AGENDA MATERIAL
DATE 5-11-22 ITEM NO. BH5

MEMORANDUM

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Date: May 13, 2022

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: Jan Lesher
County Administrator

Re: **2021 Community Health Needs Assessment**

Yesterday, during your Budget Hearings, Dr. Terry Cullen referenced the imminent dissemination of the 2021 Community Health Needs Assessment and how that document informs the actions of the Health Department and clinical partners across the region. (Attachment)

The Community Health Needs Assessment process brings together all the local hospitals, federally qualified community health centers, tribal organizations, and a range of community stakeholders. This exercise has occurred periodically since 2010 and is designed to identify community needs and articulate priorities for coordinated regional action through the Community Health Improvement Plan.

The priorities identified by the 2021 CHNA process identified are the following: Mental Health; Substance Use Disorder; Access to Care; and Social Determinants of Health. It is notable that the first three have been consistently articulated in each CHNA since 2015.

The Health Department and its partners will be working with individual and organizational stakeholders across the community to further refine these priority areas to identify evidence-based strategies and approaches to address these complex areas of critical need.

I have asked Dr. Cullen to provide hard copies to each of the Board offices. Additionally in keeping with the regional collaborative approach of this endeavor, I have asked her to share this document with the city and town managers so they can disseminate to elected official in their jurisdictions.

JKL/dym

Attachment

c: Carmine DeBonis, Jr., Deputy County Administrator for Public Works
Francisco García, MD, MPH, Deputy County Administrator & Chief Medical Officer, Health and Community Services
Terry Cullen, MD, MS, Public Health Director, Health Department
Shane Dille, Sahuarita Town Manager
Mary Jacobs, Oro Valley Town Manager
Veronica Moreno, South Tucson Manager
Michael Ortega, City of Tucson Manager
Terry Rozema, Marana Town Manager

2021

PIMA COUNTY

Community Health Needs Assessment

Banner University Medicine

PIMA COUNTY

TMC HEALTH

PREPARED BY THE ARIZONA PREVENTION RESEARCH CENTER

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COUNTY OVERVIEW	Cancer, heart disease and accidents are the leading causes of death among Pima County residents.	13.5% of Pima County residents live in poverty. The percent has steadily decreased since 2012.	10.3% of Pima County residents do not have health insurance. This has steadily decreased since 2008.
	11.2% of Pima County households receive SNAP benefits.	88.4% of the population over 25 has a high school diploma.	17 out of 23 Primary Care Areas are designated as Health Professional Shortage areas. This means that there are not enough primary care, dental or mental health providers for the population.

ASSETS	CHALLENGES
▪ Community resiliency, creativity and social support networks. ▪ 9 out of 10 residents report adequate access to locations for physical activity. ▪ Binge drinking, teen pregnancy rates, uninsured rates and poverty rates are decreasing. ▪ Adult obesity rates have not increased and are better than Arizona and US overall	▪ Lack of culturally or linguistically appropriate services ▪ Drug overdoses are increasing ▪ Social Determinants of health including food insecurity, lack of affordable housing, limited childcare and caregiver options, limited transportation, and poverty.

HEALTH PRIORITIES			
Behavioral and Mental Health	**Substance Use Disorder (SUD)**	**Access to care**	**Social Determinants of Health (SDOH)**
Almost one in eight Pima County residents reported 14 or more days of poor mental health per month. This is exacerbated by the COVID-19 pandemic and lack of mental health providers.	Pima County experienced a significant increase in overdose deaths, especially involving Fentanyl, in recent years. SUD was exacerbated by the COVID-19 pandemic and is intricately connected to mental health.	Access to care is impacted by social determinants of health such as transportation, income, insurance status and lack of culturally and linguistically appropriate care.	The conditions in which people live, learn, work and play can impact a variety of health and wellness outcomes. A focus on SDOH will ensure that the root causes of health issues are addressed.

Report Summary

CHNA Background and Purpose

Welcome to the 2021 Pima County Community Health Needs Assessment, also known as the CHNA. The Patient Protection and Affordable Care Act, requires non-profit hospitals to assess and address the health needs of the community they serve. In addition, the Pima County Health Department is required to undertake a comprehensive community health needs assessment for accreditation, to inform the development of its Community Health Improvement Plan for the County. This report represents an ongoing collaborative effort by non-profit hospitals and the Pima County Health Department to jointly conduct the CHNA. CHNA stakeholders include public health professionals, community health centers, community leaders, emergency responders, health advocates and community members. Together, these stakeholders have harnessed their networks, resources, and expertise to identify and prioritize major health issues confronting the Pima County community. The findings from this report will be used in the Community Health Improvement Plan (CHIP), to address the major health issues facing Pima County through the implementation of shared community goals, strategies, and objectives to improve the public's health.

Our collaborative approach builds on the work of previous CHNA reports to provide an ongoing narrative of health and well-being in Pima County. Throughout the CHNA process, community members, health advocates and healthcare leaders have provided their input not only on the most pressing issues facing the County, but also on the assets and strengths that will help our community to address these issues. As in previous reports, we emphasized the social determinants of health in all aspects of data collection, analysis, and interpretation. The social determinants of health are defined as the conditions in the places where people live, learn, work, and play that affect a wide range of health and quality-of-life risks and outcomes. Highlighting the social determinants of health provides comprehensive information to support the development of policies and programs to promote community health and reduce barriers to care.

In December 2020, Pima County became the first county in the state to declare racism and discrimination a public health crisis. Throughout the CHNA process, we have incorporated data collection methods to contextualize and understand health disparities and how community members experience racism and discrimination. It is essential to have data available to understand disparities and their causes to develop effective policies and programs. This report is being written at a time that is unprecedented in recent history. Since March 2020, the ongoing COVID-19 pandemic has had far-reaching implications for health and wellness across society. The COVID-19 pandemic presented unique challenges and opportunities in the collection, analysis, and interpretation of data for the CHNA, and influenced all aspects of the CHNA process. We have captured some of the most immediate effects in this report, but the full economic, social, education and health impacts of the pandemic will continue to develop for years to come.

Methodology

In the CHNA process, we aggregated data from secondary sources and conducted primary data collection to understand, contextualize and prioritize the health needs of Pima County. This process began with a review of publicly available data sources such as American Community Survey (ACS) and CDC Wonder, combined with data from the Pima County Health Department,

the Arizona Department of Health Services and stakeholder data to describe the demographics, health outcomes and social determinants of health. A full list of secondary data sources can be found in Appendix H. The secondary data collection aligned with the Healthy People 2030 Leading Health Indicators and priority areas were described by demographic and geographic characteristics when available.

Primary data collection included key informant interviews and focus groups with community members. In total, the CHNA team interviewed 37 key informants including health advocates, community leaders and healthcare providers that represent organizations serving a diverse array of Pima County residents. Focus groups were completed with community members representing diverse groups in Pima County. In total, 9 focus groups were completed with 54 community members. The information from the secondary and primary data collection activities was analyzed and shared with community members during the community forums. In total, 3 virtual community forums and 1 in-person gallery walk were completed to share the findings from the primary and secondary data collection. Activities were used to engage community members in discussion to prioritize the most important health issues. In total, 102 community members participated in the community forum activities.

KEY FINDINGS: HOW ARE WE DOING?

According to the County Health Rankings and Roadmaps, Pima County is ranked 6 out of the 15 Arizona counties in terms of overall health. Pima County ranks in the higher middle range of Arizona counties in terms of health outcomes, and in the top 25% of Arizona counties in terms of health factors.

The Good: Assets and Strengths

The 2021 CHNA found that Pima County residents have a holistic view of health that includes social, economic, mental, and spiritual wellness. Community members emphasized that health goes beyond the absence of disease. Their holistic view of a healthy community includes green spaces, access to public transportation, healthy air and environment, the availability and affordability of fresh and healthy foods, living wages, affordable child and elder care, and safe and affordable housing.

CHNA participants emphasized the resiliency and support of the community in Pima County. Pima County has a strong social service sector that increasingly collaborates to overcome new and persistent challenges. Community and family support was a common asset discussed by CHNA participants, who commended the mutual aid organizations and volunteerism that arose in response to the COVID-19 pandemic. Pima County residents also emphasized the ample opportunities and resources for outdoor recreation around Pima County and the increasing infrastructure to support healthy lifestyles and physical activities. Finally, CHNA participants highlighted the thriving cultural and art scene in Pima County, which helps to build community resilience and social connectedness.

These assets and strengths are reflected in the secondary data collected as part of the CHNA. Pima County showed progress or performed better than the state for several metrics related to health and wellness.

- Between 2018-2019, almost nine out of ten (88%) Pima County residents reported having adequate access to locations for physical activity (just slightly lower than 91% of residents in the 90th percentile of all US counties regarding this metric) and in 2017, fewer adults in Pima County reported no leisure-time physical activity compared to Arizona and the US overall.I[1]
- The percentage of uninsured people in Pima County under age 65 has decreased by 35% since 2008 and is lower than the percentage of uninsured people in the U.S. overall[2].
- Just over a quarter of adults in Pima County (26.2%) reported heavy or binge drinking on at least one occasion between 2015-2019, which indicates a 25% decrease from the 2010-2014 cycle. In 2018, 20.5% of adults reported heavy drinking or binge drinking on at least one occasion in the past 30 days. This percentage meets both the Healthy People 2020 and 2030 target.[1,3]
- Teen pregnancies have shown a decreasing trend since 2009 in Pima County overall. In 2019, there were 4.1 pregnancies per 1,000 females ages 10-17 compared to 11.2 in 2009.[4]
- Adult obesity rates (percentage of the adults aged 20 and older that report a body mass index (BMI) greater than or equal to 30 kg/m2) in Pima County remained at 25% from 2014-2018. This rate is less than the Arizona state average (28%) and the US overall (30%).[1]

The Not-so-Good: Challenges and Barriers to Health

CHNA participants identified several challenges that create barriers to health and wellness for Pima County residents. In particular, the lack of appropriate transportation options affects residents' ability to access basic needs as well as health services. The lack of accessibility in the built environment was a concern, particularly for communities with disabilities and seniors. Community members also cited discrimination and a lack of culturally or linguistically appropriate services as a persistent challenge to accessing appropriate and effective care. Community members emphasized that overall health in Pima County is affected by housing insecurity, the increasing lack of affordable housing options, limited childcare and caregiver options, lack of access to affordable healthy foods, and poverty. These challenges inhibit the ability of Pima County residents to meet their basic needs and enjoy a healthy lifestyle.

WHERE DO WE GO FROM HERE: HEALTH PRIORITIES

The 2021 CHNA process identified the following health needs for Pima County:

- Behavioral and Mental Health
- Substance Use Disorder
- Access to Care
- Social Determinants of Health, particularly transportation, poverty, and the built environment

Mental Health

Mental and behavioral health refers to emotions, behaviors and biology related to a person's mental well-being. Behavioral and mental health were consistently cited as important issues throughout the CHNA process. The COVID-19 pandemic increased the severity of loneliness and isolation, decreased access to care and worsened mental health.

- In 2018, 13.6% of Pima County adults reported 14 or more days of poor mental health per month, compared to 12.8% and 13% of Arizona and US adults.[3]
- In 2020, there were 225 suicide deaths among Pima County residents, 61% of which were by firearm. Reported suicide deaths decreased 11% from 2019.[5]
- In 2020, the mental health provider rate (providers per 100,000 population) was 192 in Pima County. Mental health providers include psychiatrists, psychologists, and licensed clinical social workers. This rate has increased in recent years, which reflects a growing number of available mental health providers. The rate in Pima County is higher than the rate for Arizona (140 providers per 100,000 population).[3]

Substance Use Disorder

Substance use disorder (SUD) is the excessive use of alcohol and drugs, including pain medication or illegal drugs. SUD was consistently recognized as a top concern in all phases of primary data collection, and strongly supported by secondary data. SUD worsened during the COVID-19 pandemic and is intricately connected to decreased mental health.

Pima County experienced a significant increase in deaths related to drug use, specifically fentanyl, in recent years. In 2020, there were 446 overdose deaths in Pima County, a 32% increase from 2019. The rate of overdose deaths has doubled since 2011. Fentanyl was the most common drug involved in overdoses, followed by methamphetamines.[5]

Access to Care

Access to care includes access to primary healthcare, specialized healthcare, and mental health services that are acceptable and appropriate to the diverse needs and background of an individual. Access is reduced by social determinants such as transportation or income, but also by insurance status, knowledge of services and structural issues such as discrimination. Participants in all phases of primary data collection consistently referred to access to care as a primary concern.

- 17 of the 23 Primary Care Areas in Pima County are designated Health Professional Shortage Areas (HPSA) by the United States government, and 19 are designated Medically Underserved Areas (MUA) by the Arizona State Government due to a shortage of health professional personnel.[4]
- Over 1 in 10 residents (10.3%) in Pima County does not have health insurance (which increases to 12.3% when looking specifically and people under the age of 65). This is less than Arizona and the US overall (11.3% and 13.6% respectively).[2]

Social Determinants of Health

Social Determinants of health are the conditions in which people live, learn, work, and play that impact a variety of health and quality-of-life risks and outcomes. CHNA participants emphasized the need to create the opportunity for all Pima County residents to thrive. This goes beyond the traditional healthcare system and encompasses the availability of fresh and health foods, access to transportation, safe and affordable housing, access to educational opportunities, and making a living wage, among many other factors. A focus on the social determinants of health will help to ensure that the basic needs of all community members are met, and it will support increased health and wellness for all the priority areas in the Pima County CHNA.

- 1 in 5 households in Pima County (19%) reported at least one of the following four housing problems from 2013-2017: overcrowding, high housing costs, lack of kitchen, or lack of plumbing facilities.[3]
- In 2019, 1 in 7 (15.5%) of households without vehicles were beyond 1 mile from the nearest supermarket.[6]
- In 2019, more than 1 in 10 (11.2%) of households received SNAP benefits (food stamps). More than half (52.6%) of those households include children.[6]
- More than a quarter of Pima County residents (28.2%) speak a language other than English at home, and 30.1% speak English less than "very well". [1]

Impact of the COVID-19 Pandemic

The immediate impact of the COVID-19 pandemic on health and wellness is not yet fully apparent in the secondary data. However, the COVID-19 pandemic was a persistent theme in all the primary data collection activities, and responses reveal some of the far-reaching implications of the pandemic on all aspects of health and wellness.

The immediate social and economic implications of the pandemic, including increased isolation, job loss, a shift to remote school and work, and disruption of health and social services has merged into chronic anxiety, burnout, stress, and increased morbidity and mortality as the pandemic continues. The sharp increase in total deaths in 2020 is one of the starkest initial measures of the severity of the pandemic. In future years, data will also likely show the impact of the pandemic on existing health and socioeconomic disparities, delayed, or disrupted medical care, isolation, chronic stress, and anxiety.

The COVID-19 pandemic has also presented some unique and unexpected consequences. CHNA participants highlighted the increased collaboration between agencies and community partners to meet new challenges during the pandemic. Pima County also experienced a surge in mutual aid groups and an increased sense of community in response to the pandemic. Residents have found new and innovative ways to connect and support each other, and technology has presented both challenges and opportunities throughout the pandemic.

Racism and Discrimination

CHNA participants discussed the many ways that racism and discrimination impact health and wellness in Pima County. Community members experience racism and discrimination in many ways including: the quality of health services, the lack of culturally or linguistically appropriate services, and inequitable access to services and opportunities. The experience of racism and discrimination impacts how individuals and communities access services – for example, it could delay their decision to seek routine medical care – and can have broader implications of compounding or creating historical mistrust of health care systems and providers. The COVID-19 pandemic worsened many existing health disparities and highlighted the urgent need to address racism and discrimination.

CHNA participants emphasized the need for more meaningful education and engagement of healthcare and social service agencies around issues of racism and discrimination. Participants called for greater representation of underserved/underrepresented groups in leadership, healthcare and social services.

LAND ACKNOWLEDGEMENT

On behalf of Pima County residents, we honor the tribal nations who have served as caretakers of this land from time immemorial and respectfully acknowledge the ancestral homelands of the Tohono O'odham Nation and the multi-millennial presence of the Pascua Yaqui Tribe within Pima County. Consistent with Pima County's commitment to diversity and inclusion, we strive toward building equal-partner relationships with Arizona's Tribal Nations.

A note on citations: Where appropriate, we have cited data sources using a superscript ([1] for example) linked to the references section in Appendix H. The reader can use the superscript to find the data source for each statistic. Unless otherwise noted, a superscript at the end of a paragraph means that all the data from that paragraph is from that source.

TRIBAL DATA SOVEREIGNTY AND SECONDARY DATA SOURCES

All of the secondary data in this report comes from publicly available databases created and maintained by local, state or national organizations or governments. Tribal Nations, as sovereign entities, have the right to control and use their own data. Much of the publicly available data sources used in this report are broken up by Primary Care Areas, or PCAs. The Tohono O'odham Nation and Pascua Yaqui Tribe comprise their own PCAs, but the information in the public data sources may not fully and accurately reflect the populations within these areas. In addition, Tribal Nations and members may not have been meaningfully engaged in decisions about the collection, analysis, and dissemination of the data in these publicly available data sources. The reader should be aware of the inherent limitations in these data sources. The Pima County Health Department and CHNA partners honor tribal sovereignty and self-determination and this extends to ownership and use of tribal data.

2021 CHNA STEERING COMMITTEE

The 2021 CHNA included the support of a steering committee that met monthly to review progress, provide guidance and support data collection and analysis activities. Steering Committee members provided direction and leadership regarding data sources, key informant interviews and focus group content and recruitment, dissemination of materials, and interpretation of data. Steering Committee members helped to ensure that the 2021 CHNA engaged the community and represented the diverse population of Pima County.

The 2021 CHNA Steering Committee included the following representatives and organizations:

Hospitals

Banner - University Medical Center:

- Chad Whelan, MD, FACP, FHM, CEO, Banner-University Medicine Tucson
- Sarah Frost, MBA, CEO, Banner-University Medical Center Tucson and South Campuses
- Christina Geare, Sr. Regional Marketing and PR Director, Banner Health
- Merry Manson, MBA, MPH Strategy and Planning Program Manager, Banner Health
- Simran Sahnan, Intern, Banner - University Medical Center

Carondelet St. Joe's Hospital:

- Ryan Harper, MA CEO, Tenet Healthcare

Carondelet St. Mary's Hospital:

- Nikki Castel, MD, Regional Vice President, Tenet Healthcare

Northwest Medical Center:

- Cameron Lewis, MS, Chief Administration Officer, Northwest Healthcare
- Heather Bulman, MBA, BSN, RN Market Chief Quality Officer, Northwest Healthcare

Oro Valley Hospital:

- Julie Hunt, MSN, Chief Nursing Officer

Santa Cruz Valley Regional Hospital:

- Stephen Harris, CEO and Chairman
- Cari Olvera, MSN, Chief Nursing Officer
- Wendy Mercer, MSN, Director of Nursing

Tucson Medical Center

- Judy Rich, RN, MSN, CEO, TMC HealthCare
- Amy Beiter, MD, MBA, CMO, Tucson Medical Center
- Julia Strange, Vice President of Community Benefits, Tucson Medical Center
- Mary Mellady, MHA Director of Connected Health and Wellness, Tucson Medical Center
- Kristopher Kitz, BA, MHA Executive Director, Strategy & Business Development, TMC HealthCare

Tucson VA Medical Center

- Jennifer Gutowski, MHA, FACHE Medical Center Director, Southern Arizona VA Healthcare System
- Jaime Barker, Strategic Planner, Southern Arizona VA Healthcare System
- Lorie Vakoc, Executive Assistant to the Director, Southern Arizona VA Healthcare System

Community Health Centers

Desert Senita Health Center:

- Jonathan Leonard, CEO

El Rio Health:

- Nancy Johnson, RN, PhD, CEO
- Erin Dougherty, MPH, Grants Management Specialist
- Tara Radke, MPH, Director of Grant Development and Management

Marana Health Care:

- Clinton Kuntz, DBH, CEO
- Christopher Oben, COO
- Jenitza Serrano-Feliciano, MD, Chief Medical Officer

United Community Health Center:

- Rodolfo Jimenez, DO, MBA, CEO
- Wendy Kibby, RN, BSN, MHA, COO

Tribal Nations and Native American-Serving Organizations

Pascua Yaqui Tribe Health Services Division

- Apryl Krause, ND, MPH, Integrative Medicine Clinic Director and Accreditation Coordinator
- Shannon Whitewater, MPH, Epidemiologist
- Yesenia A. Alvarez, Accreditation co-coordinator

Tohono O'odham Nation Health Care:

- Marlon Stevens, MBA, HCM, CPHM former CEO, Tohono O'odham Nation Health Care

Tucson Indian Center:

- Jacob Bernal, Executive Director
- Veronica Boone, Social Services Director

Health Department

Pima County Health Department:

- Theresa Cullen, MD, MS, Public Health Director
- Paula Mandel, BSN, Deputy Director
- Alan Bergen, Senior Program Manager
- Emily Bressler, MPH, CHES, Strategic Partnership Coordinator
- Amanda Monroy, MDP, Public Health Policy Manager
- Amanda Sapp, MPH, Public Health Data Services Program Manager
- Arisia Lee, Healthy Pima Coordinator

Pima County Health Department Community Advisory Committee

- The Pima County Health Department's Community Advisory Committee, comprised of representatives of community-based organizations and community leaders from diverse communities throughout Pima County, provided invaluable input, feedback and support for the Community Health Needs Assessment.

Consulting Team

Arizona Prevention Research Center:

Kathryn Tucker, MPH; Georgia Weiss-Elliott, MA; Katherine Herder, Zoe Baccam, Maia Ingram, MPH. For more information about the consulting team, *see Appendix I*.

Pima County: A Snapshot

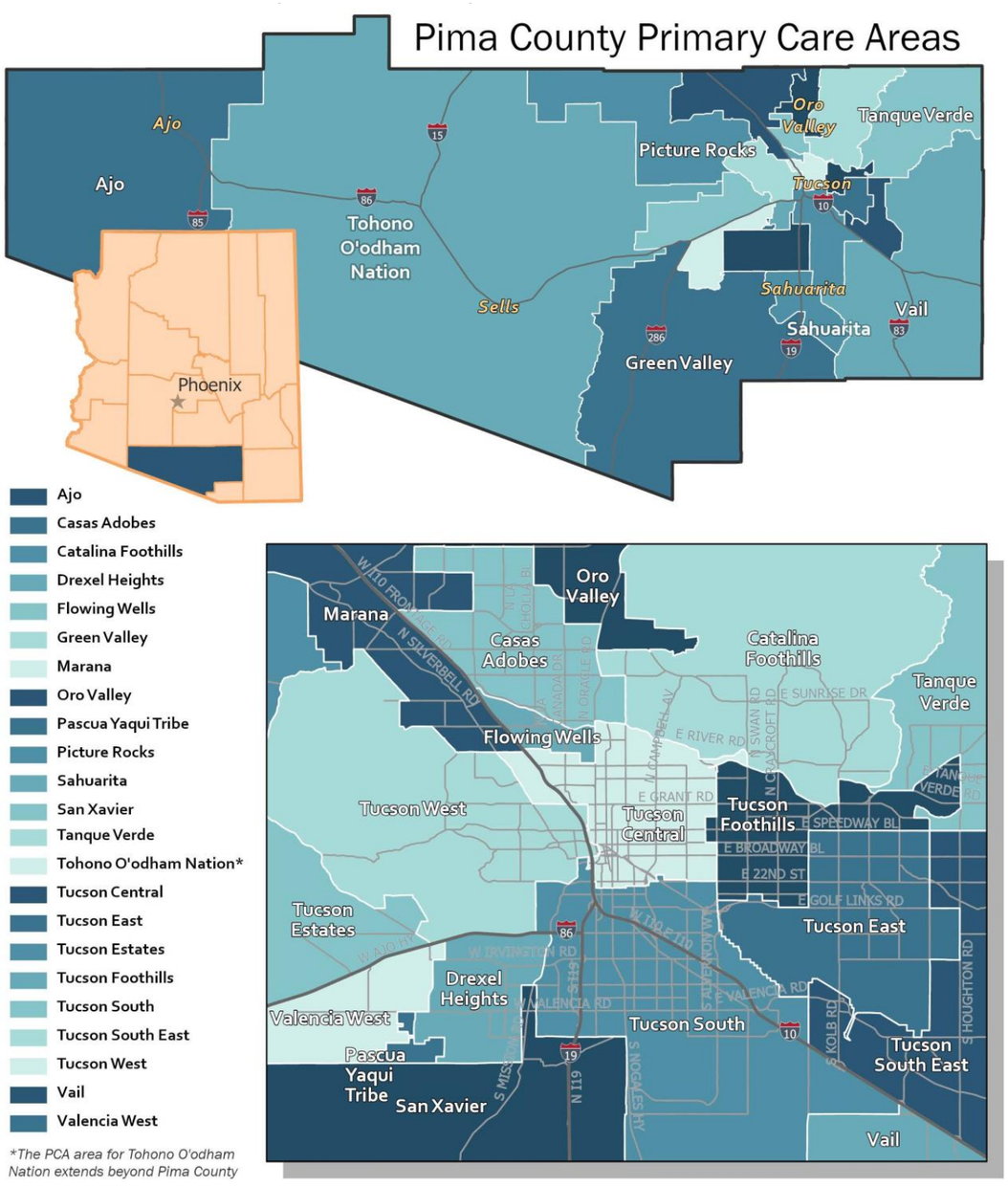


Figure 1 Pima County and the 23 primary care areas

HISTORY AND GEOGRAPHICAL REGION

Pima County is one of the southernmost counties in Arizona and is roughly the size of the state of New Hampshire. As part of the northern range of the Sonora Desert, it is comprised of mountain ranges, river valleys, and cactus forests. Pima County shares 125 miles of an international border with Mexico. This region has been continuously inhabited by Native American people for more than 10,000 years and continues to be home to two sovereign Tribal Nations: the Tohono O'odham Nation and the Pascua Yaqui Tribe. Southern Arizona has experienced numerous periods of colonization beginning with the Spanish colonization in the 17th century and again in the 1853 when the United States purchased the land under the Gadsden Purchase.

As the second most populated county after Maricopa County (which contains the city of Phoenix), Pima County covers an area of 9,184 square miles and is comprised of five incorporated jurisdictions (the City of South Tucson, the City of Tucson, and the towns of Marana, Oro Valley and Sahuarita), two Tribal Nations, and one large unincorporated area. Tucson, the County seat, is also the first city in the US to be designated a UNESCO Capital of Gastronomy, an honor which reflects a region rich in history, cultural diversity and heritage.

Pima County spans across vast areas of desert with 17 recognized *colonias*, which have a population of less than 10,000 people with low incomes; inadequate housing; and lack access to potable water, adequate sewage and/or drainage. The colonia of Ajo is more than 80 miles from the nearest city.

Rural populations represent approximately 7% of Pima County, but more than two-thirds of its area. Many communities including the Tohono O'odham Nation as well as Ajo, Amado, Arivaca, Avra, Valley, Catalina, Continental, Drexel, Heights, Flowing Wells, Helmet Peak, Littletown, Picture Rocks, Rillito, Robles Junction, South Nogales Highway Area, Vail, Valencia West, and Why, have limited access to resources, services, and opportunities.

Pima County is governed by a Board of Supervisors (BOS) representing 5 districts across the county who are elected to four-year terms. The BOS is responsible for developing local public policy for the county including developing the county budget. The BOS provides direction to County Administration as they work to ensure safe communities, nurture economic development, sustainably manage natural resources and protect the public's health.

Similarly, the City of Tucson is governed by a Mayor and Council that sets local City policy and budgets. Council members represent six Wards within the City's jurisdiction and carry out a four-year term in office. The City of South Tucson (COST) is a small jurisdiction of 1.2 square miles surrounded by the City of Tucson. The COST elects a Mayor and Council for four year terms to serve its jurisdiction which located within a U.S. Department of Housing and Urban Development (HUD)-designated Empowerment Zone and Tucson Pima Enterprise Zone. Other unincorporated areas of Pima County comprise several small towns including: Oro Valley, Marana, and Sahuarita.

PRIMARY CARE AREAS

For the purposes of this CHNA, key social determinants of health and select other indicators analyzed and compared at the sub-county level through Primary Care Area Statistical Profiles (PCAs). A Primary Care Area is a geographic area in which most residents seek primary health services from the same place(s). PCAs are based on census data and reflect areas with similar populations and demographics, allowing for statistical analyses and comparison across areas. Examining indicators at a sub-county level can help demonstrate disparities in health status and outcomes and support community health planning efforts to determine where interventions may have the most impact. The most recent data available at the Primary Care Area level are from the year 2020 and are presented in this CHNA to provide greater insight and understanding regarding the geographies and populations of greatest need throughout Pima County.

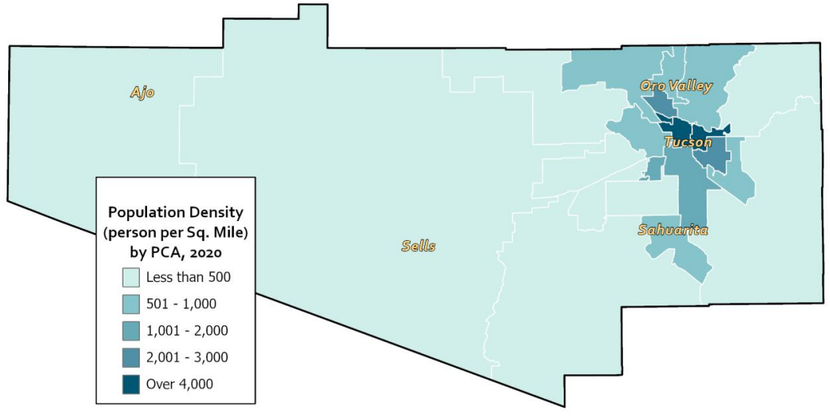
There are twenty-three PCAs in Pima County, twelve are designated as "Rural", seven as "Urban," three as "Indian", and one as "Frontier". Ten of the PCA's have a population below 20,000.

POPULATION DENSITY (URBAN VS. RURAL AREAS)

According to the 2019 Census the population was recorded at 1,047,279 reflecting a population increase of 6.8% since 2010. Located primarily in the eastern part of the County, the most populated areas include the City of South Tucson, the City of Tucson, and the towns of Marana, Oro Valley and Sahuarita. The City of Tucson, is the second largest city in the state with 548,073 residents, while Marana has 49,030, Oro Valley 46,044, and Sahuarita 31,421 residents. [1] **According to the Arizona Department of Health Service's (AHDS) 2021 Primary Care Area data, 361,138 of Pima County residents live in rural areas, just over 34%.** In counties with a population above 400,000, rural designation is given to areas with less than 50,000 people.

Rural populations are at higher risk for factors such as geographic isolation, lower socioeconomic status, higher rates of health risk behaviors, and higher rates of chronic illness and poor overall health compared to urban populations.[6] Populations in rural areas have historically lacked accessible healthcare options due to location, affordability, and transportation issues.

Figure 2 Population density of Pima County by PCA[7].



DEMOGRAPHICS

Age, Sex and Race Distribution

Pima County has an older population than the average state population, as well as a larger Hispanic/Latinx population.

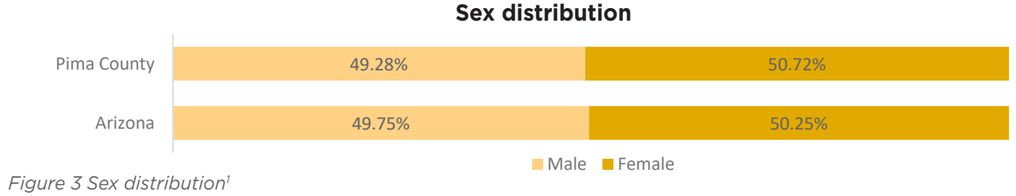


Figure 3 Sex distribution[1]

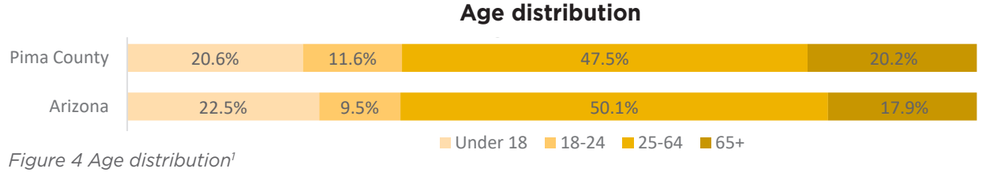


Figure 4 Age distribution[1]

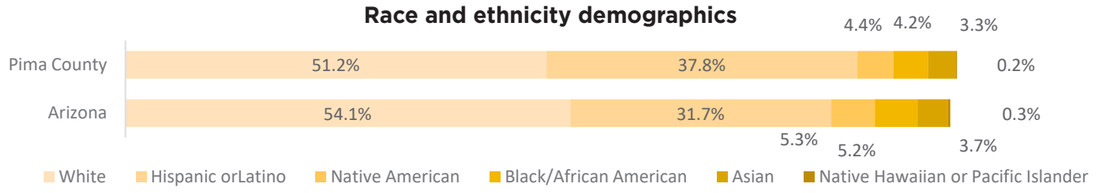


Figure 5 Race and ethnicity demographics[1]

Why race and ethnicity matter:

Hispanic/Latinx, Black/African American, and Native American populations are at higher risk of major and chronic health issues due to systemic and societal inequity. Discrimination and racism, in society and in healthcare systems, can lead to chronic and toxic stress and social and economic factors which increase the risk of contracting communicable diseases (like COVID-19) and chronic health issues. People from historically marginalized racial, ethnic and diverse backgrounds are also likely to face multiple barriers to accessing health care and other social services. Issues such as lack of insurance, transportation, childcare, or ability to take time off work can make it more difficult to go to the doctor. Cultural differences between patients and providers, language barriers, inequities in treatment, historical trauma and mistrust of healthcare systems, educational, housing, income, and wealth gaps are additional barriers to health and healthcare access.[8] For more information on racial and ethnic disparities in Pima County, see "COVID-19 Pandemic and Public Health Crisis" section.

Note on terms used in this report:

- The term “Native American” is used throughout this document, as it is commonly used by our tribal partners, and refers to the American Indian/Alaska Native population in general.
- Similarly, the term “Hispanic” is often accompanied by “Latino” or “Latinx.” This attempts to recognize the diversity not represented by the category of “Hispanic,” such as those who may identify as *indigena* (indigenous). In particular, “Latinx” is used to recognize the inherent gender within the word “Latino.”
- Terms to denote racial and ethnic categories may differ throughout the report depending on what is used within the secondary data sources.

Pima County has a complex geopolitical environment as it shares an international border (132 miles) with Mexico along with two sovereign Tribal Nations - The Tohono O’odham Nation and the Pascua Yaqui Tribe of Arizona.

The Tohono O’odham (TO) Nation’s 4400 square miles and the multiple communities of the Pascua Yaqui Tribe are included in the county. The TO Nation is a federally recognized Tribe and the second largest reservation in Arizona with over 28,000 members, and 2.8 million acres (4,460 square miles), approximately the size of the state of Connecticut. The Pascua Yaqui Tribe and reservation is also located in Pima County, in the southwestern part of the Tucson metropolitan area, with a reservation base of 2200 acres. There are three additional Yaqui communities throughout Tucson and Marana.

Since the mid 1980’s more than 12,000 refugees have resettled in Pima County. The majority are between the ages of 31-45, with slightly more males than females (53% vs. 47%). Most refugees are between the ages of 31-45, with 10% of refugees above the age of 60. Approximately 50% of refugees in Pima County speak one of 4 languages: Arabic, Somali, Napali, and Swahili and more than 50% of refugees in PC originated from 5 countries: Somalia, Democratic Republic of Congo, Iraq, and Bhutan, in that order *(Arizona Department of Health Services June 2020)*. Pima County has recently seen an influx of refugees from Afghanistan.

Refugees and underserved communities, particularly non-English speakers, often go without care and resort to using the emergency room for critical healthcare services.

When reading this report, it is important to note that racial and ethnic differences in health outcomes, risk factors, or socio-economic disparities arise from systemic discrimination, barriers to care and other structural factors, and are not the result of inherent characteristics of any racial or ethnic group. Additionally, data in this report is presented in sequence, often highlighting disparities without important context (historical, locational, etc.). This framing is not meant to insinuate or place blame on individual populations or communities.

Educational Attainment

According to the 2019 Census, nearly 9 out of 10 people (88%) in Pima County have a high school degree or higher, and over a third (34%) have a bachelor’s degree or higher. Pima County has higher educational attainment than Arizona in general.

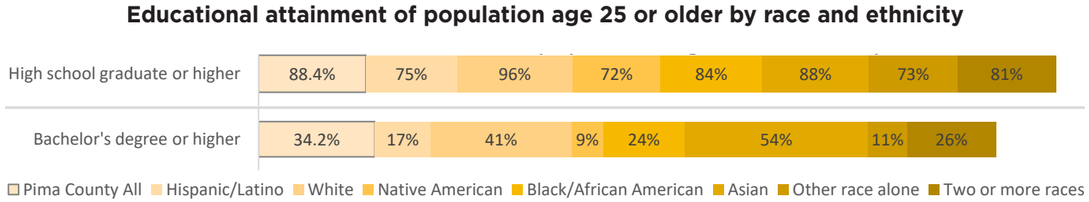


Figure 6 Educational attainment of population age 25 and older by race and ethnicity[1]

Figure 7 Percentage of population with a high school degree or higher by PCA[7]

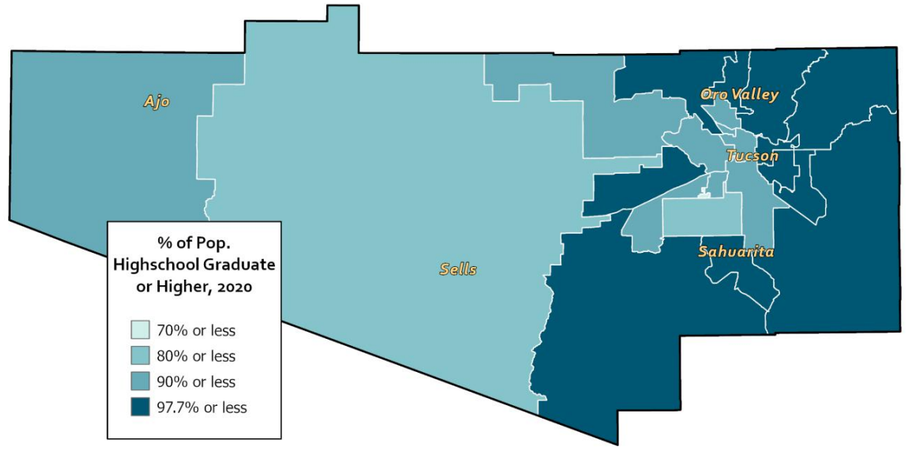
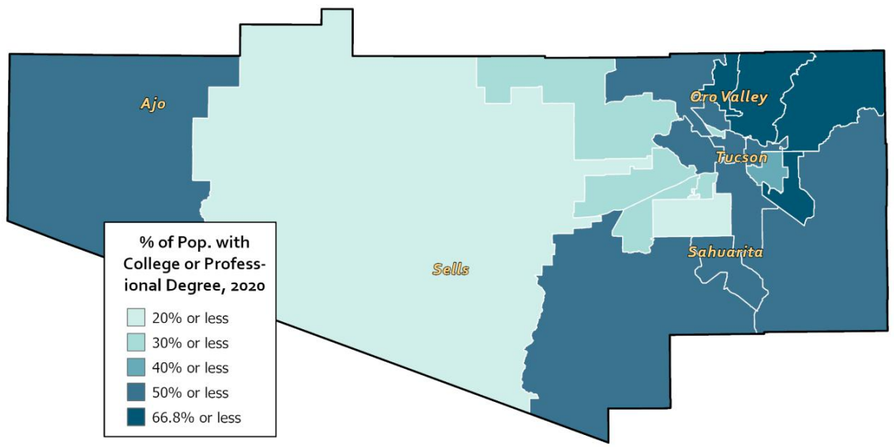


Figure 8 Percentage of population with a college or professional degree or higher by PCA[7]



Why education matters:

Education plays an important role in obtaining overall health. Because educational attainment is likely to impact a person's ability to find employment, this in turn can affect where they live and their ability to afford and have access to healthcare. Education also impacts health literacy, a person's ability to obtain, process, and understand basic health information needed to make appropriate health decisions. Low health literacy is more prevalent among older adults, marginalized populations, those in low socioeconomic statuses, and medically underserved people.[9] Therefore, education is an important indicator of health outcomes in any community.

Median Income, Poverty, and Unemployment

The Federal Poverty Level (FPL) is a measurement of the minimum amount of annual income that is needed for individuals and families to pay for essentials, such as room and board, clothes, and transportation. The FPL considers the number of people in a household, their income, and the state in which they live.[9] Pima County has less children and adults living below the FPL, yet has a higher unemployment rate than the state average. **Nearly 2 out of 10 children (19%), and more than 1 out of 10 adults (13.5), in Pima County are living below the FPL[1].**

The unemployment rate dropped from 13.9% to 6.6% between April 2020 and April 2021; the initial rate of 13.9% was higher than normal due to the economic strain related to the COVID-19 pandemic in March 2020. In 2018, the unemployment rate in Pima County was 4.1% (or 4 out of every 100 eligible workers were without a job). And the median household income, just above $56,000, is lower than the state average of $62,000.[1] As this report was being written, the City of Tucson voted to enact $15 per hour minimum wage hike by 2025 and to increase with inflation thereafter. The National Low Income Housing Coalition estimates that with the current minimum wage of Arizona, $12.15 per hour, minimum-wage workers need to work 60 hours per week to afford a one-bedroom home.[10]

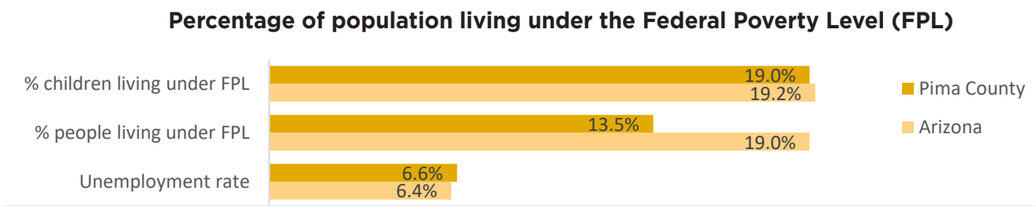


Figure 9 Percentage of population living under the Federal Poverty Level (FPL) by category

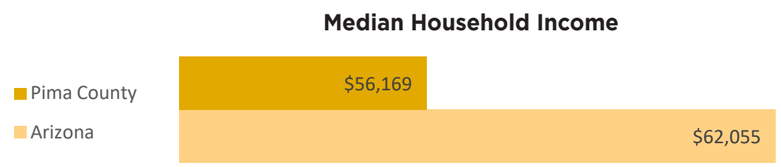


Figure 10 Median household income for Pima County and Arizona

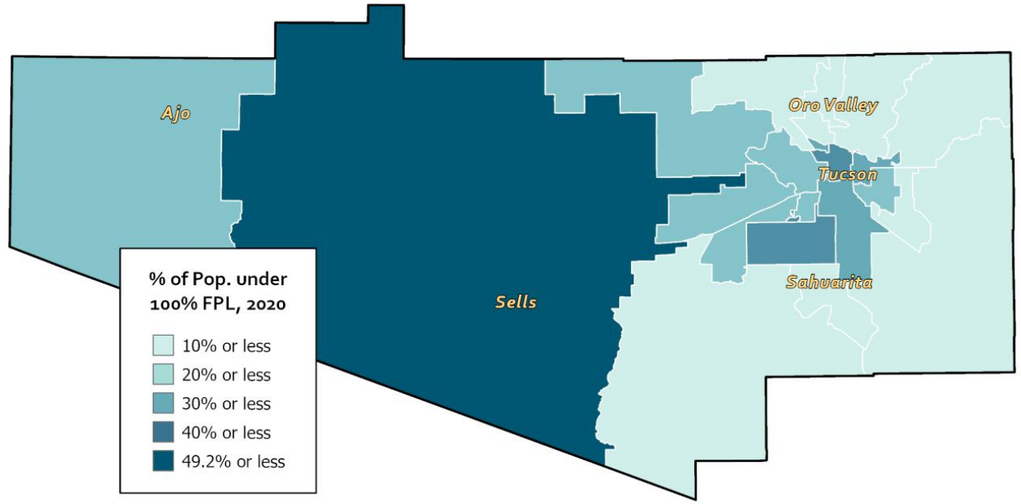


Figure 11 Percentage of the population living under the FPL by PCA[7]

Why poverty, income, and unemployment matter:

Poverty is linked to negative health outcomes and is related to chronic and toxic stress. Like educational attainment, poverty and unemployment can affect where a person lives, access to healthy foods and health care. A high poverty rate can be a cause and effect of economic conditions, lower quality schools and education, and decreased business survival.

Percent of Population without Health Insurance

Over 1 in 10 residents (10.3%) in Pima County do not have health insurance (which increases to 12.3% for people under the age of 65).[1] Most people without insurance are adults 19-55 years old, with low-income households being more likely to be uninsured. Although the total uninsured population remains high, it has significantly decreased from 19% in 2008. This is largely due to the passage of the Patient Protection and Affordable Care Act (ACA) in 2010 and the subsequent expansion of eligibility for Arizona's Medicaid program.

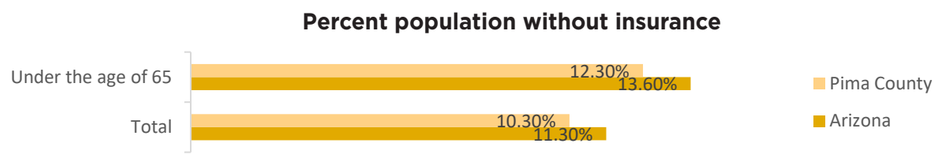


Figure 12 Percentage of population without insurance[1]

Income	Percent of households who are uninsured (2019)
Under $25,000	15.1%
$25,000-$49,999	14.5%
$50,000-$74,999	10%
$75,000-$99,999	9.5%
$100,000 or more	5.4%

Table 1 Percentage of households without insurance by income bracket[1]

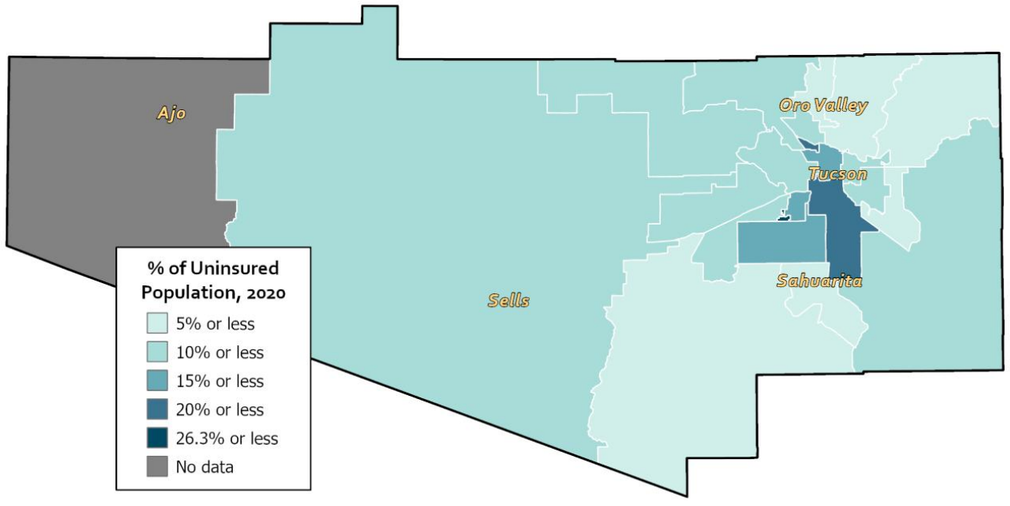


Figure 13 Percentage of population without insurance by PCA[7]

Why insurance coverage matters:

Many people in the United States do not receive the health care services they need. About 1 in 10 people in in Pima County, and in the United States in general, don't have health insurance. People without insurance are less likely to have a primary care provider, and they may not be able to afford the health care services and medications they need. High medical costs and medical debt are barriers to quality healthcare access for both insured and uninsured people.

Dental Care Access and Oral Health

According to the Pima Health Data Portal, the rate of dentists per 100,000 persons in Pima County was 65 in 2019. This rate has increased from 58 in 2014.[3] The overall ratio of persons to dentist was 1540:1 in 2020. This means that the number of dentists available limits access to dental care in Pima County. In 2020, only half (51.1%) of all adults in Pima County reported that they had visited a dentist or dental clinic for any reason in the past year.[3]

Within the County, primary care areas (PCAs) have very different access to these dentists. For example, the Catalina Foothills PCA had the lowest persons to dentist ratio of 730:1 (meaning the greatest access to dental care) while other areas such as, Picture Rocks, Drexel Heights, and Valencia West PCAs did not report any dentists.

Why Oral Health Matters

Oral diseases ranging from dental caries (cavities) to oral cancers cause pain and disability for millions of Americans and affect more than just the mouth. Good oral health allows a person to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. Research has shown that oral health can impact self-esteem and has also been linked to several chronic diseases (including diabetes, heart diseases and stroke) and premature births and low birthrates in amongst pregnant women.[11]

Migrants, Languages, and Undocumented Residents

In Pima County, 28.2% of the population speak a language other than English in the home, 30.1% of whom speak English less than "very well".[1] The ability to speak English can affect health literacy and person's ability to access and understand health care.

As of 2019 there are approximately 35,000 undocumented residents in Pima County. Over half (59%) of these residents are uninsured.[12] Undocumented residents are increasingly vulnerable as they face discrimination from the United States government and society at large. These individuals are more likely to have experienced trauma before, during, and after migrating, are subject to racial profiling and stigma, social isolation, and separation from family.

Undocumented residents are more likely to have a low socioeconomic status (determined by education, income, and occupation) and experience housing segregation and frequent moves. Along with having less legal protection than others, undocumented residents also have increased rates of fear and distrust of the legal system and fear being deported. Overall, they are at a higher risk for mental health issues as immigration-related stressors can increase suicidal ideation and risk due to the distress associated with cultural stress, social marginalization and intergenerational conflicts in addition to Post-Traumatic Stress Disorder (PTSD) and other psychological disorders.[13]

Along the U.S.-Mexico border, undocumented migrants often die in the attempt to cross through the Sonora Desert in southern Pima County. Between 1990 and 2020, the remains of 3,356 border crossers were recovered, the majority being found since 2005. In 2020 alone, 209 remains were found and 400,615 apprehensions were made by Border Patrol agents as political, economic and climate-related crises Central and South America push migrants to make the dangerous journey to

the United States.[13] Violent border policing tactics have been found to exacerbate and add to the dangerous desert conditions which put migrants at risk.[14]

Veterans

According to the 2019 Census, nearly one out of ten (9.6%) people in Pima County are identified as veterans, or as persons who served in the active military, naval, or air service, and who was 23 discharged or released therefrom under conditions other than dishonorable (U.S. Department of Veteran Affairs, 2019). Over a third of veterans (31.3%) in Pima County report having a disability, and 6.3% live below the poverty level.[1] While Veterans have access to some benefits, including health care and educational stipends, they are not guaranteed other services, like dental insurance, and are more likely than the general population to live with a disability.

Persons with Disabilities

According to the 2019 Census, over 1 in every 10 people in Pima County reported having a disability (15.5 % including seniors, and 10.5% excluding anyone over the age of 65). There are a vast number of different ways a person can experience their disability, including physically and/or mentally, and the extent to which it affects their activities and needs. In general, people with disabilities face greater barriers to access healthcare and everyday spaces as disabilities are rarely accommodated for in built and social environments.

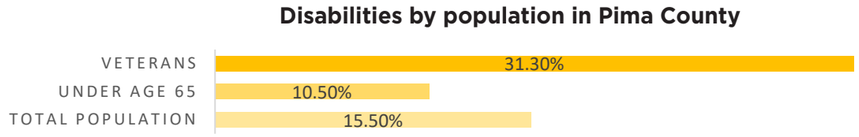


Figure 14 Percentage of disabilities by population in Pima County[1]

Registered Voters

There were 638,355 registered voters in Pima County during the November 2020 general election cycle.[15]

LGBTQ+ Health

Through key informant interviews and focus groups, community members and service providers expressed concern about the existing health disparities among LGBTQ+ residents. LGBTQ+ residents face discrimination in the community and at health centers and experience increased barriers to care. However, there is a lack of health data about LGBTQ+ identifying populations. This absence of data limits our ability to assess the presence and impact of structural discrimination within health care systems. As participants mentioned in interviews and focus groups, without secondary data collection and reporting, healthcare providers may receive little training or information around gender and sexual identities and how to care for these vulnerable populations. Stigma and discrimination contribute to quality of care, quality of life within a community, and are influential to a person's overall health and willingness to seek treatment.

GENERAL HEALTH STATUS

Leading Causes of Death

The top 5 leading causes of deaths in 2019 in Pima County were cancer, heart disease, accidents (unintentional injuries), chronic lower respiratory diseases, and cerebrovascular diseases. Cancer (malignant neoplasms) was the leading cause of death in 2019, overtaking diseases of the heart, which was the leading cause of death from 2016-2018 in terms of total number of deaths.

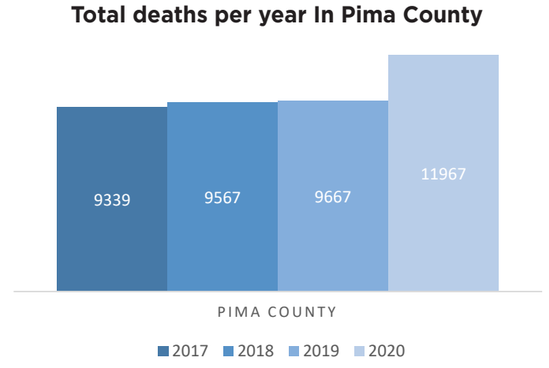


Figure 15 Total deaths per year in Pima County[4]

Life Expectancy and Premature Death

In 2019, the life expectancy in Pima County was 79.5 years old. Life expectancy is 80 years old in Arizona overall and 81.1 among the 90th percentile of U.S. counties.[13] The average age-adjusted premature mortality rate (number of deaths among residents under age 75 per 100,000 population) from 2017-2019 was 350 in Pima County, compared to 330 in Arizona and 280 among the 90th percentile of U.S. counties. This rate is notably higher among non-Hispanic/Latinx Black/African American (500) and Native American (650) populations and notably lower among Asians (160) compared to White (360) populations in Pima County. [13]

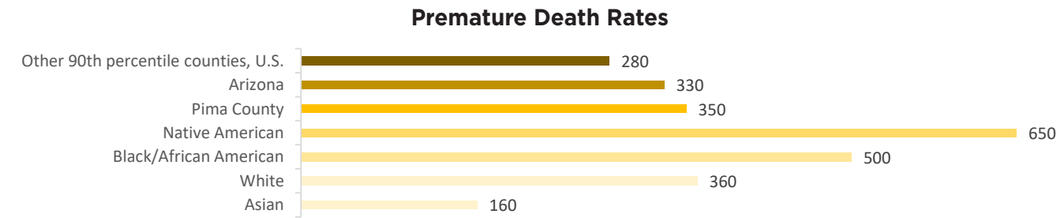
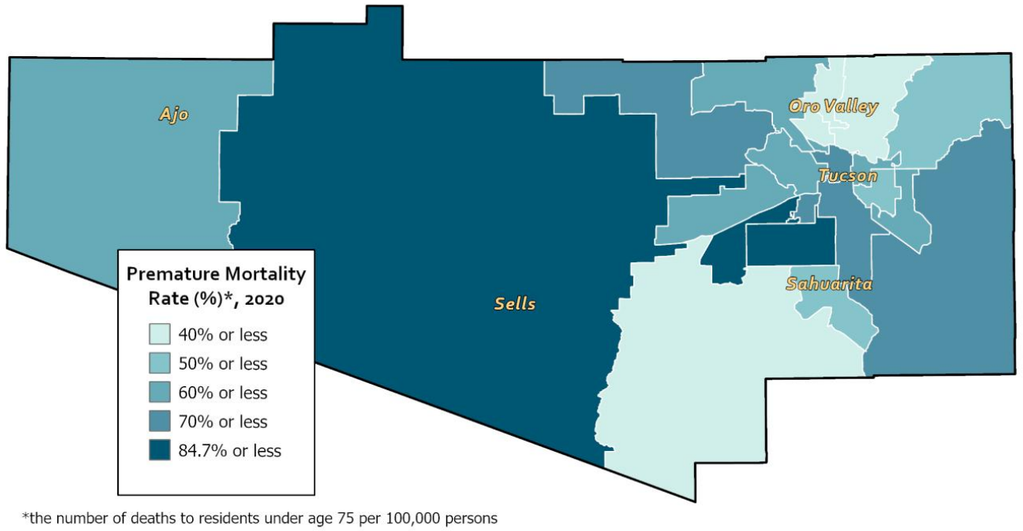


Figure 16 Premature death rates by location and race[13]



*the number of deaths to residents under age 75 per 100,000 persons

Figure 17 Premature mortality rate by PCA[7]

Quality of Life

In 2018, Pima County residents reported an average of 4.3 physically unhealthy and 4.5 mentally unhealthy days per month. The 90th percentile of all U.S. counties averaged 3.4 and 3.8 physically and mentally unhealthy days, respectively.[13]

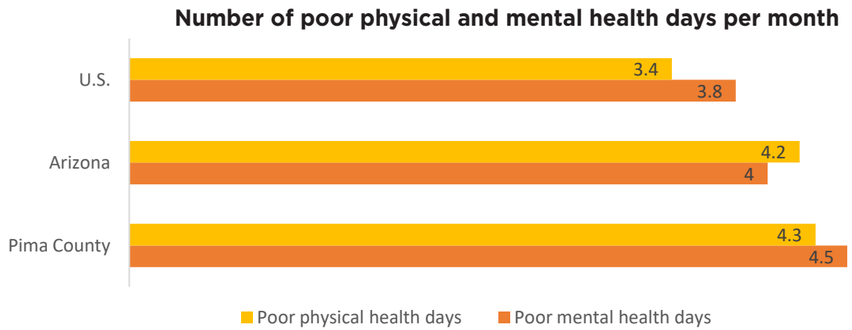


Figure 18 Number of poor physical and mental health days per month by location[13]

RACISM AND THE COVID-19 PANDEMIC: PUBLIC HEALTH CRISES

This report covers an unprecedented time in recent history. As the COVID-19 pandemic continues into its third year at the writing of this report, pandemicthe impacts of the pandemic have disproportionately impacted communities of color and historically marginalized communities, further widening the gap in health and wealth outcomes. In its wake, social justice reform movements, like the Black Lives Matter movement and Stop Asian Hate, have urged governments to be proactive against racial injustice and systemic inequality.

In a December 1st, 2020 memorandum, the Pima County Board of Supervisors published the "Resolution Declaring Racial and Ethnic Health Inequities and Income Inequality in Pima County to be Public Health Crisis." The resolution describes how the pandemic has highlighted and exacerbated racial and social health inequities by disproportionately impacting communities of color and low-income communities in Pima County and how these inequities have led to a public health crisis.[16]

The resolution describes in detail how Hispanic/Latinx, Native American and Black/African American communities in Pima County continue to experience higher rates of premature death, child and infant mortality, chronic and preventable diseases, and poverty. The report also acknowledges the negative impact of systemic racism and poverty on the social factors that determine a person's health, including access to safe and affordable housing, active recreational opportunities, well-paying jobs, quality early childhood education, clean air and water, and health care and health insurance.

As historically marginalized communities continue to be more heavily impacted by the pandemic and access to health care continues to be disrupted, this period has also been characterized by mass distrust of, and misinformation about, the COVID-19 vaccine.

COVID-19 all time cases and rates as of December 9, 2021

	Pima County	Arizona
Total Cases	164,190	1,305,260
Cases per 100,000 population	15,716.8	18,156.3
Total Deaths	2,961	22,854
Rate of Fatalities per 100,000 population	283.4	317.9
Population vaccinated	68.3%	63.3%
Male Cases	48%	48%
Female Cases	52%	52%
Less than age 20	30,119	257,754
Age 20-44	70,715	556,937
Age 45-54	21,617	179,435
Age 55-64	18,656	146,658
Age 65+	21,273	158,580
White, non-Hispanic	36%	40%
Hispanic or Latino	40%	29%
Native American*	3%	5%
Black of African American	3%	4%
Asian	1%	1%
Other	6%	6%
Unknown race	11%	16%

***Tribal data may not be fully reflected in ADHS data**

Table 2 COVID-19 all time cases and rates as of December 9, 2021[18]

Secondary Health Data

Secondary (pre-existing) data were aggregated from publicly available databases to present an unbiased, fact-driven report on the health status of Pima County. This section aims to elucidate health disparities, describe health trends over time, and provide quantifiable metrics to illustrate the health of Pima County residents relative to Arizona and the United States overall.

The quantitative data included in this section is meant to give readers a sense of the most important health issues in the county, how they are changing over time and who is most affected. However, it should be noted that quantitative data does not always convey essential contextual information associated with these issues, and so this section should be reviewed with consideration to the narratives presented in other sections. It should also be noted that some of the data are several years old due to a lag in the availability of population-level data in many databases. This report includes the most up-to-date data available but for these reasons may not reflect the most recent changes.

Icons will be used throughout this section to highlight the following:

Notable Finding: Especially important or interesting statistic

Notable Disparity: Health issues that affect some demographic groups more than others

Missing/Incomplete Data: Health area where there was a lack of publicly available data

Health People 2030 Leading Health Indicator: a metric or indicator that aligns with a Healthy People 2030 Leading Health Indicator (LHI).[17] Healthy People 2030 provides a comprehensive set of 10-year, national goals and objectives for improving the health of all Americans. LHIs are a small subset of high priority objectives selected to drive action towards health and well-being. Most LHIs address important factors that impact major causes of death and disease in the US. We note the indicators related to each section to highlight priority areas that align with national priorities that will be tracked through the Healthy People 2030 initiative. The Healthy People 2030 target is also listed even if current data for that measure are unavailable. A full list of LHIs and more information about the data measures and methodology can be found at *https://health.gov/healthypeople/objectives-and-data/leading-health-indicators*.

Important Definitions:

- **Age-Adjusted:** Many of the rates presented are *age-adjusted.* This means that the rates were calculated accounting for the distribution of ages in the sample where data were collected. This makes the rate generalizable to the larger population and comparable to different populations with different age distributions.
- **Disparity:** A *disparity* means a preventable difference or discrepancy in health outcomes between populations. In this section, we will highlight notable health disparities, or differences in health rates or statistics, by demographics including race, ethnicity, sex, and socio-economic status.
- **Prevalence/Incidence:** In the health sciences, the term *prevalence* to describe the commonness of a disease or condition, or more specifically, the number of cases of a disease or condition at any given time. *Incidence* refers to the occurrence of new cases of a disease or condition over a particular period of time.
- **Rate:** A *rate* is the quantity of something in terms of something else. The majority of rates in this section are reported as "per 100,00 population", or in other words, "for every 100,000 people in a designated area". For example, the rate of chickenpox in 2019 was 3.3 per 100,000 Pima County residents; there were approximately 3 cases of chicken pox recorded for every 100,000 Pima County residents in the entire Pima County population. The rate was calculated from the total number of cases divided by the entire population and multiplied by 100,000.
- **Ratio:** A *ratio* is a comparison of the quantity of two things. For example, the ratio of population to primary care physicians was 1167:1 in Pima County in 2018. This means that for every 1167 people in the population, there was 1 primary care physician in that same population.
- **Social Determinants of Health:** As defined by the U.S. Department of Health and Human Services, *social determinants of health* (SDOH) are "the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." SDOH consist of five domains: economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context.[18]

ACCESS TO CARE

Primary Care Statistics

Seventeen (17) of the 23 Primary Care Areas in Pima County are designated Health Professional Shortage Areas by the United States government as areas with a shortage of health professional personnel and 19 are designated Medically Underserved Areas by the Arizona State Government.[7]

In 2018, the ratio of population to primary care physicians was 1,167:1 in Pima County, compared to 1523:1 in Arizona and 1319:1 in the US overall.[13] This ratio has decreased from 1249:1 in 2010. The Drexel Heights PCA has the highest ratio of population to primary care physicians (27,400:1) while Tucson Central has the lowest (121:1). The Picture Rocks PCA does not have a primary care provider. The ratio of population to dentists was 1540:1 in Pima County overall in 2020.

Missing/Incomplete Data: Secondary data used in this report referencing Tribal Nations was accessed through publicly available data at the state level. *(see references in Appendix H)*. **However, this data may not fully represent accurate information for tribal nations. The Pima County Health Department and CHNA partners honor tribal sovereignty and self-determination and this extends to ownership and use of tribal data.**

2020 Primary Care Area Statistics, Arizona Department of Health Services						
Primary Care Area	Population	Arizona Medically Underserved Area (AzMUA)	Health Professional Shortage Area (HPSA)	Population: Primary Care Provider Ratio	Population: Dentist Ratio	% Medically Uninsured
Tohono O'odham	7639	Yes	Yes	588:1	0	8.4
Tanque Verde	17345	Yes	Yes	1927:1	1445:1	3.3
Catalina Foothills	62821	No	No	459:1	730:1	3.5
Oro Valley	49080	No	No	351:1	805:1	2.4
Marana	69242	No	No	1822:1	1978:1	5.5
Ajo	3669	Yes	Yes	1835:1	3669:1	.
Picture Rocks	10933	Yes	Yes	0:1	0	7.3
Vail	19420	Yes	Yes	4855:1	4855:1	5.6
Casas Adobes	69980	No	No	188:1	1044:1	7.4
Tucson West	40068	Yes	Yes	236:1	1742:1	8
Tucson Central	132487	Yes	Yes	121:1	1541:1	11.7
Tucson Foothills	101028	Yes	Yes	125:1	828:1	9.1
Tucson South East	52757	Yes	Yes	1884:1	1819:1	3.5
Tucson East	98432	Yes	Yes	471:1	3646:1	9.6
Tucson South	173898	Yes	Yes	535:1	11593:1	18.5
Flowing Wells	18137	Yes	No	9069:1	18137:1	17.7
Tucson Estates	15145	Yes	Yes	15145:1	735:1	7.5
Drexel Heights	27400	Yes	Yes	27400:1	0	11.3
Valencia West	17349	Yes	Yes	17349:1	0	6.2
San Xavier	1963	Yes	Yes	123:1	1963:1	14.9
Pascua Yaqui	3628	Yes	Yes	454:1	1209:1*	26.3
Green Valley	25801	Yes	No	629:1	5160:1	4.5
Sahuarita	34319	Yes	Yes	3432:1	2640:1	3.6
*Ratio provided by Pascua Yaqui stakeholders. ADHS reported 0 dentists in the Pascua Yaqui PCA in 2020.						

Table 3 2020 Primary care statistics, Arizona Department of Health Services[7]

Notable Disparity: There are fewer primary care physicians and dentists in relation to population size for certain PCAs relative to others.

In Pima County 12.3% of the population under 65, and 10.3% of the total population is medically uninsured compared to 13.6% and 11.3% in Arizona overall.[1] Most people without insurance are adults 19-55 years old and low-income households are more likely to be uninsured **(Table 4, Table 5)**. The percentage of uninsured people in Pima County under age 65 has decreased 35% since 2008.

Characteristics of Health Insurance Coverage In Pima County (2019 American Community Survey Estimates)	
	% Medically Uninsured
Civilian noninstitutionalized population	10.3
AGE	
Under 6 years	4
6 to 18 years	8.7
19 to 25 years	18.5
26 to 34 years	18.3
35 to 44 years	14.4
45 to 54 years	15.9
55 to 64 years	8.3
65 to 74 years	0.7
75 years and older	0.4

Table 4 Characteristics of health insurance coverage in Pima County by age[1]

Characteristics of Health Insurance Coverage in Pima County (2019 American Community Survey Estimates)	
Household Income (in 2019 inflation-adjusted dollars)	% Medically Uninsured
Under $25,000	15.1
$25,000 to $49,999	14.5
$50,000 to $74,999	10
$75,000 to $99,999	9.5
$100,000 and over	5.4

Table 5 Characteristics of health insurance coverage in Pima County by income[1]

Healthy People 2030 Leading Health Indicator: Persons under 65 with medical insurance (target: 92.1%)

Pima County Healthcare Usage

In 2019, the rate of hospital discharges per 10,000 persons was 998 in Pima County compared to 926 in Arizona overall.[4] Diseases of the circulatory system, mental disorders, injury and poisoning, diseases of the digestive system, and heart disease were the diagnoses with the highest rates of hospital discharges (with rates of 141, 113, 98, 95, and 93, respectively).

In Pima County, 43.2% of the population receives some type of public health insurance such as Medicare or Medicaid through the Arizona Health Care Cost Containment System (AHCCCS), Veteran's Health Care or Indian Health Service (alone or in combination with other insurance).[1] In 2018, 73.1% of Pima County adults reported having visited a doctor for a routine checkup within the past year compared to 76.7% of US adults overall.[3]

In 2018, 51.1% of adults in Pima County reported that they had visited a dentist or dental clinic for any reason in the past year. Approximately 13.5% of adults aged 65 and older in Pima County have had all of their natural teeth extracted.[3]

Healthy People 2030 Leading Health Indicator: Adults who meet the current minimum guidelines for aerobic physical activity and muscle-strengthening activity (target: 28.4%)

In 2018, 47% of female Medicare enrollees ages 65-74 received an annual mammography screening in Pima County, 7% higher than in Arizona overall. Thirteen percent (13%) of Native American female Medicare enrollees received the annual screening compared to 49% of White, 43% of Black/African American, 39% of Asian, and 35% of Latinx/Hispanic female Medicare enrollees in Pima County.[13] Over a third (65.3%) of survey respondents aged 50-75 in Pima County had colon cancer screenings in the past ten years. The 2030 Healthy People Target is 74.4%.[13]

Notable Disparity: Far fewer Native American female Medicare enrollees received an annual mammography screening compared to other racial/ethnic groups in 2018.

HEALTH OUTCOMES

In 2019, the age-adjusted mortality rate per 100,000 residents for all causes in Pima County was 697.6, a slight decrease from 704.6 in 2018.[4] Total mortality in Pima County increased 23.8% from 2019 to 2020.[5] A large increase in deaths can be partially explained by the COVID-19 pandemic. The greatest number of monthly deaths among Pima County residents between March 2020 and March 2021 were 1,648 reported in January 2021. Comparatively, 932 deaths were reported in January 2020.[4]

Notable Finding: There were 23.8% more total deaths in 2020 compared to 2019

Cancer (malignant neoplasms) was the leading cause of death in 2019 in Pima County, overtaking diseases of the heart, which was the leading cause of death from 2016-2018 in terms of total number of deaths **(Table 6)**.[18] Accidents (unintentional injuries), chronic lower respiratory diseases, and cerebrovascular diseases were the 3rd, 4th, and 5th leading causes of death, respectively **(Figure 19)**. The age-adjusted death rates per 100,000 people increased from 2018 for the top three causes of death.

Top 5 Leading Causes of Death in Pima County 2017-2019, Centers for Disease Control and Prevention

	2019		2018		2017	
	Deaths	Age-Adjusted Rate per 100,000	Deaths	Age-Adjusted Rate per 100,000	Deaths	Age-Adjusted Rate per 100,000
Malignant Neoplasms (Cancer)	2,086	137.9	**(2)** 1,964	134.9	**(2)** 1,924	**(2)** 134.4
Diseases of Heart	2,074	135.9	**(1)** 2,015	133.4	**(1)** 1,998	**(1)** 137.6
Accidents (Unintentional Injuries)	714	61.7	656	55.9	646	56.7
Chronic Lower Respiratory Diseases	582	37.1	623	41.0	577	39.4
Cerebrovascular Diseases	492	31.5	523	34.9	**(6)** 480	**(6)** 33.2

Table 6 Top 5 leading causes of death in Pima county 2017-2019[18]

Accidental Deaths by Top 3 Causes 2016-2020, Pima County Office of the Medical Examiner

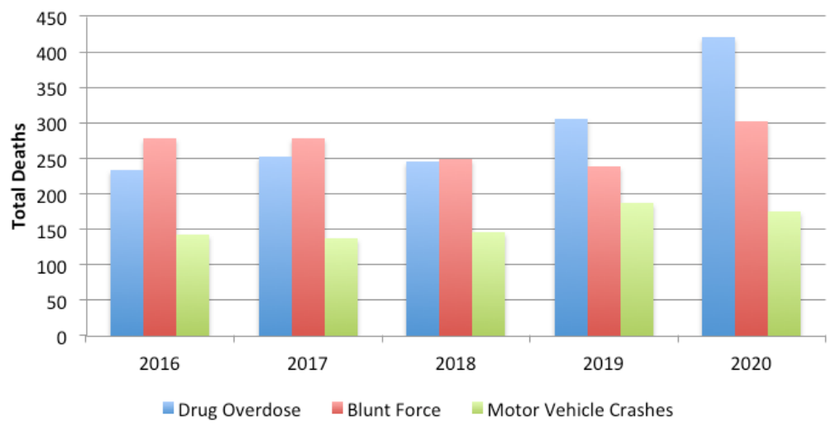


Figure 19 Accidental deaths by top 3 causes 2016-2020[5]

The average age-adjusted premature mortality rate (number of deaths among residents under age 75 per 100,000 population) from 2017-2019 was 350 in Pima County, compared to 330 in Arizona and 280 among the 90th percentile of U.S. counties. This rate was higher among Black/African American (500) and Native American (650) populations and notably lower among the Asian population (160) compared to the White population (360) in Pima County **(Figure 20)**.[13] Years of potential life lost (YPLL) before age 75 per 100,000 population (age-adjusted) in 2018 was 7,533 in Pima County, compared to 7,120 in Arizona and 6,907 in the USA overall. This metric has been increasing since 2013.[13]

Number of Deaths among Pima County residents under age 75 per 1000,000 population (Age-Adjusted) by Race/Ethnicity 2017-2019, University of Wisconsin Population Health Institute

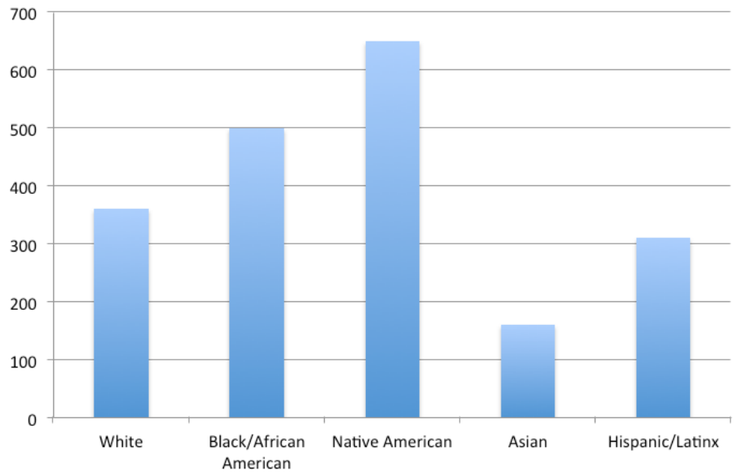


Figure 20 Number of deaths among Pima County residents under age 75 per 100,000 population (age-adjusted) by race and ethnicity[13]

Notable Disparity: The premature mortality rate is higher among Black/African American and Native American populations compared to other racial and ethnic groups.

From 2017-2019, life expectancy in Pima County was 79.5 years old. Life expectancy was 80 years old in Arizona overall and 81.1 among the 90th percentile of U.S. counties. In 2019, the average and median ages of death for males in 2019 were 70.4 and 74, while the average and median ages of death from women were 76.7 and 80, respectively.[2]

Motor Vehicle Fatalities

In 2020, 182 motor vehicle fatalities were reported in Pima County, while 189 were reported in 2019 and 148 were reported in 2018.[5] There has been an upward trend in motor vehicle fatalities since 2011. Almost half (46.2%) of motor vehicle fatalities were occupants of a motor vehicle, while 27.5% were pedestrians stuck by motor vehicles, 15.9% were motorcycle crashes, 7.6% were bicyclists stuck by motor vehicles, and 2.7% were ATV crashes.[5]

Heat-Related Fatalities

The total number of heat-related fatalities in Pima County increased 76% from 2019 to 2020.[4] Fatalities reported to the Pima County Office of the Medical Examiner (PCOME) (deaths that are sudden and unexpected with no known underlying cause) that were determined to be heat-related increased 90% from 2019 to 2020.[5]

Notable Finding: There was a 76% increase in heat-related deaths from 2019 to 2020.

Homeless Deaths

In 2020, 124 homeless deaths were reported to the Pima County Office of the Medical Examiner (PCOME), the majority of which were due to drug overdoses (53.2%).[5]

Undocumented Border Crosser Deaths

209 human remains reported to the PCOME were coded as undocumented border crossers in 2020, a 68.5% increase from 2019.[5] The rate of recovered undocumented border crosser remains per 100,000 US Border Patrol apprehensions in the Tucson metropolitan sector was 316 in 2020 compared to 195 in 2019 (although not a precise measure of undocumented crossings, previous research found that apprehensions are positively correlated with undocumented migration flows).[12]

Notable Finding: There was a 68.5% increase in undocumented border crosser deaths from 2019 to 2020

CHRONIC DISEASES

Cancer

Cancer was the leading cause of death in Pima County in 2019, with an age-adjusted mortality rate of 137.9 deaths per 100,000 population.[4] The cancer mortality death rate has generally decreased since 1999 (rate=180), however, there has been a slightly increasing trend since 2016 (rate=133.8).[18] Cancer mortality is higher among males compared to females (166.23 cancer deaths per 100,000 population vs. 109.6) **(Figure 21)**.[19]

Pima County Cancer Deaths Per 100,000 Population by Year, 1999-2018-2018, LiveStories

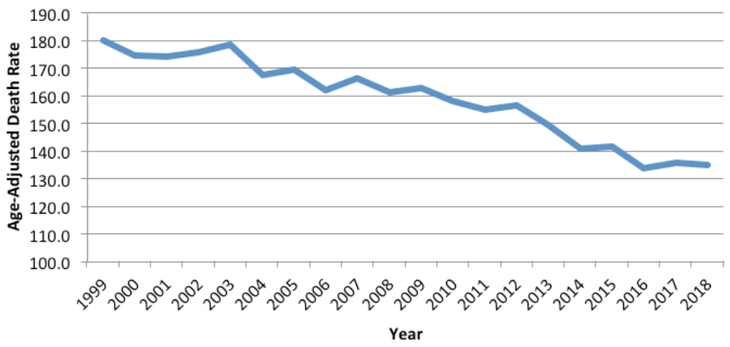


Figure 21 Pima County cancer deaths per 100,000 population 1999-2018[19]

In 2017 in the Tucson Metropolitan Statistical Area, prostate cancer had the highest age-adjusted incidence rate per 100,000 population of any type of cancer (83.03 among the male population), followed by breast cancer (55.909 among the entire population) and lung and bronchus cancer (44.115 among the entire population). Pancreatic cancer had the highest mortality-incidence age-adjusted rate ratio (0.879), followed by esophageal cancer (0.836) and liver cancer (0.725).[18]

Healthy People 2030 Leading Health Indicator: Adults who receive a colorectal cancer screening based on most recent guidelines (target: 74.4%)

Diabetes

Among the 45 Census Places within Pima County in 2018, the median value of adults who had ever been diagnosed with diabetes was 13.3%. The lowest value was 6.4% in Corona de Tucson and the highest value was 23.5% in Ali Molina.[3] In 2020, 10.6% of adults in Pima County reported having bought medications for diabetes in the past year.[3]

Healthy People 2030 Leading Health Indicator: New cases of diagnosed diabetes in the population (target: 5.6 per 1,000 population)

The age-adjusted death rate per 100,000 population due to diabetes in Pima County was 26.2 in 2018, compared to 23.0 in Arizona and 21.4 in the US overall. This rate was 17 among females and 37 among males.[3] Diabetes was the leading cause of death for tribal nations with more than five times the rate of deaths due to diabetes.[4]

Heart Disease

In 2018, 7.7% of adults in Pima County had ever been told by a health care provider that they had coronary heart disease compared to 6.8% of adults in the US overall **(Table 9)**.[3] The age-adjusted death rate per 100,000 population due to coronary heart disease was 97.8 in 2018, which has surpassed the Healthy People 2020 target of 103.4. The Healthy People 2030 target is 71.1. The age-adjusted death rate per 100,000 population due to coronary heart disease by sex is 72.2 among females and 128.2 among males in Pima County.[3]

Healthy People 2030 Leading Health Indicator: adults with hypertension whose blood pressure is under control (target: 60.8%)

Obesity

Adult obesity rates in Pima County have increased since 2007 and plateaued at 25% from 2014-2018 (percentage of the adults aged 20 and older that report a body mass index (BMI) greater than or equal to 30 kg/m2). This rate is slightly less than in Arizona (28%) and the US overall (30%) **(Figure 22)**.[13]

Obesity in Pima County, Arizona, and the United States, University of Wisconsin Population Health Institute 2007-2017

Figure 22 Obesity in Pima County, Arizona, and the United States[13]

Healthy People 2030 Leading Health Indicator: Children and adolescents with obesity (target: 15.5%)

Health Behaviors Related to Chronic Diseases

Approximately 15.3% of Pima County adults smoked cigarettes in 2020, which exceeded the 2020 Healthy People Target of 12%. The 2030 Healthy People Target is 5%. 4.2% of Pima County adults reported having used electronic cigarettes in the past 30 days.[3]

In 2018, 80.4% adults in Pima County reported consumption of sugar-sweetened beverages in the past 7 days (includes diet soft drinks, energy drinks, orange juice, other juice drinks, and regular soft drinks). 42.1% of adults reported using a quick service restaurant 6 times or more in the past 30 days.[3]

In 2017, 19% of adults age 20 and over reported engaging in no leisure-time physical activity, which is slightly less than in the US overall (23%).[13]

In 2018, 35% of adults in Pima County reported getting fewer than 7 hours of sleep a night on average (age-adjusted).[10]

Healthy People 2030 Leading Health Indicator: Cigarette smoking in adults (target: 5.0%); current use of any tobacco products among adolescents (target: 11.3%); consumption of added sugars by persons aged 2 years and over (target: 11.5%)

INFECTIOUS DISEASES

COVID-19 Pandemic

From March 2020 to December 9, 2021, there were a total of 164,190 reported cases of COVID-19 and 2,961 confirmed COVID-19 deaths in Pima County, resulting in a 15,716.8 rate of cases and a 283.4 rate of fatalities per 100,000 population.[20]

Notable Finding: As of December 9, 2021, there were a reported 2,961 all-time confirmed COVID-19 deaths in Pima County

The greatest number of reported COVID-19 cases have been among those ages 20-44 while the greatest number of hospitalized cases and deaths have been among those ages 65 and older. Although 52% of reported cases were among females, 58% of COVID-19 deaths were among males. The greatest proportion of reported COVID-19 cases was among the Latinx/Hispanic population, though the greatest proportion of hospitalized cases and deaths were among the non-Hispanic White population.[22] COVID-19 disproportionately impacted communities of color and people in areas of high social vulnerability, including rural areas.

Influenza and Pneumonia

The age-adjusted death rate per 100,000 population due to influenza and pneumonia in Pima County was 12.6 in 2018 compared to 11.3 in 2017. This rate is lower than the Arizona and US rates.[3]

Vaccines and Immunizations

As of November 9, 2021, 1,347,492 COVID-19 vaccine doses were administered to Pima County residents indicating 64.4% of the total population and 74.7% of the eligible population had been vaccinated. Nearly all (98.3%) of Pima County residents ages 65 and older and 24.4% of residents under 20 had received at least 1 dose of the vaccine, representing the highest and lowest vaccinated age groups. A higher proportion of females compared to males have been vaccinated in every age category. Vaccines were available to all adults in Pima County as of April 2021, adolescents 12 and over as of May 2021, and children 5-12 as of November 2021.[22]

Forty-eight percent (48%) of Pima County fee-for-service (FFS) Medicare enrollees had an annual flu vaccination in 2018. There has been an increasing trend in flu vaccines since 2015.[13]

The rate of reported cases of pertussis and varicella (chickenpox) in 2019 were 5.1 and 3.3 per 100,000 residents in Pima County, respectively, both of which are vaccine-preventable diseases. There were less than six but more than zero reported cases each of measles and mumps.[4]

In the 2016-2017 school year, 1.2% of child care/preschool students (18+ months of age) were exempt from every required vaccine in Pima County compared to 2.4% in Arizona overall.[23]

Healthy People 2030 Leading Health Indicator: Persons who are vaccinated annually against seasonal influenza (target: 70.0%)

BEHAVIORAL AND MENTAL HEALTH

In 2018, 13.6% of Pima County adults reported 14 or more days of poor mental health per month, compared to 12.8% and 13% of Arizona and US adults (age-adjusted). In 2018, 16.6% of Medicare beneficiaries were treated for depression, compared to 14.9% in Arizona and 18.4% in the US overall.[3]

The mental health provider rate in providers per 100,000 population (mental health providers include psychiatrists, psychologists, licensed clinical social workers, counselors, and advanced practice nurses specializing in mental health care) in Pima County was 192 in 2020, which is nearly 1.4 times the rate in Arizona overall (140 providers per 100,000 population). The rate has increased since 2016 when it was 160. 7.7% of households in Pima County had at least one person who received mental healthcare medical services in the past 3 years.[3]

Healthy People 2030 Leading Health Indicator: Adolescents with major depressive episodes who receive treatment (target: 46.4%); Suicide rate (target: 12.8 per 100,000 population)

In 2020, there were 225 suicide deaths among Pima County residents, 61% of which were by firearm. Reported suicide deaths decreased 11% from 2019. In 2020, 78% of deaths by suicide occurred among males. 7% of total suicide deaths occurred among children and adolescents ages 6-19 **(Figure 23)**.[5]

2020 Pima County Suicide Deaths by Age Group, Pima County Office of the Medical Examiner

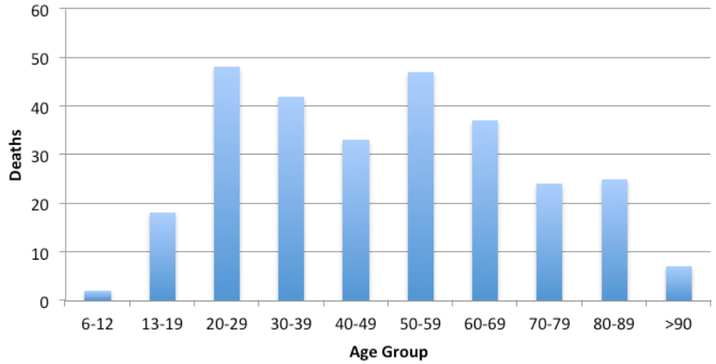


Figure 23 2020 Pima County suicide deaths by age group[5]

Notable Finding: Suicide deaths decreased from 2019 to 2020

Substance Use

In 2018, 20.5% of adults reported heavy drinking or binge drinking on at least one occasion in past 30 days, compared to 18.1% and 19% of Arizona and US adults overall. The average percentage of adults who reported heavy drinking in the 30 days prior to the survey or binge drinking on at least one occasion during that period between 2015-2019 was 26.2%, indicating a 25% decrease from the 2010-2014.[1,3]

The overdose mortality rate (deaths per 100,000 population age 15-64) in Pima County was 37.8 between 2015-2019.[24] In 2020, there were 446 overdose deaths in Pima County, signifying a 32% increase from 2019.[5] The rate of overdose deaths per 100,000 population in 2020 was just over twice the rate it was in 2011 **(Figure 24)**. Over seventy percent (70.9%) of overdose deaths were among males; 3.8% of overdose deaths were among those ages 19 and under. Most (94%) drug overdose deaths were determined to be of accidental cause.[5]

Pima County Overdose Deaths, 2011-2020, Office of the Medical Examiner

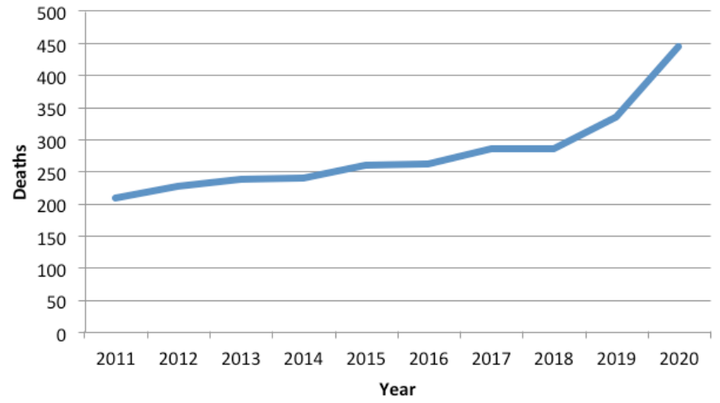


Figure 24 Pima County overdose deaths 2011-2020[5]

Healthy People 2030 Leading Health Indicator: Drug overdose deaths (target: 20.7 per 100,000); adults engaging in binge drinking of alcoholic beverages during the past 30 days (target: 25.4%)

Opiates were involved in 48% of all overdose deaths in Pima County in 2020. Fentanyl, a synthetic opioid 50 to 100 times more potent than morphine that is often mixed with other illegal drugs with or without the user's knowledge, was the leading drug involved in overdose deaths, accounting for 28% of deaths **(Table 7)**.[5]

2020 Pima County overdose deaths by top 5 drugs, Office of the Medical Examiner	
Drug	**Deaths**
Fentanyl	207
Methamphetamine	182
Heroin	78
Cocaine	61
Alcohol	57

Table 7 2020 Pima County overdose death by top 5 drugs[5]

Notable Finding: There was a 32% increase in overdose deaths from 2019 to 2020. 48% of all overdose deaths involved opiates.

SEXUAL HEALTH

Sexually Transmitted Diseases

Chlamydia cases are rising in Pima County. The number of newly diagnosed chlamydia cases per 100,000 population was 654 in 2018. The rate was 368 in 2008 **(Figure 25)**.[13] The rates of reported gonorrhea and syphilis cases per 100,000 were 211.8 and 54.6, respectively in 2019.[4]

Number of Newly Diagnosed Chlamydia Cases per 100,000 Population 2007-2018, University of Wisconsin Population Health Institute

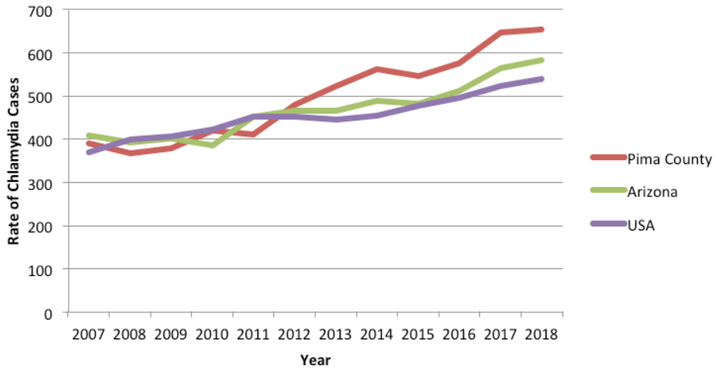


Figure 25 Number of newly diagnosed chlamydia cases per 100,000 population 2007-2018[13]

Notable Finding: **The number of newly diagnosed chlamydia cases per 100,000 population increased 78% from 2008 to 2018.**

In 2019, there were 101 newly reported HIV/AIDS cases in Pima County, a slight decrease from 2018 (115) and 2017 (113). The HIV/AIDS incidence rate in Pima County in 2018 was 11.1 newly reported cases per 100,000 population, which was slightly higher than Arizona overall (10.8), but less than Maricopa County (12.5). The prevalence of HIV in Pima County increased 28% from 2008 (2,263 reported cases) to 2018 (2,899 reported cases). The age-adjusted mortality rate per 100,000 persons due to HIV disease was 1.2 in Pima County and 0.9 in Arizona.[4]

Healthy People 2030 Leading Health Indicator: **Persons who know their HIV status (target 95.0%)**

In 2019, there were 214 reported cases of Hepatitis A in Pima County, a large jump from only 42 reported cases in 2018 and less than 6 in 2017. There were less than 6 reported cases of Hepatitis B (acute) and E and no (0) cases of perinatal Hepatitis B, Hepatitis C (acute) and Hepatitis D.[4]

Sexual Violence

According to numbers compiled by the Arizona Coalition to End Sexual and Domestic Violence based on information provided by the media, there were 11 domestic violence fatalities in Pima County and 102 in Arizona in 2020. In 2019, there were 25 domestic violence fatalities in Pima County and 96 in Arizona.[25] These figures may not represent all fatalities.

Missing/Incomplete Data: **Little secondary data were available to confirm rates of sexual and domestic violence in Pima County. However, the primary data from focus groups and surveys indicated that domestic violence was an increasing problem.**

LGBTQ+ Health

In Arizona, 4.5% of the population identifies as lesbian, gay, bisexual, transgender, queer (or questioning), or as another non-heteronormative gender identity or sexual orientation (LGBTQ+).[26] Pima County is the only county in Arizona with an ordinance prohibiting conversion therapy, or any attempt to change a person's sexual orientation, gender identity, or gender expression, for minors. There is no ordinance prohibiting discrimination based on sexual orientation or gender identity in private employment, housing, and public accommodations (full protections) at the county level.[27]

Missing/Incomplete Data: **LGBTQ+ health is a key issue for the 2021 Pima County CHNA, although this is an area where county-level quantitative data is lacking. The need for LGBTQ+ equity and discrimination prevention were common themes in the Primary Data Collection.**

MATERNAL AND INFANT HEALTH

Births

In 2019, there were a total of 10,357 births in Pima County. The greatest number of births were born to Hispanic/Latinx mothers between the ages of 25 and 29 (1,574), followed by White mothers between the ages of 25 and 29 (1,287), Hispanic/Latinx mothers between the ages of 20-24 (1,225), and White mothers between the ages of 30-34 (1,211). In 2019, the birth rate per 1,000 population was 9.9 and has been annually decreasing since 2006, when the birth rate was 14.2.[4]

In 2019, 8.2% of births were low birthweight (<2,500 grams) in Pima County, 1.2% of births were very low weight (<1,500 grams), and 9.9% of births were preterm (gestational age <37 weeks). Almost one-third (32.3%) of births involved complications of labor and/or delivery and 33.1% involved medical risk factors. More than one in ten (11.5%) infants were admitted to newborn intensive care units.[4] **(Table 8)**.[8]

Births by primary care area, Arizona Department of Health Services 2020			
Primary Care Area	**Birth Rate per 1,000 residents**	**Teen Births per 1,000 Females 14-19**	**Low-Weight Births per 1,000 Live Births**
Tohono O'odham	15.5	42.8	73.2
Tanque Verde	4.9	4.6	74.1
Catalina Foothills	5.9	6.1	67.7
Oro Valley	5.7	4.7	68.4
Marana	11.3	12.3	62.7
Ajo	13.5	55.1	72.3
Picture Rocks	7.8	17	78.3
Vail	11.2	12.5	77.0
Casas Adobes	10.6	14.9	70.4
Tucson West	10	15.9	77.5
Tucson Central	10.3	15.2	76.5
Tucson Foothills	11.7	26	79.5
Tucson South East	10.8	9.2	71.6
Tucson East	12.2	20.5	78.1
Tucson South	15	34.9	73.4
Flowing Wells	11	26.3	86.3
Tucson Estates	7.5	22.4	88.1
Drexel Heights	12.5	23.8	77.2
Valencia West	15.4	28.7	62.2
San Xavier	12.9	50.2	
Pascua Yaqui	20.8	58.7	93.5
Green Valley	2.0	17.9	86.4
Sahuarita	13.4	18.7	60.5

Table 8 Births by Primary Care Area[8]

Maternal Health

In 2019, 45.5% of Pima County births were to unmarried mothers. More than half (51%) of mothers utilized public sources of payment for birth. Five percent (5.1%) of mothers reported tobacco use during pregnancy **(Table 9)**.[4]

In 2019, 64% of women who gave birth in Pima County received prenatal care in the first trimester.

Notable Disparity: The amount of prenatal care received differs greatly by PCA.

Rates of occurrence for selected characteristics of newborns and mothers giving birth in Pima County, Arizona Department of Health Services 2019	
Characteristics	**RATE PER 100 BIRTHS**
Births with complications of labor and/or delivery	32.3
Births with medical risk factors	33.1
Preterm births (gestational age <37 weeks)	9.9
Births with abnormal conditions of the newborn	6.8
Low birthweight births (<2,500 grams)	8.2
Very low birthweight births (<1,500 grams)	1.2
Births with congenital anomalies of the newborn	0.5
Tobacco use during pregnancy	5.1
C-section	27.8
Infants admitted to newborn intensive care units	11.5
Women giving birth who received prenatal care in the 1st trimester	64.0
Public sources of payment for birth	51.0
Births to unmarried mothers	45.5

Table 9 Rates of occurrence for selected characteristics of newborns and mothers giving birth in Pima County[4]

Teen pregnancies have showed a decreasing trend since 2009 in Pima County. In 2019, there were 4.1 pregnancies per 1,000 females ages 10-17 compared to 11.2 in 2009. Among 18–19-year-olds, there were 35.2 pregnancies per 1,000 females compared to 82.3 in 2009 **(Table 10)**.[4]

Teen pregnancies 2009-2019 in Pima County, Arizona Department of Health Services		
Year	**Number of pregnancies per 1,000 females ages 10-17**	**Number of pregnancies per 1,000 females ages 18-19**
2009	11.2	82.3
2010	10.3	68.7
2011	9.0	64.3
2012	10.4	115.7
2013	7.4	54.6
2014	6.6	48.7
2015	5.2	45.9
2016	4.8	43.5
2017	4.9	39.1
2018	3.9	35.3
2019	4.1	35.2

Table 10 Teen pregnancies in Pima County 2009-2019[4]

Healthy People 2030 Leading Health Indicator: Maternal deaths (target: 15.7 per 100,000 live births)

Infant Mortality

The Pima County infant mortality rate per 1,000 live births was 5.9 in 2019, the highest rate it has been since 2010 (6.1).[4]

The rate of infant deaths per 1,000 live births between 2013-2019 was 4 among the White population, 8 among Black/African American population, 10 among the Native American population, and 5 among Hispanic/Latinx population in Pima County.[13]

Healthy People 2030 Leading Health Indicator: Infant deaths (target: 5.0 per 1,000 live births)

CHILD AND ADOLESCENT HEALTH

Child and Adolescent Mortality

In 2019, the top three leading causes of death among 15-19-year-olds were accidents (unintentional injuries) and intentional self-harm (suicide) (tied for first), followed by discharge of firearms. The leading cause of death among 1-14-year-olds was also accidents. There were no reported cases of accidental drowning deaths among children 19 years and under in 2019.[4]

Adolescent Substance Use

In Pima County 6.8% of 8th, 10th, and 12th grade students smoked at least one cigarette per day during the 30 days prior to the survey, compared to 4.7% in Arizona. This figure has decreased annually since 2012, when 14% of 8th, 10th, and 12th grade students reported smoking cigarettes.[3]

In 2018, 24.2% of 8th, 10th, and 12th grade students in Pima County reported drinking alcohol during the 30 days prior to the survey. One in five (20.2%) of students reported alcohol consumption in Arizona overall. There has been a decreasing trend in alcohol consumption among teenagers over time; in 2012, 30.7% of 8th, 10th, and 12th grade students reported that they drank alcohol.[3]

There is an increasing trend among 8th, 10th, and 12th grade students who report using marijuana in Pima County. One in five (20.1%) of 8th, 10th, and 12th grade students reported using marijuana one or more times during the 30 days in 2018, while 16.3% reported doing so in 2012. In Arizona, (15.7%) of students reported using marijuana.[3]

There was a decline in the percentage of teenagers enrolled in public school in the 8th, 10th, or 12th grades who had used methamphetamines (also called speed, crystal, crank, or ice) one or more times during their life between 2016 and 2018 in Pima County; in 2016, 2.8% of students reported ever having use methamphetamines, while 0.7% of students had in 2018.[3]

Healthy People 2030 Leading Health Indicator: Current use of any tobacco products among adolescents (target: 11.3%)

Adolescent Mental Health

Results from the 2019 Arizona High School Risk Behavior Survey revealed that 40.6% of Arizona high school students felt sad or hopeless almost every day for 2 or more weeks in a row so that they stopped doing some usual activities, during the 12 months before the survey. 20.9% seriously considered attempting suicide, 16.1% made a plan about how they would attempt suicide, 10.4% actually attempted suicide, and 4.2% had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse.[28]

Healthy People 2030 Leading Health Indicator: Adolescents with major depressive episodes who receive treatment (target: 46.4%)

Adolescent Sexual Risk Behavior

Among Arizona's 9th-12th graders in 2019, 24% reported that they were currently sexually active (had sexual intercourse with at least one person, during the 3 months before the survey). Among those, 49% did not use a condom during last sexual intercourse and 16.3% did not use any method to prevent pregnancy during last sexual intercourse.[28]

Missing/Incomplete Data: We could not find county-level data on adolescent mental health and sexual risk behavior.

EDUCATION AND ECONOMIC HEALTH

Educational Attainment

In Pima County in 2019, 88.4% of the population 25 years and older attained a high school diploma while 34.2% have a bachelor's degree or higher. Among White residents, 95.6% of the population 25 years and older attained a high school diploma and 41.4% had a bachelor's degree or higher, compared to 84.2% and 23.8% of Black/African American residents, 71.9% and 9.4% of Native American residents, 87.5% and 54.1% of Asian residents, and 75.1% and 16.5% of Hispanic/Latinx residents **(Figure 6)**.[1]

Notable Disparity: Fewer Native American, Black/African American, and Hispanic/Latinx Pima County residents are high school or college graduates compared to White and Asian residents.

School Enrollment and Performance

In Pima County, 95.6% of children ages 5-17 were enrolled in school in 2019. In the 2018-19 school year, 54% of students were eligible for free or reduced lunch.[1]

In 2020, the 4-year high school graduation rate in Pima County was 74.2%, compared to 79.2% in 2019 and 74.14% in 2018. Four-year graduation rates were less than 50% among students that were migrants, homeless, or in foster care at some point during high school. The high school dropout rate in Pima County was 4.37% in 2020 compared to 5.79% in 2019, 5.4% in 2018, and 5.3% in 2017.[29]

Based on AzMERIT Test Scores in 2019, 51% of fourth grade and 36% of eighth grade students were proficient or above in English/Language Arts. Among fourth grade students, 35% of Black/African American 32% of Native American, and 43% of Hispanic/Latinx students scored as proficient or above compared to 66% of White and 69% of Asian students. Among eighth grade students, 25% of Black/African American, 15% of Native American, and 27% of Hispanic/Latinx students scored as proficient or above compared to 51% of White and 56% of Asian students.[30]

Healthy People 2030 Leading Health Indicator: 4th grade students whose reading skills are at or above the proficient achievement level for their grade (target: 41.5%)

Almost half (48%) of fourth grade and 26% of eighth grade students were proficient or above in mathematics. Among fourth grade students, 34% of Black/African American, 26% of Native American, and 42% of Hispanic/Latinx students scored as proficient or above compared to 61% of White and 75% of Asian students. Among eighth grade students, 19% of Black/African American, 10% of Native American, and 20% of Hispanic/Latinx students scored as proficient or above compared to 39% of White and 47% of Asian students **(Figure 26)**.[30]

Standardized test performance by race and ethnicity, 2019

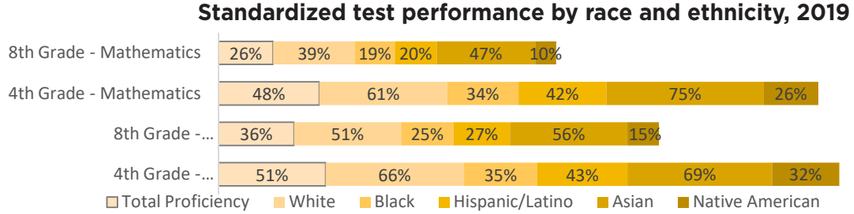


Figure 26 Standardized test performance by race & ethnicity 2019[29]

Notable Disparity: Black/African American, Native American, and Hispanic/Latinx 4th and 8th grade students are performing worse on standardized tests compared to White and Asian students. Key informants emphasized that many students with vulnerable identities are more likely to be students of color and face difficulties focusing on school due to competing priorities.

Income, Poverty, and Economic Health

In 2019 in Pima County, median earnings in the past 12 months were $22,273 among those with less than a high school degree, $29,299 among high school graduates (including equivalency), $32,336 among those with some college or an associate's degree, $47,053 among those with a bachelor's degree, and $62,202 among those with a graduate or professional degree (in 2019 inflation-adjusted dollars).[1] The median household income between 2015-2019 was $60,089 among White residents, $42,391 among Black/African American residents, $37,686 among Native American residents, $54,699 among Asian residents, and $44,427 among Hispanic/Latinx residents **(Figure 27)**.[3]

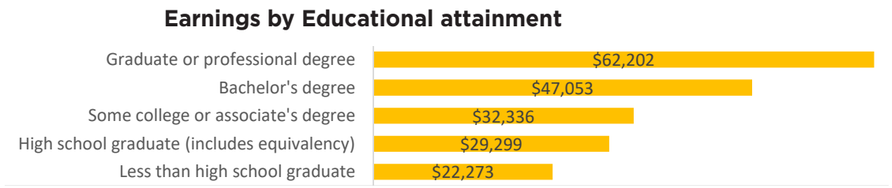


Figure 27 Educational attainment by earnings in Pima County 2019[3]

The poverty rate for the population 25 years and older is 23.7% among those without a high school diploma and 5.2% among those with a bachelor's degree or higher.[3]

In Tucson, 42.1% of households are cost-burdened (paying more than 30% of income on housing costs) among those with a household income less than $20,000, 30.1% among those between $20-$34,999, 15.8% among those between $35-$49,999, 8.3% between $50-$74,999, and 3.7% with household incomes $75,000 and higher. Those with incomes less than $35,000 are more cost-burdened compared to Arizona and the US overall, while those with incomes $35,000 and higher are less cost-burdened. In Tucson, renters are more cost-burdened than owners (51% compared to 21.8%).[30]

Between 2015-2019, the ratio of household income at the 80th percentile to income at the 20th percentile is 4.7 in Pima County, which is slightly higher than in Arizona overall (4.5).[14]

Healthy People 2030 Leading Health Indicator: Employment among the working-age population (target: 75.0%)

NATURAL, BUILT, AND SOCIAL ENVIRONMENTS

Transportation

The transportation score describes adequacy of transportation; the higher the score, the less adequate or greater the need for transportation there is in a given area. The Tohono O'odham, Pascua Yaqui, and San Xavier PCAs have the three highest transportation scores in Pima County, while Tucson Southeast, Tanque Verde, and Vail have the lowest transportation scores.[8] It is important to note that the PCAs with higher transportation scores are found in remote and rural areas of Pima County.

Between 2015-2019, 77% of the workforce reported driving alone to work, of which 35% reported commuting more than 30 minutes. The mean travel time to work was 24.9 minutes and only 2.3% of workers reported using public transportation.[3]

Access to Healthy Foods

19.1% of Pima County residents and 29.6% of children under 18 years of age were projected to experience food insecurity, defined by Feeding America as "a lack of consistent access to enough food for every person in a household to live an active, healthy life", at some point during the year 2020.[6,31]

The food environment index (FEI) combines two measures of food access: the percentage of the population that is low-income and has low access to a grocery store, and the percentage of the population that did not have access to a reliable source of food during the past year.[31] The index ranges from 0 (worst) to 10 (best) and equally weights the two measures. From 2017-2021, Pima County had a food environment index of 7.5. In 2020, Arizona has a FEI of 6.8 and the United States has a FEI of 7.8 overall.[3]

In 2019, 11.2% of Pima County households were receiving food stamps or Supplemental Nutritional Assistance Program (SNAP) benefits. More than half (52.6%) of these households had children. Nearly sixty percent (59.9%) of these households are beyond 1 mile from the nearest supermarket and 22.1% are beyond 10 miles.[6]

In 2019, 15.5% of households without vehicles were beyond 1 mile from the nearest supermarket and 2.1% were beyond 10 miles. More than forty percent (42.3%) of seniors 65 and up and 36.5% of children age 0-17 lived beyond 1 mile from the nearest supermarket and 2.03% and 2.83% were beyond 10 miles. Almost a quarter (23%) of the low-income population lived 1 mile from the nearest supermarket and 3.4% lived beyond 10 miles.[6]

Healthy People 2030 Leading Health Indicator: household food insecurity and hunger (target: 6.0%)

Homelessness and Housing

According to a point-in-time analysis conducted by the Tucson Pima Collaboration to End Homelessness which utilized count data collected on the same, single date in multiple years, there were 579 people experiencing unsheltered homelessness on a single night in 2020 compared to 361 in 2019, a 60.3% increase. There was a corresponding 26.3% decrease in the number of persons experiencing homelessness in sheltered environments (emergency shelter, safe haven, transitional housing). The overall number of people experiencing homelessness on a single night in Pima County rose from 1,372 in 2019 to 1,660 in 2020 **(Table 11)**.[32]

Annual change in homelessness among all persons in Pima County reported to U.S. Department of Housing and Urban Development, Tucson Pima Collaboration to End Homelessness 2020

Year	Number of Unsheltered Persons	Number of Sheltered Persons
2017	385	1189
2018	363	1017
2019	361	1011
2020	579	745

Table 11 Annual change in homelessness among all persons in Pima County reported to U.S. Department of Housing and Urban Development 2020[32]

In 2019, persons served through local homeless assistance programs in Pima County spent an average of 13.8 months in unsheltered or temporarily sheltered environments before moving into permanent housing. 52.4% of persons served through temporary shelter environments and rapid rehousing exited to permanent housing destinations, though 27.2% returned to homelessness within two years.

Black/African American, Native American, and Hispanic/Latinx persons are disproportionately homeless relative to the Pima County population as a whole.[22] On a single night in 2020, 58.2% of homeless persons were male and 21% were chronically homeless. The number of unsheltered homelessness among adults with serious mental illness increased 103% from 2017 (98 total persons) to 2020 (199 total persons).[32]

Notable Finding: The number of people experiencing unsheltered homelessness on a single night increased 60.3% from 2019 to 2020. This number increased 103% from 2017 to 2020 among adults with serious mental illnesses.

The share of affordable houses sold in Tucson was 74.7% in 2020. In the past decade, the greatest share of affordable houses was sold in 2012 (86.2%) and the lowest share was sold in 2018 (66.4%).[30] Nearly one in five (19%) of households in Pima County reported at least one of the following four housing problems from 2013-2017: overcrowding, high housing costs, lack of kitchen, or lack of plumbing facilities.[3]

Access to Exercise Opportunities

There are over 250,000 acres of open spaces within Pima County.[33] Between 2018-2019, 88% of the Pima County population reported having adequate access to locations for physical activity, compared to 85% of Arizona residents overall.[14]

Heat, Climate, and Air Quality

There were 108 days with temperatures above 100 degrees Fahrenheit in Tucson in 2020, the greatest number of days recorded from 1985-2021, beating the record of 99 days in 1994 **(Table 12)**. August 2020 was the all-time warmest month on record in the Tucson area from 1894-2020 with an average temperature of 92.0 degrees Fahrenheit while 2020 was the all-time driest year with only 4.17 inches of total precipitation. 2020 also marked the longest streak of 8 consecutive days of 110 degrees Fahrenheit on record, breaking the previous record of 6 days in a row in 1994.[34]

Top 5 years with the most days above 100 degrees Fahrenheit, Tucson, AZ, 1985-2020, National Weather Service	
Year	**Number of Days**
2020	108
1994	99
1989	93
1988	78
1991 & 1993	77

Table 12 Top 5 years with the most days above 100 degrees F for Tucson, Arizona 1985-2020[34]

Notable Finding: 2020 was the all-time driest year from 1894-2020 and August was the all-time warmest month in terms of average temperature. 2020 broke the record for the longest streak of consecutive 110+ °F days.

The annual weighted average number of high ozone days in Pima County was 4.3 between 2017-2019. The annual average particle concentration was 5.6µg/m.[35]

Healthy People 2030 Leading Health Indicator: Exposure to unhealthy air (target: 3,866,365,815 AQI-weighted people days)

Public Safety

In 2019, the violent crime rate per 100,000 residents was 447.4 in the Tucson Metropolitan Area compared to 366.7 in the US overall. Burglary rates were 405.1 compared to 340.5 in the US, larceny rates were 2168 compared to 1549.5 in the US, and motor vehicle theft was 308.2 compared to 219.9 in the US.[30]

Healthy People 2030 Leading Health Indicator: Homicides (target: 5.5 per 100,000 population)

Computer and Internet Access

Between 2015-2019, 92.2% of households in Pima County reported having a computer and 85.4% had a broadband Internet subscription. 40.5% of households in the Tohono O'odham county subdivision had no computer compared to 7.5% in the Tucson county subdivision and 5.8% in the Marana county subdivision according to 5-Year Estimates from the American Community Survey.[1]

Notable Disparity: Compared to only 7.5% of homes in the Tucson county subdivision, 40.5% of homes in a tribal community had no computer.

HEALTHY AGING

In Pima County, the percentage of the population 65 years of age and older increased from 16.6% in 2010-2014 to 19.2% in 2015-2019. The percentage of those 65 years of age and older is greater in Pima County relative to Arizona (17.1%) and the United States overall (15.6%).[1]

There was an 188.2% increase in Alzheimer's Disease deaths from 2000 to 2020 in Arizona.[36]

According to results from a survey conducted by the Pima County Council on Aging in 2017 (n=2,269), 34% of older adults ages 60 and older reported taking medication for chronic pain, 58% of which were taking medication daily and 84% of which were had been taking medications for longer than 6 months. 79% of older adults ages 60 and older rated their community as a good or excellent place to live while 72% rated their community as a good or excellent place to age, and 66% rated overall services available to older adults as good or excellent **(Figure 28)**.[37]

Survey Results from 2,269 Seniors 65+ in Pima County, Pima County Council on Aging 2017

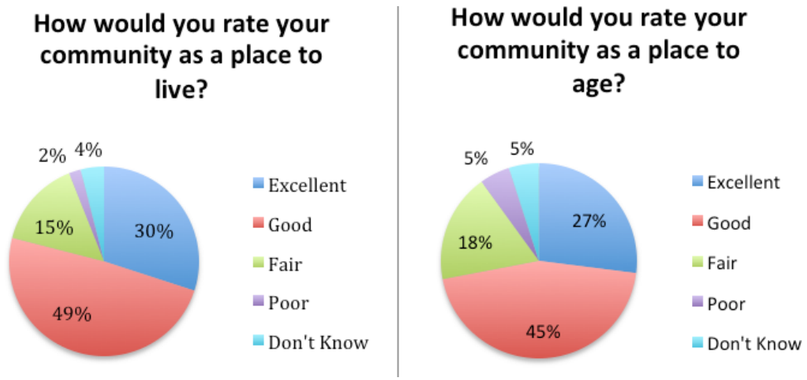


Figure 28 Survey Results from 2,269 seniors (age 65+) in Pima County 2017[37]

Missing/Incomplete Data: We were able to locate few metrics to gauge the status of senior quality of life in Pima County. Primary data emphasized the need for healthy aging services and attention to the built environment to prevent falls and injury for elderly residents.

SOCIAL DETERMINANTS OF HEALTH: PRAPARE DATA

The Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE) is an assessment tool from the National Association of Community Health Centers (NACHC) used by health centers and other providers to collect data on social determinants of health affecting their patients' wellbeing. The PRAPARE survey captures important contextual information about patients that is sometimes missing from general databases to help health centers more effectively impact patient health outcomes and reduce costs by targeting patients' unique needs more precisely. Approximately 3,592 patients at El Rio Health in Pima County completed the PRAPARE survey in 2019. Results from the survey are summarized below.

Education and Economic Health

61.6% of patients were below the federal poverty level, 22.6% were unemployed, and 13.4% had less than a high school education.

Health Care Access and Quality

55.5% of respondents had no medical insurance through an employer. 4.0% reported that a lack of transportation kept them from medical appointments.

Neighborhood and Built Environment

4.5% of patients had no housing and 5.1% were worried about losing housing. 4.6% reported feeling physically and emotionally unsafe at their current residence.

Social and Community Context

27.7% of patients reported feeling quite a bit or very much stressed. 2.3% of patients reported they were or had been afraid of a partner or ex-partner.

Primary Data

Primary data is information collected directly from Pima County residents. It includes their opinions, perceptions and experiences related to health and wellbeing. Primary data was collected to gain further context and information on health priorities, barriers, strengths, and assets.

Qualitative primary data collection consisted of:

- 31 Key informant interviews (n=37)
- 9 Focus Groups (n=54)
- 4 Community Forums
  - 3 Virtual Community Forums (English and Spanish) (n=67)
  - 1 In-Person Gallery Walk (n=35)
- Pima County Community Advisory Committee (n=19)

In total, 206 community members were engaged in the CHNA process.

Quantitative Secondary Data Collection: Strategic Planning Surveys

Between September and October 2020, Pima County Health Department (PCHD) conducted a series of Strategic Planning Surveys and interviews of over 2,100 PCHD employees, external stakeholders, community members.

There were 137 internal stakeholder surveys, 466 external stakeholder surveys, and 1,528 community surveys completed in this process. The full methods and results from these surveys can be found in the 2020 Current State Review from PCHD. See Appendix G for more information.

DATA COLLECTION METHODS

Key Informant Interviews

The purpose of conducting key informant interviews (KIIs) is to gain detailed, in-depth information from community leaders, health and social service providers, and advocates. Initial key informants were chosen by consulting previous CHNAs and compiling a list with the Steering Committee members. Additional key informants were found through recommendations from current key informants and the Community Advisory Committee. Key informants were emailed with a link to sign up for a 1-hour interview slot that could be completed virtually or in person.

A total of 37 KIIs were conducted, mainly through Zoom video calls. A few KIIs conducted in-person following COVID-19 regulations, including mask use and social distancing. Key informants represented a large range of health in Pima County (see Appendix A for a full list of Steering Committee members and their roles and affiliations) including:

- Hospitals
- First response
- Law enforcement
- Climate/environment experts
- Neighborhood leaders
- Faith leaders
- Non-profits
- Academia
- Local government
- Health department

Key informants were asked about their vision for a healthy community, top health concerns, barriers to health, community assets and strengths, and the impact of COVID-19, racism and discrimination on community health (see Appendix B for full question guide).

Focus Group Interviews

The purpose of conducting focus groups is to identify a “norm” or average that focus group participants discuss about certain topics regarding attitudes, practices, or beliefs. Focus group participants share characteristics or have similar identities, such as:

- Occupation (nurses, doctors, teachers, etc.)
- Identities/demographics (race, ethnicity, gender, sexual orientation, age, etc.)
- People with the same illnesses/conditions
- Any other characteristics

A total of 9 focus groups were conducted through Zoom or in-person with COVID-19 accommodations, including mask use and social distancing. Focus group participants were recruited directly through organizations and community leaders, or through flyers and recruitment materials sent via community listservs. Participants were given a $30 gift card following focus group participation to compensate them for their time and expertise. The participants were also invited to complete a brief and anonymous demographic survey before beginning the focus group. Focus groups were completed in 60-90 minutes (~1-1.5 hours).

The focus groups were conducted by trained focus group facilitators. Most of the focus groups were facilitated by individuals who were not part of the CHNA team, and as much as possible we tried to identify facilitators with similar characteristics to the focus group participants. In most focus groups, two members of the CHNA team were present to take notes and record the responses and observations from the focus group participants and provide technical support for the virtual settings. In some cases, only one note-taker was present. For the Tucson Indian Center focus group, a single person facilitated and took notes by the organization's request to accommodate COVID-19 precautions and policies.

Focus groups included:

1. **LGBTQ+** (n= 5, virtual) LGBTQ+ stands for Lesbian, Gay, Bisexual, Transgender, and Queer/Questioning. The "+" symbol represents the many other identities people may have including: transexual, two-spirit, intersex, asexual, pansexual, agender, gender queer, bigender, gender variant, pangender, and more. People that participated in this group identified as a part of the LGBTQ+ community.
2. **Direct service providers** (n= 7, virtual) Direct service providers help community members directly to navigate social services. Participants in this group work directly with people experiencing substance use, homelessness, mental health/illness, and other vulnerable conditions.
3. **African American Health and Wellness Coalition** (n= 5, virtual) Community members participating in this group were a part of the African American Health and Wellness Coalition, a local grassroots group supporting health and wellbeing for the Black/African American community, particularly through churches and places of worship.
4. **Promotores de Salud/Community Health Workers** (CHWs) (n= 9, virtual) Promotores came from a variety of organizations and work directly with communities in Pima County. This focus group was conducted in Spanish.
5. **Communities with Disabilities** (n= 6, virtual) Participants in this group identified as people living with disabilities.
6. **Pascua Yaqui service providers** (n= 6, in-person) This focus group consisted of service providers at the Pascua Yaqui health department. This focus group was conducted in-person at the Pascua Yaqui Health Department by 3 team members.
7. **Seniors** (n= 5, virtual) This group consisted of people that self-identified as seniors.
8. **Faith Leaders** (n= 4, virtual) Faith leaders came from a variety of religions and backgrounds.
9. **Tucson Indian Center service providers** (n= 6, in-person) The Tucson Indian Center provides support services to Native American/American Indian populations in off-reservation communities in Pima County. The participants represented a variety of tribal nations, and providers worked directly with community members to help connect them to resources in Pima County.

COMMUNITY FORUMS

Virtual

Community forums are opportunities to gather information from the wider community. Three virtual forums were conducted on Zoom, including 2 in English and 1 in Spanish.

Virtual community forums were 90-120 minutes (~1.5-2 hours) in length. After a 40-minute presentation of the CHNA methods and results, participants entered breakout rooms to discuss health priorities and possible solutions for 25-30 minutes. The breakout rooms were facilitated by volunteers who were given overarching questions and were also responsible for taking notes of participant responses. Most of the breakout rooms contained 3-6 community members.

After the breakout room discussion, participants then took part in an interactive Slido session. Slido is an interactive presentation tool that allows participants to answer questions anonymously and provide input directly from their phone or computer, while compiling and showing the results in real time. The participants provided input on the top health priorities, top social determinant of health priorities, ideas for how to solve the major health issues and strengths/assets in Pima County that can be used to address them.

During the virtual forums, participants were invited to complete a brief and anonymous demographic survey via a link in the Zoom chat.

Community Advisory Committee

The Community Advisory Committee (CAC) is a group of community leaders within Pima County. The CAC meets twice a month with PCHD to discuss county-wide health initiatives and updates. The CAC helped to guide CHNA planning and qualitative data collection.

The CAC participated in Slido polling similarly to the virtual community forums. CAC members provided input on top health priorities and solutions to these health issues and barriers.

Gallery Walk

An in-person gallery walk was held for community members to provide feedback while observing prudent COVID-19 precautions including mask use and social distancing. The gallery walk was held at Pima Community College: Downtown Campus, which was chosen for its location and accessibility via car and public transportation.

Participants were invited to vote on seven of the top health priorities identified from the key informant interviews, focus groups and virtual forums. The seven health priorities were:

1. Health systems and navigation
2. Social Determinants of health
3. Mental health
4. Climate and environment
5. Substance use
6. Chronic disease
7. Healthy aging

Stations for each health priority were set up around a large conference room. When a participant entered the room, they were provided with a brief introduction to the activity as well and the CHNA methods and purpose. They were also asked to complete a brief and anonymous demographic survey. At each station, participants were able to read information about the health issue and provide written feedback about the issue and potential solutions. All information was provided in both English and Spanish.

Forum participants were given 5 sticker dots and asked to vote on the health priorities they considered most important. Participants were able to use stickers freely and could put multiple stickers on one topic to show increased support for that topic. Self-paced, participants were able to walk around, read the handouts, give written comments, and vote during the event. The gallery walk was available from 3pm-7pm.

Pima County Health Department Strategic Planning Surveys

Pima County Health Department Strategic Planning Surveys were given to internal and external stakeholders, including community members, employees, and subject matter experts (SME) in public health. Most SMEs lived in Pima County, but some national SMEs were interviewed for different perspectives. Targeted interviews were conducted to gain qualitative data to contextualize survey results. These results were used to help PCHD begin the strategic planning process in 2021.

In September of 2020, internal stakeholder surveys opened and were distributed to all PCHD staff through email. In October, the external stakeholder surveys opened and community organization and key partners were invited to participate in surveys through connections and email listservs. Also in October, the community surveys were made available in English and Spanish surveys and were distributed through social media and websites. Surveys closed in October and reached 137 internal stakeholders, 466 external stakeholders, and 1,529 community stakeholders. For the full 2020 Current State review report, see the information provided in Appendix G.

PRIMARY DATA ANALYSIS

The CHNA team analyzed key informant interviews and focus groups using a content analysis approach. Using the qualitative data collected from KII, focus groups, and forum notes, the CHNA team were able to identify recurring themes. CHNA team members used their extensive experience and specializations in public health practice and qualitative and quantitative data analysis throughout the research process.

Limitations

There are several limitations that should be noted in relation to primary data collection activities. First, though there was strong participation from community groups, wide dissemination of recruitment materials, and participation from many diverse stakeholders and community members, the key informants, focus groups and community forums comprise a small sample and cannot fully represent the diversity of Pima County residents and communities. The purpose of these activities is not to generalize information; rather, the goal is to contextualize the secondary health data based on the experience of community members and health leaders and provide important community input to prioritize health issues.

In addition, the Pima County strategic planning surveys were completed by a small number of participants and cannot be generalized to Pima County as a whole.

The COVID-19 pandemic presented some unique opportunities and challenges in relation to participant recruitment. On the one hand, many community members and leaders were comfortable with virtual interviews, focus groups and forum options, which allowed the primary data collection activities to extend to a wide variety of stakeholders throughout the county. On the other hand, these recruitment methods are not equally available to all communities, as evidenced by the limited participation from some rural areas of Pima County. In addition, we were unable to include participants from some important communities in the data collection activities. For example, we were unable to hold focus groups with the migrant or refugee communities or with teachers and school counselors. The results in this report should therefore be read and interpreted in relation to the groups whose voices may be missing, as much as in relation to the diverse communities that are represented.

PRIMARY DATA RESULTS

Participant Demographics

A total of 206 community members participated in the CHNA. The following section describes the demographic information collected from the voluntary demographic surveys.

Number of participants in 2021 CHNA by activity	
Activity	**Attendance**
Key informant interviews	37
9 Focus Groups	54
3 Virtual Forums	67
Pima County Community Advisory Committee (CAC)	19
In-Person Gallery Walk-through	35
Total	206

Table 13 Number of participants in 2021 CHNA by activity

Demographic Surveys

In the community forums, participants were asked to fill out a voluntary demographic survey in which they were asked to describe their role in the community and the perspective that they brought to the forum. Participants were asked to identify as community members, representatives of the health department or government, or health providers and to identify their gender identity, age, race and ethnicity and zip code.

92 demographic surveys were completed, representing 38 of the 57 zip codes in Pima County.

CHNA demographic survey results	
Race/ethnicity*	
White	51%
Hispanic/Latinx	24%
Native American	18%
Black/African American	3.2%
Middle Eastern	2.2%
South Asian	2.2%
Southeast Asian	1.1%
East Asian	1.1%
Gender*	
Woman	76%
Man	21.7%
Gender non-conforming	4.3%
Self-described	2.2%
Language*	
English	85.9%
Spanish	20.7%
Other	5.4%
Community Forum Participant Role	
Community Member	40%
Clinician	0%
Social Service or Direct Service Provider	16%
Health Department or Government Representative	18%
Other	26%

Table 14 2021 CHNA demographic survey results
**Note: participants were able to choose more than one answer*

Community Snapshots: The focus groups provided a wide array of rich and valuable data regarding the opinions, experiences, and values of diverse community members in Pima County. In the following sections we have summarized the conversations and highlighted the important themes but cannot fully do justice to the unique voices and perspectives shared in the focus groups. However, we have compiled quotes and unique findings in Appendix F that highlight the responses provided by diverse community members.

TOP HEALTH CONCERNS

Key informants

The key informants identified access to care, behavioral and mental health, substance use disorder, and the impact of COVID-19 on mental health as top concerns.

Access to care

The key informants discussed several aspects regarding access to care including health insurance and prohibitive costs. Many Pima County residents struggle with obtaining or paying for private insurance but also with public insurances like Medicare and Medicaid (known as the Arizona Health Care Cost Containment System or AHCCCS).

Lack of culturally appropriate resources (language)

In healthcare, there is a lack of culturally appropriate resources and language services. Many key informants cited a need for more interpreters as patients are unable to understand their health status from physicians or healthcare providers and many rely on family members for translation instead of professionals.

Lack of knowledge about available services and how to navigate them

Many Pima County residents rely on AHCCCS and other services to gain access to healthcare. The key informants shared that Pima County residents struggled with applying for and finding appropriate or sufficient healthcare insurance as well as navigating phone calls and websites for health services.

Behavioral, Mental Health and Substance Use Disorder

Key informants discussed the following themes related to behavioral and mental health.

Lack of availability of services, treatment: Many key informants noted the lack of behavioral and mental health specialists in Pima County. Specialists are underfunded and overworked. There is also a lack of continuous treatment for mental and behavioral health issues. This lack of care was increased by COVID-19. Isolation, mourning, and grief contributed to a worsening of mental and behavioral health status. In addition, restrictions and telemedicine prevented some individuals from seeking specialized care.

Substance use disorder and overdoses: Substance use disorder and overdoses was emphasized by key informants. Key informants from many sectors from community health workers to behavioral health specialists emphasized the increase in substance use and overdoses. A decrease in mental health status and care has contributed to increased substance use disorder.

COVID-19 and its effect on these access to care and behavioral and mental health.

COVID-19 has exacerbated health disparities. Especially during the early phases of the pandemic in the Spring and Summer of 2020, community members faced difficulties with finding transportation, dealing with financial setbacks related to job loss, and accessing appointments for both urgent and maintenance healthcare. With the increase in telemedicine, some communities with low digital literacy or with a lack of access to technology and internet were unable to access care.

Focus Groups

The top health concerns and notable comments are summarized for each focus group in the table below.

2021 CHNA focus group summaries

Group	Top Health Concerns	Notable Comments
Community Health Workers/ Promotores de Salud	■ Substance use/addiction ■ Improper diet, unhealthy foods ■ Lack of appointments/ accessibility for healthcare ■ Chronic disease ■ Stress and Mental health	The participants in this focus group concentrated on the difficulty of accessing culturally and linguistically appropriate services. In particular, they noted that many providers did not share the cultural and linguistic background of their patients.
Seniors	■ Drug use ■ Homelessness ■ Climate ■ Senior ■ Mental health (isolation) ■ COVID – taking resources away from other health needs ■ Access to care	Much of the discussion in the Senior focus group centered on financial challenges prior to and during the COVID-19 pandemic. They emphasized the difficulty of living on a fixed income and being able to enjoy a healthy standard of living. The cost of caregiving, including the need to care for dependents, was discussed as a major challenge.
Communities with Disabilities	■ Built environment ■ Lack of healthy food choices ■ Accessible and affordable health and social services ■ Difficulty navigating programs ■ Access to mental health services/preventive mental health services	The participants provided important insight on the need for increasing accessibility. Also, this group emphasized the importance of resiliency and strength. Many participants struggled with finding appropriate information for care, and the information that was available was negative or isolating.

2021 CHNA focus group summaries		
Group	**Top Health Concerns**	**Notable Comments**
LGBTQ+	■ Mental Health: depression, suicide ■ Access to care—dignified and supportive care ■ Substance use disorder ■ STIs including AIDS ■ Violence and harassment ■ Poverty ■ Stress, anxiety, trauma	Participants of this focus group emphasized the need for equitable care for all marginalized identities. They emphasized that there are not enough diverse voices at the table, and health suffers because of inequitable care. This group also highlighted mental health and grief from the COVID-19 pandemic.
African American Wellness Coalition	■ Chronic Diseases ■ Alzheimer's ■ Substance Use Disorder ■ Suicide among teens ■ Poverty ■ Health Seeking Behaviors ■ Aging and end of life planning	Focus group participants emphasized the need for more diversity and cultural humility in health and wellness. Discussants gave context to generational trauma of healthcare and the need for advocacy. Discrimination impacts not only individual health, but community health.
Pascua Yaqui Service Providers	■ Drug use, ■ alcoholism, ■ diabetes, ■ Obesity, ■ Mental health (for adults and children) ■ Elderly care	Participants were both community members and direct service providers. This focus group emphasized the need for greater continuity of care for everyone in the community, especially vulnerable populations like the elderly and children.
Faith Leaders	■ Mental health ■ False information ■ Heat ■ Cultural and gender issues ■ Old age ■ Opioid crisis ■ Domestic violence ■ Access to Healthcare ■ Education	Faith leaders emphasized the importance of community. Many religious communities have strong networks, and working in collaboration could help improve health and wellness. Participants also emphasized the discrimination that exists within Pima County.
Tucson Indian Center Service Providers	■ Drug and alcohol abuse ■ Mental health ■ Chronic Disease	Participants emphasized health education to increase access to services. Many barriers cited highlighted the unique experiences of Native American populations living in Pima County and the need for greater attention in programming and policy.
Direct Service Providers	■ Substance use and overdose ■ Mental health ■ Incarceration and deportation ■ Isolation ■ Aging and dementia ■ Low education levels ■ Homelessness	Direct service providers emphasized the barriers of vulnerable populations. Since many of them worked in behavioral health and homelessness, there were many examples of community members being unable to receive care.

Table 15 2021 CHNA focus group summaries

In general, the conversations in the focus group revealed a much wider range of themes than the key informant interviews. These topics reflect the unique challenges and experiences of each community. See Appendix F for more detail about the information shared in each focus group.

The major themes from the focus group discussions include:

- Access to care
- Chronic Disease
- Substance Use Disorder
- Mental Health

The focus groups participants emphasized that these health concerns are connected and compounded by the social determinants of health. People that face circumstances such as poverty, low education levels, language barriers, discrimination, homelessness, or differences in ability have more difficulty with these top health concerns.

Access to care was emphasized in almost all the focus group discussions. Discrimination or a lack of inclusive care prevents appropriate and timely healthcare.

Chronic disease was emphasized as a health issue before and during the COVID-19 pandemic. Focus groups discussants emphasized that preventive care has been waning since the pandemic and expressed worry that there will be increasing rates of chronic disease in coming years.

Mental health and substance use disorder were consistent topics in the focus group discussions. Many of these groups identified that intersectional identities may increase risk of mental health issues or exacerbate substance use disorder due to a variety of factors including isolation, discrimination, or intergenerational trauma.

Community Forums

Slido results were used to present and report on votes from participants in real time. Participants were asked to give open ended responses as well as rank and vote on the top health concerns and social determinants of health.

2021 CHNA community forums summary			
	English		Spanish
Topic	October 19th	October 21st	October 20th
Most Important Health Issues	1. Mental Health 2. Food 3. Social Determinants of Health	1. Access to Care 2. Mental Health 3. Poverty	1. Lack of exercise 2. Bad habits 3. Poor nutrition
Top 3 Health Concerns	1. Mental Health 2. Access to Care 3. Substance Use Disorder	1. Access to Care 2. Mental Health 3. Chronic Diseases: diabetes, obesity, heart disease	1. Access to health services 2. Chronic Diseases: Diabetes, Obesity, Heart Disease 3. Mental Health
Most Important Social Determinants of Health	1. Poverty 2. Housing 3. Access to healthy foods	1. Poverty 2. Housing 3. Education	1. Access to healthy nutrition 2. Education 3. Access to language services: interpretation and translation

Table 16 2021 CHNA Community forums summary

Gallery Walk

Community forum participants were able to vote on the following health issues:

1. Health systems and navigation
2. Social Determinants of health
3. Mental health
4. Climate and environment
5. Substance use
6. Chronic disease
7. Healthy aging

The voting results from 35 community members were:

2021 CHNA gallery walk results		
Health Issue	Votes	Percentage of all votes
Mental Health	39	22.4%
Social Determinants of Health	38	21.8%
Healthcare Systems and Navigation	29	16.7%
Substance Use	21	12.1%
Chronic Disease	19	10.9%
Climate and Environment	19	10.9%
Healthy Aging	9	5.2%
Total:	174	100%

Table 17 2021 CHNA gallery walk results

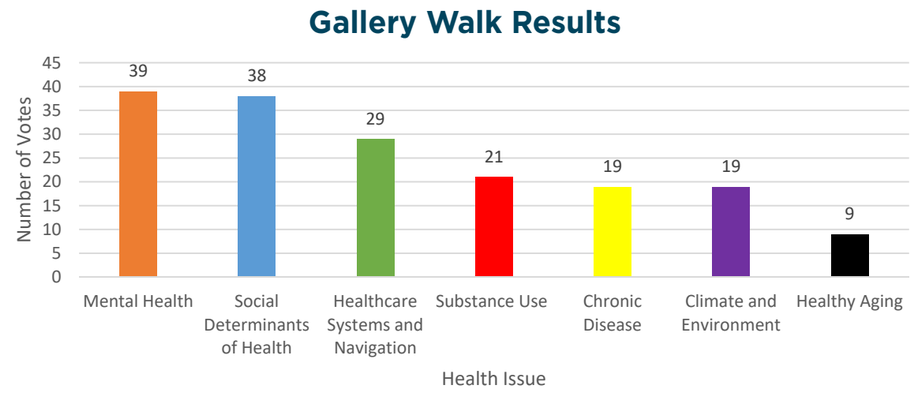


Figure 29 2021 CHNA gallery walk results

The top three health issues identified by the community were Mental Health, Social Determinants of Health, and Healthcare Systems and Navigation. There is a clear distinction between the top three and the rest of the health issues.

VISION FOR A HEALTHY COMMUNITY

Key informants and focus group participants were asked about their personal vision for a healthy community. The aim of this question was to determine the ideals of health and wellness for the community. Participants were asked what is healthy and unhealthy about their community or the ones they serve.

Key Informant Interviews

Key informants noted the following ideals in a healthy community:

- Access to services
- Mental health services
- Safe places for care
- Shelter and housing security
- Food security
- Community infrastructure and support

Key informants emphasized the need for housing and access to services as the most important needs for a healthy community. Many key informants aligned significantly on these topics throughout the interviews.

Focus Groups

Focus group participants noted that a healthy community would include:

- Access to services
- Social justice
- Safety
- Food security
- Community and social support
- Affordable housing
- Access to opportunities to be healthy (exercise/nutrition, etc)
- Behavioral health support

Focus group participants emphasized the need for access and equity. Discussants highlighted the need for equitable care and were more likely to identify with a marginalized population.

Both key informant interviews and focus groups overlapped in many areas in a vision for a healthy community. Key informants emphasized social determinants of health and referenced Maslow's hierarchy of needs to emphasize how individuals may struggle with meeting their basic needs. Focus groups emphasized access to resources and social determinants to improve health. Access to care was the most common response for a healthy community.

BARRIERS AND CHALLENGES

Key informants and community members were asked about current barriers and challenges that the community faced. This can include physical (transportation, etc.) or unseen barriers (poverty, time, etc.).

Key Informant Interviews

- Limited resources: staff, funds, volunteers
- Education and awareness: providing culturally and linguistically appropriate services and knowing how to access these services
- Difficulty in navigating services (uninsured, underinsured, health literacy, qualifying for services, unequal access to care, etc.)
- Transportation
- Focus is on acute care and treatment instead of prevention

Focus Groups

- Transportation
- Understanding and navigating health services and insurance systems
- Lack of knowledge on resources
- Inadequate or inappropriate treatment by service providers/staff
- Caregiver cost and support
- Food security
- Language justice (access to interpretation services)
- Technology, especially for seniors

> ***"As a single older person, it's cheaper for me to buy a fast-food burger than to make a nutritious meal."***
>
> – SENIOR FOCUS GROUP

Many focus group participants emphasized the need for more accessible food options. Price and location are barriers to healthy diets.

One of the most prevalent barriers mentioned by key informants and focus group participants was transportation. This was heightened by the COVID-19 pandemic, with decreased access to public transport and rideshare services at the beginning of the pandemic, whether due to lack of availability or lack of comfort in using these services. Lack of knowledge and education on resources was also cited as an important barrier. Key informants noted that their affiliated organizations had many programs, but communicating these resources is difficult.

According to the focus group participants, these resources are not effectively reaching vulnerable populations that need them most. Difficulty in navigating systems was also commonly cited as a barrier. This increased with the COVID-19 pandemic, as more people needed help and government assistance but could not navigate resources such as web or phone-based platforms. Some discussants spoke of the inundation of phone calls for private and public insurance, which confused community members. Even when residents called resources themselves, the length of wait or confusing path of computerized navigation was a barrier. People were more likely to hang up the phone instead. For web-based platforms, many websites are outdated and do not have the most up to date resources for residents to find. This causes residents to avoid using these platforms as well.

RESILIENCY AND ASSETS IN PIMA COUNTY

Resiliency is the ability to bounce back from negative situations and was particularly highlighted in the context of the ongoing COVID-19 pandemic. Resiliency can be found in individuals, communities, and institutions.

Key Informant Interviews

- Community and social support/mutual aid
- Access to outdoor recreation opportunities
- Increased collaboration and partnership between agencies and programs

Focus Groups

- Abundance of culture and art
- Mutual support networks
- Faith
- Agency and Advocacy
- Access to technology/ability to adapt to new technology
- Collaboration between entities to overcome challenges
- Hope for the future

Key informants noted that community and social support was essential in resiliency in Pima County during the COVID-19 pandemic. Also, access to outdoor recreation opportunities such as biking paths and hiking sites like Tumamoc Hill were important for Pima County residents. Focus groups emphasized the importance of culture, art, and faith in resiliency. Community members also highlighted agency and advocacy in healthcare and health initiative as a growing movement in resilience. Hope for the future is an increasingly important feeling for community members, both current and future generations. Key informants and focus groups alike emphasized the need for community or support networks to bounce back from adverse situations.

> ***Tucson is amazing…Tucson is nice and doesn't make me feel alone or different. They let me embrace [my differences]."***
>
> – COMMUNITIES WITH DISABILITIES FOCUS GROUP

> ***We all need to work together toward unity. We have to start loving our neighbor no matter the color of their skin or their beliefs. We're a lot stronger in unity…"***
>
> – FAITH LEADERS FOCUS GROUP

> ***We are a community, demanding more, we're expecting more from our community, we're not satisfied with being left isolated on our own and marginalized, we appreciate and celebrate our culture and history and the successes that we've had and we grieve over the hardships"***
>
> – LGBTQ+ FOCUS GROUP

An important theme included emerging assets due to COVID-19. Public transport became more accessible with reduced cost. Also, being able to have green spaces and go outside in hiking areas was beneficial to many before and during the COVID-19 pandemic.

Pima County residents noted that the community was one of the strongest assets. People rely on each other for increased support and sense of community. This helped in many ways, including caregiving, resources, and mental health. Also, many people can give time to volunteer with community organizations and non-profits. Pima County residents also have an abundance of culture and knowledge to be shared and passed down.

Participants also noted the importance of the business sector, collaboration between different organizations, and the continuation of reducing disconnect between sectors to create a more holistic view of health.

RACISM AND DISCRIMINATION: POSSIBLE SOLUTIONS

Community members were asked, based on their experiences, to offer strategies to mitigate racism and discrimination.

Key informants and focus group participants both emphasized how the COVID-19 pandemic exacerbated and revealed existing disparities. Discrimination and racism affect how and whether people seek care, how easily they are able to access resources, and their perception of how they receive care. Key informants also underscored the way that structural racism, under-investment and urban planning policies have harmed vulnerable and marginalized communities.

The focus group participants focused more on their personal experiences of discrimination in the health and social service sectors, including a lack of access to interpretation services, unequal treatment in health services, and fear to seek services based on race, nationality or immigration status. Racism has created intergenerational barriers to health seeking behaviors and access. Key informants and focus group participants spoke about the impact of collective and historical trauma on communities today, and how trauma shapes the interaction between the patient/client and provider.

Key informant Interview participants identified the following solutions:

- Increased diversity in leadership, by age, race/ethnicity, etc.
- Increased education to the public and increase outreach
- Creating affirming spaces and promote allyship and accountability
- Making sure resources are accessible to people with different abilities

> *"Higher levels of engagement of those with lived experience are needed, just having someone on an advisory board isn't it."*
> – KEY INFORMANT INTERVIEW

> *"Healthcare needs to be more welcoming to make patients feel safe"*
> – KEY INFORMANT INTERVIEW

> *"Move out of scare tactics regarding fentanyl"*
> – KEY INFORMANT INTERVIEW

Focus group participants identified the following potential solutions to address racism and discrimination in health and social services:

- Increased diversity in leadership and healthcare
- Increased access to resources

> *"Why not make these things more available through YouTube for these services? There are a lot of great services up in the Foothills, but no bus service so you can't reach them."*
> – SENIOR FOCUS GROUP

> *"Program for low-income school children and families for internet and accessibility"*
> – COMMUNITIES WITH DISABILITIES FOCUS GROUP

COMMUNITY FORUMS: COMMUNITY-IDENTIFIED SOLUTIONS TO MOST IMPORTANT HEALTH ISSUES

Participants in community forums were given the opportunity to write solutions on Slido from identified health issues. Table 18 summarizes the themes from the responses in all community forum activities.

Community Forum Responses: What are some potential solutions to these health issues?	
Existing Plans and Resources	"Increased funding for Harm Reduction Programs" "Increase funding for Medicaid HCBS [Home and Community Based Services] and Older Americans Act" "Increased funding for Housing First Program" "Equitable School Tax credit dollars to underserved schools and neighborhoods"
Increase Access to Healthcare	"Providing more interpreters at hospitals and clinic facilities" "Mobile clinics or improved access for rural communities, maybe through incentives or programs for physicians and health providers" "Funding Wi-Fi for telehealth"
Social Determinants of Health	"Better public transport, covered bus stops, more stops, farther reach, etc." "Increase in government subsidized housing" "Working to make sure minimum wage increases have comparable inflation to social security"
Changes to Policy/ Societal Structure	"Capture data metrics by race and ethnicity and share as a dashboard we intend to close the gaps on. Achieve health equity. Eliminate racial inequity" "A Conflict Mediation Team as an active part of law enforcement department" "High taxes or restrictions to the use of some of the substances such as drugs or alcohol"

Community Forum Responses: What are some potential solutions to these health issues?	
Mental Health Support	"First responder training for mental health crises" "Supervised consumption sites" "Stop arresting people for substance use: expand TPD deflection program"
Collaboration and Improved Communication	"Centralized services and collaboration among nonprofits" "Create a resource and referral platform to connect people to available nonprofit of subsidized healthcare providers so folks know what is available to them"

Table 18 2021 CHNA community forum solutions

PIMA COUNTY HEALTH DEPARTMENT STRATEGIC PLANNING SURVEY RESULTS

The CHNA team reviewed the Pima County Health Department 2020 Current State Review Report (see Appendix G for more information). The report contained a wealth of primary data that intersected with the aims of the Pima County CHNA. The relevant results are summarized below.

The leading health issues identified in surveys included:

- Behavioral health
  - Behavioral health was cited as the leading cause of death in Pima County. This can include self-harm and suicide.
- Substance abuse
  - Substance use was cited as the second most prioritized health issue. This can include alcohol, illicit drugs, and prescription medication.
- Diabetes
  - Diabetes was the highest ranked disease/condition in the surveys. Multiple behaviors should be addressed based on the survey: eating habits, unhealthy body weight, physical activity, healthcare seeking, and tobacco use.

Leading social determinants included:

- Schools/educational opportunities
- Economic and financial
  - Economic and financial issues were the next most common social determinants from survey results. This can include:
    - Economy/job opportunities
    - Cost of living
    - Affordable housing
- Health equity/anti-racism/social justice
  - Many stakeholders emphasized the need for innovation around health equity and anti-racism. Anti-racism is the concept of fighting against discriminatory and racist practices in society.

Key Findings

The Strategic Planning Survey identified several action items for the Pima County Health Department (PCHD). The report found that more should be done to listen to and communicate with Pima County community members. The participants recommended that PCHD: prioritize and invest resources in telling the stories of Pima County's community; increase engagement from vulnerable or unheard populations; and embed PCHD staff or community partners in neighborhoods to open communication lines and build trust.

The report also found that a strong PCHD presence in Pima County's diverse neighborhoods will play a crucial role in the effective distribution of COVID-19 vaccinations. In particular, the participants recommended that PHCD identify people who are well respected in specific communities to act as vaccine champions and prioritize methods for understanding and communicating with all populations in Pima County.

Further, PCHD's response to COVID-19 has continued and has increased collaboration with local healthcare facilities. Participants recommended that PCHD continue weekly meetings with local hospitals and facilities throughout the pandemic and even beyond and build off of these relationships to form meaningful working groups to address gaps in surveillance systems and data sharing.

Finally, there are opportunities for PCHD to strengthen and grow its working relationships with academic institutions. PCHD should leverage connections with academic institutions to participate in internship and workshare programs and acquire mutually beneficial funding opportunities. The use of the unique knowledge of local faculty can help policy, communications, and community-building activities.

While these key findings are specific to PCHD's COVID-19 response and recovery initiatives, the findings and recommendations offer relevant strategies that can be employed in the future as stakeholders continue the Community Health Improvement Plan based on the results of the CHNA.

Prioritization of Health Needs

Bringing it all together: Prioritization of Health Needs

The following section outlines the major themes from primary and secondary data collection activities.

The top health concerns identified by the primary data activities include behavioral and mental health, substance use disorder, social determinants of health, access to care, and chronic diseases. The secondary data collection also identified some health priorities that both differed from and coincided with those identified by the key informants and focus group participants. The secondary data provides quantitative support for the top health concerns identified through primary data collection. However, there were some additional issues identified through secondary data review that were not emphasized in the primary data collection.

Behavioral and Mental Health

Behavioral and mental health was the top priority for key informants, focus groups, and community forums. Many Pima County residents highlighted the high rate of mental health illness due to increased isolation and grief from the ongoing COVID-19 pandemic.

One important factor of the mental health status in Pima County (and nationwide) is the stigma associated with mental health issues and seeking care. Many community members noted the importance of reducing stigma and increasing continuity of care for mental health services. Also, mental health challenges can be unique for certain communities or populations. Some community members emphasized that anxiety and adverse mental health outcomes are related to unique circumstances like discrimination (racism, ableism, etc.) or gender dysphoria in the LGBTQ+ community. Children and elderly adults are also extremely vulnerable to negative health impacts related to isolation. Children are used to high rates of social interaction while elder adults face increasing rates of isolation away from support networks and community.

> *"The issue of isolation cuts across the generation in relation to drugs, homelessness, and seniors being isolated in home. Isolation is at the heart of a lot of stuff."*
> – KEY INFORMANT INTERVIEW

Substance Use Disorder

Substance use, including alcohol or drugs, has a huge impact on the health in Pima County, as supported by comments from community members. It was closely related to mental health and access to services in primary data collection. Further, community members also emphasized the relation to housing insecurity. Many people with substance use disorder struggle with other mental health issues due to a lack of care and existing stigma. Focus group participants said that many people may self-medicate with drugs.

Secondary data from Pima County showed a substantial increase in deaths related to drug use, specifically fentanyl. In 2020, there were 446 overdose deaths in Pima County. This is a 32% increase from 2019. The rate of overdose deaths has doubled since 2011. Almost all overdoses (94%) were from accidental cause. Fentanyl was the most common drug for overdose, followed by methamphetamines. The majority of opioid deaths were in the 20-39 age group.

In 2018, 20.5% of adults reported heavy drinking in the past 30 days or binge drinking at least once during the same period, which is higher than the US and National averages (18.1% and 19%, respectively).

Opioid use has increased in Pima County significantly. It is a concern for all community members from physicians to friends and family. Fentanyl exists in many forms and is easily accessible. This has underscored the need for naloxone distribution and reduced stigma surrounding substance use disorder. Fentanyl has a high potency, meaning that accidental overdose can be common with fentanyl use. Programming should involve education on overdose prevention as opposed to scare tactics. This is especially important for marginalized populations who are unable to gain access to education about fentanyl. Also, cross contamination is common for people who do not have opioid-related knowledge, meaning that fentanyl can be laced in many drugs.

Access to Care

Access to care was cited by many community members as an important health issue. Many marginalized populations are greatly affected by roadblocks to care. Access to care is influenced by the ease with which people are able to navigate between systems and the extend of coordination between different systems of care.

Insurance and cost are also barriers in accessing healthcare. Despite public systems like Medicare and Medicaid, there are difficulties navigating this system and qualifying for healthcare services. In some cases, participants reported a lack of appointments or long wait times for procedures, especially during the COVID-19 pandemic.

There is also a need for culturally appropriate services. Many residents had adverse health experiences attributed to racial, ethnic, gender or other identities, which can decrease future health seeking behaviors. Language is a very large barrier in accessing healthcare and many healthcare settings or programs lack proper translation. There should also be an increase in accessibility for those with different abilities.

> *"A person has the right to live without so many roadblocks"*
> – COMMUNITY WITH DISABILITIES FOCUS GROUP

Social Determinants of Health

> ***"Parking, narrow doorways and narrow aisles. Downtown and fourth are not accessible at all...I get caught in trolley tracks as well."***
>
> – COMMUNITIES WITH DISABILITIES FOCUS GROUP

Social determinants of health (SDOH) are conditions in which people live, work, play, learn, and worship that affect health as a whole, including quality of life and risk.19 Many Pima County residents struggle with SDOH, especially those in marginalized populations.

Income affects many aspects of health, and many residents are unable to afford healthy life choices, including healthcare, food, housing, and medication.

One of the most important SDOH noted throughout the primary data collection was transportation. Public transportation is difficult, especially with the COVID-19 pandemic. Many people struggled getting around due to restricted access to fear of contracting COVID-19.

The environment was cited by many key informants and focus groups. The natural environment involved the climate and weather. Air pollution from the city exacerbates many existing health problems. There are also many instances of contamination and pollution that endanger water sources for people. The built environment includes man-made infrastructure. Roads and sidewalks are not maintained well enough for those with disabilities or older adults, increasing injury and restricting movement.

Racial/ethnic disparities were a prominent pattern in Pima County. Mortality rates are notably higher in non-Hispanic/Latinx Black/African American and Native American/Alaska Native individuals in Pima County. The lowest mortality rates were seen in Asian and non-Hispanic/Latinx White individuals. Infant mortality rate is also higher among non-Hispanic/Latinx Black/African American and Native American/Alaska Native populations.

Non-white racial/ethnic groups had fewer adults with at least a high school or bachelor's degree. Education attainment is related to income. Communities of color disproportionally experience lower educational attainment and subsequently have higher rates of poverty, which can limit access to health resources and care. In high school, non-white students also have lower scores on the AzMERIT scores. When asked about this disparity, many key informants noted that students with vulnerable identities, including racial/ethnic minority, undocumented status, or others, prevents some children from being able to focus on education.

Infectious Disease

Except for COVID-19, infectious diseases were not emphasized in primary data collection activities, but the data show alarming rates of sexually transmitted diseases.

Sexually transmitted infections (STIs) have risen significantly in Pima County. The incidence of newly diagnosed chlamydia cases in residents in Pima County was 654 out of 100,000. This is an increase of 73.1% since 2008.

Further, COVID-19 cases remained exceptionally high in the state of Arizona throughout the pandemic. In July of 2021, the rate of cases in Pima County was 11,416 out of 100,000 individuals, and the death rate was 235 per 100,000. This is an exceptionally high number of cases and contributed to elevated rates of deaths between 2019 and 2020.

TOP HEALTH CONCERNS: CAUSES, BARRIERS AND SOLUTIONS.

The participants in the key informant interviews, focus groups and community forum activities identified potential causes, barriers, and solutions to the most important health issues. These causes, barriers and solutions are summarized below for the top three health issues.

Mental and Behavioral Health

Mental and behavioral health has been emphasized in primary and secondary data collection. Mental health is a pressing issue that requires a multi-sectoral approach, especially with the compounding impact of the COVID-19 pandemic.

Causes: During the COVID-19 pandemic, there has been increased isolation and grief that has caused a decline in mental health for Pima County. In primary data collection, this was especially cited in children and elder adults. Children missed out on the interaction and social-emotional learning through school and other social activities. Older adults too may have already struggled with isolation and only became more separated from family, friends, and resources due to COVID-19 precautions.

Barriers: There is a lack of mental health professionals that can help Pima County residents. There is also stigma around seeking mental health care experienced throughout Pima County.

Solutions:

- Increase number of mental health providers
  - Many community members noted that mental and behavioral health specialists are not staffed enough to support mental health in Pima County. Many members also suggested increasing pay for providers to increase staffing of mental health providers in Pima County.

- Increase number of mental health providers
  - Many community members emphasized the need to decrease stigma around mental health disorders and seeking mental health care. This can be done with more education regarding mental health and normalizing seeking care, especially across cultural and linguistic differences, increasing continuity of care
  - CHNA participants also noted that health care can be siloed and prevent continuity of care for mental health. Mental health should be emphasized as much as physical health care. This can be done with increased collaboration between community health centers, hospitals, and mental health specialists.

Substance Use Disorder

Substance use disorder (SUD) was reflected in both primary and secondary data collection. The numbers of overdoses, both fatal and non-fatal, have been increasing over the past 10 years.

Causes: Key informants and focus group participants all discussed the importance to address substance use disorder in Pima County. The opioid epidemic is an ongoing public health crisis that has persisted despite increased funding, data collection, and attention from policymakers. SUD was named a priority in both the 2015 and 2018 Community Health Needs Assessments, which highlights the persistent and challenging nature of SUD. Some more immediate causes include a decline in mental health, especially in the last year due to COVID-19. Further, key informants that work directly with overdose and substance use prevention have noted that drugs like fentanyl are easily accessible and available in many forms.

Barriers: There is a stigma surrounding substance use disorder, including discrimination against people that use substances like drugs or alcohol. Community members emphasized this as a barrier to seeking treatment or care by those affected by substance use. Further, there is limited education on substance use other than to avoid it completely, which is not realistic in many cases. Finally, there are limited resources that people can use to reduce substance use due to fear. This can include fear of losing employment, family members, or of experiencing discrimination.

Solutions:

- Decrease stigma around substance use
  - Community emphasized that stigma surrounding substance use must be challenged with increased education efforts. Education can focus on addiction, barriers to seeking help/care, signs of overdose, and signs of mental health decline that can contribute to substance use disorder. Key informants noted that naloxone and overdose prevention must be increased to create less stigma and more control over substance use.
- Increase naloxone distribution
  - Increasing programs and resources for naloxone distribution can help with increasing access to overdose prevention resources. Increasing programming and distribution can help to increase knowledge on available resources that exist in Pima County.
- Increase education on overdose and fentanyl
  - Increasing education on overdose and substance use can help to not only increase control and knowledge on overdose, but can also decrease stigma. Increased education on safe use of substances can help prevent accidental overdose, which was cited as an estimated 94% of total overdose deaths.
  - Fentanyl test strips (FTS) are inexpensive strips of paper that can detect the presence of fentanyl in any substance.
    - On May 18, 2021, Arizona governor Doug Ducey legalized FTS. Distributing FTS may be a possible solution to combat accidental overdose.
  - Participants also suggested supervised/controlled use sites, where people who use substances may safely use drugs under the supervision of trained overdose specialists with naloxone on site.

Access to Care

Access to care is an important issue that has been compounded by the COVID-19 pandemic. This may have been due to restricted access to services that were no longer provided in person, or due to people not having access to resources such as health insurance.

Causes: There are many causes of the decreased access to health care in Pima County. Many Pima County residents are unable to access healthcare due to physical reasons, like transportation and an increase in telemedicine, which may not be accessible to certain populations. Also, many residents are unable to navigate healthcare systems, including public and private insurance, which can decrease access to care significantly.

Barriers: Physical barriers include a lack of transportation, both prior to and during the pandemic. The pandemic reduced the number of available appointments for residents. This has prevented many people from continuing care and seeking out preventive, routine care like vaccinations or screenings.

Telemedicine has increased during the pandemic, which has had both positive and negative effects on access to care. Some groups have been able to access care that was otherwise difficult to access due to transportation issues. On the other hand, it has decreased access to care for people that were unable to access Wi-Fi or computers to attend appointments.

Lack of language services and interpretation is also a barrier impacting access to care.

Solutions:

- Increase advocacy groups
  - Advocacy in healthcare was noted as an important need from the community, especially for vulnerable populations. Many times, people with vulnerable identities do not commonly know all aspects of medicine or their health due to low knowledge on health jargon. Also, many community members noted that advocacy was needed to get increased services and attention in healthcare. Hospitals and other health centers should be community advocates that work to increase care for patients.

- Increase language services (interpretation and translation)
  - There should be an increase in language services to help encourage access to care for people that do not speak English. This can help protect patients from relying on English speaking family members or other people that are not providers. Even with interpretation services, they are not readily available enough for patients. Language services must be incorporated into all healthcare aspects, from appointment making to discharging with information.
- More community-based efforts for education
  - Community education was cited as an important need directly from community members. There are many ways to engage communities, but working with faith-based leadership has been effective based on community member input. Being able to connect with easily accessible and trusted resources is essential in distribution healthcare and information.
- Support the Community Health Worker (CHW) workforce
  - The CHW workforce can support increased access to care for vulnerable communities in a variety of ways. CHWs act as a liaison between health services and the community, increasing the cultural competence of health services and the ability of community members to understand services. CHWs also provide valuable education and care coordination services to help community members understand how to care for their health and access health services. CHWs help to increase cultural competence and support vulnerable communities. They are trusted members within these communities and have the unique ability to connect underserved populations with health and social services.

Social Determinants of Health

The causes and barriers of the top health concerns identified by the community all include social determinants of health. As cited in other parts of this report, access to transportation, poverty, housing, education, and a living wage, go hand-in-hand with addressing these multifaceted issues. Progress on these priority health issues cannot be successful without interventions that consider existing structures of inequality. The social determinants of health are identified as a top health priority because of how they are inextricably linked to mental health, substance use disorder and access to care.

MONITORING HEALTH INDICATORS

It is essential to monitor progress towards addressing the top health issues prioritized through the CHNA process. Table 19 provides recommended indicators that can be tracked on a population level. It is important to note that it takes time and sustained commitment to "move the needle" regarding population-level health metrics, and progress may not be evident in the short-term.

Indicators to measure progress in identified health priorities			
Health Priority	**Health Metric or Indicator**	**Current metric**	**Source**
Mental Health	Percentage of Pima County adults who reported 14 or more days of poor mental health per month	13% (2018)	University of Wisconsin Population Health Institute
	Number of suicide deaths per year	225 (2020)	Pima County Office of the Medical Examiner, 2020
Substance Use Disorder	Overdose rate per 100,000 population	37.8% (2015-2019)	National Opioid Misuse Community Assessment Tool 2015-2019: 37.8
	Opioid-involved overdose death rates	26.2 (2015-2019)	National Opioid Misuse Community Assessment Tool
Access to Care	Ratio of patients to primary care physicians by primary care area	1523:1 (2020)	Arizona Department of Health Services
	Percentage of adults in Pima County reported that they had visited a dentist or dental clinic for any reason in the past year	51.1% (2018)	Pima Health Data Portal 2020
Social Determinants of Health	Racial and ethnic disparities in education, insurance, and mortality	See "Education and Economic Health" section	Arizona Department of Education, Arizona Department of Health Services, Pima Health Data Portal, Pima County Medical Examiner's Office
	Households below the Federal Poverty Line	13.5% (2019)	US Census Bureau American Community Survey Estimates
	Persons experiencing food insecurity	19.1% (2020)	Feeding America

Table 19 Indicators to measure progress in identified health priorities

Health Challenges and Opportunities in Pima County

Key informant interviews, focus groups, and community forums provided insight into some of the unique, ongoing, and recent challenges and opportunities facing residents in Pima County. Challenges often addressed systemic issues like funding, transportation, and healthcare systems. Opportunities recognized the existing arts and culture and community support that exists in communities. In some cases, topics were both opportunities and challenges.

CHALLENGES

Transportation and built environment

Transportation was one of the most frequently mentioned challenges in Pima County. The lack of appropriate transportation has affected people's access to buying groceries and other necessities, as well as accessing health and social services. Additionally, there is little access to areas outside of the Tucson metro area by public transportation. Often people said they had community members or family in other parts of the county or state, and it was impossible to find affordable transportation to be with them. A lack of Americans with Disabilities Act (ADA) accessible buildings and everyday spaces was also a common concern and related to resident's ability to access services and spaces (including playgrounds, restaurants, clinics) and feel integrated into the community.

Avenues for growth: Improve public transportation infrastructure and maintain areas accessible to all populations. Maintain a record of accessible and inaccessible areas, business, etc. in Pima County.

Navigating systems

Whether signing up for social benefit programs (like health insurance or Supplemental Nutrition Assistance Program) or making medical appointments, many felt the online-only systems (especially during the pandemic) were not only hard to use but made complicated applications difficult to understand. For those who struggled with technology this was especially the case. With libraries closed, in-person help became very hard to find and access to technology and the internet were also impacted. A person's literacy level or preferred language (amongst other barriers) can also impact their ability to access available and necessary services. Long wait times on the phone with social service offices were another frustration. Healthcare providers also described their frustrations with not having a centralized system to provide continuous care.

Avenues for growth: Create more accessible platforms, increase affordable insurance and social benefits enrollments, and provide education and outreach to those who may need additional help.

Treatment by providers and health care centers

When it came to addressing barriers to health, many participants cited discrimination and cultural and linguistic differences as important reasons why certain groups forgo regular healthcare visits or do not follow prescribed treatment plans. People reported receiving different care based upon their race or ethnicity, insurance status, language preferences, and because of stigmas related to these and other identifying factors such as substance use, gender identity and sexual preferences. The need to have religious and culturally appropriate care was also mentioned. Participants cited a need for greater advocacy and cultural competency in interactions between health providers or care centers and patients. Experiences of discrimination often compound existing and historical mistrust of healthcare systems and increase barriers to health.

Avenues for growth: Increase interpretation services, engage community health workers (CHWs), increase cultural competency, promote greater health literacy in interactions with patients and clients, and greater opportunities for advocacy and teaching self-advocacy.

Access to care

In addition to what is written above, access to care is further impacted by high medical costs (with and without insurance) and the ability to receive timely care. As a medically underserved county, particularly mental health organizations lack enough funding and adequate staff numbers to serve the number clients.

Avenues for growth: Working more closely with programs and centers in high demand to ensure they are getting the resources they need.

Meeting basic needs:

Even with greater infrastructure and program funding, overall health in Pima County is also greatly affected by food and housing insecurity, limited childcare options, and low education and income levels. Affordable housing and shelter space was routinely cited as necessary yet unavailable or with long wait times. Inadequate housing has also become a topic of concern as heat-related deaths continue to rise. In addition, the affordability of housing is becoming an increasingly important issue as housing costs have risen rapidly since the beginning of the pandemic.

Community members cited a lack of healthy food options at food banks, or cost and transportation barriers to acquiring healthy foods. Many said access to healthy foods should also accompany greater health education.

Caregiver support was also mentioned, both for children and adults or seniors. There is both a lack of, and a high turnover rate, in caregiver numbers and grandparents were also cited as needing greater support when taking in grandchildren. Access to free and affordable childcare was also mentioned as a challenge in Pima County.

Avenues for growth: raising minimum wages and funding projects and organizations that meet these basic needs such as food banks, schools, and public housing.

OPPORTUNITIES

Collaboration and partnerships

In the wake of the pandemic, collaboration and partnerships were both created and strengthened to overcome new challenges. Partnerships allowed organizations and health centers to reopen and continue serving clients and collaboration brought individuals together to help combat isolation and injustice. The pandemic brought many new challenges and heightened old ones but also brought people together to creating lasting solutions and resilience.

Mutual aid, community, and family

Along with numerous non-profit organizations, neighborhood associations and mutual aid networks, community, and family support were a common asset brought up by participants across communities. Especially during the pandemic when most social gatherings and services and classes were unavailable, or moved to online-only formats, having a social, familial, or community network helped decrease social isolation and loneliness, brought food and services to those in need, and brought people together against social injustices. Community gardens were mentioned as an important resource for healthy food, education, and community building.

Avenues for growth: Increasing access and funding to community gardens and spaces for people to come together and work together on issues.

Faith and spirituality

Pima County residents have often found community and support within faith-based institutions and shared spiritual spaces. Faith organizations were often cited as places to receive free food, clothing, COVID-19 vaccines and tests, and other resources. Although denominational spaces, services are often offered to anyone regardless of orientation and their position within and across communities makes faith-based organizations great partners in health. In the wake of discrimination and violence against Muslims and the devastating effects of the pandemic in Pima County, interfaith coalitions and partnerships are also avenues to promote education, awareness, and healing.

Avenues for growth: Increasing health services and education in Pima County through partnerships with faith-based organizations.

Culture, History, Art

Tucson has a thriving art scene, and many participants recognized the importance of teaching and using cultural heritage, music, and art to help bring people together and promote self-expression. Connecting with the complex history of this area was also seen as an important factor in youth development and community resilience.

Avenues for growth: Promoting arts and more inclusive history in schools and community events

Both:

Technology

The COVID-19 pandemic highlighted technological barriers and brought attention to grave disparities between communities and populations. As services and processes moved online, rural communities and elderly and disabled populations often lacked (and continue to struggle with) access to computers, internet, and technical assistance, especially with the closure of public libraries and community centers. Online-only formats can also lack human connection and support groups reported seeing both a drop in participants but also an increase in areas where remote locations (being able to join from home) experienced barriers to access. Participants cited ongoing resilience and adaptation, including learning and navigating new technology, expanding programs offering free computers and internet access, and having a plethora of free resources available online, including educational materials, how-to and exercise videos.

Avenues for growth: Free and easily accessible internet and technology programs were routinely cited as important and needed. Many felt the changes made, like increased telehealth, allowed for greater access to services and hoped they would continue after the pandemic.

Climate and geography

One of the most unique aspects of Pima County and the surrounding areas is the climate and geography. With 285 days of sunshine per year and miles of open nature areas, walking paths, parks, and mountains, outdoor recreation is a year-round season. While other areas of the country were blanketed in snow and cold during the beginnings of the pandemic, Pima County saw an enormous increase in people using hiking trails, river paths, and outdoor spaces for safe places to exercise and socialize. Yet disparities in access to these areas remain as public transportation is limited. Participants, particularly those with disabilities, reflected upon the lack of ADA appropriate spaces, like playgrounds and parks, and the need to have more pedestrian friendly spaces. The summer heat also became a greater challenge during the pandemic when access to public and temperature-controlled spaces was limited and heat related deaths and fatalities are rising.

Avenues for growth: increase in public transportation and pedestrian-friendly infrastructure such as Complete Streets (a transportation policy and design approach to enable safe, convenient, and comfortable transportation options for users of all ages and ability regardless of their mode of transportation), along with sustainable solutions for addressing the increasing temperatures.

Education & Awareness

With diverse communities and a long list of non-profits and service organizations, it's not surprising that keeping track of it all has proven hard to do. Many participants shared resources but lamented that many residents didn't know about them or didn't have a way to access them. Many also felt that education and awareness about the specific needs or practices of certain populations, like LGBTQ+ or Native Americans, was increasing, and acceptance of all ways of being was particularly prominent with younger generations, but that more needed to be done within institutions. Like challenges mentioned above, health education and access to healthy foods, but also cultural competency in delivering services to diverse communities, were seen as important factors for healthy communities.

Avenues for growth: Increasing awareness and accessibility of resources, promoting acceptance and visibility of ways of life and identity at county and city level institutions while also providing educational resources on culturally and linguistically appropriate services.

Local snapshot: Public Libraries and Community Centers

Even in an increasingly digital age, public libraries and community centers continue to be an invaluable resource for communities. From free internet and technology, to help accessing and filling out forms, to workshops, learning centers, and events, libraries and community centers are routinely sites of partnership and engagement. Libraries are often sites of refuge from the climate and librarians are often a primary point of contact in connecting people to social services. Between July of 2019 and June of 2020, Pima County Public Libraries reported having over three and a half million visitors (3.62 million), over 600,000 computer use sessions, over 3 million physical checkouts and over 2 million digital downloads. Over 50 thousand people attended the food assistance program, nearly 7 thousand people attended workforce developments sessions (including business, citizenship, GED, nonprofit, Job Help, Teen Interns, and Career Online High School Programs), over 16 thousand people attended adult literacy classes and nearly 60 thousand attended early childhood literacy programs. Pima County Public Libraries also reported a 175% increase in Infoline calls after COVID-19 closures. Research has shown that libraries and museums can be catalysts in their communities to promote racial equity and inclusion, are sites for institutional and social networking, and the usage of these trusted and safe spaces is positively associated with multiple dimensions of social wellbeing.

Community Asset Resource Guide

The following table lists some of the Community Resources and Assets that were mentioned by participants throughout the CHNA process. This is not a complete list of organizations and resources in Pima County but highlights a few of the important organizations and programs that are working to support health and wellness in Pima County.

Additional resource guides can be found through existing directories that include a more comprehensive list to a variety of resources in Pima County and throughout Arizona:

- Arizona 2-1-1: https://211arizona.org/ or dial 2-1-1 in Arizona
  - The Arizona 2-1-1 website and hotline connects residents to a library of helpful resources, including organizations that help with food, housing resources, affordable internet, homeless support, rent and utility assistance, transportation, heat relief, and healthcare.
- Pima Council on Aging Resource Directory: https://pcoa.org/ways-we-help/directory/ or call the helpline at 520-790-7262
  - The PCOA Resource Directory provides information about organizations and programs for a healthy and active lifestyle, caregiving support, counseling and mental healthcare, COVID-19 resources, healthcare and dental services, Alzheimer's and dementia, animal resources, abuse support, veterans support, vision services, LGBTQ resources and meals and nutrition, among other resources.
- Arizona Self-Help: https://www.arizonaselfhelp.org/
  - Free, confidential website that estimates eligibility for different health and human services programs, such as WIC, SNAP-ed, Section 8, AHCCCS, Child Care Assistance, among others.
- AZ LINKS: https://azdaars.getcare.com/consumer/
  - Arizona's Ageing and Disability Resource Center was created to help Arizona senior citizens, people with disabilities, caregivers and family members locate resources and services that meet their needs.

Community Asset Resource Guide *continued*

Table 20 Select community resources mentioned by CHNA participants

Select community resources mentioned by CHNA participants		
Topic	**Community Resources**	**Description**
Health Information	Healthy Pima: https://www.healthypima.com/	Healthy Pima is Pima County's community health improvement planning initiative, comprised of individuals, public, community, and business organizations that have joined forces to improve community health by mobilizing resources, increasing awareness, promoting change, and taking collective action.
Farmer's Markets	Community Food Bank of Southern Arizona: https://www.communityfoodbank.org/Our-Work/Programs/Farmers-Markets/Markets Tucson and Southern Arizona: https://southernarizonaguide.com/farmers-markets-tucson/ Visit Tucson: https://www.visittucson.org/things-to-do/shopping/farmers-markets/ Southern Arizona: https://www.library.pima.gov/content/farmers-markets-in-southern-arizona/	Farmer's markets provide fresh and local produce to communities.
Healthy Aging	Pima Council on Aging (PCOA): pcoa.org	Non-profit providing expert services, advocacy, and unbiased information for older people and their families.
	Elder Alliance, United Way of Southern Arizona: https://unitedwaytucson.org/elder-alliance/	ELDER Alliance is committed to older people staying healthy longer, remaining active and involved, and maintaining maximum independence.
Healthy Aging	Dementia Capable Southern Arizona: https://www.pcoa.org/dementiareferral/	The purpose of Dementia Capable Southern Arizona is to create a welcoming, compassionate community in which people with dementia can connect and thrive. This collaborative effort supports people with dementia and their caregivers through coordination and availability of resources, community education, and effective policy change.
	Arizona End of Life Care Partnership (EOLCP): https://www.azendoflifecare.org/	Our community partners provide support, services, and education to help you talk about what's important to you so that you can live well and end well.
Native Americans	Tucson Indian Center: https://www.ticenter.org/	The Tucson Indian Center is open to the public and serves all Native American and Alaska Native people regardless of tribal heritage. The Tucson Indian Center serves children, adolescents, adults, and elders, and is developing more programming for families.
Hispanic/ Latinx	Chicanos Por la Causa: https://cplc.org/	Chicanos Por La Causa (CPLC) believes that all people, without discrimination, should have the power to live a life of dignity. Our programs work to help individuals and families achieve self-sufficiency by providing accessible healthcare; affordable housing; a quality education; access to meaningful work; and political representation.
LGBTQ+	Southern Arizona AIDS Foundation (SAAF): www.saaf.org	To promote health, well-being, and social justice for those living with HIV, LGBTQ+ individuals, and communities marginalized by society.

Community Asset Resource Guide *continued*

Select community resources mentioned by CHNA participants		
Topic	**Community Resources**	**Description**
Communities with Disabilities	Southern Arizona Adaptive Sports (SAAS): https://www.soazadaptivesports.org/	Creating opportunities for people with disabilities to engage in recreational activities and adaptive sports.
	Southern Arizona Network for Down Syndrome (SANDS): https://www.sandsaz.org/	SANDS strives to provide support to all of the families in Southern Arizona of loved ones with Down syndrome.
Refugees and Immigrants	Casa Alitas: https://www.casaalitas.org/	Casa Alitas, also known as the Alitas Program of Catholic Community Services (CCS), is a humanitarian aid project committed to aiding asylum-seekers released from ICE and Border Patrol detention into our community. Volunteers offer support by providing hospitality, including housing, food, clothing, toiletries, advocacy, and travel assistance.
	International Rescue Committee: https://www.rescue.org/united-states/tucson-az	The International Rescue Committee provides opportunities for refugees, asylees, victims of human trafficking, survivors of torture, and other immigrants to thrive in America.
	Lutheran Social Services Refugee Program: https://www.lss-sw.org/refugees	Helps to stabilize people during crisis and transition, build a foundation where people can thrive, and preserve dignity and respect for the most vulnerable.

Select community resources mentioned by CHNA participants		
Topic	**Community Resources**	**Description**
Food and Housing	Pima County Housing Assistance: https://www.pimacountyhousingsearch.org/Resources.html	Links and resources for emergency assistance, utilities, housing loans and other needs. There are also resources for employment, general community resources, and LGBTQ+ resources.
	Community Food Bank of Southern Arizona: https://www.communityfoodbank.org/	The Community Food Bank of Southern Arizona responds to the root causes of hunger and seeks to restore dignity, health, opportunity and hope to people living in poverty.
	List of Food Pantries and Meal Sites: https://www.library.pima.gov/content/food-pantries-meal-sites-and-emergency-grocery-services-in-pima-county/	Food Pantries, Meal Sites, and Emergency Grocery Services in Pima County
	Primavera Foundation: www.primavera.org	Homeless intervention and prevention resource.
	Sister Jose's Women's Center: www.srjosewomensshelter.org	Dedicated to the care and nurture of homeless women in a welcoming environment.
	Tucson Food Share/Food not Bomb: www.tucsonfoodshare.org	Distributes food to anyone without needing any documentation of any kind. Monday, Thursday, and Saturdays
	Z Mansion Brunch (Sundays): https://www.zmansion.com/charitable	Every Sunday at the Z, up to 300 homeless women, men, and children are served a bountiful brunch.
	Pima Meals on Wheels: https://pcoa.org/ways-we-help/home-delivered-meals.html/	Pima Meals on Wheels is a home delivered meals program that provides you with one-third of your nutritious food for the day.

Select community resources mentioned by CHNA participants		
Topic	**Community Resources**	**Description**
Substance Use Disorder	Medication Assisted Treatment (MAT) Directory: www.matsdirectory.com/city/az-tucson.html	Directory to help connect people with MAT services.
	Sonoran Prevention Works: www.spwaz.org	Provides community workshops, trainings referrals, consultation, and risk reduction materials to individuals, families, and organizations in order to prevent HIV, Hepatitis C, overdose, and the perpetuation of stigma.
Mental Health	La Frontera Treatment Services: www.lafronteraaz.org	La Frontera Center – Mental health and substance abuse treatment services to children, youth, and adults. La Paloma – Foster care, therapeutic foster care and group homes for children and youth. EMPACT-SPC – Suicide Prevention Center. Rally Point Arizona – crisis hotline, peer support, and navigator services for veterans and their families
Child and Family Resources	Pima County Community Prevention Coalition: www.pimacpc.org	Working together in Pima County to create an effective and supportive prevention culture to prevent underage drinking and other youth substance misuse.
	Higher Ground youth wellness and community center: www.higherground.me	Youth wellness and community center
	Youth on their own: https://yoto.org/	Youth On Their Own (YOTO) supports the high school graduation and continued success of youth experiencing homelessness in Pima County.

Select community resources mentioned by CHNA participants		
Topic	**Community Resources**	**Description**
Community Health Centers	El Rio Health(13 Locations): www.elrio.org	Federally Qualified Community Health Center with 13 locations
	Marana Community Health Center: www.mhchealthcare.org	Community Health Center in Marana offering a variety of services and wellness initiatives.
	United Community Health Center: https://uchcaz.org/	Offers healthcare and wellness initiatives to Green Valley and Sahuarita
	Desert Senita Community Health Center: https://www.desertsenita.org/	Offers healthcare and wellness initiatives for Ajo
State, County and City Resources	TUSD Resource Centers: http://www.tusd1.org/Departments/Family-Community-Outreach/Family-Resource-Centers	Resource list for families through Tucson Unified School District
	Pima County Public Library: https://www.library.pima.gov/	Public libraries for book rentals, information, and resources
Health and Wellness	La Encantada CORE through TMC: https://thecoretmc.com/	Provides presentations, education, activities, and classes to improve health and wellness through Tucson Medical Center
	YMCA of Southern Arizona: https://tucsonymca.org/	The YMCA of Southern Arizona is dedicated to improving the quality of life through programming, resources and tool distribution, and community engagement

Community Asset Resource Guide *continued*

Select community resources mentioned by CHNA participants		
Topic	**Community Resources**	**Description**
Animals	Pima Animal Care Center (PACC): webcms.pima.gov	PACC is an animal care center and shelter with affordable animal health care
Built Environment	Living Streets Alliance: https://www.livingstreetsalliance.org	Living Streets Alliance is an advocate for Tucson to create better streets at the intersections of social justice, climate change, public health, and community development
Outdoor Recreation	Parks and Recreation: https://webcms.pima.gov/government/natural_resources_parks_and_recreation/	Pima County Health Department resources for parks and recreation in Pima County.
	Chuck Huckleberry Loop: https://webcms.pima.gov/government/the_loop/ Interactive bike map, Tucson: https://gismaps.pagnet.org/bikewaysmap/	Network of bike paths throughout Pima County.

Appendices

List of Appendices

APPENDIX A: CHNA Key Informants

The following list outlines the roles and affiliations of the individuals who participated in the Key informant Interview, along with the populations they represent or serve.

Affiliation	Medically Underserved	Low Income Persons	Communities of Color	Population with Chronic Disease	Public Health Expert	Local Elected Official	Non-profit	Healthcare Provider	Vulnerable or Marginalized Populations	Faith Based	First Responder	Health Department	Grassroots/Community-based service	Schools or Education
	Populations Served													
Lecturer, University of Arizona; Physicians Assistant; Director - Dequenesh Community Clinic	•	•	•	•	•		•	•	•					•
El Rio Health, Ventanilla de Salud Community Health Worker	•	•	•	•	•				•					
ADA Coordinator, Pima County												•		
Supervisor, District 1						•								
CEO, Catholic Community Services of Southern Arizona	•	•	•	•			•		•	•				
Overdose Education and Naloxone Program Manager, Sonoran Prevention Works Tucson	•	•	•	•					•				•	
CEO, El Rio Health	•	•	•	•	•			•	•					
Medical Director, Tucson Fire Department	•	•	•	•	•			•			•			•
Battalion Chief, Rincon Valley Fire Department	•	•	•	•							•			
Rincon Valley Fire Chief	•	•	•	•							•			
Supervisor, District 5						•								•

Affiliation	Populations Served													
	Medically Underserved	Low Income Persons	Communities of Color	Population with Chronic Disease	Public Health Expert	Local Elected Official	Non-profit	Healthcare Provider	Vulnerable or Marginalized Populations	Faith Based	First Responder	Health Department	Grassroots/Community-based service	Schools or Education
VP Intermountain, Community Partners Integrated	●	●		●			●		●					
Mayor, City of Tucson						●								
Clinical Nurse Specialist TMC								●						
Manager ICU TMC								●						
CEO Southern Arizona AIDS Foundation (SAAF), TUSD Board Member	●	●	●	●	●		●	●	●				●	●
TC3 Program Coordinator	●	●	●	●							●			
CEO, Desert Senita Community Health Center	●	●	●	●	●			●	●					
City Manager, City of Tucson						●								
Member, Primavera Foundation; Assistant Prof UA MEZCOPH	●	●	●	●	●				●				●	●
CEO, Primavera Foundation	●	●	●	●			●						●	
Pediatrician specializing in LGBTQ+ Health, El Rio Health	●	●		●				●						
Principal Research Specialist and Lecturer: University of Arizona College of Public Health					●									●
Dentist, El Rio Health	●	●	●	●				●						
Health Equity Specialist, Arizona Complete Health	●	●	●	●			●		●					

Affiliation	Populations Served													
	Medically Underserved	Low Income Persons	Communities of Color	Population with Chronic Disease	Public Health Expert	Local Elected Official	Non-profit	Healthcare Provider	Vulnerable or Marginalized Populations	Faith Based	First Responder	Health Department	Grassroots/Community-based service	Schools or Education
Promotora, Family Medicine Mobile Unit, prenatal health	●	●	●	●	●			●	●				●	
Southern Arizona Adaptive Sports	●	●		●			●		●					
Tucson Police Department Homeless Outreach Team	●	●		●							●			
Community Volunteer, Health Advocate, President of the Coalition for African American Health and Wellness	●	●	●	●			●		●				●	
CEO, Sister Jose Women's Center														
Chief, TC3	●	●	●	●							●			

Affiliation	Populations Served													
	Medically Underserved	Low Income Persons	Communities of Color	Population with Chronic Disease	Public Health Expert	Local Elected Official	Non-profit	Healthcare Provider	Vulnerable or Marginalized Populations	Faith Based	First Responder	Health Department	Grassroots/Community-based service	Schools or Education
Clinical Assistant Professor at the College of Nursing	●	●	●	●	●			●	●					●
Executive Director, Autism Society of Southern Arizona	●	●		●			●		●					
Quality Improvement Manager, Direct Advocacy & Resource Center	●	●		●			●		●					
John Valenzuela Youth Center	●	●	●				●		●				●	●
Medical Director, Pascua Yaqui Nation	●	●	●	●				●	●			●		
Community Engagement and Outreach Coordinator, Saguaro National Park			●											

APPENDIX B: Key informant Interview Guide

All KIs will be asked fourteen (14) questions. Eleven (11) questions are universal, for all KI participants (Q1-Q3 and Q8-Q14). Questions four (4) through seven (7) have been tailored for specific respondents and will vary depending on the KI. For example, if the KI is a community outreach worker, she or he will be asked questions 1-3 (all), followed by questions 4-7 (outreach workers), and finally questions 8-14 (all) for a total of fourteen questions

Target	Question(s) and Prompt(s)	Origin
General/all	1. Can you give us a brief description of your specialized knowledge, expertise, and representative role? Prompts: can you tell us more about… ▪ Any identities you'd like to share with us? ▪ Any roles and/or positions you're in? ▪ What populations/communities do you serve?	New
	2. How do you define health? 2a: What do you think is necessary in order to live a healthy life?	CHNA Advisory Team; 2015 Pima County Community Health Needs Assessment; New
	3. What are the most important issues that affect the health of people in Pima County? 3a: Who is most affected by these?	Kaiser Permanente; 2015 Pima County Community Health Needs Assessment
Clinicians	4. Can you talk about some of the main health challenges and barriers in the population you serve? What about assets?	2015 Pima County Community Health Needs Assessment; New
	5. What do your patients/the community you serve do to promote and improve their health? What assets do they rely on?	2015 Pima County Community Needs Assessment; New
	6. How adequately do you feel you are able to meet the needs of your patients? 6a: What resources do you rely on to be able to meet these needs? What are some challenges? 6b: What challenges have you seen/experienced in your position due to the recent COVID-19 pandemic?	Based on 2012 Pima County Health Assessment; 2015 Pima County Community Health Needs Assessment; New
Health Department (e.g. IHS, TON)	4. Can you talk about some of the main health challenges and barriers in the population you serve? What about assets?	Kaiser Permanente; 2015 Pima County Community Health Needs Assessment
	5. What does the community you serve do to promote and improve their health? What assets do they rely on?	New
	6. How adequate/accessible are resources and services that this community needs to live healthy lives? 6a: (If inadequate / inaccessible) How could these be improved?	2012 Pima County Health Assessment; 2015 Pima County Community Health Needs Assessment; New
Community Leaders (elected officials, faith-based leaders, education, etc.)	4. Can you talk about some of the main health challenges and barriers in your community? Prompt: What prevents the people in your community from achieving optimal health?	2015 Pima County Community Health Needs Assessment; New
	5. What do the people in your community do to promote their health? Prompt: What are some strengths of assets in your community?	New
	6. How many people utilize the programs and resources available to them? Prompt: What other programs are needed to address current barriers or health concerns?	New

Target	Question(s) and Prompt(s)	Origin
Outreach Workers (e.g. Promotores/ Community Health Workers, Environmental/ Occupational Health Workers, etc.)	4. Can you talk about some of the main health challenges and barriers in the community you serve? Prompt: What prevents the people in your community from achieving optimal health?	Kaiser Permanente; 2015 Pima County Community Health Needs Assessment
	5. What do the people in your community do to promote their health? Prompt: What are some strengths or assets in the community you serve?	New
	6. Where do people in your community go when they need resources for improving their health or quality of life?	Community Tool Box; 2015 Pima County Community Health Needs Assessment; New
	7. What are challenges in your day-to-day work? What resources do you rely on?	2015 Pima County Community Health Needs Assessment
Non-Profit (specific populations)	4. Can you talk about some of the main health challenges and barriers in the community you serve? Prompt: What prevents the people in your community from achieving optimal health?	Kaiser Permanente; 2015 Pima County Community Health Needs Assessment
	5. What are some of the strengths or assets of the population you service? What do they do to improve their health?	New
	6. Where do people in your community go when they need resources for improving their health or quality of life?	Community Tool Box; 2015 Pima County Community Health Needs Assessment; New
	7. What are challenges in your day-to-day work? What resources do you rely on?	2015 Pima County Community Health Needs Assessment

Target	Question(s) and Prompt(s)	Origin
COVID-19 and Racism/ Prejudice Questions	8. How has the recent COVID-19 pandemic affected the health of the people you work with in Pima County? 8a. What new or unexpected health issues arose throughout the pandemic? 8b. How has your organization responded to communities in need during the pandemic? 8c. In what ways have you seen community resilience throughout the current pandemic? Can you provide any specific examples? 8d. What are some important factors that should be considered in pandemic recovery efforts?	New
	9. In December 2020, Pima County declared racism a public health crisis. We would like to further understand how racism, prejudice, and discrimination is affecting the health within the county. How would you describe the impact of racism, discrimination, and prejudice on individual and community health? You can consider any form of discrimination based on race, age, sex, socioeconomic status, etc. Prompt: What do you think should be prioritized in Pima County to reduce the impact of racism, prejudice or discrimination on public health?	New
Community Resources	10. This next question is being used to understand community assets and strengths of the communities/ populations you work with. Part of the CHNA will be dedicated to existing community resources and programs. What are some programs that exist in Pima County to promote… for the people or communities you serve? …physical health or exercise? …mental health or psychosocial wellbeing? …health for specific populations (infants, youth, seniors, minority populations, etc.)? …resilience in vulnerable communities? (by race, Socio-economic status, immigration status, disabilities, etc.) Prompt: Can you name some programs or initiatives?	Kaiser Permanente; 2015 Pima County Community Health Needs Assessment
	11. This next question aims to help us determine areas that need further public health attention. What services are needed in the community? Who most needs them?	Kaiser Permanente, 2015 CHNA

Target	Question(s) and Prompt(s)	Origin
General/all	12. Use this space to ask any additional questions that you identified based on secondary data or other conversations with key informants. This is an opportunity to provide additional context for the information in the secondary data or follow up with a comment from the key informant.	New
General/all	11. What organizations/people should be involved in community health planning processes in Pima County? Why?	New
	12. Which members of the population you work with / are part of / serve would you recommend we try to gather for a focus group? Do you have any tips on how to reach them?	2015 Pima County Community Health Needs Assessment; New
	13. Is there anyone else you would recommend we interview as a Key informant? Do you have their contact information?	2015 Pima County Community Health Needs Assessment; New
	14. Is there anything else you'd like us to know?	New

To meet federal guidelines the following information will be collected from each Key informant:

- Name
- Title
- Affiliation
- Population(s) represented: [1] Medically underserved persons; [2] Low-income persons; [3] minority populations; [4] populations with chronic diseases
- Brief Description of Interviewee's Specialized Knowledge, Expertise, and Representative Role
- Classification(s): [1] Health Expert; [2] Community Leader ; [3] Other
- Other characteristics of Interviewees: [1] Federal Health Department representative; [2] Tribal Health Department representative; [3] State Health Department representative; [4] County Health Department representative; [5] Healthcare consumer advocate; [6] Nonprofit organization; [7] Academic expert; [8] Local government official; [9] Community-based organization; [10] Healthcare provider; [11] Private business; [12] Health insurance or managed care organization.

APPENDIX C: Focus Group Discussion (FGD) Guide – English

Focus Group Discussions

Questions for focus group discussions (FGDs) will be tailored to specific sessions. Universal questions will address community assets and challenges.

Potential FGDs include: Promotores / outreach workers, hospital-based health professionals / clinicians

APPENDIX C: Focus Group Discussion (FGD) Instrument – English

FGD Logistics

The purpose of focus group discussions (FGDs) is identify a "norm" or average that respondents center toward with regard to attitudes, beliefs, practices / behavior. They can also be used to validate and/or challenge what has been published in prior assessments and/or stated by key informants. To get the best results during these discussions, the following should apply. Due to the COVID-19 pandemic, virtual focus groups via web platforms such as Zoom or Whatsapp may be safer and more accessible for participants. The same logistics should continue to apply virtually:

- FGDs should be advertised through a trusted community leader, representative, or body;
- Focus groups should be between 6 and 10 people, with no more than 12 participants;
- Participants should have similar characteristics, for example:
  - Same type of work (e.g. Promotores, community health workers)
  - Similar "call to action" (e.g. parents of children in a particular school district or diocese; patients / people affected by the same illness)
  - Similar demographic characteristics (e.g. a discussion focused on elderly or members of the LGBT community or caregivers, etc. should have only participants representing said group)
- Discussions should be held at a convenient time in a neutral, easily accessible place.
  - Is the group being scheduled at a time and place that members of x community will be able to attend?
  - Are there supports in place to offset potential barriers (e.g. a child caregiver to watch children, reimbursement for transportation and/or easy parking)
  - Is the group taking place somewhere where participants will be comfortable speaking? (E.g. If you are asking parents of high school students their perceptions of efforts of the school administration, holding a focus group at a school building may make some participants uncomfortable and unwilling to speak freely.);

- The FGD should be run by a trained **facilitator**. One to two **recorders** (people) should be present to observe not only what is stated, but how statements are made, paying specific attention to tone of voice, body language, etc. of participants. All of this should be recorded with the notes.
- Participants should not have access to questions ahead of time. The list of questions should be brief and open-ended;
- Notes should be made available to participants in real-time to facilitate discussions / ideas (use a whiteboard, flipchart, shared document if virtual, etc.).
- Virtual focus groups should take the opportunity to increase accessibility during focus groups, including copying questions into the chat for ease of participants. Participants should be aware of the opportunity to utilize the chat if they do not feel comfortable speaking. Chat logs serve as a method to utilize verbatim responses from participants.
  - Participants also have the opportunity to chat privately to facilitators or recorders on some platforms, which can increase comfort and security.

The Focus Group Discussion Protocol

Part I: Sign-In and Introduction (~10 minutes)

1. Participants should sign-in prior to sitting down to start the focus groups. Names and phone numbers and/or emails should be collected in case follow-up is needed. (See appendix I: FGD Sign-In Sheet)
   a. If completed virtually, participants should fill out a virtual sign-in sheet with the same information as they enter the call.
2. The **facilitator** will briefly introduce themselves, the purpose of the FGD, and why participants have been chosen.
   a. Sample Introduction
      i. *Hello. My name is , and I am helping with a county-wide collaboration to assess the health and wellbeing of Pima County residents. You have been asked to participate in this discussion because your knowledge of (e.g. community health outreach work) that will help us better understand what works for your community as well as what challenges you face as a community. We are very grateful for your taking the time to speak with us so we can learn from you. All of the information you share today will be reported anonymously. Thank you.*
      ii. Spend some time reviewing what you can and cannot do as a result of these groups so that you do not raise expectations. Review how their confidentiality will be kept. (E.g. No names associated with notes, unique ID number, having your camera on will not compromise anonymity, etc.)
         1. *Example: We will not be recording these discussions, and while we will be taking notes, none of the information will include your name or any other identifiable information. The information from these focus groups will be used to help us learn more for the Community Health Needs Assessment and will help guide public health programming and practices in the future.*
         2. *If virtual, can add: Having your camera on will not affect anonymity because we are not recording or taking pictures of your face.*
   b. After stating the purpose of the FGDs, the facilitator will introduce any assistants (recorders), and ask the participants to introduce themselves. A brief ice-breaker – especially if incorporated into introductions – may help people feel at ease.
   c. Let the participants know that there will be 8 questions total, with some prompts or additional questions that may be asked as needed. We have around 10 minutes per question, and we ask that participants try to make sure that everyone is able to participate.

Part II: Rapport-Building and Introductions (~5-10 minutes)

This is to start to get participants used to the idea of answering and discussing questions in a group setting. Questions should be lighthearted and easy to answer. These can be about phone service providers, what people did over the weekend, current events, etc. (Essentially, whatever is most salient to specific participant group.)

- Preferred icebreaker: introductions, what brought you to the focus group today, answer one icebreaker question (e.g. favorite ice cream flavor, bucket list vacation spot, etc)

Part III: In-Depth Discussion (~45-60 minutes)

1. What is your vision of a healthy community? [National Center for Rural Health Works, 2015 CHNA, New]
   d. This can be initially vague to get at a broader concept of "health" and wellbeing, but should eventually be specific and focused on the following two questions:
      i. What is healthy about / in your community? [If health providers, change this to "What is healthy about / in the community you serve?"]
      ii. What is unhealthy about / in your community? [If health providers, change this to "What is unhealthy about / in the community you serve?"]
         1. What barriers are preventing your community from improving their health? [If health providers, change this to "preventing the community you serve"]

2. What are the most important health issues in your community? [2015 CHNA, New]
    a. Sub-question (optional):
        i. Why are these issues important in your community?
    b. Prompts:
        i. What are some struggles people have in relation to these health issues? [Include whatever important health topics were mentioned]
        ii. *To ascertain community assets / strengths:* What strategies or resources do people in your community use in relation to these health issues?
3. What resources do you think are necessary for people to live a healthy life? [New]
    a. Prompts:
        i. What are some strategies to help give your community greater access to these resources?
        ii. Are any specific populations at a higher need for these resources? If so, who and why?
4. What is the quality of programs to improve health and wellbeing in your community? [Adapted from Anne Arundel County, Maryland, Community Health Needs Assessment, 2012, 2015 CHNA]
    a. Prompts:
        i. What programs are available? Can you give us examples?
            1. Are there programs to address things like…
                a. Physical Health? Like exercising or going outside?
                b. Mental Health?
                c. Access to resources or healthcare?
        ii. Why or why not are programs successful?
            1. What are they doing well?
            2. What can they do to improve services?
        ii. Are there needs that are not being addressed but that you think could be?
        iii. Who should be leading the movement/conversation for improvement? Who should be involved? [New]
5. What are some unique challenges of the COVID-19 pandemic in your community or the community you serve? [New]
    a. Sub-question: How has COVID-19 affected the most important health issues discussed earlier in the discussion?

6. Has racism, prejudice or any form of discrimination affected the health of people in your community? If so, can you describe some ways that this has happened? [New]
    a. If prompted, provide an example:
        i. Current events/news stories
        ii. Hypotheticals”
            1. If someone was denied health services because of something they can’t change about themselves, like their race, sexual orientation, gender, or income at the moment, how would that affect their health? Have you seen things like this in your community?
    b. Prompts
        i. How does racism affect the health issues discussed earlier in the Focus Group?
7. What are some methods to build resilience, or the ability to bounce back from negative situations, in your community? [New]
    a. Prompts:
        i. Can you provide some examples of how your community has shown resiliency?
        ii. What about specifically during the COVID-19 pandemic?

Part IV: Closure (~10 minutes)

Ask participants if there is anything they would like to add or any questions they have. Restate the value of their contribution and thank them. Tell participants how they can get in touch with someone if they have any questions about the Pima County CHNA.

APPENDIX D: Focus Group Discussion Instrument – Spanish

Protocolo de Diálogo Para el Grupo de Discusión

Parte I: Registro de llegada y presentaciones (aprox. 10 minutos)

1. Los participantes deben registrar su llegada antes de sentarse y que empiece el grupo de discusión. Obtenga los nombres y los números de teléfono o correos electrónicos en caso de que se tenga que hacer un seguimiento.
    a. Si es totalmente virtual, los participantes deben llenar una hoja de registro virtual con la misma información cuando entren a la llamada.
2. El **moderador** se presentará rápidamente, dará el propósito del grupo de discusión (FGD) y por qué se ha elegido a los participantes.
    a. *Modelo de presentación*
        i. *Hola Me llamo -- y estoy ayudando con la colaboración a nivel del condado para evaluar la salud y el bienestar de los residentes del condado de Pima. Se les ha pedido que participen en este diálogo debido a su conocimiento de [por ejemplo, el trabajo de promoción de salud en la comunidad] lo cual nos ayudará a entender mejor lo que funciona en su comunidad, así como los retos que enfrenta su comunidad. Estamos muy agradecidos de que se tome el tiempo de conversar con nosotros para que podamos aprender de usted. Toda la información que comparta hoy será registrada de forma anónima. Gracias.*
        ii. Mencione brevemente lo que se puede y no se puede hacer como resultado de estos grupos. De este modo no se crearán expectativas. Explique cómo se mantendrá la confidencialidad. (por ejemplo, no asocian los nombres con las notas, el uso de números únicos de identificación, como el tener su cámara encendida no comprometerá el anonimato, etc.)
    b. Después de explicar el propósito de los FGD, el moderador presentará a cualquier asistente (recorder) y le pedirá a los participantes que se presenten. El uso de una actividad para romper el hielo, especialmente si se realiza durante las presentaciones, puede ayudar a que la gente se sienta más cómoda.

Parte II: Establecimiento de un vínculo (entre 5 a 10 minutos)

Esto es para ayudar a los participantes a que se acostumbren a la idea de responder y dar su opinión sobre preguntas en un entorno de grupo. Las preguntas deben ser simples y fáciles de responder. Pueden ser sobre compañías de teléfono, qué hicieron el fin de semana, eventos actuales, etc. (Básicamente, lo que esté más relacionado a este grupo específico de participantes).

Parte III: Diálogo más detallado (entre 45 a 60 minutos)

1. ¿Cuál es su visión de una comunidad saludable?
    c. Esto puede ser inicialmente algo general para llegar a un concepto más amplio de “salud” y bienestar, pero debe ser eventualmente más específico y enfocado en las siguientes dos preguntas:
        i. ¿Qué es saludable sobre o en su comunidad? [Si son profesionales médicos, cambie la pregunta a “¿Qué es saludable de o en la comunidad en la que usted trabaja?”]
        ii. ¿Qué no es saludable sobre o en su comunidad? [Si son profesionales médicos, cambie la pregunta a “¿Qué no es saludable de o en la comunidad en la que usted trabaja?”]
            1. ¿Qué barreras no le permiten a su comunidad mejorar su salud? [Si son profesionales médicos, cambie la pregunta a “mejorar la salud de la comunidad en la que usted trabaja”]
2. ¿Cuáles son los problemas de salud más importantes en su comunidad?
    a. Pregunta adicional:
        i. ¿Puede organizarlos en orden de importancia? [Puede hacer que los participantes voten con stickers o que usen una encuesta virtual]
        ii. ¿Cuáles son algunas de las estrategias que pueden promover la resiliencia en las comunidades para estos problemas de salud? [Nuevo]
    b. Preguntas opcionales:
        i. ¿Cuáles son algunos de los retos que las personas enfrentan para mantenerse saludables? ¿Cuáles son los retos para comer bien? ¿Hacer ejercicio? [Incluya cualquier tema de salud importante que haya sido mencionado]
        ii. Para determinar los recursos o fortalezas de la comunidad:¿Qué estrategias o recursos tiene la gente en su comunidad para apoyar un estilo de vida saludable?
3. ¿Qué recursos cree que son necesarios para que las personas puedan tener una vida saludable?
    a. Preguntas opcionales:
        i. ¿Cuáles son las estrategias para ayudar a que su comunidad tenga más acceso a estos recursos?
        ii. ¿Alguna población específica tiene una mayor necesidad de estos recursos? De ser así, ¿quién y por qué?

4. ¿Cuál es la calidad de los programas para mejorar la salud y el bienestar en su comunidad?

- **a.** Preguntas opcionales:
  - **i.** ¿Qué programas están disponibles? ¿Nos puede dar ejemplos?
  - **ii.** ¿Por qué son o no son exitosos estos programas?
    1. ¿Qué están haciendo bien?
    2. ¿Qué pueden hacer para mejorar sus servicios?

5. ¿Qué pueden hacer los hospitales u otras organizaciones para mejorar la salud y el bienestar de las personas en su comunidad?

- **a.** Preguntas opcionales:
  - **i.** ¿Se le ocurre algún programa existente que pueda ayudar a las personas en su comunidad? (Pida detalles)
  - **ii.** ¿Hay necesidades que no están siendo cubiertas que usted cree que podrían estarlo?
  - **iii.** ¿Quién debería estar liderando el movimiento o conversación para hacer mejoras? ¿Quién debe participar? [Nuevo]

6. ¿Cuáles son los retos únicos de la pandemia de la COVID-19 en su comunidad o en la comunidad donde trabaja?

- **a.** Pregunta adicional: ¿Cómo ha afectado la COVID-19 los problemas de salud más importantes mencionados previamente en esta conversación?

7. ¿El racismo o cualquier otra forma de prejuicio o discriminación contra una persona o comunidad basada en su raza o etnia ha afectado la salud de las personas en su comunidad? De ser así, ¿puede describir algunas formas en que esto ha sucedido?

- **a.** Preguntas opcionales:
  - **i.** ¿Cómo afecta el racismo los problemas de salud de los que platicamos al principio en el grupo de discusión?

8. ¿Cuáles son algunos métodos para generar la resiliencia o capacidad de recuperarse de situaciones negativas en su comunidad?

- **a.** Preguntas opcionales:
  - **i.** ¿Puede darnos algunos ejemplos sobre cómo su comunidad ha mostrado su capacidad de recuperarse?
  - **ii.** ¿Qué ha hecho específicamente durante la pandemia de la COVID-19?

Parte IV: Cierre (aprox. 10 minutos)

Pregúnteles a los participantes si hay algo que les gustaría añadir o si tienen alguna pregunta. Reafirme el valor de su contribución y deles las gracias. Informe a los participantes sobre cómo puede ponerse en contacto con alguien si tienen alguna pregunta sobre el CHNA del Condado de Pima.

APPENDIX E: Pima County CHNA Community Forum Guide

Virtual Forum Outline

Section	Time	Description	Admin
Introductions	10 minutes	Allow people to get into room. Introduce members of the CHNA team. Review Zoom etiquette and go over agenda.	All participants will be muted and unable to turn on microphone for first 50 minutes. Can use chat feature to ask questions or for clarification. 2 people will be monitoring chat and helping with technical difficulties. CHNA team and breakout room facilitators will change name in Zoom to show who they are.
CHNA presentation	40 minutes	Presentation of CHNA purpose, methods, results of data collection. Incorporate audience engagement (word clouds, polls, etc)	While presentation is going on, someone on CHNA team will be creating breakout rooms with volunteer facilitators in each room. Try to make rooms no larger than 10 people, may depend on size.
Question and answer	15 minutes	Allow participants to ask questions about CHNA process.	Use chat or form to gather questions and then have moderator to ask them. Try to group questions together.
Breakout group intro	5 minutes	Explain breakout groups, go over questions	

Section	Time	Description	Admin
Breakout room discussions	25 minutes	Potential questions: Based on your experience and the results from the needs assessment, what do you think are the most important health issues in Pima County? Why? The Community Health Needs Assessment will guide public health planning efforts in Pima County. What are the top three issues that you think the county should prioritize? (Try to reach consensus) What are the underlying causes for the three priority health issues? What are some potential solutions to address them? What are the strengths or assets in Pima County that will help us address these priority health issues?	Can use Jamboard to share selected results (only volunteer facilitators will have access). 2 people will remain in main room to deal with technical issues or pop in rooms to answer questions.
Report out/ prioritization activity	20 minutes	Slido Interactive Presentation. The facilitator introduces Slido and helps participants connect through their phone or computer. The facilitator moves through each Slido question , allowing time for participants to provide an answer.	Main facilitator can also get some feedback from volunteer breakout room facilitators to share with the group.
Closing	5 minutes	Thank audience, discuss next steps (upcoming events, report, etc)	

Prioritization Activity Questions

The following questions were asked during the virtual community forums as part of the interactive Slido activity.

Community Forums (English)

1. Word Cloud: What do you think is the most important health issue in Pima County? Choose your top priority!
2. Ranking Activity: What are the top three issues you think the county should prioritize?
   - Mental health
   - Access to care
   - Substance use disorder
   - Climate and environment
   - Chronic diseases: **diabetes, obesity, heart disease**
   - Healthy Aging
   - Oral health
   - Violence
   - COVID-19 response
   - Chronic diseases: others
   - Sexual health
   - Cancer
   - Alzheimer's Disease
   - Maternal and infant health
   - Child and adolescent health
3. Ranking Activity: Which of the following social determinants of health do you think are most important? Choose your top three.
   - Poverty
   - Housing
   - Access to healthy foods
   - Education
   - Language access (interpreters, etc.)
   - Access to exercise opportunities
   - Transportation
   - Accessible environment for elderly/community with disability
   - Public safety
4. Free Response: What are some potential solutions to these issues?
5. Free Response: What assets or strengths in Pima County can help us to address these issues?

In-person Gallery Walk Outline

Logistics:

Check-in table:

- Handouts about CHNA
  - What is the purpose?
  - Past CHNAs
- Explain the gallery walk to community members as they arrive
- Sticker dots
- Point out volunteers who can answer questions during the walk.
- Email or sign-in sheet

Stations/Groupings:

- Top Health Priorities related to other primary data collection on big posters with volunteers/ CHNA members there to answer any questions
- Need to print out information on each to be read by participant or by facilitators OR hand out individual papers/brochures
  - Social determinants (especially transportation)
    - Transportation
    - Poverty
  - Healthcare systems
    - Access to healthcare
    - Difficulty navigating health systems
  - Chronic disease
    - Diabetes
    - Heart disease
    - Obesity
  - Mental health
  - SUD
  - Healthy aging
  - Climate/environment
- Questions for written feedback.
  - Why do you think this health issue is important?
  - What are the underlying causes for this health issue?
  - What are some potential solutions for this health issue?
  - Additional comments or questions

CHNA Team:

- Walk around and make sure everything is going well, can be one of the people staffing the check-in table for participant and volunteer support

Itinerary:

Participant Movement	Description	Admin/supplies
Check-in table	Participants will be able to get their sticker dots and general information about past CHNAs and the logistics of gallery walk	Elevator Pitch Dots All materials in English and Spanish
Stations – all	Volunteers or CHNA team member will be there to describe the background behind problem based on primary data collection	Need posters with room for sticker placement May need elevator pitch for different health issues Need FAQs for stations also Need multiple translations Handouts with summary of what the problem means
Exit area	Answer last minute questions	Demographics Survey

APPENDIX F: Community Snapshot

Community snapshots provide insight into challenges and opportunities for specific communities in Pima County. Focus Group participants provided rich and valuable data to inform the CHNA process, and this appendix highlights the unique voices and experiences of participants in different focus groups. Each section highlights a major unique theme from the focus group and provides quotes and a summary of the conversation from that focus group.

LGBTQ+: equity and trauma informed care in Pima County

> *"The number of people who have been triggered mentally/emotionally because it's similar to AIDS pandemic. This triggers a large amount of that who are grieving delayed because of it. Not knowing the transmission of COVID-19 in the beginning was very similar to the AIDS pandemic."*

This story, like many others from the LGBTQ+ focus group emphasized the importance of understanding trauma-informed approaches and the multitude of backgrounds that individuals hold. The LGBTQ+ focus group established the necessity of eradicating disparities and creating more equitable care for all marginalized populations.

African American Health and Wellness Coalition: the need for culturally appropriate care

The African American Health and Wellness Coalition highlighted a multitude of stories in healthcare driven by implicit bias and discrimination. The community members also told personal stories of how this discrimination can lead to further health disparities and health seeking behaviors.

> *"Fear is a huge phenomenon; they are afraid to hear about these things. They [community members] don't want to know that something is wrong. Prefer not to do preventive things like breast exams, colonoscopy, because they don't want to hear bad news."*

> *"Most providers are of another ethnic group. Always have question: are they providing same information to a white counterpart? Am I getting all of the information of a white counterpart? Racial issue could be part of it as well. There is a lack of trust from a racial standpoint."*

Because of the repeated discrimination against Black or African American community members in Pima County face higher rates of chronic illness and adverse health outcomes.

> *"When it comes to anything in health, we are number 1, but on the wrong side"*

> *"A lot of time, [we] don't get same level of treatment of care as whites. For example, my husband was in the hospital and he had just had major surgery. They wanted to put him back on regular floor. He should have been in ICU. I had to argue with the doctor. If I wasn't there to argue on his behalf, he would have been on regular floor. Need to advocate at hospital. Recent, 9 months ago."*

> *"We have racial trauma, when we go to doctor and get information that doesn't make sense. Before I was 65, I got palliative care. Then I got on Medicare, and I wish I could back on my insurance. I'm not sure if I'm getting good care. They don't provide preventive care, the trust isn't there, so how much am I going to listen or follow."*

These stories highlight the racial injustices in healthcare and the effects mentally and physically for multiple generations and families. On the other hand, there were many assets highlighted in the community and resiliency of this focus group.

> *"Faith is also important. As I talk to people and hear of their situations, lady who had a triple bypass and didn't feel like she was getting proper care, finally someone with authority and knowledge walked in and said you can't do that. So glad that doctor walked in. You need to know that people are advocating for you. Her sister was advocating for her, you need to have faith that you are right if you know that something isn't right. I'm concerned if you don't have individuals advocating for them. But we shouldn't need to advocate, we should get equal services and treatment. That's really the key—equal treatment so that when someone goes in there isn't a need to feel ill will towards the person caring for them. We've had that with COVID-19. Two people going in, young, died of COVID-19. I started questioning if they were getting the correct or best treatment."*

> *"Leadership of the churches really stepped up. It was a way to communicate information out to African American community, to churchgoing community. It was another way to communicate information out. It suggested that we don't really have a good way to communicate. Word of mouth is one way we do it, but the internet process was really difficult to navigate. It was a lengthy process, so it was fantastic for churches and pima county to partner, it happened instantly. I hope that Pima county or someone is taking notes and is able to roll out something else like this in another situation. I hope we are all learning something from this COVID-19 process. Now we are looking at if we will get a third dose. Hopefully the powers that be have learned something about communication, and hopefully the churches have also learned something important. "*

> *Racism intersects in everything that we do. Whether healthcare, education, living from day to day—racism is part of that. It's a known fact. We know it, you may not because it's not part of your life. It's part of our life. We live with that every day. When I go outside my door, I know that I'll need to have a shield on for that. You know you'll experience it in some way. It may not be overt, it's very subtle."*

Communities with Disabilities: advocacy matters

> *I would like to see more self-determination. Teaching self-determination. If children get used to abuse by adults as a child, they will not speak up or know what abuse is later. I want my son to know he can say no to things so that he's not treated this way as an adult with intellectual disabilities. They have the right to say no; no one likes hearing no, but there's people who can't say they want something different breakfast today. We need access to disabled mentors. I've been finding them on the internet but don't know where to find them locally. "*

This story emphasizes the importance of understanding advocacy and autonomy with communities with disabilities. The following stories highlight the need for more programming and resources needed for these communities. While different abilities are present constantly, advocacy and intent to improve accessibility is essential moving forward.

> *I hated saying I couldn't take my kids to the park because I couldn't access the park or go up the stairs and I felt like I was robbing my children's childhood. Why can't I run with other mothers? Jungle gyms were built many years ago and don't prioritize access for disabled parents. It affects us and our family, everyone. They tell us to adapt but why can't you adapt to us. "*

> *I'm part of stroke survivor disability and there's a lot of info out and education on how to ...if you suspect a stroke what to do but normal, there's not a lot of stroke groups in Tucson so it's hard to navigate around Tucson on what to expect and do, years later as a survivor or caregiver. I know there are spinal cord injury groups and caregiver groups at various hospitals. I'm also a heart survivor. There's not a lot of follow through, you hear about the initial information but there's follow through with life after. There are women's group but now I want to work but now I'm limited. What can I do memory-wise. I know who I was like years ago but I can't stand very long, or stand the heat, so what can I do. I get very overwhelmed, but they don't tell you what to expect years down the road and it would be great to have more support groups and more information."*

> *I don't go downtown at all, or people want me to go to shows and stuff. Where will I park, I have to wheel very far, have to get handicap seating and I don't even know how to do that. So id don't go, and people don't want to be bothered because you need something special. I always have to make sure when I make reservations to ask if two people can sit on one side and not be squeezed in. I'm not going to let me get stressed out. Rising medical, was the only that got mad because they put their sign in the access aisle. I got after them because they are servicing our community with folks who need medical stuff and that was the most obnoxious thing I had seen."*

While there is a great deal of information on the struggles that inequitable built and social environments places on people with different abilities, there are also many strengths in social networks and support.

> *I like how everyone comes together. After my accident I had strangers coming to me and asking how I was and how my family was. I'm not from here but it took this to make me feel like home. Everyone was trying to be educated and supportive. The community is great and people are interested. Bad thing, swept under the rug and everyone moves on after a while. I wish there was more adaptive events that could be provided for young family members. Support groups and networking for family members going through this."*

> *There's a great deal of information but go through and reword all of it to be more holistic and less doom and gloom. When my son got diagnosed it was like, this is terrible but if you do this you can fix him by age five. There's no structural support to help me with my son, but at the same time, I'm not sorry I couldn't be a concert violinist. This also a society issue, don't make all the info on disability about what people can't do."*

Pascua Yaqui Nation service providers: intergenerational trauma and resiliency

The Pascua Yaqui service providers worked directly with the community and were also community members. They held a unique experience of working on a sovereign nation emphasized the importance of decreasing intergenerational trauma. From these adverse experiences, the Pascua Yaqui people emphasized their resiliency and strength in culture, survival, and community.

> *One population underserved are children because they don't have a voice. Parents absent, being raised by neighbors and grandparents. They are doing the best they can but it's not good enough. There are a lot of children with ADHD with behavioral health issue and traumas. A lot of trauma and violence, abuse, neglect, sexual assault that's underneath the tables. Biggest one is MMIW—missing and murdered indigenous women. Tucson was #2 in nation, a lot to do with the laws - goes back to law enforcement. We have great police department but there's a disconnect. The enforcement is the issue. Under federal and not state law."*

> *I will share that working with elders, and I lost both of my parents in their 80s, having come from Mexico to US, resilience is part of our nature. It's fight or flight. How bad do you want to live and succeed? If you make it part of your lifestyle, you're going to make it. The people who fall to the wayside to social pressures, your social environment and how you were raised. My parents never smoked or drank, not even coffee. Resilience is part of the Yaqui way. They have had to fight for their lives."*

Seniors: increasing accessibility and reliability in Pima County

> *Access to services is also important. I'm a sober person for 39 years, works with others in recovery, recognize that some older people have a lot of trauma and mental health issues, very hard to address and get help. A healthy community is one in which people know exactly how to get help that people need when they need it."*

In the senior/elderly population of Pima County, many of the same issues of discrimination and access were raised but exacerbated by age and accessibility. The following stories emphasize struggles with the built and natural environments, accessibility, and discrimination.

> *I fell five times last year, went to physical therapy, but sometimes just tripping on sidewalks and curbs, safety."*

> *Pima County has a pretty significant homeless population, but even among others who are very low income are struggling with heat and climate. We need more trees. Climate will continue to be major health issue. Increase in fires, lung problems, the fires force me inside. Air quality warnings are helpful."*

> *Seniors have spent their whole lives working, and now we need to take care of them. They've earned the right, spent their life working, now it seems like we are lacking in taking care of them. "*

> *Pima Council on Aging cannot be beat, they have so many programs, but people don't realize it. I had no idea about senior companions. I am one now, I visit with elderly who can't get out. They helped me build a wheelchair ramp for my husband. But the lack of getting the word out about these programs to the people."*

> *More affordable healthy meals. As a single old person, it's cheaper for me to buy a fast food burger than to make a nutritious meal. Pima Council on Aging is a great resource, but they are run mostly by volunteers. I would love to see more of these programs."*

> *I'm so appalled, don't even know where to go for help, trying to apply for food stamps and SSI [supplemental security income]. Food stamps was unbelievable, all has to be done on computer, get knocked off. I'm fairly computer savvy and it took me a few hours to do this form. I'm thinking, should I call local representative, don't even know where to start. It's so bad."*

> *Nobody is getting help for trauma. Complex, chronic trauma that is intergenerational. That is why those people aren't at the table. They aren't reached effectively in our culture. That needs to be addressed."*

> *Another thing, nobody things about much, when people can give blood and make some extra money, even to this day certain groups are prohibited from giving blood, LGBT population not allowed to give blood even after all this time. Quite an archaic understanding. "*

> *There is strength in numbers. My voice gets stronger if someone is standing next to me saying "you're right."*

Promotores de salud/CHWs: access to opportunities

> *First of all, there is some discrimination against those who speak Spanish."*

> *Even if people speak some English, they often don't understand 100%. It is very important that health advice/instructions are delivered in the right language because people need to be able to understand completely."*

Language services, including translation and interpretation services, are need in resources, programming, and healthcare.

> *People are feeding their children unhealthy foods with lots of saturated fat*

> *Food at the schools have lots of sugar and fat, it is important to improve nutrition at schools."*

Another important emphasis was on food security and quality. Available food in Pima County has low nutrition content and high rates of saturated fat and sugar, which is commonly found in children's food.

Faith Leaders: safety and religion in Pima County

> *When the towers fell, 9/11, I felt the towers fell on me and my dreams and hopes. And I was pregnant at the time with my 5th child and we were under surveillance and Patriot Act and phones hacked...I realized there was an incredible lack of misunderstanding. And that was the point that compelled me into the community work, into conversations with different religions...recently was the first time I could openly grieve this event. But as minorities it falls on us to do the work of understanding, people don't come and ask, you have to stretch out this hand. That's how we make the world a better place, by showing up for everything and not about what divides and separate us. "*
>
> MEMBER OF THE MUSLIM COMMUNITY

Many community members emphasized the struggles unique to refugees, including those especially those from the Middle East. Focus group participants highlighted an influx of Afghan refugees, and these communities are commonly faced with discrimination and poverty. Another participant emphasized that many Muslim communities may be afraid to engage in community advocacy and social justice due to fear of violence and discrimination.

> *They are very insular with their families, maybe have enough to do with, and maybe fear about what will happen to them in the community since post-9/11. People have been attacked killed and called terrorists. And vandalism of places of worship."*

Many participants also emphasized the need for greater education on cultural and religious differences. The following story emphasizes the importance of cultural competence and humility for providers to give equitable and safe care for different cultures.

> *I wanted to see a female gynecologist and there wasn't one on call and I was willing to go home and have my baby instead of see a male. There's a lack of understanding of Muslim male/female relations. Females really want to see females and that can be a block to getting help. Also 2) translators at appointment 3) and a big stigma about mental health. We know there are children that have issues, PTSD from what they have been through, and the parents don't know how to handle them but they ignore it, think they can move on and get through it. They have access to Medicare and Medicaid, so they have the opportunity but it's these other things, and a lack of trust."*

Tucson Indian Center service providers: increasing resources

Focus group discussants emphasized the need for increased education and resources. There was an emphasis on action items that should be enacted.

> *Leaders have to understand and get educated to know that not everyone has a cell phone, not everyone can afford technology. Many Native Americans migrate back to reservations and have no reception back on the rez [short for reservation]. They don't have a computer or phone. good luck with police dept or fire department."*

> *They are so used to not having resources. Reservations don't have contact and have to rely on other signs, we need to think that way because there isn't enough. Some of the phone services/cell phone services don't hit where we need them the most. I don't even think 911 call would work."*

> *With a unique experience of working directly with the community, there were many action items to increase education to resources."*

> *City officials, target those programs and have them help promote, encouraging skills and native community, here's some flyers and assist with them toolbox."*

> *Healthy block parties and getting healthy food. Maybe people haven't found things they may enjoy, so maybe having workout things at these events can help. People can't afford some things, and if they were to offer samples of different things in grocery stores can help."*

APPENDIX G: Pima County Health Department 2020 Current State Review

The 2020 Current State Review provides strategic insight on public health and the Pima County Health Department from community members, stakeholders, staff and subject matter experts. It was completed in December 2020 by KSM Consulting with additional research and contributions from Harle, Vest and Yeager.

The full report can be found on the Pima County Health Department Website under "2020 Current State Review."

APPENDIX H: Full list of References

The following list of references correspond to the superscripts noted throughout the CHNA document. For example, a superscript 1 refers to the first citation in the list.

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Additional Reading

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APPENDIX I: Consulting Team and Volunteer Acknowledgements

The 2021 Pima County Community Health Needs Assessment was completed by the Arizona Prevention Research Center (AzPRC) at the University of Arizona Mel and Enid Zuckerman College of Public Health. The following section outlines the qualifications and roles of each member of the CHNA team.

Kathryn (Katy) Tucker, MPH

Katy has more than seven years of experience in health promotion planning and evaluation with communities in Africa, Central and South America, and Southern Arizona. For the last four years, she has worked as a participatory evaluator and researcher on a variety of projects in Southern Arizona. Kathryn implemented primary and secondary data collection and analysis and provided leadership for the CHNA effort and drafting.

Georgia Weiss-Elliot, MA

Georgia is an Evaluation Specialist with the AzPRC. She has a Master's in Geography from the University of Arizona and works on projects along the U.S.-Mexico border concerning health care access, health literacy and community health worker training. Her work has also focused on counter cartography, design, and data visualization. Georgia helped facilitate large volunteer efforts, data visualization, and drafting the report.

Katherine (Katie) Herder, MPH (2022)

Katie is a current MPH biostatistics student and Paul D. Coverdell fellow at The University of Arizona. Originally from Evanston, IL, Katie graduated from The University of California, Santa Cruz in 2016 with a BA in Psychology and a minor in Biology. From 2017-19, Katie served as a Youth in Development Peace Corps volunteer in the Dominican Republic. Katie led the secondary data collection and helped primary data collection and drafting of the report.

Zoe Baccam, MPH (2022)

Zoe is a current MPH student in the One Health Concentration at the University of Arizona. She graduated from the University of Arizona with a BS in Public Health with minors in Spanish and Biochemistry. She has experience in qualitative data collection and analysis. Zoe aims to bring a lens of social justice and advocacy to her projects. Zoe helped facilitate primary data collection and drafting of the report.

Maia Ingram, MPH

Maia is the Co-Director of the AzPRC. She has over 25 years of experience developing and evaluating community-based prevention and research programs. She has expertise in community-based participatory research to engage communities to engage health disparities. She has a long history of collaboration with organizations and individuals throughout Pima County.

Focus Group Facilitators

The following individuals facilitated focus groups for the 2021 CHNA:

- Yvonne Bueno, DrPH, MPH
- Maiya Block, MPH
- Jacqueline Larson

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