

Community Health Assessment

2023



SAN JUAN BASIN **public health**

Prepared by

colorado school of public health

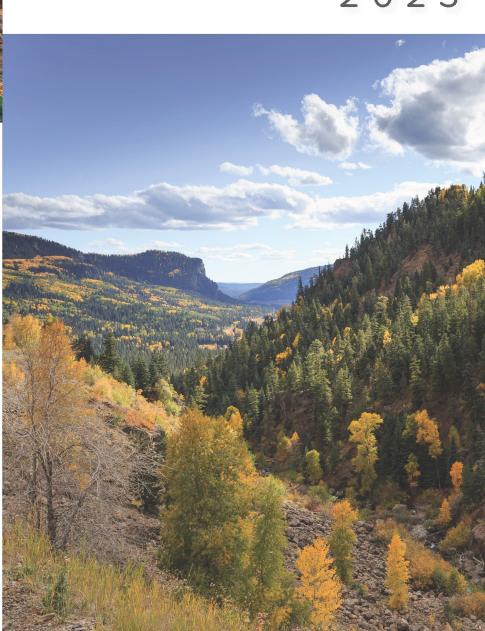


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Letter from SJBPH Leadership

Every five years, San Juan Basin Public Health (SJBPH) takes a close look at the health and wellness needs of Archuleta and La Plata counties through a Community Health Assessment. This assessment seeks input from community members to identify the top priorities among our residents, providing an opportunity to strategically develop and fund public and environmental health programs relevant to those needs. It reflects the responses of over 1,500 community members, as well as targeted population data collected from focus groups and key informant interviews. As Archuleta and La Plata counties will launch individual health departments in 2024 following SJBPH's dissolution, input received from this assessment is invaluable to informing the path forward for each new public health department.

Enhancing population health requires the efforts of not only the local public health agency, but also of government, non-profits, healthcare organizations, and community members. This is especially true this year, as SJBPH will dissolve and be replaced by individual county public health departments in each county on January 1, 2024. SJBPH has taken this opportunity to prepare a Community Health Assessment that serves the counties' individual needs and can be used by the entire public health system, including partner organizations, to inform their own strategies to improve community health and to seek funding for innovative programming. Because this research reflects community input, local agencies will be able to tailor their plans and programs to best address the unique and complex needs of the residents of Archuleta and La Plata counties.

Local public health agencies are required by the state of Colorado to complete a Community Health Assessment every five years as a component of their overall Public Health Improvement Planning process. For more information about the state's Health Assessment and Planning initiative, visit: cdphe-lpha.colorado.gov/chaps-phases.

SJBPH would like to recognize the advisory committee for their dedication throughout this process, the Colorado School of Public Health student assessment team, the staff of SJBPH for their support, and the public for participating in this assessment and for your interest in the health of our communities.

It has been our privilege to serve you as your local public health agency for the last 75 years. As we bring our existence as an independent agency to a close, we hope you find this information useful as a reference for our community's health in the coming years.

Sincerely,
San Juan Basin Public Health Leadership

Acknowledgements

The development and production of the 2023 Community Health Assessment for San Juan Basin Public Health, serving Archuleta County and La Plata County, required time and effort from many individuals and organizations. SJBPH would like to thank all of the community members who completed the community health assessment survey and who participated in the focus groups and key informant interviews. Also thank you to the partner organizations who helped SJBPH distribute the survey to community members.

Thank you to Dr. Virginia Visconti and the Colorado School of Public Health's student assessment team who compiled and analyzed several data sources. Much of the work from this team was used throughout the Community Health Assessment. Colorado School of Public Health's student assessment team:

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- Mariel Balbuena, La Plata Family Centers Coalition
- Ellison Bonds, Fort Lewis College student
- Dr. Jon Bruss, San Juan Basin Public Health Board of Health member
- Dan Davis, Pagosa Springs Medical Center
- Brian Devine, San Juan Basin Public Health
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Additionally, thank you to the staff of SJBPH, whose tireless efforts at survey distribution

resulted in a large response from the community. Community input enhanced the community health assessment process, and SJBPH hopes this community health assessment report will provide direction for future public health improvement planning.

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- Colorado Department of Public Health and Environment, Office of Public Health Practice, Planning and Local Partnerships (OPHP) Preventive Block Grant
- San Juan Basin Public Health

Introduction

Overview of the Community Health Assessment

In 2008, the Colorado Public Health Act (Senate Bill 08-194) was passed with the purpose of ensuring that all individuals in Colorado have access to core public health services. This act requires that quality care is consistently available, regardless of where an individual lives. The Act establishes Assessment and Planning as a core capability of local public health agencies and requires public health departments to fulfill three guiding functions in the assessment and planning process:

- Determining the health status of communities and community capacity to address change through community assessments.
- Utilizing assessment results to create fiveyear improvement plans at both the state and local levels.
- Ensuring collaboration with the local community to create health improvement plans (CDPHE, 2008).

A Community Health Assessment tells the community story and provides a foundation to improve the health of the population. It is the basis for priority setting, planning, program development, policy changes, coordination of community resources, funding applications, and new ways to collaboratively use community assets to improve the health of the population. A Community Health Assessment identifies disparities among different subpopulations in the jurisdiction and the factors that contribute to them in order to support the community's efforts to achieve health equity.

Purpose

The purpose of this report is to provide an assessment of population trends, describe community health status and identify potential public health concerns.

Project Development

Colorado School of Public Health (ColoradoSPH) faculty brokered the introduction between San Juan Basin Public Health (SJBPH) and ColoradoSPH students in the Community Health Assessment course at the Anschutz Medical Campus in Aurora, Colorado. The students enrolled in the class collaborated with SJBPH to conduct data analyses from both Archuleta and La Plata counties during the spring of 2023. The student assessment team (SAT) analyzed qualitative and quantitative data from both counties to assist in the assessment of the health of both communities and also help inform possible future best practices in the two counties.

SJBPH staff constructed the Community Health Assessment (CHA) report based off the information from the SAT. The SJBPH team who developed this report included staff from the: Assessment and Planning, Epidemiology, Policy and Partnerships, and Communications programs. A more complete list of acronyms can be found in Appendix A.

About San Juan Basin Public Health

San Juan Basin Public Health is a district local public health agency that has served the residents of Archuleta and La Plata counties since 1948. For 75 years, SJBPH has enhanced public health through a wide range of programs. SJBPH is governed by a seven-person Board of Health, which consists of one commissioner from both Archuleta and La Plata counties as well as five commissioner-appointed members.

The agency's mission is to protect human and environmental health and inspire wellbeing in our community, while reflecting the diverse communities within which we operate, and based on our organizational values of Compassion, Health Equity, Integrity, Respect, and Stewardship. While individual health services continue to be a priority, as dictated by the needs of our community, SJBPH's focus has

shifted increasingly to population health, addressing health inequities and social determinants of health. SJBPH supports the health and well-being of almost 70,000 residents across two rural counties that span over 3,000 square miles in southwest Colorado.

On April 28, 2022, the San Juan Basin Board of Health recommended the dissolution of the San Juan Basin Public Health District. This decision was primarily influenced by differing priorities and philosophical differences between Archuleta and La Plata counties regarding the regulatory role of public health and the services to be delivered. Both counties agreed with the Board of Health recommendation and, on November 15, 2022, entered into an intergovernmental agreement for the orderly dissolution of San Juan Basin Public Health effective December 31, 2023. Consistent with Colorado law, both counties have created public health departments that will assume the functions of public health on January 1, 2024.

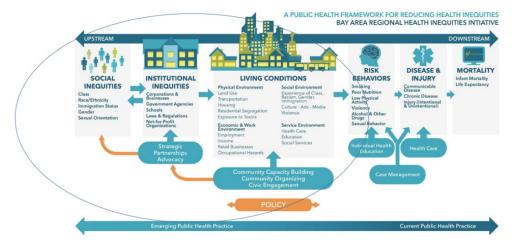
Methods of Data Collection and Analysis

BARHII Framework

Formally established in 2002, the Bay Area Regional Health Inequities Initiative (BARHII) is an organization based in San Francisco that created the BARHII Framework (BARHII, 2015). The framework aims to illustrate the connection between social inequities and health, focusing attention on measures of social determinants that have not been utilized within the scope of public health department epidemiology, see Figure 1 (BARHII, 2015). While the BARHII Framework has been adopted by the California Department of Public Health as part of its decision-making framework, it has also been used by other health departments and agencies that have initiated work toward addressing health inequities (BARHII, 2015).

The SAT used the BARHII Framework to code the qualitative data from the open-ended survey questions, the key informant interviews and the focus groups. This model contains six domains: Social Inequities, Institutional Inequities, Living Conditions, Risk Behaviors, Disease & Injury, and Mortality (BARHII, 2015).

Figure 1.



BARHII, 2023

Some of these domains are defined within this document, but all can be found in Appendix B.

SJBPH collected both qualitative and quantitative primary data with the SJBPH Community Health Assessment Survey (Appendix C) and will be referred to from here on as the SJBPH Survey.

Primary Quantitative Data

SJBPH Survey

SJBPH distributed a community health assessment survey in English and Spanish from January to April 2023 to collect local feedback on a variety of issues related to health. The survey included a total of 22 questions. Two of these questions were free responses, which allowed for qualitative analysis. There were options to take the survey electronically or on a paper copy.

The survey was advertised and distributed via email campaigns, e-newsletters, social media, a press release, and flyers. Community outreach included giving presentations and tabling at outreach events. Hard copies of the survey were available at 20 partner organizations throughout Archuleta and La Plata counties.

Ensuring a survey is delivered to a representative sample of the population is a challenge. SJBPH attempted to accomplish this, yet there is still the possibility that survey results did not capture all

perspectives. There was a total of 1,545 respondents with 427 (28%) respondents from Archuleta County and 1,118 (72%) respondents from La Plata County. The number of respondents of the survey allowed for statistical validity for the population size of each county; however, when breaking the number of respondents by race or age group, it was no longer statistically valid for both counties. Because of this, the data is not weighted by age or race. Respondents to the 2023 SJBPH survey were generally older and more frequently female (>70% of surveys in both counties) compared to county census data. The median age for Archuleta County respondents was 57 and 54 for La Plata County respondents. In addition to males and young people, racial groups who represent a smaller proportion of population, notably Black and Indigenous groups, were under-surveyed. People who identified as Hispanic, Spanish, or Latino were also under-surveyed, but to a lesser extent. More

information about the survey demographics can be found in Appendix D.

SJBPH staff made an effort about halfway through the collection process to increase numbers in populations where survey data was lacking. Staff partnered with local organizations that serve the Spanish-speaking population as well as targeted outreach on social media for Hispanic, Spanish, or Latino individuals, males and those in younger age groups.

Primary Qualitative Data

SJBPH Survey

The 2023 SJBPH survey collected primary qualitative data through free-response survey questions. The SAT created a code list originating from the BARHII Framework in order to organize the responses given for the two free-response questions. At least two students coded each response to ensure agreement on the codes assigned to each answer. Next, the SAT used the codes to identify themes, representing the common ideas expressed in the survey responses. Finally, the SAT assigned the themes along with illustrative quotes to the BARHII Framework for this report.

While it is important to have a framework for coding qualitative data focused on equity, there are limitations. One of the limitations is that it does not differentiate between favorable and unfavorable comments. For instance, comments about "how active the community is" were coded into "Lack of Physical Activity." Because of this use caution when interpreting this data.

Focus Groups

SJBPH conducted six 90-minute focus groups with stakeholders from both Archuleta County and La Plata County during March and April 2023 with a total of 26 participants. Stakeholders represented the following communities:

- Rural (La Plata County)
- Housing (La Plata County)
- Latino (La Plata County)
- Senior Citizens/Homebound (La Plata County)
- La Plata County Leaders
- Archuleta County Leaders

The discussion focused on better understanding stakeholders' perspectives on characteristics that make a county healthy including positive and negative behaviors observed, important health issues the communities face, and things public health can do differently to help address issues faced. Within these topics, a trained moderator probed further to better understand whether stakeholders believe Archuleta and La Plata counties to be healthy, how community members interact with the local public health agency, and barriers to improving health.

After each focus group was conducted, the audio was transcribed. A code list was then drafted based on the primary subject areas covered during the focus groups. Each member of the SAT thematically coded the first transcript and, as a team, updated the code list to reflect additional codes identified after coding the first transcript that was not included in the initial draft. This step also allowed members of the SAT to discuss any discrepancies in coding before each member independently coded one of the final five transcripts. After coding all six transcripts, themes were organized according to the BARHII Framework.

Key Informant Interviews

SJBPH also obtained qualitative data through key informant interviews (KII). SJBPH and the SAT conducted seven KIIs with stakeholders from Archuleta County and La Plata County. These interviews were approximately 30 minutes each and discussed a variety of public health topics including positive and negative health behaviors, stakeholders' perspectives and opinions on

public health concerns within their communities, and public health programming and actions that they feel would make a positive impact.

SJBPH conducted three of the KIIs, and the SAT conducted four. Interviewers probed interviewees during the KIIs in order to further the conversation and fully understand the health issues being raised. Interviewees included four stakeholders that represented Archuleta County and three stakeholders that represented La Plata County from the following areas:

- Childcare and school districts
- Public Health
- Healthcare
- Southern Ute Indian Tribe

Once all KIIs were completed, the SAT transcribed the interviews. Initially, an identical codebook from the focus groups was utilized to code the KII content. Then, the SAT updated the codebook to include additional codes related specifically to any unique KII content. Once all seven KII interviews were coded, themes were organized according to the BARHII Framework.

Secondary Quantitative Data

The SAT collected and organized secondary data. Initial data mining occurred through exploring existing databases. The 2018 SJBPH CHA also

served as a reference to identify health areas and previous data point collection. The BARHII Framework helped to further illuminate areas that would be beneficial to include in the secondary quantitative data collection. Once the SAT compiled data from local, state, and national databases, the team then began categorizing the topic areas and adding in the quantitative secondary data. This process was completed through collaborative team efforts to ensure that data appropriately represented the needs of the communities that SJBPH serves.

Secondary quantitative data were mined from various sources including state, national, and local entities. The Colorado Health Information Dataset (COHID), compiled by the Colorado Department of Public Health and Environment (CDPHE), was one of the main sources that the SAT used for a large majority of the data. Another main source from CDPHE, Vision, was used often in the secondary data. CDPHE was also mined for data for health issues surrounding workplace safety. The U.S. Census Bureau, and U.S. Environmental Protection Agency served as national resources where the SAT mined secondary quantitative data. A few other notable sources include City of Durango, Colorado Health Institute, Mountain Express Transit, La Plata County, and the Healthy Kids Colorado Survey.

About Archuleta and La Plata Counties, Colorado

Archuleta County and La Plata County are located in the southwestern part of Colorado spanning 3,000 square miles of valleys, mesas and mountains. The rural counties sit within the San Juan Basin region, with the Southern Ute Indian Reservation predominantly located within La Plata County.

Based on the 2021 population estimates from the Colorado State Demography Office, there are 13,802 and 56,280 residents living in Archuleta County and La Plata County, respectively (see Figure 2 below for a map of population density). Those who identify as non-Hispanic white represent 75.7% of Archuleta County residents and 78% of La Plata

County. Those older than 65 years represent about 28.4% of the population in Archuleta County and 20.6% in La Plata County (DOLA, 2023).

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County

Population Density by Census Tract

0.0

200.0

Figure 2. Map of Archuleta County and La Plata County: Population Density by Census Tract ACS 2015-2019

CDPHE, 2022a

Overall, residents of both counties have higher educational attainment than the Colorado state average. Of people older than 25 years of age, 40% of Archuleta County residents and 47% of La Plata County residents have a bachelor's degree or higher (U.S. Census Bureau, 2022a).

Approximately 56.2% of adults 16 years and older participate in the labor force in Archuleta County and in La Plata County approximately 64.8% participate (U.S. Census Bureau, 2022a). Both counties are tourist destinations and rely significantly on the revenue incoming from tourism seasons as well as the tourism industry. Many of the businesses that operate within the two counties also supplement the tourism industry (SW Colorado Economic Development, n.d.).

The population in both counties is growing, particularly amongst those older than 65 years of age. From 2020 and 2021, Archuleta County and La Plata County each experienced an increase in this age group of 5.3% and 4.8% in each county, respectively (DOLA, 2023).

Both Archuleta County and La Plata County were designated as health professional shortage areas (HPSA) for primary care, dental health, and mental health (Health Resources and Services Administration, 2022). Of the 59 ranked counties in Colorado, Archuleta County ranked 20th and La Plata County ranked 16th in terms of health outcomes (CHRR, 2023a).

Age

More than half of the Archuleta County population (56%) is above the age of 45 with equal distribution in the 45-64 age group and the 65+ age group. La Plata County only has 48% over the age of 45, with 21% of that being over the age of 64. Both counties have similar percentages for 0–17-year-olds and 25–44-year-olds. La Plata County has twice the percentage of 18–24-year-olds, likely due to the presence of Fort Lewis College in the county. Generally, the populations in both Archuleta and La Plata Counties skew older than the state, as almost 60% of the total population of Colorado is under 45.

Figure 3 presents Archuleta County, La Plata County and Colorado's population stratified by age in the year 2021.

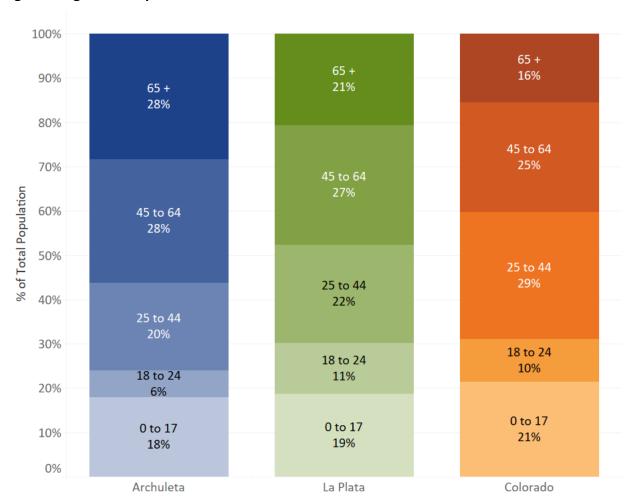


Figure 3. Age 2021 Population Estimates

DOLA, 2023

In the 2023 SJBPH survey, residents from both counties identified inequities among age groups. Respondents viewed the elderly population as having fewer available and accessible

resources. Below is a question that was asked in the SJBPH survey where many respondents wrote about topics including access to healthcare, food insecurities, and lack of care for those with dementia and other neurological disorders.

In your own words, what do you believe is the most important health issue facing the residents of your county?

- "Elder care for elders, food security, transportation, housing" —Archuleta County Resident
- "I believe we are going to see more incidents of dementia, and there are not enough resources for the patient or their family." —Archuleta County Resident
- "The lack of staff to provide care to the elderly."
- —La Plata County Resident

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Race and Ethnicity

In 2021, the population by racial/ethnic groups in Archuleta County consist of 76% Non-Hispanic (NH) White, 19% Hispanic, 1% Black of African American alone NH, 1% Asian alone NH, 2% Two or more NH, and 2% American Indian/Alaska Native NH.

In 2020, the population by racial/ethnic groups in La Plata County consist of 78% Non-Hispanic White, 13% Hispanic, 1% Black of African American alone NH, 1% Asian alone NH, 2% Two or more NH, and 6% American Indian/Alaska Native NH.

Colorado as a whole has fewer Non-Hispanic Whites at 67%, more Hispanics at 22%, more Black or African American alone NH and Asian alone NH (4% and 3% respectively) and fewer American Indian and Alaska Native alone NH than Archuleta and La Plata counties.

Figure 4 summarizes Archuleta County stratified by race/ethnicity in 2021.

Archuleta La Plata Colorado Colorado Archuleta La Plata White alone NH 76% 78% 67% Hispanic 19% 13% 22% Black or African American alone NH 1% 1% 4% Asian alone NH 1% 1% 3% Two or more NH 2% 2% 2%

Figure 4. 2021 Population Estimates by Racial/Ethnic Group

DOLA, 2023

Sexual Orientation and Gender Identity

American Indian and Alaska Native alone NH

Native Hawaiian or Other Pacific Islander alone NH

According to Behavioral Risk Factor Surveillance System data for 2018-2020, 5.4% of Colorado identify as Gay, Lesbian, or Bisexual. In La Plata County, 4.9% of individuals identify as such. The data for Archuleta County is suppressed due to the small number of respondents.

2%

0%

6%

0%

1%

0%



According to the Movement Advancement Project, which supports the Colorado Equity Profile, Colorado scores highly in all categories that they provide data on which includes state nondiscrimination laws, religious exemption laws, LGBTQ+ youth laws and policies, healthcare laws and policies, criminal justice laws and policies, and the ability for transgender people to correct name and gender marker on identity documents. While those protections apply to the whole state and cover Archuleta and La Plata, some residents expressed concerns:

"Homophobia runs rampant and keeps vulnerable populations unsafe and unhealthy."

La Plata County resident

"Youth in their school district lack sex education that is sexuality and gender-identity inclusive."

- La Plata County resident

"A group of students that refer to themselves as our queer students - our transgender, gay, LGBTQIA group - have no room to wiggle. There's community pressure against them, there's student pressure against them, and that group is going to need help, otherwise we will see, I think, an increase in suicides, anxiety, and depression, unless we can relieve some of the pressure that they are feeling. And that's worth it. But that's work our community has to do."

—Archuleta County resident

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The larger community comments on how to address LGBTQIA+ equity make reference to the preference for more supportive practices with regard to services and community resources. Research suggests that in order to positively impact the health outcomes of LGBTQIA+ individuals, education for professionals who provide supportive care and services for the LGBTQIA+ community needs to be increased. Research has demonstrated that healthcare providers feel that they are not well enough informed or well-equipped to address LGBTQIA+ health issues in a holistic and respectful manner (Henriquez, et. al, 2021). Many teachers and school staff report similar concerns about a lack of knowledge and community buy-in that would allow them to provide comprehensive and appropriate support (Patterson, et.al., 2019).

2023 SJBPH Survey Outcomes Overview

In the 2023 SJBPH survey, respondents in Archuleta County and La Plata County were asked to respond to the question: how would you rate the overall health of your community? The residents of both counties rated their community health favorably (see Figure 5 below).

Archuleta La Plata 58% 60% 50% 50% % of Respondents 40% 37% 30% 30% 20% 9% 8% 10% 4% 3% 0% 1% 0% Somewhat Unhealthy Very Healthy Somewhat Unhealthy Very Very Healthy Very Healthy Healthy Unhealthy Healthy Healthy Unhealthy Overall Community Health Archuleta La Plata Very Healthy 3% 8% Healthy 30% 50% Somewhat Healthy 58% 37% Unhealthy 9% 4% Very Unhealthy 0% 1%

Figure 5. How would you rate the overall health of your community?

2023 SJBPH Survey

La Plata County residents generally scored the health of their community more favorably than Archuleta County residents. 50% of La Plata County residents who took the survey chose "Healthy," while 58% of Archuleta County residents who took the survey chose "Somewhat Healthy." As part of this question, survey takers were asked why they rated the health of their community this way. Here are some examples:

Very Healthy:

- "Active outdoorsy fit folks" La Plata County resident
- "We are an active community with great access to hiking, biking trails. I feel like there is an emphasis on living healthy in LPC [La Plata County]." La Plata County resident
- "Lots of active people" Archuleta County resident

- "Endless outdoor activities." Archuleta County resident Healthy:
- "People spend a lot of time in outdoor activities" Archuleta County resident
- "Overall I think we have a population that enjoys spending time outdoors being active. That internal motivation leads to better health outcomes. We have access to the outdoors, a focus on healthy eating as well as better air and water quality than many places." - La Plata County resident

Somewhat Healthy:

- "We have a lot of unhealthy food and people in the area who are dining do not look well. There are, on the other hand, lots of people who exercise and are outdoors a lot who appear more healthy." – La Plata County resident
- "You have the haves and have nots in the community. Those with money seem to be healthier and more active." – La Plata County resident
- "Significant substance abuse and homelessness in this community" La Plata County resident
- "Senior citizens with health problems, mixed with younger people that are healthy and active." – Archuleta County resident
- "Changing of Drs. happens too often." Archuleta County resident
- "Fairly active population however access to services is limited." Archuleta County resident

Unhealthy:

- "Drug and alcohol abuse, needs of low-income families, poor nutrition due to high cost of food, indifference to vaccinations" – Archuleta County resident
- "Limited family resource support, limited pediatric support" Archuleta County resident
- "There are a lot of poor diet, drug, and alcohol related illnesses." La Plata County resident

Figure 6 shows the changes from the 2018 SJBPH survey to the 2023 SJBPH survey in rating the health of the community. Neither county showed much of a change.

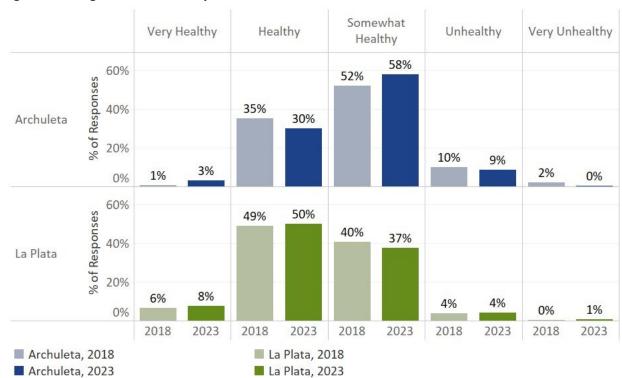


Figure 6. Changes in SJBPH Survey Data from 2018-2023

2018 SJBPH Survey, 2023 SJBPH Survey

The other open-ended questions asked on the survey was "In your own words, what do you believe is the most important health issue facing the residents of your county?" The BARHII framework was useful for coding resident's responses. The category labeled "Living Conditions" includes the most sub-categories within it, so it is not surprising that the greatest number of responses fall within this category.

Living conditions are defined as the ways in which the physical environment, economic and work environment, social environment, and service environment affect the health of community members. Each of these sub-categories can result in exposure to risk factors and/or barriers to access to resources that can then either directly result in disease or influence a person's behavior and increase their risk for disease or injury. The service environment sub-category falls under the Access section, while the other three sub-categories are included under the Social Determinants of Health section.

The "Living Conditions" category of service environment comprises the ways in which the local service environment systems impact health. Services included in this category are healthcare, education, and social services. The physical environment category of "Living Conditions" includes the ways in which the physical world, such as land use, transportation, housing, residential segregation, and exposure to toxins impacts health. The "Living Conditions" category of economic and work environment encompasses how the local economy, businesses, and individual economic circumstances impact health. Included in this category

are factors such as employment, income, retail availability, and occupational hazards. The "Living Conditions" category of social environment describes how the local social setting impacts physical and mental health. This category includes factors such as experiences of social identities (such as class, race, gender, and immigration), culture, media, advertising, and violence in the environment. Examples of some of these are below Figure 7.

Disease and Institutional Social Inequities Living Conditions Risk Behaviors Mortality Inequities Injury 50% 40% % of Responses 30% 20% 10% 0% Archuleta La Plata

Figure 7. Responses coded by the BARHII Model to "What is the most important health issue facing the residents of your county?"

2023 SJBPH Survey

Income, housing and healthcare all fall within "Living Conditions", but the BARHII framework places them within different "environments." They fall within the economic and work environment, the physical environment, and the service environment, respectively. SJBPH staff and the SAT analyzed and coded all of the open-ended responses from the SJBPH survey. The following are some examples of the comments that survey respondents made within these categories by county:

Income Examples

- Archuleta County
 - "Economic insecurity due to low wages and high cost of living."
 - "Cost of living and cost of health care"
 - o "Poverty"
- La Plata County
 - "Local jobs do not support basic expenses, housing, health, food"
 - "Poverty and the increased cost of living and lack of affordable housing that causes families to have no savings or financial security when they experience a difficult life event."
 - "High cost of living."

Housing Examples

- Archuleta County
 - "Affordable housing. Seriously. Working 5 jobs to pay rent or sharing unsavory housing among many occupants is not healthy."
 - "Housing inequality for working people."
 - "Affordable housing and the rising cost of food which adversely affect both the elderly and young families. Long term rental incentives and retail competition are needed."
- La Plata County
 - "Homelessness and poor-quality housing. This can lead to declining physical and mental health."
 - "Housing for teachers, police and other public services."
 - "Safe and affordable housing"
 - "Affordable housing. People can barely afford to live here and need to spend most of their money on housing, leaving little available for their medical expenses."

Healthcare Examples

- Archuleta County
 - "Access to doctors/specialists"
 - "Poor health care options."
 - "Access to preventative medicine via general practitioners or family physicians. There are not nearly enough so obtaining an appointment can take months."
- La Plata County
 - "Cost of insurance and the fact that doctors frequently leave Durango and it is hard to find a doctor who is accepting patients. Both at most important to me."
 - "Affordable care and reasonable rates for insurance"

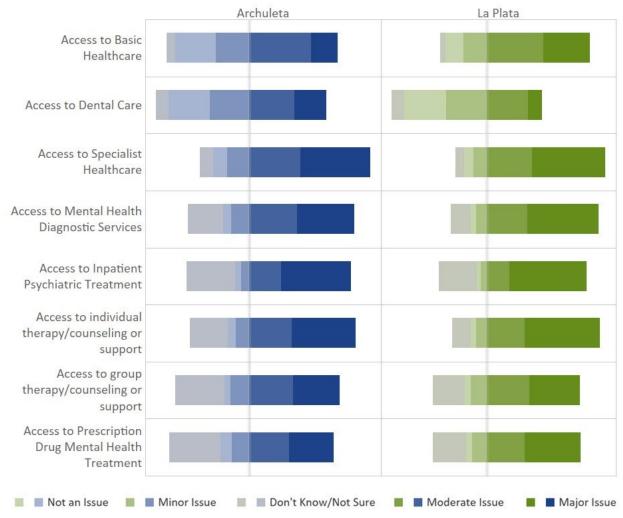
Access to Healthcare

In the 2023 SJBPH survey, access to basic healthcare emerged as a lower level of concern compared to access to specialty and mental health care. La Plata County data indicated clear concerns regarding mental health care. In both Archuleta and La Plata Counties more than half of respondents chose "moderate" or "major issue" for all access to mental health care questions. Access to a specialist was the highest "issue" in this category for both Archuleta and La Plata Counties at 71% and 79%, respectively (see Figure 8).

The following SJBPH survey data is displayed consistently throughout the document. In the survey, respondents were asked to choose their level of concern for certain issues ranging from "don't know/no opinion," "not an issue," "minor issue," "moderate issue," to "major issue." In these graphics, the grey line that runs through all of the questions separates minor issues and moderate issues. The graphs that have more counts on the right side of the grey

line are issues chosen to be of a larger concern than those where there are more counts on the left side of the grey line.

Figure 8. Concerns Regarding Accessibility of Physical and Mental Health Care



2023 SJBPH Survey (For full survey questions, see Appendix C)

When asked "What do you see as important health issues facing the community?", focus group and KII participants from Archuleta County and La Plata County identified access to primary care, dental care, and mental health services as major concerns. Community members felt that services were difficult to access due to long wait times, limited number of providers, and cost of services:

"One of the biggest things [about what makes a county healthy] is accessibility. I saw it on a personal level with my husband. He had to be flown out because there wasn't the proper care available for him, even in Durango, and it almost cost him his life."

-Stakeholder from an Archuleta County Focus Group

"I have great insurance and yet it takes me a month to get in to see a doctor half the time. So access to healthcare. Primary healthcare is a problem and probably dental care too is going to be problematic for anybody."

—Stakeholder from a La Plata County Focus Group



Mental and behavioral health care were heavily emphasized across both counties with concerns about limited access to services, lack of resources for substance use, and little support within schools and for families:

"Access is inadequate and waiting times are long and resource providers are scarce. And I think it was important because what I see oftentimes when it comes to behavioral health are those waitlists."

—Stakeholder from a La Plata County Focus Group

"The one [health issue] that stands out the most is behavioral health because we have a large number of students that need to access more than just their school guidance counselor or their school counselor. We're in a situation where we've applied now for multiple years for school health professionals to increase access to mental health support, but really as an organization, those extreme cases shouldn't be in the laps of schools, it should be in the laps of local professionals and experts. And there's a real gap where local providers are no longer taking students, and there doesn't seem to be a public access point. And so we have a lot of students that are falling through the cracks there."

-Stakeholder from an Archuleta County KII

"Mental health issues...goes back to accessibility.... People who live on the dry side can't necessarily make it into where the mental health facilities are located."

—Stakeholder from a La Plata County Focus Group

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SJBPH survey respondents shared similar answers to the focus groups and KIIs. Many discussed the high turnover rates of providers in the area and the lack of access to both specialists and primary care providers. Cost of care, timeliness, and continuity of care were also mentioned frequently.

Additionally, based on the qualitative survey data, concerns regarding mental health in the Archuleta County and La Plata County communities extend to the accessibility of locating these mental health services. Many of the mental health resources are very far away, or the transportation to get these services is very inconvenient, according to the data.

Furthermore, according to the SJBPH survey responses, residents were also concerned about access to reproductive health resources. La Plata County residents highlighted the lack of transparency for reproductive healthcare as well as the lack of contraceptive choices available.

The utilization of preventive care is a primary indicator of health. According to County Health Rankings and Roadmaps data as of 2020, there were 770 people in La Plata County for every one physician (CHRR, 2023c). This is a higher ratio as compared to the entire state of Colorado and the United States. Archuleta County has 1,180 people for every one physician which is also a higher ratio than the state of Colorado as a whole (CHRR, 2023b). Access to care is a higher concern reported on these survey results than it was on the last SJBPH survey in 2018. In the past five years the number of physicians has increased by almost 25% in La Plata County compared to previous numbers of people per physician, while the number in Archuleta County has stayed steady (CHRR, 2023b; CHRR, 2023c).

In Archuleta County, access to dentists who provide preventive care is limited. This could impact residents' ability to partake in preventive care related to their dental health. There are 1,060 people for every one dentist in La Plata County and 2,300 people in Archuleta County for every one dentist according to data compiled by County Health Rankings and Roadmaps using the Area Health Resource File. La Plata County appears to have a higher ratio of dentists than Colorado as a whole and the United States which has one dentist per 1,380 people. La Plata County, Colorado and the United States has been trending downwards, meaning more dentists per person, while Archuleta County has been trending upwards since 2016 (CHRR, 2023b; CHRR, 2023c). More providers are a step in the right direction as far as addressing access, but there are other factors that impede accessibility such as limited hours, providers not accepting new patients and staff turnover.

Cost of Care and Health Insurance

Based on the qualitative survey data, concerns regarding mental health in Archuleta County and La Plata County also extend to the mental health services that are available, and many residents highlighted access to resources such as therapy, medications, and other mental health services. Mental health care affordability and access were both concerns. As one resident from La Plata County stated,

"There is a lack of affordable mental health treatments in this area. Most people who need this resource can't afford therapy sessions that are \$120 or up."

Per survey data, many residents of Archuleta County and La Plata County expressed concerns regarding the affordability of healthcare, cost of insurance, and public discourse around the acceptance of insurance policies and plans. Many residents expressed that, although the community members have good health behavior, there are issues with getting care when needed due to the affordability of insurance. One resident of La Plata County remarked that,

"although there are many healthy people in La Plata County there are also many that are not healthy. Many that do not have 23 2023 Community Health Assessment the means to have healthy foods, participate in exercise/recreational activities, and also have reasonably priced health insurance."

The general lack of knowledge regarding resources and the healthcare system as well as a portion of the community struggling with lower income exacerbates these issues. For example, as one La Plata County survey respondent noted,

Generally healthy population, but medical care and health insurance are pricey and there are many residents who are uneducated per numerous health issues and/or lack knowledge of access to resources - or the resources do not exist (such as substance abuse clinics).

Residents also emphasized the high price of medications as contributing to this inequality, with one stakeholder from Archuleta County lamented that not everybody has the "money to do the things they need to do for medication." They also went on to say that this means there is lower compliance with taking prescriptions among "people that struggle financially."

From the SJBPH survey, according to an Archuleta County resident who described their community as somewhat healthy, the ranking of "somewhat" was due to "many people without access to basic and preventive health services and without health insurance." Many residents across Archuleta County as well as La Plata County also expressed concerns over "limited insurance," or "no insurance;" and called this trend "worrisome."

Figure 9 shows the percentage of persons under the age of 65 years living in La Plata County and Archuleta County that are without health insurance compared to the entire population of Colorado in 2021.

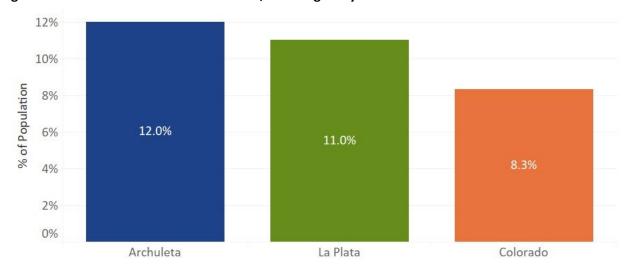


Figure 9. Persons without health insurance, under age 65 years

U.S. Census Bureau, 2022a

Focus group data from both Archuleta County and La Plata County also indicated "access to healthcare" as one of the areas where inequities are the "most pressing" and "troubling." During a focus group discussion, a stakeholder representing La Plata County stated:

I think access to affordable healthcare or free healthcare [is a major barrier in La Plata County]. I come to the table thinking the hardest thing about living in America is having to pay for healthcare, you know? We struggle with access [to insurance], and without insurance it is almost impossible to get adequate care. Even with it, it's hard. I think it just provides really inequitable care and I think that as soon as you put a cost on going to the doctor, you just make it [that much more difficult].

Research shows that uninsured Americans are substantially less likely to have a usual source of healthcare than their insured counterparts (CDC, 2018). As a result, they are less likely to access preventative services and more likely to suffer from chronic health conditions and early mortality. This is especially pertinent in the SJBPH District as both counties have higher rates of uninsured persons than in the state of Colorado, and both counties reported difficulties with accessing preventative and primary care, mental health, and dental care (U.S. Census Bureau, 2022a).

From a state perspective, there are ongoing efforts to address this issue. The Colorado Department of Health Care Policy and Financing (HCPF) created a health equity plan for the 2022-2023 fiscal year (Colorado Department of Health Care Policy and Financing, 2022). This plan outlines a number of options for leveraging state and national incentive payment programs to help make local healthcare more affordable, especially for those without insurance. This department also created a task force that hopes to meet with local communities in order to address regional and statewide health disparities. The full plan and task force information can be found on the Health Equity page of the Colorado Department of Health Care Policy and Financing.

Health Education

Another common sentiment expressed by community members across the two counties was a need for increased general education about health and public health programs. Focus group data showed that it is highly regarded as an area where the community wants to see more work done, both in schools and with families directly. Stakeholders specifically highlighted "education around positive food behaviors", "sexual health education", and "general education on resources" as a "top priority" in order to attain positive health outcomes. Speaking

to the need for "education around healthy eating," one parent from La Plata County who was a participant in a focus group comprising those in organizations serving Latino residents stated:

"There is a need to have an education program for like the very basic stuff of what does sugar do to your brain [sic]. You're giving your kid 20 bottles of sugar a day, and then wonder why the kid is hyperactive, or wonder why the kid is this or that way. I

think there's also kind of a need to educate the population in general."

Sexual health education was the other aspect of health education that was brought up by many community members across both counties. A stakeholder from La Plata County expressed:

"We used to have teen education on reproductive services. Teen pregnancy used to be very high in the early 2000s, so we had a program where a community member gave education to the community to help lower it, but I don't know if we have that at the moment. I would like to see that again."

Another specific topic that stakeholders, especially those who identified as parents, wanted to see more of was education regarding alcohol and drugs, and substance abuse in general. One stakeholder commented:

"It's very similar to sex, where in the United States it's very common and you see it everywhere, but there's not the same level of education with drugs and alcohol. It's normalized. It's everywhere. People's parents use. There's no education about what different drugs do, how they can impact you, and how they can create a chemical dependence."

Stakeholders also mentioned how having access to education in general "around what healthcare is like and the different insurances and coverages you have," can help people navigate institutions more easily. Focus group data indicated that many residents feel that a lot of the difficulties with accessing healthcare happens because "people don't understand" what resources they have. An Archuleta County resident put it as follows:

"Once again, that's education. [For example] especially with Medicaid, Medicare, there are taxis that Medicaid actually will pay for but people aren't aware of that - and who makes them aware of that? Is that you? Is it in the doctor's office, the front desk?

Somebody has to be aware of it.

Seniors and homebound residents expressed frustration with existing education around available resources and called for more health education. One stakeholder said that seniors find it difficult to take care of their health "because they don't know how to navigate the digital world that we live in" and "might not know what services are available to them." When asked what public health programs they would like to see more of, participants of a focus group unanimously highlighted education and support of needs. A stakeholder also specified that such education needs to center on families because "it all kind of starts with the families and at home."

Loss of Government Assistance and Benefits

Loss of government benefits was another key area of concern for many community members. General reduction in governmental assistance and rollback on welfare budgets at the local, state, and federal level troubled community members across both counties, with some worrying that it was going to impact "food security", "education" and "access."

Internet Access

Access to broadband is difficult to measure and available data from the Federal Communications Commission (FCC) has its limitations; however, most broadband funding programs define service to be at least 100/20 Mbps, this is the speed the Colorado Broadband Office uses, as did the SAT when evaluating access to broadband (Colorado Broadband Office, 2023a).

Using this definition, 88.8% of Colorado residents have access to broadband service, while just 51.1%

of Archuleta County and 53.22% of La Plata County residents have this service available (Colorado Broadband Office, 2023b). Access to the internet affects many things, including access to care. Many providers offer telemedicine which may not be

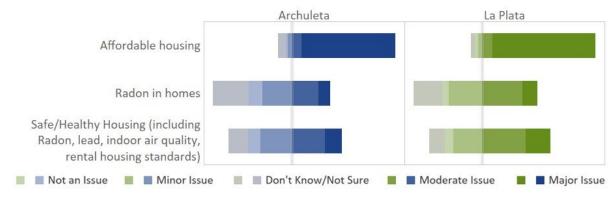
available to those without broadband internet. During the pandemic, some medical providers only offered telemedicine which greatly impacted access to care.

Social Determinants of Health

Housing

Respondents to the 2023 SJBPH survey reported mixed levels of concern over the safety of their home, but overwhelmingly rated affordable housing as a "major issue" (80% in Archuleta County and 82% in La Plata County).

Figure 10. Physical Living Conditions



2023 SJBPH Survey

When focus group participants were asked, "Would you consider Archuleta or La Plata County to be healthy? Why or why not?", respondents from both counties identified lack of affordable housing as a major reason that their county was not healthy. Stakeholders felt that there was not sufficient housing available within the price range of the average working-class individual and that a majority of their paycheck went towards housing costs, making it difficult to afford other necessities like healthy foods and healthcare.



When asked what would increase the health of the community, one focus group participant from La Plata County put it very simply:

"I think affordable housing, permanent affordable housing, workforce housing, anything that allows for either a no income or low income or even a middle income."

—Stakeholder from a La Plata County Focus Group

An Archuleta County focus group participant made a similar point:

"There's such limited affordable housing... Housing affects your mental health, your behavioral health. It affects your physical health, access to food. I mean, you don't have stable housing, everything's affected." —Stakeholder from an Archuleta County Focus Group Access is inadequate and waiting times are long and resource providers are scarce. And I think it was important because what I see oftentimes when it comes to behavioral health are those waitlists."

—Stakeholder from a La Plata County Focus Group

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Survey respondents from both counties identified housing insecurity, affordability, quality, and a perceived high number of unhoused individuals in the community as issues. "Homelessness" was a frequent answer when identifying the largest health issue. A La Plata County resident commented,

"People can barely afford to live here and need to spend most of their money on housing, leaving little available for their medical expenses."

Lack of affordable housing is a public health issue that impacts nearly every aspect of a person's health. Being unhoused, unstably housed, living in poor quality housing, or living in overcrowded housing conditions can impact mental health, chronic illness, injury, and expose people to violence and environmental, communicable, and vector-borne disease (Maqbool, Viveiros, & Ault, 2015; Krieger & Higgins, 2002). Spending a high percentage of income on housing can cause cutbacks on other health necessities including delayed medical care, postponing medication purchases, and food insecurity (Fletcher, Andreyeva, & Busch, 2009). Stable housing is also a protective factor for domestic violence, child abuse and neglect, and substance abuse (Anderson & Saunders, 2003; Leech 2012).

Households are considered cost burdened if they spend more than 30% of their total income on rent or a mortgage every month (U.S. Census Bureau, 2022b). In La Plata County 30.5% and 34.9% in Archuleta County are housing cost burdened including those with a mortgage or renting (U.S. Census Bureau, 2022c, U.S. Census Bureau, 2022d).

The State of Colorado has identified a multifaceted approach to improving affordable housing by preserving existing affordable housing while encouraging development of new affordable housing. Strategies include health impact assessments, restoration of existing units, protection of long-term residents, inclusive municipal zoning and housing policies, and revenue generation/incentives for new developments (CDPHE, n.d; Allbee & Lubell, 2015). A resource to further explore a public health approach to housing is the *Preserving, Protecting, and Expanding Affordable Housing* Toolkit by ChangeLab Solutions, cited by CDPHE in their recommendations (CDPHE, n.d; Allbee & Lubell, 2015).

Access to Transportation

Archuleta County relies on Mountain Express Transit for public transportation with a limited schedule. Archuleta County's service runs throughout Pagosa Springs on a single route with 21 stops along U.S. Hwy 160. Seniors over the age of 60 are eligible to receive discounted ParaTransit services, free bus rides, and free rides to the Pagosa Senior Center.

La Plata County relies on Road Runner Transit to help connect the areas of Ignacio and Bayfield to Durango and The Bustang Outrider to connect Durango to Grand Junction. Both of these services offer a single route with limited scheduling. Services are available to people with disabilities and seniors over the age of 60 with door-to-door assisted transportation throughout the county. Lastly, within Durango, there are five available transit routes connecting most of the town.



Focus group members from La Plata County identified a lack of transportation as a major issue that limited people from taking care of their health. Again, more rural members of communities were more heavily affected, citing a lack of public and affordable transportation options as a limiting factor for receiving healthcare:

- "Transportation is big because we're in a rural, large community."
- —Stakeholder from a La Plata County focus group
- "We have transportation but you have to get on the bus at 7 in the morning and you won't be home till 7 at night."
- —Stakeholder from a La Plata County focus group

An Archuleta County focus group participant also echoed this concern:

"Having no access to transportation is a big thing."

In the 2023 SJBPH survey, 46% of respondents in Archuleta County rated transportation as a major or moderate concern. 63% of La Plata County respondents rated it as a major or moderate concern.

Figure 11. Access to Transportation



2023 SJBPH Survey

Additionally, community members associated transportation with being a barrier to healthcare access, economic opportunities, food access, and physical activity opportunities, all of which contribute to overall public health. Transportation also was identified as a component that compounds other stressors experienced by lower-income community members and older adults.

Income and Poverty

In both counties, survey respondents considered poverty and the availability of jobs/economic opportunity as areas of major or moderate concern. In Archuleta County, 80% of survey respondents rated poverty as a major or moderate issue (71% for the availability of jobs/economic opportunities). In La Plata County, 87% rated poverty as a major or moderate issue (76% for the availability of jobs/economic opportunities).

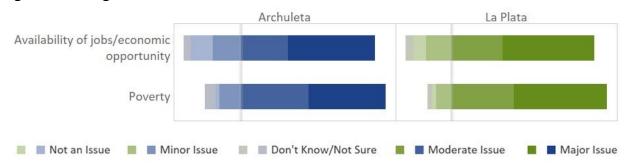


Figure 12. Living Conditions: Economic & Work Environment

2023 SJBPH Survey

According to the U.S. Census Bureau (2022a), the median household income in Archuleta County for 2017-2021 was \$62,907 (in 2021 dollars). Per capita income in the past 12 months for 2017-2021 was \$34,394 (in 2021 dollars). 11.4% of the residents were living in poverty. The median divides the income distribution into two equal parts: one-half of the cases falling below the median income and one-half above the median (U.S. Census Bureau, n.d.).

In La Plata County, the median household income for 2017-2021 was \$75,089 (in 2021 dollars). Per capita income in the past 12 months for 2017-2021 was \$40,529 (in 2021 dollars). 10.1% of the population was living in poverty (U.S. Census Bureau, 2022a).

Both counties had lower median household incomes and per capita income in the last 12 months compared to the state of Colorado. For the state of Colorado, the median household income for 2017-2021 was \$80,184 (in 2021 dollars). Per capita income in the past 12 months for 2017-2021 was \$42,807 (in 2021 dollars). 9.4% of the population was living in poverty (U.S. Census Bureau, 2022e).

Focus group participants from both counties identified low income and lack of employment as factors compounding the issue of high cost of living. Most residents expressed a need to have multiple jobs to meet their basic needs because they were not being paid enough to work full-time at one job. Respondents noted that most available jobs were in customer service due to the resort and tourism-based economy of the counties, which relies on tips and hourly wages instead of having reliable salaries.



When asked, "What prevents people from taking care of their health?," focus group members and KII participants from both Archuleta County and La Plata County mentioned the high cost of living as a primary factor. Even working multiple jobs, residents in both counties still expressed a struggle to afford basic needs like housing, food, water, electricity, and healthcare. Many respondents blamed this high cost of living on the resort economy of the area, which caters to the wealthy, becoming nearly entirely unaffordable for working class residents.

"People that live here working service industry jobs, they can't afford to live here anymore. You know, coming in and then rising costs and nothing is helping. People can't keep up with energy cost, housing costs. We've got people displaced. So it's just this ever-lightening economy. And it drives all those other things." —Stakeholder from an Archuleta County Focus Group

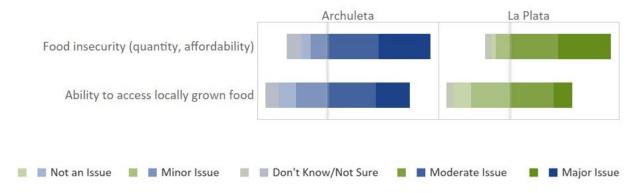
"It's probably no secret that Durango is expensive. And it's hard for people. Few people are living, right in Durango - no one can really afford that. Most people I know are living kind of on the outskirts or working in Durango, but living in Bayfield, which is just tough. It's hard to work somewhere you can't actually afford to live." -Stakeholder from a La Plata County KII

Survey respondents from both counties echoed similar sentiments to the focus group and KII participants regarding cost of living stating that poverty, increased cost of living and lack of affordable housing contribute to families not having financial security when they experience a difficult life event. According to the 2023 SJBPH Survey, "Poverty" and "Cost of living" were prevalent answers when asked what the largest health issue was in their community.

Food Insecurity

Food insecurity and food access were identified as major issues by both counties' residents. In Archuleta County, 72% of residents ranked food insecurity as either a major or moderate concern. In La Plata County, 80% of residents rated food insecurity as either a major or moderate concern.

Figure 13. Food Concerns



2023 SJBPH Survey

Figure 14. Population (%) Experiencing Food Insecurity



Feeding America, 2023

According to Feeding America, in 2023, 9.2% of the population in Colorado was experiencing food insecurity. In the same year, 9.1% and 10.3% of the population in Archuleta and La Plata counties respectively were experiencing food insecurity (see Figure 14 above).

One major barrier identified by stakeholders of both Archuleta County and La Plata County was a lack of access to healthy foods in working class neighborhoods. Focus group participants noted that although fast food was both affordable and readily available nearby, grocery stores with a consistent supply of fresh and healthy foods were prohibitively far and located in wealthier areas. A stakeholder from a La Plata County focus group stated,

"Rising food insecurity is symptomatic of the economic disparity and it's just, it's just huge."

Food security and access to healthy food were extremely prevalent answers from the respondents of the SJBPH survey. Both the cost and quality of food in Archuleta and La Plata counties were highlighted as large health issues.

Food insecurity and poor nutrition are associated with birth defects, cognitive problems, asthma, depression, stress, aggression and anxiety, suicide ideation, poor overall health, poor sleep, poor oral health, diabetes, hyperlipidemia, hypertension, and reduced independence in older adulthood (Gundersen & Ziliak, 2015). In the 2021 Colorado Health Access Survey (CHAS), Archuleta County and La Plata County residents reported food insecurity levels in the highest rate range in the state: 10.4%-12.3%. The CHAS also found that Black/African American and Hispanic/Latino Coloradans were significantly more likely to report food insecurity (CHI, 2021).

Nutritional health in Archuleta and La Plata counties was difficult to assess due to mixed results in data collection. According to the Behavioral Risk Factor Surveillance System (CDPHE, 2023a), adults in La Plata County reported consuming as much fruit per day than the average consumption in the state of Colorado -- with 62% consuming fruit less once or more per day. Archuleta County residents consume slightly less than average with 56% consuming fruit once or more per day. When it comes to daily vegetable consumption, 85% of Archuleta and La Plata County residents eat vegetables one or more times a day. This is higher than the state average at 82%.

Fruit Consumption 1 or more times per day Vegetable Consumption 1 or more times per day (Adults) (Adults) 80% 60% % of Adults 85% 85% 81% 40% 62% 62% 56% 20% 0% Archuleta La Plata Colorado Archuleta La Plata Colorado

Figure 15. Fruit and vegetable consumption 1x or more per day (% of adults)

CDPHE, 2023a

Based on the qualitative survey data, community members in both counties seem to be split on nutrition status. Some individuals stated that nutrition seems to be a topic of concern. However, there are others who emphasized that high prices.

Focus group and KII stakeholders also mentioned the high prices of food and other daily living costs. Costs have increased and community members find it hard to keep up with housing

costs on top of food necessities. A community stakeholder explained below how difficult it is to drive over to get food and make sure that you are feeding your body proper food.

Sense of Community

Across nearly all focus groups and KIIs, a sense of community was regarded as a strength and positive health behavior for Archuleta County and La Plata County which was a reason that many respondents felt like both counties could be considered healthy.

Community members noted a willingness to support one another with meeting their needs, communication, and collaboration amongst individuals to help each other access services, and strong community connections allowing for the counties to remain resilient during the COVID-19 pandemic:

[Regarding positive health behaviors] "La Plata County, because we are small and have limited resources, everyone is just so willing to problem solve. Everyone's so willing to collaborate, and use what we have together for the betterment of a lot of people."

—Stakeholder from a La Plata County Focus Group

Stakeholders in La Plata County also viewed a sense of community as being a driving force behind social networks being more active and enjoying outdoor activities together:

[Positive behaviors I see within my family, friends, and people I serve include] "People encouraging each other to get outdoors and encouraging group activities. It's our [sense of] community and we can easily, even within our own family, say 'hey, let's get together and let's go out to the lake."

-Stakeholder from a La Plata County Focus Group

However, cultural barriers, especially amongst the Latinx population, were identified as a concern during focus groups and KIIs, causing this population to feel socially isolated and lack that sense of community. This was identified both in terms of language barriers and in feeling as if there were not culturally inclusive spaces within their community:

[Discussing social isolation] "It's cultural: spaces where you feel comfortable which we would love to share with our community. So we built toward that but unfortunately we see this group as separate – we're the Latino community."

—Stakeholder from a La Plata County Focus Group

Access to Childcare

Lack of childcare was also a large area of concern related to employment, especially with most residents working long hours at multiple jobs. This mismatch in the supply and demand of childcare services was illustrated succinctly by a resident who noted,

"We've been designated as a childcare desert. And because of the lack of early care and education slots there's more demand."—Stakeholder from an Archuleta County KII

18% 16% 14% 12% % of Population 10% 18% 8% 13% 6% 4% 2% 0% Archuleta La Plata Colorado

Figure 16. Linguistically isolated households (2015-2019)

CDPHE, 2022b

A linguistically isolated household is described as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well" (The Annie E. Casey Foundation, 2022). 18% of the population in Colorado live in linguistically isolated households. Comparatively, 10% and 12.9% of the population in Archuleta County and La Plata County respectively live in linguistically isolated households (CDPHE, 2022b).

Archuleta County and La Plata County stakeholders indicated that there is a lack of racial and cultural equity within the communities which results in the inability to access needed resources. More specifically, there is a need to ensure that public health materials reflect local cultures, are available in multiple languages, and that translation services are available so that all resources available are inclusive of the community.

Access to public information and resources that are specific to different linguistic and cultural groups is an important process in the pursuit of health equity. It is necessary to identify that lack of resources is tied to greater social inequity and that these inequities can be addressed by increasing the accessibility of linguistically and culturally appropriate resources. In this area, the community was crucial in identifying their own needs and asking for their preferred best practice solution.

Behavioral Health

According to the American Medical Association, "behavioral health generally refers to mental health and substance use disorders, life stressors and crises, and stress-related physical symptoms. Behavioral health care refers to the prevention, diagnosis and treatment of those conditions" (AMA, 2022).

Mental Health

Figure 17 presents the survey results related to stigma of having or seeking treatment for a health condition on a scale ranging from major issue to not an issue and support for families with children (daycare, safe places to play).

Stigma of having or seeking treatment for a mental health condition

Support for families with children (day care, safe places to play)

Not an Issue Minor Issue Don't Know/Not Sure Moderate Issue Major Issue

Figure 17. Social Inequities: Mental Health Stigma & Support for Families with Children

2023 SJBPH Survey

Findings from the focus groups and KIIs highlight a level of stigma within both Archuleta County and La Plata County that prevents residents from seeking resources and help they need. When asked, "What prevents people from taking care of their health?" stakeholders from the La Plata County focus group reported that residents feel shame for believing that

they may need to seek professional assistance for mental health and, as a result, do not seek help:

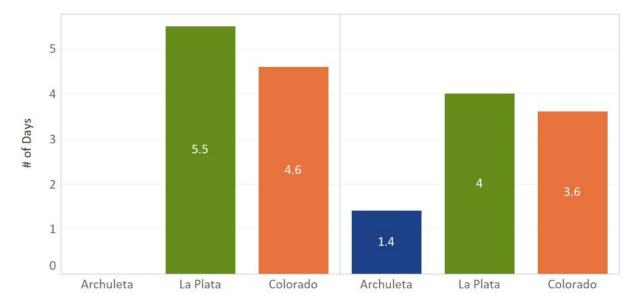
"I think [resistance to seeking help] probably comes from stigma. I think that even with young children, when we offer support services, the first thought is defensive. Like 'I must be doing something wrong if my child needs additional help, I don't want them identified or labeled as anything.' 'I don't want anyone to know that I am receiving help or this service.' Even if it's peer-to-peer like a parent-to-parent support, we see resistance."—Stakeholder from a La Plata County Focus Group

Figure 18 outlines data from Archuleta County and La Plata County, and Colorado related to mental health. The graphs show the average number of days experienced by adults in the past 30 where their mental health was not good, and the number of days with poor physical and mental health days that kept them from doing usual activities. La Plata County is higher than Colorado as a whole in both categories. Archuleta County is suppressed in one graph since there isn't enough information to report on it, but the average number of days where mental health was not good is lower than either Colorado or La Plata County.

Figure 18. Mental Health Factors Behavioral Risk Factors Surveillance System 2018-2020

Average number of days (in the past 30 days) experienced by adults of poor physical or mental health that kept them from doing usual activities

Average number of days (in the past 30 days) experienced by adults when their mental health was not good



CDPHE, 2022c

When community stakeholders were asked about negative health behaviors and health issues in their communities during focus groups and KIIs, respondents from both Archuleta County and La Plata County identified mental health as a concern.

"Mental health and addictions have gotten out of hand. Kids are dealing with stuff in schools and it's because of the other economic issues that they're facing. That drives other things so, maybe more counseling options. Mental health is a huge component of what our county is lacking in. Suicide rates are up. All those things are connected to a lot of other things.

—Stakeholder from a La Plata County Focus Group

"Going back to what makes a county healthy, I think just support for people. Mental health services is huge right now for all ages. I get to work in a job where we run the whole gamut of age groups. So I know that each one has its challenges. It's important - when looking at the county and its challenges and solutions - to look from all perspectives.

-Stakeholder from a La Plata County KII

According to the survey data, many of the Archuleta County and La Plata County residents also consider mental health to be on the decline within their communities. Many identified issues of loneliness, anxiety, and stress. Consider this remark from an Archuleta County resident:

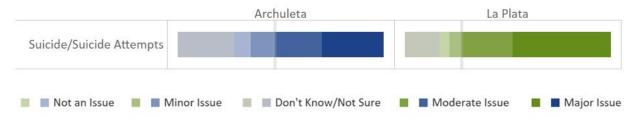
"From working with the public and vulnerable populations throughout the pandemic, I have seen a marked decline in the outlook and attitudes of most clients. The majority have begun reporting anxiety and other mental health issues in addition to (or in place of) physical health issues, etc."

"Mental health" was one of the most popular survey answers when asked what the largest health issue was in the community. When mentioned with other topics, access to mental health resources was discussed, as well as in relation to substance use and addiction.

In addressing mental health many of the best practice recommendations have been identified by the community at large as access-based issues. There is a scarcity of clinical mental health providers in rural areas around the United States, though there is some hope for meeting the needs of rural regions due to the increased access and reliance on telemedicine because of COVID-19 (Morales, et.al. 2020). Due to increased access to telemedicine, there is an increase in provider options for those seeking culturally and linguistically competent mental health care services. Telehealth would give minority communities increased access to providers who are skilled and experienced in more niche areas of practice such as LGBTQIA+-specific mental health concerns and practitioners that share an identity with other minority communities (Jensen, et.al, 2020). Of course, this also relates back to access to broadband and comfort using technology.

Suicide

Figure 19. Concern Over Suicide/Suicide Attempts



2023 SJBPH Survey

53% of Archuleta County survey respondents rated suicide/suicide attempts as a major or moderate issue. In La Plata, suicide/suicide attempts were rated by 48% of survey respondents as a major issue and an additional 25% as a moderate issue (Figure 19). In looking at the data, suicide was an incredibly pressing issue for Archuleta and La Plata. The age-adjusted rate of suicide deaths in Archuleta County and La Plata County is higher than the rate in Colorado. The rate of suicide deaths in Archuleta County appears much higher, but the rates are not significantly different given the small counts. The age-adjusted rate of suicide deaths for Archuleta County is 43.12, La Plata County is 27.65, and the state of Colorado is 21.07 per 100,000 (CDPHE, 2023b) (Figure 20).

La Plata

Colorado

Figure 20. Age-adjusted rate of suicide deaths (per 100,000 population) 2022

CDPHE, 2023b

0

Archuleta

Mental health challenges were seen to be quite prevalent among high school students in Archuleta County and La Plata County. According to the 2021 Healthy Kids Colorado Survey, about 38% of students reported feeling sad or hopeless almost every day for two weeks or more in a row during the past 12 months and in turn stopped doing some of their usual activities (CDPHE, 2022d). 18% of students seriously considered attempting suicide in the past 12 months, and 7% of students attempted suicide one or more times during the past 12 months (CDPHE, 2022d). The Healthy Kids Colorado Survey data combines the five counties of Archuleta, Dolores, La Plata, Montezuma, and San Juan into Region 9.

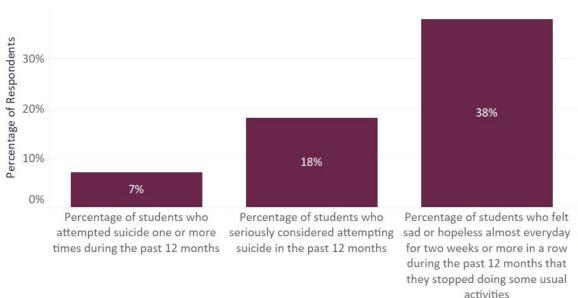


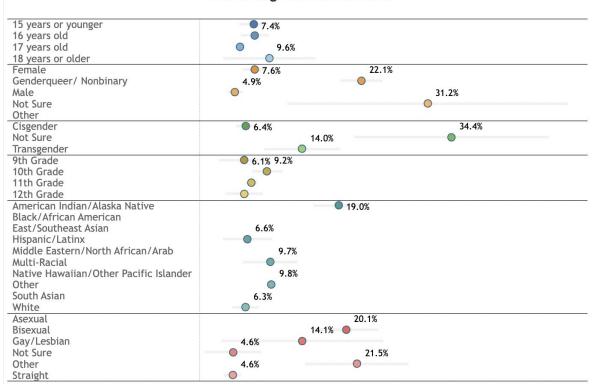
Figure 21. Mental Health Challenges High School Students (Region 9)

As seen in Figure 22 below, there are disparities among high school students that have attempted suicide. In many cases, percentages of LGBTQIA+ and BIPOC students who have attempted suicide one or more times in the past year are higher than other students (CDPHE, 2022d).

Figure 22. Percentage of students who attempted suicide one or more times during the past 12 months, Healthy Kids Colorado Survey Data

Region 9 Estimates





CDPHE, 2022d



When asked during focus groups and KIIs about negative health behaviors and health issues in their communities, stakeholders in both Archuleta and La Plata counties identified suicide as a concern in regard to mortality. High rates of suicide and suicidal ideation were touched on as a community health issue that SJBPH should prioritize:

"I think on the last health assessment Archuleta County was one of the highest counties for suicide in the whole state. And when you look at that, what are the underlying causes making so many people deal with that?"

—Stakeholder from an Archuleta County Focus Group

"If you look at the statistics, our region was high for Colorado, and Colorado across the board is really high for mental health and suicide."

—Stakeholder from a La Plata County Focus Group

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Stakeholders from both counties also discussed the importance of having suicide prevention within their communities. When asked about what public health programs individuals would like to see more of, suicide prevention was mentioned, especially amongst youth and tribal communities. Having suicide prevention in schools was emphasized as a programming priority by both counties.

Research shows that adolescents, those identifying as LGBTQIA+, American Indian and Alaska Native (AI/AN) people, and people with access to firearms have a higher risk of completing suicide than other groups in America (CDC, 2023a). Thus, best practices focus on these vulnerable populations.

According to the CDPHE, firearms are the leading method of suicide in Colorado (CDPHE, 2023c). Males represent a disproportionate 78% of suicide fatalities across all age groups, with the highest number in males ages 25-34. Having a firearm in the home triples the odds of lethality in a suicide attempt. The CDPHE offers a wide range of <u>literature and resources</u> such as links to the Colorado Firearm Safety Coalition, training for providers, gun buy-back programs, and education on proper gun storage and temporary out-of-home storage (CDPHE, 2020).

Youth suicide prevention is best approached from upstream prevention of risk factors in conjunction with interventions for students experiencing acute mental health stress. The Colorado School Safety Resource Center has a resource guide detailing a menu of school-based prevention/intervention programs. (CSSRC, 2023; CSSRC, 2021). Other resources

include <u>Youth Mental Health First Aid</u> training for askable adults (such as coaches, teachers, employers of youth), and <u>The Second Wind Fund</u> - a Colorado-specific fund to cover the cost of therapy for youth experiencing suicide ideation (MHFACO, 2023; The Second Wind Fund, 2023). LGBTQIA+ youth-specific suicide prevention approaches are explained in detail in the <u>CDPHE Suicide Prevention Commission's LGBTQIA2S+ Recommendations</u>; some key approaches are family and community acceptance, access to care, LGBTQIA+-inclusive and anti-bullying policies in schools (CDPHE, 2022e).

Substance Use Disorder

Substance use was noted in multiple areas of the data collected as a major concern within the community.

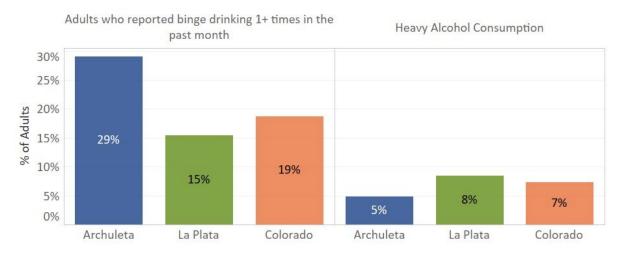
Among the most notable best practices to address the prevalence of substance use disorder (SUD) is to address the nature of substance use as a symptom of a larger issue. SUD is a recognized diagnosis by both the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) and the International Classification of Diseases 11th Revision (ICD-11) manuals of practice and needs to be considered through the lens of treating a disease as opposed to simply redirecting a behavior. One of the primary ways to adjust the perception around substance use is through community messaging. Identifying treatments for SUD as health care treatments and allowing them to be integrated into general health care settings can decrease the stigma around treatment occurring as well as make treatment more accessible to the community at large.

When talking about risk behaviors, most of the public health models that address SUD involve risk mitigation and educational strategies around the disease. Prevention is key in decreasing the need for direct care services to treat SUD, but the current need also exists in ensuring that those who are already living with the disorder have access to sustainable and accessible treatment. Rehabilitation care can be expensive and time consuming so the more accessible and affordable that treatment can be, the more likely residents

are to access said treatment. The community members have the best input on how SUD is best addressed within their own communities as there is no one-size-fits-all treatment.

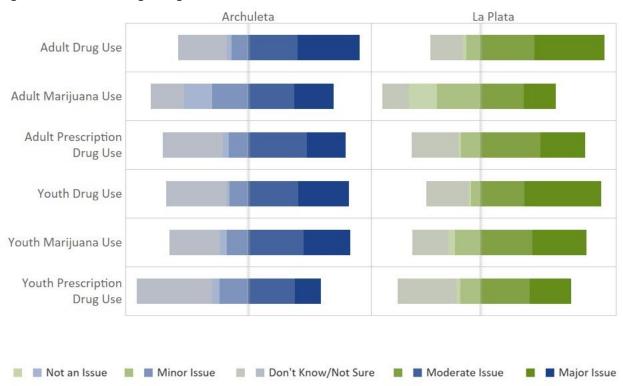
Nicotine, alcohol, and substance use all impact overall health. Alcohol use impacts the health of both counties' residents; according to secondary data, a higher percentage of Archuleta County adults reported binge drinking than Colorado adults as a whole, while more La Plata County residents reported heavy alcohol consumption. Binge drinking is defined as four or more drinks for women and five or more drinks for men on one occasion and heavy alcohol consumption is defined as eight or more drinks for women and 15 plus for men in a week (CDPHE, 2023a).

Figure 23. Adults who reported binge drinking 1+ times in the past month and Heavy Alcohol consumption BFRSS data 2019-2021



CDPHE, 2023a

Figure 24. Concerns Regarding Substance Use



2023 SJBPH Survey

SJBPH survey respondents in Archuleta County considered adult alcohol use and adult drug use (drugs other than marijuana or prescriptions) to be the top two issues chosen as either a major or moderate concern at 69% and 61% respectively. Youth marijuana use, youth tobacco

use, youth alcohol use, youth drug use, adult prescription drug use and adult tobacco use were all over 50%. In La Plata County, respondents considered adult alcohol use to be a moderate or major concern at 76%, and adult drug use (drugs other than marijuana or prescriptions) at 71%. The only issue not over 50% was adult marijuana use. In both counties people chose no opinion/don't know at higher percentages in the youth categories, highlighting an opportunity for education.

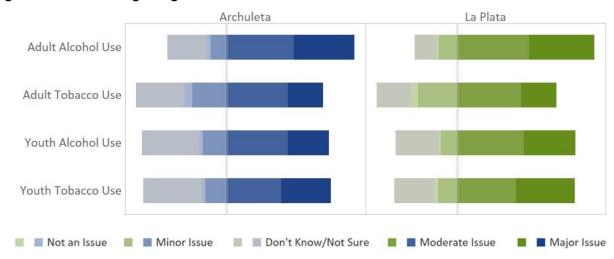


Figure 25. Concerns Regarding Alcohol and Tobacco Use

2023 SJBPH Survey

Based on the qualitative data from focus groups and KIIs, community stakeholders within both counties discussed substance use.



Some individuals who participated in the focus groups and the KIIs discussed that substance use is one of the most mentioned risk behaviors. Multiple people from La Plata County and Archuleta County mentioned how easy it is for younger students to get drugs and who are now accessing harder narcotics. As one La Plata County focus group participant highlighted,

"I spoke to the school admin assistant and the school nurse and substance abuse came up from both of them, because they're dealing with kids' families and see through kids what it's doing to them, and the schools believe that substance abuse is rising."

In response to the question, "What negative health behaviors do you see?" a stakeholder from an Archuleta County KII stated,

"Drug issues amongst our youth."

Per the qualitative survey data, concerns regarding smoking were related to the use of electronic cigarette devices, vapes, and the use of recreational marijuana. A survey respondent of La Plata County expressed,

"Too many residents seem to be consuming marijuana because it is now legal, without the education about how it negatively impacts health; heart disease, hyperemesis, etc."

An Archuleta County survey respondent remarked,

"I see a lot of people still smoking and vaping."

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The discourse around smoking seemed to be very closely linked to alcohol and drug consumption as well. Furthermore, many residents highlighted that, despite high physical activity (a health-promoting behavior), there remains high usage of substances. A La Plata County stakeholder pointed to this idea:

"Our community also possesses a party culture that highly encourages drinking alcohol and smoking weed, even when doing healthy activities like hiking, biking, and skiing."

Many survey respondents in Archuleta and La Plata counties further described the support of public health services for substance use as well as alcoholism within their county.

"What I see daily is an active community with a shortage of certain services, such as for mental health and alcohol use disorder,"

a La Plata County stakeholder claimed. Another La Plata County stakeholder remarked,

"There seems to be no real place for treatment. I am not at all happy with the choice of medical practices, feeling that they are inferior."

Community stakeholders also maintained that poverty and low income have a strong association with these particular risk behaviors. Many argued that these issues are of particular concern within the unhoused populations and individuals with lower incomes. However, it is important to note that many of the community stakeholders that mentioned these links highlight the "exploitation of the poor," recognizing that structural issues influence behaviors such as substance use and abuse.

Substance use and abuse are associated with a wide range of health outcomes, many of which are particular to the type of substance. Generally, people who have SUD, have a higher chance of having chronic health issues such as lung or heart disease, cancer, strokes, mental-health related conditions, and motor vehicle related injuries. Some substances put people at higher risk for HIV, hepatitis C, and other communicable diseases (NIDA, 2022).

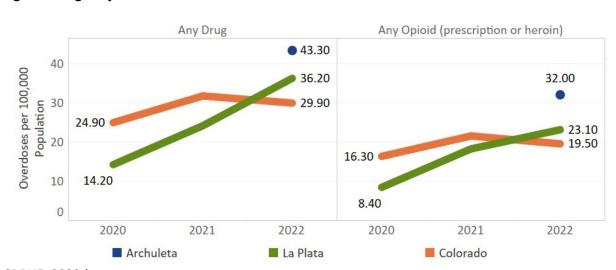


Figure 26. Age-adjusted overdose death rates

CDPHE, 2023d

La Plata County has seen an increase in drug overdose deaths in the last few years, increasing from 14.2 to 36.2 per hundred thousand for any type of drug. Both counties' rates are higher than the state as a whole for any type of drug use in 2022, but Archuleta County data is suppressed for 2020 and 2021. For opioids alone, (whether prescription or heroin), Archuleta County and La Plata County's age-adjusted death rate in 2022 is higher than the state as a whole at 19.5 per 100,000 where Archuleta County is 32 and La Plata County is 23.3 per 100,000 (CDPHE, 2023d). La Plata County's age-adjusted rate per 100,000 has been increasing since 2020. Men tend to have higher rates of overdose deaths, while women tend to have higher rates of Emergency Department visits for overdoses as well as hospital admissions.

There are three main categories for substance use work in the public health system: upstream prevention, harm reduction, and substance use disorder (SUD) treatment.

Environmental Health

Environmental Issues and Concerns

According to the 2023 SJBPH Survey, in Archuleta County, access to water was a major or moderate concern for 50% of respondents. 39% also rated drinking water quality as a major or moderate concern.

Climate change and solid/hazardous waste were major concerns for 42%, and 40% of Archuleta County respondents, respectively.

According to the 2023 SJBPH survey, in La Plata County, access to water was a major or moderate concern for 66% of respondents. A majority considered surface water pollution to be a concern, and 46% also rated drinking water quality as a major or moderate concern.

59% considered climate change a major concern, while concern over solid/hazardous waste varied.

Archuleta La Plata Climate Change Environmental Quality (air, water, climate change, food safety) Solid/Hazardous Waste (landfills, illegal dumping, recycling) **Drinking Water Quality** Water Quantity (access to/amount of water) Surface Water Pollution (rivers, lakes) Not an Issue Minor Issue ■ Don't Know/Not Sure ■ Moderate Issue Major Issue

Figure 27. Environmental Issues and Concerns

2023 SJBPH Survey

Water Quality and Quantity

Colorado Enviroscreen is a tool developed by CDPHE and Colorado State University for environmental health screening. This tool identifies areas with disproportionate environmental health risks. According to this tool, Archuleta County has a higher score than 19% of all counties in Colorado and La Plata has a higher score than 66% of all counties in Colorado for drinking water providers who violated certain health-based standards between 2010 and 2020 (CDPHE, 2022f).

Respondents of the SJBPH survey included answers regarding concerns about water quality in both counties. "Water quality" as a large health issue was a popular answer from both counties; however, few responses provided specifics of what aspects of quality were most concerning. Another major health issue brought up by stakeholders in both Archuleta County and La Plata County in focus groups and key informant interviews was poor perception of environmental health linked to the counties' mining histories. Stakeholders felt that the air, water, and soil in their counties were still heavily polluted from mining and identified lack of access to clean water as a major health issue that they faced. The primary water source for many more rural residents from both counties is well water and they fear that the polluted water may be negatively affecting their health:

I think it just depends on specific areas in La Plata County. Especially since we were such a background of the mining town, there are so many minerals and substances still in our water, our soil, our air. –Stakeholder from a La Plata County Focus Group

Air Quality

Air quality in both counties, excepting wildfires, typically reflects good to moderate conditions according to more than 1,900 Air Quality Index (AQI) measurements in each county over the last five years (see Figure 28 below for details).

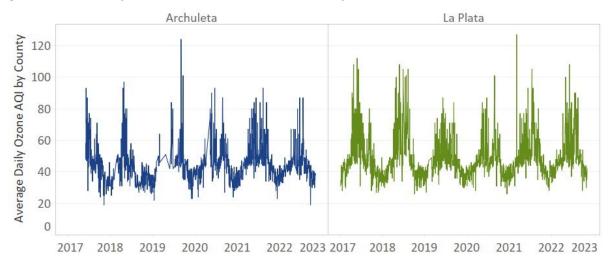


Figure 28. Air Quality Over 7-Years (EPA Ozone Air Quality Index 2017-2023)

Good (≤50 AQI), Moderate (51-100 AQI), Unhealthy for Sensitive Groups (101-150 AQI), Unhealthy (151-200 AQI), Very Unhealthy (201-300 AQI), Hazardous (≥301 AQI) U.S. EPA, 2023

In the 2023 SJBPH survey, 70% of Archuleta County respondents and 55% of La Plata County respondents rated outdoor air pollution as a minor or not an issue. Some respondents did mention air quality as a health concern, specifically from wildfire smoke and motor emissions. In general, "air quality" was used as the only phrasing for this concern.

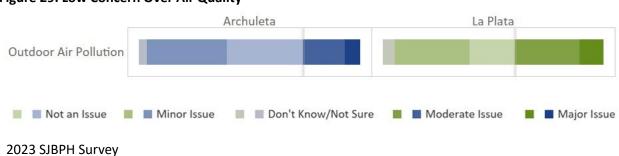


Figure 29. Low Concern Over Air Quality

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Climate and Health

According to the Colorado Health Institute's Colorado Health and Climate Index, Archuleta and La Plata counties are at the highest level of risk of climate change exposures. Exposure is measured as a combination of the number of extreme heat days (above 90 degrees Fahrenheit); percent of land rated moderate to highest risk for fire; possible harm from a wildfire; percent of weeks that any percent of the counties' populations are in severe, extreme, or exceptional drought; percent of the population that lives in a wildland-urban interface, and community flooding risk.

Archuleta County

- Number of extreme heat days: 10 (PRISM, 2021)
- Percentage of land with moderate to highest wildfire risk: 63% (CSFS, 2017)
- Percentage of weeks that any percentage of the population is in severe, extreme, or exceptional drought: 100% (US Drought Monitor, 2023b)
- 4. Percentage of the population who live in a wildland urban interface: 99% (CSFS, 2017)
- 5. Community flooding: Moderate risk (CHI, 2022)

La Plata County

- 1. Number of extreme heat days: 10 (PRISM, 2021)
- 2. Percentage of land with moderate to highest wildfire risk: 66% (CSFS, 2017)
- 3. Percentage of weeks that any percentage of the population is in severe, extreme, or exceptional drought: 100% (US Drought Monitor, 2023a)
- 4. Percentage of the population who live in a wildland-urban interface: 97% (CSFS, 2017)
- 5. Community flooding: Major (CHI, 2022)

Under continued climate change, projected increases in hot days and extreme heat events in the Southwest will increase the risk of heat-associated deaths (NCA4, 2018a). Older adults and children have a higher risk of dying or becoming ill due to extreme heat. People working outdoors, the socially isolated and economically disadvantaged, those with chronic illnesses, as well as some communities of color, are also especially vulnerable to death or illness (USGCRP, 2016).

Other environmental conditions of greatest concern for human health are ground-level ozone air pollution, dust storms, particulate air pollution (such as from wildfires and dust storms), and aeroallergens (airborne proteins that trigger allergic reactions). The risk of onset or exacerbation of respiratory and cardiovascular disease is associated with a single or a combined exposure to ground-level ozone pollution, particulate air pollution, and respiratory allergens. These conditions may also lead to new cases or exacerbation of allergy and asthma (NCA4, 2018a).

Climate change will make it harder for any given regulatory approach to reduce ground-level ozone pollution in the future as meteorological conditions become increasingly conducive to forming ozone over most of the United States. Unless offset by additional emissions reductions, these climate-driven increases in ozone will cause premature deaths, hospital visits, lost school days, and acute respiratory symptoms (USGCRP, 2016).

Water-related illnesses caused by pathogens such as bacteria, viruses, protozoa, and toxins—produced by algae and cyanobacteria (i.e., blue-green algae) and chemicals introduced into the environment—have increased as a result of changing weather patterns. Exposure can adversely affect human health through ingestion, inhalation, or direct contact with contaminated drinking or recreational water and through consumption of infected fish and shellfish. Health symptoms from water-related illnesses may include but are not limited to gastrointestinal illness (e.g., gastroenteritis, diarrhea, and vomiting), neurological disorders, respiratory distress (e.g., mild to severe influenza-like illness), meningitis, organ failure, and dermal infections (ASPR, 2022).

Climate change, including rising temperatures and changes in weather extremes, is expected to increase the exposure of food to certain pathogens and toxins. This will increase the risk of negative health impacts, but actual incidence of foodborne illness will depend on the efficacy of practices that safeguard food in the United States (GC 2016).

Climate change has drastically increased the need for general population shelters for people displaced by wildfires, floods, landslides, and other disasters. Implementing infection control and other safety measures within shelters is critical. Plan for shelters that will be open for months or longer; apply these considerations to similar public spaces needed as a result of climate change (e.g., cooling/warming centers). Regular communication with local organizations will ensure patients and community members are aware of such resources (ASPR, 2022).

Many types of extreme events related to climate change cause disruption of infrastructure, including power, water, transportation, and communication systems, that are essential to maintaining access to health care and emergency response services and safeguarding human health (USGCRP, 2016).

Increases in some extreme weather events and storm surges will increase the risk that infrastructure for drinking water, wastewater, and stormwater will fail due to either damage or exceedance of system capacity, especially in areas with aging infrastructure [High Confidence]. (USGCRP, 2016)

Heat extremes, warming, changes in precipitation, and potentially an intensified El Niño-Southern Oscillation may influence the distribution and occurrence of vector-borne diseases like West Nile virus and may lead to the emergence of new disease (NCA4, 2018a).

The impacts to human disease, however, will be limited by the adaptive capacity of human populations, such as vector control practices or personal protective measures. (USGCRP, 2016).

Ticks capable of carrying the bacteria that cause Lyme disease and other pathogens will show earlier seasonal activity and a generally northward expansion in response to increasing temperatures associated with climate change. Longer seasonal activity and expanding geographic range of these ticks will increase the risk of human exposure to ticks (USGCRP, 2016).

Food production in the Southwest is vulnerable to water shortages. Increased drought, heat waves, and reduction of winter chill hours can harm crops and livestock; exacerbate competition for water among agriculture, energy generation, and municipal uses; and increase future food insecurity (NCA4, 2018b).

The nutritional value of agriculturally important food crops, such as wheat and rice, will decrease as rising levels of atmospheric carbon dioxide continue to reduce the concentrations of protein and essential minerals in most plant species (GC 2016).

One impact of rising temperatures, especially in combination with environmental and socioeconomic stresses, is violence towards others and towards self. Slow-moving disasters, such as drought, may affect mental health over many years. Communities that rely especially on well-functioning natural and agricultural systems in specific locations may be especially vulnerable to mental health effects when those systems fail (NCA4, 2018a).

Prolonged exposure to high temperatures is associated with increased hospital admissions for cardiovascular, kidney, and respiratory disorders (USGCRP, 2016). Hotter nights erode sleep quality, which impacts all aspects of our biology and health. A recent study estimated that humans are already losing an average of 44 hours of sleep each year because of a warming world. Reduced sleep is replete with negative health consequences, including weakening the immune system and cardiovascular system, and increasing our susceptibility to inflammation and chronic illnesses. Multiple nights of elevated heat and humidity also elevate the risk for heatstroke because it does not give our bodies the time to recover. Another study found that nighttime heat is also especially dangerous, and hot nights may increase the risk of mortality by 50 percent.

People with mental illness are at higher risk for poor physical and mental health due to extreme heat. Increases in extreme heat will increase the risk of disease and death for people with mental illness, including elderly populations and those taking prescription medications that impair the body's ability to regulate temperature (GC 2016).

In 2022 CDPHE conducted state-wide listening sessions and developed the Colorado Community Perspectives on Climate Change 2022, with a working plan to come sometime in 2023. SJBPH's service area community members participated in this process, listed under "The Durango Area" in the report. There are limitations to this report, including that the demographics of participants are not listed so it is not known if all groups were represented. Opportunities related to climate change are expected to become available from state sources. Aligning with the Colorado Climate Change priorities will likely be tied to more resources, as well as honoring the process community members participated in. Durango area residents were reported as being most interested in financial incentives for farmers to adopt better climate practices and more systematic conservation-focused water use planning. Community members were also supportive of policy solutions to support environmentally conscious construction and transportation infrastructure (CDPHE, 2022g).

These priorities identified by the Durango area residents align with the Colorado Health Institute's 2023 Colorado Health and Climate Policy Agenda (CHI, 2023). The agenda was

developed by an interdisciplinary team of Colorado leaders to assess the 2022 <u>Colorado Counties Health and Climate Index</u> (CHI, 2022). The Climate Policy Agenda identified five key strategy categories along with smaller goals and action strategies for each goal. While the agenda is largely state-focused, there are several strategies and funding sources for counties and municipalities -- several of which align with the priorities identified by Durango area residents in the CDPHE climate assessment (such as funding to expand electric vehicle infrastructure).

Additionally, in recognizing that the effects of climate change do and will continue to disproportionately impact already marginalized communities, any climate solution strategies should prioritize community engagement, a climate equity framework, and involve partnership with the indigenous communities in the region (CDPHE, 2023e)

Communicable Disease

Communicable diseases are caused by bacteria, viruses, and parasites. Some communicable diseases can be spread from one person to another such as influenza, COVID-19 or measles. Other communicable diseases can be spread from contaminated food or water such as salmonella or giardia. Lastly, animals and insects can spread diseases to humans such as West Nile Virus or Plague.

Per Colorado regulation 6 CCR 1009-1, certain diseases and conditions are reportable to public health for surveillance and investigation purposes and to implement disease control measures (State of Colorado, 2014).

According to CDPHE's Colorado Electronic Disease Reporting System (CEDRS), COVID-19 was the most reported condition with 3,488 cases reported 2020- 2022 in Archuleta County. After COVID-19, the top five reported conditions in Archuleta County for 2018-2022 were:

- 1. Animal bites (132)
- 2. Chronic hepatitis C (59)
- 3. Salmonella (26)
- 4. Influenza-associated hospitalizations (24)
- 5. Campylobacteriosis (15) (CEDRS, 2023).

Year Reported 2018 Animal Bites 2019 2020 2021 2022 Hepatitis C, Chronic Influenza - Hospitalized Campylobacteriosi Number of Reported Cases

Figure 30. Reportable Conditions Archuleta County

*Sexually Transmitted Diseases and COVID-19 are not included in this graphic CEDRS, 2023

For La Plata County, COVID-19 was the most reported condition with 15,616 cases reported 2020-2022. After COVID-19, the top five reported conditions in La Plata County for 2018-2022 were:

- 1. Chronic hepatitis C (184)
- 2. Animal bites (99)
- 3. Influenza associated hospitalizations (78)
- 4. Salmonellosis (37)
- 5. Carbapenem-Resistant Pseudomonas Aeruginosa (37) (CEDRS, 2023)

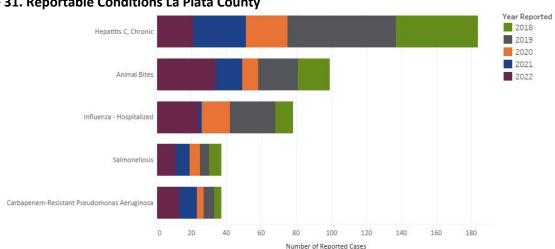


Figure 31. Reportable Conditions La Plata County

^{*}Sexually Transmitted Diseases and COVID-19 are not included in this graphic CEDRS, 2023

Animal bites are not a communicable disease; however, this condition can put residents at risk for developing a disease such as rabies. The most common animal bite reported for Archuleta and La Plata counties were from a dog or cat. Not all reports of animal bites are at risk for rabies, but public health performs a risk assessment to see if rabies post exposure prophylaxis is needed.

Hepatitis C is a liver infection caused by the hepatitis C virus and is spread through contact with blood from someone who is infected. Most people get infected with hepatitis C virus by sharing needles or other equipment for drug use (CDC, 2023b).

Of the top reported six reportable conditions, the only two vaccine preventable diseases are influenza-associated hospitalizations and COVID-19. Both illnesses are respiratory viruses that spread from person to person via respiratory droplets.

Salmonella and Campylobacteriosis are communicable diseases caused by bacteria. Both cause diarrhea, fever and stomach cramps. Most people get infected with salmonella and campylobacteriosis by eating contaminated food or drinking contaminated water. Salmonella is also spread by touching infected animals, their feces or their environment (CDC, 2023c; CDC 2023d).

Lastly, Carbapenem-Resistant Pseudomonas Aeruginosa (CRPA) are infections that are antibiotic resistant. Carbapenems are often used as last-line antibiotics used to treat multidrug-resistant infections. CRPA can cause pneumonia, bloodstream infections, urinary tract infections and surgical site infections (CDC, n.d.). For more information about communicable diseases in Colorado, please visit the CDPHE Communicable Diseases homepage (https://cdphe.colorado.gov/health/communicable-diseases).

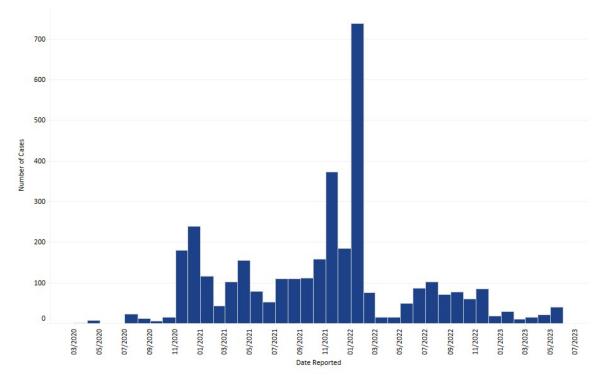
Respiratory Diseases

COVID-19

SARS-CoV-2 is the virus that causes COVID-19 (coronavirus disease 2019) and the COVID-19 pandemic. It is a very contagious illness that spreads from person to person and is responsible for over one million deaths in the United States. (CDC, 2022a). Severity of disease depends on several different factors, however those who are immunocompromised, have certain disabilities or underlying health conditions are at highest risk of getting very sick.

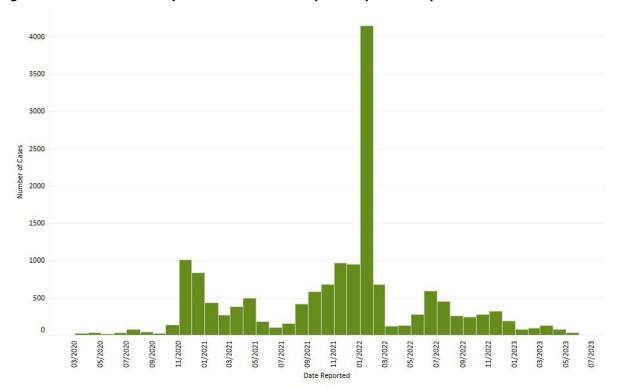
The first COVID-19 case was identified in La Plata County on 3/23/20 and the first death among cases was on 5/9/2020. The first COVID-19 case was identified in Archuleta County on 4/5/2020 and the first death among cases was on 1/17/2021. The federal emergency for COVID-19 was declared on March 13, 2020, and ended on May 11, 2023. During this time frame, 16,015 cases were reported in La Plata County and 3,597 cases were reported in Archuleta County (CEDRS, 2023). The highest number of cases were reported during January 2022, which was when the Omicron variant emerged.

Figure 32. COVID-19 Cases by Month Archuleta County January 2020-May 2023



CEDRS, 2023

Figure 33. COVID-19 Cases by Month La Plata County January 2020-May 2023



CEDRS, 2023

According to the CDPHE COVID-19 vaccine data dashboard, La Plata County had one of the highest vaccine rates in the state of Colorado with 81% of the county's population immunized with one or more doses of COVID-19 vaccine. Archuleta County has a moderate vaccination rate with 69.4% of the population immunized with one or more doses of any COVID-19 vaccine.

In the SJBPH survey, one respondent from Archuleta County responded to the question "what is the most important health issue facing the residents of your county?" with, "The lack of education related to vaccines & communicable diseases." Several La Plata County residents responded to the same question with "COVID-19, RSV and the Flu."

Influenza

To supplement the data collected from the reportable conditions, SJBPH conducts additional influenza positivity surveillance. Data is voluntarily collected from 7-12 medical facilities across Archuleta and La Plata counties. This includes all patients, including those who do not reside in the jurisdiction. Figure 34 below represents a trend of influenza positivity for the 2018-19 influenza season through the 2022-23 season. All five seasons peaked between November and April. The 2020- 21 influenza reported very letter flu activity because COVID-19 was the primary circulating virus during that time.

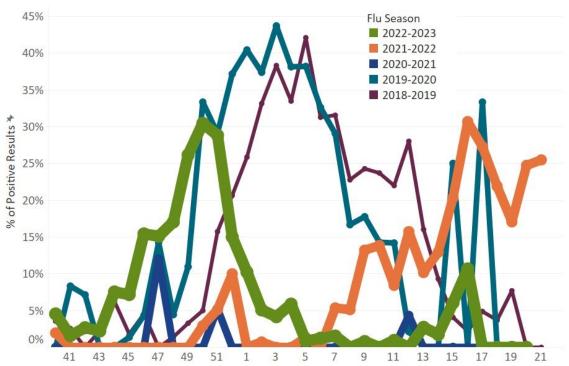


Figure 34. Flu Positivity by Week La Plata and Archuleta Counties 2018-2023

San Juan Basin Public Health Flu Surveillance Program

Vaccine preventable diseases

Pertussis and varicella are both vaccine preventable diseases. In 2020, there were zero pertussis and varicella cases reported in Archuleta and La Plata counties. This could be due to the mitigation strategies during the height of the COVID-19 pandemic such as social distancing and masking. Since 2020, La Plata has seen an increase of cases reported with nine varicella cases and five pertussis reported in 2022. Archuleta saw a slight increase after 2020, however cases remain low with only one varicella and one pertussis case reported in 2022.

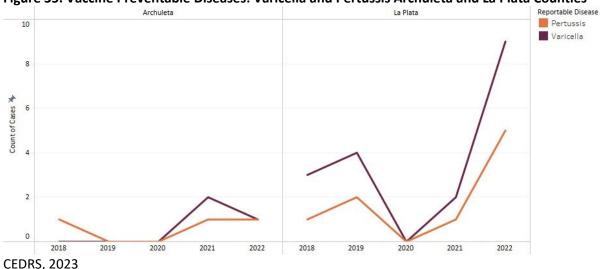


Figure 35. Vaccine Preventable Diseases: Varicella and Pertussis Archuleta and La Plata Counties

Sexually Transmitted Diseases

Sexually transmitted diseases (STD) are communicable diseases that spread from person to person during sex. Some STDs such as gonorrhea and chlamydia are transmitted by bodily fluids. Other STDs such as syphilis are transmitted by skin-to-skin contact (CDPHE, 2023f).

Chlamydia

According to CDPHE, from 2018-2022 Archuleta had 124 chlamydia cases reported. Cases decreased from 41 cases 2019 to 10 cases in 2021. Then there was an increase from 2021 to 2022. In La Plata County, from 2018-2022, there were 978 chlamydia cases reported. Chlamydia cases are elevated, however appear to be decreasing from 2018 with 227 cases to 167 cases in 2021. There was a slight increase in cases from 2021 to 2022. The changes in trends could be due to changes in health seeking

behavior during the COVID-19 pandemic. (CDPHE, 2023g)

Gonorrhea

In Archuleta County, from 2018-2022 there were 19 cases of gonorrhea reported. Cases decreased from 2020 with eight cases to two cases in 2022. La Plata County saw 255 cases reported from 2018-2022. Case counts decreased from 57 cases reported in 2020 to 47 cases reported in 2022 (CDPHE, 2023g)

Syphilis

Syphilis cases in Archuleta County remained low from 2018-2022 with only two cases reported. La Plata County saw a much different trend with 64 cases reported from 2018-2022. There were 4 cases reported in 2018 and 27 cases reported in 2022. Cases of syphilis have also been increasing statewide during this time period (CDPHE, 2023g).

Archuleta La Plata Disease Chlamydia ■ Gonorrhea 200 Syphilis Number of Cases 150 100 50 0 2018 2019 2020 2019 2020 2022 2022 2017 2017 Year Year

Figure 36. Sexually Transmitted Disease Trends: Chlamydia, Gonorrhea, Syphilis; Archuleta and La Plata Counties 2018-2023

CDPHE, 2023g

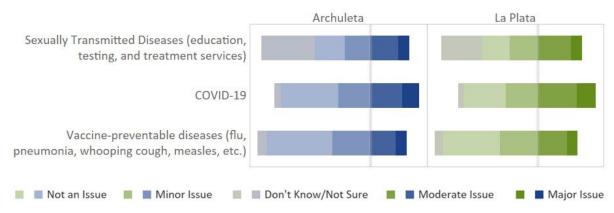
Results from the SJBPH survey suggest that the majority of respondents do not consider vaccine-preventable diseases, COVID-19 or STD as a significant issue. Roughly 94 (24.29%) saw vaccine preventable diseases as a major or moderate issue in Archuleta County and 288 (27.93%) in La Plata County.

In Archuleta County, 126 (33.6%) respondents saw COVID-19 as a major or moderate issue, while 420 (42.21%) La Plata County respondents saw it as a major or moderate issue. It is important to note that this survey was distributed in the final months of the federal emergency for COVID-19.

For STD, 321 (31.47%) La Plata residents saw it as a major or moderate issue, while 102 (26.49%) Archuleta County respondents saw it as a major or moderate issue.

In the open-ended survey responses, COVID-19 was the most common answer for communicable disease concerns, followed by the flu and RSV, in terms of the threat of infectiousness. These responses were brief and offered little additional information or context.

Figure 37. Communicable Disease



2023 SJBPH Survey

Emergency Preparedness

All local public health agencies are required to prepare and respond to emergencies with public health or environmental health implications in coordination with local, state, and federal agencies, and public and private sector partners. The local public health agency can serve as, or support, the Emergency Support Function 8 (Public Health and Medical Services) lead for the county, region, or jurisdiction.

Public health prepares to respond to emergencies related to environmental and human health. This can be communicable disease related such as an infectious disease pandemic or an event such a fire that impacts air quality. Since 2018, the SJBPH emergency response team responded to five fires and five communicable disease incidents. During this time frame, the largest emergency responses for SJBPH were the 416 Fire, COVID-19 Pandemic, and Mpox (formerly known as monkeypox).

416 Fire

The 416 Fire started on June 1, 2018, in La Plata County, approximately 10 miles north of Durango. It burned more than 54,000 acres and by the time it was contained, it was the sixth largest wildfire in Colorado history (Encyclopedia Staff, 2021). SJBPH's emergency response focused on evacuation and re-entry messages for evacuees, air quality advisories, identifying public water systems, retail food safety concerns, and identifying clients in the evacuation and pre-evacuation areas, and assisting persons with complex medical needs.

COVID-19 Pandemic Emergency Response

SJBPH was the leading agency in the COVID-19 pandemic for Archuleta and La Plata counites. The federal emergency for COVID-19 was declared on March 13, 2020, and ended on May 11, 2023.

Throughout the SJBPH COVID-19 response, objectives pivoted as new information and resources became available regarding this novel virus. The organization created many objectives that were broad in nature to capture the core of our response. These included:

- Develop and implement strategies to slow disease spread and increase vaccine availability in settings and communities that are disproportionately impacted (people who are houseless, communities of color, people with limited English proficiency, older adults, people in congregate settings, and people with pre-existing health conditions).
- Implement COVID-19 vaccination points of distribution (PODs) across both counties, coordinate the logistical vaccine distribution across our region and provide the resources necessary for our community to succeed at vaccine administration.
- Create, maintain, support, and strengthen routine surveillance and detection systems and epidemiological investigation processes, including the ability to expand these systems and processes.
- Manage the expanded public health workforce responsible for case investigation, contact tracing, active monitoring, and outbreaks; and fill basic needs for people who require assistance while isolated or quarantined.
- Recommend and implement mitigation strategies to businesses, community partners, and stakeholders to address gaps in compliance with public health orders.
- Routinely share information as well as issue public health alerts to all levels of government and the private sector in preparation for and in response to changes in disease transmission in our community.
- Coordinate with ESF 8 partners and stakeholders to define COVID-19 medical surge needs and available health care personnel and resources through the collection and analysis of data.
- Preserve the continuity of essential SJBPH functions and services.
- Plan for stepping down and up public health orders and advisories.
- Begin reconstituting programs and services for full reconstitution of existing programs,

implementation of our new steady state COVID-19 response program, and deactivation of the Incident Command System.

In La Plata County, 538 (56.81%) residents reported using COVID-19 related support which included testing supplies, masks, isolation and quarantine assistance. While in Archuleta County, 177 (53.80%) reported using COVID-19 related support. COVID-19 Immunization clinics were also among the top SJBPH services used in the last five years including 580 (61.25%) La Plata County residents and 167 (50.76%) of Archuleta County residents.

Mpox Response

Mpox, formerly known as monkeypox, is a communicable disease caused by the mpox virus. It is spread from person to person when someone who has mpox has close contact with someone else (CDPHE, 2023h). While mpox is not a new disease, it was circulating in new areas of the world in 2022. The first human case of mpox was identified in 1970 and prior to the 2022 outbreak, cases of mpox occurred in individuals who lived or traveled to central and western African counties. The first case detected in Colorado was in May 2022; and the first case identified in SJBPH's jurisdiction was in a La Plata County resident in August 2022.

SJBPH's emergency response was focused on the following:

- Expanding the medical ecosystem of diagnostic testing and enrolled vaccine providers
- Ensuring equitable access to mpox vaccinations,
- Focusing vaccine and testing outreach to medical providers and those at higher risk of transmission,
- Providing robust communications to community partners, the public, high risk populations and the media.

Morbidity

Chronic Disease

Heart disease is one of the leading causes of death in the United States and can be linked to several health disparities in rural communities. Archuleta and La Plata counties both have higher than average occurrences of coronary heart disease, though La Plata County experiences nearly twice the national prevalence. A few of the leading ways to address and prevent coronary heart disease are diet and exercise. The national objectives to improve health and well-being identified in the Healthy People 2030 program identifies objectives around reducing high blood pressure and cholesterol in adults as a primary concern (Office of Disease Prevention and Health Promotion [ODPHP], n.d.).

Access to healthy and nutritious foods is necessary for the reduction of high blood pressure and cholesterol. High blood pressure has been linked to high sodium intake, eating highly processed foods, and a lack of physical activity (Choi, 2012).

Evidence suggests that one of the most effective ways to prevent coronary heart disease is to increase access to affordable fresh fruits and vegetables. By adjusting nutritional access within the community, health outcomes improve. Healthy, fresh foods being accessible to communities that are already at higher risk such as low-income communities, communities of color, communities where English is not the first language, and communities in rural areas can have massive, positive impacts on health outcomes. In areas that are rural such as Archuleta and La Plata counties, there is an identified increase in cost associated with purchasing healthy food options. Addressing the cost disparities by either increasing access or finding ways to provide locally sustainable options would benefit the community (CDC, 2022b).

In the 2023 survey, SJBPH asked about Chronic Diseases rather than individually as had been done in the past. In Archuleta County, 69% of respondents answered that chronic diseases were a moderate or major issue while 71% of respondents in La Plata County answered the same way. The question included heart disease, cancer, diabetes, and obesity, etc.

Archuleta La Plata Chronic Diseases (heart disease, cancer, diabetes, obesity, etc.) Not an Issue Minor Issue Don't Know/Not Sure Moderate Issue Major Issue

Figure 38. Concerns over Chronic Diseases

2023 SJBPH Survey

Obesity

Rates of overweight adults are similar across Archuleta County, La Plata County, and the state of Colorado, with rates at 38%, 33.7% and 35.5% respectively. With that said, the rates of obesity are lower in Archuleta and La Plata counties than in Colorado as a whole by 13.6% and 5.6% respectively (CDPHE, 2023a) (see Figure 39).



Figure 39. Overweight and Obese Adults (%) BRFSS 2019-2021

CDPHE, 2023a

Heart Disease

The top two leading causes of death in Colorado, Archuleta County, and La Plata County are heart disease and malignant neoplasms (cancer) (CDPHE, 2023i). In Archuleta County, the prevalence of heart disease is 2.8%, which is very similar to the prevalence in Colorado at 2.5%. The prevalence of heart disease is higher in La Plata County at 4.53% (CDPHE, 2023b). Prevalence "refers to the total number of individuals in a population who have a disease or health condition at a specific period of time, usually expressed as a percentage of the population" (Harvard School of Public Health, 2023). As shown in Figure 40, Archuleta County residents have higher rates of high blood pressure and high cholesterol than do La Plata or Colorado residents. This could lead to increasing mortality rates in the future.

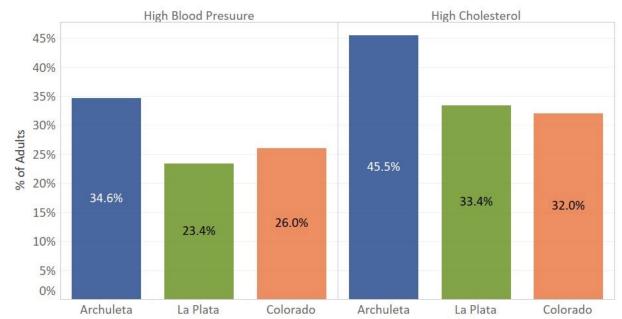


Figure 40. Cardiac Health Indicators High Blood Pressure and High Cholesterol (%) BFRSS 2017-2021

CDPHE, 2023b

It is also important to note that disparities exist in mortality rates for heart disease. Figure 41 illustrates the age-adjusted heart disease mortality rate in the area encompassing the Southern Ute Reservation in La Plata County is 149.7 deaths per 100,000 people, while the state average is 127.1 deaths per 100,000 people (CDPHE, 2019).

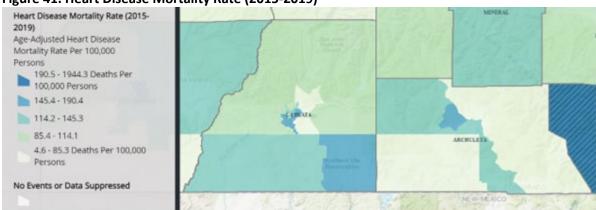


Figure 41. Heart Disease Mortality Rate (2015-2019)

CDPHE, 2019

Cancer (Malignant Neoplasms)

The Colorado Central Cancer Registry is a database that tracks cancer diagnoses statewide. Data is collected from Colorado hospitals, pathology labs, other state cancer registries, death certificates and physicians. According to this source, for all types of cancer, Archuleta County and La Plata County have higher crude rates of cancer incidence than the state from 2000-2020. Archuleta County has a rate of 514.5 per 100,000 and La Plata County has a rate of 429.5 per 100,000, while the state rate is 422.3 per 100,000 (CDPHE, 2023j).

Age

Rates increase as people age, with the highest crude rate in those aged 75-79 with a crude rate of 2,001.7 per 100,000 population in La Plata County; and over the age of 85 with a crude rate of 2,065.8 per 100,000 for those in Archuleta

County. Men and women have similar rates of incidence (CDPHE, 2023j).

Race

When looking at race, in La Plata County, those who are white had the highest rate with 453.4 per 100,000 population; followed by Asian/pacific islander with a rate of 178.8 per 100,000. This was a similar trend in Archuleta County with white having a rate of 528.4 per 100,000 population and Asian/ Pacific Islander having a rate of 204.9 per 100,000 population (CDPHE, 2023j).

Type of Cancer

The top three age-adjusted incidence rates by cancer sites for Colorado 2016-2020 are:

- 1. Breast
- 2. Prostate
- 3. Lung and Bronchus

(National Cancer Institute, 2023)

According to the Colorado Health Information Dataset, age-adjusted rates per 100,000 population for cancer 2016-2020 are the following:

Cancer Site	Archuleta County	La Plata County	Colorado
Breast (Female)	54.47	68.3	67.2
Prostate (Male)	29.58	52.21	46.3
Lung and Bronchus	23.96	26.51	38.2

CDPHE, 2023j

Physical Activity

According to the qualitative survey data, many of the community members emphasized that their community seems to be very active and enjoy outdoor activities including hiking, snowboarding, and other forms of exercise:

"Durango has a lot of athletes and people who are interested in outdoor recreational activities."

However, despite the very active culture of both Archuleta County and La Plata County, qualitative survey data also indicated that access to indoor recreation is an issue amongst members of the community with lower socioeconomic status. Financial barriers also

prevent individuals from accessing certain facilities. Yet, a communitywide culture of outdoor recreation regardless of age exists. As a La Plata County resident stated,

"Friends in Durango are very active into their 80's and even 90's. Hiking, snowshoeing, etc."

Archuleta County residents shared the same perception of their community:

"Many people are engaged in outdoor activities and most residents appear to be healthy and fit."

Many community members identified a lack of indoor options during the winter as a barrier to exercise.

Mortality

Mortality includes factors like life expectancy and infant mortality and is the farthest downstream domain within the BARHII Framework. Upstream institutional and social inequalities affect health behaviors and disease and injury status. These, in turn, lead to differences in mortality amongst the community's population.

Leading Cause of Death

Vital statistics for Colorado are derived from the official records of vital events (live births, deaths, fetal deaths, induced terminations of pregnancy/abortions, marriages and divorces). These records are collected through the Office of the State Registrar of Vital Records. Colorado's vital statistics include data for all vital events that occur in Colorado, as well as those occurring in other states among Colorado residents (CDPHE, 2023k).

When looking at the top 10 leading causes of death in 2022, heart disease and malignant neoplasms were the top two causes for Archuleta County, La Plata County, and Colorado. The top causes of death are similar between Archuleta County, La Plata County, and the state of Colorado but there were a few differences. Parkinson's disease and "pneumonitis due to solids and liquids" were in Archuleta County's top 10 leading causes of death but not in the top 10 leading causes for La Plata County or the state of Colorado. La Plata County had "other diseases of respiratory system" in the top 10 leading causes of death but was not present in Archuleta County or the top 10 causes for the state of Colorado as a whole.

Age-Adjusted Rate for Leading cause of Death by County 2022* (per 100,000 population)

Rank	Archuleta County	La Plata County	Colorado
1	Heart disease (165.32)	Heart disease (142.86)	Heart disease (125.92)
2	Malignant neoplasms (114.52)	Malignant neoplasms (107)	Malignant neoplasms (120.51)
3	COVID-19 (36.78)	Unintentional injuries (73.21)	Unintentional injuries (68.69)
4	Unintentional injuries (61.36)	Cerebrovascular diseases (31.39)	Chronic lower respiratory
			diseases (36.42)
5	Cerebrovascular diseases (21.54)	Chronic lower respiratory	COVID-19 (33.67)
		diseases (28.45)	
6	Chronic lower respiratory	COVID-19 (22.65)	Cerebrovascular diseases (32.2)
	diseases (19.14)		
7	Suicide (43.12)	Suicide (27.65)	Alzheimer's disease (29.66)
8	Parkinsons disease (12.56)	Chronic liver disease and	Suicide (21.07)
		cirrhosis (26.45)	
9	Pneumonitis due to solids and	Alzheimer's disease (12.57)	Diabetes mellitus (17.82)
	liquids (11.62)		
10	**	Other diseases of respiratory	Chronic liver disease and
		system (11.33)	cirrhosis (18.38)

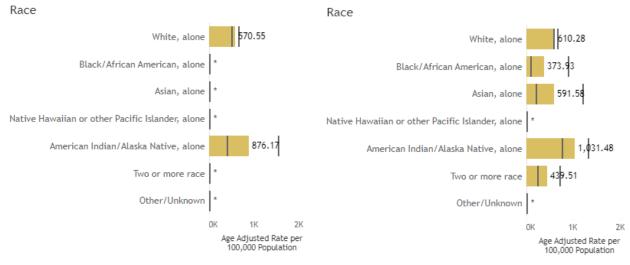
^{*}COVID-19 pandemic may have impacted these rates

Age-Adjusted Death Rates

In Archuleta and La Plata counties, the SAT identified disparities in death rates across racial groups. The SAT also identified disproportionate rates of death among American Indian and Alaska Native populations (AI/AN) in Archuleta County and disproportionately high rates of death among AI/AN population in La Plata County (CDPHE, 2023I) (see Figure 42).

^{**} Data is unavailable due to suppression CDPHE, 2023i

Figure 42. Colorado Age-Adjusted Death Rates (2020-2022)



Archuleta County

La Plata County

CDPHE, 2023I

According to the BARHII report, "life expectancy... conforms to a pattern called the 'social gradient,' in which the more income and wealth people have, the more likely they are to live longer, while people with less income and wealth can expect to live comparatively shorter lives." (Public Health Institute, 2023). Based on this knowledge, the best practices for public health to address mortality are to first address the social inequities, institutional inequities, and living conditions identified that affect risk behaviors and access to care as these upstream topics affect both physical and mental health (Robeznieks, 2021). Thus, a collaborative, cross-sector strategy can work to decrease the health disparities that lead to differences in life expectancy, with a particular focus on the population within the reservation that has the lowest life expectancy.

Conclusion

The SJBPH Community Health Assessment survey responses demonstrate that community members look beyond traditional public health domains when they consider what makes them healthy. The top three issues selected by respondents in each county is as follows:

Archuleta County

- Affordable Housing
- Substance Use
- Poverty

La Plata County

- Affordable Housing
- Substance Use
- Access to Mental Health Services

This demonstrates that the living conditions in our community that impact health are much more than simply access to healthcare, exercise opportunities, or nutritious foods. These are complex topics that will require cross-sector collaboration, programmatic innovations, and multi-level interventions before the communities served by SJBPH see

an improvement in outcomes. It is also important to remember that survey results offer a snapshot of local concerns during a specific time frame but do not exhaustively list every issue that people consider when they think about their health.

Additionally, there are many other factors that contribute to the health of communities that were not listed by survey respondents. The public health system has made tremendous strides in the last hundred years on issues that are simply now part of the fabric of American life and may not be perceived as ongoing public health interventions, like clean water, clean air, a safe food supply, tobacco cessation, automobile safety, oral health, maternal and child health, and immunization. It is understandable that these issues disappear from survey results as they become basic parts of life, but it is impossible for people and communities to be healthy without them. Public health concepts, such as getting immunized to prevent disease, wearing a seatbelt while in the car, and choosing not to use tobacco products are simple actions that improve health for the vast majority of people. While suicide is a very visible and emotionally difficult cause of death in our region, chronic diseases (such as cardiovascular disease or cancer) continue to cause more deaths or years of life lost than suicide. That does not mean that future programming should ignore either suicide or chronic disease - it means that SJBPH cannot rely on a survey alone to help determine future activities of the agency.

Therefore, to create an effective Public Health Improvement Plan (PHIP), SJBPH considers:

- The Public Health Act of 2008 the legal obligations of local public health agencies.
- Revised Foundational Public Health Services Framework which includes capabilities and services
- Community Health Assessment survey results what Archuleta and La Plata County residents selected as their top health concerns.
- Data the numbers that tell SJBPH what issues have the greatest impact on health in the region.
- Expert knowledge what SJBPH staff leadership, and partners know about the public health system, emerging trends, threats, and opportunities.

By creating a PHIP framework that allows public health agencies to address pressing health needs while planning for future trends, the agency can be responsive and flexible. Staff can seek health data that is not available from other sources, because they know what information is needed to design better programs or to support partners who are designing interventions. SJBPH recommends that the programs that the Archuleta County Public Health Department and the La Plata County Public Health Department bring to the region should be tailored to the needs of their residents.

References

Allbee, A. Johnson, R. & Lubell, J. (2015). *Preserving, Protecting, and Expanding Affordable Housing*. ChangeLab Solutions.

http://www.changelabsolutions.org/publications/affordable housing toolkit.

AMA. (2022). American Medical Association. *What is behavioral health?* Retrieved on September 24, 2023 from https://www.ama-assn.org/delivering-care/public-health/what-behavioral-health.

Anderson, D. K., & Saunders, D. G. (2003). Leaving an abusive partner. *Trauma, Violence, & Abuse, 4*(2), 163–191. https://doi.org/10.1177/1524838002250769.

ASPR. (2022). Assistant Secretary for Preparedness and Response. *Climate Change Resilience and Healthcare System Considerations*. Retrieved from

https://files.asprtracie.hhs.gov/documents/aspr-tracie-climate-change-resilience-and-healthcare-system-considerations-508.pdf.

Bay Area Regional Health Inequities Initiative. (2015). Applying Social Determinants of Health Indicators to Advance Health Equity: A Guide for Local Health Department Epidemiologists and Public Health Professionals. Oakland, CA.

Bay Area Regional Health Inequities Initiative. (2023). *BARHII Framework*. Retrieved September 24, 2023 from https://barhii.org/framework/.

Braveman P. (2014). What are health disparities and health equity? We need to be clear. *Public health reports (Washington, D.C. : 1974), 129 Suppl 2*(Suppl 2), 5–8.

https://doi.org/10.1177/00333549141291S203

Centers for Disease Control and Prevention (CDC). (n.d.) CRPA: Carbapenem-resistant Pseudomonas aeruginosa. Retrieved from https://www.cdc.gov/hai/pdfs/cre/crpa-handout-v7-508.pdf.

Centers for Disease Control and Prevention (CDC). (2018). Health Insurance and Access to Care. *NCHS Fact Sheet*.

https://www.cdc.gov/nchs/data/factsheets/factsheet health insurance and access to care.p df

Centers for Disease Control and Prevention (CDC). (2022a). COVID-19: How COVID-19 Spreads. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html.

Centers for Disease Control and Prevention (CDC). (2022b). *Best Practices for Heart Disease and Stroke: A Guide to Effective Approaches and Strategies*. Centers for Disease Control and Prevention; 2022 doi:10.15620/cdc:122290.

Centers for Disease Control and Prevention (CDC). (2023a). *Suicide Prevention: Facts about Suicide*. Retrieved November 27, 2023, from https://www.cdc.gov/suicide/facts/index.html.

Centers for Disease Control and Prevention (CDC). (2023b). *Viral Hepatitis: Hepatitis C.* Retrieved from https://www.cdc.gov/hepatitis/hcv/index.htm.

Centers for Disease Control and Prevention (CDC). (2023c). *Salmonella: Questions and Answers*. Retrieved from https://www.cdc.gov/salmonella/general/index.html.

Centers for Disease Control and Prevention (CDC). (2023d). *Campylobacter* (Campylobacteriosis): Questions and Answers. Retrieved from https://www.cdc.gov/campylobacter/fag.html.

Choi, J. Y. (2012). A portrait of rural health in America. *Journal of Rural Social Sciences*, *27*(3), 1.https://egrove.olemiss.edu/cgi/viewcontent.cgi?article=1439&context=jrss.

City of Durango. (n.d.). Transit. https://www.durangogov.org/333/Transit

Colorado Broadband Office. (2023a) Welcome to the Colorado Broadband Map. https://experience.arcgis.com/experience/938d40535cd842dc9aeceacd3c554e4b/page/Dashbo ard/

Colorado Broadband Office. (2023b). Colorado Broadband Map. Retrieved from https://broadbandhub.colorado.gov/#map.

Colorado Department of Health Care Policy and Financing. (2022). *Department Health Equity Plan Fiscal Year 2022-23*.

https://hcpf.colorado.gov/sites/hcpf/files/2022%20HCPF%20Health%20Equity%20Plan.pdf

CDPHE. (n.d.) Colorado Department of Public Health & Environment Housing Stability: Affordable Housing. https://cdphe.colorado.gov/sites/cdphe/files/PSD_SDOH_Housing-Stability_brief.pdf.

CDPHE. (2019). *Colorado Department of Public Health and Environment: Heart Disease Mortality Rate*. CDPHE Community Health Equity Map. (2019). https://www.cohealthmaps.dphe.state.co.us/cdphe community health equity map/.

CDPHE. (2020). Colorado Department of Public Health and Environment Firearm Safety: Gun Owners Can Help Prevent Suicide! https://drive.google.com/file/d/1QqirLKXeNgUSg7RhjOmEA-4UL5h2SW9Z/view.

CDPHE. (2022a). Colorado Department of Public Health and Environment Open Data. *Population Density (Census Tracts): 2015-2019 American Community Survey.* Retrieved October 16, 2023 from https://data-cdphe.opendata.arcgis.com/datasets/CDPHE::population-density-census-tracts/about.

CDPHE. (2022b). Colorado Department of Public Health and Environment. *Colorado Health Indicators Data Set: Institutional Equity.* Retrieved from

https://cohealthviz.dphe.state.co.us/t/HSEBPublic/views/CHITemplate-Redesign1_0-latest3-11m_16527278788750/InstitutionalEquityDash?%3Aembed=y&%3Aiid=2&%3AisGuestRedirectFromVizportal=y.

CDPHE. (2022c). Colorado Department of Public Health and Environment. *Colorado Health Indicators Data Set: Chronic Disease – Mental Health.* Retrieved from <a href="https://cohealthviz.dphe.state.co.us/t/HSEBPublic/views/CHITemplate-Redesign1_0-latest3-11m_16527278788750/ChronicDiseaseFin?%3Aembed=y&%3Aiid=2&%3AisGuestRedirectFrom Vizportal=y.

CDPHE. (2022d). Colorado Department of Public Health and Environment. *Healthy Kids Colorado Survey Dashboard*. Retrieved May 16, 2023, from https://cdphe.colorado.gov/healthy-kids-colorado-survey-dashboard.

CDPHE. (2022e). Colorado Department of Public Health and Environment. *Suicide Prevention Commission Youth-Specific Initiatives Work Group Recommendations*. https://drive.google.com/file/d/1HU6roVvR4B-Ildlon5kMjkgaATJAhsAE/view.

CDPHE. (2022f). Colorado Department of Public Health and Environment. *Enviroscreen*. Retrieved November 8, 2023, from https://cdphe.colorado.gov/enviroscreen.

CDPHE. (2022g). Colorado Department of Public Health and Environment. *Climate Perspectives on Climate Change*.

https://drive.google.com/file/d/1QLVRLmatEO10aNzpYHef9mJ1HJwe9Vk0/view.

CDPHE. (2023a). Colorado Department of Public Health and Environment. *VISION: Visual Information System for Identifying Opportunities and Needs.* Retrieved October 5, 2023, from https://teeo-cdphe.shinyapps.io/CDPHE_VISION/.

CDPHE. (2023b). Colorado Department of Public Health and Environment. *Suicide Dashboard: Colorado Vital Stats Program.* Retrieved September 24, 2023 from https://cohealthviz.dphe.state.co.us/t/HealthInformaticsPublic/views/COVDRSSuicideDashboardSingleRaceandMultipleRace/Story1?%3Aembed=y&%3Aiid=1&%3AisGuestRedirectFromVizportal=y.

CDPHE. (2023c). *Colorado Department of Public Health and Environment Office of Gun Violence Prevention*. https://cdphe.colorado.gov/about-cdphe/office-of-gun-violence-prevention.

CDPHE. (2023d). Colorado Department of Public Health and Environment, Colorado Vital Statistics Program. *Drug Overdose Dashboard: Drug Overdose Deaths*. Retrieved September 24, 2023 from https://cohealthviz.dphe.state.co.us/t/PSDVIP-

MHPPUBLIC/views/DrugOverdoseDashboard/ODDeathAdjustedRates?iframeSizedToWindow=true&%3Adisplay count=n&%3AshowAppBanner=false&%3Aorigin=viz_share_link&%3AshowVizHome=n&%3AisGuestRedirectFromVizportal=y&%3Aembed=y#2.

CDPHE. (2023e). *Colorado Department of Public Health & Environment Climate Equity Framework*. https://drive.google.com/file/d/1xpllrDisGYJ--cY3fu1sTJpEL5oC0DZU/view.

CDPHE. (2023f). *Colorado Department of Public Health and Environment: Facts, testing and locations*. Retrieved September 29, 2023, from https://cdphe.colorado.gov/sti-facts-testing-locations.

CDPHE. (2023g). Colorado Department of Public Health and Environment, STI Trend Tables 2018-2022 (geography: La Plata and Archuleta counties). Retrieved September 29, 2023 from https://cohealthviz.dphe.state.co.us/t/STIHIVViralHepatitisPublic/views/PublicFacingTrendTables//PublicFacingTrendTables?%3Aembed=y&%3Aiid=1&%3AisGuestRedirectFromVizportal=y.

CDPHE. (2023h). *Colorado Department of Public Health and Environment: Mpox.* Retrieved September 24, 2023 from https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox%20can%20be%20transmitted%20from,result%20in%20getting%20the%2">https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox%20can%20be%20transmitted%20from,result%20in%20getting%20the%2">https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox%20can%20be%20transmitted%20from,result%20in%20getting%20the%2">https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox%20can%20be%20transmitted%20from,result%20in%20getting%20the%2">https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox%20can%20be%20transmitted%20from,result%20in%20getting%20the%2">https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox%20can%20be%20transmitted%20from,result%20in%20getting%20the%2">https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox%20can%20be%20transmitted%20from,result%20in%20getting%20the%2">https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox%20can%20be%20transmitted%20from,result%20in%20getting%20the%2">https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox%20can%20be%20transmitted%20from,result%20in%20getting%20the%2">https://cdphe.colorado.gov/diseases-a-to-z/mpox#:~:text=Mpox.**

CDPHE. (2023i). Colorado Department of Public Health and Environment. *Vital Statistics Program: Leading Causes of Death with Counts and Age-Adjusted Rates: Colorado Residents, 2022*. Retrieved October 19, 2023 from https://docs.google.com/spreadsheets/d/19 50c9gLHL OQtl8eBYTtaAMxRKAvYYe/edit#gid=17 5711556.

CDPHE. (2023j). Colorado Department of Public Health and Environment. *Colorado Health Data and Statistics: Cancer Incidence*. Retrieved September 25, 2023 from https://cohealthviz.dphe.state.co.us/t/HealthInformaticsPublic/views/COHIDCancerIncidenceRates/CancerIncidences?iframeSizedToWindow=true&%3Aembed=y&%3AshowAppBanner=false&%3Adisplay_count=no&%3AshowVizHome=no.

CDPHE. (2023k). Colorado Department of Public Health and Environment. *Vital Statistics: Birth, death, and other vital records*. Retrieved September 25, 2023, from https://cdphe.colorado.gov/vitalrecords.

CDPHE. (2023l). Colorado Department of Public Health and Environment. *Colorado Health Information Dataset (CoHID), Mortality Statistics, Age-Adjusted Rates, 2020-2022, Includes Race/Hispanic Origin*. Retrieved November 28, 2023 from

 $\frac{https://cohealthviz.dphe.state.co.us/t/HealthInformaticsPublic/views/COHIDFullDeathQuery_St_ateDemographyPopEstimates/MortalityStatistics?%3Aembed=y&%3Aiid=1&%3AisGuestRedirect_FromVizportal=y.$

Colorado Electronic Disease Reporting System (CEDRS), Accessed at https://efort.dphe.state.co.us on 10/12/2023.

Colorado Health Institute. (2021). Navigating Uncharted Waters: The Pandemic, Health, Coverage, and Care in Colorado.

https://www.coloradohealthinstitute.org/sites/default/files/file_attachments/2021%20Colorado%20Health%20Access%20Survey%20Storybook.pdf.

Colorado Health Institute. (2022). *Think Globally, Adapt Locally: Colorado Counties Health and Climate Index*. https://www.coloradohealthinstitute.org/research/2022-climate-change-health-index.

Colorado Health Institute. (2023). Colorado's Health and Climate Policy Agenda: A Call to Action to Protect Our Communities from Climate Change.

https://www.coloradohealthinstitute.org/research/colorados-health-and-climate-policy-agenda.

CHRR (2023a). County Health Rankings and Roadmaps, Colorado: Data by County, Rankings. Retrieved September 25, 2023 from https://www.countyhealthrankings.org/explore-health-rankings/colorado?year=2023&tab=1.

CHRR (2023b). County Health Rankings and Roadmaps, Archuleta County: County Snapshot. Retrieved September 24, 2023 from https://www.countyhealthrankings.org/explore-health-rankings/colorado/archuleta?year=2023.

CHRR (2023c). County Health Rankings and Roadmaps, La Plata County: County Snapshot. Retrieved September 24, 2023 from https://www.countyhealthrankings.org/explore-health-rankings/colorado/la-plata?year=2023.

Colorado School Safety Resource Center. (2021). *Resources for Youth Suicide Prevention and Intervention.*

https://cdpsdocs.state.co.us/safeschools/Resources/CSSRC Resource Guides/CSSRCSuicidePreventionResourceGuide2021.pdf.

Colorado School Safety Resource Center. (2023). *Colorado School Safety Resource Center*. https://cssrc.colorado.gov/.

Colorado State Forest Service. (2017). 2017 Report on The Health of Colorado's Forests: Meeting the Challenge of Dead and At-Risk Trees. Retrieved May 16, 2023 from https://csfs.colostate.edu/wp-content/uploads/2018/02/2017 ForestHealthReport FINAL.pdf.

DOLA. (2023). *Colorado Department of Local Affairs, State Demography Office: Population Estimates*. Retrieved October 13, 2023, from https://demography.dola.colorado.gov/.

Encyclopedia Staff. (2021, January 25). 416 Fire. *Colorado Encyclopedia*. Retrieved from https://coloradoencyclopedia.org/article/416-fire

Feeding America. (2023). Map the Meal Gap: Food Insecurity among Overall (all ages) Population in Colorado. Retrieved November 27, 2023, from https://map.feedingamerica.org/county/2021/overall/colorado.

Fletcher, J. M., Andreyeva, T., & Busch, S. H. (2009). Assessing the effect of changes in housing costs on food insecurity. *Journal of Children and Poverty*, *15*(2), 79–93. https://doi.org/10.1080/10796120903310541. Gundersen, C., & Ziliak, J. P. (2015). Food insecurity and health outcomes. *Health Affairs*, 34(11), 1830–1839. https://doi.org/10.1377/hlthaff.2015.0645.

Harvard School of Public Health. (2023). Obesity Prevention Source: Prevalence and Incidence Defined. Retrieved on October 19, 2023, from https://www.hsph.harvard.edu/obesity-prevention-source/prevalence-incidence/.

Henriquez, N. R., & Ahmad, N. (2021). "The Message Is You Don't Exist": Exploring Lived Experiences of Rural Lesbian, Gay, Bisexual, Transgender, Queer/Questioning (LGBTQ) People Utilizing Health care Services. SAGE Open Nursing, 7, 23779608211051174. https://journals.sagepub.com/doi/pdf/10.1177/23779608211051174

Health Resources and Service Administration. (2022). *HPSA Designations*. Retrieved November 27, 2023, from https://data.hrsa.gov/tools/shortage-area/hpsa-find.

Jensen, E. J., Wieling, E., & Mendenhall, T. (2020). A phenomenological study of clinicians' perspectives on barriers to rural mental health care. *Journal of Rural Mental Health*, 44(1), 51–61. https://doi.org/10.1037/rmh0000125

Krieger, J., & Higgins, D. L. (2002). Housing and Health: Time again for public health action. *American Journal of Public Health*, *92*(5), 758–768. https://doi.org/10.2105/ajph.92.5.758.

La Plata County. (n.d.). Transportation.

https://www.co.laplata.co.us/services/health_and_human_services/senior_services/transportation.php

Leech, T. G. J. (2012). Subsidized Housing, Public Housing, and Adolescent Violence and Substance Use. Youth & Society, 44(2), 217–235. https://doi.org/10.1177/0044118X10388821.

Maqbool, N., Viveiros, J., & Ault, M. (2015). *The impacts of affordable housing on health*. https://nhc.org/wp-content/uploads/2017/03/The-Impacts-of-Affordable-Housing-on-Health-A-Research-Summary.pdf.

Mental Health First Aid Colorado. (2023). *Mental Health First Aid Colorado*. https://www.mhfaco.org/.

Morales, D. A., Barksdale, C. L., & Beckel-Mitchener, A. C. (2020). A call to action to address rural mental health disparities. Journal of clinical and translational science, 4(5), 463-467. https://www.cambridge.org/core/journals/journal-of-clinical-and-translational-science/article/call-to-action-to-address-rural-mental-health-disparities/FF7E3D53F66B2BA0DE572BC2B30B10CE

Mountain Express Transit. (n.d.). *Transportation News & Announcements*. https://www.archuletacounty.org/681/Transportation

National Cancer Institute. (2023). Cancer Statistics. Retrieved September 25, 2023, from https://www.cancer.gov/about-cancer/understanding/statistics.

National Institute on Drug Abuse. (2022). *Addiction and Health*. http://nida.nih.gov/publications/drugs-brains-behavior-science-addiction/addiction-health.

NCA4. (2018a). U.S. Global Change Research Program. Southwest In Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II: Human Health. https://nca2018.globalchange.gov/chapter/25/

NCA4. (2018b). U.S. Global Change Research Program. Southwest In Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II: Food. https://nca2018.globalchange.gov/chapter/25/

Office of Disease Prevention and Health Promotion. (n.d.). Heart Disease and Stroke. *Healthy People 2030*. U.S. Department of Health and Human

Services. https://health.gov/healthypeople/objectives-and-data/browse-objectives/heart-disease-and-stroke

Patterson, J. G., Tree, J. M. J., & Kamen, C. (2019). *Cultural competency and microaggressions in the provision of care to LGBT patients in rural and Appalachian Tennessee*. Patient education and counseling, 102(11), 2081-2090.

https://www.sciencedirect.com/science/article/abs/pii/S0738399119302381?casa_token=iXWZ_ELXRLYYAAAAA:2YflOrxCR4o_xyYhp8O425hK93OM_LNumUAA6unlLyHGzLQW0yaWb5Y8VwD6y2pyQXWB3_UP5A

PRISM Climate Group, Oregon State University, https://prism.oregonstate.edu, data created 4 Feb 2021, accessed 16 May 2023.

Public Health Institute. (2023). *BARHII Framework*. https://www.phi.org/thought-leadership/barhii-framework/.

Robeznieks, A. (2021). *3 key upstream factors that drive health inequities*. American Medical Association. https://www.ama-assn.org/delivering-care/health-equity/3-key-upstream-factors-drive-health-inequities.

State of Colorado. (2014). Code of Colorado Regulations: Colorado Department of Public Health and Environment. *Disease Control and Environmental Epidemiology Division: Rules and Regulations Pertaining to Epidemic and Communicable Disease Control.* Retrieved November 28, 2023 from

https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=5961&fileName=6%20CC R%201009-

<u>1#:~:text=Regulation%201.&text=The%20Colorado%20Board%20of%20Health,or%20suspected</u>%20of%20being%2C%20communicable.

SW Colorado Economic Development - Region 9 Economic Development District. (n.d). https://www.region9edd.org/uploads/Final_Report_Economic_Snapshot_2020.pdf

The Annie Casey Foundation. (2022). *Children Living in Linguistically Isolate Households*. Retrieved November, 27, 2023 from https://datacenter.aecf.org/data/tables/129-children-

<u>living-in-linguistically-isolated-households-by-family-nativity#detailed/1/any/false/2048,1729,37,871,870,573,869,36,868,867/78,79/472,473.</u>

The Second Wind Fund. (2023). *The Second Wind Fund: Youth Suicide Prevention*. https://thesecondwindfund.org/.

- U.S. Census Bureau. (n.d.). *Median Household Income*. Retrieved September 24, 2023, from https://www.census.gov/quickfacts/fact/note/US/INC110221.
- U.S. Census Bureau (2022a). *U.S. Census Bureau QuickFacts: La Plata County, Colorado; Archuleta County, CO.* Retrieved September 25, 2023 from https://www.census.gov/quickfacts/fact/table/laplatacountycolorado,archuletacountycolorado/PST045222.
- U.S. Census Bureau (2022b). Renters More Likely Than Homeowners to Spend More Than 30% of Income on Housing in Almost All Counties. Retrieved September 25, 2023, from https://www.census.gov/library/stories/2022/12/housing-costs-burden.html.
- U.S. Census Bureau (2022c). Financial Characteristics for Housing Units: La Plata County. Retrieved September 25, 2023 from https://data.census.gov/table/ACSST5Y2021.S2506?q=La+Plata+County,+Colorado&t=Financial+Characteristics.
- U.S. Census Bureau (2022d). Financial Characteristics for Housing Units: Archuleta County. Retrieved September 25, 2023 from https://data.census.gov/table?q=Archuleta+County,+Colorado&t=Financial+Characteristics.
- U.S. Census Bureau. (2022e). *U.S. Census Bureau QuickFacts: Colorado*. Retrieved May 16, 2023, from https://www.census.gov/quickfacts/fact/table/CO
- U.S. Drought Monitor. (2023a). Drought conditions by County. Retrieved November 28, 2023, from https://www.drought.gov/states/colorado/county/la%20plata.
- U.S. Drought Monitor. (2023b). Drought conditions by County. Retrieved November 28, 2023, from https://www.drought.gov/states/colorado/county/archuleta.
- U.S. Environmental Protection Agency (EPA). (2023). Air Quality System Data Mart. https://www.epa.gov/outdoor-air-quality-data/air-data-multiyear-tile-plot.

USGCRP. (2016) United States Global Change Research Program. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. https://health2016.globalchange.gov/. USGCRP, 2016

Appendix A: Acronyms

ACS	American Community Survey
AI/AN	American Indian & Alaska Native
AMA	American Medical Association
AQI	Air Quality Index
ASPR	Assistant Secretary for Emergency Preparedness
BARHII	Bay Area Regional Health Inequities Initiative
BRFSS	Behavioral Risk Factor Surveillance System
CHA	Community Health Assessment
CDC	Centers for Disease Control and Prevention
CDPHE	Colorado Department of Public Health and Environment
CEDRS	Colorado Electronic Disease Reporting System
CHI	Colorado Health Institute
CHRR	County Health Rankings and Roadmaps
CoHID	Colorado Health Information Dataset
Colorado SPH	Colorado School of Public Health
CRPA	Carbapenem-Resistant Pseudomonas Aeruginosa
CSFS	Colorado State Forest Service
DOLA	Department of Local Affairs
DSM-V	Diagnostic and Statistical Manual of Mental Disorders
FCC	Federal Communications Commission
FG	Focus Groups
HCPF	Colorado Department of Health Care Policy and Financing
HPSA	Health Professional Shortage Area
ICD-11	International Classification of Diseases 11th Revision
KII	Key informant interview
LGBTQIA+	Lesbian, gay, bisexual, transgender, queer, intersex, asexual plus
MHFACO	Mental Health First Aid Colorado
NIDA	National Institute of Drug Abuse
ODPHP	Office of Disease Prevention and Health Promotion
OPHP	Office of Public Health, Practice, Planning and Local Partnerships
PHIP	Public Health Improvement Plan
POD	Point of Distribution
SAT	Student Assessment Team
SJBPH	San Juan Basin Public Health
SUD	Substance Use Disorder
STD	Sexually Transmitted Disease

Appendix B: Domains of the BARHII Model

SOCIAL INEQUITIES

Domain Description

Social inequities include class, race/ethnicity, immigration status, gender, and sexual orientation in the BARHII Framework. For this report, social inequities encompass racial and cultural equity, linguistic equity, equity among the LGBTQIA+ community and their treatment within the county, the stigma associated with asking for help due to class differences, gender-based violence, stigma experienced by those who are unhoused, aging, and disability.

INSTITUTIONAL INEQUITIES

Domain Description

Institutional inequity occurs when certain communities face disparities (Braveman, 2014) in wellbeing as a result of how a government or non-government institution treats them differently than other groups (CDPHE, 2022b). Institutional inequities are defined by the BARHII Framework as a barrier to health equity caused by a lack of advocacy, support, or representation for a 'community in need' within corporations (or other business institutions), government agencies, schools, legal and judicial systems, and/or non-profit organizations. For this report, institutional inequities include disparities in access to, or experiences with, health insurance (medical and dental), disparities in access to, or experiences with, childcare, food insecurity, inequities in education, as well as inequities in resources like broadband access and government benefits. Some of these issues will be discussed in later sections.

LIVING CONDITIONS

Domain Description

Living conditions are defined as the ways in which the physical, economic, social, and service environments affect the health of community members. Each of these categories can result in exposure to risk factors and/or barriers to access to resources that can then either directly result in disease or influence a person's behavior and increase their risk for disease or injury. The service environment is in the Access section, while the other three are in the Social Determinants of Health section.

Service Environment

The "Living Conditions" category of service environment comprises the ways in which the local service systems impact health. Services included in this category are healthcare, education, and social services.

Physical Environment

The physical environment category of "Living Conditions" includes the ways in which the physical world, such as land use, transportation, housing, residential segregation, and exposure to toxins impacts health.

Economic and Work Environment

The "Living Conditions" category of economic and working environment encompasses how the local economy, businesses, and individual economic circumstances impact health. Included in this category are factors such as employment, income, retail availability, and occupational hazards.

Social Environment

The "Living Conditions" category of social environment describes how the local social setting impacts physical and mental health. This category includes factors such as experiences of social identities (such as class, race, gender, and immigration), culture, media, advertising, and violence in the environment.

RISK BEHAVIORS

Domain Description

Risk behaviors are behaviors individuals may partake in that can increase one's likelihood of adverse health effects like disease or injury. Substance use, diet, sexual behavior, physical activity, and participation in preventive care are all considered within the domain of risk behaviors. Social and environmental factors often influence these personal behaviors. This section highlights relevant health concerns related to risk behaviors in Archuleta and La Plata counties.

DISEASE AND INJURY

Domain Description

This report defines injury as accidental bodily harm or damage to the body as a result of physical trauma. Disease has a far more general description and is broken down into a few major components. Mental health is the state of mental and emotional well-being that a person experiences and can relate to feelings of anxiousness, depression, extreme anger, sadness, and many other experiences. Mental health can be made reference to in terms of medically recognized mental health conditions or psychological capacity to make safe and healthy choices. Under the umbrella of mental health, there is specific recognition of suicide as a byproduct of poor mental health and substance use as a treatable mental health condition. Disease also includes two different types of physical illness: chronic disease and communicable disease. Communicable diseases are acute illnesses that are a result of infection or transmission of a pathogen that can cause illness to the person to whom the disease is transmitted. Chronic illness is understood as a disease or medical condition that has long-term impacts on a person's health lasting over a long period of

time, usually without a cure. Chronic diseases can include those whose effects worsen over time and those whose effects can be well controlled with the correct interventions.

MORTALITY

Domain Description

Mortality includes factors like life expectancy and infant mortality and is the farthest downstream domain within the BARHII Framework. Upstream institutional and social inequalities affect health behaviors and disease and injury status. These, in turn, lead to differences in mortality amongst the community's population.

Appendix C: SJBPH Survey

which you live.					
I live in: (This is t	he only require	d question.)			
Archuleta Coun	ty				
La Plata County	7				
2. Please enter your	zip code:				
3. How would you ra	ate the overall h	nealth of your communi	ty?		
Very Healthy	Healthy	Somewhat Healthy	Unhealthy	Very Unhealthy	
\circ		\circ	\bigcirc	\circ	
Why did you select this r	ating?				
4. In your own words residents of your cou		believe is the most imp	oortant health is	ssue facing the	

* 1. When answering the questions in this survey, please respond based on the county in

In the past five years, have you used any services or p Basin Public Health? (Check all that apply)	participated in any programs provided by San Juan
Care Coordination Services (Oral Health Program, Maternal/Child Health Care Coordination, Temporary Assistance for Needy Families (TANF) Case Management, General Care Coordination)	Communicable Disease (TB care or infection prevention guidance) Communications (follow on social media, SJBPH website, e-
SafeCare	newsletters, media coverage) Nurse Family Partnership (NFP)
Health Insurance Enrollment and Literacy Air Quality (Radon-testing or info sessions)	Women, Infant and Children (WIC)
Consumer Protection (food safety, childcare inspections, school inspections)	Attended a presentation on how to create an evacuation kit Visited SJBPH website to receive emergency preparedness
Water Quality (water lab, septic systems, drinking water testing)	recommendations Participated in the Southwest Colorado Medical Reserve Corps
Birth or Death Certificates	Thriving Communities Program (Suicide prevention, ROAR
Vaccines at SJBPH office clinics (Monkeypox, Travel, Routine, COVID-19)	(Recognizing Opportunities around Resilience), tobacco prevention)
Language Interpretation (Spanish, Other) Cancer Prevention and Early Detection Program (aka Women's	COVID-19 Related Support (testing supplies, masks, isolation and quarantine assistance)
Wellness Connection-received assistance to complete Pap test or mammogram)	COVID-19 Immunization Clinics
Sexual Health Clinic Services (STI testing or treatment, HIV testing, PrEP for HIV, Well woman exam, gynecology exam)	
Are there other community or social services that you've used in the	e last five years outside of San Juan Basin Public Health?
If so, please list:	

The following information helps us describe the health and well-being of the entire community; honesty improves our accuracy and understanding. We will not look at or report your individual information. This survey is anonymous.

6. What is your age?	
7. Please select your race (check all that apply	():
White	
Black or African American	
Asian or Asian American	
American Indian or Alaska Native	
Native Hawaiian or other Pacific Islander	
Another race, please list:	
8. Are you of Hispanic, Latino, or Spanish orig	gin?
Yes	
○ No	
9. What is the current primary source of your	health insurance?
Health insurance through work	Indian Health Service
Health insurance through someone else's work	Child Health Plan Plus (CHP+)
Medicaid/Health First Colorado/OmniSalud	A student health insurance plan sponsored
Medicare	through a college or university
Veteran's Affairs, Military Health or TRICARE	Health insurance bought directly by you or someone else through a broker or Connect for Health Colorado/Colorado Connect
	I do not have health insurance coverage
Other insurance coverage not listed above (please	specify);

10. What is the highest level of education you h	nave completed?
High School Diploma or equivalent	
Some college	
Graduated from college	
Some graduate school	
Completed graduate school	
Oid not complete High School	
11. What is your gender identity?	
Woman	Non-binary/non-conforming
Man	Prefer not to respond
Transgender	
Another gender, please list:	

12. What is your opinion about the following physical and mental health issues in your community?

Use the following definitions to rank each issue:

 $\underline{\text{Minor Issue}}; A \text{ concern, but much less important than other issues}$

 $\underline{\text{Moderate Issue}} : A \ concern \ of \ average \ importance \ when \ compared \ to \ other \ issues$

 $\underline{\text{Major Issue}}$: In the top 3 to 5 concerns you think need immediate attention

	Not an Issue	Minor Issue	Moderate Issue	Major Issue	No Opinion/Don't Know
Ability to get an appointment to see a medical health care provider for basic health needs	0	0	0	\circ	
Ability to get an appointment to see a medical health care provider who is a specialist	\circ	\bigcirc	\bigcirc	\bigcirc	
Accessibility of Oral Health care (ability to get an appointment for dental health needs)	0	0	0	\circ	
Vaccine-preventable diseases (flu, pneumonia, whooping cough, measles, etc.)	0	\bigcirc	\circ	\bigcirc	\circ
COVID-19		\bigcirc			
Sexually Transmitted Diseases (education, testing, and treatment services)	\circ	\bigcirc	\bigcirc	\bigcirc	
Teen Birth Rates/Teen Pregnancy	0	0	0	\circ	0
Suicide/Suicide Attempts	\bigcirc	\bigcirc		\bigcirc	\bigcirc
Substance Use			\bigcirc		
Chronic Diseases (heart disease, cancer, diabetes, obesity, etc.)	0	\bigcirc	\circ	\circ	\circ
Environmental Quality (air, water, climate change, food safety)	0	0	0	0	0

13. How concerned are you about these other community issues that impact health?

Use the following definitions to rank each issue:

Minor Issue: A concern, but much less important than other issues

Moderate Issue: A concern of average importance when compared to other issues

	Not an Issue	Minor Issue	Moderate Issue	Major Issue	No Opinion/Don't Know
Poverty					
High School Graduation Rates	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Early childhood education/youth development	\bigcirc	\circ	\circ	\circ	0
Motor Vehicle Accidents	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Availability of Exercise or Fitness Opportunities	\circ	\circ	\circ	\circ	\circ
Domestic Violence					
Sexual Violence			\bigcirc		
Radon in homes	\bigcirc	\bigcirc	\bigcirc		\bigcirc
Racism		\bigcirc			
Availability of jobs/economic opportunity	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Support for families with children (day care, safe places to play)	\circ	\circ	0	\circ	0
Food insecurity (quantity, affordability)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Ability to access locally grown food		0	\circ	\bigcirc	
Transportation					
Affordable housing					

14. What is your opinion about the following substance abuse issues in your community?

For these questions:

Youth is a person under age 18

Adult is a person aged 18 or older

Use the following definitions to rank each issue:

Minor Issue: A concern, but much less important than other issues

Moderate Issue: A concern of average importance when compared to other issues

	Not an Issue	Minor Issue	Moderate Issue	Major Issue	No Opinion/Don't Know
Youth Prescription Drug Use			\circ	\bigcirc	
Adult Prescription Drug Use	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
Youth Alcohol Use					
Adult Alcohol Use					
Youth Tobacco Use (includes e- cigarettes or vaping)	\circ	\circ	\circ	\circ	\circ
Adult Tobacco Use (includes e- cigarettes or vaping)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Youth Marijuana Use					
Adult Marijuana Use					
Youth Drug Use (drugs <u>other than</u> marijuana or prescriptions)	0	0	\circ	\circ	\circ
Adult Drug Use (drugs other than marijuana or prescriptions)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

15. What is your opinion about the following mental health issues in your community?

Use the following definitions to rank each issue:

Minor Issue: A concern, but much less important than other issues

Moderate Issue: A concern of average importance when compared to other issues

	Not an Issue	Minor Issue	Moderate Issue	Major Issue	No opinion/Not sure
Access to diagnostic services (testing, screening, assessing mental health or behavior issues)	0		\circ	\circ	0
Access to individual therapy/counseling or support	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Access to group therapy/counseling or support	\circ	\circ	\circ	\circ	\circ
Access to treatment services using prescription drugs (anti-depressants, anti-anxiety medication, etc)	0			\bigcirc	
Access to inpatient psychiatric treatment	\circ	\circ	\circ	\circ	\circ
Stigma of having or seeking treatment for a mental health condition	\bigcirc	\bigcirc	\circ	\bigcirc	\bigcirc

16. What is your opinion about the following Environmental Health issues in your community?

Use the following definitions to rank each issue:

Minor Issue: A concern, but much less important than other issues

Moderate Issue: A concern of average importance when compared to other issues

	Not an Issue	Minor Issue	Moderate Issue	Major Issue	Don't Know/Not Sure
Outdoor Air Pollution	\bigcirc	\bigcirc	\circ		\circ
Safe/Healthy Housing (including Radon, lead, indoor air quality, rental housing standards)	0		\bigcirc	\bigcirc	
Surface Water Pollution (rivers, lakes)	\circ	\circ	\circ	\circ	\circ
Water Quantity (access to/amount of water)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Septic Systems (Onsite Wastewater Treatment Systems)	\circ	\circ	\circ	\circ	\circ
Drinking Water Quality	\bigcirc	\bigcirc	\bigcirc		\bigcirc
Communicable Diseases that are NOT Vaccine- Preventable (Hantavirus, Tularemia, West Nile Virus, Plague, Salmonella, E-coli)	0				
Communicable Diseases that ARE Vaccine-Preventable (flu, measles, chicken pox)	0	0	0	0	0
Climate Change	\bigcirc	\bigcirc		\bigcirc	\circ
Food Safety (food from restaurants, markets, deli counters)	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Sanitation at schools and childcare facilities	\circ	\circ	\circ	\circ	\circ

	Not an Issue	Minor Issue	Moderate Issue	Major Issue	Don't Know/Not Sure
Solid/Hazardous Waste (landfills, illegal dumping, recycling)	0	0	0	0	0
Sanitation at body art establishments, swimming pools, hotels/motels	\circ	\bigcirc	0	\circ	\bigcirc
17. Are there any o survey?	ther major issi	ues in your co	mmunity that ha	ive not been i	dentified in this
18. Please list three word per line.	words that de	escribe your ic	deal vision of he	alth for your o	community, one
1.					
2.					
3.					

San Juan Basin Public Health thanks you for completing the survey and providing important information to impact your community!

^{*}Cover page not included

Appendix D: Survey Demographics

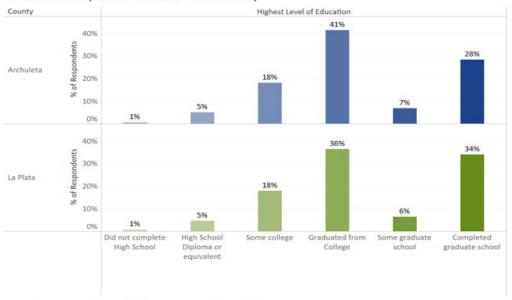
Residents of both counties responded in higher numbers to the Community Health Assessment Survey in 2023 than they did in 2018. The total number of surveys taken was 1545, 427 in Archuleta County, an increase of 193, and 1118 in La Plata County, an increase of 284, for a total increase of 493.

Compared to the populations in each county, those who took the survey tended to be older, white, well-educated, and female. In Archuleta County, more than 80% was over 45, 95% white, 76% have a college degree, and 71% identify as a woman. In La Plata County, more than 65% were over 45, 91% white, 76% have a college degree, and 75% identify as a woman.



Source: San Juan Basin Public Health 2023 Community Health Assessment

Education of Population from SJBPH CHA Survey



Source: San Juan Basin Public Health 2023 Community Health Assessment

Highest Level of Education	Archuleta	La Plata
Did not complete High School	1%	196
High School Diploma or equivalent	5%	5%
Some college	18%	18%
Graduated from College	41%	36%
Some graduate school	7%	6%
Completed graduate school	28%	34%

2023 SJBPH CHA Survey Results - Gender Identity by County

Archuleta La Plata



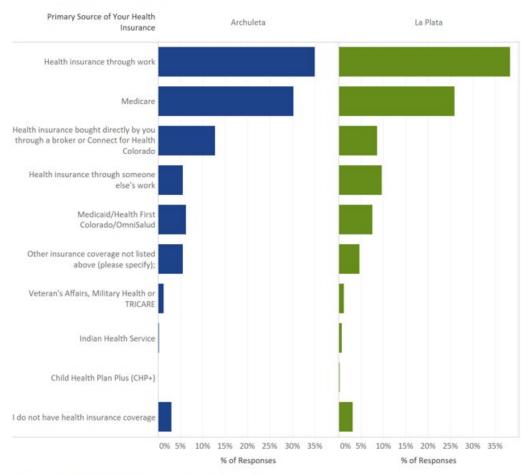


Gender Identity	Archuleta	La Plata
Woman	71%	75%
Man	26%	22%
Non-binary/non-conforming		1%
Transgender	0%	0%
Prefer not to respond	3%	2%

Source: San Juan Basin Public Health 2023 Community Health Assessment



2023 SJBPH CHA Health Insurance



Source: San Juan Basin Public Health 2023 Community Health Assessment