2019 Mat-Su

Community Health Needs Assessment

Hearing Every Voice

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Contributing Authors:

Mat-Su Health Foundation Staff

Melissa Kemberling PhD, MPH Kathleen Matthews, MSN, APRN Omari Richins, MPH 777 Crusey Street, Suite A201 Wasilla, AK 99654 healthymatsu.org

McDowell Group Anchorage Office

1400 W. Benson Blvd., Suite 510 Anchorage, AK 99503 mcdowellgroup.net

Strategy Solutions, Inc.

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Photovoice Community Groups						
Chickaloon Traditional Council –Elders	Latinx					
Chickaloon Traditional Council – Sutton Women's Group	Williwaw Community Residents					
Chickaloon Traditional Council – Tribal Citizens	People of a Certain Age (Older Residents)					
Knik Tribe – Housing	Mat-Su Health Services					
Knik Tribe – Youth	Parents With a Purpose					
Kabayan Inc. Filipino Community of Mat-Su	Youth Leadership Council (from R.O.C.K. Mat-Su)					

Steering Committee					
Stephen Adams, Knik Tribal Council	Mark Lackey, CCS Early Learning				
Stephanie Allen, United Way of Mat-Su	Kathleen Matthews, Behavioral Health Provider				
Michael Baldwin, Alaska Mental Health Trust Authority	Robin Minard, Mat-Su Health Foundation				
Jim Beck, Mat-Su Health Foundation	Michelle Overstreet, MyHouse				
René Dillow, Public Health Nursing	Richard Porter, Knik Tribe				
Melissa Caswell, Southcentral Foundation	Elizabeth Ripley, Mat-Su Health Foundation				
Nathan Johnson, Providence Health and Services Alaska	Desiré Shepler, Alaska Family Services				
Melissa Kemberling, Mat-Su Health Foundation	Lisa Wade, Chickaloon Traditional Council				
Vickie Knapp, Mat-Su Health Services	Dave Wallace, Mat-Su Regional Medical Center				
Jared Kosin, Mat-Su Regional Medical Center	Melody West, Sunshine Community Health Center				

To the Residents of Mat-Su,

This is the third community health needs assessment sponsored by the Mat-Su Health Foundation and Mat-Su Regional Medical Center. The process and focus of the assessment continues to change and evolve as we learn how to more closely listen to the Mat-Su community. This assessment focuses on *Hearing Every Voice*

- a difficult task when you live in a community that numbers over 100,000 men, women, and children. We continue to learn that people have different health

related needs, goals, and aspirations depending on many factors including their culture, age, race, gender and sexual orientation.

A "one size fits all" approach rarely works for anything and this is true for addressing our community's health challenges. A simple example is that an elderly man

- a veteran who has a hard time walking may not be able to get the help he needs because a building with a support group on the second floor is not accessible to

him. This barrier to health is not the same as for a young person who bounds up and down the stairs in seconds. We would only learn about this by listening to

our elderly veterans.

Collecting information for this assessment we heard about different needs like new immigrants needing English classes, Alaska Native elders affected by racism,

young people facing homelessness, and the Williwaw community's desire to reclaim areas of the neighborhood devastated by drug use and poverty. We also heard

about what different groups value - catching and growing what you eat, elders and youth dancing and drumming together, having a playground in your

neighborhood, and having a wellness center nearby. Promoting a community where every resident has the opportunity for a healthy life requires that we listen

to each other and celebrate our similarities and differences as we help each other and connect in a meaningful way.

Elizabeth Ripley, CEO

Mat-Su Health Foundation

Dave Wallace, CEO

Mat-Su Regional Medical Center

EXECUTIVE SUMMARY

Every three years, the Mat-Su Health Foundation and the Mat-Su Regional Medical Center conduct a health assessment for Mat-Su in partnership with the community. As Mat-Su continues to grow – the population increased from 91,697 in 2011 to 105,743 in 2018 – the health of Mat-Su residents is improving, staying the same and worsening - depending on the health issue. In the next few pages, highlights of this change are reported.

For this assessment, community health goals were ranked two different ways: 1) by importance to address for the whole borough and 2) by the feasibility to improve for sub-regions of Mat-Su. The goals for Mat-Su that rose to the top in this year's needs assessment are listed below. This executive summary will examine each of these goals.

Top Ranked Goals	All of Mat-Su (Importance)	Core Area (feasibility)	Parks Hwy Area (Feasibility)	Upper Su (Feasibility)	Glenn Hwy (Feasibility)
Resident economic stability					
Safe and healthy relationships					
Strong social connections					
Freedom from discrimination related to race, ethnicity, disability					
Excellent mental health					
Affordable/accessible healthy recreation					
Accessible behavioral healthcare					
Affordable/accessible preventive care					
Healthy environment					

Ranking: Darker color = higher ranking in importance or feasibility

Having a <u>Healthy Environment</u> is the second most highly ranked goal in terms of feasibility in achieving in three Mat-Su areas. Resident groups mentioned how being out in nature is healing and health promoting, whether they are walking, fishing, picking berries, playing, or just sitting. Mat-Su has an abundance of beautiful places to do all these things; residents said that it is important to preserve and take care of our environment. The Mat-Su Trails and Parks Foundation, Valley Recycling Solutions, Tribal partners and many residents work to take care of the Mat-Su environment.

Having a community where All Residents Have Economic Stability that Allows Them to Have Safe Housing and Healthy Food was ranked as the most important health goal for Mat-Su. Our borough has 44,014 residents who were employed in 2018 and an unemployment rate of 7.6%. In 2017, 11.9% of residents lived in poverty, including 9% of families and 14% of children. Although unemployment has decreased slightly, the percent of residents in poverty has increased. Residents reported that having healthy food and safe and affordable housing is crucial to one's health and fulfilling ones potential. This goal is linked to the health environment goal; residents reported that it is important for them to protect the environment that allows access to healthy subsistence food.

Having <u>Safe and Healthy Relationships</u> rose to the top five selected in all forms of ranking. Mat-Su youth and adults are experiencing more dating violence, domestic violence, and sexual assault as compared to 2011. Youth are experiencing more bullying at school, including cyber bullying. A bright spot is that substantiated allegations of child maltreatment have decreased. In Mat-Su, Alaska Family Services runs a domestic violence shelter for residents, and prevention work is being done by this organization, a community group called No More Mat-Su, and is included in the wellness curriculum for the school district. It is clear these efforts need to be augmented to turn these trends around.

Having Accessible and Affordable Healthy Recreational Opportunities was mentioned by residents as being important for older residents, youth, and families, and ranked as being feasible to achieve in three Mat-Su areas. This goal is closely linked to the safe and healthy relationships goal. Research has shown that youth who have opportunities to learn, plan, and grow while being connected to each other and supportive adults are less likely to experience substance use, depression, violence, and unsafe relationships. There is a new initiative, Youth360, with pilot sights in Houston and Wasilla that is working to support youth and provide more options for involvement in healthy recreational opportunities.

Having Accessible Behavioral Health Care and Excellent Mental Health are goals that are linked and have shown up prominently in the two past needs assessments as well as this one. Behavioral health includes mental health and substance use disorders. The status of youth mental health is extremely concerning and has worsened since 2016. Currently over 1 in 5 middle and traditional high school students have considered suicide in the last year, over half of traditional students report signs of depression in the last year, and over one third report considering suicide. The suicide rate in Mat-Su is higher than in Alaska and 3 times that of the U.S. The bright spot for youth and adults is that binge drinking has lessened since 2011. Access to behavioral health care is still an issue in Mat-Su, especially for residents who have Medicaid – the adult wait to start care is at least a month, and children often need to wait many months. The MSHF has funded a program that places behavioral health providers in 11 schools to help improve access to behavioral health care for students.

Having <u>Strong Social Connections</u> impacts health and is an element of the vision of a healthy community. High levels of social connection may help one live longer and has been associated with a better immune system and faster recovery from disease. Individuals with high levels of social connection may experience less anxiety, depression, and suicide. Since 2016, we have seen an increase in social connection in Mat-Su related to residents who report helping each other out, being able to ask others for favors, attending public social gatherings, and volunteering.

Many of these goals are related; for example, <u>Having a Community that Is</u> <u>Free from Discrimination</u> is crucial for the physical and mental health of residents. When a majority of people, laws, and funding systems systematically discriminate against a group of people based on a characteristic of the group, it can deprive them of equal power and cause inequality in society. This can create a condition that restricts resources that promote health and cause stress and other health-related issues for that group. When asked if there is a significant level of racism in Mat-Su, people of color were more likely to say "yes" and to feel that the level had increased in the last year

Having <u>Accessible and Affordable Preventive Care</u> was ranked as a feasible goal in three Mat-Su areas. This goal links to preventing falls, getting vaccinations, and health screenings. These are all areas where an increase in use of this type of care could improve health in general for Mat-Su residents. This is especially true for seniors who report low levels of getting the flu or pneumonia vaccine and who suffer from falls at a higher rate than other age groups.

Demographic Snapshot	Mat-Su Borough (Most Recent)	Mat-Su Borough (Previous)	Alaska	Progress Same Regress
ADOLWD Population estimate	105,743 (2018)	91,697 (2011)	736,239 (2018)	N/A
Population change since2010 (%)	2.08	3.0	1.29	N/A
Population 65+ (%)	12.0 (2018)	8.0 (2011)	11.8 (2018)	N/A
Population under 19 years (%)	26.8 (2018)	31.6 (2010)	24.9 (2018)	N/A
Individuals living in poverty (%)	11.9 (2017)	10.7 (2010)	11.2 (2017)	
Annual Average Unemployment Rate (%)	7.6 (2018)	9.2 (2011)	6.6 (2018)	
Individuals with a physical disability (%)	12.1 (2017)	11.4 (2014)	11 (2017)	

Healthcare Access Snapshot	Mat-Su Borough (Most Recent)	Mat-Su Borough (Previous)	Alaska	Progress	Same	Regress
Could not see a doctor due to cost in last 12 months-18+ yrs (%)	16.5 (2018)	18.5 (2011)	14.1 (2018)			
Could not see a doctor due to cost in last 12 months-65+ yrs (%)	8.1(2018)	5.9 (2011)	4.7 (2018)			
Have a usual primary care provider – 18+ yrs (%)	59.7 (2018)	57.9 (2011)	56 (2018)			
Have a usual primary care provider – 65+ yrs (%)	73.3 (2018)	71.8 (2011)	90.9 (2018)			
Persons with medical insurance 18+ yrs (%).	85.4 (2018)	76.8 (2011)	89.3 (2018)			
Persons with medical insurance 65+ yrs (%).	99.3 (2018)	97.6 (2011)	97.9 (2018)			
Primary care Physician to Population Ratio	2130:1 (2016)	2081:1(2008)	1,110:1 (2016)			
Mental Health Providers	840:1 (2018)	1,565:1 (2013)	260:1 (2018)			
Preventable Hospital Stays per 1000 Medicaid enrollees	3,148 (2016)	10,385 (2006-7)	2970 (2016)			

Healthy Weight Snapshot	Mat-Su Borough (Most Recent)	Mat-Su Borough (Previous)	Alaska	Progress	Same	Regress
Kindergarten – 8th grade	67 (2017/18)	69.4 (2010-11)	65.2 (2017/18)			
Traditional high school	74.5 (2017/18)	71.7 (2011)	69.1 (2017/18)			
Alternative high school	59.7 (2017/18)	65.1 (2011)	58.5(2017/18)			
Adult	26.7 (2018)	39.0 (2011)	34.1 (2018)			
Adults 65+ years	32.4 (2018)	27.3 (2011)	N/A			

Chronic/infectious Disease Snapshot	Mat-Su Borough (Most Recent)	Mat-Su Borough (Previous)	Alaska	Progress	Same	Regress
Coronary heart disease death rate per 100,000 people	112 (2017)	124.8 (2013)	133.4 (2017)			
Stroke disease death rate per 100,000 people	25.6 (2017)*	45.6 (2013)	34.8 (2017)			
Diabetes-adults (%)	7.9 (2018)	7.5 (2011)	8.4 (2018)			
Diabetes-adults 65+ years (%)	19.5 (2018)	21.3 (2011)	17.6 (2018)			
Cancer death rate per 100,000 people	173.5 (2016)	171.9 (2007)	157.8 (2016)			
Colorectal cancer death rate per 100,000 people	15.4 (2016)	18.3 (2007)	14.7 (2016)			
Lung cancer death rate per 100,000 people	69 (2016)	31.5 (2007)	38.9 (2016)			
Mammogram, women age 40+, in past 2 years (%)	58.6 (2016)	60.7 (2006-10)	62.8 (2016)			
Cervical cancer screening, women 18+, in past 3yr (%)	68.8 (2016)	81.5 (2006-10)	77.3 (2016)			
Colorectal Cancer screening ever age 50+ (%)	64 (2018)	59.5 (2006-10)	64.6 (2018)			
Chlamydia Rate per 100,000 (crude rate)	429.3 (2016)	288.7 (2007)	771.6 (2016)			
Gonorrhea Rate per 100,000 people (crude rate)	101.9 (2016)	78.6 (2011)	196.9 (2016)			

^{*}Data may not unreliable

Behavioral Health Snapshot	Mat-Su Borough (Most Recent)	Mat-Su Borough (Previous)	Alaska	Progress Same Regress
Average number of poor mental health days in last month-adult	3.9 (2018)	3.4 (2011)	3.7 (2018)	
Average number of poor mental health days in last month -senior	2.9	N/A	NA	N/A
Felt so sad or hopeless almost daily for 2 weeks or more in a row that they stopped doing usual activities in last 12 months-Traditional High School student (%)	31.4 (2017)	26.9 (2011)	34.5 (2017)	
Felt so sad or hopeless almost daily for 2 weeks or more in a row that they stopped doing usual activities in last 12 months - Alternative High School student (%)	53.8 (2017)	34.8 (2011)	50.8 (2017)	
Considered suicide ever, Middle School Student	22.9 (2017)	20.6 (2011)	N/A	
Considered suicide in the past year, Traditional HS Student	20.1 (2017)	15.1 (2011)	21.1 (2017)	
Considered suicide in the past year, Alternative HS Student	35.9 (2017)	20.6 (2011)	32.9 (2017)	
Suicide death rate, age adjusted per 100,000 people	30.6 (2017)	22.6 (2014)	25.3 (2017)	
Binge drinking in the last month, Traditional high school	13.4 (2017)	15.2 (2011)	13.5 (2017)	
Binge drinking in the last month, Alternative high school	32.0 (2017)	35.6 (2011)	28.7 (2017)	
Binge drinking in the last month, Adults 18+	15.4 (2017)	20.0 (2011)	18 (2017)	
Binge drinking in the last month, Adults 65+	2.2 (2017)	8.1 (2019)	6.5 (2017)	
Youth marijuana use, ever- Middle School	7.9 (2017)	14.7 (2011)	NA	
Youth marijuana use, ever- Traditional High School	37.4 (2017)	36.2 (2011)	38.5 (2017)	
Youth marijuana use, ever- Alternative High School	68.3 (2017)	71.7 (2011)	73.1 (2017)	

Safety and Injury Snapshot	Mat-Su Borough (Most Recent)	Mat-Su Borough (Previous)	Alaska	Progress	Same	Regress
Dating violence in past 12 months -traditional high school (%)	19 (2017)	11.1 (2011)	7.5 (2017)			
Dating violence in past 12 months –alternative high school (%)	32.3 (2017)	14.8 (2011)	N/A			
Forced intercourse ever, traditional high school students (%)	9.2 (2017)	8.1 (2011)	7.9 (2017)			
Forced intercourse ever, alternative high school students (%)	26.2 (2017)	17.5 (2011)	20.9 (2017)			
Bullying at school, past 12 months, traditional high school (%)	22.4 (2017)	23.6 (2011)	21.6 (2017)			
Bullying at school, past 12 months, alternative high school	27.9 (2017)	19.7 (2011)	24 (2017)			
Electronic bullying, past 12 month, traditional high school (%)	17.4 (2017)	17.2 (2011)	17.9 (2017)			
Electronic bullying, past 12 month, alternative high school	32.5 (2017)	20.5 (2011)	25.2 (2017)			
Allegations of child maltreatment per 100,000 substantiated by OCS	7.8 (2018)	12.1 (2014)	N/A			
Had unwanted sexual activity ever, adults (%)	22.7 (2017)	14.9 (2009)	N/A			
Threatened or physically hurt by partner ever (%)	26.4 (2017)	22.2 (2009)	N/A			
Witnessed parent hurt by spouse or partner ever, adult (%)	22.1 (2017)	21.3 (2009)	N/A			
Unintentional injury death rate per 100,000 people	63.7 (2017)	60.0 (2011)	63 (2011)			
Motor vehicle death rate per 100,000 people	12.3 (2016)	14.1 (2011)	12.8 (2016)			

Social Connection and Racism	Mat-Su Borough (Most Recent)	Mat-Su Borough (Previous)	Alaska	Progress	Same	Regress
I have no one I can count on to help with a practical problem (%)	6 (2019)	4 (2016)	N/A			
I have 1-5 people I can count on to help with a practical problem (%)	52 (2019)	52 (2016)	N/A			
I do favors for people in my community very often, often, or sometimes	80 (2019)	81 (2016)	N/A			
It is very likely or likely I have someone I can ask for help with my children (%)	79 (2019)	70 (2016)	N/A			
I have volunteered in the last year (%)	52 (2019)	44 (2016)	N/A			
People in my community do favors for each other very often, often, or sometimes (%)	84 (2019)	73 (2016)	N/A			
I have attended social gathering, state fair, and other social event in last year (%)	52 (2019)	44 (2016)	N/A			
I agree there is a significant level of racism in Mat-Su (%)	26 (2019)	N/A	N/A		N/A	
In last year, the level of racism in Mat-Su has increased (%)	12 (2019)	N/A	N/A		N/A	

Maternal Child Health	Mat-Su Borough (Most Recent)	Mat-Su Borough (Previous)	Alaska	Progress Same Regress
Low birth weight births (%)	6.2 (2017)	6.1(2007-09)	6.2 (2017)	
Preterm births (%)	10.4 (2017)	10.0 (2007-09))	10.7 (2017)	
Infant mortality rate (per 1,000 live births)	3.9 (2017)*	5.5 (2007-09)	5.9 (2017)	
Post-neonatal infant mortality rate (per 1000 births)	1.6 (2017)*	3.9 (2007-09)	2.6 (2107)	
Child (0-4) deaths per 100,000 pop	5.0 (2017)	N/A	7.9 (2017)	N/A
Child (5-14) deaths per 100,000 pop	31.6 (2017)	N/A	23.3 (2017)	N/A
First prenatal visit in first trimester, self-reported	9.7 (2017)	N/A	13.9 (2017)	N/A
Smoke cigarettes during last 3 months of pregnancy	14 (2017)	14.4 (2007-09)	12.3 (2017)	
Used marijuana during pregnancy	10.5 (2017)	2.1 (2007-09)	8.6 (2017)	
Used alcohol during pregnancy	7.7 (2017)	3.8 (2007-09)	6.3 (2017)	

^{*}Data unreliable

Senior Health Snapshot	Mat-Su Borough (Most Recent)	Mat-Su Borough (Previous)	Alaska	Progress	Same	Regress
States that health is good, very good, or excellent	82.3 (2018)	85 (2013)	81.1 (2018)			
Had flu shot in last 12 months (%)	41.1 (2018)	60 (2013)	49 (2018)			
Had pneumonia shot in last 12 months	61.3 (2018)	65.6 (2013)	64.2 (2018)			
Colonoscopy/sigmoidoscopy in last 5 years	45.1 (2018)	60.3 (2011)	44 (2018)			
Average number of poor physical health days in last month	6.0 (2018)	N/A	4.1 (2018)			
Average number of poor mental health days in last month	2.9 (2018)	N/A	3.7 (2018)			

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LIST OF ABBREVIATIONS

ACS American Community Survey

ADEED Alaska Department of Education and Early Development

ADOLWD Alaska Department of Labor & Workforce Development

ATR Alaska Trauma Registry

BH Behavioral Health

BRFSS Behavioral Risk Factor Surveillance System

CDP Census Designated Place

HAVRS Health Analytics and Vital Records Section

HHS Household Survey

MSBSD Mat-Su Borough School District

MSHF Mat-Su Health Foundation

 $\mathsf{MSRMC} \qquad \mathsf{Mat}\text{-Su Regional Medical Center}$

NCES National Center for Education Statistics

OCS Office of Children's Services

R.O.C.K. Mat-Su Raising Our Children With Kindness

USBEA U.S. Bureau of Economic Analysis

Socioeconomic Profile

The socioeconomic profile provides a description of the demographic, education, and economy summary of Mat-Su. The data was compiled from the U.S. Census, American Community Survey (ASC), Alaska Department of Labor & Workforce Development (ADOLWD), Alaska Department of Education and Early Development (ADEED), and the U.S. Bureau of Economic Analysis (USBEA).

Secondary Indicators and Data Analysis

Secondary data for this report came from many different sources. The MSHF requested and received data collected by the State of Alaska, Department of Health and Social Services, Division of Public Health, Behavioral Risk Factor Surveillance System (BRFSS), and the Alaska Trauma Registry (ATR) programs. A contracted biostatistician analyzed the reported BRFSS and Births data. Many of the key indicators presented in this report and additional indicators can be found on the MSHF website page entitled *Mat-Su Health Stats*.

Community Groups using Photovoice

Photovoice is a form of participatory action research. This form of research enables community members to take a leading role collecting, analyzing, and reporting data. Using this process a community group comes together to take pictures that "answer a question." For this assessment there were two questions: What in your life or community is challenging to your health? What about your life and/or community is supportive to your health? The group leader and members take pictures to answer the questions and created captions for each picture that describe the answer. Common themes from the group are identified and the pictures are reported in this report. Additionally, a community wide exhibit will feature all of the group displays.

2019 Mat-Su Household Survey

The 2019 Mat-Su Household Survey (HHS) captured information about health needs and priorities that was not available from secondary data sources. The telephone survey of 755 Mat-Su households included both landlines and mobile phones. The sample was geographically distributed across the borough. The survey results were weighted by respondent age to provide a representative sample of Mat-Su households.

CHAPTER 1: MAT-SU 2019 CHNA HEARING EVERY VOICE

"As a community we could spend all our time pulling and eradicating weeds (focusing on the negative), or we could focus on growing and nurturing the trees and large healthy bushes (our community strengths) so that eventually their shade prevents the weeds from growing." (Paraphrased from Nathan Johnson, Providence Health Services Alaska)

In the first Community Health Needs Assessment (CHNA) Steering Committee meeting, two important decisions were made: to take a "strength-based" approach to this assessment, as well as a focus on "Hearing Every Voice." The Steering Committee members argued that the data traditionally used in these assessments are from large surveys – often telephone surveys.¹The Steering Committee identified groups that would be less apt to agree to participate with these types of surveys: They were residents who:

- don't trust systems including the government
- who have just moved here
- who live off the "grid" and don't have phones
- who are living with others (couch surfing)
- are homeless
- who do not speak English well
- are homebound elderly
- are disabled
- are youth
- are recent immigrants and refugees

The committee agreed that we needed to collect information from groups who may not be answering surveys. The Committee proposed the assessment should use a combination of traditional methodology (survey and census data) and a community-based methodology that allowed residents self-determination regarding planning, data collection, and the use of the results. They stated that survey data is important for writing grants, deciding to open programs, or starting new types of services, telling the story of how our community is growing and supporting programs expansions.

A sub-committee of the Steering Committee met and decided that the assessment should be led with the following values:

- State clearly whose voice is being heard when reporting data findings.
- Strive to hear voices of residents from many different situations/circumstances/cultures in the community.
- ▶ Groups participating must have self-determination2. This includes:
 - ▶ Have the Group design and lead the data collection efforts.
 - Give back the data findings and other products of the research.
 - Ensure the Group has control over how findings are presented and if and when they can be shared.

¹These include the Mat-Su Household Survey, the Behavioral Risk Factor Surveillance Survey, the Pregnancy Risk Factor Monitoring System Survey, American Community Survey, and the Child Understanding Behavior Survey.

 $^{^{\}rm 2}$ Adopted from Child Welfare Research and Evaluation Workgroups, Project of the Children's Bureau

- There must be an authentic partnership with the Group. This includes building trust and ensuring confidentiality to participants through an informed consent process.
 - Ensure transparency and honesty in presenting and carrying out the assessment.
 - Treat individuals involved in data collection with kindness and respect as "whole people" and not as research subjects. This includes recognizing and reporting on the context surrounding their data: their culture and stories.
 - Be process-driven, not outcome-driven. In other words, don't try to push forward with data collection at a fast pace. Be in the moment, react in an authentic manner, and respond to what is happening.

How do we hear every voice?

In order to hear every voice, we chose to use both survey data and Photovoice data. The list below shows who we heard from with each type of data collection. We realize that this is not EVERY voice; however, it is a start to hear from groups that may not be represented in typical survey data and whose voice may not have been heard. Additionally, using survey data limits the questions that can be asked on specific topics, and there may be needs that are not asked about.

Figure 1: Types of residents reached by surveys and Photovoice

Survey Data	Photovoice Project
Residents who:	Resident groups participating:
have phones (mobile and	Chickaloon women
landlines)	Chickaloon elders
are willing to do a phone survey	Chickaloon Tribal Citizens/
who answer mail surveys	community
who have no fear in sharing	Knik Tribe youth
information with strangers	 Knik Tribe housing residents
	Filipino residents
	Latinx residents
	Older residents
	Youth from R.O.C.K.
	Residents with BH needs
	Residents from Williwaw
	Community
	Parents with Purpose

Health Issues and Goals that were found

Figure 2 displays the issues that both the survey data and Photovoice projects had in common, and Figure 3 shows how the two different data collection types produced different results. In order to get a list of themes for the Steering Committee to rank in terms of priority to address, we merged the findings from both tables and combined them in a way that all themes were captured. They were then grouped in a way that linked themes in a logical manner and phrased in a strength-based way. Figure 4 listed the final themes that were ranked by the Committee.

Figure 2: Similar Themes from Surveys and Photovoice			
Survey Data Photovoice Project			
Residents with Substance Use Disorders	 Drug abuse including the opioid epidemic 		
Residents who are suicidal, depressed and anxiousSafety and Youth Violence	Mental health and suicideFamily safety and youth violence (bullying)		
(bullying, fights, dating violence, sexual assault)	 Senior issues (building connections with youth, 		
Senior Issues (growing population, falls)	isolation) • Access to healthy affordable		
Food (obesity, lack of healthy diet, diabetes)	food, subsistence food Healthy accessible activities for		
 Residents not having enough physical activity 	children and families Pollution/lung issues – healthy		
Pollution that affects lungs and chronic respiratory disease	environment and climate change		
• Economics – poverty rising	 Economics – poverty, homelessness, poor housing, lack of transportation affecting income 		

Figure 3: Different Themes from Surveys and Photovoice

Survey Data	Photovoice Project
High rates of sexually transmitted disease	The importance of cultural values and community
Low rates of prevention practices helmet use, colorectal cancer and breast cancer screening, flu and pneumonia vaccination	Racial equity and discriminationEnvironmental stewardshipAffordable family activities
 Smoking and drinking during pregnancy Lack of transportation High rates of Adverse Childhood 	 Spirituality feeding the soul Social connections (youth connecting to others, affordable family activities, geographic isolation)
Experiences	

Figure 4: Final Themes that Were Ranked by the Steering Committee

Themes from 2019 Community Health Assessment

- A community without discrimination that promotes equity for all residents regardless of race, ethnicity, or ability
- Communities and residents practicing and celebrating their spirituality and culture
- A healthy environment for outdoor activities including subsistence/recreational activities
- Strong social connections between residents
- Residents with excellent mental health and coping skills
- Families and youth who have healthy relationships and are safe and not at risk for bullying and violence
- Accessible economic opportunities that allow for the ability to afford safe housing and healthy food (assistance needed with: affordable transportation, English as a 2nd language instruction, accessible higher education)
- Affordable and accessible healthy recreational activities for youth, families, and seniors
- Accessible behavioral health care
- Affordable and accessible preventive care including fall prevention, cancer screenings, sexually transmitted disease prevention, and vaccinations

The goals were ranked by the Steering Committee in two different ways

- How important it is to address the goal for the whole borough?
- How feasible it is to address and see progress in the different subcommunities of Mat-Su?³

The areas are as follows:

- Upper Su (Talkeetna, Trapper Creek)
- Glenn Highway (Sutton/Alpine, Buffalo/Soapstone, Chickaloon)
- Parks Highway (Meadow Lakes, Big Lake, Willow)
- Core area (Wasilla, Palmer, Knik Goose Bay)

The following themes came up in both the ranking by feasibility (at least one area) and importance:

- Accessible economic opportunities that allow for the ability to afford safe housing and healthy food
- Families and youth who have healthy relationships and are safe
- Strong social connections between residents
- A community without discrimination that promotes equity for all residents regardless of race, ethnicity, or ability

The following theme occurred in all the sub-communities:

Families and youth who have healthy relationships and are safe

The following themes occurred in 3 out of 4 sub-communities:

- Affordable and accessible healthy recreational activities for youth, families, and seniors
- Accessible behavioral health care
- Affordable and accessible preventive care including fall prevention, cancer screenings, sexually transmitted disease prevention, and vaccinations
- A healthy environment for outdoor activities including subsistence
- Affordable and accessible healthy recreational activities for youth, families, and seniors

³ The feasibility was determined by the answers to the following questions: Is there a champion(s) for the issue?How many entities/organizations/individuals are working on this issue?

Figure 5: Ranked Goals for Mat-Su and Sub-Communities for 2019-2021

<u>Themes Ranked</u> Importance for All Mat-Su	<u>Themes Ranked</u> Ability to Make a Difference - Core Area	Themes Ranked Ability to Make a Difference - South Parks Highway Area	<u>Themes Ranked</u> Ability to Make a Difference - Upper-Su Area	Themes Ranked Ability to Make a Difference - Glenn Highway Area
 Accessible economic opportunities that allow for the ability to afford safe housing and healthy food Families and youth who have healthy relationships and are safe Strong social connections between residents A community without discrimination that promotes equity for all residents regardless of race, ethnicity, or ability Residents with excellent mental health and coping skills 	 Affordable and accessible healthy recreational activities for youth, families, and seniors Strong social connections between residents Accessible behavioral health care Affordable and accessible preventive care including fall prevention, cancer screenings, sexually transmitted disease prevention, and vaccinations Families and youth who have healthy relationships and are safe 	 A healthy environment for outdoor activities including subsistence practices/recreational activities Families and youth who have healthy relationships and are safe Affordable and accessible preventive care including fall prevention, cancer screenings, sexually transmitted disease prevention, and vaccinations Affordable and accessible healthy recreational activities for youth, families, and seniors Accessible behavioral health care 	 Families and youth who have healthy relationships and are safe Affordable and accessible preventive care including fall prevention, cancer screenings, sexually transmitted disease prevention, and vaccinations A healthy environment for outdoor activities including subsistence practices/recreational activities Accessible behavioral health care Accessible economic opportunities that allow for the ability to afford safe housing and healthy food 	 A community without discrimination that promotes equity for all residents A healthy environment for outdoor activities including subsistence Affordable and accessible healthy recreational activities for youth, families, and seniors Strong social connections between residents Families and youth who have healthy relationships and are safe

CHAPTER 2: PROGRESS SINCE THE 2016 ASSESSMENT

Valley Hospital Association Inc. (VHA)/dba Mat-Su Health Foundation (MSHF), a non-profit 501(c)(3) organization, is required by the Internal Revenue Service (IRS) to complete a Community Health Needs Assessment (CHNA) every three years and evaluate the implementation strategy goals and objectives on a yearly basis and to include a summary of the evaluation in this CHNA. This is due to VHA's 35% ownership in Mat-Su Regional Medical Center (MSRMC). MSRMC is a for-profit hospital that, without the ownership interest of VHA, would not be required by the IRS to complete a CHNA or implementation strategy action plan. The information from MSRMC that is contained in this evaluation shows the commitment the hospital has to supporting not only MSHF's mission and outreach to the community, but also to the Mat-Su Borough residents. The process includes:



2016 Community Health Improvement Goals

The overarching goals identified during the 2016 CHNA included:

- Mat-Su Residents have access to an effective and complete behavioral health continuum of care.
- All Mat-Su children and families are safe, healthy and thriving through an engaged and coordinated community.
- All Mat-Su residents have adequate income, housing, transportation, education levels, social connections, and information on resources and health to support good health and access to physicians and behavioral health care.
- All residents are a healthy weight.
- The following diagrams summarize how the work was conducted and the main outcomes and impacts. Following these diagrams the progress on each goal is described in detail. Figure 6 shows the MSRMC way of working in the world. Figure 7 shows the way that the work was approached by the MSHF and the main content of the work. Figure 8 shows the key accomplishments of shared efforts from the Mat-Su Health Foundation and the Mat-Su Regional Medical Center.

Figure 6: Key Accomplishments

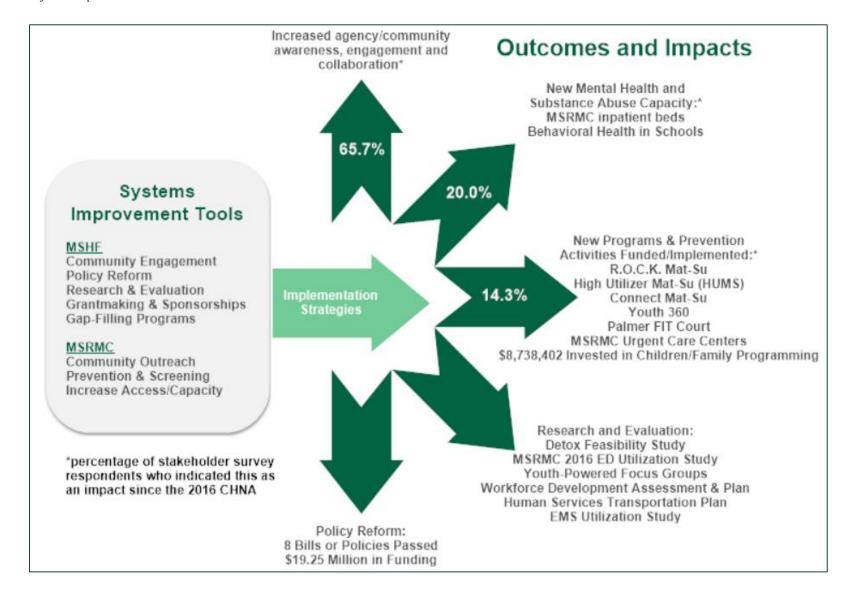
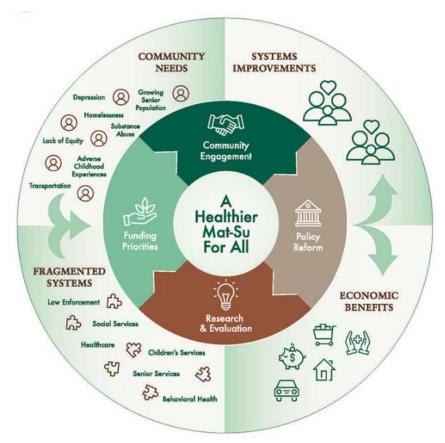


Figure 7: MSHF: Our Way of Working in the World



Community Engagement

Partners include MSHF, MSRMC, R.O.C.K. Mat-Su (Raising Our Children with Kindness), law enforcement and first responders, behavioral health providers, primary care providers, the Matanuska-Susitna Borough, the Matanuska Susitna Borough School District, Knik Tribal Council, Chickaloon Village Traditional Council, senior centers, the Office of Children's Services, the Division of Behavioral Health, local birth centers, and others.

Systems Improvement Tools

Policy Reform

2017:

- Testify at legislative sessions regarding community needs
- ▶ Bills advocated for that passed:
- SB79/HB159 Opioid Prescribing
- ▶ SB83/HB164 Protection of Vulnerable Adults
- SB14/HB132 Ride Sharing Services

2018:

- State law that allows marriage and family counselors to bill Medicaid for their service
- State law that allows behavioral health providers to be supervised by a physician instead of only a psychiatrist
- ▶ \$250,000 in State of Alaska funding for the Alaska Healthcare Transformation Project
- ▶ \$12 million in additional substance use treatment funding
- \$7 million in State Disproportionate Share (DSH) funding for BH inpatient care
- Advocacy Win: for legislation requiring insurers to pay for services via telemedicine
- Advocacy Win: legislation that reduces the caseloads of OCS workers and increases their training
- State law passed that dedicates a portion of marijuana tax revenue to youth substance abuse prevention through after school program funding

2019: (6 months)

- Policy that expands the SHARP program for student loan repayment, resulting in more providers in the Mat-Su
- Member of the Medicaid for All Alaskans Steering Committee. This group brings many organizations together to advocate to protect Medicaid
- 2020 AK Budget Advocacy: funding was fully or partially restored for early education and housing/homelessness

Research and Evaluation

2017:

- Detox Feasibility Study
- ► MSRMC 2016 ED Utilization Data Analysis
- Youth Powered Focus Groups

2018:

- Mat-Su Health and Human Services Workforce Development Assessment and Plan a strategic plan for our Workforce Development Focus Area
- MSHF and the Matanuska Susitna Borough collaborated on a Coordinated Health and Human Services Transportation Assessment and Plan

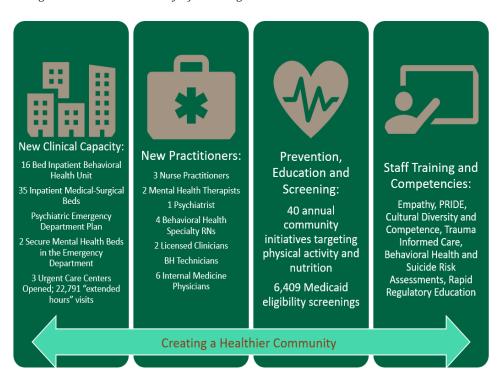
2019: (6 months)

- Human Services Transportation Plan completed
- ▶ EMS Utilization Study

Grantmaking and Sponsorships

- MSHF Academic and Vocational Scholarships
- ► Target Wellness Grants (<\$15K)
- ▶ Healthy Impact and Discovery Grants (>\$15K)
- Strategic Grants
- MSHF and MSRMC Sponsorships

Figure 8: MSRMC: Our Way of Working in the World

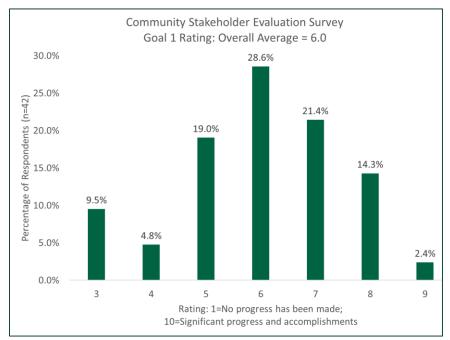


Goal 1: Mat-Su Residents have access to an effective and complete behavioral health continuum of care

Major investments and accomplishments of the implementation plan between 2017 and 2019

Figure 9 shows the results from a survey of key stakeholders in Mat-Su who use the data from the CHNA who were asked to rate the progress that has been made on Goal 1 since 2016.





MSRMC is expanding adult psychiatric and substance abuse treatment.

MSRMC will be opening 16 behavioral health beds on the third floor of the hospital in early 2020. The Psychiatric Emergency Department is also part of Mat-Su Regional Medical Center's Emergency Department Expansion Plan. The timeline for the Emergency Department Expansion Plan was revised because the hospital was able to adjust its other expansion projects and corresponding timelines to expedite the construction of the inpatient behavioral health beds. Two (2) "secure beds" have been designated in the Emergency Department. Four (4) behavioral health specialty RNs were hired in 2018. Two (2) therapists and a psychiatrist were hired in 2019.

MSHF provided more than \$2,400,000 in behavioral health funding support between 2017 and 2019

The funding supported behavioral health services in the Mat-Su Borough to fill gaps in the continuum of care, including:

- behavioral health support in 8 local schools for the 2018 school year, expanding to 11 in 2019;
- operational funding for children and family BH services including the Palmer Families with Infants and Toddlers (FIT) therapeutic court;
- the High Utilizer Mat-Su (HUMS) program to address the needs of high utilizers of Emergency Department Services;
- Child-Parent Psychotherapy Training;
- Crisis Intervention Team (CIT) Training;
- supporting three clinics with integrating SBIRT (Screening, Brief Intervention, Referral to Treatment);
- Peer Support Worker Training;
- expansion of Substance Use Disorder (SUD) outpatient services,
- implementation of harm reduction services.

High Utilizer Mat-Su (HUMS) program implemented to address ED utilization

Funded by MSHF through LINKS, the High Utilizer Mat-Su (HUMS) program is designed to increase patient self-reliance to more effectively address their health care needs by helping them navigate community-based systems and reduce their barriers to accessing appropriate care, resulting in a 62% decrease in ED utilization for 52 patients and an estimated savings of \$1.2 million in the first year of operation.

MSRMC and MSHF Created a Multi-Disciplinary Team (MDT)

The focus and mission of the MDT is to serve the complex needs of the patient by increasing the patient's connection to appropriate community-based services outside the hospital setting. In 2017 and 2018, the group has reviewed 110 cases.

Training a Workforce for a Complete Continuum of Care

The Mat-Su Borough is Alaska's fastest-growing region. This growth is expected to continue in every age cohort over the next three decades, outpacing Anchorage and the entire state. While Mat-Su's employment rate and available labor force have experienced growth, it has not matched the borough's population growth, with an unemployment rate consistently higher than both Anchorage and Alaska since 2008. In 2018, MSHF completed the Mat-Su Health and Human Services Workforce Development and Strategic Plan. The purpose of this assessment is to support strategic approaches to education and workforce training with Mat-Su stakeholders, including Mat-Su Regional Medical Center (MSRMC), University of Alaska Anchorage (UAA), Mat-Su College, along with other educational institutions and employers to ensure a complete continuum of physical and behavioral health care. MSHF offered scholarships and loan repayment support for BH professionals. Between 2017 and 2019, 69 scholarships were awarded by

MSHF for Behavioral health professional. MSRMC was able to fill 89 positions by local residents.

Behavioral Health in Schools Initiative

The Behavioral Health in Schools Initiative included funding to provide behavioral health services in 8 schools for the 2018 school year and expanded to 11 schools for the 2019 school year. Outcomes included development of positive relationships with school staff, a shared commitment among school staff and providers to routinely consult on student needs, and appropriate space accommodations for program services.

Crisis Intervention Team Training

MSHF continues to support the CIT (Crisis Intervention Team) coalition by funding a facilitator (\$25K annually), co-funding a yearly CIT Academy training and co-funding periodic Mental Health First Aid Training. Between 2017 and 2019, 387 first responders have received Mental Health First Aid training, and 67 were trained in the CIT Academy. Another Academy will be held in the fall of 2019. Behavioral health incidents where CIT Officers were involved were less likely to result in hospital transport for involuntary commitment without pending criminal charges. These officers were more likely to report that the subject had been stabilized at the scene and that they had given resources to the subject.

MSRMC trained Emergency Department RNs, ICU RNs and Float pool in Handle with Care and Trauma Informed Care, as well as cultural diversity and cultural competence.

Palmer Families with Infants and Toddlers (FIT) Therapeutic Court

Implemented in 2018, the Palmer Families with Infants and Toddlers (FIT) Court is designed to better support children moving through the court system. Based on recent neurological research, adverse episodes – loss of parental contact, neglect and trauma can actually shape the way a child's brain develops, impacting them for their lifetimes. The effort looks holistically at linking government with health care and social services to improve system efficiency and to enhance communication about children's health and wellness. The court served 11 families consisting of 20 adults and 18 children. Through the court, children can receive a behavioral health assessment, parents can receive mental health, substance abuse and/or trauma assessments and be connected to the appropriate level of care.

- ▶ 50% of children received a behavioral health assessment
- ▶ 85% of parents received an BH assessment and 50% initiated care
- ▶ 100% of parents received a SUD assessment and 75% initiated care
- ▶ 75% of parents received a trauma services assessment and 25% initiated care

SBIRT (Screening, Brief Intervention and Referral to Treatment) Integration

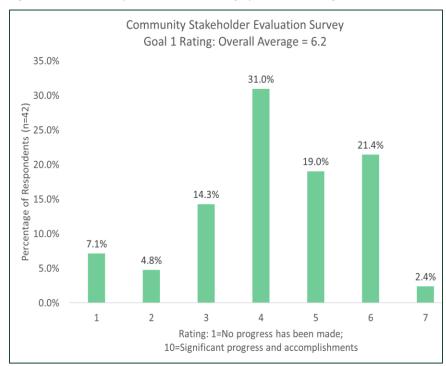
Sunshine Community Health Center (SCHC) had incredible success integrating the use of this screening into the care they provide. Over a 12-month period, SCHC used SBIRT to screen 92.5% (2,166) of eligible patients. Ten percent of these patients tested positive and required a brief intervention or referral to treatment. SCHC estimated a projected collective cost benefit of \$143,843 in healthcare utilization savings due to the screenings.

Goal 2: All Mat-Su children and families are safe, healthy, and thriving through an engaged and coordinated community

Major investments and accomplishments of the implementation plan between 2017 and 2019

Figure 10 shows the results from a survey of key stakeholders in Mat-Su who use the data from the CHNA who were asked to rate the progress that has been made on Goal 2 since 2016.

Figure 10: Community Stakeholder Rating of Goal 2 Accomplishment



Between 2017 and 2019, MSHF provided more than \$8.7 million in grant funding to fill gaps in the array of services and programs that support children and families in the Mat-Su Borough.

The funding supported programs that supported youth development, families involved in the child welfare system, community connections and social support programs, developmental screenings, and parenting and early learning programs.

MSHF continued to serve as the backbone organization for R.O.C.K. (Raising Our Children with Kindness) with the goal of promoting family resilience and eliminating child maltreatment.

- R.O.C.K. supported 15 schools to participate in a year-long process to become "Trauma-Sensitive" schools.
- ▶ The program contracted with Knik Tribe to implement the Building Family Futures Program to offer voluntary, conflict-free case management services to tribal members with a screened-out report of harm.
- R.O.C.K. and other partners launched the Caring Communities program, an initiative designed to create a community where every family has an equal opportunity to thrive.

MSHF investment in early learning initiatives.

The foundation awarded funds for an early childcare quality technical assistance program impacting 517 children and 84 staff. Nine early childhood programs received support and maintained or achieved Level 1 status in Learn and Grow (a quality rating program). Trainings were also held for early educators and administrators. The foundation also provided funding for capital improvement at one center and building a building that will be leased to the local Head Start provider for a new center.

MSHF helped to secure a Robert Wood Johnson Grant to launch Youth 360.

Two pilot sites were created based on a model that was successful in Iceland. The program builds youth connection with positive and meaningful activities for youth afterschool and in the summer that is accessible for all. It also offers education and support for parents and caregivers about the importance of engaging and connecting with youth.

- ▶ 64 students served during the summer of 2019
- After school programs implemented
- 96% of students reported that the program helped them build social connections

Before, after and summer school activities that promote protective factors reached more than 10,000 Mat-Su children.

MSHF provided more than \$1.4 million in funding to more than 50 positive youth development programs between 2017 and 2019.

MSRMC enhanced relationships with birthing centers.

Initiated through a memorandum of understanding between the MSRMC and all birthing centers, improved relationships between the hospital and birthing center has resulted in a sustained improvement in the transfer of mothers and babies in distress.

MSHF and MSRMC promote quality care provision to children and families.

- During 2017, 100% of MSRMC staff received Empathy Training and 100% of all new employees received training on Emergency Management. These trainings continued for 100% of new hires through 2018 and 2019.
- As of 2018, R.O.C.K. supported 15 schools and 5 community organizations to complete a year-long process with the National Council for Behavioral Health to become a Trauma-Informed Organization.
- R.O.C.K. hired a part-time Trauma Sensitive Schools Fellow to support local schools in their efforts and hired an evaluator to assess the progress of these schools.
- In 2018, R.O.C.K. sponsored training for 5 Mat-Su trainers of Stewards of Children (a sexual abuse prevention program) who trained over 150 community members in this program.

Goal 3: All Mat-Su residents have adequate income, housing, transportation, education levels, social connections, and information on resources and health to support good health and access to physicians and behavioral health care

Major investments and accomplishments of the implementation plan between 2017 and 2019

MSHF provided over \$1.5 million in basic needs and care coordination funding.

This included funding for health fairs, public transportation, and food security programs, housing and homeless efforts, as well as capacity-building and operations funding for organizations assisting with basic needs and care coordination.

MSHF launched Connect Mat-Su, a regional resource and referral network and hub.

The program includes a physical location and information database that provides Mat-Su residents with immediate access to the information, referrals, and direct assistance needed for them to thrive physically, mentally, and emotionally.

In 2018 the program served 112 residents, and approximately 3,000 residents utilized the LINKS Parent Resource Center and Aging and Disability Resource Center. In the first two quarters of 2019, 585 utilized Connect MatSu, and 2,529 utilized the LINKS Parent Resource Center and Aging and Disability Resource Center.

MSHF supported local housing and homeless prevention efforts for youth and seniors, including hospice and skilled nursing beds.

MSHF promoted safe and affordable housing for Mat-Su residents by funding Valley Residential Services for the Mat-Su Housing and Homeless Coalition. This funding paid for the coordinator and supported the Homeless Connect Day – an event that links resource providers with homeless individuals and families. The foundation also funded transitional housing at Knik House, Connect Palmer, My House for a homeless youth intervention program, and a guest housing program for LGBTQ youth. The foundation also funded an elevator to make the Valley Residential Service building accessible.

MSHF collaborated with the Matanuska Susitna Borough on a Coordinated Health and Human Services Transportation Assessment and Plan and provided funding to increase access to transportation.

Between 2017 and 2019, more than \$958,000 was provided to local transit providers to increase transit both within the borough and to Anchorage. The transportation assessment was conducted, and the plan developed in 2018 and approved by the borough council in March 2019. MSHF funded a facilitator to bring together providers to discuss implementation of the recommendations. A central dispatch system was established, coordinated by Sunshine Transit including investment in technology to support the system.

MSRMC expanded access to physicians, primary care, and preventative care services.

Three urgent care centers have been opened since 2017 in Palmer, Settlers Bay and Wasilla. There was an increase in the number of patients receiving urgent care during extended hours (defined as after 5:00p.m. on M-F and anytime on the weekends) from 7,001 in 2017 to 11,276 in 2018. A total of 4,514 were seen in the first six months of 2019.

MSRMC also conducts preventative screenings:

- A total of 1,768 glucose screenings and 1,771 cholesterol screenings were conducted between 2017 and 2019.
- A total of 6,409 Medicaid eligibility screenings were conducted during this time frame.
- Expanding access to primary and preventative care is a top priority for MSRMC.
- A total of six (6) internal medicine physicians and three (3) nurse practitioners have been recruited since 2017.

MSHF invested more than \$2.3 million in academic scholarships, many of which are focused on careers that provide a living wage and increase the Mat-Su healthcare workforce.

Table 1: MSHF Scholarships Provided to Increase Healthcare Workforce

Academic	2017	2018	2019
Allied Health	17	26	11
Dental Health	6	15	5
Medical Technician (all types)	6	7	11
Nurse, Nurse Practitioner & Physician Assistant	40	86	78
Other	12	8	6
Paramedic	4	4	1
Pharmacist	0	4	0
Primary Care Physician	8	8	5
Public Health Professional	0	4	1
Specialist Physician	8	13	4
Behavioral Health Professionals	26	17	26
Vocational	2017	2018	2019
Certified Nurse Assistant	8	12	16
Certified Medical Assistant	7	15	16
Emergency Medical Technician	4	2	5

Goal 4: All Mat-Su residents are a healthy weight.

Major investments and accomplishments of the implementation plan between 2017 and 2019

MSRMC-sponsored community physical activity and health and nutrition initiatives.

MSRMC sponsors more than 40 annual community initiatives directly related to physical activity and health nutrition. Included among these are:

- ▶ Bicycle Safety Rodeo
- ▶ Baby & Children's Health Fair
- ▶ Family Health Fair
- Go Red for Heart Health
- Senior Walking Program at the Menard Center
- Senior Fitness Day at MTA Sports Center
- ▶ Senior Circle Health and Wellness Program
- Numerous community walks, runs and bicycling activities

In 2017, MSHF invested \$144,541 in 23 health and wellness community events.

MSHF invested in trails and parks infrastructure

In 2017, MSHF invested \$343,750 into 5 parks and trail projects. In 2018, the Foundation provided a multi-year grant (\$4,950,000) to Mat-Su Trails and Parks Foundation (MTPF) who awarded 9 grants in 2018 and 3 during the first two quarters of 2019. This funded projects that used a total of 1,903 volunteer hours that helped build or maintain 25 miles of trail projects and implement a Trail Stewards Program and an Avalanche Forecaster Project.

MSHF provided almost \$700,000 to support emergency food assistance and senior nutrition.

In 2017, 7 projects were awarded \$52,004 to support food and nutrition programs. In 2019, three senior centers were awarded \$570,004 to fund senior nutrition programs reaching over 25,000 residents. Funds provided at the end of 2019 allowed programs to deliver 26,558 meals to Wasilla area seniors and 1,210 meals to Upper Su seniors.

For more information on Stakeholder Feedback on the use of 2016 CHNA see Appendix B.

Chapter 3: About Mat-Su Residents

Mat-Su is located about 40 miles northeast of Anchorage, contains 27 communities, and encompasses 24, 682 square miles of land and 578 square miles of water. This includes three incorporated cities: Palmer, Wasilla, and Houston. Of the 25 unincorporated regions or Census Designated Places in the borough, most are located within 30 miles of either Palmer or Wasilla. Talkeetna and Trapper Creek are the most distant communities from the economic center of the borough, 55 to 75 miles north of Wasilla.

Why is it important?

In order to understand the health needs of a population, it is important to know the size, age distribution, and household structure of the population. People at different ages and who live in different household types have different health needs that must be addressed by appropriate policies and programs. Additionally, population growth rate trend data can help public health professionals and planners to develop programs that meet the population demand.

What is happening in Mat-Su?

In 2018, the Mat-Su Borough had a population of 105,743, representing 14% of Alaska's total population. Since 2010, Mat-Su's population grew at a faster rate (2.1%) than Alaska's (1.3%). Recently, Mat-Su's population continues to grow while Alaska started to see a decline since 2016.

The average Mat-Su household has 3.6 members. Those employed earn an average monthly income of \$3,587. Income, housing, and education all contribute to a firm foundation upon which the health of a community is built.

In 2017, the percentages of Mat-Su persons experiencing poverty were 14% children, 12% individuals, and 9% families. On average about 13% of children lived in poverty from 2008-2017. Most residents (92%) have a high school diploma or an equivalent by age 25; 22% have earned a college degree. The median age of a Mat-Su Resident is 35.2 years.

The Data

Mat-Su Population and Communities

In 2018, the Mat-Su population was 105,743, living in approximately 29,443 households. Mat-Su households also have larger average households (3.6 persons) compared to Alaska (2.8 persons) with larger average family sizes (4.2 family members compared to 3.4 family members, respectively).

The five largest communities include: Knik-Fairview (19,420), Lakes (9,307), Meadow Lakes (9,198), Tanaina (9,055), and Wasilla (8,801).

The fastest-growing communities with populations greater than 1,000, include: Point MacKenzie (272% since 2010), Fishhook (41%), Gateway (31%), Susitna North (29%), Farm Loop (27%), and Meadow Lakes (22%).

Table 2: Population Indicators

Indicator	Mat-Su Borough	Alaska
ADOLWD, 2018		
Population estimate	105,743	736,239
Population change since 2017 (%)	0.44	-0.22
Population change since 2010 (%)	2.08	1.29
U.S. Census Data, 2018		
Population count	107,610	737,438
Median age (years) 2017	35.2	34.5
Pop 65+ (%)	11.9	11.8
Change since 2010 (%)	81.3	58.4
Population under 19 years (%)	26.8	24.9
Change since 2010 (%)	12.2	-1.9
Number of households, 2017	29,443	250,741
Average household size, 2017	3.6	2.8
Average family size, 2017	4.2	3.4

Source: ADOLWD; U.S. Census, ACS

Table 3: Mat-Su Borough Communities by Population

Community	2018 Population Estimate	2010 Census Population	% Change
Big Lake CDP	3,771	3,350	12.6
Buffalo Soapstone CDP	1,013	855	18.5
Butte CDP	3,624	3,246	11.6
Chase CDP	30	34	-11.8
Chickaloon CDP	254	272	-6.6
Eureka Roadhouse CDP	37	29	27.6
Farm Loop CDP	1,300	1,028	26.5

Table 3: Mat-Su Borough Communities by Population (cont.)

Community	2018 Population Estimate	2010 Census Population	% Change
Fishhook CDP	6,608	4,679	41.2
Gateway CDP	7,265	5,552	30.9
Glacier View CDP	219	234	-6.4
Houston City	2,100	1,912	9.8
Knik-Fairview CDP	19,420	14,923	30.1
Knik River CDP	830	744	11.6
Lake Louise CDP	27	46	-41.3
Lakes CDP	9,307	8,364	11.3
Lazy Mountain CDP	1,560	1,479	5.5
Meadow Lakes CDP	9,198	7,570	21.5
Palmer City	6,223	5,937	4.8
Petersville CDP	6	4	50.0
Point MacKenzie CDP	1,965	529	271.5
Skwentna CDP	35	37	-5.4
Susitna CDP	15	18	-16.7
Susitna North CDP	1,621	1,260	28.7
Sutton-Alpine CDP	1,046	1,447	-27.7
Talkeetna CDP	928	876	5.9
Tanaina CDP	9,055	8,197	10.5
Trapper Creek CDP	445	481	-7.5
Wasilla City	8,801	7,831	12.4
Willow CDP	2,143	2,102	2.0
Balance	6,897	5,959	15.7

Source: ADOLWD; U.S. Census, ACS

Table 4: Population Growth Rate (% Change)

Year	Mat-Su Borough	Alaska
2010-2011	2.2	1.2
2011-2012	2.1	1.2
2012-2013	2.4	0.8
2013-2014	2.4	0.1
2014-2015	1.8	0.1
2015-2016	2.6	0.4
2016-2017	1.7	-0.3
2017-2018	1.3	-0.2

Source: ADOLWD

Table 5: Single Family Households (%)

Year	Mat-Su Borough	Alaska	U.S.
2013	71.1	67.2	65.9
2014	69.6	66.1	65.8
2015	72.0	65.5	65.6
2016	67.6	66.0	65.4
2017	69.7	66.8	65.5

Source: U.S. Census, ACS

The two largest Mat-Su cities are Palmer and Wasilla with populations of 6,223 and 8,801, respectively. Since 2017, the populations of Palmer and Wasilla declined slightly (-1.4% and -0.2%, respectively); however, since 2010, both communities have seen positive growth (4.8% and 12.2%, respectively).

In 2018, Palmer has 2,002 households with an average household size of 3.2 people and an average family size of 4 people. Wasilla had 2,986 households with an average household size of 3.1 people and an average family household size of 3.8 people.

Table 6: Population Indicators: Palmer and Wasilla

Indicator	Palmer	Wasilla
ADOLWD, 2018		
Population estimate	6,223	8,801
Population change since 2017 (%)	-1.4	-0.2
Population change since 2010 (%)	4.8	12.2
Pop 65+ (%)	42.6	55.2
Population 65+ change since 2010 (%)	31.5	30.8
Population under 18 years (%)	-2.1	7.3
Population 19 and under change since 2010 (%)	42.6	55.2
U.S. Census Data, 2018		
Population count	7,306	10,529
Median age (years) 2017	30.7	34.4
Number of households, 2017	2,002	2,986
Average household size, 2017	3.19	3.09
Average family size, 2017	3.97	3.75

Source: ADOLWD; U.S. Census, ACS

Age

The population age 65 and older represents 12% of the Mat-Su's total population in 2018. Since 2010, the senior population grew at an astounding 81% compared to 58% of Alaska seniors overall.

Table 7: Population Age Distribution, 2018

Age Range	Mat-Su Borough %	Alaska %	Mat-Su Borough Count	Alaska Count
0-4	7.4	6.9	7,799	51,153
5-9	8.1	7.3	8,547	53,604
10-14	8.3	7.1	8,763	52,619
15-19	6.9	6.5	7,252	47,566
20-24	5.0	6.4	5,303	47,413
25-29	6.5	7.7	6,839	56,363
30-34	7.1	7.7	7,501	56,857
35-39	7.2	7.2	7,659	52,659
40-44	6.1	5.8	6,471	42,978
45-49	6.1	5.9	6,418	43,476
50-54	6.1	6.1	6,433	45,202
55-59	6.9	7.0	7,327	51,366
60-64	6.4	6.5	6,786	47,679
65-69	5.1	4.9	5,362	36,095
70-74	3.2	3.2	3,334	23,205
75-79	1.9	1.8	1,995	13,490
80-84	1.0	1.1	1,068	7,936
85+	0.8	0.9	886	6,578
Total Population	on -	-	105,743	736,239
Median Age	-	-	35.6	35.2

Source: ADOLWD



"Spending quality time with family and in the community, despite race." From Chickaloon Traditional Council – Elders.

Education

The Mat-Su Borough School District (MSBSD) has 46 schools ranging in enrollment from about 20 to more than 1,000 students. It has six charter schools, three special mission education schools, 21 elementary schools, four middle schools, eight high schools, and four Kindergarten-Grade 12 schools. Total enrollment was 19,101 in the 2018-2019 school year, down by 1.4% since the 2017-2018 school year.

Nine out of 10 Mat-Su adults aged 25 and older have achieved a high school diploma or the equivalent or higher; 22% have a college degree. The percentage of Mat-Su adults earning a college degree was lower than the state (29%) and the U.S. (32%).

Table 8: Mat-Su Borough School District High School Graduation

School Year	<u>2013</u> 2014	<u>2014</u> 2015	<u>2015</u> 2016	<u>2016</u> 2017	<u>2017</u> 2018	<u>2018</u> 2019
Total Enrollment	17,843	18,037	18,745	18,935	19,369	19,101
Number of Graduates	1,115	1,132	1,140	1,161	1,176	N/A

N/A indicates not available. Source: DEED

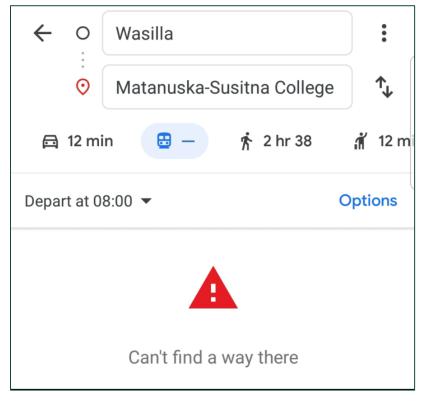


"Access to Education." From Chickaloon Traditional Council – Sutton Women's Group.

Table 9: Education Indicators (%), 2017

	Mat-Su Borough	Alask a	U.S.
High School Students Graduated Within Four Years	81	78	85
High School Diploma or Higher Aged 25 or Older	92	92	88
Bachelor's Degree or Higher Aged 25 or Older	22	29	32

Source: DEED; U.S. Census ACS; National Center for Education Statistics



"Lack of transportation = no access to classes = no good job opportunities."

From Latinx Residents.

Income and Poverty

In 2018, approximately 44,014 Mat-Su residents were employed, and Mat-Suhadan average annual unemployment rate of 7.6%. For more than the past decade, Mat-Su's rate has been consistently higher than Alaska's average unemployment rate. Most of the employed population work in the trade, transportation, and utilities sector (20%), followed by the education and health services (19%), and local government (14%).

Mat-Su per capita income (\$30,409) was lower than Alaska (\$35,065) and the U.S. (\$31,177). Income inequality affects the health of a community. The Gini coefficient of household income inequality is a measure of how disparate incomes are within a community. The Mat-Su Gini coefficient is 0.43, similar to Alaska (0.42) and lower than the U.S. (0.48).

Lower income levels are associated with poor health outcomes. In 2017, 11.9% of Mat-Su residents lived in poverty in the past 12 months. Approximately 9.0% of Mat-Su families lived below the poverty line, higher than Alaska families (7.4%) and slightly lower than families nationwide (9.5%).

Eligibility for free lunch in school serves as an economic indicator. Children need nutrition to be healthy and succeed in school; two out five Mat-Su children are eligible for free lunch.



"Broken down cars, broken homes, broken families, and broken lives." From Chickaloon Traditional Council – Tribal Citizens.

Table 10: Mat-Su Borough Economic Indicators

Indicator	Mat-Su Borough
Annual Average Unemployment Rate (2018)	7.6%
Unemployment Rate (July 2019)	6.5%
Population 16+ Unemployment Rate (2013-2017)	9.8%
Total Personal Income (2017)	\$4.77 billion
Total Earnings by Place of Work (2017)	\$1.87 billion
Residents Employed (2018)	44,014
Average Monthly Wage and Salary Employment (2018)	23,648
Peak Monthly Wage and Salary Employment (2018)	25,230
Wage and Salary Total Earnings (2018)	\$1.02 billion
Average Monthly Earnings (2018)	\$3,587

Source: ADOLWD; U.S. Census, ACS; U.S. Bureau of Economic Analysis

Table 11: Annual Average Unemployment

Year	Mat-Su Borough %	Mat-Su Count	Alaska %	U.S. %
2008	7.6%	3,160	6.7%	5.8%
2009	8.9%	3,776	7.7%	9.3%
2010	9.5%	3,995	7.9%	9.6%
2011	9.2%	3,978	7.6%	8.9%
2012	8.7%	3,789	7.1%	8.1%
2013	8.4%	3,672	7.0%	7.4%
2014	8.1%	3,617	6.9%	6.2%
2015	7.7%	3,552	6.5%	5.3%
2016	8.2%	3,903	6.9%	4.9%
2017	8.2%	3,986	7.0%	4.4%
2018	7.6%	3,640	6.6%	3.9%

Source: ADOLWD

Table 12: Mat-Su Borough Total Employment and Wages by Sector

Sector	Average Monthly Employment	% of Total Employment	Total Wages	% of Total Wages
Federal Government	220	0.9%	\$20,617,342	2.0%
State Government	1,425	6.0%	\$77,503,314	7.6%
Local Government	3,363	14.2%	\$157,617,002	15.5%
Natural Resources and Mining	190	0.8%	\$7,678,697	0.8%
Construction	2,218	9.4%	\$147,263,943	14.5%
Manufacturing	296	1.3%	\$11,258,488	1.1%
Trade, Transportation, Utilities	4,803	20.3%	\$171,515,265	16.9%
Information	528	2.2%	\$32,355,834	3.2%
Financial Activities	853	3.6%	\$41,226,194	4.1%
Professional and Business Services	1,299	5.5%	\$65,547,512	6.4%
Educational and Health Services	4,596	19.4%	\$201,439,963	19.8%
Leisure and Hospitality	2,950	12.5%	\$59,303,399	5.8%
Other	905	3.8%	\$24,459,199	2.4%
Unclassified Establishments	2	0.0%	\$28,300	0.0%
Total	23,648	100%	\$1,017,814,452	100%

Source: ADOLWD



"One-stop care." From Parents with Purpose.

Table13: Economic Indicators

Indicator	Mat-Su Borough	Alaska	U.S.
Income inequality Gini coefficient (2017)	0.43	0.42	0.48
Median household income (2013-2017)	\$74,887	\$76,117	\$57,652
Per capita income (2013-2017)	\$30,409	\$35,065	\$31,177
Poverty level, individuals (2013-2017)	9.8%	10.2%	14.6%
Poverty level, families (2013-2017)	6.8%	6.9%	10.5%
Poverty level, under age 18 (2013-2017)	11.3%	14.1%	20.3%
Free lunch eligible (2018)	42%	48%	N/A
Free/reduced-price lunch eligible (2018)	48%	52%	52%*

Notes: GINI coefficient of household income inequality is a measure of how disparate incomes are within a community. *U.S.% is from 2016-2017. N/A indicates not available.

Source: U.S. Census, ACS; DEED; NCES

Table 14: Individuals Below Poverty Level (%)

Year	Mat-Su Borough %	Alaska %	U.S. %
rear	(95% Confidence Interval)	(95% Confidence Interval)	(95% Confidence Interval)
2000	8.5	8.4	13.2
2008	(6.2-10.8)	(7.6-9.2)	(13.1-13.3)
2000	8.7	9.0	14.3
2009	(6.5-10.9)	(8.2-9.8)	(14.2-14.4)
2010	10.7	9.9	15.3
2010	(7.8-13.6)	(9.0-10.8)	(15.2-15.4)
2011	12.2	10.5	15.9
2011	(8.8-15.6)	(9.7-11.3)	(15.8-16.0)
2012	9.6	10.1	15.9
2012	(7.9-11.3)	(9.4-10.8)	(15.8-16.0)
2012	8.6	9.3	15.8
2013	(7.0-10.2)	(8.6-10.0)	(15.7-15.9)
2014	10.6	11.2	15.5
2014	(8.7-12.5)	(10.3-12.1)	(15.4-15.6)
2015	9.9	10.3	14.7
2015	(8.4-11.4)	(9.5-11.1)	(14.6-14.8)
2016	9.6	9.9	14.0
2016	(7.8-11.4)	(9.0-10.8)	(13.9-14.1)
2017	11.9	11.1	13.4
2017	(10.1-13.7)	(10.1-12.1)	(13.3-13.5)

Source: U.S. Census ACS

Table 15: All Families Below Poverty Level (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	U.S. % (95% Confidence Interval)
2008	4.8 (3.2-6.4)	5.7 (4.9-6.5)	9.7 (9.6-9.8)
2009	5.4 (2.7-8.1)	6.2 (5.4-7.0)	10.5 (10.4-10.6)
2010	7.5 (4.4-10.6)	7.2 (6.3-8.1)	11.3 (11.2-11.4)
2011	8.7 (5.4-12.0)	6.9 (5.9-7.9)	11.7 (11.6-11.8)
2012	6.6 (4.8-8.4)	7.5 (6.7-8.3)	11.8 (11.7-11.9)
2013	6.0 (4.3-7.7)	5.9 (5.3-6.5)	11.6 (11.5-11.7)
2014	7.0 (5.3-8.7)	7.9 (7.0-8.8)	11.3 (11.2-11.4)
2015	6.3 (4.9-7.7)	7.0 (6.2-7.8)	10.6 (10.5-10.7)
2016	6.1 (4.3-7.9)	6.7 (5.9-7.5)	10.0 (9.9-10.1)
2017	9.0 (7.0-11.0)	7.4 (6.5-8.3)	9.5 (9.4-9.6)

Source: U.S. Census ACS

Table 16: Children Under 18 Below Poverty Level (%)

Year	Mat-Su Borough %	Alaska %	U.S. %
rear	(95% Confidence	(95% Confidence	(95% Confidence
	Interval)	Interval)	Interval)
2008	11.9	11.0	18.2
	(7.1-16.7)	(9.3-12.7)	(18.0-18.4)
2009	11.3	12.8	20.0
	(5.9-16.7)	(11.0-14.6)	(19.8-20.2)
2010	15.0	12.9	21.6
	(9.4-20.6)	(11.3-14.5)	(21.4-21.8)
2011	17.5	14.5	22.5
	(10.6-24.4)	(12.4-16.6)	(22.3-22.7)
2012	10.9	13.9	22.6
	(8.0-13.8)	(12.4-15.4)	(22.4-22.8)
2013	10.8 (7.6-14.0)	12.1 (10.7-13.5)	22.2 (22.0-22.4)
2014	13.0	15.8	21.7
	(9.1-16.9)	(13.6-18.0)	(21.5-21.9)
2015	12.2	15.2	20.7
	(9.5-14.9)	(13.4-17.0)	(20.5-20.9)
2016	9.0	14.1	19.5
	(5.8-12.2)	(11.9-16.3)	(19.3-19.7)
2017	14.0	14.9	18.4
	(10.8-17.2)	(12.4-17.4)	(18.2-18.6)

Source: U.S. Census ACS

R.O.C.K. Mat-Su Youth Leadership Council

R.O.C.K. Mat-Su (Raising Our Children With Kindness) is a place-based collective impact initiative consisting of individuals and organizations that joined together in 2014 to promote family resilience and reduce child maltreatment in the Matanuska-Susitna Borough (Mat-Su) in Southcentral Alaska. The Youth Leadership Council targets youth ages 12-18 years old in the Mat-Su. The youth that participate develop leadership, public speaking, and critical thinking skills while also being exposed to diverse ideas and situations occurring in the community.

The R.O.C.K. Mat-Su Youth Leadership Council group consisted of members who held positions on the Council as youth leaders in the Mat-Su Valley. The Youth Leadership group had five (5) participants, but only two of them took pictures. There were 6 pictures with captions submitted from this group.

The R.O.C.K. Mat-Su Youth Leadership Council hosted their groups meetings during their regularly scheduled Youth Leadership meetings. All their participants were recruited via this meeting. They held all three group meetings as stated in the methodology section.

Themes Identified by Group

- 1. Healthy relationships
- 2. Food insecurity
- 3. Housing

- The Group Leader thought that there would be more youth who would have been interested in taking part in the Photovoice project. Regardless of the small participation, the small group was able to have rich discussion about the issues that faced them and other youth in the Mat-Su.
- 2. The Group Leader believed they did a superb job of delivering a Photovoice description through a presentation. They thought that there was a high level of understanding, and youth participants were very excited to start thinking about ideas on how to execute the project.
- 3. At the Group Leader Convening, this group shared challenges that were faced by youth regarding healthy relationships, food insecurity, housing (homelessness), as well as the lack of social connections in their neighborhoods.



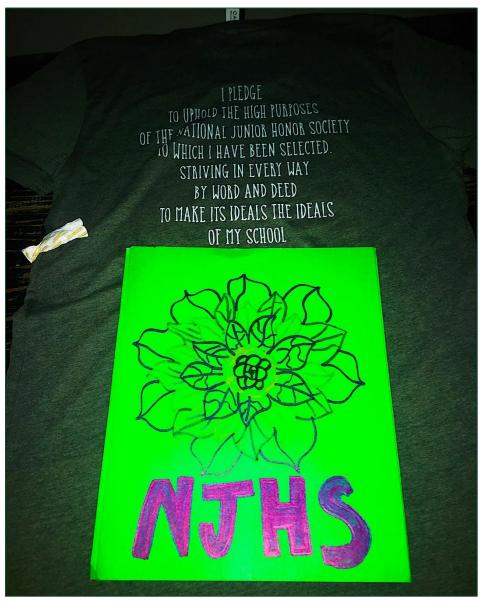
"Homeless vs. Home – it is important to have a healthy home."



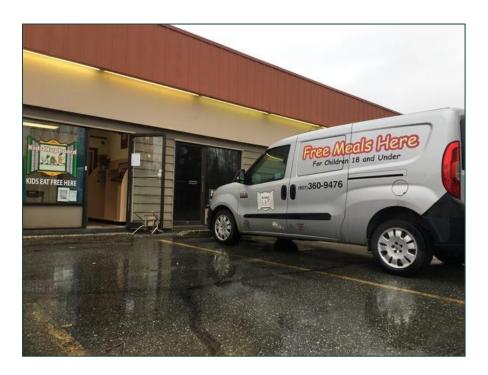
"Affordable Activities – we need to make sports more affordable for children that can't afford."



"This is a photo of a rundown home in Big Lake. Homes like this are typical in the northern Mat-Su Valley. Many children grow up in homes like this and experience the many negative consequences associated with rundown living conditions, such as neglect and drug abuse. This photo also represents all the problems that plague rural communities, drug abuse, homelessness, domestic violence, etc. These problems all feed into one another and are especially noticeable among children. However, hope is found in many social programs for children that help them deal with these living conditions and the associated problems. More funding for these programs and the establishment of newer ones that deal with the root causes would help this problem immensely."



"National Junior Honor Society Program – teaches responsibility, kids have a voice, keep up the good work!"



"This photo shows the Kids Kupboard office in Big Lake. This is a free service where kids 18 and under can come and get a free meal. This shows the reality of food insecurity among young people in the valley. Furthermore, it relates to the previous pictures because it is harder for kids to form healthy relationships when they are worried about where their next meal will come from. Many problems feed into the issue of food insecurity, drug abuse, domestic violence, and homelessness are just some of the problems that feed into child hunger. Some possible solutions that could be implemented include increased funding to this program and others like it."

Knik Tribe – Youth

The Knik Tribal Council is a federally recognized tribal government. Comprising over 1,800 tribal citizens, Knik Tribal Council serves its Tribal Members and all other Native American and Alaska Native People within its service area. The tribal government includes the following departments: a Housing/Community Services Department, Tribal Development Department, Finance Department, Information Technology Department, and Administration Department. Knik Tribal Council serves the six thousand Alaska Native and Native American People living within the Knik service area.

Although this group had two subgroups representing different populations, they all worked and met as one joint group. The two groups represented by Knik Tribe were: Knik Tribe – Youth and Knik Tribe – Housing. The Knik Tribe – Youth group focused on hearing the voices from Alaska Native and other youth in the Knik Tribe community.

The Knik Tribe had six (6) participants, but only three (3) of them took pictures. There were 3 pictures with captions submitted from this group. Though the group had two sub-groups, they submitted all their pictures as one group.

Knik Tribe recruited participants using individuals who worked with their community members in the various subgroups mentioned above. They held all three group meetings as stated in the methodology section.

Themes Identified by Group

- 1. Healthy and accessible activities for children and families
- 2. Support for families and individuals

- The Knik Tribe's first group meeting didn't go as well as the Group Leader had expected. This was primarily due to the low numbers of participants attending. Though there were only six participants when they expected more, the group leader stated that the participants who did come to the meeting were highly engaged and excited to be a part of this Photovoice project.
- 2. The Group Leader also believed that the participants who attended the meetings were invested and wanted to show their creativity using this project.
- 3. One of the most striking conversations was that of a young Native woman who shared a picture of her "aftercare for a suicide attempt on her life" (pictured below). This young Native woman was truly taken aback by the lack of compassion given to her by the medical system. She said that after she was taken to the hospital for trying to take her own life, the only follow-up she received was a nearly \$9,000 bill with no check-in to see if she was okay or needed any other follow-up care. It wasn't easy for her to share this, but she knew she had to for it to have an impact and hopefully change the broken system of care for those suffering with suicide attempts or suicidal ideations.



"Any activities that youth (or anyone) would want to participate in cost a lot of money. If a child/youth wants to engage in community sports or activities, the parents' limited income shouldn't hold them back. Sports and other activities are usually a child's first time learning about teamwork, work ethic, and what interests them. If money is the only barrier to manifesting these qualities from our kids, it should be an easy barrier to overcome."



"Families who live with a substance abuser go through many high-stress, or even traumatic, experiences, and they usually go through them alone. These bottles were found in the backyard of a Wasilla resident, and they knew immediately they belonged to their mother. This resident expressed a feeling of hopelessness watching their mother struggle with substance use disorder and not seek help. Individuals and families like this need to know what resources are available to them as support and how they can utilize them."

PROV Health & S	ROVIDENCE THIS IS A B		Pago 2 of			
Detailed Ad	count Activity					
Date	Description	Charges	Insurance Pmts/Adjs	Patient Pmts/Adja	Patient Balance	
Outo Patient: Provider:	Conscription Acct Location: Alaska Me		Penta/Adja Status		Balance	
Oato Putient: Provider:	Acet		Penta/Adja Status	Pents/Adja Final Notice seet, Emergency M	Balance	200

"This bill was received shortly after being released from a psychiatric unit for suicidal behaviors. The only follow-up that reached the patient was a bill. This implies there was no safety/treatment plan developed. This bill eventually went to collections, and the patient needed to determine how this was going to be paid. This reveals a significant gap in suicide prevention within the medical system. An in-depth safety/treatment plan should have been developed. This ensures patient safety after discharge through verbal contact with either the patient or an identified person within the safety plan."

Parents with Purpose

The Parents with Purpose group came out of CCS Early Learning, which is a non-profit that provides Head Start and Early Head Start services, programs for children from birth to 5 years, with five centers in Mat-Su and one center in Chugiak-Eagle River. This group has been providing quality early childhood education and family services for children for over 45 years.

The Parents with Purpose group consisted of families who have used services through the non-profit. These families consist of individuals who used the CCS's services to reach their family's goals to better support their children in reaching their next developmental goals. The Parents with Purpose group had four (4) participants, all of which took pictures. There were 11 pictures with captions submitted from this group.

The Parents with Purpose group recruited participants by first thinking about families and staff they knew would probably be interested. Then they made contact by phone, which was later followed up by a formal email sent to participants. They had invited 8 persons, but had only 4 participants accept. This group was led by two group leaders who both worked for CCS Early Learning. They held all three group meetings as stated in the methodology section.

Themes Identified by Group

1. Community within our community

- 1. One of the participants invited to group meetings was unable to attend the meeting physically because they were stuck out of town due to the fires in Sterling; however, they were excited about the project and phoned in to the first meeting.
- 2. The Group Leader said their first meeting was really successful. After they did their initial presentation on the Photovoice project, participants had many questions, making the meeting conversational, which the Group Leaders think led to group cohesion and better discussion about the issues they faced.
- 3. Participants were extremely thankful for the opportunity to showcase their perspectives with the larger Mat-Su, and they saw the potential opportunity in this project to actually get the change for issues affecting them.
- 4. One of the participants from this group attended the Group Leader Convening and was very vocal. They spoke a lot about the lack of social connection throughout the Borough and that they lived in the same apartment for years, but yet they didn't know their neighbors because they were standoffish. Another notable mention was that the destruction of the Cottonwood Creek Mall created a void in the community for persons (especially elderly) to have a place to socialize and walk around particularly during the cold times of year.



"Hope for the homeless."



"Harvesting Hope."



"Family Destruction."



"Transporting our Future."



"Feeding families."

Chickaloon Traditional Council - Elders

Chickaloon Native Village, Nay'dini'aa Na', meaning "the river with the two logs across it," is a vibrant, innovative, and culturally rich Ahtna Athabascan Tribe located in Sutton who have occupied this area for the past 10,000 years.

The Chickaloon Traditional Council – Elders group did their project with Tribal Elders throughout their community. Each week an Elder's Lunch is hosted in the Chickaloon community and Elders, Tribal Citizens, community members, and Ya Ne Da Ah Students are all welcome to join. The Elders lunch is used as a way to ensure Elders get a weekly hot meal while also providing opportunities to offer services and keep Elders engaged. These weekly lunches provide the opportunity for socialization and community connection to strengthen cultural and traditional understanding and pass on Elder stories and knowledge to younger generations. The Chickaloon Elders group had five (5) participants, all of whom took pictures. There were 16 pictures with captions submitted from this group.

The Chickaloon Traditional Council – Elders group recruited participants by attending and selecting willing Elders from their weekly Elder's lunch. The Group Leader discussed their possible participation in the Photovoice project at the lunch and then made plans to assist them with their pictures and the remainder of the project. They only held two group meetings instead of the three as stated in the methodology section.

Additional Prompts Used

What does your ideal community look like?

Themes Identified by Group

- 1. Traditional Ahtna Culture & traditional cultural values and community
- 2. Social connections
- 3. Support for elders in need
- 4. Accessible services
- 5. Racial equity
- 6. Veterans' ability to get support

- 1. This group chose to use one additional prompt (stated above). This prompt was used to allow participants to visualize what it would mean to have an ideal community in relation to their health. This was impactful, since the Elders have a great understanding of what good health means with respect to their tradition and culture.
- 2. The Group Leader from this group who was not a Chickaloon Elder themselves stated that they really appreciated the opportunity to work with the Elders. They said that it really helped them to better appreciate their culture and the knowledge and perspective of the

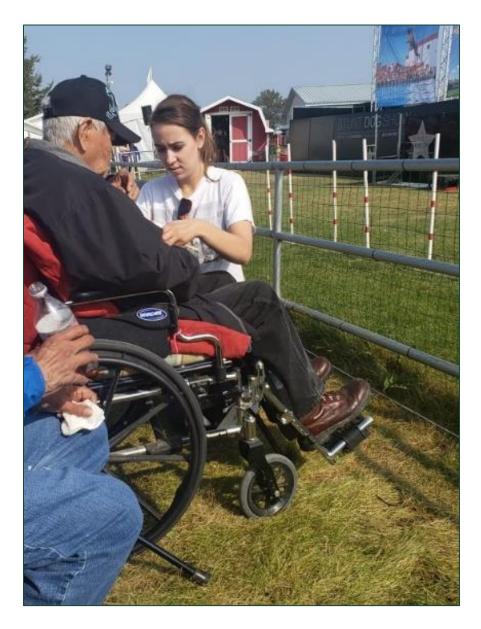
- Elders. They were able to bond with the Elders a lot more closely than they typically did, which was empowering for them.
- 3. The first meeting went very well with the Elders having thoughtful responses to the prompts. In this meeting, the Elders were able to come up with great ideas for the pictures that they wanted to take, and this sparked rich discussion about their community and how they felt about it.



"Singing Dene' songs and traditional dances always makes me happy."



"Respect for Elders, passing on Values, opportunities to share food, socialize and participating in activities while being respected as an Elder."



"When I am ready to ask for help."



"Passing on traditions and knowledge by sharing it with young people. Learn the language." $\,$



"The emotional and mental challenges of living alone and the lack of companionship."

Persons of a Certain Age

The "People of a Certain Age" group consisted of members who were over the age of 65 years old. The group was an all-female group with members who have lived in various regions of the Mat-Su Valley for many years. They shared their perspective on health from an older-aged individuals' eyes living in Mat-Su.

The "People of a Certain Age" group had six (6) participants, all of whom took pictures. There were 31 pictures with captions submitted from this group. The "People of a Certain Age" group recruited participants through their friend networks. They reached out to individuals either by calling or emailing to solicit interest in the Photovoice project. The Miscellaneous group was led by two group leaders. They held all three group meetings as stated in the methodology section.

Themes Identified by Group

- 1. Our endangered natural world
- 2. Community support
- 3. Feeding the soul
- 4. Our stunning natural world
- 5. Accessibility

Stories

1. There was one participant who was a bit skeptical about the Photovoice project prior to the first meeting, but 30 seconds into hearing more about the project from the Group Leaders they made up

- their mind to be a participant and enthusiastically embraced the project.
- 2. One participant in this group was an 80-year-old lady. She was not confident to take part in the project alone, so her daughter decided to

be her helper throughout the project, which shows how important the participant thought it would be to be a part of this project.

- 3. This group finished up their project with a reflection and chose three quotes to sum this up:
 - "The environment around you shapes who you are." Halsey
 - Our environment, the world in which we live and work, is a mirror of our attitudes and expectations." Earl Nightingale
 - "Everyone becomes a creation of their environment." Steven Redhead

many theking bitch, hetmania, princess, pinkep of he's gripedfected, hit, and graded may butt, he's and to " You have a fine ass girl and has short, six and, better my craits he" done this to a lat of grital . He made a roull relative to alst told me he has been abused I told my is Since she work with palce. I don't thirk I tdd my mom about end of this I'm kinda afraid to talk about it. It's pired me down and tried to kiss mir. He's Add my three will be bad illings, if I lold angenz, I know i not true, her also called his ex, and l PRINCE ALL THE TIME. He calls !

"Bullying!"



"Short Hours for the Hungry?"



"Unsurpassed Beauty."



"Lonely Senior."



"Neighborly?"

CHAPTER 6: VOICES FROM DIVERSE CULTURES IN MAT-SU

Kabayan Inc. Filipino Community in Mat-Su

Kabayan Inc. is a local non-profit that was started in 2016. They are dedicated to Filipinos and Filipino-Americans in the Mat-Su and they promote Filipino cultural awareness by covering topics about education resources and health and wellness programs. The Kabayan Inc. group had three (3) participants, all of whom took pictures. There were 15 pictures with captions submitted from this group.

The Kabayan Inc. group recruited participants by sharing the information on their Facebook page, as well as reaching out to friends in the community who may be interested. The group leader did not think their first meeting went well because their participants were confused about the Photovoice project. After the first meeting, the Group Leader reached out to the MSHF Community Health Fellow to attend their next meeting to better clarify what was expected from participants. They held four meetings, which included the one meeting they had with the assistance of the MSHF Community Health Fellow.

Themes Identified by Group

- 1. Homelessness
- 2. Addiction and substance abuse
- 3. Outdoor environment

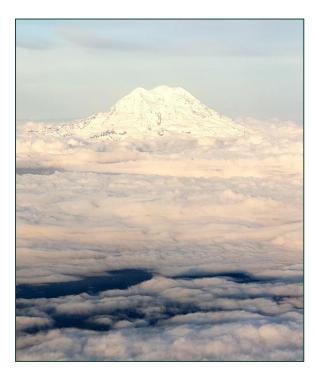
- 1. At the group's first meeting, although there was a bit of confusion, participants were curious and asked many questions about the Photovoice project and how it worked. The Group Leader wanted assistance for their next meeting to get everything on track.
- 2. The meeting that the MSHF Community Health Fellow attended went extremely well, and the participants got a better grasp of what was being asked of them for this project. There was still some confusion about how to caption the pictures, but when the Community Health Fellow prompted the group members to explain what they wanted the audience to know about their initial pictures, the conversation was so rich that they had clarified how to write captions themselves through this. Participants opened up about how drugs and addiction had affected different persons close to them in their lives and were visibly emotional when they shared these stories in the group meeting.
- 3. The Group Leader and participants were happy that they got the chance to share their perspectives on health in the Mat-Su because they did not think that there was enough opportunity for them as the Filipino community to share their culture in their new home.



"Homeless – Never look down on someone else less unfortunate than yourself, unless you're helping them up."



I feel broken the only solution I can think of is to end everything."



"I am going to reach the top of my dream and I will live happy and content."



"DRUGS – destroy somebody's life little by little until you hit rock bottom."



"SCARED BUT BRAVE – Road to success is not easy lots of obstacles and trials I'm scared but brave enough to go on. To face all the challenges and discover the light on the other side of the road."

Latinx Residents

Latinx Residents was a group formed by persons of Latin American origin. Latinx refers to a person of Latin American origin or descent and is used as a gender-neutral/non-binary alternative to Latino or Latina. The Latinx Residents group consisted of a group of females of Latin American origin who wanted to share their experiences and perspectives of health with the wider Mat-Su Borough. The Latinx Residents group had three (3) participants, all of which took pictures. There were 10 pictures with captions submitted from this group.

The Latinx Residents group recruited participants using a group chat that the Group Leader was a member of to solicit interest in the Photovoice project. This group did not have any time that all the participants could meet simultaneously, thus the Group Leader decided that they would do all of their meetings via phone calls. The Group Leader shared all necessary information using the group chat app and followed up with each participant via phonecall to ensure they had a greater understanding of the Photovoice project.

Themes Identified by Group

No themes were identified by the Latinx Residents.

Stories

1. The Group Leader was unsure of how successful their project would go, since they were not going to physically meet with group participants. The Group Leader stated that she was happy by the engagement and wiliness to participate from others in her community. What had seemed like a barrier to participation allowed the group to have flexible participation where participants were able to engage with the Group Leader when it best suited them. The Group Leader said the one-on-one approach allowed her to explain the project with greater understanding to this group's participants.



"Fruits and veggies are very expensive."



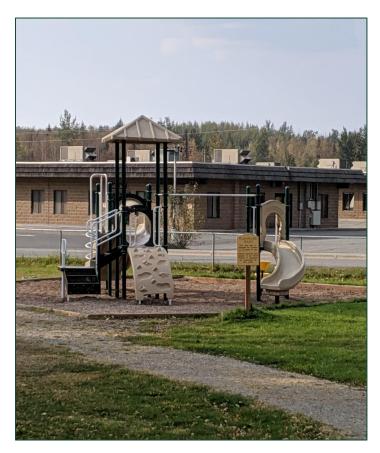
"Easy access to outdoors keep us in good physical and mental health."



"Blueberry picking in Hatcher Pass. Great peaceful family activity."



"More healthy options are needed at stores."



"Fun places to play."

CHAPTER 7: THE VOICES FROM COMMUNITIES IN MAT-SU

Williwaw Community Residents

Williwaw is a community in transition that is located just outside the city limits of Wasilla in the Mat-Su. The Williwaw Subdivision was purchased in the mid-1900s to develop a campground for travelers and families who wanted to enjoy the Wasilla Lake. However, this venture failed and left the community distraught. Williwaw soon became labeled as the "hood" near Wasilla because many homeless and impoverished individuals suffering from neglect and substance abuse chose to reside here.

Community members wanted to make a positive change to improve the neighborhood and thus gathered together and eventually began a non-profit called Families for the Improvement of Safety & Health (F.I.S.H.). This non-profit began to revitalize the area by focusing on neighborhood unification to better everyone's health, family support, quality of life, and making the neighborhood a desirable and safe place to live and raise children.

The Williwaw Community Residents group was led via the F.I.S.H. non-profit and consisted of community members from the Williwaw community who want to make positive change in the neighborhood. The Williwaw Community Residents group had nine (9) participants, all of whom took pictures. There were 22 pictures with captions submitted from this group.

The Williwaw group used F.I.S.H.'s Facebook page to garner interest and recruit participants to take part in the Photovoice project. They held all three group meetings as stated in the methodology section.

Theme Identified by Group

1. Community in Transition

- When first reaching out to the Group Leader from this group, there
 wasn't a clear understanding of the Photovoice project; nonetheless,
 they wanted to participate in it. They believed it would give them the
 opportunity to showcase the positive changes they were making in
 their community.
- 2. Williwaw's Community Resident group was able to tell a story in their pictures and captions. It truly showed how the Williwaw community is in a transition that is being led by F.I.S.H. and other enthusiastic community members. They shared that for too long their community has been overlooked as the "hood," and they wanted to ignite positive change to improve the quality of life for all living in their community. Williwaw's Photovoice project speaks to the fact that if you want to see change in your community, you have to be the driving force to start that change. They have truly outlined a way for other communities within Mat-Su to advocate and see the positive change in their neighborhoods.



When the campground concept was not successful, lots were slowly sold off and became inexpensive land purchase for people. As an unfortunate result, it created a situation wherein that conveniently located community became known as the 'hood' of Wasilla. Williwaw still bears the burden of that heavy stigma today."



"With approximately 100 school-aged children bussed from Williwaw each day to surrounding schools, the situation becomes a safety concern for families. Roadways and ditches at the bus stops are cleaned regularly by community members."



After only one year of those suffering from addiction living on Williwaw property, the devastation left behind is insurmountable."



"With the opioid crisis hitting Alaska with a vengeance, the 'hood' has become a haven for homeless addicts. Williwaw's accessibility to the city center of Wasilla makes it easier for those in addiction and without transportation to call the community home. Homes are constructed out of trash for basic shelter."



"Community members volunteer their time to clean up, rebuild, and renovate."



"Professional builders step in and invest in the 'hood' by creating affordable housing for families."



"The future of Williwaw."

Chickaloon Traditional Council – Sutton Women's Group

Chickaloon Native Village, Nay'dini'aa Na', meaning "the river with the two logs across it," is a vibrant, innovative, and culturally rich Ahtna Athabascan Tribe located in Sutton where they have occupied this area for the past 10,000 years.

The Chickaloon Traditional Council – Sutton Women's Group was a women's group created for this Photovoice project. It consisted of women who lived in the Sutton region of the Mat-Su Borough; some members were Tribal citizens while others were Chickaloon community members. The Chickaloon Traditional Council – Sutton Women's group had seven (7) participants, all of whom took pictures. There were 63 pictures with captions submitted from this group.

The Chickaloon Traditional Council – Sutton Women's group recruited members by using Tribal citizens and staff who have worked for Chickaloon to seek willing women to participate in the Photovoice project. They only held two group meetings instead of the three as stated in the methodology section.

Themes Identified by Group

No themes were identified by Chickaloon Traditional Council – Sutton Women's Group.

Additional Prompts

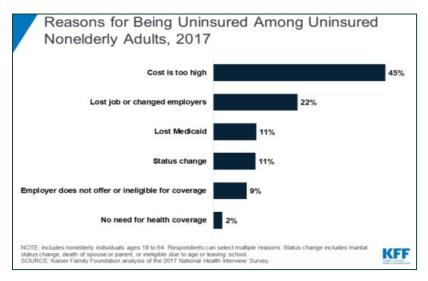
What does subsistence look like in your community?

Stories

1. This group chose to use one additional prompt (stated above). This was used to better get an idea of what participants think are necessities for being able to support oneself, which gave rise to what are the essentials to living life throughout the Chickaloon community.



"Wellness center - it's more than just a clinic."



"Rise in health care cost."



"The road to the dark side."



"Sonic – Styrofoam and plastic straws, going backwards instead of forwards!"



"Catch what you eat and eat what you catch!"

Chickaloon Traditional Council – Tribal Citizens

The Chickaloon Traditional Council – Tribal Citizens group did their project with all other residents in the Chickaloon Native Village who had interest in the project. The Chickaloon Traditional Council – Tribal Citizens group had nine (9) participants, all of whom took pictures. There were 49 pictures with captions submitted from this group.

The Chickaloon Traditional Council – Tribal Citizens group recruited participants by inviting Tribal citizens and staff who have worked for Chickaloon and are engaged in community activities to participate in the Photovoice project. There was also a focus on asking individuals who don't typically get asked to attend meetings. They only held two group meetings instead of the three as stated in the methodology section.

Additional Prompts

How does culture and environment affect our health? What does our ideal community look like?

Themes Identified by Group

- 1. Food sovereignty and the importance of food security
- 2. Climate change and the importance of environmental stewardship
- 3. Youth resilience (through activities in the community)
- 4. Geographic isolation challenges

- This group chose to use two additional prompts (stated above). These
 prompts were chosen through passionate discussion about what
 questions will encompass and allow participants to display their
 health perspective through the eyes of their culture.
- Participants in this group were very enthusiastic about the project and
 for the opportunity to be heard. The group leader said that all
 participants communicated well with each other and with a high
 degree of honesty, which allowed for the meetings to go smoothly and
 finish quicker than expected.
- 3. The Group Leader stated that they wished that they could have had more participants than the maximum amount of 10 because they believed that they could easily have filled another 10 slots with eager and enthusiastic participants. This shows the buy-in that the community members had with this project and the yearning for the

wider community to hear their voice.



"Our ideal community cares for all living things."



"Culture is not static and it needs to be shared."



"A healthy climate supports family fun."



"Sharing ancestors knowledge from Elders to youth feeds our bodies and our spirits." $\,$



"Profiting off of alcohol dependence and enabling substance abuse creates chaos for families and our community."



"Transportation Challenges: No safe biking paths create dangerous road conditions."



"What we are taught about our history can help us create a healthier future."

CHAPTER 8: THE VOICES OF RESIDENTS FROM SOCIAL SERVICE GROUPS

Mat-Su Health Services

Mat-Su Health Services began as a community mental health center in 1977 and has provided community health services for the last 30+ years. They grew to become a Federally Qualified Health Center in 2005 and now provide primary care, integrated medical, and behavioral health care to the community.

The group from Mat-Su Health Services consisted of individuals who have been patients of the organization. This group consisted of individuals suffering from issues related to mental health and substance use disorder.

The Mat-Su Health Services group had four (4) participants, all of whom took pictures. There were 35 pictures with captions submitted from this group.

The Mat-Su Health Services recruited participants using staff who knew individuals who wanted their voices to be heard. Once a list of persons were identified, the Group Leader reached out to each individual via the staff who identified them. They held all 3 group meetings as mentioned in the methodology section.

Themes Identified by Group

- 1. Pastimes that help and interfere
- 2. Out my backdoor
- 3. Barriers
- 4. Limited funding
- 5. Coping skills

Stories

- 1. In their first group meeting, after explaining the Photovoice project to them, participants had lots of excitement and engagement. Some participants shared personal stories of struggles in their lives, which helped the Group Leaders build rapport with them. Additionally, there was one participant who could not physically attend the first meeting because of the fires, but they were ecstatic to be able to participate by phone.
- 2. One of the participants was a mother who had an autistic son, and both of them took part in the group meetings together, which showed the group leader how empowering the Photovoice process could be.
- 3. Another participant was a young man who only had friends online because he was very shy in person. After hearing this, the other group members showed encouragement and were inclusive by helping him to participate and feel like he belonged.



"No Paths, where do I go??? Exciting, scary, lost, thrilling...overwhelming!!!"



"Alone even with friends."





Cab Vouchers - "Curb-to-curb service" for those lacking transportation - Always wished for a city bus to and from appointments. Don't have that here. The taxi rides are a godsent. But deep down one knows that this very generous service can not last forever. A backup plan needs attention. "I wish there was a city bus... much cheaper."



"Indoor gardening brings jobs and gives me something to do and focus on." $\,$

Knik Tribe - Housing

The Knik Tribal Council is a federally recognized tribal government. Comprising over 1,800 tribal citizens, Knik Tribal Council serves its Tribal Members and all other Native American and Alaska Native people within its service area. The tribal government includes the following departments: a Housing/Community Services Department, Tribal Development Department, Finance Department, Information Technology Department, and Administration Department. Knik Tribal Council serves six-thousand Alaska Native and Native American people who live within the Knik service area.

Although this group had two subgroups representing different populations, they all worked and met as one joint group. The two groups represented by Knik Tribe were: Knik Tribe – Youth and Knik Tribe – Housing. The Knik Tribe – Housing group focused on getting individuals who were working the Knik's housing program to find safe and affordable housing.

The Knik Tribe had six participants, but only three participants took pictures. There were two pictures with captions submitted from this group. Though the group had two sub-groups, they submitted all their pictures as one group.

How their Photovoice project differed

Knik Tribe recruited participants using individuals who worked with their community members in the various subgroups mentioned above. They held all three group meetings as stated in the methodology section.

Theme Identified by Group

1. Safety for our families and children

Stories (Same for both Knik Tribe groups)

- The Knik Tribe's first group meeting didn't go as well as the Group Leader had expected. This was primarily due to the low numbers of participants attending. Although there were only six participants when they expected more, the Group Leader stated that the participants who did come to the meeting were highly engaged and excited to be a part of this Photovoice project.
- The Group Leader also believed that the participants who attended the meetings were invested and wanted to show their creativity using this project.
- 3. One of the most striking conversations was that of a young Native woman who shared a picture of her "aftercare for a suicide attempt on her life" (pictured below). This young Native woman was truly taken aback by the lack of compassion given to her by the medical system. She said that after she was taken to the hospital for trying to take her own life, the only follow up she received was a nearly \$9,000 bill with no one checking in to see if she was okay or needed any other follow-up care. It wasn't easy for her to share this, but she knew she had to for it to have an impact and hopefully change the broken system of care for those suffering with suicide attempts or suicidal ideations



"The Mat-Su Valley has a plethora of hiking trails and recreations spots that are not only accessible but abundant with healthy and nutritious natural resources.

This can encourage healthy behaviors including physical activity and nutritional & traditional eating habits. It can also bring families together and allow them a space to strengthen relationships."



"This newly established section to an existing subdivision has a literal end to the sidewalk. The rarity of sidewalks is concerning in the Mat-Su Valley, since it is the fastest growing borough in the State. To reflect this growth, we need safety measures taken to ensure our children and families can walk safely in their neighborhood and throughout our communities. This will promote healthy habits such as physical activity, community engagement and mindfulness."

CHAPTER 9: HEALTHCARE ACCESS DATA

Why is it important?

For people to "access health care," several factors must be in place. They must be able to locate the appropriate care, travel to an appointment at a convenient time, be able to pay for it, and be able to understand and benefit from the care that is provided. Having access to health care is important for all ages for people to have optimal health. Illness, trauma, and accidents may require immediate medical care in order to restore health. At different life states, preventive care, such as screenings, can be conducted and lead to decreased disease and better health. Having access to care includes obtaining preventive care screenings. Preventive care is recognized as a cost-effective way to identify and attend to health problems early before they become life-threatening or debilitating and more costly.

What is Mat-Su's Status?

In Mat-Su, most residents have some form of health insurance (85%), and 5 $\,$

60% have a regular primary care provider. These two factors increase the likelihood that a person will seek appropriate health care throughout their lifetime. Since 2014, the percentage of residents with insurance or a regular care provider has not changed much. Most Mat-Su adults who have insurance have private or employer insurance (57%). The next most common form of insurance is Medicare (20%), and Medicaid/Denali KidCare (17%).

One of the main barriers preventing Mat-Su residents from getting the care they need is cost (17%). Most people received dental or medical when they

needed it; however, in the last year, for those in need, 15% did not get dental care, and 14% did not get medical care. Nine percent did not receive their prescriptions or medications needed.

The Data

Health Insurance Coverage

Having health insurance increases access to care. A greater percentage of adults reported having some form of health insurance, increasing from 70% to 85% during 2008-2018.

The most common form of insurance carried by Mat-Su residents was private or employer insurance (57%), followed by Medicare (20%), and Medicaid/Denali KidCare (17%).

Table 17: Residents Who Have Some Form of Health Insurance (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	Healthy People Goal %
2008	69.8	79.2	100
2000	(61.8-76.8)	(77.1-81.2)	100
2009	75.8	80.1	100
2007	(67.4-82.5)	(77.9-82.1)	100
2010	85.2	82.9	100
2010	(76.1-91.2)	(80.5-85.1)	100
2011	76.8	79.9	100
2011	(71.9-81.1)	(78.2-81.6)	100
2012	77.4	79.6	100
2012	(72.2-81.8)	(77.9-81.2)	100
2013	79.7	83.0	100
2013	(75.7-83.2)	(81.5-84.3)	100
2014	83.3	84.5	100
2014	(79.7-86.3)	(83.0-85.8)	100
2015	83.4	85.1	100
2015	(80.2-86.2)	(83.5-86.6)	100
2016	83.8	88.0	100
2010	(80.1-86.9)	(86.5-89.4)	100
2017	87.5	88.7	100
201/	(84.5-90.0)	(87.1-90.0)	100
201	85.4	89.3	100
8	(80.6-89.1)	(87.7-90.7)	100

Source: ADHHS BRFSS



"Healthcare access for all in the community." From Chickaloon Traditional Council – Tribal Citizens.



"Community of care." From Parents with Purpose.

Table 18: What types of health coverage or insurance do you and members of your household have? (%)

Type of Insurance	% of Total	2016 Results (n=700)	2012 Results (n=700)
Private	57	53	59
Medicare	20	15	16
Medicaid	12	15	11
Champus/Tricare	7	6	6
None	7	11	11
Veterans Administration	6	3	4
Tribal Health System/Indian Health Service	6	5	9
Denali KidCare	5	8	8
Worker's Compensation	3	<1	<1
Don't Know	3	6	-
Refused	1	2	-

Source: Mat-Su Household Survey (HHS) 2012, 2016, 2019

Regular Healthcare Provider

Another factor that increases access to care is having an ongoing relationship with a primary care provider. In 2018, 60% of Mat-Su adults had a regular primary care provider. The percentage of adults who reported having a primary care provider increased during 2008-2017. While an improvement, about a third of the population still do not have a usual primary care provider. Mat-Su and Alaska have not achieved the Healthy People 2020 Goal of 83.9% of the general population having a regular private care provider.

Table 19: Having a Usual Primary Care Provider-Adults (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	Healthy People Goal %
	57.8	53.5	
2008	(50.1-65.2)	(51.2-55.8)	83.9
2000	55.4	55.2	00.0
2009	(47.4-63.0)	(52.8-57.5)	83.9
2010	57.6	56.3	02.0
2010	(46.9-67.7)	(53.3-59.4)	83.9
2011	57.9	56.4	02.0
2011	(52.1-63.4)	(54.3-58.4)	83.9
2012	56.7	54.5	02.0
2012	(52.0-61.3)	(52.8-56.1)	83.9
2012	61.7	57.1	02.0
2013	(57.5-65.8)	(55.5-58.7)	83.9
2014	60.9	55.7	02.0
2014	(56.7-65.0)	(54.1-57.4)	83.9
2015	61.5	55.4	02.0
2015	(57.9-65.0)	(53.5-57.3)	83.9
2016	60.2	58.8	02.0
2016	.6 (56.1-64.1) (56.8-60.8		83.9
2017	63.5	60.1	02.0
2017	(59.7-67.2)	(58.1-62.1)	83.9
2010	59.7	56.0	02.0
2018	(54.1-65.0)	(53.8-58.2)	83.9

Source: ADHSS BRFSS

Not Receiving Care

In 2019, 13% of Mat-Su households experienced a mental health concern, 7% experienced drug or alcohol abuse, and 5% experienced violence or threats of violence within the household. In 2016, 8% experienced a mental health concern, 6% drug or alcohol abuse, and 2% violence or threats of violence within the household

Table 20: In the past 12 months, did you or anyone in your household experience any of the following? (%)

Experience	Yes	No	Don't Know	2016 Results (n=700) Yes
A mental health concern	13	86	4	8
Drug or alcohol abuse	7	93	3	6
Violence, or threats of violence, between family members within the household	5	95	<1	2

Source: Mat-Su Household Survey (HHS) 2016, 2019

Generally, Mat-Su households received specific services when they needed them. However, 15% did not receive dental care, 14% did not get medical care, and 9% did not receive their prescriptions or medications needed. Six percent of households with mental health needs were not met, and 4% didn't receive addiction treatment. A similar question was asked in the 2012 and 2016 MSHF Community Health Needs Assessment surveys, producing similar results regarding dental care, medical care, and prescription or medications.

Table 21: In the past 12 months, did you or anyone in your household have needs in the following areas that could not be met? (%)

Type of care	Yes	No	Don't Know	2016 Results (n=700) Yes	2012 Results (n=700) Yes
Dental care	15	84	1	17	12
Medical care	14	85	1	13	12
Prescriptions or medications	9	90	1	12	9
Mental health care	6	93	1	-	-
Treatment for addictions	4	95	1	-	-

Source: Mat-Su Household Survey (HHS) 2012, 2016, 2019

Barriers to Receiving Care

In 2018, 17% of Mat-Su residents said they did not see a doctor in the last year because of the cost.

When asked about barriers that prevent residents from seeking care, only 3% did not know where to find medical care, yet 16% did not know where to find help with for mental health, and 17% did not know where to find treatment for addictions.

Table 22: I would know where to find help if someone in my household needed... (%)

Type of Care	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
Medical care	68	29	3	<1	<1
Mental health care	38	41	12	4	6
Treatment for addictions	35	41	13	4	7

Source: Mat-Su Household Survey (HHS) 2019

Table 23: Couldn't See a Doctor Due to Cost-Adults (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
2008	20.3 (15.0-26.9)	16.4 (14.8-18.2)
2009	16.1 (10.8-23.4)	15.9 (14.2-17.8)
2010	18.8 (11.8-28.5)	14.7 (12.8-17.0)
2011	21.1 (17.0-25.9)	17.6 (16.0-19.2)
2012	15.4 (11.9-19.6)	14.7 (13.4-16.1)
2013	16.2 (13.1-19.8)	14.1 (12.9-15.4)
2014	13.7 (11.0-17.0)	13.6 (12.4-14.39)
2015	15.5 (12.9-18.5)	14.1 (12.8-15.6)
2016	18.1 (14.9-21.8)	13.4 (12.0-15.0)
2017	12.9 (10.3-16.0)	13.6 (12.2-15.1)
2018	16.5 (12.6-21.4)	14.1 (12.6-15.8)

Source: ADHHS BRFSS

Why is it important?

Nutrition, exercise, and body weight are factors that can affect a person's health. Body weight is measured in, and often spoken of, in terms of body mass index (BMI). This index provides a measure of body fatness and can be used to screen people into weight categories. For example, a BMI below 18.5 is considered underweight, 18.2-24.9 (normal), 25.0-29.9 (overweight), and 30.0 and above (obese). Having a healthy weight, participating in physical activity, and consuming nutritious food may prevent many long-term chronic diseases such as heart disease, diabetes, cancer, and stroke.

What is Mat-Su's Status?

A smaller percentage of Mat-Su children and adults are a healthy weight compared to Alaska (27% compared to 34%). Having a healthy diet and exercising regularly contribute to having a healthy weight. Under half (46%) of Mat-Su traditional high schools students get one hour of exercise five times per week, and just over half of Mat-Su adults (55%) and Mat-Su seniors (54%) get 2.5 hours of moderate exercise or 1.25 hours of vigorous exercise each week.

In 2017, only 10% of traditional high school students and 8% of alternative students ate fruits and vegetables five or more times per day during the past seven days.

The Data

Exercise

Generally, while not different than Alaska for all indicators (except one), physical activity remains a challenge for Mat-Su youth and adults.

In 2017, 46% of traditional high school students reported exercising 60 minutes per day, five days per week. Only 25.9% of Mat-Su alternative high school students exercised at this level. In 2019, almost all middle school students (94%) reported being physical active for 60 minutes on one day in the last week.

In 2017, 12% of traditional high school students attended physical education classes on 5 days in an average week. In 2019, 37% of middle school students attended physical education classes on 5 days in an average week.

Approximately 40% of middle school students and 62% of high school students watched TV, played videos, or used a computer for something other than schoolwork for three or more hours on an average school day.

Table 24: Exercise-Youth, 2017 (%)

	Mat-Su Borough %	Alaska %	Healthy
Indicator	(95% Confidence	(95% Confidence	People
	Interval)	Interval)	Goal %
Physically active fo	r 60+ min for 5+ Do	ays in Past Week	
Middle School, Physical	y 93.6		
Active for 60+ Minutes	1+ (02 0 04 2)	N/A	-
Days in Last Week, 2019) (73.0-74.2)		
Traditional High School	46.1	43.8	47.9
Traditional High School	(41.7-50.6)	(41.8-45.8)	17.7
Alternative High School	25.9	29.6	_
Three matrice ringin seniour	(20.1-32.6)	(26.8-32.5)	
All High School Students	44.1	43.0	_
All High School Students	(40.1-48.2)	(41.1-44.8)	
Watched TV, Played	Videos, or Used Co	omputer for Somethi	ng Other
Than School Work fo	r 3+ Hours/Day on c	an Average School D	Day
Middle School, Less than	1		
3 Hours Total TV or Nor	n- 40.0	N/A	
school Computer Use,	(38.9-41.2)	N/A	-
2019			
Traditional High School	60.8	58.0	
Traditional filgh School	(55.9-65.4)	(56.0-60.1)	-
Alternative High School	69.0	63.4	
Alternative fign School	(59.6-77.1)	(59.9-66.8)	-
All II; ah Cahaal Ctudant	61.6	58.3	
All High School Students	(57.1-65.8)	(56.4-60.2)	-
Attended Physical E	ducation (PE) Clas	sses on 5+ Day(s) in .	Average
Week		, , ,	J
W: 111 G.1 1 0040	36.8	NI / A	
Middle School, 2019	(25.9-37.8)	N/A	-
m 1:: 1::: 1::: 1::: 1::: 1::: 1::: 1::	11.8	17.5	25.2
Traditional High School	(9.4-14.6)	(15.7-19.5)	37.0
Al	12 2*	16.3	
Alternative High School	(5.8-24.1)	(12.8-20.4)	-
	11 Ω	17.5	
All high school students	(9.5-14.5)	(15.8-19.4)	-

^{*} Indicates data are unreliable. N/A indicates not available. - indicates not applicable. Source: DHSS YRBS; MS YRBS

In 2017, more than half of Mat-Su adults (55%) and seniors (54%) met the national recommendations for physical activity of 2.5 hours of moderate exercise or 1.25 hours of vigorous weekly. Approximately one-third of adults (37%) and seniors (32%) met the national guidelines for muscle-strengthening activities of two or more times per week.



"Clean waters continue to support healthy outdoor activities." From Chickaloon Traditional Council – Tribal Citizens.



"Walk with friends." From Mat-Su Health Services Group.

Table 25: Exercise-Adults, 2017 (%)

Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)					
Physical activity: 18+ years							
2.5 hrs. moderate or 1.25 hrs. vigorous/week	54.9 (48.8-60.9)	57.5 (51.2-63.6)					
Physical activity: 65+ years							
2.5 hrs. moderate or 1.25 hrs. vigorous/week	54.2 (42.9-65.2)	56.2 (51.1-61.3)					
Strengthening activities	: 18+ years						
2 or more times per week	37.3 (31.4-43.5)	32.9 (30.0-35.9)					
Strengthening activities 65+ years							
2 or more times per week	32.1 (23.3-42.4)	28.2 (23.6-32.8)					

Source: ADHSS BRFSS, CDC BRFSS Prevalence & Trends

Nutrition

Healthy eating habits are a challenge. Dietary guidelines for people two years and older include daily consumption of 2.5 to 6.5 cups of fruit and vegetables (amount varies depending on age); two to three ounces of whole grains; and limiting solid fats, cholesterol, sodium, refined grains, and added sugars. In 2017, only 10% of traditional high school students and 8% of alternative students ate fruits and vegetables five or more times per day during the past seven days. In 2017, 12% and 43% of adults and seniors, respectively, ate the recommended amount of fruits and vegetables. The percentage of adults eating the recommended amount of fruits and vegetables decreased by about half from 23% to 13% during 2007-2017.



"Long sunny day to grow sweet and organic carrots."
-Latinx Residents.

Table 26: Eats Five or More Servings of Fruits/Vegetables Daily, 2017 (%)

Population	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
Traditional High School	10.2 (7.2-14.1)	9.5 (8.5-10.7)
Alternative High School	8.3 (5.4-12.4)	9.3 (7.9-10.8)
All High School Students	10.0 (7.3-13.6)	9.6 (8.6-10.6)
Adults 18+ Years	12.9 (9.4-17.6)	18.7 (8.6-10.6)
Adults 65+ Years	13.8 (7.7-23.4)	N/A

N/A indicates not available. Source: ADHSS YRBS, BRFSS



"From farm to table; supporting organic farmers to keep us and our economy healthy."

From Chickaloon Traditional Council – Tribal Citizens.

Table 27: Eats Five or More Servings of Fruits/Vegetables Daily – Adult Trend Data (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
2007	23.3 (15.6-33.2)	23.1 (20.5-26.0)
2009	24.2 (16.3-34.5)	22.6 (20.1-25.4)
2011	17.2 (13.5-21.6)	19.6 (17.8-21.6)
2013	20.5 (15.8-26.2)	20.3 (18.5-22.2)
2015	20.1 (15.6-25.4)	19.6 (17.4-21.9)
2017	12.9 (9.4-17.6)	18.7 (16.3-21.5)

Source: ADHSS BRFSS

Overweight and Obesity

While obesity shows signs of improvement over time for adults, it remains a challenge. About one-third of students in grades K-8 were overweight or obese. Self-reported data reveals that 27% of Mat-Su high school students were overweight or obese in 2017. By school type, 26% of traditional high school students and 40% of alternative high school students were overweight or obese in 2017. In 2018, most Mat-Su adults (73%) and adults 65 or older (68%) were overweight or obese. Thirty-four percent of Mat-Su adults are obese. The percentage of overweight or obese adults did not significantly increase or decrease between 2008 and 2018.

Table 28: Obesity and Overweight Indicators (%)

Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	Healthy People Goal %
Overweight, 2017			
Traditional High School	12.2 (9.5-15.5)	16.3 (14.9-17.9)	-
Alternative High School	16.3 (11.2-23.1)	17.5 (14.9-20.5)	-
All High School	12.6 (10.1-15.6)	16.4 (15.0-17.8)	-
Adults 18+ Years (2018)	39.7 (34.3-45.4)	35.3 (33.2-37.4)	-
Adults 65+ Years (2018)	41.7 (33.1-50.19)	38.8 (34.1-43.4)	-
Obese, 2017			
Traditional High School	13.3 (10.0-17.5)	14.6 (13.3-16.0)	16.1
Alternative High School	24.0 (19.20-29.6)	23.9 (21.3-26.7)	-
All High School	14.4 (11.2-18.2)	15.3 (14.0-16.6)	-
Adults 18+ Years (2018)	33.5 (28.4-39.0)	30.6 (28.6-32.7)	30.6
Adults 65+ Years (2018)	25.9 (19.0-34.2)	27.2 (23.1-31.3)	-
Overweight and C	Obese, 2017		
Kindergarten	29.9 (26.8-33.1)	31.4 (29.5-33.5)	-
First Grade	26.5 (23.9-29.3)	29.1 (26.5-31.8)	-
Third Grade	30.0 (27.1-33.2)	34.4 (32.1-36.7)	-
Fifth Grade	37.1 (33.8-40.5)	39.0 (36.5-41.4)	-
Seventh Grade	40.8 (37.6-44.0)	40.3 (36.7-44.1)	-
K-8 Combined	33.0 (30.7-35.3)	34.8 (33.0-36.7)	-

Table 29: Obesity and Overweight Indicators (%) (cont.)

Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	Healthy People Goal %
Overweight and			
Traditional High	25.5	30.9	_
School	(21.2-30.4)	(29.0-33.0)	_
Alternative High	40.3	41.5	
School	(33.0-48.0)	(37.9-45.1)	-
All High School	27.0 (22.9-31.5)	31.7 (29.8-33.6)	-
Adults 18+ Years (2018)	73.2 (68.1-77.7)	65.9 (63.7-68.0)	-
Adults 65+ Years (2018)	67.6 (58.3-75.7)	N/A	-

^{* *}Alaska data are Anchorage and Mat-Su Borough school districts combined.

Source: ADHSS BRFSS, CDC BRFSS Prevalence and Trends, YRBS, Alaska Obesity Prevention and Control: Student Weight Status



"Fresh air...We can all get out in the mountains with good friends." From Chickaloon Traditional Council – Tribal Citizens.

N/A indicates not available.

indicates not applicable.# indicates data pending.

Table 30: Overweight and Obese-Adult Trend Data (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
2008	72.4 (65.3-78.5)	65.7 (63.5-67.9)
2009	69.8 (61.6-76.9)	65.9 (63.5-68.2)
2010	76.5 (67.0-84.0)	67.5 (64.5-70.4)
2011	61.0 (55.5-66.3)	65.8 (63.3-67.4)
2012	69.7 (64.4-74.9)	65.5 (63.6-67.4)
2013	71.2 (67.2-74.9)	65.6 (63.8-67.2)
2014	68.9 (65.0-72.6)	66.7 (65.1-68.4)
2015	68.9 (64.3-72.3)	67.2 (65.3-69.0)
2016	68.4 (64.3-72.1)	67.4 (65.4-69.3)
2017	68.7 (64.7-72.4)	65.8 (63.7-68.0)
2018	73.2 (68.1-77.7)	65.9 (63.7-68.0)

Source: ADHSS BRFSS

Table 31: Obesity-Adults (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
2008	29.7 (23.4-36.9)	28.5 (26.5-30.5)
2009	26.9 (20.4-34.5)	26.9 (24.8-29.0)
2010	37.4 (27.9-48.1)	29.2 (26.5-32.0)
2011	26.8 (22.5-31.5)	28.2 (26.4-30.0)
2012	27.6 (22.9-32.8)	28.2 (26.5-30.0)
2013	30.7 (26.8-34.9)	29.7 (28.1-31.4)
2014	32.8 (29.1-36.6)	30.0 (28.4-31.6)
2015	33.0 (29.5-36.7)	29.8 (28.1-31.6)
2016	33.0 (29.3-36.9)	31.4 (29.5-33.4)
2017	32.7 (29.0-36.5)	33.4 (31.4-35.4)
2018	33.5 (28.4-39.0)	30.6 (28.6-32.7)

Source: ADHSS BRFSS

CHAPTER 11: CHRONIC AND INFECTIOUS DISEASE DATA

Chronic Disease Why is it important?

Chronic disease includes conditions such as heart disease, cancer, diabetes, stroke, arthritis, and chronic obstructive pulmonary disease. Many of these diseases are preventable and linked to four modifiable risk factors: inactivity, poor diet, tobacco use, and alcohol abuse. Chronic diseases are the most costly and preventable health problems in the U.S. and are the leading cause of death and disability.

What is Mat-Su's Status?

Some of the leading causes of death for Mat-Su residents are chronic diseases, including cancer, hypertension, and chronic respiratory disease. In Mat-Su, coronary heart disease and stroke death are lower than for the rest of Alaska or the country but do not meet the Healthy People Goal. Overweight and obesity contributes to several chronic diseases. About 27% of Mat-Su high school students were overweight or obese in 2017. In 2018, most Mat-Su adults (73%) and adults 65 or older (68%) were overweight or obese. Thirty-four percent of Mat-Su adults are obese.

Smoking contributes to several chronic diseases such as cancer, stroke, and chronic lower respiratory disease. Currently, 8% of Mat-Su high school students report smoking and more than twice as many adults smoke (21%). Smoking during pregnancy can be very dangerous for the baby. Fourteen percent of Mat-Su pregnant women reported smoking during their last three months of pregnancy.

There is also a higher rate of death from chronic lower respiratory disease in Mat-Su compared to the U.S. Mat-Su has a higher cancer incidence rate and cancer death rate than both Alaska and the U.S. The prostate cancer death rate in Mat-Su meets the Healthy People 2020 goal; however, the Mat-Su death rates for colorectal cancer and lung cancer are higher than the 2020 goals.

Not all Mat-Su residents get cancer screenings that would help detect the disease early. Six out of ten women received a mammogram screening in the past two years, and 64% of Mat-Su adults have ever had a colorectal cancer screening.

Although Mat-Su doesn't meet the Healthy People 2020 goal for women aged 21-65 receiving their cervical cancer screen test, 69% of women have received the screening in the last three years.

The Data

Heart Disease and Stroke

The following all contribute to the development of heart disease: a diet high in fat, salt, and cholesterol; lack of exercise; stress; and smoking. In 2017, 30% of Mat-Su adults reported they have had high cholesterol during their lifetime. Mat-Su has not achieved the Healthy People 2020 Goal of 13.5%. Almost half (49%) of Mat-Su adults aged 65 years or older reported ever having high cholesterol.

No significant changes occurred over time in the percentage of the population having high cholesterol or blood pressure. Nearly a third of adults (30%) and half of seniors (49%) have high cholesterol. Nearly a third of adults (32%) have high blood pressure, and 68% of seniors have high blood pressure.

The coronary heart disease death rate (112.0 per 100,000 persons) was lower than the Alaska rate (133.4) and U.S. rate (196.9).

Table 32: Heart Disease and Stroke Indicators (%)

Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US 2017	Healthy People Goal %
High Cholesterc	ol, 2017 (%)			
Adults 18+ years	30.4 (25.3-35.9)	31.1 (28.4-33.9)	33.0	13.5
Adults 65+ years	48.6 (38.9-58.5)	58.0 (53.1-63.0)	-	-
High Blood Press	sure (%)			
Adults 18+ years (2018)	27.9 (22.4-34.3)	28.6 (26.2-31.1)	32.3	-
Adults 65+ years (2017)	67.6 (58.3-75.8)	59.4 (54.5-64.2)	-	-
Death Rates, 20	17			
Coronary heart disease death rate per 100,000 people	112.0	133.4	165.0^	100.8
Stroke disease deat rate per 100,000 people	h 25.6*	34.8	37.6^	33.8

^{*}Indicates data are unreliable. ^U.S. Rates are crude rates, Mat-Su and Alaska are age-adjusted. - indicates not applicable.

Table 33: High Cholesterol-Adults

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	Healthy People Goal %
2009	27.6 (19.4-37.6)	35.8 (32.6-39.2)	13.5
2011	36.0 (30.8-41.5)	34.8 (32.4-37.2)	13.5
2013	41.2 (34.8-48.0)	37.9 (35.7-40.3)	13.5
2015	35.9 (30.4-41.9)	34.6 (31.9-37.4)	13.5
2017	30.4 (25.3-35.9)	31.1 (28.4-33.9)	13.5

Source: ADHSS BRFSS

Table 34: High Blood Pressure-Adults

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
2009	22.4 (15.4-31.2)	26.8 (24.2-29.6)
2011	33.5 (28.2-39.2)	29.5 (27.4-31.8)
2013	25.8 (20.7-31.7)	28.0 (25.9-30.2)
2014	29.0 (25.0-33.4)	26.0 (24.2-27.8)
2015	30.0 (25.4-35.1)	28.9 (26.7-31.2)
2016	30.7 (25.9-36.1)	31.0 (28.4-33.7)
2017	32.8 (28.1-37.8)	32.9 (30.4-35.5)
2018	27.9 (22.4-34.3)	28.6 (26.2-31.1)

Source: ADHSS BRFSS

Source: HAVR; ADHSS BRFSS; CDC BRFSS Prevalence and Trends NCHS; National Vital Statistics Report 2017

Table 35: Coronary Heart Disease Death Rate per 100,000 People

Year	Mat-Su Borough Rate	Mat-Su Borough Number of Deaths	Alaska Rate	U.S. Rate	Healthy People Goal %
2013	124.8	84	132.4	165.8	100.8
2014	109.4	84	143.2	167.2	100.8
2015	123.1	96	149.6	164.0	100.8
2016	133.6	108	136.7	163.2	100.8
2017	112.0	98	133.4	196.9	100.8

Source: HAVR, NCHS National Vital Statistics

Table 36: Stroke Disease Death Rate per 100,000 People

Year	Mat-Su Borough Rate	Mat-Su Borough Number of Deaths	Alaska Rate	U.S. Rate	Healthy People Goal %
2013	45.6	28	40.0	36.2	33.8
2014	29.1*	18	31.6	36.5	33.8
2015	38.4	25	35.3	37.6	33.8
2016	52.5	34	38.2	37.3	33.8
2017	25.6*	19	34.8	37.6	33.8

^{*} indicates the data are unreliable.

Source: HAVR, NCHS National Vital Statistics

Obesity/Diabetes

Diabetes is caused when the blood glucose level is above normal. Complications leading from diabetes include heart disease, blindness, kidney failure, and lower extremity amputations. The disease is classified into three types: Type-1, Type-2, and Gestational Diabetes. Risk factors for the most common types of diabetes, Type-2, include older age, obesity, family history, prior history of gestational diabetes, physical inactivity, and race/ethnicity. Almost eight percent of Mat-Su adults and 20% of Mat-Su seniors aged 65 or older reported having diabetes during their lifetime in 2018.

Table 37: Diabetes Indicators, 2018 (%)

Indicator/ Population	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	U.S. %
Adults 18+ years	7.9 (5.7-10.8)	8.4 (7.4-9.4)	10.5
Adults 65+ years	19.5 (13.5-27.3)	17.6 (14.4-20.9)	N/A

N/A indicates not available.

Source: HAVR, ADHS BRFSS, CDC BRFSS Prevalence and Trends, ADHS YRBS, CDC YRBS

Table 38: Diabetes-Adults (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
2008	4.9 (2.8-8.4)	6.4 (5.5-7.5)
2009	1.9 (0.9-4.1)	6.5 (5.5-7.6)
2010	7.1 (3.4-14.0)	7.4 (6.0-9.0)
2011	7.5 (5.6-10.1)	7.8 (6.8-8.9)
2012	8.0 (5.5-11.5)	6.9 (5.9-7.9)
2013	6.8 (5.0-9.2)	7.0 (6.1-7.9)
2014	8.4 (6.7-10.6)	7.8 (7.0-8.7)
2015	7.5 (5.9-9.4)	7.5 (6.6-8.5)
2016	7.2 (5.8-9.0)	7.5 (6.6-8.5)
2017	8.5 (6.6-10.7)	8.1 (7.2-9.2)
2018	7.9 (5.7-10.8)	8.4 (7.4-9.4)

Source: ADHSS BRFSS

Chronic Lower Respiratory Disease

Smoking contributes to the occurrence of chronic lower respiratory disease. Just over 21% of Mat-Su adults reported smoking in 2018, nearly double the Healthy People 2020 Goal for adults of 12%. Nevertheless, the percentage of Mat-Su adults smoking in 2018 has dropped since the 27% reported in 2008. Among Mat-Su seniors, 15% smoke in 2017.

Among pregnant women, 14% smoked in Mat-Su, higher than pregnant women statewide (12%), and 1% used some smokeless tobacco in their last three months of pregnancy.

In 2017, 2% of middle school students smoked and 1% used smokeless tobacco, and 9% of high school students smoked and 9% used smokeless tobacco. The Healthy People 2020 Goal for high school students is 6.9%.

Eight percent of Mat-Su adults and 4% of seniors use some smokeless tobacco. Mat-Su has not achieved the Healthy People Goal of 0.3% among adults. Adult smokeless tobacco use has not changed significantly between 2008 and 2018.

Many chronic lower respiratory deaths are considered preventable such as some deaths due to bronchitis, asthma, and chronic obstructive pulmonary disease. These conditions are complicated by smoking. Mat-Su has a higher chronic lower respiratory disease death rate (43.3 per 100,000 persons) than Alaska (36.0) and the U.S. (40.9).



"The smoke made it hard for this asthmatic to breathe." From Chickaloon Traditional Council Elders.

Table 39: Tobacco-Related Indicators (%)

Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US % (95% Confidence Interval)	Healthy People Goal %
Current Smok	ing, 2017			
Middle School Students (2019)	1.6 (1.3-1.9)	N/A	N/A	-
Traditional High School	5.8 (3.6-9.4)	6.7 (5.8-7.8)	8.8 (7.2–10.7)	16.0
Alternative High School	31.8 (22.1-43.4)	38.5 (33.7-43.5)	N/A	-
All High School Students	8.4 (6.1-11.4)	8.9 (7.9-10.0)	N/A	-
Adults 18+ Years (2018)	21.3 (16.7-26.8)	19.6 (17.9-21.6)	17.1	12.0
Adults 65+ Years (2018)	5.4 (2.7-10.5)	12.8 (9.4-16.2)	N/A	-
Pregnant Women (Last 3 Months of Pregnancy)	13.9 (7.8-23.5)	12.3 (10.2-14.9)	N/A	1.7
Current Smok	eless Tobacco L	Jsers, 2017		
Middle School Students (2019)	0.7 (0.5-0.9)	N/A	N/A	-
Traditional High School	8.5 (6.2-11.5)	8.3 (7.3-9.5)	5.5 (4.4–6.7)	6.9
Alternative High School	9.9 (5.6-16.9)	16.3 (14.0-18.9)	N/A	-
All High School Students	8.6 (6.4-11.4)	8.9 (7.9-10.0)	N/A	-
Adults 18+ Years (2018)	7.5 (4.8-8.7)	5.5 (4.6-6.7)	2.2	0.3
Adults 65+ Years	3.9 (1.5-9.4)	1.9 (1.1-2.8)	N/A	-
Pregnant Women (Last 3 Months of Pregnancy)	1.1 (0.3-4.2)	6.0 (4.7-7.5)	N/A	-

Table 40: Adult Smoking (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
2008	26.6 (20.3-34.1)	23.8 (21.9-25.8)
2009	25.8 (19.5-33.3)	21.5 (19.5-23.5)
2010	29.2 (20.5-39.7)	22.2 (19.7-24.9)
2011	22.3 (18.3-26.9)	22.6 (20.9-24.4)
2012	21.6 (17.3-26.6)	21.0 (19.5-22.6)
2013	20.8 (17.3-24.9)	21.9 (20.4-23.4)
2014	22.5 (19.2-26.2)	20.3 (18.9-21.7)
2015	17.1 (14.4-20.1)	19.2 (17.8-20.7)
2016	18.9 (15.9-22.4)	19.9 (18.2-21.6)
2017	20.1 (16.9-23.7)	20.4 (18.57-22.2)
2018	21.3 (16.7-26.8)	19.6 (17.9-21.6)

Source: ADHSS BRFSS

Table 41: Adult Smokeless Tobacco (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	Healthy People Goal %
2008	4.6 (2.1-10.0)	5.2 (4.3-6.2)	0.3
2009	5.5 (2.6-11.3)	5.4 (34.5-6.4)	0.3
2010	9.7 (4.5-20.0)	5.9 (4.7-7.4)	0.3
2011	5.2 (3.2-8.2)	5.7 (4.8-6.6)	0.3
2012	6.1 (3.9-9.6)	5.6 (4.8-6.5)	0.3
2013	4.8 (3.0-7.6)	5.3 (4.6-6.1)	0.3
2014	4.4 (3.0-6.6)	5.3 (4.6-6.1)	0.3
2015	6.0 (4.5-8.0)	5.8 (5.0-6.7)	0.3
2016	5.9 (4.2-8.3)	6.1 (5.2-7.3)	0.3
2017	6.5 (4.8-8.7)	5.4 (4.6-6.4)	0.3
2018	7.5 (4.8-11.5)	5.5 (4.6-6.7)	0.3

Source: ADHSS BRFSS

Table 42: Chronic Lower Respiratory Disease Death Rate per 100,000 People (Age-Adjusted)

Year	Mat-Su Borough Rate	Mat-Su Borough Number of Deaths	Alaska Rate	U.S. Rate
2013	48.6	31	37.1	42.1
2014	43.2	28	37.8	40.5
2015	38.7	33	36.9	41.6
2016	51.2	39	40.5	40.6
2017	43.3	34	36.0	40.9

Source: HAVR, National Vital Statistics WONDER



"My life is at peace, but I am ready and prepared for the storm." From Filipino Residents.

Cancer

Although cancer is the leading cause of death in Mat-Su, many forms of the disease are preventable and treatable if detected early. Like heart disease,

lifestyle practices such as smoking, obesity, and drinking alcohol can contribute to the development of cancer.

About 440 Mat-Su residents passed away from cancer in 2016. The Mat-Su cancer death rate was 173.5 per 100,000 people in 2016. Mat-Su has not achieved the Healthy People 2020 Goal of 160.6. There are no discernable trends in the cancer death rate, the cancer incidence rate, breast cancer death rate, colorectal cancer death rate, and prostate cancer death rate. In addition, Mat-Su does not differ from the state or nation.

Three cancers commonly screened for are breast cancer, cervical cancer, and colorectal cancer. Mammograms can detect breast cancer early. In 2016, 59% of women had a mammogram in the last two years; Mat-Su did not meet the Healthy People 2020 Goal of 81.1%. The Mat-Su breast cancer death rate (10.4 per 100,000) in 2015 was lower than the Alaska or U.S. rate. In 2016, 69% of women ages 21-65 were screened for cervical cancer. This percentage was lower than the Health People 2020 Goal of 92%.

Colorectal cancer screening (using fecal occult blood testing, sigmoidoscopy, or colonoscopy) is recommended for 50- to 75-year-olds. In 2018, 64% of Mat-Su adults over 50 years old and 77% of seniors age 65 and older had ever had a colorectal cancer screening test. In the last five years, 45% of 50-to 75-year-old adults and 61% of seniors age 65-75 had the screening. The Mat-Su colorectal cancer death rate was 15.4 per 100,000 people in 2016; Mat-Su did not achieve the Healthy People 2020 Goal of 14.5 per 100,000 people.

In 2016, Mat-Su had a higher lung cancer death rate (69.0 per 100,000) than Alaska (38.9) and the U.S. (38.5).

Table 43: Cancer Screening (%)

Women's Cancer	Interval) Screening,	2016		
Mammogram Past 2 Years: Women 40+ years	58.6 49.4-67.8)	62.8 (58.0-67.7)	72.5	81.1
Cervical Cancer Pap Test Past 3 Years: Women 21-65 years	68.8 58.4-79.3)	77.3 (73.0-81.7)	79.8	92.0
Colorectal Cance	er Screening	g Ever, 2018		
Adults 50+ Years (64.0 55.6-71.6)	64.6 (61.3-67.7)	-	70.5
Adults 65+ Years (76.5 65.6-84.7)	N/A	-	-
Colorectal Cance	er Screening	g Past 5 Years,	2018	
Adults 50-75 Years (3	45.1 36.4-54.2)	44.0 (40.6-47.4)	-	-
Adults 65-75 Years	60.6 46.8-72.9)	N/A	-	-

N/A indicates not available.

- indicates not applicable.

Source: ADHSS BRFSS, CDC BRFSS Prevalence and Trends

Table 44: Cancer Death Rate Per 100,000 People (Age-Adjusted)

Year	Mat-Su Borough % (95% Confidence Interval)	Mat-Su Borough # of Deaths	Alaska % (95% Confidence Interval)	US Rate (95% Confidence Interval)	Healthy People Goal Rate
2007	171.9 (135.4-214.3)	96	184.6 (171.1-198.7)	179.3 (178.8-179.7)	160.6
2008	179.9 (142.4-223.3)	96	180.7 (167.8-194.4)	176.3 (175.9-176.8)	160.6
2009	172.7 (138.7-211.9)	110	185.8 (172.8-199.5)	173.4 (172.9-173.9)	160.6
2010	201.8 (164.9-243.9)	124	177.7 (165.2-190.9)	171.7 (171.3-172.2)	160.6
2011	192.7 (157.9-232.3)	129	177.4 (165.3-190.2)	168.7 (168.3-169.2)	160.6
2012	185.7 (152.6-223.3)	135	170.2 (158.5-182.4)	166.3 (165.9-166.8)	160.6
2013	171.4 (140.9-206.2)	136	174.0 (162.6-186.0)	163.2 (162.8-163.6)	160.6
2014	184.2 (152.0-220.8)	140	165.9 (154.8-177.5)	161.3 (160.9-161.7)	160.6
2015	146.4 (120.3-176.3)	134	159.7 (149.0-171.0	158.7 (158.3-159.1)	160.6
2016	173.5 (144.0- 207.0)	143	157.8 (147.3- 168.8)	155.9 (155.5- 156.3)	160.6

Source: Alaska Cancer Registry, Cancer Mortality; CDC Cancer Control and Prevention, Cancer Mortality Rates

Table 45: Cancer Incidence Rate Per 100,000 People (Age-Adjusted)

Year	Mat-Su Borough % (95% Confidence Interval)	Mat-Su Borough # of Deaths	Alaska % (95% Confidence Interval)	US Rate (95% Confidence Interval)
2007	505.3 (446.0-569.9)	317	495.6 (473.4-518.4)	487.0 (486.2-487.8)
2008	550.3 (489.9-615.6)	371	514.0 (491.9-536.7)	482.9 (482.1-483.7)
2009	539.2 (481.3-601.7)	385	482.2 (461.2-503.7)	478.6 (477.8-479.3)
2010	501.4 (447.3-559.9)	378	489.5 (468.7-510.9)	467.3 (466.5-468.0)
2011	469.8 (419.1-524.7)	374	476.7 (456.6-497.4)	468.2 (467.4-468.9)
2012	442.4 (395.2-493.5)	387	486.2 (466.3-506.6)	454.8 (454.0-455.5)
2013	464.6 (416.0-517.1)	396	471.4 (452.0-491.3)	453 (452.3-453.7)
2014	458.5 (410.4-510.4)	402	471.3 (452.4-490.8)	449.3 (448.6-450.0)
2015	436.0 (391.4-484.2)	413	446.7 (428.7-465.2)	448.7 (448.0-449.4)
2016	438.5 (394.9-485.5)	438	419.1 (402.1- 436.6)	435.6 (434.9-436.3)

Source: Alaska Cancer Registry, Cancer Incidence; CDC Cancer Control and Prevention; Cancer Incidence Rates for US, 1996 to 2016

Table 46: Breast Cancer Death Rate Per 100,000 People (Female) (Age-Adjusted)

Year	Mat-Su Borough % (95% Confidence Interval)	Mat-Su Borough # of Deaths	Alaska % (95% Confidence Interval)	US Rate (95% Confidence Interval)
2007	31.8 (14.9-59.1)	10	25.9 (19.8-33.3)	23.0 (22.7-23.2)
2008	*	-	17.5 (12.6-23.7)	22.6 (22.3-22.8)
2009	18.1 (6.0-40.3)	6	28.1 (21.7-35.8)	22.2 (22.0-22.5)
2010	35.2 (15.8-65.5)	9	21.9 (16.3-28.6)	21.9 (21.7-22.1)
2011	18.4 (7.0-38.7)	7	19.9 (14.8-26.2)	21.5 (21.3-21.8)
2012	12.6 (4.9-27.8)	7	17.7 (13.2-23.1)	21.3 (21.1-21.5)
2013	19.3 (8.5-37.9)	9	19.6 (14.8-25.4)	20.7 (20.5-20.9)
2014	23.5 (10.0-45.8)	9	24.1 (18.6-30.6)	20.5 (20.3-20.8)
2015	10.4 (3.7-24.3)	6	18.1 (13.6-23.6)	20.3 (20.1-20.5)
2016	*	*	19.0 (14.5-24.4)	20.0 (19.8-20.2)

^{*} Data are suppressed.

Source: Alaska Cancer Registry, Cancer Mortality; CDC Cancer Control and Prevention; Cancer Mortality Rates for US, 1996 to 2016

Table 47: Colorectal Cancer Death Rate Per 100,000 People (Age Adjusted)

Year	Mat-Su Borough % (95% Confidence Interval)	Mat-Su Borough # of Deaths	Alaska % (95% Confidence Interval)	US Rate (95% Confidence Interval)	Healthy People Goal Rate
2007	18.3 (7.7-35.4)	9	19.4 (15.1-24.5)	16.9 (16.8-17.1)	14.5
2008	15.0 (5.7-30.6)	8	17.8 (13.8-22.5)	16.5 (16.3-16.6)	14.5
2009	9.5 (3.8-19.9)	8	15.7 (12.1-19.9)	15.8 (15.7-15.9)	14.5
2010	9.8 (3.7-20.6)	8	16.4 (12.8-20.7)	15.5 (15.4-15.6)	14.5
2011	20.3 (9.5-36.8)	11	13.9 (10.7-17.7)	15.1 (15.0-15.2)	14.5
2012	13.4 (5.5-26.5)	8	15.6 (12.2-19.5)	14.7 (14.6-14.8)	14.5
2013	11.7 (5.0-22.9)	10	17.0 (13.6-20.9)	14.5 (14.3-14.6)	14.5
2014	22.5 (11.8-38.0)	15	16.4 (13.0-20.4)	14.1 (14.0-14.2)	14.5
2015	*	*	14.4 (11.3-18.1)	14.0 (13.9-14.1)	14.5
2016	15.4 (7.8-26.9)	14	14.7 (11.6-18.3)	13.7 (13.6-13.8)	14.5

^{*} Data are suppressed.

Source: Alaska Cancer Registry, Cancer Mortality; CDC Cancer Control and Prevention; Cancer Mortality Rates for US, 1996 to 2016

Table 48: Lung Cancer Death Rate Per 100,000 People (Age Adjusted)

Year	Mat-Su Borough % (95% Confidence Interval)	Mat-Su Borough # of Deaths	Alaska % (95% Confidence Interval)	US Rate (95% Confidence Interval)	Healthy People Goal Rate
2007	31.5 (17.6-51.2)	19	56.5 (49.2-64.5)	50.7 (50.5-51.0)	45.5
2008	54.6 (35.0-80.1)	29	53.2 (46.4-60.8)	49.6 (49.3-49.8)	45.5
2009	57.3 (38.3-81.8)	34	56.0 (48.9-63.8)	48.4 (48.2-48.7)	45.5
2010	54.7 (36.5-78.0)	34	49.4 (42.8-56.6)	47.4 (47.2-47.7)	45.5
2011	56.1 (38.3-78.8)	38	50.4 (44.0-57.4)	46.0 (45.8-46.2)	45.5
2012	54.6 (37.6-76.3)	40	51.8 (45.4-58.9)	44.9 (44.7-45.2)	45.5
2013	48.2 (32.6-68.1)	38	47.4 (41.5-53.9)	43.4 (43.2-43.7)	45.5
2014	48.7 (32.8-69.0)	36	41.2 (35.8-47.2)	42.2 (42.0-42.4)	45.5
2015	44.2 (30.4-61.9)	40	42.2 (36.8-48.1)	40.6 (40.4-40.8)	45.5
2016	69.0 (49.9-92.4)	50	38.9 (33.7-44.7)	38.5 (38.3-38.7)	45.5

Source: Alaska Cancer Registry, Cancer Mortality; CDC Cancer Control and Prevention; Cancer Mortality Rates for US, 1996 to 2016

Table 49: Prostate Cancer Death Rate Per 100,000 People (Age Adjusted)

Year	Mat-Su Borough % (95% Confidenc e Interval)	Mat-Su Borough # of Deaths	Alaska % (95% Confidence Interval)	US Rate (95% Confidence Interval)	Healthy People Goal Rate
2007	*	-	20.5 (13.3-29.6)	24.2 (24.0-24.5)	21.2
2008	*	-	23.1 (15.7-32.3)	23.0 (22.7-23.3)	21.2
2009	26.0 (9.1-55.6)	6	23.6 (16.2-32.8)	22.1 (21.9-22.4)	21.2
2010	37.6 (13.4-77.2)	7	23.9 (16.7-32.8)	21.8 (21.6-22.1)	21.2
2011	*	-	20.6 (14.1-28.7)	20.8 (20.5-21.0)	21.2
2012	*	-	18.1 (12.2-25.4)	19.6 (19.3-19.8)	21.2
2013	*	-	17.4 (11.8-24.4)	19.3 (19.0-19.5)	21.2
2014	18.7 (6.1-41.3)	8	23.1 (16.7-31.0)	19.1 (18.9-19.3)	21.2
2015	*	-	13.9 (9.2-20.0)	18.9 (18.7-19.2)	21.2
2016	16.1 (5.2-35.8)	6	18.9 (13.3-25.8)	19.4 (19.2-19.6)	21.2

^{*} Data are suppressed.

Source: Alaska Cancer Registry, Cancer Mortality; CDC Cancer Control and Prevention; Cancer Mortality Rates for US, 1996 to 2016

Infectious Disease

Why is it important?

Infectious diseases are caused by organisms such as bacteria, viruses, fungi, or parasites. Many infectious diseases can be prevented by vaccines. While most infectious diseases involve only minor and short-lasting symptoms, some such as pneumonia, AIDS, or meningitis can become very serious.

What is Mat-Su's Status?

Prevention in the form of immunization is a big part of controlling infectious disease. A quarter of adults received the flu vaccine, and a third received the pneumonia immunization. Among seniors, the percentages were slightly higher (41% for the flu vaccine and 61% for pneumonia immunization).

Regarding sexually transmitted diseases, in 2016, the Mat-Su gonorrhea rate reached 101.9 per 100,000 persons, more than nine times the 2007 rate of 10.9, and more than double the rate in 2015 (43.5). The rate of Chlamydia has persisted at a similar rate over the past few years (429.3 per 100,00 people in 2016).

Infectious Disease – Adults

Many forms of infectious disease can be prevented with the scheduled application of vaccines, such as the flu and pneumonia vaccines. Seasonal flu can lead to hospitalization and even death. Although in a typical flu season, most deaths occur to people age 65 or older, even healthy people can get very sick from the flu. The pneumococcal vaccine is recommended for adults aged 65 or older and people of other ages who have long-term health problems. This vaccine prevents serious infections of the lungs (pneumonia) and blood (bacteremia), and meningitis.

A quarter of adults received the flu vaccine, and a third received the pneumonia immunization. Among seniors, the percentages were slightly higher (41% for the flu vaccine and 61% for pneumonia immunization).

The percentage of adults receiving the flu vaccine did not significantly fluctuate, with 28% receiving the flu vaccine in 2007 and 30% in 2018. Mat-Su adults reported a lower percentage of flu vaccine participation than Alaska (33%) in 2018 and well below the Healthy People 2020 Goal of 80%.

The percentage of adults receiving the pneumonia vaccine did not significantly change between 2007 and 2018; 27% of Mat-Su adults received the pneumonia vaccine in 2007 and 28% in 2018.

Table 50: Adult Immunizations 2018 (%)

	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US %	Healthy People Goal %
Influenza Immur	nization			
Adults 18+ Years	29.6 (24.1-35.8)	33.0 (30.8-35.4)	N/A	80.0
Adults 65+ Years	41.1 (31.1-51.9)	49.0 (44.3-53.6)	60.7	90.0
Pneumonia Immunization				
Adults 18+ Years	28.4 (22.7-34.8)	28.6 (26.4-30.9)	N/A	-
Adults 65+ Years	61.3 (50.3-71.2)	64.2 (59.6-68.9)	75.4	90.0

N/A indicates not available.

Source: ADHSS BRFSS, CDC BRFSS Prevalence and Trends Data

Table 51: Flu Vaccine (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	Healthy People Goal %
2007-2008	27.5 (21.8-34.1)	36.4 (34.4-38.6)	80.0
2009-2010	31.3 (24.7-38.7)	38.0 (35.6-40.4)	80.0
2011	24.1 (20.0-28.8)	32.0 (29.8-34.3)	80.0
2012	26.5 (22.4-31.2)	31.2 (29.3-33.1)	80.0
2013	26.9 (21.9-32.6)	33.9 (31.8-36.1)	80.0
2014	26.3 (22.4-30.6)	34.9 (32.9-36.9)	80.0
2015	23.2 (18.9-28.1)	34.7 (32.2-37.3)	80.0
2016	25.1 (20.5-30.4)	33.4 (30.6-36.4)	80.0
2017	24.7 (20.2-29.9)	33.5 (30.7-36.5)	80.0
2018	29.6 (24.1-35.8)	33.0 (30.8-35.4)	80.0

Source: ADHSS BRFSS

⁻ indicates not applicable.

Table 52: Pneumococcal Vaccine (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
2007-2008	26.5 (20.3-33.9)	24.1 (22.1-26.3)
2009	16.0 (10.4-23.8)	24.0 (21.3-26.8)
2010	30.5 (20.0-43.6)	26.0 (22.7-29.5)
2011	29.3 (24.7-34.4)	27.7 (25.5-30.0)
2012	26.6 (22.1-31.6)	27.5 (25.6-29.5)
2013	32.8 (25.6-40.8)	29.0 (26.8-31.3)
2014	28.4 (24.2-33.1)	29.9 (27.9-32.0)
2015	30.0 (25.0-35.7)	32.9 (30.2-35.7)
2016	33.2 (27.5-39.5)	34.8 (31.8-37.9)
2017	29.2 (24.0-35.1)	38.4 (35.3-41.6)
2018	28.4 (22.7-34.8)	28.6 (26.4-30.9)

Source: ADHSS BRFSS

Sexually Transmitted Disease

Sexually transmitted diseases are a form of infectious disease and associated with increased morbidity and mortality. The two most commonly reported infectious diseases in the U.S. are Chlamydia and gonorrhea, which can be treated with medication. Untreated Chlamydia may lead to infertility and associated chronic pelvic problems in women. The Mat-Su Chlamydia rate was 429.3 per 100,000 people in 2016, much lower than the Alaska rate and slightly lower than the U.S. Untreated gonorrhea can lead to pelvic inflammatory disease in women and a painful disease called epididymitis in men and may develop into other life-threatening conditions. In 2016, the Mat-Su gonorrhea rate reached 101.9 per 100,000 persons, more than nine times the 2007 rate of 10.9, and more than double the rate in 2015 (43.5).

Table 53: Chlamydia Rate Per 100,000 People (Crude Rate)

Year	Mat-Su Rate	Alaska Rate	U.S. Rate
2007	288.7	722.3	367.7
2008	317.6	709.1	398.0
2009	306.7	743.6	405.7
2010	449.0	843.0	422.8
2011	468.2	794.1	453.2
2012	459.5	747.0	453.0
2013	538.2	783.0	443.0
2014	404.9	785.4	452.1
2015	378.9	766.5	475.0
2016	429.3	771.6	497.3

Source: ADHSS, Interactive Display of Alaska Chlamydia Data, CDC, NCHHSTP Atlas

Table 54: Gonorrhea Rate Per 100,000 People (Crude Rate)

Year	Mat-Su Rate	Alaska Rate	U.S. Rate
2007	10.9	85.2	118.1
2008	7.0	84.3	110.7
2009	19.2	142.5	98.2
2010	23.4	178.3	100.0
2011	16.3	136.2	103.2
2012	13.9	99.3	106.6
2013	52.2	153.0	105.2
2014	48.8	181.9	109.8
2015	42.5	150.7	123.0
2016	101.9	196.9	145.8

Source: ADHSS, Interactive Display of Alaska Gonorrhea Data, CDC, NCHHSTP Atlas

CHAPTER 12: MENTAL HEALTH, ALCOHOL AND SUBSTANCE ABUSE DATA

Why is it important?

Mental health contributes to a person's total health. A person's mental health can be influenced by spiritual beliefs, cultural practices, and experiences in childhood and adulthood. Poor mental health is often associated with physical health problems. Alcohol and substance abuse challenges can be a cause or response to mental health issues, such as depression or anxiety. Research has shown that untreated stress caused by adverse experiences and trauma during childhood can cause changes in the developing brain and lead to physical and mental health problems as an adolescent and adult, including depression, suicide attempts, alcoholism, drug addiction, and being at risk for intimate partner violence. These physical problems include chronic obstructive pulmonary disease, ischemic heart disease, cancer, and liver disease. Toxic stress in childhood can also lead to participation in unhealthy behaviors at an early age (i.e., smoking, drinking alcohol, and doing illegal drugs).

What is Mat-Su's Status?

Among adults, the "early" signals of depression and mental health do not seem alarming, but a gap exists between these and the suicide death rate. Mat-Su did not differ from the Alaska or the national percentages for available depression indicators.

Adults reported an average of 3.9 poor mental health days, while seniors reported 2.3 days. Among all adults, the average number of poor mental health days did not change from 2008-2017. Mat-Su's suicide death rate appears higher than the Alaska rate and more than double the national one. It also appears to have increased to 30.6 per 100,000 persons in 2017, whereas 2013-2016 rates ranged from 18.5 to 22.6.

Mental stress and health problems are often linked to abuse of alcohol and drugs. Seventeen percent of Mat-Su adults and 15% of high school students reported binge drinking in the last month. In 2017, Mat-Su youth are reporting they are trying different kinds of drugs, including 40% using marijuana, prescription drugs without a prescription (15%), huffing/cocaine (8%), ecstasy (6%), methamphetamine (4%), and heroin (4%).

The Data

Children and Youth Mental Health

No local data are available to assess the mental health of children younger than middle school. Research has shown that when children experience severe stress, it can affect their mental health at that time, as well as their mental and physical health later in life. Adverse childhood experiences that have been studied include: emotional, physical, and sexual abuse; household mental illness; parental separation/divorce; and incarceration of a household member.

Depression and suicide remain a serious challenge. However, for all indicators presented for youth suicide, Mat-Su did not differ from Alaska and did not differ from the national except for the percentage of traditional high school students who made a suicide plan. Mat-Su traditional high school students reported 18% compared to 14% nationwide.

Among middle school students in the past year, one in five considered suicide, 15% planned about how to attempt suicide, and 7% attempted suicide. Among high school students in the past year, a third felt sad or hopeless for two weeks in a row, one in five considered suicide, nearly one in five made a plan about how to attempt suicide, 9% attempted suicide, and 4% needed to be treated by a doctor or nurse.

Table 55: Youth Depression Indicators, 2017 (%)

	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US % (95% Confidence Interval)	Healthy People Goal %
Felt sad or	hopeless almost	every day for 2+ v	veeks in a row in _l	past year
Traditional high school	31.4 (27.2-35.8)	34.5 (32.4-36.7)	31.5 29.6–33.4)	-
Alternative high school	53.8 (46.1-61.3)	50.8 (46.8-54.9)	-	-
All high school	33.5 (29.6-37.7)	35.5 (33.5-37.5)	-	-

^{*} Data are unreliable.



"This is a photo of the Youth 360 building at HJSH. Here students come after school to participate in activities and develop positive relationships with adults and students alike. For many students, these programs are the only way they develop positive relationships. While it is good that these programs exist to fill this need, the fact that they need to exist is a problem. These problems exist because of many of the same reasons as above. We can help with these problems in the same ways as many above."

From R.O.C.K. Mat-Su Youth Leadership Council.

⁻ indicates not applicable. Source: ADHSS YRBS, CDC YRBS

Table 56: Youth Suicide Indicators, 2017 (%)

Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US % (95% Confidence Interval)	Healthy People Goal %
Suicide cor	nsideration in pa	st year		
Middle school, ever, 2019	22.9 (21.9-23.9)	-	-	-
Traditional high school	n 20.1 (16.9-23.7)	21.1 (19.5-22.9)	17.2 (16.2–18.3)	-
Alternative high school	a 35.9 (30.7-41.5)	32.9 (30.1-35.9)	-	-
All high school	21.6 (18.6-25.0)	21.9 (20.3-23.5)	-	-

Made a plan about how to attempt suicide in past year					
Middle school,	15.0	_	_		
ever, 2019	(14.1-15.8)	-	-		
Traditional high	18.1	17.9	13.6		
school	(14.9-21.7)	(16.4-19.5)	(12.4-14.8)	-	
Alternative high	25.9	27.2			
school	(20.9-31.7)	(24.3-30.3)	-	-	
All high school	18.8	18.5			
All high school	(15.9-22.1)	(17.1-20.0)	-	-	

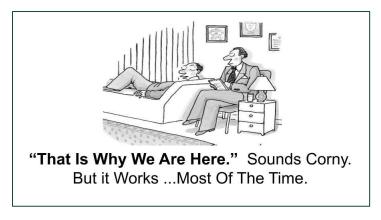
Actually attempted suicide in past year						
Middle school,	7.2					
ever, 2019	(6.6-7.8)	-	-	-		
Traditional high	8.2	10.3	7.4	1.7		
school	(5.9-11.3)	(91.1-11.7)	(6.5-8.4)	1./		
Alternative high	17.9	20.7*				
school	(13.6-23.1)	(17.8-24.0)	-	-		
All high calcal	9.2	11.0				
All high school	(7.0-12.0)	(9.8-12.6)	-	-		

Suicide attempt needed to be treated by doctor or nurse						
Traditional high	3.2	3.1	2.4			
school	(1.8-5.8)	(2.3-4.0)	(2.1-2.9)	-		
Alternative high	6.3	7.4*				
school	(3.3-11.5)	(5.3-10.1)	-	-		
All high school	3.5	3.4				
All High School	(2.1-5.8)	(2.7-4.3)	-	-		

^{*} Data are unreliable. - indicates not applicable. Source: ADHSS YRBS, CDC YRBS

Adult Mental Health

Among adults, the "early" signals of depression and mental health do not seem alarming, but a gap exists between these and the suicide death rate. Mat-Su did not differ from the Alaska or national percentages for available depression indicators. Adults reported an average of 3.9 poor mental health days, while seniors reported 2.3 days (2017). Among all adults, the average number of poor mental health days did not change from 2008-2018. Seventeen percent of adults were told by a healthcare provide they were depressed, and 14% of mothers of three-year-old children were diagnosed with depression since their child was born.



Mat-Su's suicide death rate appears higher than Alaska's and more than double the national rate. It also appears to have increased to 30.6 per 100,000 persons in 2017 whereas 2013-2016 rates ranged from 18.5 to 22.6.

From Mat-Su Health Services Group



"When I see the tops I am looking UP and not DOWN." From Mat-Su Health Services Group

Table 57: Adult Mental Health Indicators

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Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US %	Healthy People Goal %
Depression, 2018				
Average number of poor mental health days in the last month (18+)	3.9 (3.0-4.7)	3.7 (3.4-4.0)	N/A	-
Average number of poor mental health days in the last month (65+)	2.9 (1.6-4.3)	N/A	N/A	-
Told by a healthcare provider you have a depressive disorder, ever (%)	18.8 (14.0-24.8)	21.2 (19.1-23.4)	20.5	-
Mothers of 3-year- olds who diagnosed with depression since child was born, 2014 (%)	13.7 (5.5-30.5)	12.3 (8.8-17.0)	N/A	-
Suicide, 2017				
Suicide death rate, age-adjusted, per 100,000 people	30.6	25.3 (23.9-26.6)	14.0	10.2

^{*}Median U.S. Crude Rate.

N/A indicates not available.
- indicates not applicable.
Source: ADHSS BRFSS, CUBS; HAVR; CDC BRFSS Prevalence and Trends

Table 58: Average Number of Poor Mental Health Days in Last Month

Year	Mat-Su Borough Average Number of Days (95% Confidence Interval)	Alaska Alaska Average Number of Days (95% Confidence Interval)
2008	3.8 (2.6-5.0)	3.3 (3.0-3.7)
2009	2.6 (1.7-3.4)	2.8 (2.5-3.1)
2010	3.7 (2.2-5.2)	3.2 (2.8-3.7)
2011	3.4 (2.6-4.2)	3.2 (2.8-3.5)
2012	3.8 (2.8-4.9)	3.3 (3.0-3.6)
2013	3.1 (2.5-3.7)	3.1 (2.8-3.3)
2014	3.2 (2.7-3.8)	3.1 (2.8-3.3)
2015	3.7 (3.1-4.3)	3.6 (3.3-3.9)
2016	3.9 (3.2-4.7)	3.5 (3.1-3.8)
2017	3.9 (3.1-4.7)	3.9 (3.5-4.2)
2018	3.9 (3.0-4.7)	3.7 (3.4-4.0)

Source: ADHSS BRFSS

Table 59: Suicide Death Rate per 100,000 People

Year	Mat-Su Borough Rate	Alaska Rate (95% Confidence Interval)	U.S. Rate	Healthy People Goal Rate
2013	21.1*	23.5 (20.0-27.0)	17.0	10.2
2014	22.6	22.3 (21.1-23.6)	17.4	10.2
2015	18.8*	27.1 (23.5-31.1)	17.6	10.2
2016	18.5*	25.3 (23.9-26.6)	17.8	10.2
2017	30.6	26.9 (25.5-28.2)	N/A	10.2

[^]U.S. Rate is crude rate, all others are age-adjusted rates.

^{*} Data are unreliable.

N/A indicates not available. Source: HAVR, ADHSS

Alcohol Misuse

Binge drinking for youth is defined as having five or more drinks at one sitting. In 2017, 13% of Mat-Su traditional and 32% of alternative high school students reported binge drinking in the last month.

For adults, binge drinking is defined as having five or more drinks in one sitting for a male and four or more for a female. Heavy drinking is defined as having two or more drinks daily for a male and one or more for a female. For all alcohol indicators present, Mat-Su did not differ from Alaska or the nation. In addition, there were no changes over time for adult binge drinking or heavy drinking. In 2018, 15% of adults and 2% of seniors report binge drinking. In 2017, 7% of adults reported heavy drinking behaviors, while 2% of seniors reported the same behaviors in 2018. Mat-Su met the Healthy People 2020 Goal of 24.3% for binge drinking. About 8% of pregnant mothers drank alcohol during the last three months of pregnancy; Mat-Su did not meet the Healthy People 2020 Goal of 1.7%.



"Being wasted = wasted time, money, memory and family life." From Chickaloon Traditional Council – Sutton Women's Group.

Table 60: Alcohol-Related Indicators, 2017 (%)

		, ()			
Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US % (95% Confidenc e Interval)	Healthy People Goal %	
Binge drinking					
Traditional high school	13.4 (10.5-17.0)	13.5 (12.2-14.9)	13.5 (12.0-15.1)	8.5	
Alternative high school	32.0 (24.3-40.9)	28.7 (24.6-33.1)	-	-	
All high school	15.2 (12.3-18.6)	28.7 (13.3-15.9)	-	-	
Adults 18+ years (2018)	15.4 (10.4-22.3)	18.0 (15.7-20.6)	17.4^	24.3	
Adults 65+ years (2018)	2.2 (0.7-6.6)	6.5 (4.0-8.9)	-	-	
Heavy drinking)				
Adults 18+ years	7.8 (5.8-10.3)	8.8 (7.7-10.1)	6.3^	-	
Adults 65+ years (2018)	2.4 (0.7-7.9)	5.1 (3.1-7.1)	-	-	
Drinking while pregnant					
Used alcohol during last 3 months of pregnancy	7.7 (3.5-16.1)	6.3 (4.6-8.5)	-	1.7	

^U.S. Rate is crude rate.

Source: ADHS BRFSS and YRBS, PRAMS, CDC BRFSS Data and Trends

Table 61: Adult Binge Drinking (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	Healthy People Goal %
2008	15.7 (10.7-22.4)	16.1 (14.5-17.8)	24.3
2009	17.3 (10.5-27.3)	18.1 (15.8-20.8)	24.3
2010	25.0 (14.6-39.3)	21.6 (18.1-25.5)	24.3
2011	20.0 (15.43-26.3)	20.2 (18.3-22.2)	24.3
2012	22.4 (16.5-29.8)	20.1 (18.0-22.7)	24.3
2013	17.7 (12.9-23.9)	20.1 (18.1-22.4)	24.3
2014	17.0 (13.7-21.1)	19.0 (17.3-20.7)	24.3
2015	16.7 (14.0-19.7)	19.9 (18.3-21.5)	24.3
2016	16.6 (13.96-20.2)	18.2 (16.7-19.9)	24.3
2017	18.9 (15.8-22.4)	19.3 (17.6-21.0)	24.3
2018 Source: ADHSS BE	15.4 (10.4-22.3)	18.0 (15.7-20.6)	24.3

Source: ADHSS BRFSS

Table 62: Adult Heavy Drinking (%)

Year	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)
2008	4.8 (2.9-7.8)	4.8 (4.1-5.7)
2009	6.1 (3.2-11.6)	6.2 (4.9-7.9)
2010	11.2 (4.1-27.0)	6.1 (4.3-8.5)
2011	6.9 (4.6-10.1)	7.3(6.2-8.6)
2012	7.6 (5.1-11.2)	6.5 (5.5-7.6)
2013	5.0 (3.4-7.3)	7.7 (6.6-8.9)
2014	7.9 (5.6-11.0)	9.1 (7.9-10.5)
2015	8.3 (6.4-10.7)	7.9 (7.0-9.0)
2016	6.5 (4.7-9.0)	7.3 (6.3-8.5)
2017	7.8 (5.8-10.3)	8.8 (7.7-10.1)

Source: ADHSS BRFSS

Substance Abuse

Among all the youth drug indicators, Mat-Su youth do not differ from Alaska or the U.S. percentages. The order of highest types of drugs used by youth in 2017 were: marijuana (40%), prescription drugs without a prescription (15%), huffing/cocaine (8%), ecstasy (6%), methamphetamine (4%), and heroin (4%).

Of the top five leading causes of death in Mat-Su, all have an established connection to substance abuse. Chronic lower respiratory disease, heart disease, and many cancers have a strong association with smoking and other substance abuse. Research has shown that alcohol and drug abuse are second only to depression and other mood disorders as a risk factor for suicide. The alcohol- and drug-associated death rates do not appear to differ with Alaska or the nation. Alcohol and drug use can also contribute to death due to chronic liver disease and cirrhosis. Mat-Su had a lower death rate (10.2 per 100,000) for this cause than the state or nation. Alcohol misuse can contribute to motor vehicle accident injury and death. The Mat-Su motor vehicle death rate (12.0 per 100,000) was similar to Alaska (13.8) and the U.S. (12.4).

When pregnant women drink alcohol, this introduces the risk their child will have Fetal Alcohol Spectrum Disorder (FASD).



"ADDICTION – you are alive and existed but yet NO SOUL." From Filipino Residents Group.

Table 63: Youth-Related Drug Indicators 2017 (%)

	0	(,,,)	
Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US % (95% Confidence Interval)
Marijuana, ever			
Middle school, 2019	7.9 (7.3-8.6)	N/A	N/A
Traditional high school	37.4 (3.1-43.8)	38.5 (36.1-40.9)	35.6 (33.0–38.3)
Alternative high school	68.3 (60.7-75.0)	73.1 (69.2-76.6)	N/A
All high school	40.4 (34.8-46.2)	40.8 (38.6-43.1)	N/A
Huffing, ever			
Traditional high school	6.8 (4.6-10.1)	6.9 (6.0-8.0)	6.2 (5.6-6.9)
Alternative high school	15.8 (12.1-20.5)	12.6 (10.9-14.6)	N/A
All high school	7.7 (5.5-10.6)	7.4 (6.5-8.3)	N/A
Methamphetamine	es, ever		
Traditional high school	3.4 (2.2-5.3)	3.2 (2.6-4.0)	2.5 (2.0-3.0)
Alternative high school	13.7 (9.8-18.7)	12.3 (10.6-14.3)	N/A
All high school	4.4 (3.2-6.2)	3.8 (3.1-4.5)	N/A
Any form of cocain	ne, ever		
Middle school, 2019	2.0 (1.7-2.4)	N/A	N/A
Traditional high school	6.6 (4.8-9.2)	4.9 (4.1-5.8)	4.8 (4.2–5.6)
Alternative high school	19.9 (14.1-27.4)	18.3 (15.8-21.0)	N/A
All high school	7.9 (6.1-10.2)	5.7 (5.0-6.6)	N/A

Table 64: Youth-Related Drug Indicators 2017 (%) (cont.)

Tuble 64: Touth-Related	0	2017 (70) (00110	•)				
Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US % (95% Confidence Interval)				
Prescription drugs without a prescription from their doctors, ever							
Traditional high school	12.8 (9.9-16.3)	14.4 (13.1-15.8)	14.0 (12.7–15.4)				
Alternative high school	31.5 (23.7-40.6)	30.2 (27.4-33.1)	N/A				
All high school	14.5 (11.6-17.0)	15.5 (14.3-16.8)	N/A				
Ecstasy, ever							
Traditional high school	4.6 (2.9-7.1)	4.6 (3.8-5.5)	4.0 (3.4–4.7)				
Alternative high school	15.2 (10.2-21.9)	16.9 (14.5-19.7)	N/A				
All high school	5.6 (3.9-7.9)	5.3 (4.6-6.2)	N/A				
Heroin, ever							
Traditional high school	2.9 (1.7-4.8)	2.7 (2.0-3.5)	1.7 (1.3-2.2)				
Alternative high school	8.7 (5.8-12.9)	7.4 (5.8-9.4)	N/A				
All high school	3.5 (2.3-5.2)	3.1 (2.4-3.9)	N/A				

Source: ADHSS YRBS, CDC YRBS Data and Trends

Table 65: Select Causes of Death Often Related to Substance Abuse

Indicator	Mat-Su Borough Rate	Alaska Rate	US Rate	Healthy People Goal Rate
Alcohol-induced death rate per 100,000 people, 2017 (age-adjusted)	9.1*	19.8	11.0^	-
Drug-induced death rate per 100,000 people, 2017 (ageadjusted)	20.7	21.2	22.7^	-
Unintentional injury death rate per 100,000 people, 2017 (age-adjusted)	63.7	63.0	52.2	36.0
Suicide death rate per 100,000 people, 2017 (age- adjusted)	30.6	26.9	14.5	10.2
Homicide death rate per 100,000 people, 2017 (age- adjusted)	**	10.4	6.0	5.5
Chronic liver disease and cirrhosis death rate per 100,000 people, 2017 (ageadjusted)	10.2*	14.9	12.8	8.2
Motor vehicle death rate per 100,000 people, 2017 (ageadjusted)	12.0†	13.8	12.4	12.4
Poisoning death rate per 100,000 people, 2017 (ageadjusted)	**	20.7	19.9	13.1

Source: ADHHS DBH, ATR, ABDR, HAVR Vital Statistics Report, CDC WONDER

^{*} Data are unreliable.
^Crude Rate (All others age-adjusted)

^{**} Data are suppressed. †2011-2017 rolling average, form RWJF County Health Rankings

Why is it important?

For the purposes of this assessment, "safety" is defined as events that could endanger the safety of the general public, both inside and outside their homes. This includes intentional injury (violence) but not suicide, which is included in the mental health chapter. Unintentional injury (injuries that occur by accident) such as motor vehicle crashes, drowning, and fires, are included in this chapter.

Both public safety and unintentional injury contribute to health conditions that can be prevented. Crime and violence are often linked to other public health issues such as alcohol and substance abuse. Many unintentional injuries can be prevented with changes in community norms surrounding the activities linked to injury (i.e., helmet use), provision of resources, and changes to the built environment (i.e., bike lanes).

What is Mat-Su's Status?

Among all the youth violence indicators for the Mat-Su, none were significantly different than Alaska or the U.S. However, challenges persist. The most recent data shows 39% of middle school students ever got in a physical fight, 20% of high school students were in a physical fight in the past 12 months, 7% of high school students experienced dating violence in the past 12 months, and 11% of high school students were raped.

Interpersonal violence and sexual violence are a problem among adults. Twenty-three percent of Mat-Su adults experienced unwanted sexual activity, 26% were ever threatened by a partner, and 8% were threatened or hurt by a partner in the last five years. The data on domestic violence and sexual assault in Mat-Su is likely underreported because of the hesitancy of individuals to review their experiences.

Another important way to protect Mat-Su residents is to prevent injury that occurs unintentionally (i.e., motor vehicle crashes, drownings, and falls). Mat-Su had an unintentional injury death rate of 63.7 per 100,000 people. Mat-Su youth are reporting higher rates of wearing a bike helmet, not riding with a drunk driver, and wearing a seatbelt compared to U.S. youth.

The leading causes of injury requiring hospitalization in Mat-Su were falls, motor vehicle accidents, ATV accidents, assaults/ homicides/purposely inflicted, and suicide.

The Data

Crime

Currently the cities of Palmer and Wasilla have municipal police services, and the Alaska State Troopers are charged with enforcement of all criminal and traffic laws of the State of Alaska with an emphasis in areas not covered by a local police unit. In 2010, the city of Houston had a police service that has since been disbanded.

In 2017, the most common crime reported and/or investigated by city police and state troopers was theft, followed by assault. The 2016 homicide rate was 8.9 per 100,000 people, higher than Alaska and the U.S rate.



"A group of concerned citizens creates a network of informed people and organize an active neighborhood crime watch program."

From Williwaw Community Residents.

Table 66: Actual Criminal Offenses, Number, 2017

Incident	Palmer	Wasilla
Homicide	1	-
Rape	1	-
Robbery	4	5
Assault	90	179
Burglary	19	40
Theft	208	377
Motor Vehicle Theft	17	47

- indicates data is not reported. Source: Alaska Dept. of Public Safety

Table 67: Homicide Death Rate Trends

Years	Mat-Su Borough Rate	Mat-Su Borough Number of Deaths	Alaska Rate	U.S. Rate
2013	5.1*	6	5.7	-
2014	7.8*	7	4.6	5.1
2015	6.5*	6	8.1	5.7
2016	8.9*	8	7.6	6.2
2017	**	**	10.4	6.2

* Data are unreliable. ** Data are suppressed. Source: HAVR, NCHS, NVS CDC WONDER

Table 68: Violent Crime, 2010

Location	Number of Incidences	Rate per 100,000 Inhabitants
Mat-Su Borough	114	*
Alaska	4,537	638.8
Metropolitan Alaska	2,846	N/A
Cities outside Metropolitan Areas (estimate)	697	N/A
Alaska State Troopers	994	N/A
U.S.	1,246,248	403.6

*Data are unreliable. N/A indicates not available.

Source: FBI, Crime in the United States

Child and Youth Violence

Interpersonal violence is defined as "the intentional use of physical force or power, threatened or actual, against another person or against a group or community that results in or has a high likelihood of resulting in injury, death, psychological harm, delayed development, or deprivation." Most of the indicators presented in this section are considered "no-tolerance" indicators for communities, meaning they assume harm is preventable and should not occur.

Among all the youth violence indicators for the Mat-Su, none were significantly different than Alaska or the U.S. However, challenges persist with 39% of middle school students ever got in a physical fight, 20% of high school students were in a physical fight in the past 12 months, 7% percent of high school students experienced dating violence in the past 12 months, and 11% of high school students were raped. About 47% of middle school students and 23% of high school students were bullied on school grounds in the past 12 months, and 25% of middle school students and 19% of high school students experienced electronic bullying in the past 12 months.

When children witness domestic violence, they become fearful and anxious, and may feel worthless and powerless. They do not feel safe and always worry for themselves, their parent(s), and their siblings. The experience can have lifelong effects on the individuals' physical and emotional health. In 2017, 22% of Mat-Su adults reported that, in childhood, they witnessed a parent hurt by their parent's spouse or partner.



"Adventures to wild places teaches healthy relationships without environment and helps us learn about ourselves." from Chickaloon Traditional Council – Tribal Citizens

Table 69: Youth Violence Indicators (%)

Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US % (95% Confidence Interval)	Healthy People Goal %
Physical fight				
Middle school, ever, 2019	39.4 (38.2-40.6)	N/A	N/A	28.4
Traditional high school, in past 12 months, 2017	19.0 (15.6-22.9)	18.7 (17.3- 20.3)	23.6 (21.6- 25.6)	28.4
Alternative high school, in past 12 months, 2017	32.3 (25.9-39.6)	33.6 (30.2- 37.1)	N/A	-
All high school, in past 12 months, 2017	20.3 (17.1-23.9)	19.9 (18.5- 21.3)	N/A	-
Dating violence	in past 12 m	onths		
Traditional high school, 2017	5.7 (3.8-8.7)	7.5 (6.4-8.7)	8.0 (7.3–8.8)	-
Alternative high school, 2017	16.5 (9.5-26.9)	17.8* (13.0- 23.9)	N/A	-
All high school, 2017	6.8 (4.8-9.6)	8.2 (7.2-9.4)	N/A	-
Forced intercou	rse ever			
Traditional high school, 2017	9.2 (7.2-11.7)	7.9 (6.8-9.1)	7.4 (6.6-8.3)	-
Alternative high school, 2017	26.2 (20.2-33.1)	20.9 (17.7- 24.5)	N/A	-
All high school, 2017	10.8 (8.8-13.2)	8.7 (7.7-9.9)	N/A	-

Table 70: Youth Violence Indicators (%) (cont.)

Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US % (95% Confidence Interval)	Healthy People Goal %
Bullying on scho	ol grounds			
Middle school, ever, 2019	46.8 (45.6-48.0)	N/A	N/A	-
Traditional high school, in past 12 months, 2017	22.4 (18.3-27.2)	21.6 (20.1- 23.3)	19.0 (17.6– 20.5)	17.9
Alternative high school, in past 12 months, 2017	27.9 (23.0-33.4)	24.0 (21.3- 27.0)	N/A	-
All high school, in past 12 months, 2017	23.0 (19.1-27.3)	21.8 (20.3- 23.3)	N/A	-
Electronic bullyir	ng			
Middle school, ever, 2019	25.0 (24.0-26.0)	N/A	N/A	-
Traditional high school, in past 12 months, 2017	17.4 (14.8-20.4)	17.9 (16.4- 19.5)	14.9 (13.7- 16.2)	-
Alternative high school, in past 12 months, 2017	32.5 (24.3-41.8)	25.2 (21.3- 29.5)	N/A	-
All high school, in past 12 months, 2017	18.9 (16.4-21.7)	18.3 (16.9- 19.9)	N/A	-

^{*} Data are unreliable.

N/A indicates not available. Source: ADHSS YRBS, CDC YRBS Data and Trends

Table 71: Child Maltreatment Handled by Wasilla Office of Children Services, Unique Children (Under Age 18), Rate per 1,000 children, 2018

omque chiaren	2018	2017	2016	2015	2014
	(N=29,458)	(N=29,435)	(N=28,843)	(N=27,877)	(N=27,433)
Any Child Mo	altreatmen [.]	t			
All Reports1	90.9	79.9	79.2	82.2	69.5
Screened-In Reports2	61.1	53.0	50.7	55.6	42.8
Substantiated Reports3	7.8	6.9	9.1	13.7	12.1
Physical Abu	use				
All Reports	22.7	19.4	20.7	18.6	12.9
Screened-In Reports	16.4	12.4	13.1	11.8	6.8
Substantiated Reports	1.8	1.8	1.1	1.7	1.1
Sexual Abus	е				
All Reports	18.1	13.5	12.8	14.7	10.1
Screened-In Reports	7.0	5.7	5.4	6.8	4.1
Substantiated Reports	0.6	*	0.7	1.0	0.4
Mental Abus	se				
All Reports	26.4	21.0	19.9	23.9	12.4
Screened-In Reports	20.8	15.7	13.3	19.2	8.0
Substantiated Reports	1.3	1.0	1.7	4.0	0.6
Neglect					
All Reports	67.9	59.8	58.4	61.5	56.5
Screened-In Reports	46.9	41.9	40.1	44.3	37.6
Substantiated Reports	6.5	5.8	7.8	10.6	11.2

¹Reports include all Protective Services Reports (PSR) made to the OCS for the unique number of children with at least one report of alleged abuse during the year. ²Screen-Ins are reports OCS determines constitute a potential threat to child safety. An assessment is completed for these reports, calculated by the unique number of children with at least one report of alleged abuse screened-in during the year. ³Substantiations are Screen-Ins in which OCS has concluded that the allegation of maltreatment or risk of maltreatment was supported or founded by State law or policy, calculated by the unique number of children with at least one report screened-in and substantiated by OCS during the year. Source: ADHSS Alaska Office of Children's Services (OCS); Unique Children

Adult Violence

Domestic violence is defined as a pattern of abusive behavior in any relationship that is used by one partner to gain or maintain power and control over the other. It may include physical, sexual, emotional, economic, or psychological threats of actions to influence the other person. Many cases of domestic violence go unreported. In 2017, 26% of Mat-Su adults reported ever being threatened or hurt by a partner, and 8 percent reported being threatened or hurt by a partner in the last five years.

Table 72: Mat-Su Borough Domestic Violence/Sexual Assault Indicators (%)

Indicator	2017	2012	2009	2006
Witnessed parent hurt by spouse/partner	22.1 (16.7-27.4)	19.7 (15.7-23.8)	21.3 (12.3-30.3)	24.1 (14.5-33.7)
Had unwanted sexual activity, ever	22.7 (17.6-27.9)	19.6 (15.4-23.7)	14.9 (7.8-21.9)	21.8 (12.4-31.3)
Threatened or hurt by partner, ever	26.4 (21.0-31.9)	27.0 (22.4-31.7)	22.2 (13.1-31.2)	17.6 (9.9-25.3)
Threatened or hurt by current or former intimate partner in last 5 years	7.5 (3.9-11.1)	6.1 (3.5-8.7)	8.3 (1.1-15.6)	*

^{*} indicates data are suppressed.

Source: ADHSS BRFSS

Safety Behavior and Injury

Many middle school students are not always wearing their helmets while riding bikes (16%) or rollerblading or skateboarding (22%). Most high school students are not riding with drunk drivers. Only 13% reported this behavior. Most students are wearing their seatbelt all or most of the time: middle school 95% and high school 91%.



"Pathways for Bikers & Walkers?" From People of a Certain Age.

Table 73: Youth Safety Behavior Indicators

Table 73: Youth Safety Behavior Indicators					
Indicator	Mat-Su Borough % (95% Confidence Interval)	Alaska % (95% Confidence Interval)	US % (95% Confidence Interval)	Healthy People Goal %	
Wear helme	t always				
Middle School Bike Riders, 2019	16.2 (15.3-17.2)	N/A	N/A	-	
Middle School Rollerbladers/ Skateboarders, 2019	21.6 (20.2-23.1)	N/A	N/A	-	
Rode with a drunk driver in the past 30 days					
Traditional High School	12.0 (9.2-15.4)	14.9 (13.7-16.1)	16.5 (15.2–17.7)	25.5	
Alternative high School	16.9 (13.1-21.5)	18.8 (16.1-21.9)	N/A	-	
All High School	12.5 (9.9-15.5)	15.2 (14.1-16.4)	N/A	-	
Wear seatbe	elt all or most of	f the time			
Middle School, 2019	95.3 (94.8-95.8)	N/A	N/A	-	
Traditional High School	91.3 (88.4-93.5)	85.8 (84.5-87.1)	94.1* (92.7-95.2)	-	
Alternative High School	88.2 (83.9-91.5)	79.5 (76.5-82.3)	N/A	-	
All High School	91.0 (88.4-93.0)	85.3 (84.1-86.5)	N/A	-	

^{*}Sometimes, Most of the Time, or Always Wore a Seat Belt

N/A indicates not available.

Source: ADHSS YRBS, HAVR, CDC YRBS, WONDER

Table 74: Unintentional Injury Death Rate per 100,000 People

Year	Mat-Su Borough Rate	Mat-Su Borough Number of Deaths	Alaska Rate	U.S. Rate	Healthy People Goal Rate
2011	60.0	49	57.1	39.0	36.0
2012	54.9	49	53.7	38.9	36.0
2013	67.2	56	52.5	39.2	36.0
2014	63.0	53	54.6	40.4	36.0
2015	64.2	52	57.4	43.1	36.0
2016	56.7	52	62.1	47.3	36.0
2017	63.7	61	63.0	49.3	36.0

Source: HAVR, CDC WONDER

Table 75: Motor Vehicle Death Rate per 100,000 People

Year	Mat-Su Borough Rate	Mat-Su Borough Number of Deaths	Alaska Rate	U.S. Rate	Healthy People Goal Rate
2011	14.1	36	12.3	11.1	12.4
2012	15.3	41	10.2	11.3	12.4
2013	15.4	42	8.9	10.9	12.4
2014	13.3	38	11.2	10.8	12.4
2015	12.9	37	10.6	11.4	12.4
2016	12.3	37	12.8	12.1	12.4

Source: HAVR, CDC WONDER

Between 2014 and 2018, most injury hospitalizations were among persons ages 20 years and older. The leading causes of injury hospitalizations include: falls (40%, 1,1213 admissions), motor vehicle traffic accidents (18%, 539 admissions), ATV-nontraffic accidents (7%, 218 admissions), assault/homicide/purposely inflicted (4%, 118 admissions), suicide/self-inflicted (3%, 83 admissions), and struck by a person or object unintentionally (3%, 83 admissions).

Table 76: Injury Requiring Hospitalization By Age, 2014-2018

Age Range	Mat-Su Borough %	Mat-Su Borough Count	Alaska %	Alaska Count
<5 years	5.2%	159	4.4%	941
5-14 years	7.6%	231	6.4%	1,377
15-19 years	7.6%	231	5.2%	1,123
20-44 years	27.7%	848	31.5%	6,788
45-64 years	24.2%	741	25.3%	5,439
>64 years	27.7%	848	27.2%	5,860
Total	100.0%	3,058	100.0%	21,528

Notes: Multiple visits for the same injury are counted as separate occurrences. Mat-Su: Injuries that occurred in the Mat-Su Region of Alaska, regardless of where hospitalized in Alaska. Alaska: Injuries that occurred in the State of Alaska, regardless of where hospitalized in Alaska. Source: Alaska Trauma Registry; five-year rolling average

Table 77: Leading Causes of Injuries Requiring Hospitalization, 2014-2018

Mat-Su			Rest of Alaska (Excluding Mat-Su)		
Cause	%	Coun t	Cause	%	Count
Falls	39.7	1,213	Falls	44.7	8,259
Motor Vehicle Traffic	17.6	539	Assault/Homicido /Purposely Inflicted	10.2	1,893
ATV- Nontraffic	7.1	218	Motor Vehicle Traffic	9.4	1,730
Assault/Homicide /Purposely Inflicted	3.9	118	ATV - Nontraffic	3.6	664
Suicide/Self- Inflicted	2.7	83	Pedal Cycle	2.7	506
Struck by Person/Object (Unintentional)	2.7	83	Pedestrian	2.6	486
Total	-	3,058		-	18,471

Source: Alaska Trauma Registry, Alaska Defined Causes of Injury Definitions

The Mat-Su Borough provides emergency medical services (EMS) to all communities in the borough, including operating the Palmer and Wasilla fire departments. Emergency services assist with many health concerns, especially injury-related health issues. The Greater Palmer Fire Services Department and Wasilla's Fire Department provide on-call, ground-level response for fire, rescue, and EMS. The Borough's Fire Prevention Officer teaches fire prevention classes in schools.

The extent to which Mat-Su region has management to improve transportation safety is unclear, in part, because most roads are managed by the State of Alaska Department of Transportation and Public Facilities (ADOT&PF). ADOT&PF maintains a management program to improve safety across the entire state.

CHAPTER 14: RACE, ETHNICITY, DISABILITY, SEXUAL ORIENTATION, GENDER AND DISCRIMINATION DATA

Why is it important?

Discrimination can occur based on many different characteristics of a person, such as race, gender, ethnicity, sexual orientation, age, disability, and religion. Discrimination is defined as the "unjust or prejudicial treatment of different categories of people." When a majority of people, laws, funding systems, etc., systematically discriminate against a group of people based on a characteristic of the group, it can deprive them of equal power and cause inequality in society. This can create a condition that restricts resources that promote health and cause stress and other health-related issues for that group.

In this chapter, we will examine what we know about discrimination based on race, disability, and sexual orientation. An example of this is racism that is based on how society assigns one's value and available opportunities based on how one looks or, in other words, based on race. This leads to unfair disadvantages and advantages for some individuals and communities. Racism has been shown to profoundly affect health and limit equal opportunities for the health of individuals of all ages, families, and communities. Racism and the stress associated with it have been linked to low birth weight and pre-term babies, mental illness, and chronic disease. Race may negatively or positively affect social connections. Race matters because racism exists.

Discrimination based on disability can affect employment, education, and access to all sorts of services and social opportunities due to lack of accessible infrastructure and societal attitudes and beliefs about disability. The unemployment rate among people with disabilities is significantly higher than among the general population, and reasons cited for this include discrimination in the workplace and lack of transportation. Research on employed people with disabilities shows less job promotion and decreased salaries compared to their coworkers.

Discrimination against lesbian, gay, bisexual, and transgender people can significantly affect their health status. Research has documented high rates of psychiatric disorders, substance abuse, and suicide. It can also be difficult for an LGBTQ individual to find a medical provider who has been trained in providing health care for this group.

What is Mat-Su's Status? Race and Ethnicity

White continues to be the predominant race in the borough and has remained steady at 83-84 % over the last five years. This is followed by Alaska Natives or American Indian at 11% and Hispanic at 5% with little to no change in these percentages over the last five years. Other races in MatSu include African American (1%) and Asian/Pacific Islander (1%). Residents have differing views on the level of racism in Mat-Su, and it is more likely that nonwhite residents feel that there is significant racism and it is not decreasing.

People with disabilities who are non-institutionalized represent 12% of the Mat-Su population, approximately 99,208 people in 2017. The percent of individuals with disabilities increases in older age groups. Mat-Su older residents involved in the Photovoice project sited physical barriers that prevent access to services in the community for residents with disabilities.

The percent of residents who identify as gay, bisexual and transgender in Mat-Su is estimated to be close to 5%. There is little data on the level and effects of discrimination for these individuals in Mat-Su; however, it is clear that this type of discrimination can have a significant effect on one's health. More communication with residents in all these groups is important to ensure their optimal health status.

The Data

Race and Ethnicity

Table 78: Mat-Su Borough Race/Ethnicity Distribution

	2018	2017	2016	2015	2014
White (%)	83%	83%	84%	84%	84%
White	94,461	93,393	92,203	89,991	88,539
Black (%)	2%	2%	2%	2%	2%
Black	2,532	2,464	2,302	2,211	2,137
Asian (%)	3%	3%	3%	3%	3%
Asian	3,611	3,425	3,179	2,930	2,775
Native Hawaiian or Other Pacific Islander (%)	1%	1%	1%	1%	1%
Native Hawaiian or Other Pacific Islander (%)	995	936	898	780	791
Alaska Native or American Indian(%)	11%	11%	11%	11%	10%
Alaska Native or American Indian	12,443	12,203	11,789	11,411	11,012
Hispanic Origin (%)	5%	5%	4%	4%	4%
Hispanic Origin	5,364	5,176	4,875	4,640	4,364
Mat-Su Total	114,042	112,421	110,371	107,323	105,254

Data Source: U.S. Census

White continues to be the predominant race in the borough and has remained steady at 83-84 % over the last five years. This is followed by Alaska Natives or American Indian at 11% and Hispanic at 5% with little to know change in these percentages over the last five years.

When Mat-Su residents were asked whether they agreed that there is a significant level of racism in the borough, only 26% percent agreed, and 61% disagreed. Individuals from White, Alaska Native, and other ethnicities all endorsed some level of perceived racism.

The 2016 American Community survey revealed that 1,473 Mat-Su residents speak English "less than very well." That amounts to 1.6% of the estimated Mat-Su population age 5 or older. Among those the language specific breakout is:

- 256 Spanish speakers
- ▶ 585 Other Indo-European speakers
- 438 Asian and Pacific Islander speakers
- ▶ 194 Other languages (including Alaska Native languages).

Table 79: agreement with the statement there is a significant level of racism in Mat-su, 2019

	<u>Agree</u> Strongly Agree	<u>Disagree</u> Strongly Disagree
All Residents	26%	61%
Alaska Native Residents	18%	50%
White Residents	7%	64%
Residents of other Races	13%	61%

Data Source; 2019 Mat-Su Household Survey

Residents were asked if they agreed with the statement that "there is a significant level of racism in Mat-Su." Their answers were different depending on their self-identified race. Alaska Native residents were more likely to feel that there is a significant level as compared to white residents and those of other races. Those of other races were twice as likely to feel there was significant racism as compared to white residents.

Table 80: in the last year has the level of racism in Mat-Su increased, decreased, or stayed the same, 2019

Location	Increased	Decreased	Stayed the Same
All Residents	12%	8%	65%
Alaska Native Residents	s 12%	20%	65%
White Residents	10%	8%	67%
Residents of Other Race	es 16%	1%	64%

Data Source: 2019 Mat-Su Household Survey

Respondents who either agreed or disagreed with the previous statement were asked a follow-up question; those who didn't know or declined to answer were not asked the question. Two-thirds of these respondents (65%) said they believed racial discrimination in the borough had stayed the same over the last year, while 12% said it had increased, and 8% said it had decreased. Fourteen percent didn't know.

Similar to views on the level of racism, residents' views on whether racism is increasing, decreasing, or staying the same varied based on race. Alaska Native (8%) and residents of other races than white and Alaska Native were less likely to say that racism had decreased. Residents of all races had more similar opinions on whether it had increased.

Discussing racism and racial discrimination can be difficult; however, as noted above, racism has the potential to profoundly affect the health and social well-being of individuals and communities in the borough. It will be important to continue to have conversations about race and racism and to further study the impact of racism on the health and well-being of the residents of the Mat-Su Borough in order to ensure that all residents have the opportunity for a healthy life.



"As an Alaska Native Veteran, when people look past our race and treat everyone equally and the supports that prior service members have."

- Chickaloon Traditional Council – Elders.

People with Disabilities

People with disabilities who are non-institutionalized represent 12% of the Mat-Su population, approximately 99,208 people in 2017. The percent of individuals with disabilities varies by age with 3.3% of those under 18 years of age having a disability, 11.7% between the ages of 18-64 years, and 38% of residents 64 years or older.

Table 81: Mat-Su Borough People with Disabilities

	2017	2016	2015	2014
Total civilian non- institutionalized people with disabilities	99,208	96,764	94,431	92,250
Total civilian non- institutionalized people with disabilities	12.1%	12.1%	11.5%	11.4%
Under 18 years with a disability (%)	27,510	27,019	26,569	26,251
Under 18 years with a disability (#)	3.3%	3.6%	3.3%	3.4%
18-64 years with a disability (%)	61,559	60,387	59,182	57,869
18-64 years with a disability (%)	11.7%	11.7%	11%	11%
64 years and older with a disability (%)	10,139	9,358	8,680	8,130
64 years and older with a disability (#)	38%	39.3%	40%	40.7%

Data Source: American Community Survey, 5-year Estimate Data Profiles

Table 82: Mat-Su Residents reporting they are limited in any activities because of physical, mental, or emotional problems, 2016

	Mat-Su	Anchorage	Alaska
Yes	23%	18.7%	18.3%
No	77%	81.3%	81.7%

Data Source: 2016, State of Alaska BRFSS

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"Help to Access."
-People of a Certain Age.

When Mat-Su adults were asked if they were limited in activities by physical, mental, or emotional problems, 23% responded "yes." Alaska Native residents (28.4%) and residents who report a race other than white (28.4%) were more likely than white residents (21.9%) to report having a limitation. Residents who are female, have low income, have a high school education level or less, and those who live in rural areas were all more likely to report a limitation. There is not Mat-Su survey data on levels of discrimination against people with disabilities; however, this topic came up in the Photovoice projects.



"Two Favorite Stores: One Accessible Door."
-People of a Certain Age.

Residents who identify as LGBT

According to a 2017 Gallup Poll, in the United States approximately 4.5% of residents identify as lesbian, bisexual, or transgender. In the 2019 Mat-Su Household Survey, 86% of residents said that they felt comfortable answering questions about their sexual orientation or gender. Of those, 1% identified as gay, 2% as bisexual, 1% as transgender, and 1% as other. On the 2019 Mat-Su Household Survey, residents who were asked if based on their sexual orientation they thought their health care was worse, better, or the same as others. There was not much difference in residents who thought their care was better; however, those who identify as gay were more likely to say their experiences were worse as compared to straight and bisexual residents. Women (16%) were more likely to feel that their medical care was better than those of other genders as compared to men (6%).

Table 83: in the last year, when seeking health care do you feel your experiences were better, worse or the same as the health care experienced by people of other sexual orientations or gender identities?

Location	Straight	Gay	Bisexual
Better	11%	12%	9%
Worse	1%	7%	0%
The Same	51%	52%	62%

Data Source: 2019 Mat-Su Household Survey

There is a lack of survey data for Mat-Su on discrimination based on sexual orientation and gender. This is an area that would benefit from more examination. Additionally, it would be helpful to have LGBTQ residents participate in a Photovoice project about their health in order to understand their views on what helps and hinders their health and wellbeing in our community.

Why is it important?

The value of having social connections is not the number of friends one has, but rather a sense or feeling of being connected to others. This involves caring for and feeling cared about by others and having a sense of belonging to a group or community. Family and social connection and support impacts health, and is an element of the vision of a healthy community. High levels of social connection may help one live longer and has been associated with a better immune system and faster recovery from disease. Individuals with high levels of social connection may experience less anxiety, depression, and suicide. Higher levels of social connection also contribute to higher levels of self-esteem and empathy and a better ability to manage one's own emotions. Youth and older residents are particularly impacted by social connections. Youth with positive social connections and a sense of belonging experience less depression and anxiety, are more likely to remain involved in school and other group activities, and are less likely to abuse substances. Social connection is a key component to healthy aging. Studies have shown that older people with close connections and relationships live longer, experience less depression, and cope better with health conditions.

What is Mat-Su's status?

A community where all residents, including families, feel supported by and connected to family, friends, neighbors, and the broader community continues to be a goal for Mat-Su. There is a yearning for an increased sense of community in the region so that people feel supported and are better equipped to address their needs. The theme of strong social connections between community residents was identified and ranked in the top five most important themes by the steering committee and participants in the Photovoice project. Additionally, the goal of strong social connections between community residents was considered by the steering committee to be one of the most feasible goals to address in the Mat-Su Borough.

Measures of community support and community engagement served as indicators for social connectedness in the Mat-Su Borough. In terms of community support, 89% of the community has at least two individuals they could count on for help with a practical problem, such as needing a ride to a medical appointment. Over half of community residents report doing favors for each other often or very often, with individuals reporting an excellent quality of life noting favors being done at a higher rate. These results were very similar to those reported in the 2016 Mat-Su Household Survey. Residents being likely or very likely to report a neighborhood child skipping school to the child's parent or school was 64%, the same as in 2016. Over three-quarters of community members with children would be likely to ask for help with childcare if needed, indicating an increase (79% compared to 70%) from 2016. Family members and friends continued to be the people of

choice to ask for advice about problems. Individuals were noted to be less likely to ask family and friends for advice the older they were, possibly a reflection of how aging can impact the number and quality of people's social and community networks.

Measures of community engagement looked at participating in volunteer activities, helping a non-relative in the community, and attending local community events. Overall these measures demonstrated growth from 2016 to 2019. Slightly over half (52%) of community members have volunteered for local groups in the past 12 months compared to 44% in 2016. Helping a non-relative in the community often or very often in the past 12 months occurred 57% in 2019 as compared to 43% in 2016. Lastly, 84% of community members attended a local community event in the past 6 months as compared to 70% in 2016.

Feeling cared about by others and having a sense of belonging to a group of community was noted to be very important to the youth in the Mat-Su Borough. A survey of two middle school and two high school populations revealed that students who felt they mattered to people in the community were less likely to: feel alone, consider or attempt suicide, or to abuse substances including alcohol, tobacco, and marijuana. Some of these statistics were quite startling with one Mat-Su Borough traditional high school reporting students who did not feel they mattered to people in the community as having rates of: feeling alone – 62%, reporting feeling so sad that they stopped all activities for at least two weeks in the past year – 76%, considered suicide – 54%, and planned suicide – 45%.

The Data

Community Support

Respondents reported they could count on an average of 7.3 people to help them with a practical problem. Six percent said they had no one to count on, over half (52%) said they could count on between one and five people, while one-quarter (24%) could count on six to ten people, and 17% could count on 11 or more. These results are similar to those from 2016. Those living in urban areas had a slightly higher average number of individuals they felt they could count on as compared to those living in rural areas.

Table 84: how many people can you count on to help you with a practical problem, such as needing a ride to a medical appointment, 2019

Indicator	Mat-Su Borough 2019	Mat-Su Borough 2016
0 people	6%	4%
1-5 people	52%	52%
6-10 people	24%	24%
11+ people	17%	15%
Average	73 neonle	7 º neonle

Source: 2019 Mat-Su Household Survey

Over half of respondents (57%) said that people in their community do favors for each other often or very often, while 23% said this happens sometimes, and 20% said rarely or never. All age groups noted favors being done with ages 35 and older noting favors at a higher rate. A similar question was asked in the 2016 Mat-Su Household Survey, producing similar responses in 2019 with the exception of the "sometimes" response (31% compared to 23%).

Table 85: Do you and people in your community do favors for each other very often, sometimes, rarely, or never (%)?, 2019

Indicator	Mat-Su Borough 2019	Mat-Su Borough 2016
Very Often	22%	19%
Often	35%	31%
Sometimes	23%	31%
Rarely	15%	11%
Never	5%	6%

Source: 2019 Mat-Su Household Survey

Respondents were asked how likely they'd be to report a neighborhood child skipping school to the child's parent or school. Nearly two-thirds (64%) said they would be likely or very likely to report the child, while 26% said they would be unlikely to report it. Individuals aged 35-64 were the most apt to very likely report a neighborhood child skipping school. A similar question was asked in the 2016 Mat-Su Household Survey. When comparing results, it appears those "very likely" to report a child decreased (41% compared to 33%); however, net likely was the same (64% both years).

Table 86: If you saw a child from your immediate neighborhood skipping school, would you be very likely, likely, unlikely, or very unlikely to report this to the child's parent or school? (%)

Indicator	Mat-Su Borough 2019	Mat-Su Borough 2016
Very likely	33	41
Likely	31	23
Unlikely	20	11
Very Unlikely	6	15

Source: 2019 Mat-Su Household Survey

Over three-quarters of respondents who have children (79%) said they would be likely to ask for help with childcare if they needed it, while 18% said they were unlikely to do so. Individuals in urban areas were slightly

more likely to ask for help (80% compared to 76%) than those living in rural areas. A similar question was asked in the 2016 Mat-Su Household Survey. When comparing results, it appears those "very likely" to ask for help decreased (50% compared to 43%); however, net likely increased (70% compared to 79%).

Table 87: If you needed help to care of your children, such as needing someone to watch your child for a few hours when you were at a medical appointment or to pick them up from school, would you be very likely, likely, unlikely, ore very unlikely to ask for help? (%)

Indicator	Mat-Su Borough 2019	Mat-Su Borough 2016
Very likely	43	50
Likely	36	20
Unlikely	11	8
Very Unlikely	7	9

Source: 2019 Mat-Su Household Survey

Table 88: If you need advice on how to handle a problem, such as a financial, emotional, or work-related issue, who would you ask for help? (%)

Indicator	Mat-Su Borough 2019	Mat-Su Borough 2016
Family member	59	60
Friend	26	28
Church leader	8	7
Co-worker/boss	6	5
Professional	5	2
Healthcare provider	2	3
Neighbor	2	4
God	1	-
Other	1	3
Nobody	5	2
Don't know	5	5

Source: 2019 Mat-Su Household Survey

Respondents were asked who they would ask for help if they needed advice on how to handle a problem. Family member was by far the most common answer at 59%, followed by friend at 26%. All other responses garnered 8% or fewer of responses each. Five percent said they had no one to ask for advice. This may correlate with loneliness which has been shown to have a wide range of negative effects on physical and mental health. A similar question was asked in the 2016 Mat-Su Household Survey. When comparing results, it appears family members (60%) and friends (28%) remain the top two types of people to ask for help.

Community Engagement

Community engagement is a way that residents can become socially connected, as well as, assist others in the community. About half of respondents (52%) had volunteered for local groups in the last year. In 2016, 44% of Mat-Su households reported they volunteered. Rates of volunteering were highest in those living in urban areas with larger households and having 1 or more children in the home.

Table 89: In the past 12 months, have you volunteered for any local groups, such as a church group or other non-profit? (%)

Indicator	Mat-Su Borough 2019	Mat-Su Borough 2016
Yes	52	44
No	48	55

Source: 2019 Mat-Su Household Survey

Over half of respondents (57%) said they often or very often helped a person in need in their community, other than family, in the last year; one-quarter (27%) said this occurred sometimes; and 16% said it occurred rarely or never. Individuals aged 64 or less were more likely to help a non-relative community member. A similar question was asked in the 2016 Mat-Su Household Survey. When comparing results, it appears those "often" response was lower (25% compared to 36%) and the "never" response was higher (11% compared to 6%).

Table 90: Do you and people in your community do favors for each other very often, sometimes, rarely, or never (%)?, 2019

Indicator	Mat-Su Borough 2019	Mat-Su Borough 2016
Very Often	21	18
Often	36	25
Sometimes	27	30
Rarely	10	14
Never	6	11

Source: 2019 Mat-Su Household Survey

Most respondents (84%) had attended a local community event in the previous six months. In 2016, Mat-Su households were less likely to report they attended a local community event (70% compared to 84%). Individuals with larger households and having children in the home reported a greater tendency to attend local community events.

Table 91: In the past six months, have you attended a local community event such as a church event, school gathering, concert, state fair, or other social events of any kind? (%)

Indicator	Mat-Su Borough 2019	Mat-Su Borough 2016
Yes	52	44
No	48	55

Source: 2019 Mat-Su Household Survey

Why is it important?

Examining the health of people of different ages and races/ethnicities within our community is important to understand the issues that affect some individuals and not others. Programs that are designed for specific subpopulations may be more successful because they address issues, barriers, and challenges specific to those groups. This chapter will provide data specific to, Mat-Su on maternal and child health, youth health, health of students attending alternative high schools, and senior health.

Demographics

In 2018, there were 1,374 babies born to Mat-Su mothers. The fertility rate can be used to compare the rates of births that occur in different regions. This rate is defined as the number of births per 1,000 females of childbearing age (15-44 years) in the population. Mat-Su has a higher fertility rate (68.9 per 1,000 females) compared to the U.S. (60.2) but lower than Alaska (71.4).

In 2018, there were 19,879 women of childbearing age (15-44 years) living in the Mat-Su. Children and youth age 19 or younger make up 31% of the population (32,361). Children between the ages of 0-4 totaled 7,799 and made up 7% of the population.

Birth Outcomes

Infants born to unmarried mothers may have poorer health outcomes compared to married mothers. When infants are born full-term and a healthy weight (2,500 grams – 4,000 grams), they have less risk of serious health issues, lasting disabilities, and even death. Alaska and Mat-Su have fewer low birth weight but more preterm births than the U.S. In 2017, 6% of Mat-Su babies were born low-birth weight (<2,500 grams), and 10% were born premature (36 weeks or less).

Prenatal Care

The quality and timing of prenatal care plays an important role in the health of an infant. In 2017, 10% of pregnant women had their first prenatal visit in the first trimester compared to 14% of Alaska mothers.

Using alcohol, illegal drugs, and tobacco during pregnancy can lead to health problems for the baby before and after it is born. In 2017, 14% of Mat-Su mothers reported smoking when they were pregnant, 8% reported using alcohol in their last three months of pregnancy, and 11% said they used marijuana prenatally (up from 2% in 2007-2009).

Well-baby check-ups provide an opportunity for a provider to track a child's growth and development, administer immunizations and screening tests, and provide guidance to parents. In 2017, 96% of three-year-old children had a medical provider who knew the child well, and 92% received a well-child check-up in the last year. Three out of four (77%) of three-year-old children have ever seen a dentist.

Childhood vaccines have made many childhood diseases that lead to death and disability, as well as significant discomfort, rare events. The Mat-Su Borough School District has immunization requirements that children must meet to attend borough schools. In 2017, 19% Mat-Su mothers of three-year-old children reported ever delaying or not getting a vaccine for their child.

Young Child Behavioral Health

Sometimes parents have concerns about a child's behavior. Being connected with a regular primary care provider can be beneficial when guidance is needed concerning parenting and behavior issues. Research has shown that when children experience severe stress, it can affect their mental health at that time, as well as their mental and physical health later in life. In 2017, 0.1% of three-year-old Mat-Su children ever experienced the death of a household member, 22% ever experienced being away from either parent for more than one month, and 3% ever witnessed violence or physical abuse between household members.

Maternal depression can negatively affect a child. Conversely, the more support a mother has, the more likely she can be emotionally available for her child. In 2014, 14% of Mat-Su mothers of three-year-old children reported being diagnosed with depression since their child was born. In 2017, 87% of mothers of a three-year-old reported they had someone they could borrow money from if needed, and 93% said they had someone who they could ask to help if they were sick.

Child Services

Quality childcare is important for children and their families. In 2017, 0.2% of mothers with a three-year-old had their child removed from childcare due to difficult behaviors.

Infant Mortality

Total infant deaths include neonatal (in the first 28 days of life) and postneonatal deaths (from 29 days to the end of the first year of life). The Mat-Su total infant mortality death rate was 3.9 births per 1,000 live births. The mortality rate is lower than Alaska and the U.S. (5.9 and 5.8, respectively).

In 2017, Mat-Su neonatal infant death rate of 2.3 deaths per 1,000 live births was lower than Alaska and the U.S. (3.4 and 3.8, respectively). The child death rate for children age 0-4 was 5 per 100,000 people, lower than Alaska (7.9) and the U.S. (24.3). Deaths of children age 5-14 were 31.6 per 100,000 higher than Alaska (23.3) and the U.S. (13.6).

Table 92: Summary Measures for Mat-Su Pregnant Women and Infants, 2017

Indicator	Mat-Su Borough (95% Confidence Interval)	Alaska (95% Confidence Interval)	U.S.
Births			
Fertility rate per 1,000 population of females 15-44 years	68.9	71.4	60.2
Low birth-weight births(%)	6.2	6.2	8.3
Preterm births (%)	10.4	10.7	9.9
Infant and Child Deaths			
Neonatal infant mortality (per 1,000 live births)	2.3*	3.4	3.8
Post-neonatal infant mortality (per 1,000 live births)	1.6*	2.6	2.0
Infant mortality rate (per 1,000 live births)	3.9*	5.9	5.8
Child (0-4) deaths per 100,000 population	5.0	7.9	24.3^
Child (5-14) deaths per 100,000 population	31.6*	23.3	13.6
During Pregnancy			
First prenatal visit in first trimester, self-reported	9.7 (5.1-17.8)	13.9 (11.4-16.9)	N/A
Smoked cigarettes during last 3 months of pregnancy	14.0 (7.8-23.5)	12.3 (10.2-14.9)	N/A
Used alcohol during last 3 months of pregnancy	7.7 (3.5-16.1)	6.3 (4.6-8.5)	N/A
Used marijuana during pregnancy	10.5 (5.4-19.0)	8.6 (6.7-10.9)	N/A

^{*} Data are unreliable.

Source: HAVR, ADHSS PRAMS; NCHS, National Vital Statistics Report

Table 93: Summary Measures for Mat-Su Mothers and Young Children, 2017

Indicator	Mat-Su Borough (95% Confidence Interval)	Alaska (95% Confidence Interval)
Access to Care for Three-Ye	ear-Old	
Has a health care provider who knows child and health history	96.0 (76.4-99.4)	90.3 (86.2-93.2)
Had a well-child check-up or physical exam in last year	91.8 (80.2-96.9)	89.5 (85.4-92.5)
Ever delayed getting a vaccine	19.0 (10.3-32.2)	13.1 (9.8-17.3)
Child has ever been to dentist	76.5 (62.9-86.1)	71.3 (65.9-76.1)
Behavioral Health of Three-	Year-Old	
Child removed from childcare due to difficult behaviors	0.2 (0.0-1.7)	1.3 (0.4-3.0)
Mother does not have regular childcare arrangements for 3-year-old child	64.7 (50.1-77.0)	58.8 (53.2-64.1)
Child ever experienced the death of a household member	0.1 (0.0-1.0)	4.0 (2.5-6.3)
Child ever experienced being away from either parent for more than one month, (2014)	22.1 (10.8-40.0)	19.1 (15.1-23.9)
Child ever witnessed violence or physical abuse between household members	3.0 (0.7-12.0)	4.1 (2.3-6.9)
Someone read aloud to child yesterday for 30 minutes or more	65.5 (50.2-78.1)	67.2 (61.8-72.2)
Mothers of a Three-Year-Ol	d: Behavioral Heal	th and Support
Mothers of 3 -year-olds who diagnose with depression since child was born, (2014)		12.3 (8.8-17.0)
Social support, mother knows someon who would loan her money	ne 86.8 (73.2-94.1)	77.2 (72.0-81.7)
Social support, mother knows someon who can help when mother is sick	ne 92.7 (79.1-97.7)	87.7 (83.5-90.9)

Source: ADHSS PRAMS

[^]Children ages 1-4 only.

N/A indicates not available.

Demographics

In 2018, there were 8,763 10- to 14-year-old and 7,252 15- to 19-year-old youth living in Mat-Su. Youth 10-19 make up 15% of the population. In Mat-Su, 11% of residents who are under age 18 live in poverty, less than found in Alaska (14%) or the U.S. (20%). In 2017, 81% of high school students graduated in four years, slightly higher than Alaska (78%) and lower than the U.S. (85%).

Nutrition, Exercise, and Sexual Health

Generally, high school students attending alternative high schools in the Mat-Su tend to display higher risk factors than high school students attending traditional schools. Compared to traditional high school students, alternative high school students are more likely to be obese, less physically active, and less likely to have played on a sports team. Few Mat-Su youth eat five or more servings of fruits and vegetables each day (10% traditional high school students, 8% alternative high school students).

Infants born to non-teenage mothers tend to have better health outcomes. The teen birth rate (18.0 births per 1,000 females aged 15-19 years) in Mat-Su is lower than the rate for the state of Alaska (24.6). Most middle and traditional high school students are not having sexual intercourse. However, most alternative school students (62%) have had sex. This has decreased from 72% in 2011. Less traditional students in the Mat-Su (37%) have ever had sex and are comparable to traditional high school students in the U.S. (40%). Of sexually active high school students, just under half reported using a condom at their last sexual intercourse (48%).

Alcohol and Substance Misuse

In Mat-Su, 13% of traditional high school students report binge drinking (five or more drinks at a time) compared to 32% of alternative high school students in the last month. Among all the youth drug indicators, Mat-Su youth do not differ from Alaska or the U.S. percentages. The order of highest types of drugs used by youth in 2017 was: marijuana (40%), prescription drugs without a prescription (15%), huffing/cocaine (8%), ecstasy (6%), methamphetamine (4%), and heroin (4%).

Violence

Middle and high schools are places where youth may be exposed to peer violence. Close to half of Mat-Su middle school students (49%) have ever carried a knife, gun, or club to school; been bullied on school property in the last month (47%) or ever been in a physical fight (39%); and 25% have been electronic bullied in the last 12 months. In 2017, 11% of high school students have been forced to have sex when they didn't want to, and 7% have reported being physically hurt by someone they dated in the past year.

Behavioral Health

Adolescence can be both an exciting and challenging time for youth. There are protective practices that parents can encourage for their children that help them successfully grow and learning during that time. Generally, high school students attending alternative high schools in the Mat-Su tend to display lower protective factors than high school students attending traditional schools. Compared to traditional students, alternative students are less likely to have daily talks with their parents about school; believed teachers strongly cared for them, or took part in organized out-of-school activities one or more days a week. Additionally, they were more likely to be sad or depressed, seriously considering suicide, and attempted suicide.

Table 94: Physical Health: Mat-Su Youth, 2017

Indicator	Mat-Su Borough Middle School % (2019)	Mat-Su Borough Traditional High School %	Mat-Su Borough Alternative High School %	All Mat-Su Borough High Schools %	All Alaska High School %	U.S. Traditional High School %^
Healthy Lifestyle						
Healthy weight (not overweight or obese)	N/A	74.5 (69.6-78.8)	59.7 (52.0-67.0)	73.0 (68.5-77.1)	68.3 (66.4-70.2)	N/A
Obese	N/A	13.3 (10.0-17.5)	24.0 (19.2-29.6)	14.4 (11.2-18.2)	15.3 (14.0-16.6)	14.8 (13.8–15.8)
Eats 5 fruits/vegetables daily	N/A	10.2 (7.2-14.1)	8.3 (5.4-12.4)	10.0 (7.3-13.6)	9.6 (8.6-10.6)	N/A
Physically active for 60 minutes 5 or more times/week	93.6* (93.0-94.2)	46.1 (41.7-50.6)	25.9 (20.1-32.6)	44.1 (40.1-48.2)	43.0 (41.1-44.8)	46.5 (43.5–49.5)
Watched TV, videos, non-school computer 3 or more hours on average school day	40.0 † (38.9-41.2)	60.8 (55.9-65.4)	69.0 (59.6-77.1)	61.6 (57.1-65.8)	58.3 (56.4-60.2)	43.0 (41.1-44.9)
Attended daily physical education class	36.8 (35.9-37.8)	11.7 (9.4-14.6)	12.3 (5.8-24.1)	11.8 (9.5-14.5)	17.5 (15.8-19.4)	29.9 (23.6–37.0)
Played on a sports team during past 12 months	59.8 (58.7-61.0)	57.6 (51.4-63.6)	24.6 (17.5-33.3)	54.4 (48.7-60.0)	55.7 (53.5-58.0)	54.3 (50.6–58.0)
Sexual Behavior						
Ever had sexual intercourse	5.7 (5.1-6.3)	37.0 (30.7-43.8)	62.0 (53.4-69.9)	39.4 (33.6-45.5)	38.7 (36.2-41.2)	39.5 (36.8–42.4)
Had sexual intercourse before age 13 years	1.6^^ (1.4-2.0)	3.2 (2.1-5.0)	15.3 (9.0-25.0)	4.4 (3.1-6.2)	4.2 (3.5-5.0)	3.4 (3.0–3.9)
Of those who had sex, those who used condom	53.2 (48.3-58.1)	49.3 (40.3-58.4)	**	47.5 (39.9-55.2)	47.8 (44.4-51.1)	53.8 (51.4–56.2)
Teen Pregnancy						
Teen birth rate per 1,000 females aged 15-19 (2014-2018)				18.0	24.6	

[^]Traditional High Schools Only

^{*}Physically active (for 60+ min) during 1 or more of last 7 days
† On average school day < 3 hours total TV or non-school computer/phone use
** Data are suppressed.

^First had sexual intercourse at age 10 or under
Source: ADHSS YRBS, HAVRS; CDC YRBS; Middle School YRBS

Table 95: Behavioral Health and Development, 2017

Indicator	Mat-Su Borough Middle School % (2019)	Mat-Su Borough Traditional High School %	Mat-Su Borough Alternative High School %	All Mat-Su Borough High Schools %	All Alaska High School %	U.S. Traditional High School %^
Protective Behaviors						
Parents talked to them daily about school	48.4 (47.2-49.5)	46.5 (42.3-50.8)	31.7 (26.3-37.5)	45.1 (41.3-49.0)	40.6 (38.8-42.5)	N/A
Teachers strongly cared about/encouraged them	56.1 (54.9-57.3)	17.6 (14.2-21.6)	44.7 (38.9-50.7)	20.2 (17.0-23.9)	20.7 (19.4-22.2)	N/A
Would feel comfortable asking adult other than parent for help	81.1* (80.2-82.1)	85.1 (82.2-87.5)	88.5 (83.7-92.0)	85.4 (82.8-87.6)	84.1 (82.7-85.4)	N/A
Spent 1 or more hours volunteering/helping weekly	N/A	52.2 (47.0-57.4)	46.7 (39.6-53.8)	51.7 (46.9-56.4)	54.3 (52.3-56.3)	N/A
Take part in organized out of school activities 1 or more days per week	47.5 (46.3-48.7)	57.8 (50.9-64.5)	35.9 (28.2-44.5)	55.7 (49.4-61.8)	56.5 (54.1-58.9)	N/A
Feel community supports youth	48.2 (47.0-49.4)	N/A	N/A	N/A	N/A	N/A
Violence						
Carried a gun, knife, or club to school in last 30 days	48.8 † (47.6-50.0)	11.9 (9.6-14.8)	14.7 (10.0-21.1)	12.2 (10.0-14.8)	10.3 (9.3-11.3)	3.8 (2.9–4.8)
In a physical fight in last 12 months	39.4 † (38.2-40.6)	19.0 (15.6-22.9)	32.3 (25.9-39.6)	20.3 (17.1-23.9)	19.9 (18.5-21.3)	23.6 (21.6–25.6)
Ever physically hurt by someone they dated in past year	N/A	5.7 (3.8-8.7)	16.5 (9.5-26.9)	6.8 (4.8-9.6)	8.6 (7.4-9.9)	8.0 (7.3–8.8)
Forced to have sex when they didn't want to	N/A	9.2 (7.2-11.7)	26.2 (20.2-33.1)	10.8 (8.8-13.2)	8.7 (7.7-9.9)	7.4 (6.6–8.3)
Bullied on school property in last 12 months	46.8 † (45.6-48.0)	22.4 (18.3-27.2)	27.9 (23.0-33.4)	23.0 (19.7-27.3)	21.8 (20.3-23.3)	19.0 (17.6–20.5)
Electronically bullied in last 12 months	25.0 † (24.0-26.0)	17.4 (14.8-20.4)	32.5 (24.3-41.8)	18.9 (16.4-21.7)	18.3 (16.9-19.9)	14.9 (13.7-16.2)
Mental Health						
Sad or depressed for two plus weeks in a row in past 12 months	N/A	31.4 (27.2-35.8)	53.8 (46.1-61.3)	33. (29.6-37.7)	35.5 (33.5-37.5)	31.5 (29.6–33.4)
Seriously considered suicide in past 12 months	22.9† (21.9-23.9)	20.1 (16.9-23.7)	35.9 (30.7-41.5)	21.6 (18.6-25.0)	21.9 (20.3-23.5)	17.2 (16.2–18.3)
Attempted suicide in past 12 months	7.2† (6.6-7.8)	8.2 (5.9-11.3)	17.9 (13.6-23.1)	9.0 (7.0-12.0)	11.0 (9.8-12.3)	7.4 (6.5–8.4)
Suicide attempt resulted in injury that needed treatment by a doctor or nurse	N/A	3.2 (1.8-5.8)	6.3 (3.3-11.5)	3.5 (2.1-5.8)	3.4 (2.7-4.3)	2.4 (2.1–2.9)

^{*}Have one or more adults other than parents you can ask important life questions † Middle School Ever

^More than one day/week on average you do organized after school/evening/weekend events Source: ADHSS YRBS, CDC YRBS; Middle School YRBS

CHAPTER 18: MAT-SU OLDER RESIDENTS

Demographics

In 2018, 12% of the Mat-Su population was aged 65 and older (12,645). It is anticipated the senior population will more than double by 2030. It is important to monitor the health of this population in order to make sure there is a sufficient level of services for them.

Access to Health Care and Other Services

In 2018, almost all (99.3%) Mat-Su older residents reported having some form of medical insurance, and 73.3% have at least one primary care provider. Only eight percent of older residents said that they did not see a doctor in the last year due to cost. Under half (41%) had a flu shot, 61% had a pneumonia immunization, and 45% had a colorectal screening in the past five years.

Nutrition and Exercise

Only 14% of older residents report eating five fruits or vegetables daily. Fifty-four percent report getting 2.5 hours moderate or 1.25 hours of vigorous exercise each week — the amount of exercise prescribed in the Healthy People 2020 goal. Almost one-third (32%) report participating in strength training two or more times per week. In 2018, 26% of older residents were a healthy weight.

Alcohol and Substance Misuse

Approximately 2% of older residents report binge drinking that is defined as consuming five or more drinks at a sitting for males and four or more for females. Similarly, 2% of older residents report heavy drinking. Five percent of Mat-Su older residents currently smoke.

Physical and Behavioral Health

Over 80% of older residents stated that their health is excellent, very good, or good. On average, older residents report having almost three poor mental health days and six poor physical health days per month. Twenty percent of Mat-Su older residents have diabetes, 64% have high blood pressure, and 49% have high cholesterol.

Table 96: Mat-Su Senior Measures, 2018

Indicator	Mat-Su Older Residents % (95% Confidence Interval)	Alaska Older Residents % (95% Confidence Interval)	Alaska All Adults (95% Confidence Interval)
Access to Health Care			
Have medical insurance (Alaska older residents, 2017)	99.3 (94.9-99.9)	97.6 (96.3-98.9)	89.9 (87.7-90.7)
Have one person think of as personal doctor or health care provider	73.3 (64.6-80.5)	71.8 (67.6-75.9)	56.0 (53.8-58.2)
Did not visit doctor because of cost, last 12 months	8.1 (3.8-16.2)	5.9 (4.1-7.8)	14.1 (12.6-21.4)
Had flu shot in last 12 months	41.1 (31.1-51.9)	49.0 (44.3-53.6)	33.0 (30.8-35.4)
Had pneumonia shot in last 12 months	61.3 (50.3-71.2)	64.2 (59.6-68.9)	28.6 (26.4-30.9)
Colonoscopy/Sigmoidoscopy in last 5 years (Adults age 50-75)	45.1 (36.4-54.2)	44.0 (40.6-47.4)	N/A
Nutrition and Exercise			
Consumed 5 fruits/vegetables per day (2017)	13.8 (7.7-23.4)	N/A	18.7 (16.2-21.5)
Did strength training 2 or more times per week (2017)	32.1 (23.3-42.4)	28.2 (23.6-32.8)	32.9 (30.0-35.9)
Reported 2.5 hours moderate or vigorous equivalent exercise/week (2017)	54.2 (42.9-65.2)	56.2 (51.1-61.3)	57.1 (53.9-60.2)
Neither overweight or obese (Alaska older residents are those of normal weight)	25.9 (19.0-34.2)	31.1 (26.6-35.6)	34.1 (32.0-36.3)
Alcohol and Substance Misuse			
Binge drinking	2.2 (0.7-6.6)	6.5 (4.0-8.9)	18.0 (15.7-20.6)
Heavy drinking (Alaska all adults, 2017)	2.4 (0.7-7.9)	5.1 (3.1-7.1)	8.8 (7.7-10.1)
Smoking	5.4 (2.7-10.5)	12.8 (9.4-16.2)	19.6 (17.9-21.6)
Physical and Behavioral Health			
States health is good or better	82.3 (75.3-87.7)	81.1 (77.5-84.6)	84.4 (82.8-85.8)
Average number of poor mental health days in last month	2.9 (1.6-4.3)	N/A	3.7 (3.4-4.0)
Average number of poor physical health days in last month	6.0 (3.9-8.2)	N/A	4.1 (3.7-4.4)
Physical and Behavioral Health (continued)			
Have diabetes	19.5 (13.5-27.3)	17.6 (14.4-20.9)	8.4 (7.4-9.4)
Have high blood pressure (Alaska older residents, 2017)	64.4 (52.0-75.2)	59.4 (54.5-64.2)	28.6 (26.2-31.1)
Have high cholesterol (2017)	48.6 (38.9-58.5)	58.0 (53.1-63.0)	31.1 (28.4-33.9)

N/A indicates not available.

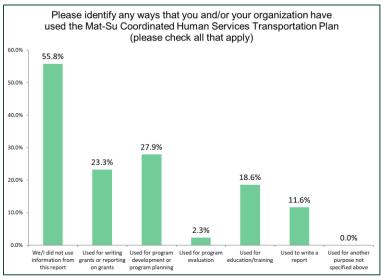
APPENDIX A: DATA SOURCES

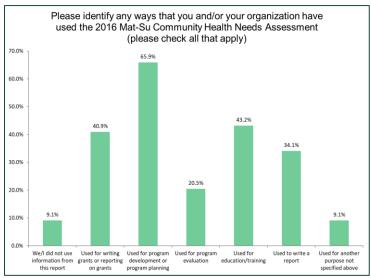
Data Source	Type of Data	For More information
Alaska Births Defects Registry (ABDR)	Birth defects data	Data available online: http://dhss.alaska.gov/dph/VitalStats/Pages/data/default.aspx
Alaska Department of Health and Social Services (ADHSS), Health Analytics and Vital Records	Birth and death data	Data available online: http://dhss.alaska.gov/dph/VitalStats/Pages/data/default.aspx
Alaska Cancer Registry (ACR)	Cancer incidence and death rates	Data available online: http://ibis.dhss.alaska.gov/
Alaska Department of Early Education and Development (ADEED)	High school graduation and number of graduates	Data available online: http://education.alaska.gov/Stats/
Alaska Department of Health and Social Services (ADHSS), Behavioral Risk Factor Surveillance System (BRFSS)	Health care access health risk factors, and preventive health	Data available online: http://ibis.dhss.alaska.gov/
Alaska Department of Health and Social Services (ADHSS), Alaska Childhood Understanding Behaviors Survey (CUBS)	Health and developmental data for three-year-old children and their mothers.	Data available online: http://ibis.dhss.alaska.gov/
Alaska Department of Health and Social Services (ADHSS),Health Analytics and Vital Records Section (HAVRS)	Teen Birth Rate	Data available online: http://ibis.dhss.alaska.gov/
Alaska Department of Health and Social Services (ADHSS), Interactive Display of Alaska Chlamydia and Gonorrhea Data	Sexually transmitted disease data	Data available online: http://ibis.dhss.alaska.gov/
Alaska Department of Health and Social Services (ADHSS), Pregnancy Risk Assessment Monitoring System (PRAMS)	Maternal and child health data	Data available online: http://ibis.dhss.alaska.gov/
Alaska Department of Health and Social Services (ADHSS), Alaska Office of Children's Services (OCS)	Child maltreatment	Data provided to MSHF

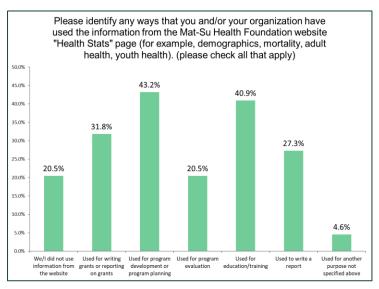
Data Source	Type of Data	For More information
	Middle and high school health behaviors and attitudes.	Data available online:
		http://ibis.dhss.alaska.gov/
Development (ADOLWD)	Demographic, economic, workforce and labor data	Data available online:
		http://laborstats.alaska.gov/
Alaska Division of Behavioral Health (DBH), Epidemiologic Profile on Substance Use, Abuse and	Alcohol and substance misuse data	Data available online:
Dependency		http://ibis.dhss.alaska.gov/
Trauma Registry (ATR)	Injury data	Data available online:
		http://dhss.alaska.gov/dph/Emergency/Pages/trauma/registry.aspx
Alaska Department of Public Safety	Alaska State Trooper crime data	Data available online:
	<u> </u>	http://dps.alaska.gov/
Centers for Disease Control and Prevention (CDC) BRFSS Prevalence Trends and Data	Health care access health risk factors, and preventive health	Data available online: https://www.cdc.gov/brfss/brfssprevalence/
Centers of Disease Control and Prevention (CDC),	Cancer incidence and mortality data	Data available online:
National Program of Cancer Registries		http://ibis.dhss.alaska.gov/
Centers for Disease Control and Prevention (CDC), National Center for HOV/AIDS, Viral Hepatitis, STD, and	Sexually transmitted disease data	Data available online:
TB Prevention (NCHHSTP) Atlas		http://www.cdc.gov/nchhstp/
Centers for Disease Control and Prevention, Web-based	Injury data	Data available online:
Injury Statistics Query and Reporting System (WISQARS)		http://www.cdc.gov/injury/wisqars/index.html
Centers for Disease Control and Prevention, Wide-	Public health data	Data available online:
ranging Online Data for Epidemiologic Research (WONDER)		https://wonder.cdc.gov/
Economic Research Service (ERS)	Income inequality	Data available online:
		http://www.ers.usda.gov/data-products.aspx
Mat-Su Health Foundation (MSHF), 2012, 2016 and 2019 Household Survey (HHS)	Health insurance and health access, attitudes about community services and schools, and other community data	Data available online:
		http://www.healthymatsu.org/health-resources/msb-health-
		statistics
Alaska Department of Health and Social Services	Child healthy weight and obesity and overweight data	Data available online:
Nacional Control Control (No. 1)	over weight uata	http://ibis.dhss.alaska.gov/
National Center for Health Statistics (NCHS), National Vital Statistics Reports	Birth and death data	Data available online: http://dhss.alaska.gov/dph/VitalStats/Pages/data/default.aspx
US Census, 2010 census and American Community Survey	Population demographics and household data, physical disability	Data available online:
		http://www.census.gov/ and
		http://live.laborstats.alaska.gov/cen/acs.cfm

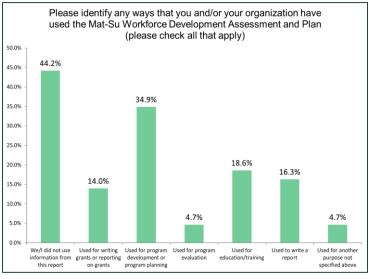
APPENDIX B: STAKEHOLDER INPUT ON USE OF 2016 CHNA

Stakeholders were asked how they used the data from the 2016 CHNA and other MSHF Reports (Mat-Su Coordinated Human Services Transportation Plan, Mat-Su Workforce Development Assessment and Plan).









Stakeholder Survey respondents were asked, "Since the 2016 Community Health Needs Assessment, what is different in the community today because of the work of the MSHF over the past three years?" Responses included:

- Agency engagement in certain areas of need that was identified on the survey results.
- I have only a limited perspective on this because I have only worked with community members for the past year. From what I have heard and seen, community members are engaged with data and evidence-based practices. Unlike some communities I work with, there is an interest in engaging with the data to make decisions and to assess how the community is doing.
- Many more opportunities to connect through R.O.C.K. Mat-Su. Mobile Needle exchange was available. Much more community engagement.
- I think there is more awareness of support services, more agencies and organizations available to help and better coordination for services.
- More awareness of ACEs in all aspects of the community. Improvements to behavioral health and family supports. Prevention work has been funded (Youth 360); improved access to primary health care through Medicaid expansion and additional providers in Mat-Su and less utilization of the ER for primary care services.
- More awareness of needs. However, funding issues continue which makes access difficult under any circumstances.
- More people are aware of ACES and the impact of trauma on both physical and mental health.
- Communication and relationship between various agencies and sectors is growing.
- Consistent focus and conversations on what was highlighted.

- Agency silos are being torn down and leaders in the community are working together at an unprecedented rate. Cross collaborative relationships are developing and growing to help assure that children are safe in our community and that Child Protection Services are staffed with a stable and resilient workforce.
- Greater communication between non-profit agencies.
- Improved connections and coordination among agencies.
- The work of R.O.C.K. Mat-Su really brings community partners together, which is nice.
- ▶ People and programs are working together.
- More community engagement around child wellbeing through the work of R.O.C.K. Mat-Su, a different way to engage and help community members with special needs through the HUMS program and CIT training.
- There is more communication between community providers. There are more pilot projects to address the needs or the gaps in services.
- R.O.C.K. Mat-Su community prevention and training efforts and increased agency collaborations in Southcentral Alaska.
- Much more collaboration among providers and organizations. More strategic goals within the community.
- Providers are engaging with one another more and are talking a little bit more about their work in the context of family and community systems.
- Behavioral health providers are starting to view each other as resources, rather than competition.
- R.O.C.K. Mat-Su and all of the community collaboration and collaborative projects that it has helped to get started.
- There is more collaboration between various service providers to fill gaps in available services and some new services are beginning to appear.

- Launching of Connect Mat-Su; Partnerships with MSBSD on Trauma-Sensitive Schools and Behavioral Health in Schools.
- I believe more grants were available for mental health concerns and I now see more services available in the community as a reflection of this. The needs assessment helped to provide a more overarching awareness of the needs.
- ▶ There is a focus on getting behavioral health services to students in the schools, and to providing healthy after-school activities.
- Expansion of youth behavioral health services, Connect Mat-Su, Youth 360.
- New model of early intervention at schools.

Comments received from the Stakeholder Survey regarding **how MSHF can assist with data and reporting needs** included:

- Need to communicate to the specific providers where the needs were the greatest on a regular basis through surveys or other follow-up means to stay on top of whether or not change is being made. It also helps the providers by keeping the results in front of them regularly.
- I would like to see outcome data from more organizations across the community. Not just "studies" being done but funded programs and what the community impact is.
- I totally appreciate the work and clarity of these documents.
- In more remote areas (areas outside of the core Wasilla and Palmer areas) there is a need for data that better represents services outside the core area. The needs and access to care are different depending on which part of the borough you live in.
- It will be good to know if the work being done is helping youth be healthier and reducing risk factors. A comparison of needs will provide trend data that will inform whether we are moving in the right direction. It would be great to have a published document of "Recommendations for a Healthier Mat-Su" based on the data and trends.

- Continued gathering of non-profits to share expertise and brainstorm solutions and ways to support one another.
- MSHF is providing a level of data available to the community that exceeds what I see in other communities in other states where I work. You are doing a great job in facilitating the use of data.
- Continue to collect local health data.
- Continue to make data sets available for research, program development and evaluation.
- Thank you for all you do!
- Assistance with better technology and easy to use data gathering tools.
- We need more data on Alaska Native/Native American people out here in the Valley. Data such as; how many are utilizing the care available to them (e.g., medical, behavioral, dental)? Which organizations in the Valley assess for whether their Alaska Native client is enrolled with a tribe? If they are enrolled, why is there no outreach to that tribe for coordinated care.

Why was Photovoice incorporated into the 2019 Mat-Su Health Foundation CHNA?

During the 2019 CHNA pre-planning meetings, the steering committee believed that in the previous two Mat-Su CHNAs (2016 and 2013), there were communities in the Mat-Su that were not being heard from through the traditional research methodologies used. Thus, as a way to "Hear Every Voice" in Mat-Su, Photovoice was selected as an additional the research method. This was primarily due to the fact that Photovoice can be used as a means to empower the marginalized groups in Mat-Su to speak up on issues affecting them and give them a means to achieve social change.

The aim of using Photovoice was to understand what health means to these communities. This encompassed both positive and negative factors that lead to worse or better health within each group's respective community.

Our Photovoice Methodology

The Photovoice methodology can be broken into 8 steps:

- 1. Community Health Needs Assessment meeting with Steering Committee to decide to use Photovoice
- 2. Identify and get commitment from group leaders
- 3. Formal two-day Photovoice training for group leaders
- 4. Group meetings (Each group had 2-3 meetings with group leaders and participants.)
- 5. Collection of pictures, captions and themes
- 6. Group Leader Convening
- 7. Exhibitions (Community and MSHF)
- 8. Data findings entered into CHNA

1. Community Health Needs Assessment Meeting with Steering Committee

In April 2019, the Steering Committee had their first meeting for the 2019 Community Health Needs Assessment. From this meeting, the Steering Committee wanted a way of "Hearing Every Voice," especially the ones not heard from through the traditional research used for these assessments. The Steering Committee elected to use a community-based methodology coupled with traditional methodology (survey and census data) to hear from more voices. Additionally, a subgroup of the Steering Committee chose values that should lead the assessment (see Introduction: Hearing Every Voice Chapter).

2. Identify and Get Commitment from Group Leaders

Potential groups were identified by the Steering Committee and other Mat-Su Health Foundation (MSHF) staff. The goal was to get a wide variety of community groups throughout Mat-Su to be a part of this project with a focus on voices who have not been heard from before. After getting an initial list of contacts to gauge interest in the project, the MSHF Community Health Fellow either scheduled meetings via phone calls, face-to-face, or email to talk with potential group leaders. A flyer was also created and disseminated to persons of interest seeking Group Leaders to take part in this project. Group Leaders who agreed to take part in the Photovoice project were invited to a two-session train-the-trainer Photovoice training with contractors that the Mat-Su Health Foundation hired through a competitive request for proposal (RFP) bid.

Groups Leaders were incentivized to take part in the project through the MSHF, awarding \$1,000 grant for a community group or organization of each Leader's choice. Additionally, participants were incentivized to take part in group meetings by providing a \$25 gift card to each participant for each meeting they attended. MSHF also had an agreement with Valley Transit where we would provide transportation to and from group meetings for free for any group leaders or participants who requested this.

3. Formal two-day Photovoice Trainings for Group Leaders

After a competitive decision process, the RFP was awarded to Dr. Amanda O. Latz and Dr. Robin Phelps-Ward. Two days were scheduled as the Photovoice training workshop. The entire training consisted of seven hours of Photovoice training split evenly over a two-day time period. There were a total of 19 individuals spanning the 10 participating groups who attended the two-session Photovoice trainings. After the Photovoice training, an equipment form was sent out to all group leaders. This was used to determine what and how many of each supply we needed.

4. Group Meetings

Each group leader was asked to have 5 – 10 participants for their group; however, they were allowed to work with less than 5 participants but not more than 10. Each group was asked to hold three group meetings. The group meetings were semi-structured with the Group Leaders deciding how to share the Photovoice information with their participants. Group meetings lasted between 20 minutes to 1 hour. The outline for objectives of each meeting were:

Meeting 1: Explain Photovoice process and highlight the goals; discuss what "health" means; teach participants how to use cameras and about informed consent; ask group participants to take approximately 25 pictures in response to prompts

Meeting 2: Display pictures either as prints or digitally; participants reduce pictures to top 3-5; use the "SHOWeD Technique" to caption selected pictures - What do we <u>SEE</u> here? What is really <u>HAPPENING</u> here? How does this relate to <u>OUR</u> lives? <u>WHY</u> does this situation, concern, or strength <u>EXIST</u>? What can we <u>DO</u> about it? Begin to identify themes from pictures

Meeting 3: Have pictures with captions available in print or digitally; have reflective group discussions on the pictures, captions and themes; make any necessary adjustments or changes to captions or themes identified

After every group's first meeting, there was a scheduled time to debrief. Debriefing either took place via phone or email. Phone debriefs took around 10-15 minutes.

5. Collection of Pictures, Captions and Themes

After each group concluded all their meetings, each Group Leader was sent a link to a Google Form via email. This link was to be used to submit their participant's pictures, captions, and themes. The pictures were then downloaded and saved. This was done by participant and by group. Once all the pictures were collected for each participant, they were added to a participant-specific Word document and captions were added to their respective pictures. After this was done for all participants of a given group, a group-specific Word document was created that contained all a specific group's participant's pictures and captions. This was repeated for all the groups taking part in the project. All the groups' themes were compiled into one Word document where each theme was separated by group.

6. Group Leader Convening

Once all the groups had completed their meetings, a Group Leader Convening was scheduled. Group Leaders as well as 2-3 participants from each group were invited to attend. Prior to the meeting, pictures with captions were printed out onto A4 paper and stuck all around the room for a mini exhibition during the convening.

The three goals of this meeting were to (1) hear how the Photovoice process went, (2) discuss initial thoughts from the mini exhibition, and (3) have some preliminary exhibition planning for the MSHF Community Exhibition and Group Community Exhibition.

7. Exhibitions

The end product of the Photovoice project is to display the pictures with captions and themes at an exhibition to advocate for social change. Since Photovoice is participatory action research, it was completely dependent on the Group Leaders and participants if they wanted to take part in any exhibition. There was the option to take part in two exhibitions per group:

- 1. MSHF Community Exhibition with all groups from the Photovoice project
- 2. Group Community Exhibitions

MSHF staff decided to give each group the opportunity to host an exhibition among themselves, as well as to host a combined group exhibition through the MSHF.

Groups were told that they can apply for a sponsorship grant of up to \$2,500 through the MSHF for their Group's Community Exhibition.

8. Data Findings Entered into Community Health Needs Assessment

Once all the data (pictures, captions and themes) were collected, analysis of themes was done by looking at themes coming out of the quantitative data for the CHNA and match up against the Photovoice themes. The overlapping themes were then used for the CHNA Ranking component, where members of the Steering Committee were asked to rank different issues by geographical area.

The Prompts Used

Each group was given two universal prompts, as well as the opportunity to add another prompt if the group wanted a third prompt.

The two universal prompts were:

- 1. What about your life and/or community is challenging to your health?
- 2. What about your life and/or community is supportive to your health?

APPENDIX D: MAT-SU RESOURCES

The MSHF has funded the development of a program that provides Mat-Su residents with information and referral to get the services they need to meet the needs identified in this needs assessment. Created in 2018, the program strives to be a comprehensive and innovative health and social services information and referral resource center. It is a network that is both a physical and virtual resource center linking residents with immediate access to the information, referrals and direct assistance needed to thrive physically, mentally, socially, and emotionally.

Substance Use Disorder Treatment				
Alaska Family Services	(907) 376-4080	Fallen Up Ministries	(907) 815-7283	
Knik House	(907) 357-0391	True North Recovery Inc.	(907) 357-8780	
MY House	(907) 373-4357	YOUTH 411	(907) 373-4357	
Alcohol Safety Action Programs	(907) 746-6260	Clitheroe	(907) 243-1181	
Sunshine Community Health Center-Willow	(907) 495-4100	Akeela Mat-Su Outpatient Program	(907) 707-1291	
Sunshine Community Health Center- Talkeetna	(907) 733-2273	American Lung Association Alaska	(907) 891-7445	
Mat-Su Alano Club	(907) 376-8669	Fiend 2 Clean	(907) 982-4673	
Al-Anon Helpline Mat Su	(907) 357-2550	Teen Challenge	(907) 202-8850	
Alaska Dream Center	(907) 746-3736	My House	(907) 373-4357	
Mindful Exchanges	(907) 745-7799	Nugen's Ranch	(907) 376-4534	

	Physico	ıl Health	
All Alaska Pediatric Partnership		Randall Twenhafel, P.N.P.	(907) 357-4543
Dr. Marta Beaubien, M.D.	(907) 357-4543	Janet Shelley, F.N.P.	(907) 357-4543
Heartreach Center	(907) 373-3456	Real Time Neuromonitoring Assoc (907) 861-6	000; (615) 346-8182
Mat-Su Women's Health Specialist	(907) 746-7747	Carepoint Pc/Blue Sky Neurology	(907) 861-6000
Alaska Foot & Ankle Care Center	(907) 746-5678	Caring For Women	(907) 357-9930
Arctic Skye Family Medicine	(907) 745-7944	Jackson And Coker	(907) 861-6000
Or. Marie Westphal, M.D.	(907) 357-4543	Alaska Native Medical Center	(855) 482-4382
Nat-Su Sertoma	(907) 352-8333	Adventures In Pediatrics	(907) 373-7337
unshine Community Health Center-Willow	(907) 495-4100	Dr. Brück Clift Md, Llc	(907) 746-6686
Playful Learning Pediatric Therapy Palmer Office	(907) 317-5895	Alaska Children's Heart Center, Llc	(907) 565-2242
ife House Community Health Center C'eyiits' Hwnax	(907) 631-7665	Redi Rides Of Alaska - Wasilla	(907) 357-7500
unshine Community Health Center- Talkeetna	(907) 733-2273	Orthopedics Physicians Ak Wasilla	(907) 357-2267
Bridges Counseling Connections, Wasilla	(907) 631-0526	Jesse Atwood, Md	(907) 761-5900
tate Of Alaska Metabolic Clinic	(907) 269-3430	Seattle Children's Hospital	(907) 339-1945
Vindsong Midwifery	(907) 373-2672	Mat-Su Regional Urgent Care Wasilla	(907) 352-2880
Vellspring Home Health	(907) 357-3655	Mat-Su Regional Urgent Care - Settler's Bay	(907) 864-1300
Vasilla Medical Clinic	(907) 373-6055	Mat-Su Regional Urgent Care - Palmer	(907) 861-1400
outhcentral Foundation	(907) 729-4955	Peak Neurology & Sleep Medicine LLC	(907) 313-2344
Alaska Home Care	(907) 357-5431	Mat-Su Emergency Physicians	(907) 746-7511
Vasilla Homeless-Committee	(907) 521-2949	Mat-Su Regional Advanced Wound Care & Hyperbaric Therapy	(907) 861-6312
Classic Eyewear	(907) 376-9173	Wasilla Physical Therapy	(907) 376-7334
ohn Boston, Do Internal Medicine	(907) 376-8938	Integrated Wellness & Center For Birth, LLC	(907) 357-7781
Bentah Nuutah Valley Native Primary Care Center	(907) 631-7800	Alaska Mobility, LLC (907) 244-3	550; (907) 373-4050
Alaska Cleft Lip And Palate Program	(907) 729-4347	The Family Health Center	(907) 745-1777
Mat-Su Health Services	(907) 376-2411	Mat-Su Public Health Center	(907) 352-6600
Mat-Su Veterans Affairs Community Based Outpatient Clinic	(907) 631-3100	Mat-Su Midwifery & Family Health	(907) 373-3420
Playful Learning Pediatric Therapy Wasilla Office	(907) 317-5895	Heirloom Wellness And Birth	(907) 746-6644
orthwest Medical	(907) 357-9909	Alaska Full Circle Counseling Solutions LLC	(907) 864-0560
rovidence Medical Group Mat-Su Behavioral Health Clinic	(907) 761-5800	Odland Family Practice Clinic	(907) 373-0850
lealth Quest Therapy, Inc. Talkeetna	(907) 376-6366	Geneva Woods Pharmacy Wasilla	(907) 376-8200
lealth Quest Therapy, Inc. Wasilla	(907) 376-6363	Dr. Lawrence Norton Pediatric Neuropsychologist	(907) 334-9842
aded Body Wellness And Spine Institue	(907) 631-0600	Chickaloon Native Village Nay'dini'aa Na'kayax'	(907) 745-0749
alley Charities	(907) 376-5708	Glacier View Surgical Associates	(907) 746-1520

	Physical He	ealth (cont.)	
Providence Nurse Family Partnership	(907) 273-0572	American Marine Hyperbarics Center	(907) 357-5400
Coho Family Medicine	(907) 357-0820	Assistive Technology Of Alaska	(907) 563-2599; (800)-723-2852
Ptarmigan Pediatrics	(907) 357-4543	Alaska Urology	(907) 745-9300
Dr. Therese Tomasoski, M.D.	(907) 357-4543	Valley Radiation Therapy Center	(907) 745-2900
Lea Anne Abernathy, F.N.P.	(907) 357-4543	Natalie Beyeler & Associates	(907) 745-3770
enni Thomas, MSN, CPNP, IBCLC	(907) 357-4543	Valley Allergy & Asthma Clinic	(907) 745-4488
Dr. Bruce Hess, O.D.	(907) 357-4543	Alaska Cares Mat-Su	(907) 357-5157
Wild Iris Family Medicine & Maternity Care	(907) 373-9453	Mat-Su Ear Nose Throat & Facial Plastics	(907) 745-9200
Cottonwood Creek Clinic	(907) 373-5950	Lisa Cooney Internal Medicine Clinic	(907) 376-9321
Midnight Sun Oncology	(907) 746-7771	Joseph Llewellyn Md, LLC	(907) 745-9320
Palmer Family Medicine	(907) 746-2345	Now Health Palmer	(907) 745-9355
Orion Behavioral Health Network -Eagle River	(907) 696-7466	Alyeska Vascular Surgery LLC	(907) 562-8346
Orion Behavioral Health Network -Mat-Su	(907) 696-7466	Alaska Foot & Ankle Specialists	(907) 373-3338
Dr. Lawrence Norton-Wasilla	(907) 334-9842	Alyeska Center For Facial Plastic Surgery & Ent	(907) 373-1410
Reliable Passenger Transport	(907) 632-9939	Mat-Su Valley Cancer Center	(907) 707-1333
Adonai Diabetes & Endocrinology Center	(907) 357-2332	Pioneer Peak Orthopedics	(907) 707-1671
Alaska Imaging Associates	(907) 746-4646	Brent H. Taylor, Md, Facs	(907) 745-9400
Cellnetix Pathology & Laboratories	(907) 746-6791	Michael G. Fitzgerald	(907) 864-0260
Gagnon Plastic & Reconstructive Surgery	(907) 357-4550	Alaska Heart Institute	(907) 357-3213
Generations Medical Center	(907) 357-4963	Mat-Su Plastic Surgery	(907) 745-7575
Denali Healthcare Specialists	(907) 357-8483	The Alaska Hospitalist Group	(907) 375-3355
Heritage Family Medicine LLC	(907) 357-3496	Algone Alaska	(907) 373-9460
Dr. John Oliver	(907) 357-6121	Mat-Su Surgical Associates	(907) 745-8100
Ear Nose And Throat Specialists Of Alaska	(907) 373-1410	Alyeska Therapy Center, Inc	(907) 357-2578
Alaska Brain Center, LLC	(907) 373-6500	Valley Dermatology Center	(907) 357-2800
Anesthesia Care Associates	(907) 290-5784	Advanced Physical Therapy Of Alaska	(907) 376-8590
Dr. Laura Peterson, M.D.	(907) 357-4543	Alaska Birthing	(907) 694-1123

	Mental	l Health	
Richard Crisostomo, PMHNP, RN	(907) 357-4400	Kara Stocker, PsyD	(907) 357-4400
Mat-Su Coalition for Suicide Prevention	(907) 775-8701	Compassionate Directions	(907) 745-2634
Alaska Marriage & Family Center	(907) 376-0776	YOUTH 411	(907) 373-4357
North Star Palmer Residential Treatment Center	(907) 258-7575	Orion Behavioral Health Network -Eagle River	(907) 696-7466
Barbara Caldwell, RN	(907) 357-4400	Clitheroe	(907) 243-1181
Set Free Alaska Substance Abuse Treatment	(907) 373-4732	Orion Behavioral Health Network -Mat-Su	(907) 696-7466
Sunshine Community Health Center-Willow	(907) 495-4100	Orion Behavioral Health Network	(907) 696-7466
Playful Journeys, Inc.	(907) 376-9091	Elowyn M. Smith, DO	(907)357-4400
Life House Community Health Center C'EYIITS' HWNAX	(907) 631-7665	Full Circle Counseling	(907) 864-0560
Sunshine Community Health Center- Talkeetna	(907) 733-2273	Chickaloon Native Village Health and Social	(907) 745-0704
Mountain River Counseling	(435) 817-0812	Akeela Mat-Su Outpatient Program	(907) 707-1291
Bridges Counseling Connections, Wasilla	(907) 631-0526	American Lung Association ALASKA	(907) 891-7445
Confidential Care	(907) 3571999	Providence Behavioral Medical Group	(907) 761-5800
Ptarmigan Connections	(907) 357-4400	Denali Family Services Anchorage	(907) 222-2321
Co-Occurring Disorders Institute	(907) 745-2634	Benteh Nuutah Valley Native Primary Care Center Behavioral Health Clinic	(907) 631-7800
Office of Veteran Affairs Wasilla	(907) 376-4318	Alaska Family Services	(907) 746-4080
Lighted Path Therapy Services, LLC	(907) 312-1202	Heather Lee, MS, LPC	(907) 357-4400
Mat-Su Veterans Affairs Community Based Outpatient Clinic	(907) 631-3100	Olive Tree Counseling	(907) 357-6513
Mindful Exchanges	(907) 745-7799	Presbyterian Hospitality House Fairbanks	(907) 456-6445
Providence Medical Group Mat-Su Behavioral Health Clinic	(907) 761-5800	Alaska Full Circle Counseling Solutions LLC	(907) 864-0560
Miriam Hinther, LPN, CPST	(907) 357-4400	Presbyterian Hospitality House Wasilla	(907) 357-6445
Nicole Gregson, LPC, RPT	(907) 357-4400	Nugen's Ranch	(907) 376-4534
Erika L. Stannard, PsyD	(907) 357-4400	Family Centered Services of Alaska - Wasilla	(907) 357-7519
Green Psychological Services	(907) 707-1336	Chickaloon Native Village Nay'dini'aa Na'Kayax'	(907) 745-0749

	Basic Ne	eds	
St. Vincent DePaul - Our Lady Of the Lake Church	(907) 892-6492	First Presbyterian Church	(907) 3765053
Salvation Army-Mat-Su Valley Corps	(907) 745-7079	Blood-N-Fire Ministries Of Alaska	(907) 864-0463
HeartReach Center	(907) 373-3456	Family First Treasures	(907) 746-6200
MYHouse	(907) 373-4357	Mouse House	(907) 376-6773
Turn-A-Leaf Thrift Store	(907) 376-5708	Thrifters Rock	(907) 745-7625
American Red Cross	(907) 357-6060	Good Shepherd Lutheran Church	(907) 376-3522
Wasilla Homeless-Committee	(907) 521-2949	Alaska Mobility, LLC	(907) 244-3550; (907)373-4050
Classic Eyewear	(907) 376-9173	Frontline Mission	(907) 357-8600
Connect Palmer	(907) 746-9675	Geneva Woods Pharmacy Wasilla	(907) 376-8200
Big Lake Community Closet	(907) 775-3238	Assistive Technology Of Alaska	(907) 563-2599; (800) 723-2852
Southcentral Foundation Alaska Women's Recovery Project	(907) 729-5190	First Presbyterian Church	(907) 3765053

Transportation			
A Cab	(907) 775-6622	Sunshine Community Transit	(907) 354-3885; (907) 495-8411
Life House Community Health Center C'eyiits' Hwnax	(907) 631-7665	Valley Cab	(907) 357-8294
Alaska Cab	(907) 357-2727	Chickaloon Area Transit System	(907) 745-2287
Alaska Home Care	(907) 357-5431	Valley Transit	(907) 864-5000
Wasilla Homeless-Committee	(907) 521-2949	Reliable Passenger Transport	(907) 632-9939
Alaska Rideshare	(907) 245-6503	Redi Rides Of Alaska - Wasilla	(907) 357-7500
		Knik Tribal Council	(907) 373-7991

	Legal		
Alcohol Safety Action Programs	(907) 746-6260	Alaska Legal Services	(907) 746-4636

	Mone	У	
Salvation Army-Mat-Su Valley Corps	(907) 745-7079	Alaska Division of Public Assistance	(907) 376-3903
MEA Operation Roundup	(907) 761-9317	Salvation Army Corps Community Center Palmer	(907) 745-7079
Alaska Housing Finance Corporation-Wasilla	(907) 376-5744	NeighborWorks Alaska	(907) 745-6636

	Social	Activities	
Daybreak Inc	(907) 746-6019	Palmer Public Library	(907) 745-4690
Uaf Cooperative Extension Family Nutrition Program	(907) 745-3423	Girl Scouts Of Alaska	(907) 248-2250
Heartreach Center	(907) 373-3456	Mat-Su Sea Hawkers	(907) 232-5921
Mat-Su Coalition For Suicide Prevention	(907) 775-8701	True North Recovery Inc.	(907)357-8780
Big Lake Lions Recreation Center	(907) 892-6502	R.O.C.K. Mat-Su: Raising Our Children With Kindness	(907) 373-2628
Alpenglow Pony Club	(907) 745-4194	Compassionate Directions	(907) 745-2634
Bishop's Attic Ii	(907) 745-4215	Southcentral Foundation Alaska Women's Recovery Project	(907) 729-5190
Christ First United Methodist Church	(907) 376-3109	Choosing Our Roots	(907) 764-6233
Mat-Su Rock And Mineral Club	(907) 745-2002	Blood-N-Fire Ministries Of Alaska	(907) 864-0463
All Alaska Football Camp	(907) 244-1700	Alaska Youth And Family Network- Anchorage	(907) 770-4979
All About Dance	(907) 715-9174	Boys & Girls Club Alaska-Mat-Su	(907) 357-2582
American Red Cross	(907) 357-6060	Okamoto's Karate Wasilla	(907) 376-0333
Big Brothers Big Sisters Of Alaska Wasilla	(907) 376-4617	Mat-Su Steelers Pop Warner Football	(907) 715-0003
Mat-Su Alano Club	(907) 376-8669	Alaska Club Valley	(907) 373-3300
Alaska Attachment & Bonding Associates	(907) 376-0366	Alaska Pioneer Home Palmer	(907) 745-4241
Al-Anon Helpline Mat Su	(907) 357-2550	Usda Rural Development State Office Palmer	(907) 761-7705
Alcoholics Anonymous	(907) 376-4777	Wasilla Public Library	(907) 376-5913
Mat-Su Health Foundation	(907) 352-2863	Alaska Autism Resource Center (907) 334-	331; (866)301-7372
Wasilla-Knik Historical Society	(907) 376-7755	Brett Memorial Ice Arena	(907) 861-7690
Wasilla Youth Soccer Association	(907) 376-1013	Alaska Brain Injury Network	(907) 274-2824
Alaska Dream Center	(907) 746-3736	Royal Family Kids Alaska (907) 982-9	645; (907) 864-6701
Thrive Mat-Su	(907) 745-5827	Mat-Su Trails And Parks Foundation	(907) 746-8757
Connect Palmer	(907) 746-9675	Fiend 2 Clean	(907) 982-4673
Mat Valley Dance	(907) 317-4617	Mat-Su Coalition On Housing And Homelessness	(907) 232-4450
Mat-Su Youth Orchestra		Salvation Army Corps Community Center Palmer	(907) 745-7079
Percussion In The Valley	(907) 631-8079	Grandfamilies Network Project	(907) 373-7795
Sonja's Studio Of Performing Arts	(907) 357-3933	Onward And Upward	(907) 953-5360
Valley School Of Music	(907) 315-2435	Knik Tribal Council	(907) 373-7991
Wasilla Dance And Music Center	(907) 354-3658	Help Me Grow Alaska	(833) 464-2527
Pioneer Amateur Hockey Association	(907) 715-4335	Boys & Girls Clubs Alaska-Goose Bay	(907) 355-6197
Palmer Soccer Club	(907) 795-9401	Greater Wasilla Chamber Of Commerce	(907) 376-1299
Screaming Eagle Archery Of Alaska	(907) 376-2699	Valley Performing Arts	(907) 373-0195
Okamoto's Karate	(907) 562-5662	North America Outdoor Institute	(907) 376-2898
Orito's Taekwondo	(907) 232-9304	Nine Star Education & Employment Services	(907) 373-3006

	Edu	cation	
Chickaloon Village Education	(907) 745-0722	Alzheimer's Association	(907) 746-3413
All Alaska Pediatric Partnership		Southcentral Foundation Alaska Women's Recovery Project	(907) 729-5190
Burchell High School	(907) 864-2600	Ak Community Resources	(222) 333-4444
UAf Cooperative Extension Family Nutrition Program	(907) 745-3423	Youth 411	(907) 373-4357
Alaska Bible College	(907) 745-3201	Choosing Our Roots	(907) 764-6233
MyHouse	(907) 373-4357	Big Lake Elementary School	(907) 892-9700
Mat-Su Coalition For Suicide Prevention	(907) 775-8701	Boys & Girls Club Alaska-Mat-Su	(907) 357-2582
Alaska Job Center & Unemployment Office	(907) 352-2500	Nine Star Education & Employment Services Headquarters	(907) 279-7827
Thread Alaska Mat-Su Office (800) 278	3-3723;(907) 373-5024	Gathering Grounds	(907) 373-4357
Charter College	(907) 352-1000	Alzheimer's Resource Of Alaska Anchorage	(907) 561-3313
American Red Cross	(907) 357-6060	Alaska Native LGBTQ Initiative	(907) 729-2971
Denali Family Services Mat-Su	(907) 376-3275	Wasilla Public Library	(907) 376-5913
Sarah's House	(907) 746-9675	Alaska Autism Resource Center (907) 334-1	331;(866) 301-7372
Alaska Inclusive Child Care Program (Alaska In!)	(907) 269-4500	Mat-Su Services For Children And Adults	(907) 352-1200
Access Alaska Mat-Su (907) 357-	2588; (800) 770-0228	Mat-Su Day School	(907) 864-6000
Alaska Center For The Blind And Visually Impaired	(907) 248-7770	Reading Write Alaska	(907) 631-3056
Bright Minds Learning Center	(907) 357-2600	Best Beginnings Alaska	(907) 297-3300
Mat-Su Borough School District-Fit Program	(907) 746-9200	Alaska Children's Trust	(907) 248-7676
Sunshine Station Child Care Center	(907) 733-5437	Palmer Head Start Center	(907) 746-4483
Alaska Dream Center	(907) 746-3736	NeighborWorks Alaska Palmer	(907) 745-6636
Alaska Vocational Medical Training	(907) 373-6357	Meadow Lakes Head Start Center	(907) 373-7165
Alaska Job Corps	(907) 861-8800	Wasilla Head Start Center	(907) 373-7795
Dzuuggi Preschool	(907) 746-9228	Onward and Upward	(907) 953-5360
Co-Occurring Disorders Institute	(907) 745-2634	Early Head Start Wasilla Center	(907) 373-7736
Consumer Direct Care Network	(907) 357-7962	Palmer Early Head Start Center	(907) 746-4483
Mat-Su Health Services	(907) 376-2411	Help Me Grow Alaska	(833) 464-2527
Volunteers Of America Anchorage	(907) 279-9640	Alaska Cares Mat-Su	(907) 357-5157
Sonja's Studio Of Performing Arts	(907) 357-3933	Now Health Palmer	(907) 745-9355
Wasilla Dance And Music Center	(907) 354-3658	Ccs Early Learning Palmer	(907) 746-4483
Palmer Public Library	(907) 745-4690	Ccs Early Learning Wasilla	(907) 373-7736
Mat-Su Imagination Library	(907) 232-8517	North America Outdoor Institute	(907) 376-2898
Providence Nurse Family Partnership	(907) 273-0572	Nine Star Education & Employment Services Wasilla	(907) 373-7833
Links Mat-Su Resource Center	(907) 373-3632	Northern Industrial Training, Llc	(907) 357-6400
Rural Deaf Student Support	(907) 433-4778	Nine Star Education & Employment Services	(907) 373-3006
Houston Jr/Sr High School	(907) 892-9500	Autism Speaks	(907) 269-8442
R.O.C.K. Mat-Su: Raising Our Children With Kindness	(907) 373-2628		

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Daybreak Inc	(907) 746-6019	Alyeska Vocational Services	(907) 562-7019
St. Vincent Depaul - Our Lady Of The Lake Church	(907) 892-6492	Gathering Grounds	(907) 373-4357
Heartreach Center	(907) 373-3456	American Lung Association Alaska	(907) 891-7445
Alaska Job Center & Unemployment Office	(907) 352-2500	Alaska Autism Resource Center	(907) 334-1331; (866) 301-7372
Thread Alaska Mat-Su Office (800) 278	3-3723; (907) 373-5024	Mat-Su Reentry Coalition	(907) 414-4077
Big Brothers Big Sisters Of Alaska Wasilla	(907) 376-4617	American Cancer Society	(907) 277-8696
Set Free Alaska Substance Abuse Treatment	(907) 373-4732	Alaska Children's Trust	(907) 248-7676
Alaska Department Of Vocational Rehabilitation Mat Su	(907) 352-2545	Frontline Mission	(907) 357-8600
Alcoholics Anonymous	(907) 376-4777	Stone Soup Group	(907) 561-3701
J & J Independent Living LLC	(907) 373-3953	Alaska Full Circle Counseling Solutions LLC	(907) 864-0560
Alaska Vocational Medical Training	(907) 373-6357	My House	(907) 373-4357
Wasilla Homeless-Committee	(907) 521-2949	ResCare Wasilla	(907) 357-5627
Alaska Wisdom Recovery	(907) 373-9233	Knik Tribal Council	(907) 373-7991
Connect Palmer	(907) 746-9675	Assistive Technology Of Alaska	(907) 563-2599; (800) 723-2852
Consumer Direct Care Network	(907) 357-7962	Greater Wasilla Chamber Of Commerce	(907) 376-1299
Volunteers Of America Anchorage	(907) 279-9640	Nine Star Education & Employment Services W	Vasilla (907) 373-7833
Office Of Children's Services	(907)357-9797	Northern Industrial Training, LLC	(907) 357-6400
Fallen Up Ministries	(907) 815-7283	Nine Star Education & Employment Services	(907) 373-3006
Family Centered Services (Of Alaska) (800) 478	3-2108; (907) 357-7519		

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St. Vincent Depaul - Our Lady Of The Lake Church	(907) 892-6492	Alaska Division Of Public Assistance	(907) 376-3903
Salvation Army-Mat-Su Valley Corps	(907) 745-7079	Our Lady Of The Lake Church	(907) 892-6492
UAf Cooperative Extension Family Nutrition Progr	ram (907) 745-3423	First Presbyterian Church	(907) 376-5053
Alaska Family Services Wasilla	(907) 376-4080	Youth 411	(907) 373-4357
City Of Wasilla Grow Your Own Garden	(907) 373-9010	Blood-N-Fire Ministries Of Alaska	(907) 864-0463
MyHouse	(907) 373-4357	Big Lake Baptist Church	(907) 892-6646
Nourished Health Coaching Services	(907) 982-9933	Gathering Grounds	(907) 373-4357
American Red Cross	(907) 357-6060	Good Shepherd Lutheran Church	(907) 376-3522
Women, Infants & Children	(907) 376-4080	Family Christian Center	(907)745-6033
Access Alaska Mat-Su (9	007) 357-2588; (800) 770-0228	USDA Rural Development State Office Palmer	(907) 761-7705
Willow Community Food Pantry	(907) 414-7555	Meals On Wheels	(907) 376-3104
Big Lake Community Food Pantry	(907) 892-8545	Food Pantry Of Wasilla	(907) 357-3769
Mat-Su Community Senior Center	(907) 745-5454	Christian Center Food Pantry	(907) 232-6706
Windsong Midwifery	(907) 373-2672	Salvation Army Corps Community Center Palmer	(907) 745-7079
Wasilla Homeless-Committee	(907) 521-2949	Frontline Mission	(907) 357-8600
Upper Susitna Food Pantry-Talkeetna	(907) 733-3358	My House	(907) 373-4357
Wasilla Area Seniors, Inc.	(907) 376-3104	Kids Kupboard	(907) 360-9476
Upper Susitna Food Pantry-Trappers Creek	(907) 733-3348	Food Bank Of Alaska	(907) 272-3663

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