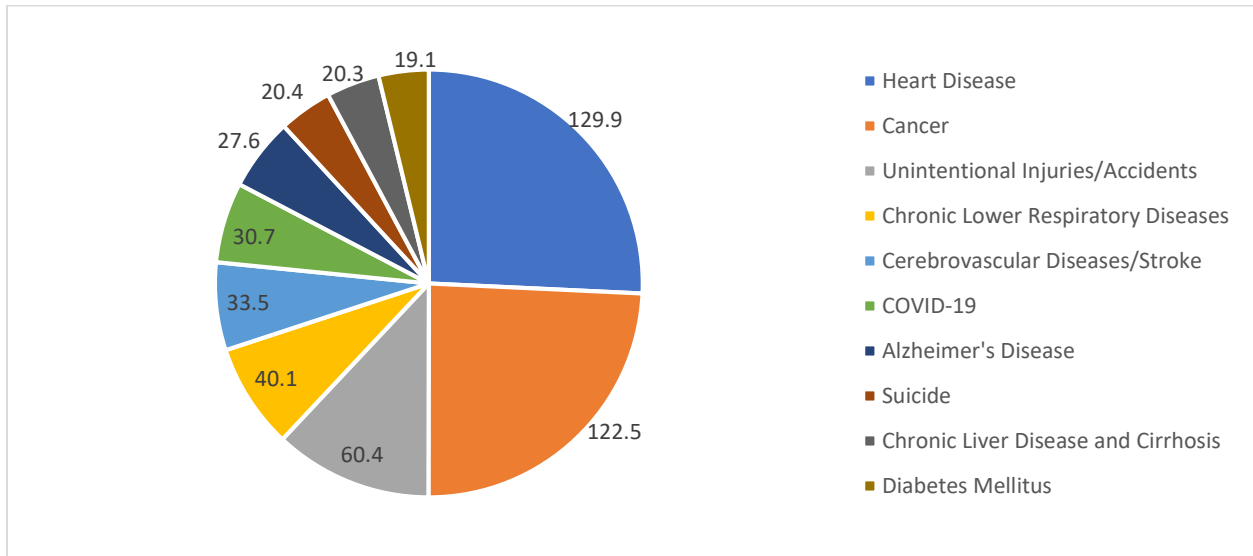
Source: Colorado Public Health and Environment Mortality Data. Denver County, 2022. CoHID | Department of Public Health & Environment (colorado.gov)

Life Expectancy

Overall, Colorado has the 12th longest life expectancy of the United States, estimated at 78.3 years in 2020.[9] Life expectancy in Denver County, Colorado differs by 13 years depending on the neighborhood (range 72.8-85.9).[5] Geographical variability in the historical and current systemic racism, built environment, access to healthy food, air pollution, living conditions, and overall resources all contribute to differences in health status and longevity.

Map of Life Expectancy in Denver County, 2021.
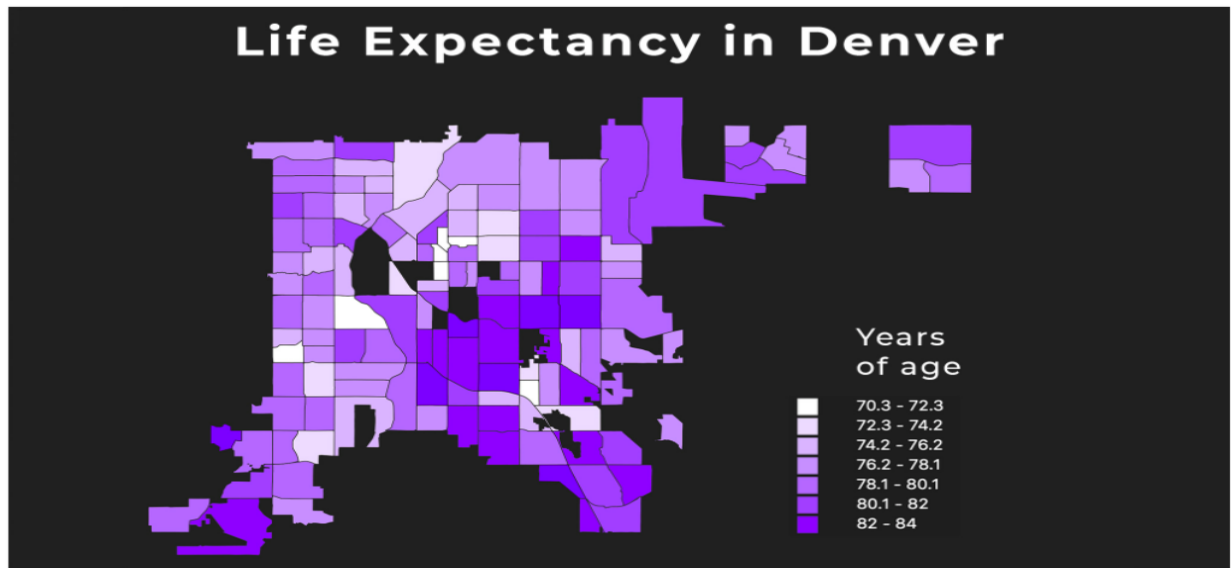
Data Source: Colorado Department of Public Health and Environment

Disability

In addition, an estimated 22.2% of Denver residents have one or more disabilities, which is lower than national estimates across all types of disabilities.[8] Disabilities can include challenges with cognition, hearing, vision, physical mobility, independent living, and self-care.

Proportion of the population >=18 years with a disability, United States and Denver County, 2021
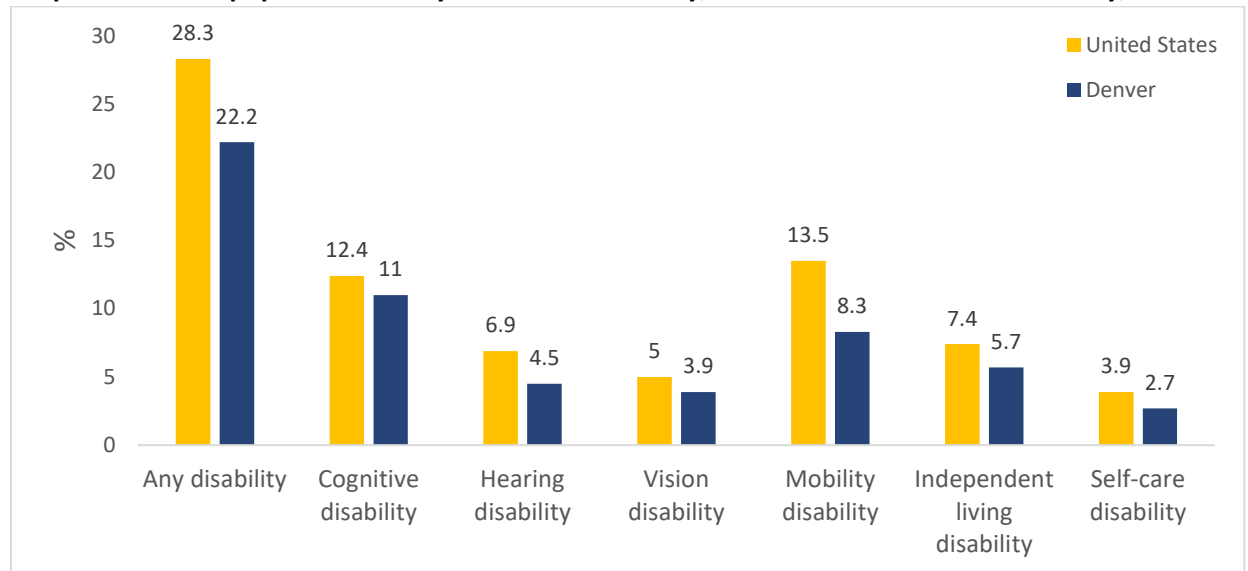
Source: Centers for Disease Control and Prevention (CDC). PLACES: Local Data for Better Health. 2021.
https://places.cdc.gov/

Key Chronic and Mental Health Conditions

Generally, adult Denver residents have less burden of key chronic health conditions than the overall US population, including lower rates of high blood pressure, obesity, diabetes, heart disease, and stroke.[8] However, residents of Denver report higher rates of depression, affecting 21.9% of adults and similar rates of asthma (9.7%) than estimates for the nation.

Prevalence (%) of adults >=18 years of age with key chronic conditions, United States and Denver County, 2021.

Source: CDC. PLACES: Local Data for Better Health. 2021. https://places.cdc.gov/
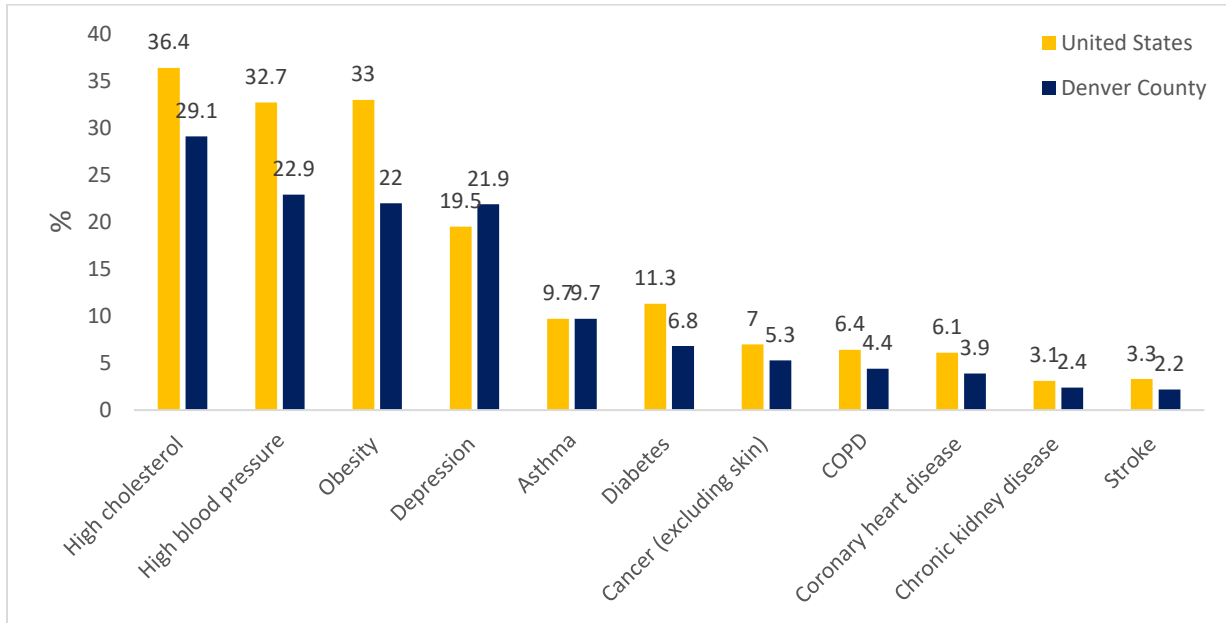
Health Risk Behaviors

Compared to the United States, Denver residents have better sleep health and engage in more physical activity but have similar rates of smoking and a higher rates of binge drinking.[8]

Prevalence (%) of health risk behaviors among adults >=18 years of age, United States and Denver County, 2021.

Source: CDC. PLACES: Local Data for Better Health. 2021. https://places.cdc.gov/
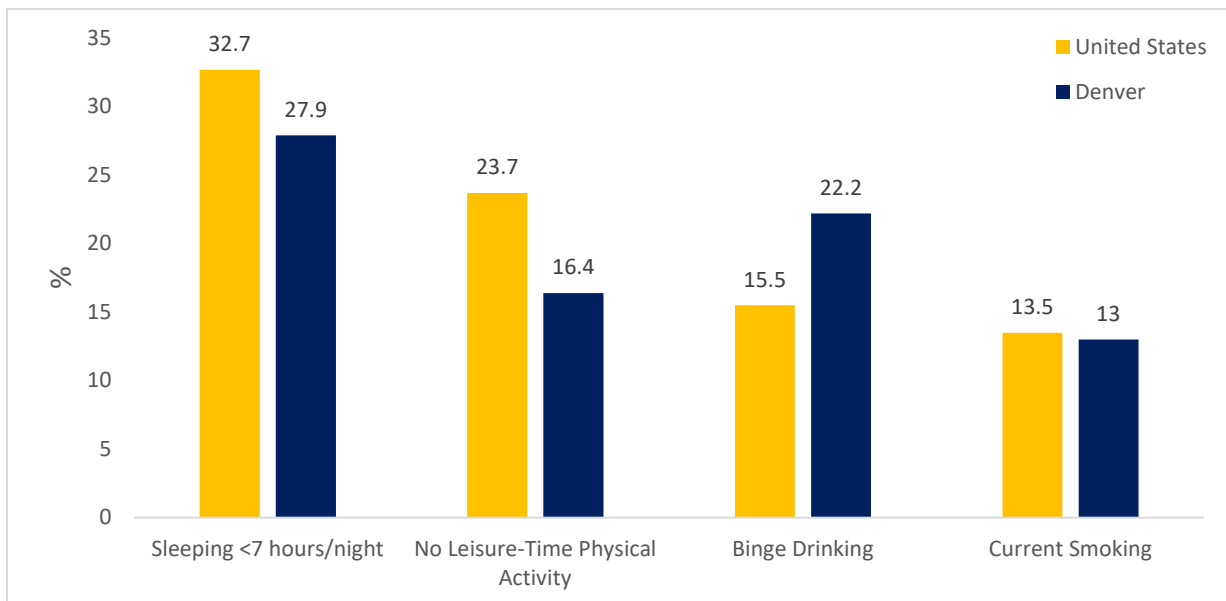
Maternal Health

Estimates of maternal mortality rank Colorado as having one of the lowest rates in the nation, yet there is variability in methodology for obtaining data on maternal deaths across states.[5] The statewide rates however are increasing in recent years, at 54.7 pregnancy-related deaths/100,000 live births for the period 2016-2020, partially attributed to an increase in overall drug overdoses. Colorado is among the top 10 highest states with the greatest proportion of live births with low birthweight in the nation.[9] The top factors impacting pregnancy-related deaths are suicide, drug overdose, and obstetric complications. Teen birth rates have been steadily decreasing nationally for the past 2 decades; however, the most current 7-year average (2014-2020) rate of teen pregnancies in Denver of 25/1,000 teenagers aged 15-19 is higher than both rates in Colorado (16/1,000) and the United States (19/1,000).[7] There is also a higher proportion of live births with low birthweight (<2,500 grams) in Denver (9%; approximately 1 in 11 births) and Colorado (9%) than the average for the United States (8%).[7]

Behavioral Health: Mental Health and Substance Misuse

One of the greatest impacts of the COVID-19 pandemic is the increased burden on mental health and increased use of substances among our communities. From 2019 to 2021, Colorado experienced a large increase in the proportion of individuals who reported their mental health was poor, from 15.3 to 23.7%.[10] In Denver, between 2019 and 2020, the proportion of people reporting >=8 days of poor mental health in the previous 30 days increased from 17% to 26.9%. Colorado ranks among the 5 highest states with a compiled score for overall drug use and addiction, which considers drug use prevalence, law enforcement, drug health issues, and rehabilitation.[11,12] An estimated 20% of Colorado residents use illicit drugs. Drug overdoses are also high in Colorado, with 1,799 lives lost to overdose in the state, and 370 of those in Denver, in 2022.[5] Fortunately, more Denver residents are accessing mental health or substance use services in recent years, increasing from 19.1% in 2019 to 20.9% in 2021. Reasons for not accessing mental health services include discomfort in talking about mental health needs and cost.

Violence and Injury

Injuries are classified into 3 key categories: preventable (accidental), intentional, and undetermined intent. Most injury-related deaths are preventable (72%), but intentional injuries often incur mental and emotional health problems beyond the victim - for family members, friends, and communities.

Poisoning is the leading cause of preventable injury-related deaths in the United States, followed by motor vehicle crashes and falls.[14] In 2020, preventable injuries were responsible for 200,955 deaths in the U.S. In Colorado, the deaths rates for poisoning are 30.4/100,000, for motor vehicle crashes 18.6/100,000, and 18.6/100,000 for falls: these are consistent with rates for the nation.

Intentional injuries include intentional self-harm (suicide), assault (homicide), legal intervention, and operations of war. In 2020, intentional injuries accounted for 71,348 total deaths (26.5% total injury-related deaths) nationally, and suicide was the leading cause (45,979, 64.4%). In 2022, there were 1,987 (22.0/100,000) suicides in Colorado, 155 (21.8/100,000) of which were among Denver residents.[5] Despite increases in mental health needs due to the pandemic, suicide rates have remained consistent in Denver and the state in recent years.

Rates of firearm deaths (unintentional and intentional) in Colorado have been steadily increasing since 2016, and significantly increased between 2020 (n=918 deaths) and 2021 (n=1,059).[5]

Age-adjusted firearm death rates, Colorado 2016-2021.
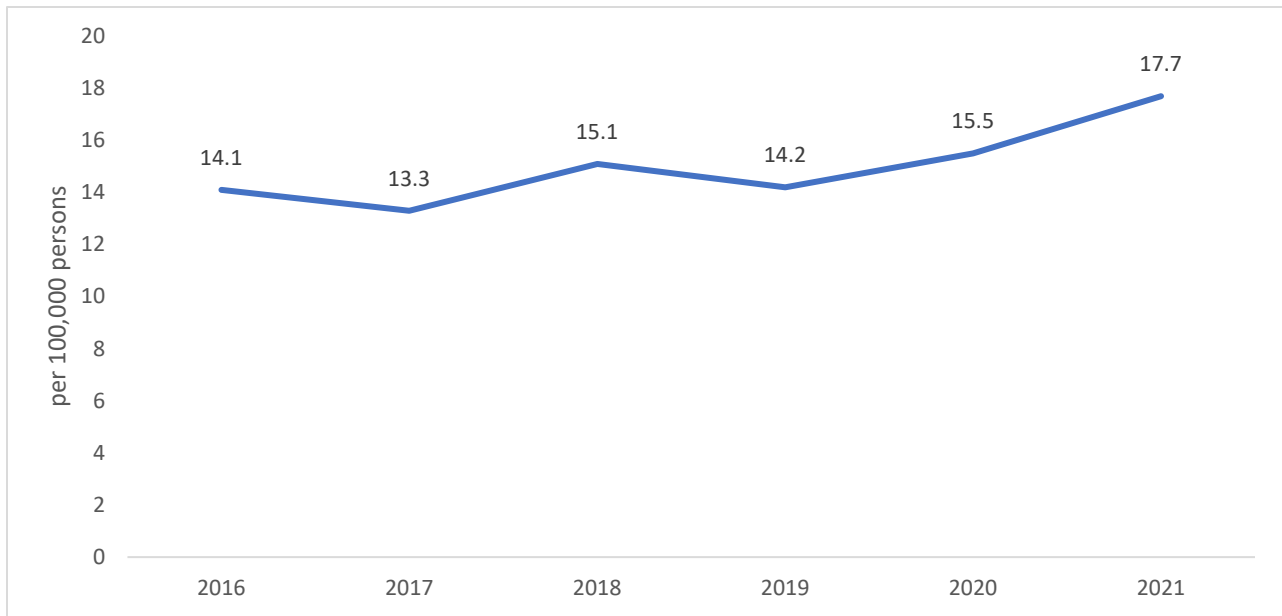
Overall and homicide-related firearm deaths in Colorado were highest for residents 19-24 years of age; persons aged 65 years and older had the highest rates of firearm-associated suicide.[5] Homicide claimed the lives of 414 Colorado residents in 2022; 83 of these were in Denver County.

Age-specific firearm injury mortality rates, Colorado residents, 2020-2021.
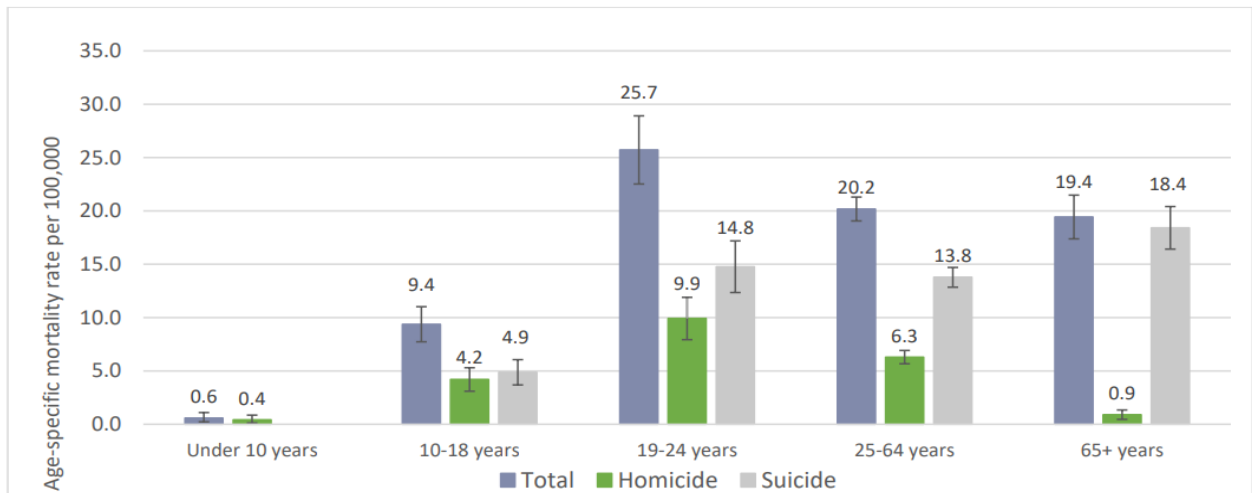
Category is not displayed if based on fewer than three events.
Source: Vital Statistics Program, Colorado Department of Public Health and Environment. Error bars represent the lower and upper limits of the 95% confidence interval of the age-adjusted rate.

Healthcare Insurance and Access

In 2021, an estimated 12.4% of adults 18-64 years of age in Denver were lacking health insurance, similar to estimates for Colorado (12.0%) and higher than the national estimate of 10.8%.[8] Colorado had the second highest state rate of health insurance premium increase in the nation in 2023, creating additional barriers to healthcare access.[15] The number of primary care providers for every one person in Denver (Primary Care Provider Ratio) is 1:730, indicating more availability of providers than the state overall (1:1,200) and nationally (1:1,301).[7] However, only 63.1% of Denver adult residents 18-64 years of age visit a provider for a routine check-up annually, 10.5% lower than national estimates (73.6%).[8] Coloradans that identify as Black, Indigenous, or Persons of Color face disproportionate barriers to care

than persons who identify as White, non-Hispanic, with a greater proportion not able to make a primary care appointment when needed (15-26% higher).[10] Barriers differentially experienced by these populations include transportation, needing to work, and childcare needs. Racial discrimination also plays a role in accessing care: the rate of Black/African American and Hispanic Coloradans cite avoiding healthcare due to unfair treatment is twice that reported by White, non-Hispanic residents (4.4-5.4% vs. 2.3% in 2021). Dentists are more scarce in Denver than state-wide, with a Dental Provider Ratio of 1:1,240 compared to 1:1,180 for Colorado, but higher than ratios for the United States (1:1,380).[7] Approximately two-thirds of Denver residents (64.7%) and Americans (64.8%) visit their dental provider annually.[8] There is a greater concentration of mental health providers in Denver (1:140) than in the state (1:230) and the nation (1:340).[7]

Telehealth

The advent of the COVID-19 pandemic facilitated rapid adoption of telehealth as a mainstream modality for care delivery in the United States. In 2021, over 3.8 million service encounters were provided through telehealth in Colorado (1,263/1,000 persons).[16] Rates of telehealth utilization are higher in Denver County (613,774 healthcare service visits; 1,622/1,000 persons) than across the state. While telehealth holds promise for addressing some of the barriers associated with healthcare access, state and national data illustrate differing telehealth utilization across racial and ethnic groups. Most persons utilizing telehealth services in Colorado identify as White, non-Hispanic (43% of those utilizing telehealth), with only 18% of telehealth utilizers identifying as Hispanic, and 6% identifying as Black/African American. The most common reason for seeking telehealth services across all racial and ethnic groups was mental health.

Preventive Care

In Denver, a lower proportion of adults (>=18 years) had an annual visit with their primary care provider and a similar annual rate of dental visits as the United States average in 2021.[8] However, the proportion of male and female older adult (>=65) residents that are up to date for core preventive care measures (flu shot past year, PPV shot ever, colorectal cancer screening, and mammogram past 2 years (women)) is greater in Denver than national estimates.

Prevalence of adults engaging in care and meeting core prevention guidelines, United States and Denver County, 2021.

Source: CDC. PLACES: Local Data for Better Health. 2021. https://places.cdc.gov/
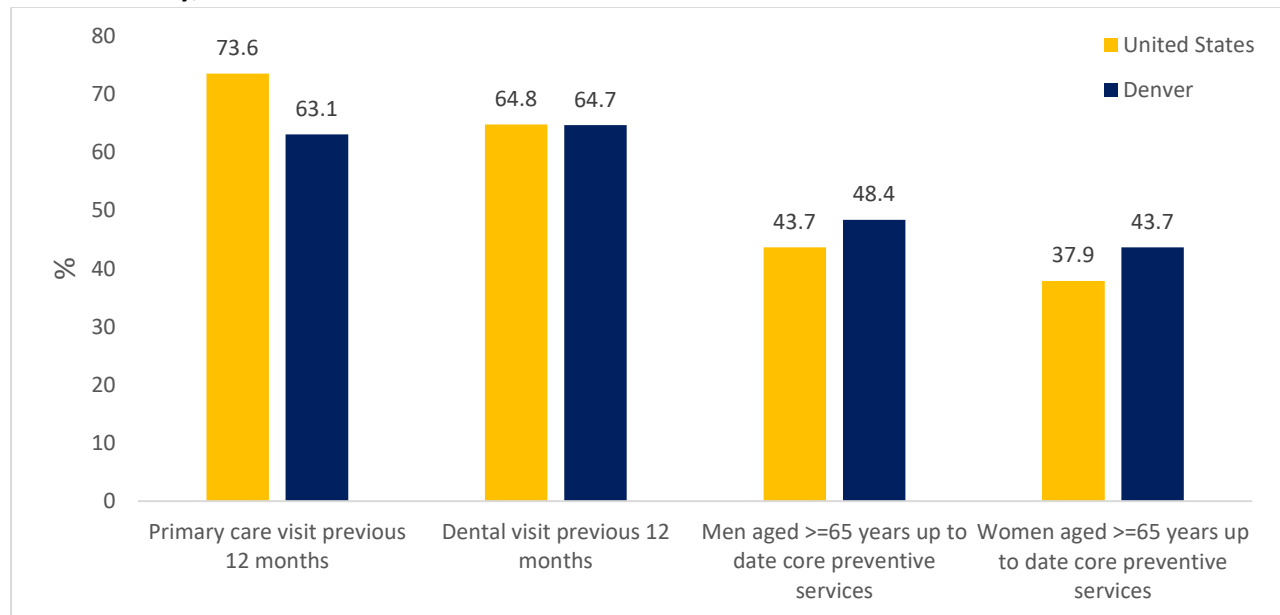
In addition to healthcare insurance, the circumstances in which people live, work, and play, often referred to as social determinants of health, or health-related social needs, impact healthcare access and overall health.

Community Connectiveness/Social Support

The Centers for Disease Control and Prevention (CDC) refers to social connectiveness as a sense of belonging among individuals or groups, and a recognized social determinant of health.[9] There is evidence to support higher levels of social connectiveness on well-being and health outcomes, yet there are currently no standardized approaches to measurement and minimal data on our national, state, and local populations. Limited research has shown promise of strategies including psychological therapy, group exercise programs, peer support, companion communications through telephone or other outreach, yet there remains a need to establish evidence-based approaches.

Homelessness

In 2022, there were an estimated 582,462 (rate 18/10,000) individuals experiencing homelessness in the United States.[17] During the same year, an estimated 10,397 individuals (rate 17.9/10,000) were experiencing homelessness in Colorado, a 5.6% increase since 2020. Between 2006 and 2021, the proportion of Colorado residents experiencing chronic homelessness and relying on shelters grew more than any other state (266%).[17] Two-thirds of persons experiencing homelessness in Colorado are in the 7-county Metro Denver region, estimated at 6,888 individuals in 2022 (12.8% increase compared to 2020).[18] 4,798 of these individuals were in Denver County; 1,308 (27.3%) of whom were unsheltered. Initial estimates for Denver County in 2023 show a continued increase in persons in need, at 5,818 individuals. In Denver County, homelessness disproportionately impacts persons who identify as black, indigenous, and persons of color.

Proportion of Denver County population and persons experiencing homelessness in Denver County, 2021-2022 by race and ethnicity.
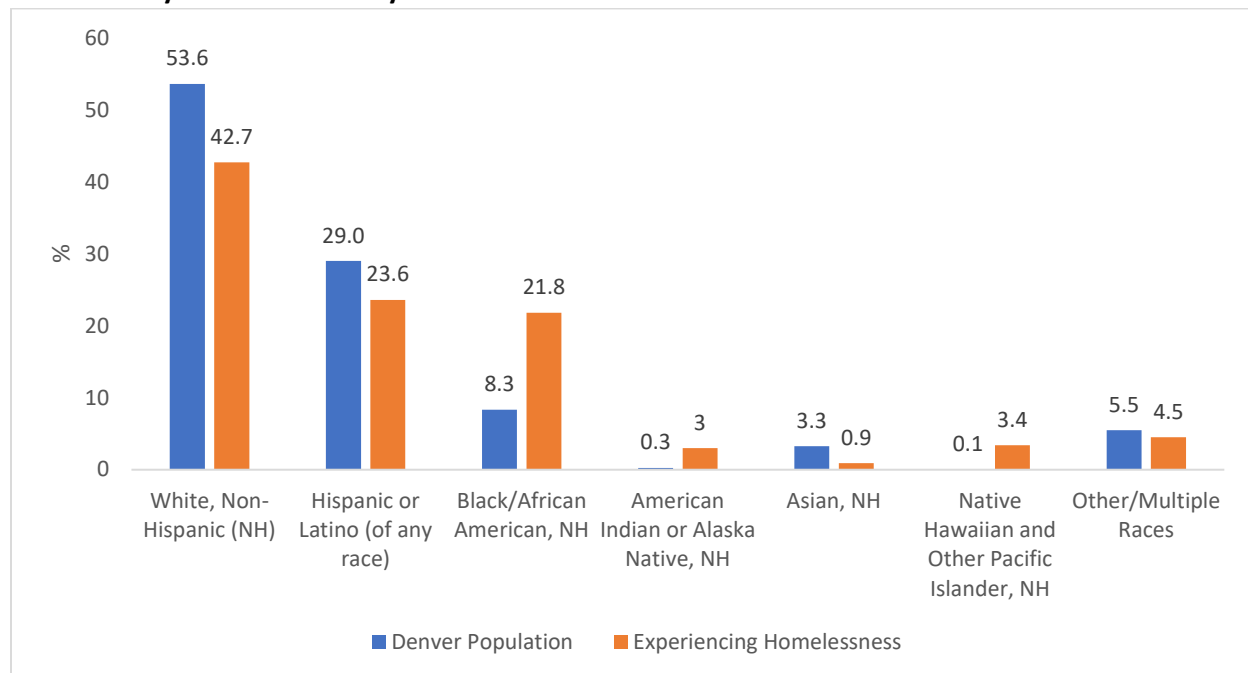
Data are from the 2021 1-year estimates for Denver County and the Point-in-Time estimate conducted in January 2022. Sources: Metro Denver Housing Initiative Point in Time Counts, 2022. http://www.mdhi.org US Census 2021 1-year population estimates, City and County of Denver. https://data.census.gov/

Food Insecurity

Food insecurity is another major barrier for the communities of Colorado and Denver. An estimated 1 in 3 (33%) Coloradans and Denver residents in 2021 were experiencing food insecurity, triple the rate in 2019.[7]

Results: Identified Health Priorities

The following health concerns, based on primary and secondary data, were reviewed by the Denver Health Community Benefit Advisory Committee: access to care, community connectedness/social support, mental health, substance use disorders, health care costs/insurance, and diabetes. Community members thought DH was overall positioned to address all of these needs. After review and scoring by the Denver Health Community Benefit Advisory Council, the three priority areas of focus for the current CHNA and three-year Community Benefit Implementation Plan were identified as:

1. Access to Care
2. Behavioral Health (Mental Health and Substance Misuse)
3. Housing and Homelessness

These focus areas were approved by the Denver Health and Hospital Authority Board on September 21, 2023.

Areas not Addressed

While the Committee did not include issues such as community connectedness/social support as a final priority area, they included discussion around the intersection of community connectedness within the identified priorities, including access and continuity of care, mental health and substance misuse, and housing stability. In addition, the Community Benefit Implementation Plan will include review of current efforts and evidence-based strategies such as peer support in facilitating improved health. Adolescent health was also not included in the final priorities due to the nature of the priority areas including individuals across the lifespan, which includes adolescents. The Committee also recognized diabetes as the only singular disease condition included in topics identified by community members and intends to consider the impact of efforts focused on improving healthcare access and facilitating resources for health-related social needs (including housing stability) on individuals with chronic disease conditions.

Conclusions

The 3 health priorities identified in the current CHNA include:

- Access to Care,
- Behavioral Health (including Mental Health and Substance Misuse), and
- Housing and Homelessness.

These priorities were identified based on input from community partners, individuals in the community, and secondary data; prioritization considered burden, the presence of health disparities, existing evidence-based strategies, and the ability of Denver Health to address the issue. These priorities align with local[19] and state[20] strategic health areas of focus, and the key considerations in addressing priorities including community engagement and equity. These priorities are consistent with existing work, work we have planned, and new ventures with community partners. Working to address these priorities is meaningful work that we trust will improve the health of our Denver community.

Acknowledgements

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Appendices

Appendix A: Denver Health Community Benefit Annual Public Meeting

Appendix B: Denver Health Community Benefit Public Survey

Appendix C: Facilitate Denver Health Community Benefit Public Survey Conversation

Appendix D: Members of the Denver Health Community Benefit Advisory Council

Methods

Denver Health and Hospital Authority held two online forums on June 12, 2023 one each within and outside business hours with both Spanish and American Sign Language simultaneous interpretation offered. These forums were advertised through an e-mail invitation that was sent to 180 community leaders, as well as public notices in the June 2 and 9 editions of Colorado Politics and in the June 2 editions of LaVoz and Westword.

The meeting followed an agenda including review and feedback regarding Community Benefit Implementation Plan Activities in 2022, and recommended Community Benefit priorities for the 2023 CHNA. Feedback was requested verbally and through the zoom chat feature. The questions prompting participant Community Benefit engagement included:

- What feedback do you have for Denver Health regarding their community benefit work?
- We are beginning a new community health needs assessment. What are the top three health concerns in your community?

Results

We recorded the following 12 participants from organizations outside Denver Health. The participants included representatives of health alliances, refugee services, advocacy organizations, and health care.

Name	Organization	Title / Position
Vicente Cardona	Mile High Health Alliance	Executive Director
Mandy Ashley	Aurora Health Alliance	Executive Director
Victoria Nava-Watson	Denver Public Library System	Community Engagement Manager
Alexandra Soto	Spring Institute	Program Manager
Kerin May	Spring Institute	Interpretation Coordinator I
Deborah Ward-White	Families Forward Resource Center	Family Advocate
Gerald O. Caldwell	Families Forward Colorado	Family Advocate
Erin Ostlie-Madden	Center for Health Progress	Member
Gillian Brautigam	Center for Health Progress	Member
Carly Weisenberg	Center for Health Progress	Senior Health Care Organizer

Joe Sammen	Center for Health Progress	Co-Executive Director
Carla Mickelson	Colorado Coalition for the Homeless	Community Health Nurse Manager

Participants in the public meeting were very grateful to Denver Health and noted that we were doing work that supports the community. They stressed the importance of partnership and recommended the following areas for focus:

- Affordable and safe housing
- Community connectedness (including connecting patients to organizations that do grassroots organizing work)
- Social support (especially for patients who have a hospital/jail/street trajectory maybe due to cognitive and memory issues)
- Access to care, including:
    a. Primary care after ED visits
    b. Effective prenatal care for young African American mothers
    c. Higher levels of care for patients who are unable to be successful at nursing homes due to SUD, behavior issues, needing housing and community based services
    d. Substance use disorder services
    e. Care provided outside traditional health care settings
        i. Helping the Black community get proper medical care (e.g., blood pressure checks and diabetes care); using outreach, transportation options, utilizing mobile vans or barber shops
- Fatherhood (recognizing this is very special and that now is time to change what a father is- a great provider, but also a nurturing man- we need to nurture our children).

Appendix B: Denver Health Community Benefit Public Survey

Methods

A brief survey was created to further solicit input from community-based organizations, community members, and patients and members of existing Denver Health Community Advisory Committees to identify community health priorities.

This survey was distributed to contacts including:
- A list of 180 community organization and local government leaders who were invited to the annual DH community benefit presentation, and people they passed the survey to via direct email distribution lists, newsletters, and social media
- The Denver Health Patient and Family Advisory Committee, a committee
- The Denver Health Office of Research Community Advisory Panel

The survey solicited responses to two primary questions with response options based on priorities identified in the Community Benefit Public Meeting and known community health domains.
The primary questions were:
- What are the TOP 3 health concerns in your community?
- What 3 areas do you think Denver Health can most impact?

The survey also included open-ended responses for specification on why the issues selected are important, how Denver Health could best impact the issue or concern, and for suggestions of additional community partners that would be useful in addressing priorities.

Participants were also asked to describe themselves based on various demographic questions and type of organizational affiliation for respondents from community-based organizations.

Results

Participants: Community Based Organizations

Characteristics of Community Partners who Responded to the Community Benefit Public Survey (n=19).

	n (%)
Type of Organization	
Advocacy	1 (5.3)
City/State Government	6 (31.6)
Community Based Organization	6 (31.6)
Education	1 (5.3)
Health-Related Social Needs/Social Services	2 (10.5)
Mental Healthcare	3 (15.8)
Age	
18-24	1 (5.3)
25-34	2 (10.5)
35-44	6 (31.6)
45-54	6 (31.6)
55-64	3 (15.8)
65 or older	1 (5.3)
Gender	
Female	15 (78.9)

|	
Male	3 (15.8)
Non-Binary	1 (5.3)
Ethnicity	
Hispanic, Latino, Spanish, or Mexican	11 (57.9)
Non-Hispanic	6 (31.6)
Prefer Not to Answer	2 (10.5)
Race	
White	9 (47.4)
Black or African American	1 (5.3)
American Indian or Alaska Native	1 (5.3)
Asian	3 (15.8)
Native Hawaiian or Pacific Islander	0 (0.0)
Other/Multiple Races	3 (15.8)
Prefer Not to Answer	1 (5.3)

Participants: Community Members

Characteristics of Individual Community Members who Responded to the Community Benefit Public Survey (n=15).

	n (%)
Age	
18-34	0 (0.0)
35-44	5 (33.3)
45-54	3 (20.0)
>=55	5 (33.3)
Prefer Not to Answer	2 (13.3)
Gender	
Female	9 (60.0)
Male	4 (26.7)
Non-Binary	0 (0.0)
Prefer Not to Answer	2 (13.3)
Ethnicity	
Hispanic, Latino, Spanish, or Mexican	3 (20.0)
Non-Hispanic	9 (60.0)
Prefer Not to Answer	3 (20.0)
Race	
White	7 (46.7)
Black or African American	3 (20.0)
American Indian or Alaska Native	1 (6.7)
Asian	0 (0.0)
Native Hawaiian or Pacific Islander	0 (0.0)
Other/Multiple Races	4 (26.7)
Prefer Not to Answer	0 (0.0)
Zip Code of Residence	
80004	1 (6.7)
80011	1 (6.7)
80014	1 (6.7)
80134	1 (6.7)
80204	1 (6.7)
80205	2 (13.3)

80211	1 (6.7)
80220	1 (6.7)
80223	1 (6.7)
80226	1 (6.7)
80231	1 (6.7)
80239	1 (6.7)
Prefer Not to Answer	2 (13.3)

Top 3 Health Priorities – Community Based Organizations (for the Communities you Serve or Represent)

Counts of Health Priorities Identified by Community Based Organization Respondents (n=19). Each respondent was asked to select 3 priority areas.
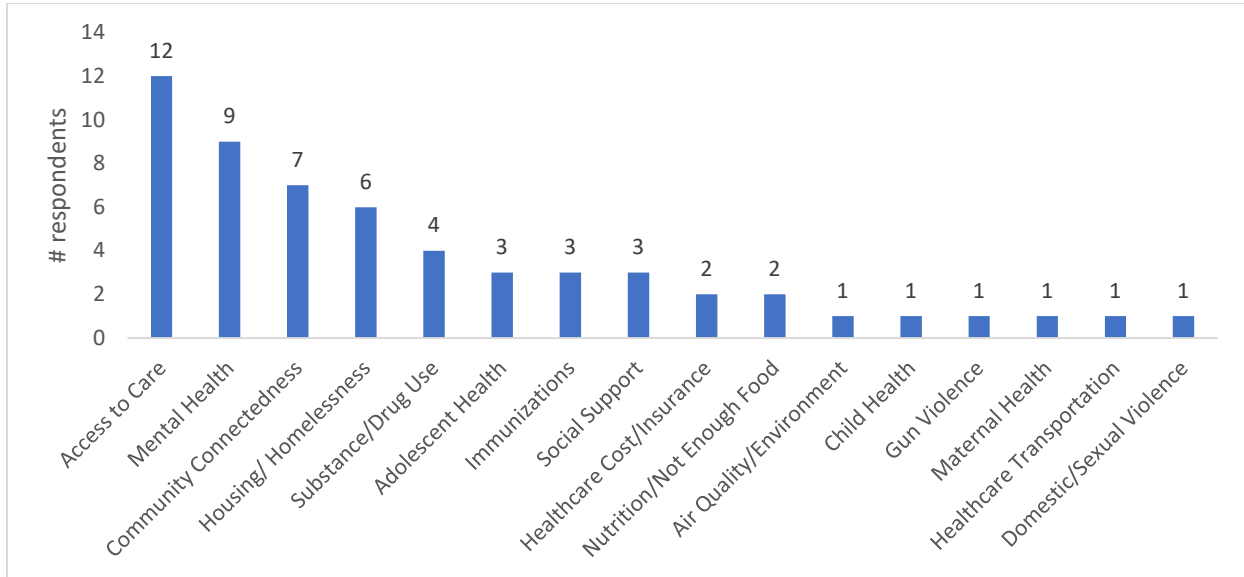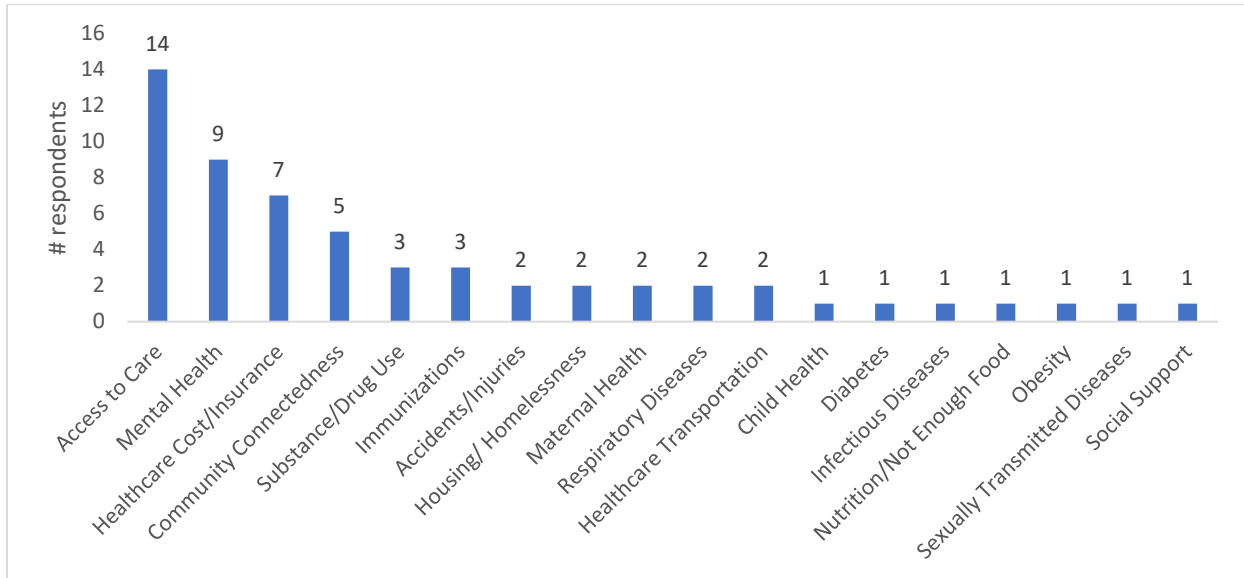

Top 3 Health Priorities – Community Members

Counts of Health Priorities Identified by Community Members (n=15). Each respondent was asked to select 3 priority areas.
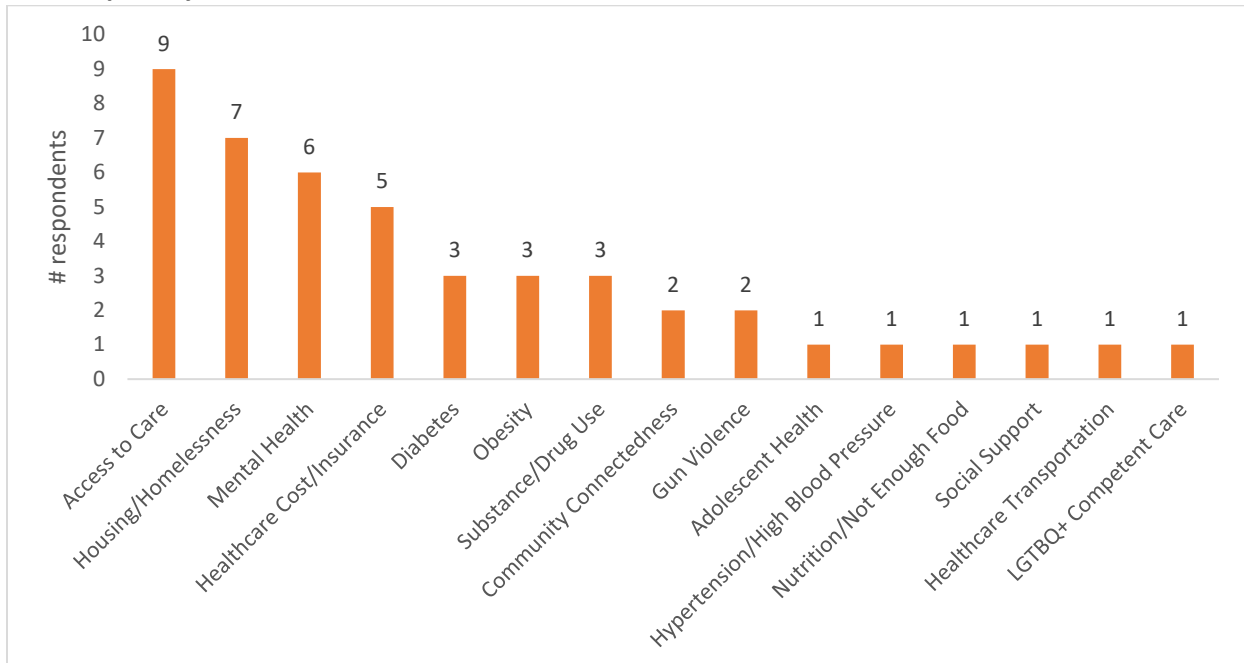
Top 3 Health Topics that Denver Health Could Most Impact – Community Based Organizations (for the Communities you Serve or Represent)

Counts of Health Topics that Denver Health Could Most Impact, Identified by Community Based Organization Respondents (n=19). Each respondent was asked to select 3 health topic areas.

Top 3 Health Topics that Denver Health Could Most Impact – Community Members

Counts of Health Topics that Denver Health Could Most Impact, Identified by Community Member Respondents (n=15). Each respondent was asked to select 3 health topic areas.
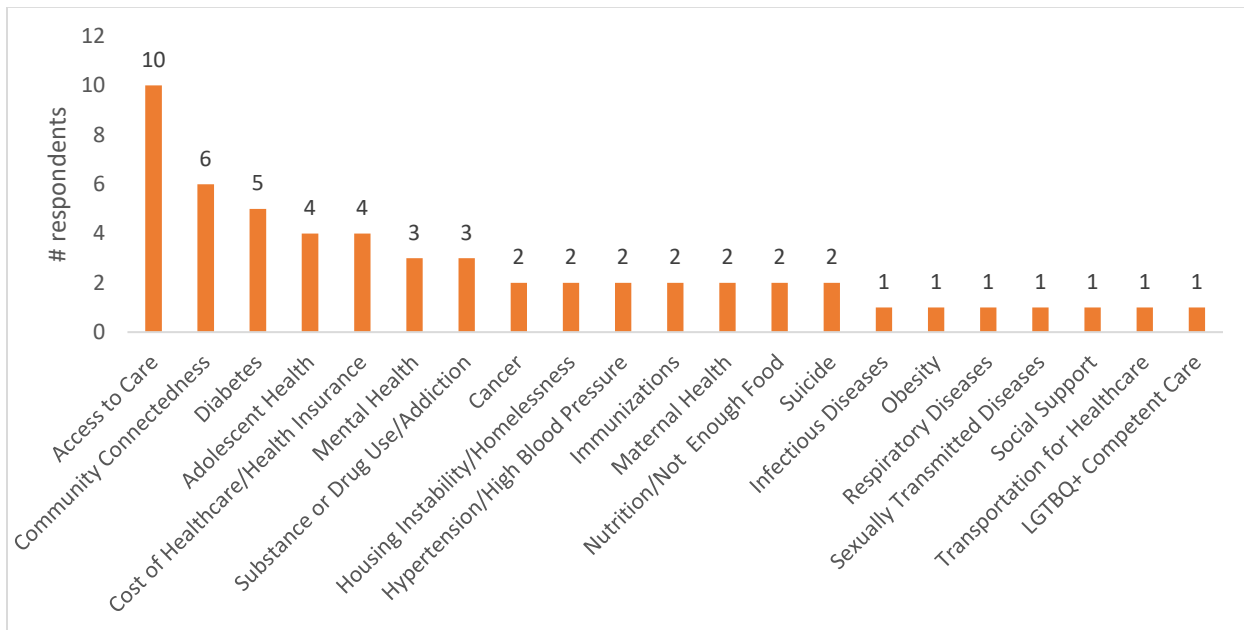
Recommended Organizations for DH to Partner with to Improve Health Priorities

Participants also recommended organizations with which Denver Health could partner to improve community health:

- 9 to 5
- Asian Chamber of Commerce
- Asian Pacific Development Center
- Behavioral Health Administration
- Catholic Charities Colorado
- Center for African American Health
- Chanda Center for Health Advocacy
- City and County of Denver
- Clothes for Kids
- Colorado Access
- Colorado Asian Pacific United
- Colorado Coalition for the Homeless
- Colorado Department of Human Services
- Colorado Health Facilities Authority
- Denver Asian American Pacific Islander Commission
- Denver Colorado Cross-Disability Coalition
- Denver Rescue Mission
- Dress for Success Denver
- El Grupo Vida
- Family Voices
- Food Bank of the Rockies
- Gathering Place
- Health Systems: HealthONE, Intermountain, University of Colorado, Fort Logan
- Healthcare Policy and Finance (HCPF)
- Metro Caring
- Mexican Consulate
- One Colorado
- Salvation Army
- Servicios de La Raza
- Thriving Families
- Village Exchange
- Well Power
- Youth Seen

Appendix C: Facilitated Denver Health Community Benefit Public Survey Conversation

<u>Methods</u>

On August 18, 2023 a focus group was conducted among participants attending the Denver Health Center for Addiction Medicine monthly Community Advisory Meeting to discuss community health priorities. The purpose of this group is to engage patients and other community members with lived experience with substance use and recovery in shaping programs, patient care initiatives, and research related to mental health and substance use care at Denver Health. The monthly meetings are an open roster of individuals who express interest in participation without a requirement for continued engagement; however, many of the participants are regular monthly attendees. The number of attendees monthly ranges from 15-25.

The focus group was guided based on the primary questions of the Community Benefit Public Survey, querying around the top 3 health priorities for the community and the top 3 health concerns that Denver Health could most impact. The discussion provided additional details on reasons for concern and actionable suggestions.

<u>Results</u>

Participants

Characteristics of Individuals who Participated in the Focus Group Discussion of Community Health Priorities During the August 2023 Center for Addiction Medicine Community Advisory Meeting (n=21).

	n (%)
Age	
18-34	2 (13.3)
35-44	2 (13.3)
45-54	10 (66.7)
>=55	6 (40.0)
Prefer Not to Answer	1 (6.7)
Gender	
Female	3 (14.3)
Male	15 (71.4)
Non-Binary	0 (0.0)
Prefer Not to Answer	3 (14.3)
Ethnicity	
Hispanic, Latino, Spanish, or Mexican	5 (23.8)
Non-Hispanic	12 (57.1)
Prefer Not to Answer	4 (19.0)
Race	
White	8 (38.1)
Black or African American	2 (9.5)
American Indian or Alaska Native	2 (9.5)
Asian	1 (6.7)
Native Hawaiian or Pacific Islander	0 (0.0)
Other/Multiple Races	0 (0.0)
Prefer Not to Answer	8 (38.1)

Top 3 Health Priorities – Community Members Attending the CAM Community Advisory Meeting

- **Housing Instability/Homelessness**

- **Mental Health**

- **Substance/Drug Use**

Top 3 Health Areas Denver Health Could Most Impact - Community Members Attending the CAM Community Advisory Meeting

- **Access to Care**

- **Housing Instability/Homelessness**

- **Mental Health**

Name	Title/Position
Brooke Bender, MPH	Administrative Director, Center for Addiction Medicine (CAM)
Ann Boyer MD, MPH	Chief Medical Information Officer
Ray Estacio, MD	Medical Director of Quality Improvement and Research, Ambulatory Care Services
Amy Friedman, MA, CPXP	Chief Experience Officer
Rocio Pereira, MD	Director, Office of Health Equity Chief of Endocrinology
Stephanie Phibbs, PhD, MPH	Associate Scientist, Research
Read Pierce, MD	Chief Quality Officer
Laura Podewils, MS, PhD	Associate Director, Learning Health Systems and Evaluation
Stephanie Syner, MSW	Project Manager II and Community Relations Coordinator
Allyson Wedley, MA	Project Specialist, Center for Equity, Diversity, and Opportunity
Lorena Zimmer	Chief Impact Officer, Center for Equity, Diversity, and Opportunity