

2013 Mat-Su Community Health Needs Assessment



MAT-SU HEALTH
FOUNDATION

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TO MAT-SU RESIDENTS,

The Mat-Su Health Foundation would like to see the Mat-Su Borough become the healthiest place in the country. MSHF shares ownership in the Mat-Su Regional Medical Center and invests its assets in charitable works that improve the health and wellness of Alaskans living in Mat-Su. In order to achieve this vision of the healthiest borough, MSHF has been working with a steering committee composed of local and statewide partners to complete a community health needs assessment (CHNA) for the borough.

The following partners have provided funding for this project: Alaska Mental Health Trust Authority, BP Alaska, Denali Commission, Providence Health and Services Alaska, Rasmuson Foundation, Southcentral Foundation, Mat-Su Borough, Mat-Su Agency Partnership, Mat-Su Coalition of Senior Centers, Mat-Su Community Health Centers, the State of Alaska Department of Health and Social Services including Mat-Su Public Health Nursing, and the United Way of Mat-Su. Additionally, a Steering Committee composed of representatives from these and other community organizations helped guide this process.



**Elizabeth Ripley, Executive Director
Mat-Su Health Foundation**

The first phase of this assessment involved collecting primary and secondary data on the health of the Mat-Su population, including a survey of Mat-Su residents. In the second phase, this information was presented and discussed at twenty-three community meetings in February, March, and April of 2013. Feedback from the meetings was combined with the data findings to create a *Mat-Su Community Health Needs Assessment Report*. The findings from the report will help guide the Mat-Su Health Foundation and the Mat-Su Regional Medical Center in collaboration with our community partners and the people of Mat-Su to take steps to make the Mat-Su Borough the healthiest in the country.

This report was created with the help of McDowell Group and Agnew::Beck consultants, along with the input of over 500 Mat-Su community members who shared with us their concerns and hopes for the borough. We offer a special thanks to our partners in funding and planning this community health needs assessment and to our fellow citizens who generously gave their time and energy to offer input. We are grateful for your feedback and support.



**Linda Conover, Board Chair
Mat-Su Health Foundation**

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2013 MAT-SU COMMUNITY HEALTH NEEDS ASSESSMENT

Executive Summary

MAT-SU HAS A LOT TO BE PROUD OF

Looking at the big picture, the Mat-Su Borough has amazing assets in terms of natural environment and quality of life. People like living in Mat-Su; in fact, our population has been the fastest growing in Alaska for the last twenty years. We also have a rich sense of community with active chambers of commerce and community councils, a solid faith-based sector, and a strong school system with dedicated teachers and administrators. There are a wealth of examples of successful collaboration and cooperation among different organizations and agencies to improve health in the borough. All of this can help address the health problems that challenge our community.

In 2012, the Mat-Su Health Foundation, along with other community and statewide partners, embarked on a journey to understand the health of the Mat-Su population. We started by exploring existing data from ongoing surveys and the U.S. Census. We also commissioned a household survey, a workplace survey, and an assessment of local health policy and the built environment. We analyzed these data findings and in early 2013 launched a community meeting series where the information was presented and attendees were given an opportunity to identify our greatest health challenges.

The Community Health Needs Assessment (CHNA) report is a culmination of this journey. This report provides an overview of what we know about our health and what our residents have identified as priority issues.

We would like to thank the 526 Mat-Su residents and professionals who attended 23 community meetings to help identify the top five health priorities for our borough.

THE HEADLINES



Overwhelming consensus was revealed in our community about Mat-Su's greatest health challenges...

- ALCOHOL AND SUBSTANCE ABUSE

The community views this as our leading health challenge. This issue leads to approximately 11 alcohol-induced deaths and 16 drug-induced deaths each year, 22% of our injuries requiring hospitalizations, and much stress and worry for families and children.

- CHILDREN EXPERIENCING TRAUMA AND VIOLENCE

This issue is directly related to our community's leading goal – to keep our children safe and well-cared-for. In the last year, we had over 1,625 protective service reports of child maltreatment and 420 substantiated allegations. One in four of our high school students have been bullied in the last year, and half of our middle school students have been in a physical fight.

WHAT WE HEARD

“I saw a heroin addict last week in the Emergency Department who thought she was pregnant. We did a pregnancy test and found out she wasn't. I had nowhere to send that girl. Just like drunks, I have nowhere to send them – they are the ones crashing into your vehicle.”

-Emergency Department physician

“If alcohol and substance abuse are addressed, many of the other issues would take care of themselves.”

-Wasilla senior

“Start at birth and find a way for the community to support families. People may not intend to hurt their child but because of the stress and strain it does happen. People want to be good parents but they do not have the skills.”

-Wasilla resident

- DEPRESSION AND SUICIDE

The Mat-Su has a suicide death rate that is twice as high as the U.S. rate.

- DOMESTIC VIOLENCE AND SEXUAL ASSAULT

More than one in ten high school students experience dating violence or have been physically forced to have intercourse when they did not want to.

- BEHAVIORAL HEALTH CARE SYSTEM IN NEED OF REPAIR

Children, families, and individuals are not getting the counseling, addiction treatment, and other services they need. There are long waiting lists, especially for children, and lack of money and transportation prevent many people from getting services.

There are other issues that affect our health that came up from the data review and at the meetings. These include overweight and obesity, lack of access to medical and dental care, smoking, injury, lack of access to safe and affordable housing, and decreased use of cancer screenings and immunizations.



WHAT WE HEARD

“Access to mental health care could eliminate a lot – if kids can heal from trauma. There are parents who can’t get their kids in to see someone – often there is a 6-8 week waiting list.”

-School principal

“Office of Children Services child maltreatment reports related to drugs and alcohol and whether people’s lives are violence-free [are important], but access to mental health services underlies everything – healthy mental health is related to all the rest.”

-Wasilla senior

THE FUTURE

The Mat-Su Health Foundation has chosen to focus our resources and energy on addressing the high priority health issues identified by the community. One of our foci will be working with local and statewide providers, organizations, and residents to ensure that all Mat-Su residents can have optimal mental and emotional health. To do this we will need a behavioral health system that works for everyone from children to seniors. *Healthy Seniors* was our first focus area, and that work is already underway.

Our other focus will be to support a Mat-Su where our children are safe and well-cared-for, not just by healthy families, but by everywhere they go throughout their day (schools, health care facilities, daycare, camps, sports activities, etc.). The goal will be to grow emotionally healthy children who will pass on this strength and steadiness to their children and future generations to come. By all working together we can have maximum impact in solving the health problems identified through the community health needs assessment process. We look forward to working with partners throughout the community as together we strive to help Mat-Su become the healthiest place in the U. S.



MAT-SU HEALTH SNAPSHOTS

These snapshot tables provide a quick overview of demographic and health indicators, correlating with the first six chapters of this report: demographics; healthcare access; healthy weight, chronic and infectious disease; mental health, alcohol, and substance abuse; and safety and injury.

CHAPTER 1: DEMOGRAPHIC SNAPSHOT		
Indicator	Mat-Su	AK
ADOLWD Population estimate, 2011	91,697	722,190
Population change since 2010 (%)	3.0	1.7
Population change since 2000 (%)	54.6	15.2
Median age (years), 2010	34.8	33.8
Number of households, 2012	31,824	258,058
Average household size, 2010	2.75	2.7
Average family size, 2010	3.23	3.2
Total population living in poverty (%), 2006-2010	9.9	13.8
Unemployment Rate (seasonally adjusted) (%), 2011	8.6	7.4
Number of homeless in Mat-Su, 2012	938	NA
Individuals with a physical disability (%), 2009-2011	10	11
<i>Data Sources: Alaska Department of Labor and Workforce Development (ADOLWD); U.S. Census; Mat-Su Coalition on Housing and Homelessness.</i>		

CHAPTER 2: HEALTHCARE ACCESS SNAPSHOT				
Indicator	Mat-Su	AK	US	Healthy People Goal
Did not see a doctor due to cost in last 12 months (%).				
• 18+ years, 2011	18.5	17.4	NA	-
• 65+ years, 2011	4.7	NA	NA	-
Have a usual primary care provider (%).				
• 18+ years, 2011	57.9	56.4	76.3	84
• 65+ years, 2011	90.9	NA	NA	-
Persons with medical insurance (%).				
• 18+ years, 2011	77.0	79.9	82.1	100
• 65+ years, 2011	97.9	97.2	NA	-
Primary Care Physician to Population Ratio, 2009.	1293:1	731:1	NA	-
Preventable Hospital Stays per 1000 Medicaid enrollees, 2009.	53.3	55.1	NA	-
<i>Data Sources: Alaska Department of Health and Social Service (ADHSS), Behavioral Risk Factor Surveillance System (BRFSS); Robert Wood Johnson Foundation (RWJF), County Health Rankings; Centers for Disease Control and Prevention (CDC), BRFSS Prevalence and Trends Data. Note: NA – Not Available; (-) means no goal set for this indicator.</i>				

CHAPTER 3: HEALTHY WEIGHT SNAPSHOT				
Indicator	Mat-Su Percent	AK Percent	US Percent (2009-10)	Healthy People Goal
Healthy weight				
• K-7 th , 2009-10	71.0	NA	63.2	-
• Middle school, 2011	69.1	68.5	63.7	-
• Traditional high school, 2011	71.7	72.0	27.7	-
• Alternative high school, 2011*	65.1	NA	NA	-
• Adult, 2011	38.8	34.4	25.7	33.9
• Senior, 2011	27.3	NA	NA	-
<i>Data Sources: ADHSS and MSBSD; ADHSS, BRFSS and YRBS; RWJF, County Health Rankings. Note: NA – Data not available; (-) means no goal set for this indicator. * The Alaska Department of Health and Social Services labeled Mat-Su alternative high schools who participated in the Youth Risk Behavior Survey in 2011 as American Charter Academy, Burchell High School, Mat-Su Day School, and Valley Pathways.</i>				

CHAPTER 4: CHRONIC AND INFECTIOUS DISEASE SNAPSHOT

Indicator	Mat-Su	AK	US	Healthy People Goal
Chronic Disease				
Coronary heart disease death rate per 100,000 people, 2007-2009	87.5	87.6	126.0	100.8
Stroke disease death rate per 100,000 people, 2007-2009	40.1	43.1	42.2	33.8
Diabetes – adults, 2011 (%)	7.5	7.8	11.3	-
Diabetes – seniors, 2011 (%)	21.3	20.3	NA	-
Cancer death rate per 100,000 people, 2007-2009	175.3	182.9	178.4	160.6
Colorectal cancer death rate per 100,000 people, 2007-2009	13.6	17.5	16.9	14.5
Lung cancer death rate per 100,000 people, 2009	56.7	55.8	48.5	45.5
Mammogram, women age 40+, in past 2 years, 2006-2010 (%)	60.7	69.9	75.2 (2010)	81.1
Cervical cancer screening, women age 18+, PAP in past 3 years, 2006-2010 (%)	81.5	82.7	81.0 (2010)	92.0
Prevention: Colorectal Cancer Screening ever, age 50+, 2006-2010 (%)	59.5	65.6	64.2 (2010)	-

CHAPTER 4: CHRONIC AND INFECTIOUS DISEASE SNAPSHOT (CONT.)

Indicator	Mat-Su	AK	US	Healthy People Goal
Infectious Disease				
Children in MSBSD who have received an exemption for immunizations, 2012-2013 (%)	10%	NA	NA	-
Adults aged 65+ who received an influenza immunization, 2011 (%)	49.1	51.8	60.7	90.0
Adults Aged 65+ who received pneumonia immunization, 2011 (%)	65.1	66.2	70.0	90.0
Age-adjusted chlamydia rate per 100,000 people, 2011	716.5	808.0	457.6	-
Age-adjusted gonorrhea rate per 100,000 people, 2011	78.6	138.5	104.2	-
<i>Data Sources: ADHSS, BRFSS and YBRS; Alaska Bureau of Vital Statistics (ABVS); CDC, BRFSS Prevalence and Trends; RVVJF, County Health Rankings; National Center for Health Statistics (NCHS), National Vital Statistics Reports. NA – Data not available; (-) means no goal set for this indicator.</i>				

CHAPTER 5: MENTAL HEALTH, ALCOHOL, AND SUBSTANCE ABUSE SNAPSHOT

Indicator	Mat-Su Percent	Alaska Percent	Healthy People Goal Percent
Adults who had no poor mental health days in last month, 2011			
• Adult	68.1	67.1	-
• Seniors	81.7	NA	
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, 2011			
• Traditional high school	26.9	25.9	-
• Alternative high school	34.8	NA	
Considered suicide in the past year, 2011			
• Middle school	20.6	20.9	-
• Traditional high school	15.1	14.5	
• Alternative high school	20.6	NA	
Suicide death rate per 100,000 people, 2007-2009	23.2	22.7	11.3
Binge drinking, 2011			
• High school	15.2	16.7	-
• Alternative high school	35.6	NA	-
• Adults 18+	19.5	20.2	24.3
• Seniors 65+	8.1	NA	-
Marijuana, 2011			
• Middle school, ever used	14.7	18	-
• High school, 1 or more times/month	18.8	21.2	-
• Alternative high school	43.8	NA	-
Currently using marijuana, cocaine, or un-prescribed drugs, 2011			
• High school	22.5	23.8	-
• Alternative high school	50.1	NA	-
<i>Data Sources: ADHSS, BRFSS and YRBS. Note: NA – Data not available; (-) means no goal set for this indicator.</i>			

CHAPTER 6: SAFETY AND INJURY SNAPSHOT

Indicator	Mat-Su	Alaska	U.S	Healthy People Goal
Violent Crime per 100,000 people, 2007-2009	555.9	650.2	431.9	NA
Homicide per 100,000 people, 2007-2009	5.0	5.2	5.9	5.5
Dating violence in past 12 mo., high school, 2011 (%)	11.1	12.0	9.4	-
Forced intercourse ever, high school, 2011 (%)	8.1	9.2	8.0	-
Bullying at school in past 12 mo., high school, 2011 (%)	23.6	23.0	20.1	17.9
Number of allegations of child maltreatment that were substantiated by the Office of Children's Services, April 2012 – March 2013	420	NA	NA	-
Had unwanted sexual activity ever, adults, 2009 (%)	11.0	14.4	NA	-
Threatened or physically hurt by partner ever, adults, 2009 (%)	19.4	24.3	NA	-
Witnessed parent hurt by spouse or partner ever, adult, 2009 (%)	22.7	20.6	NA	-
<i>Data sources: ADHSS, BRFSS and YRBS; CDC, YRBS; NCHS, National Vital Statistics Report.</i>				

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LIST OF ABBREVIATIONS

ABDR	Alaska Birth Defects Registry	MSBSD	Matanuska Susitna Borough School District
ABVS	Alaska Bureau of Vital Statistics	MSHF	Mat-Su Health Foundation
ACS	US Census, American Community Survey	MSRMC	Mat-Su Regional Medical Center
ADBH	Alaska Division of Behavioral Health	NCHHSTP	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
ADEED	Alaska Department of Early Education and Development	NCHS	National Center for Health Statistics
ADHSS	Alaska Department of Health and Social Services	PRAMS	Pregnancy Risk Assessment Monitoring System
ADOLWD	Alaska Department of Labor and Workforce Development	RWJF	Robert Wood Johnson Foundation
ADPS	Alaska Department of Public Safety	SHOTS	Searching for Hardships and Obstacles to Shots
ATR	Alaska Trauma Registry	YRBS	Youth Risk Factor Survey
BRFSS	Behavioral Risk Factor Surveillance System	USBEA	US Bureau of Economic Analysis
CDC	Centers for Disease Control and Prevention	USBLS	US Bureau of Labor Statistics
CUBS	Childhood Understanding Behaviors Survey (CUBS)	USDA	US Department of Agriculture
ERS	Economic Research Service	USDAER	US Department of Agriculture Economic Research Services
FBI	Federal Bureau of Investigation	USDE	US Department of Education
HHS	Household Survey	USDOJ	US Department of Justice
HPG	Healthy People 2020 Goal	WISQARS	Web-based Injury Statistics Query and Reporting System

COMMUNITY HEALTH NEEDS ASSESSMENT: DATA AND METHODS

A Community Health Needs Assessment (CHNA) helps to gauge a community's health status and support strategic plans to improve overall health. The CHNA process also promotes collaboration among local agencies and provides data to be used for evaluation and planning to promote the health of a population. For this assessment, the community has been defined as the Matanuska-Susitna Borough.

This report is composed of two segments. Section One presents data to describe the Mat-Su community in terms of demographics, healthcare access, healthy weight, chronic and infectious disease, behavioral health and substance abuse, public and home safety, and sub-populations, such as mothers and children, youth, seniors, and Alaska Native people. Section Two presents information collected at 23 community meetings conducted in early 2013 to determine the top five health priorities for the borough.

Data for this report was obtained from the following major research tasks:

- development of a socioeconomic profile;
- identification of key secondary health indicators;
- analysis of State of Alaska Behavioral Risk Factor Surveillance System (BRFSS) and Alaska Trauma Registry (ATR) data;
- collection and analysis of data from the 2012 Mat-Su Household Survey;
- collection and analysis of data from the Community Health Assessment and Group Evaluation (CHANGE) Tool; and
- completion of a series of 23 Mat-Su community engagement meetings.

Results from these research tasks are interspersed throughout this report as appropriate. The complete results for the household and workplace surveys and the CHANGE assessment can be found on the Mat-Su Health Foundation website at www.healthymatsu.org. The following is an overview of the methodologies for each task.

SOCIOECONOMIC PROFILE

The socioeconomic profile provides a description of the demographic, education, and economic summary of Mat-Su. The data was obtained from the U.S. Census, the American Community Survey (ASC), the U.S. Department of Agriculture Economic Research Service (USDARS), the Alaska Department of Labor & Workforce Development (ADOLWD), the 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 come from many different sources. Table A.1 found in Appendix One lists each data source, the type of data, and a website for the reader to get more in-depth information about how the data was collected or access similar data. The MSHF also requested and received data that was 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.

Additionally, MSHF paid for an oversample of the BRFSS survey of Mat-Su residents, including seniors in 2011 in order to improve the accuracy of the population health estimates for the borough. A contracted biostatistician analyzed the BRFSS and ATR data that is reported in this health assessment. Many of the key indicators in this report and additional indicators can be found on the MSHF website page entitled *Mat-Su Health Stats*.

2012 MAT-SU HOUSEHOLD SURVEY

The 2012 Mat-Su Household Survey (HHS) captured information about health needs and priorities that was not available from secondary data sources, including data about the needs of seniors and the role of schools in addressing certain health needs. The telephone survey of 700 Mat-Su households included both land-lines and cellphones. The sample was geographically distributed across the borough and included an over-sampling of seniors and Alaska Native households. The survey results were then weighted to provide a representative sample of Mat-Su households.

MAT-SU CHANGE RESEARCH

The Centers for Disease Control and Prevention (CDC) developed the CHANGE model to help communities understand and respond to key health factors in the built environment. These include opportunities for exercise and recreation, workplace health practices, public policies related to healthy eating and lifestyles, and other important long-term determinants of public health and wellbeing. The CHANGE model divides the community into the following five sectors: community-at-large, community institutions, healthcare system, school system, and the workplace sector.

The following is a brief description of how each of these five CHANGE sectors was addressed to collect data for the CHNA. Data from the CHANGE research has been incorporated, where appropriate, throughout the report.

SECTOR 1: COMMUNITY-AT-LARGE

This research used public information from printed materials and websites, supplemented by interviews with representatives of city departments, to profile public policies, commissions, and initiatives with respect to the health environment.

SECTOR 2: COMMUNITY INSTITUTIONS

The Community Institutions sector includes human services providers and facilities such as childcare settings; faith-based organizations; senior, youth and family centers; health and wellness organizations; and colleges. To make the CHANGE research as efficient as possible, Mat-Su Health Foundation, in consultation with the Steering Committee, decided to combine the Community Institutions sector with the Workplace sector. See the Workplace section for a description of research activities.

SECTOR 3: HEALTHCARE SYSTEM

This sector includes all types of service providers, for example private practitioners, clinics, hospitals, pediatric and adolescent services, senior care, and specialists. Information was gathered primarily through phone interviews with executives and others who represent the sector.

SECTOR 4: SCHOOL SYSTEM

The study team used a combination of information about policies and goals obtained from the Mat-Su Borough School District, existing Healthy Schools survey data, and interviews with representatives of selected schools.

SECTOR 5: WORKPLACE SECTOR

The study team fielded an online workplace survey using invitations broadcast to email lists that represent a cross-section of community worksites. Eighty-five respondents provided information about their workplaces. Thirty-nine were for-profit businesses, nine were nonprofits, and 34 were government agencies. The nonprofits and government agencies would typically have been part of the Community Institutions sector, but were included here because the information sought was similar to that for the for-profit workplaces. The online survey results are not statistically representative of all Mat-Su worksites because participants were not randomly selected. Instead, the survey was open to all interested respondents. Additionally, the study team used telephone interviews to obtain information from key organizations that did not participate in the online survey. The results of this survey, along with other CHANGE research results can be found on the MSHF website.

COMMUNITY ENGAGEMENT MEETING METHODOLOGY

MEETING OUTLINE

The two primary objectives of the community engagement meetings were to share the preliminary results from the first phase of the CHNA and to collect feedback and perspectives from Mat-Su residents. While the meetings varied in length, they followed the same general outline. At each meeting, MSHF staff presented the preliminary findings from the first phase of the CHNA to provide participants with a snapshot of the health status of the Mat-Su Borough. This included a four-minute video prepared by MSHF staff as well as a PowerPoint presentation. After the presentation, participants shared feedback on the data and were asked to respond to three key questions:

1. Do you have any comments or questions about the data presented?
2. Did any of the data surprise you?
3. Was anything missing?

Participants at the community meetings also indicated which health issues and health-related goals were most important to address in Mat-Su. The initial list of issues and goals, outlined below, was developed during the first phase of the health assessment and included the health issues where Mat-Su did not meet the Healthy People 2020 Goals, or the borough lagged behind the rest of the country. Healthy People 2020 Goals are health targets for communities set by the Centers for Disease Control and Prevention (CDC). The intent of these goals is for U.S. communities to work to achieve the target by the year 2020.

HEALTH ISSUES

1. Access to medical care
2. Access to mental health care
3. Alcohol and drug abuse
4. Cancer
5. Child and youth abuse and violence
6. Depression and suicide
7. Domestic violence and sexual assault
8. Overweight and obesity
9. Smoking and smokeless tobacco
10. Unintentional injury
11. Violent crime – homicide, aggravated assault, rape, robbery

Working from this initial list, participants selected their five most important health issues, which were then ranked using an audience response system with live results. After individuals submitted their priorities, the results were weighted and tabulated and then shared back with meeting attendees. Next, participants ranked a list of “Healthy Future Goals” (listed below). Results from both rounds of ranking were compared and discussed.

HEALTHY FUTURE GOALS

All Mat-Su residents...

1. are able to find, access and benefit from health care services.
2. are able to find, access and benefit from mental health care services.
3. are drug-free and sober or drink responsibly.
4. are cancer-free.
5. who are children are safe and well-cared-for.
6. have optimal cultural, mental and spiritual health.
7. enjoy healthy relationships.
8. are healthy weights.
9. are tobacco-free.
10. are not at risk for being injured at work, play and home.
11. live in a violence-free community.

Following the two rounds of ranking, meeting attendees discussed community strengths that might help address the priority health issues. These strengths included specific resources such as organizations and programs, as well as broader strengths such as community characteristics. This was followed by a discussion of strategies, with a particular focus on strategies that might help address the top five health issues and goals. At the end of each meeting, the project team gave a summary of the next steps and explained opportunities for providing additional feedback.

In addition to the 23 community meetings that were held, a “virtual” community meeting using a platform called “MindMixer” was conducted online. MindMixer is an online resource that facilitates community engagement and input. The resource was available for 30 days, during which participants were able to access the list of issues and goals and to submit their priorities for the top five issues and top five goals. This interactive webpage was modeled after the community meeting format and included the data presentation, a link to the video and an opportunity for online participants to vote on the top issues and goals. There was also a forum for discussing strengths and strategies.

OUTREACH AND INCENTIVES FOR PARTICIPATION

The meetings were publicized in a variety of ways in order to reach as many Mat-Su residents as possible. For specific stakeholder groups, targeted outreach included emailing flyers to interested parties as well as announcements in relevant bulletins, newsletters, and, in some cases, posters and phone calls. Outreach for the six community meetings included both email and paper flyers, personal emails, posters, radio announcements, newspaper ads and social media announcements. A raffle with door prizes, such as first aid and emergency survival kits, was held at all of the meetings, and meals were provided for meetings that took place during lunch or dinner time. As an additional incentive, free child care was available at all of the community meetings and all meeting participants received their choice of a free pass to a health club, pool, or ice rink.

PARTICIPANTS

Twenty-three meetings were held over the course of a three-month period. This included 17 meetings with focused stakeholders and six community meetings held in various locations across the borough. Residents were also able to provide feedback using the virtual meeting website, “Engage in Health Mat-Su.” There were 526 participants total who attended meetings, including online participants. Some participants may be counted more than once if they participated in multiple meetings.

The list of stakeholder groups who were invited to the meetings was identified by the CHNA Steering Committee and the project team. Stakeholders included organizations and individuals in health and health-related fields such as primary care, behavioral health, and human services providers who have a direct impact on and are close to many of the issues discussed. Additional stakeholder groups included the business community, educational institutions, government and law enforcement – groups that have a specialized stake and insights

into population health. Some meetings focused on gathering input from special populations such as tribal representatives, low-income providers, seniors, and youth. The community meetings were open to the public and all Mat-Su residents. Community meetings were held in Houston, Palmer, Sutton, Talkeetna, Wasilla and Willow. The number of participants who attended each meeting and a detailed list of organizations who were represented, dates and times, and the location of the meetings can be found in Appendix B.

CHAPTER 1: WHERE WE LIVE, LEARN, AND WORK

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: Wasilla, Palmer, 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. Approximately 33% of Mat-Su residents commuted to Anchorage for employment in 2011.

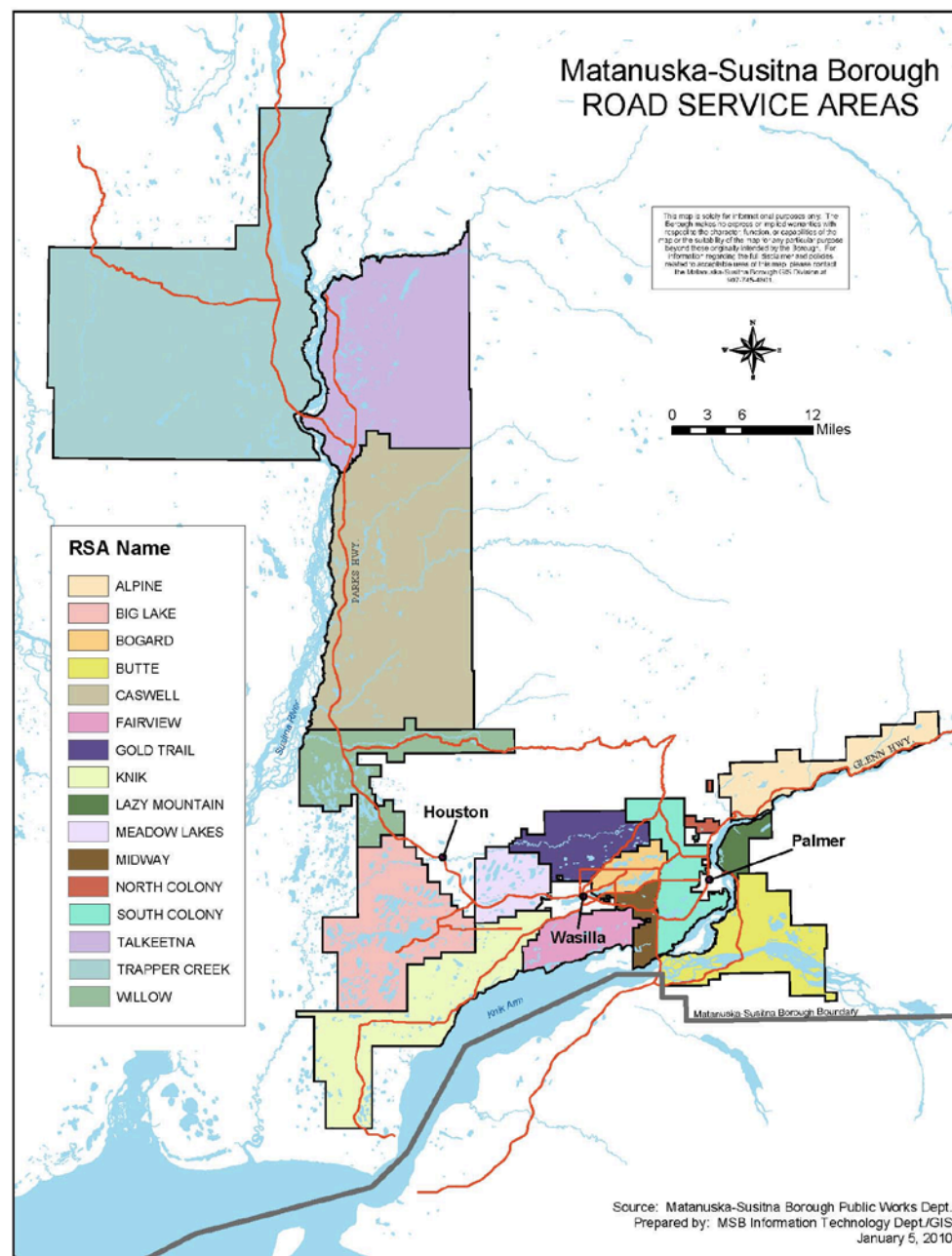


FIGURE 1.1 MATANUSKA-SUSITNA BOROUGH ROAD SERVICE AREAS

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 MAT-SU'S STATUS?

In 2011, 91,695 people lived in Mat-Su, which has had the fastest growing regional population in Alaska for the last 20 years. The average Mat-Su household has three members. In 2011, 37,259 Mat-Su residents were employed making an average monthly income of \$3,122. Income, housing and education all contribute to a firm foundation upon which the health of a community is built.

One out of 10 Mat-Su residents live below the poverty level and one out of four children are eligible for free lunch at school. The percent of individuals who live at or below the poverty level has stayed the same over the last 10 years. In 2012, at least 938 people were homeless in Mat-Su. Although almost all residents (91.8%) have a high school diploma or an equivalent by age 25 years, only 76% of Mat-Su high school students graduate in four years and 20.8% go on to earn a college degree. The median age of a Mat-Su resident is 34.8 years. In Mat-Su, the senior population continues to grow as the percent of young residents decreases.

THE DATA

MAT-SU POPULATION AND COMMUNITIES

In 2011, Mat-Su had a population of 91,697 residents, an increase of three percent from 2010 and 54.6% from 2000. In 2010, Mat-Su had 31,824 households with an average size of 2.75 people and an average family size of 3.23 people. Among the family households, 16% were single parent families.

In 2010, there were 41,329 housing units in Mat-Su. Of these, 31,824 were occupied (77%) and 9,505 (23%) were vacant. Of the occupied housing units, 24,181 were owner-occupied units (76%) and 7,643 (24%) were renter-occupied units. Eighty-one percent of the housing units had complete plumbing facilities. Of the occupied housing units, 95% had complete plumbing facilities, while five percent lacked complete plumbing facilities.

The ten largest communities include: Knik-Fairview, Lakes, Tanaina, Wasilla, Meadow Lakes, Palmer, Gateway, Fishhook, Big Lake, and Butte. Sixteen of the communities have populations of more than 1,000.

TABLE 1.1 POPULATION INDICATORS		
	Mat-Su	Alaska
2011 ADOLWD		
Population estimate	91,697	722,190
Population change since 2010 (%)	3.0	1.7
Population change since 2000 (%)	54.6	15.2
2010 U.S. Census		
Population count	88,995	710,231
Median age (Years)	34.8	33.8
Population 65+ years (%)	7.9	7.7
Change since 2000 (%)	2	2.0
Population under 19 years (%)	31.6	29.3
Change since 2000 (%)	-3.4	-3.9
Number of households	31,824	258,058
Average household size	2.75	2.7
Average family size	3.23	3.2
<i>Data Sources: ADOLWD; U.S. Census, American Community Survey (ACS).</i>		

TABLE 1.2 POPULATION GROWTH RATE										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Mat-Su (%)	5	4.4	5.3	4.4	3.5	3.3	2.8	4.5	3.2	2.2
Alaska (%)	1.2	1.6	1.1	1.1	0.8	1	1.6	2.4	2.2	1.1
<i>Data Source: ADOLWD.</i>										

TABLE 1.3 SINGLE FAMILY HOUSEHOLDS					
	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011
Mat-Su (%)	17.8	16.8	14.8	14.9	16.0
Alaska (%)	17.3	17.1	17.3	17.1	17.3
U.S. (%)	17.1	17.1	17.1	17.4	17.7
<i>Data Source: U.S. Census, ACS.</i>					

TABLE 1.4 MAT-SU COMMUNITIES BY POPULATION SIZE			
Community	2011 Population	2000 Population	% Change 2000-2011
Knik-Fairview CDP	15,588	6,985	123.2%
Lakes CDP	8,612	6,604	30.4
Tanaina CDP	8,411	5,056	66.4
Wasilla City	8,064	5,504	46.5
Meadow Lakes CDP	7,918	4,720	67.8
Palmer City	6,087	4,705	29.4
Gateway CDP	5,680	3,802	49.4
Fishhook CDP	4,757	2,565	85.5
Big Lake CDP	3,399	2,435	39.6
Butte CDP	3,274	2,561	27.8
Willow CDP	2,156	1,657	30.1
Houston City	1,945	1,202	61.8
Sutton-Alpine CDP	1,492	1,080	38.1
Lazy Mountain CDP	1,471	1,160	26.8
Susitna North CDP	1,323	985	34.3
Farm Loop CDP	1,032	975	5.8

TABLE 1.4 (CONT.)			
Community	2011 Population	2000 Population	% Change 2000-2011
Talkeetna CDP	896	731	22.6
Buffalo Soapstone CDP	876	761	15.1
Knik River CDP	760	582	30.6
Point MacKenzie CDP	632	226	179.6
Trapper Creek CDP	499	423	18
Chickaloon CDP	270	213	26.8
Glacier View CDP	239	238	0.4
Lake Louise CDP	51	88	-42
Chase CDP	32	43	-25.6
Skwentna CDP	30	111	-73
Eureka Roadhouse CDP	24	28	-14.3
Susitna CDP	17	37	-54.1
Petersville CDP	5	16	-68.8
Balance	6,157	3,829	60.8
<i>Data Sources: ADOLWD; U.S. Census.</i>			

The two largest cities in the Mat-Su Borough, Palmer and Wasilla, had populations of 6,087 and 8,064 residents, respectively, in 2011. This represents an overall population increase of three percent from the prior year. Since 2000, Palmer has grown 29% and Wasilla 47%.

In 2010, Palmer had 2,113 households, with an average household size of 2.61 residents and an average family size of 3.28 residents. Wasilla had 2,962 households, with an average household size of 2.61 residents and an average family size of 3.21 residents.

In 2010, nine percent of Palmer residents and five percent of Wasilla residents identify as Alaska Native/American Indian alone. In 2010, the median age for residents of Palmer was 30 years, with nearly 10% of the population over the age of 65 and 34% under the age of 19. Wasilla's median age was 32 years, with 10% over the age of 65 and 32% under the age of 19.

TABLE 1.5 PALMER & WASILLA DEMOGRAPHICS

	Palmer	Wasilla
2011 ADOLWD		
Population estimate	6,087	8,064
Population change since 2010 (%)	2.5	3.0
Population change since 2000 (%)	29.4	46.5
2010 U.S. Census		
Population count	5,937	7,831
Population Alaska Native/American Indian (%) ¹	9.2	5.2
Median age (Years)	30.1	32.2
Population 65+ years (%)	9.6	10.3
Change since 2000 (%)	0.5	3.5
Population under 19 years (%)	33.7	32.3
Change since 2000 (%)	-4.2	-4.1
Number of households, 2010	2,113	2,962
Average household size	2.61	2.61
Average family size	3.28	3.21
<i>Data Sources: ADOLWD; U.S. Census. Note¹ This percentage does not include individuals who report themselves as identifying with two or more races.</i>		

TABLE 1.6 POPULATION AGE DISTRIBUTION, 2011				
Age Group	Mat-Su Percent	Alaska Percent	Mat-Su Number	Alaska Number
0-4 yr.	7.7	7.6	7,023	54,971
5-9 yr.	8.1	7.1	7,423	51,548
10-14 yr.	8.0	7.1	7,345	51,382
15-19 yr.	7.7	7.0	7,056	50,574
20-24 yr.	5.7	7.6	5,198	55,101
25-29 yr.	6.5	7.9	5,976	57,151
30-34 yr.	6.7	7.0	6,150	50,564
35-39 yr.	6.3	6.2	5,811	44,807
40-44 yr.	6.9	6.5	6,367	47,150
45-49 yr.	7.4	7.2	6,799	52,315
50-54 yr.	8.1	7.8	7,394	56,550
55-59 yr.	7.2	7.2	6,619	51,913
60-64 yr.	5.4	5.5	4,935	39,347
65-69 yr.	3.3	3.3	3,052	23,694

TABLE 1.6 (CONT.)				
Age Group	Mat-Su Percent	Alaska Percent	Mat-Su Number	Alaska Number
70-74 yr.	2.2	2.0	1,981	14,416
75-79 yr.	1.3	1.3	1,177	9,258
80-84 yr.	0.9	0.9	784	6,354
85+ yr.	0.7	0.7	607	5,100
Median Age			34.7 yr.	33.9 yr.
Total Population			91,697	722,190
<i>Data Source: ADOLWD</i>				

AGE

The median age for the borough is 35 years, with 8.4% of the population over the age of 65 (an increase of more than two percent since 2000) and 31.5% of the population under 19 years of age (a decrease of more than three percent since 2000).

RACE/ETHNICITY

In 2011, approximately 88.7% of the Mat-Su population reported their race as white; 1.7% as black; 2% as Asian or Pacific Islander; 7.7% as Alaska Native or American Indian; and 3.9% as Hispanic. Created by the ADOLWD, these estimates adjust data into mutually exclusive racial categories from surveys that allow respondents to select more than one racial category. Thus, these numbers may differ from estimates for a racial group that includes a single race category as well as those who selected “more than one race category.” In 2009-2011, the total number of Mat-Su residents who consider themselves Alaska Native and/or American Indian alone or in combination with another race was 9,047.

TABLE 1.7 MAT-SU RACE/ETHNICITY DISTRIBUTION					
Year	2007	2008	2009	2010	2011
White (%)	89.7	89.5	89.3	89.2	88.7
White	72,667	74,927	76,872	79,358	81,309
Black (%)	1.5	1.6	1.6	1.6	1.7
Black	1,209	1,295	1,359	1,419	1,585
Asian or Pacific Islander (%)	1.7	1.7	1.8	1.9	2.0
Asian or Pacific Islander	1,343	1,438	1,546	1,650	1,792
Alaska Native or American Indian (%)	7.2	7.2	7.3	7.4	7.7
Alaska Native or American Indian	5,793	6,031	6,297	6,568	7,011
Hispanic (%)	3.5	3.6	3.6	3.7	3.9
Hispanic	2,811	2,970	3,129	3,301	3,543
Mat-Su Total	81,012	83,691	86,074	88,995	91,697
Alaska Native alone or in combination with one or more other race(s), 2009-2011					9,047
<p><i>Data Source: ADOLWD; U.S. Census.</i> <i>Note: The Mat-Su Racial/Ethnic Distribution uses "bridged" race estimates data, which are race estimates that adjust data from surveys that allow reporting of more than one race group such that the respondent is assigned a single race. The last line in this table presents census data for Alaska Native alone or in combination with other races from the American Community Survey 2009-2011, 3-year estimates. This estimate reports all persons who marked Alaska Native as their race only and those who marked Alaska Native and other race(s).</i></p>					

EDUCATION

MSBSD has 44 schools, including high schools, middle schools, elementary schools, multi-grade academies and charter schools. MSBSD had an enrollment of 17,494 students in pre-education through 12th grade in the 2011-2012 school year. This is an increase of two percent from the 2010-2011 school year and an increase of eight percent since the 2007-2008 school year.

Nine of 10 Mat-Su adults aged 25 and older have achieved a high school degree or the equivalent or higher. Twenty-one percent of Mat-Su adults aged 25 or over had a college degree in 2009-2011. The percentage of Mat-Su adults earning a college degree was lower than the state and national averages.

TABLE 1.8 MSBSD HIGH SCHOOL GRADUATION

Type	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Total enrollment (PE-12)	16,159	16,490	16,770	17,079	17,494
Number of graduates	932	1,012	1,092	1,085	1125

Data Source: Alaska Department of Early Education and Development (ADEED).

TABLE 1.9 EDUCATION INDICATORS

Education Level	Mat-Su 2006-10	AK 2006-10	U.S. 2008-09 ¹
High School Students Graduated within Four Years (%)	76.4	72.6	77.0
High School Degree or Higher Aged 25 or Older (%)	91.8	90.7	85.0
College Degree or Higher Aged 25 or Older (%)	20.8	27.0	27.9

*Data Source: U.S. Department of Education (USDE); U.S. Census, ACS.
Note¹: The median percent is reported for the U.S.*

INCOME AND POVERTY

In 2011, the annual average unemployment rate was 8.9%. This rate has increased from 8% in 2002. In 2011, 37,259 residents were employed making average monthly earnings of \$3,122. The majority of the employed population worked in trade, transportation, and utilities (21.8%), followed by education and health services (18.3%), local government (15%), and leisure and hospitality (12.4%).

Mat-Su per capita income was lower than Alaska but slightly higher than U.S. per capita income in 2010. Mat-Su per capita income increased from \$26,600 in 2000 to \$40,656 in 2010. Economic 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 0.387, lower than Alaska and the U.S., which indicates a more homogeneous distribution of wealth within the community.

Lower income levels are associated with poor health outcomes. About one of 10 Mat-Su residents lived in poverty in the past 12 months. Although a smaller percentage of families and individuals live in poverty in the Mat-Su than nationwide, 7.7% of Mat-Su families lived below the poverty line. The percent of the Mat-Su population living in poverty was lower than the U.S. for all time periods presented. While it appears that the

TABLE 1.10 MAT-SU BOROUGH ECONOMIC DATA	
	Mat-Su Borough
2011 Annual average unemployment rate	8.9%
July 2012 Unemployment rate	8.6%
2006-2010 Average % of 16+ population not employed	6.3%
2010 Total personal income (in thousands)	\$3,649,774
2011 Total wages	\$1,495,209,537
2011 Residents employed	37,259
2011 Average monthly wage and salary employment	20,302
2011 Peak monthly wage and salary employment	21,457
2011 Wage and salary total earnings	\$760,503,042
2011 Average monthly earnings	\$3,122
<i>Data Sources: ADOLWD; U.S. Census ACS; U. S. Bureau of Economic Analysis (USBEA).</i>	

poverty level is increasing slightly from 2007-2009 to 2009-2011, it is not a statistically significant increase.

Almost 15% of Mat-Su youth lived in poverty during 2009-2011. While it appears that the poverty level among youth is increasing slightly from 2007-2009 to 2009-2011, it is not a statistically significant increase. Eligibility for free lunch in school serves as an economic indicator. Children need nutrition to be healthy and succeed in school. One in four Mat-Su children is eligible for free lunch.

TABLE 1.11 UNEMPLOYMENT RATE				
Years	Mat-Su %	Mat-Su Number	Alaska %	U.S. %
2002	8.0	2,059	7.1	5.8
2003	8.6	2,533	7.7	6.0
2004	8.3	2,874	7.4	5.5
2005	7.6	2,883	6.9	5.1
2006	7.4	2,798	6.5	4.6
2007	6.9	2,872	6.1	4.6
2008	7.3	2,757	6.4	5.8
2009	8.9	3,034	7.7	9.3
2010	9.1	3,776	8.0	9.6
2011	8.9	3,888	7.6	8.9
<i>Data Source: U.S. Bureau of Labor Statistics (USBLS)</i>				

TABLE 1.12 MAT-SU TOTAL EMPLOYMENT AND EARNINGS BY SECTOR, 2011

Sector	Avg. Monthly Employment	% of Employment	Total Earnings	% of Total Earnings
Educational and health services	3,707	18.3	\$137,534,397	18.1
Local government	3,045	15.0	\$134,406,464	17.7
Trade, transportation, utilities	4,417	21.8	\$134,398,325	17.7
Construction	1,505	7.4	\$86,111,521	11.3
State government	1,185	5.8	\$57,412,157	7.5
Professional and business services	1,159	5.7	\$52,488,949	6.9
Leisure and hospitality	2,516	12.4	\$39,277,104	5.2
Information	642	3.2	\$36,014,473	4.7
Financial activities	738	3.6	\$31,059,720	4.1
Federal government	216	1.1	\$18,077,623	2.4
Manufacturing	209	1.0	\$7,311,354	1.0
Natural resources and mining	182	0.9	\$7,009,206	0.9
Other	743	3.7	\$17,772,441	2.3
Unclassified establishments	38	0.2	\$1,629,308	0.2
Total	20,302	100	\$760,503,042	100%

Data Source: ADOLWD.

TABLE 1.13 ECONOMIC INDICATORS			
Indicator	Mat-Su	Alaska	U.S. 2006- 2010
Income Inequality Gini Coefficient ¹ , 2006-10	0.387	0.412	0.467
Median Household Income (\$), 2006-10	67,703	66,521	51,914
Per Capita Income (\$), 2010	40,656	44,233	39,937
Poverty Level (Total Population) (%), 2006-10	9.9	9.5	13.8
Poverty Level (Families) (%), 2006-10	6.4	6.6	10.1
Poverty Level (Under 18 Years) (%), 2006-10	12.8	13.0	19.2
Free Lunch Eligible (%), 2009 ²	24.5	31.5	39.9
<i>Data Sources: U.S. Census, ACS; USBEA; Economic Research Service (ERS); U.S. Department of Agriculture (USDA). Note¹: The Gini coefficient of household income inequality is a measure of how disparate incomes are within a community. Note² Data for the U.S. and Alaska is the median value.</i>			

TABLE 1.14 POVERTY LEVEL FOR MAT-SU RESIDENTS						
Years	Mat-Su (%)	Mat-Su Margin of Error (+/-)	Alaska (%)	Alaska Margin of Error (+/-)	U.S. (%)	U.S. Margin of Error (+/-)
2005-2007	10.9	1.5	10.4	0.5	13.3	0.1
2006-2008	9.6	1.5	9.5	0.6	13.2	0.1
2007-2009	8.8	1.2	8.7	0.5	13.6	0.1
2008-2010	9.7	1.5	9.1	0.5	14.4	0.1
2009-2011	10.5	1.6	9.8	0.6	15.2	0.1
<i>Data Source: U.S. Census Bureau, ACS.</i>						

TABLE 1.15 POVERTY LEVEL FOR MAT-SU FAMILIES

Years	Mat-Su (%)	Mat-Su Margin of Error (+/-)	Alaska (%)	Alaska Margin of Error (+/-)	U.S. (%)	U.S. Margin of Error (+/-)
2005-2007	8.0	1.7	7.6	0.6	9.8	0.1
2006-2008	5.7	1.4	6.7	0.7	9.6	0.1
2007-2009	5.0	1.2	6.0	0.5	9.9	0.1
2008-2010	6.4	1.2	6.2	0.5	10.5	0.1
2009-2011	7.7	1.5	6.7	0.5	11.1	0.1

Data Source: U.S. Census Bureau, ACS.

TABLE 1.16. POVERTY LEVEL FOR MAT-SU CHILDREN UNDER 18 YEARS

Years	Mat-Su (%)	Mat-Su Margin of Error (+/-)	Alaska (%)	Alaska Margin of Error (+/-)	U.S. (%)	U.S. Margin of Error (+/-)
2005-2007	11.9	2.8	13.9	1.0	18.3	0.1
2006-2008	11.6	3.1	13.0	1.3	18.2	0.1
2007-2009	11.2	2.8	11.8	1.0	18.9	0.1
2008-2010	13.2	3.1	12.2	1.0	20.1	0.1
2009-2011	14.6	3.3	13.2	1.2	21.4	0.1

Data Source: U.S. Census Bureau, ACS.

CHAPTER 2: HEALTHCARE ACCESS

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 in order for people to have optimal health. Illness, trauma, and accidents may require immediate medical care in order to restore health. At different life stages, preventive care, such as screenings, can be conducted that leads 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 (77%), and a little over half have a regular primary care provider (57%). These two factors increase the likelihood that a person will seek appropriate health care throughout their lifetime. Over the last ten years, the percentage of residents with insurance or a regular care provider has not changed very much. Almost all seniors have both insurance and a regular provider. Most Mat-Su adults who have insurance have private or employer provided insurance (59%). The next most common form of insurance is Medicaid/Denali Kids Care (19%) and Medicare (16%). We have one primary care physician to every 1,293 people in Mat-Su. The main barrier that prevents Mat-Su residents from getting the care they need is cost (17%). Other barriers include not being able to get an appointment at a convenient time (14%); lack of transportation (7%); and not knowing where to go (7%). Most people received dental and vision care when they needed it; however, in the last year for those in need, 12% did not get dental and 9% did not get vision care. The two most common places for residents to get information about health are the internet (48%) and their family doctor (31%).

THE DATA

HEALTH INSURANCE COVERAGE

Having health insurance increases access to care. Seventy-seven percent of Mat-Su adults had some type of medical insurance in 2011. This percentage has remained relatively stable from 2001-2011. The majority of Mat-Su residents aged 65 and older had some form of medical insurance in 2011.

The most common form of insurance carried by Mat-Su residents was private or employer provided insurance (59%), followed by Medicaid/Denali Kidcare (19%) and Medicare (16%).

The online survey of Mat-Su employers revealed that 61% provided access to a health insurance plan. The reasons varied as to why businesses/organizations did not offer health coverage to their employees. The top five reasons included: cost of insurance was too expensive; coverage was obtained elsewhere by their employees; insurance was not required by law; the company did not have a responsibility to provide coverage; employees were not eligible; and employers did not know what insurance options were available.

TABLE 2.1 RESIDENTS WHO HAVE SOME FORM OF HEALTH INSURANCE

Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval	Healthy People Goal
1991-1995	82.3	76.1 - 87.2	84.9	83.7 - 86.1	100
1996-1999	77.6	71.2 - 82.9	78.5	77.0 - 79.9	100
2000-2002	76.1	70.0 - 81.4	81.4	79.9 - 82.7	100
2003	81.7	73.2 - 88.0	82.5	80.3 - 84.6	100
2004	78.0	71.3 - 83.4	83.9	82.3 - 85.3	100
2005	79.1	73.0 - 84.2	82.4	80.9 - 83.9	100
2006	75.5	67.4 - 82.1	80.4	78.5 - 82.2	100
2007	72.5	65.2 - 78.8	81.6	79.8 - 83.4	100
2008	69.8	61.8 - 76.8	79.8	77.7 - 81.8	100
2009	78.3	67.0 - 82.0	80.1	77.9 - 82.1	100
2010	85.1	76.0 - 91.2	82.9	80.5 - 85.1	100
2011	77.0	72.1 - 81.3	79.9	78.2 - 81.6	100

Data Source: ADHHS, BRFSS.

TABLE 2.2 WHAT TYPES OF HEALTH COVERAGE OR INSURANCE DO YOU OR MEMBERS OF YOUR HOUSEHOLD HAVE?

Insurance Type	Percent
Private/Employer Provided/Union	59
Medicaid/Denali Kid Care	19
Medicare	16
Champus/Tricare/VA	10
Tribal Health System/Indian Health Service	9
Workers' Compensation	<1
None	11

Data Source: Mat-Su Health Foundation (MSHF), 2012 Mat-Su Household Survey (HHS).

Note: Multiple answers were allowed.

REGULAR HEALTHCARE PROVIDER

Another factor that increases access to care is having an ongoing relationship with a primary care provider. In 2011, 57.9% of Mat-Su adults and 90.9% of adults 65 years or older had a regular 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 primary care provider.

The 2012 County Health Rankings and Roadmaps data shows the ratio of Mat-Su primary care providers to be one physician to 1,293 persons, which is lower than the statewide average of 731:1.

Another indicator that reflects the ability of the primary care system to care for specific chronic conditions is the rate of hospital stays that could have been prevented with the appropriate use of primary care providers. In 2009, the rate of preventable hospitalizations (also known as ambulatory care-sensitive hospitalizations) in Mat-Su was 53.3 per 1,000 Medicare enrollees, lower than the statewide average of 55.

TABLE 2.3 HAVING A USUAL PRIMARY CARE PROVIDER – ADULTS

Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval	Healthy People Goal
2001	53.8	43.6 - 63.8	51.8	48.9 - 54.6	83.9
2002	52.6	41.2 - 63.8	52.9	50.0 - 55.8	83.9
2003	53.9	44.1 - 63.4	50.2	47.5 - 52.9	83.9
2004	53.3	46.3 - 60.2	55.0	53.1 - 57.0	83.9
2005	54.7	44.4 - 64.6	54.8	52.1 - 57.6	83.9
2006	66.5	54.9 - 76.3	57.1	54.0 - 60.1	83.9
2007	57.1	46.8 - 66.9	59.3	56.1 - 62.4	83.9
2008	57.8	50.1 - 65.2	53.5	51.2 - 55.8	83.9
2009	55.3	47.4 - 63.0	55.2	52.8 - 57.5	83.9
2010	57.6	46.9 - 67.7	56.3	53.3 - 59.4	83.9
2011	57.9	52.2 - 63.5	56.4	54.3 - 58.4	83.9
<i>Data Source: ADHSS, BRFSS.</i>					

NOT RECEIVING CARE

Generally, Mat-Su households received specific services when they needed them with the following exceptions: 12% did not receive treatment for a minor illness; 12% did not get dental care; 9% did not get vision care; 4% were unable to get treatment for a chronic disease related illness, 8% for a mental health concern, and 33% for a drug or alcohol issue. Additionally, 12% said they did not get prescriptions or

medications when they were needed. Respondents from higher income households were more likely to say they needed, and obtained, dental or vision care. Households with income less than \$50,000 were more likely than those with incomes more than \$50,000 to go without needed healthcare services (24% versus 5%) and needed prescriptions/medications (18% versus 3%).

TABLE 2.4 EXPERIENCED A NEED AND DID NOT RECEIVE SERVICES FOR THAT NEED		
In the past 12 months, did anyone in your household experience...	Of households that needed services, percent that did NOT get services	Percent of sample that needed services
Any minor illness	12	41
Need for dental care	12	65
Need for vision care	9	62
A chronic disease i.e. diabetes	4	17
A mental health concern	8	11
A drug or alcohol issue	33	3
<i>Data Source: MSHF, HHS.</i>		

BARRIERS TO RECEIVING CARE

In 2011, 18.5% of Mat-Su residents said that they did not see a doctor in the last year because of the cost. Almost five percent of adults 65 years or older did not see a doctor in the last year because of cost.

When asked about barriers that prevented them from seeking needed health care, 14% of residents were unable to get a

health care appointment at a time that worked for their household. Seven percent said that they didn't know where to go for medical care and seven percent stated that they were not able to get transportation to medical or other health care appointments.

TABLE 2.5 BARRIERS TO ACCESS TO CARE	
In the past 12 months, did anyone in your household experience...	Percent
Not knowing where to go for medical care	7.0
Not having transportation to get to medical care	7.0
Inability to get a health care appointment at a time that worked for your household	14
<i>Data Source: MSHF; HHS. Note: Due to rounding, some rows may not add up to 100 percent.</i>	

TABLE 2.6 COULDN'T SEE A DOCTOR DUE TO COST - ADULTS				
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval
1991-94	14.6	9.8 - 21.2	14.1	12.8 - 15.4
1995-98	17.8	13.2 - 23.7	13.4	12.3 - 14.7
1999-00	12.2	7.7 - 18.8	13.0	11.5 - 14.6
2003-04	15.3	10.7 - 21.5	12.9	11.7 - 14.2
2005-07	18.8	14.4 - 24.1	15.1	13.9 - 16.4
2008	20.3	15.0 - 26.9	16.4	14.8 - 18.2
2009	16.1	10.7 - 23.4	15.9	14.2 - 17.8
2010	19.0	11.7 - 29.5	14.9	12.9 - 17.3
2011	18.5	14.9 - 22.7	17.4	15.4 - 18.5
<i>Data Source: ADHHS; BRFSS.</i>				

MEDICAL INFORMATION SOURCE

Forty-eight percent of respondents used the Internet most often as a source of information about health conditions followed by 31% who contacted their family doctor. Six percent obtained information from relatives or friends. The six percent of “other” responses in the table above includes obtaining information from various clinics and calling insurance hotlines.

Higher income respondents were more likely to use the Internet versus lower income respondents (55% versus 39%). Lower income respondents were more likely to ask a family doctor for information (36% versus 27% for higher income respondents).

TABLE 2.7 WHEN YOU NEED INFORMATION ABOUT A HEALTH CONDITION, WHAT SOURCE OF INFORMATION DO YOU USE MOST OFTEN?

Information Source	Percent
Internet	48
Family doctor	31
Relative or friend	6
Hospital	3
VA/Military/Tricare	2
Books	1
Magazines	<1
Other	6
Answered “don’t know” or refused to answer	2
<i>Data source: MSHF; HHS. Note: Due to rounding, some columns may not add up to 100 percent.</i>	

PREVENTIVE CARE

Two-thirds of respondents (67%) said they had an annual medical exam or preventive screening in the past 12 months. Urban individuals, higher-income households, and seniors were most likely to have had an exam or preventative screening. More information on preventive care can be found in the Chronic and Infectious Disease Chapter (cancer screening) and the Sub-population Chapter (Maternal and Child Preventive Care).

CHAPTER 3: HEALTHY WEIGHT

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 or above (obese). Having a healthy weight, participating in physical activity, and consuming healthy food may prevent many long-term chronic diseases such as heart disease, diabetes, cancer, and stroke.

WHAT IS MAT-SU'S STATUS?

A greater percentage of Mat-Su children and adults are a healthy weight as compared to the rest of the country. Mat-Su has met the Healthy People 2020 Goals for the levels of exercise and obesity of children and adults. Although Mat-Su looks better than other regions, improvements can still be made, especially with adults and seniors. Only 39% of adults and 27% of seniors are a healthy weight. Having a healthy diet and exercising regularly contribute to having a healthy weight.

Almost 50% of Mat-Su youth get one hour of exercise five times per week and almost 56% of Mat-Su adults get 2.5 hours of moderate exercise or 1.25 hours of vigorous exercise each week. Less than two out of ten teens and adults report eating five servings of fruits and vegetables each day.

Mat-Su residents want to be healthy. The two most common health-related changes that Mat-Su adults say they want to make in their lives include getting more exercise and eating healthier food. School policies and routines affect the weight of children. Almost ten years ago the Matanuska Susitna Borough School District (MSBSD) decided to put only healthy snacks and drinks in school vending machines. Since the 2003-2004 school year, the percentage of overweight and obese children decreased from 32% to 26%. The MSBSD requirement for physical education (PE) is less rigorous for older grades – almost half of middle school students attended daily physical education classes, but only eight percent of traditional high school students had daily classes. According to the 2012 Mat-Su Household Survey, Mat-Su residents think that the school system should take an active role in improving the nutrition of food available in school and making sure students get exercise every day.

THE DATA

EXERCISE

In 2011, 55% of Mat-Su middle school students and 48% of traditional high school students reported exercising 60 minutes per day, five days per week. Only 34% of Mat-Su alternative high school students exercised at this level.

Sixty-four percent of Mat-Su middle school students and 57% of traditional high school students stated that they played on one or more sports teams during the past 12 months. Only 25% of alternative high school students reported playing on a sports team.

In 2011, 47% of Mat-Su middle school students, 17% of alternative high school students and only 8% of traditional high school students attended physical education classes five days in an average week. Mat-Su middle school students achieved the Healthy People 2020 Goal target but Mat-Su high school students did not. The percentage of Mat-Su traditional high

school students attending daily physical education classes in school was two times lower than Alaska as a whole and nearly four times lower than the Health People 2020 Goal.

Diversions to exercise include sedentary activities like watching television, videos, or a computer screen (“screen time”). Over half of middle school students (56%) and high school students (51% traditional, 54% alternative) watched TV, videos, or used the computer (other than for school work) for three or more hours on an average school day.

More than half of Mat-Su adults (56%) and 62% of seniors met the national recommendations for physical activity of 2.5 hours of moderate exercise or 1.25 hours of vigorous exercise weekly. Mat-Su adults achieved the Healthy People 2020 Goal of 47.9%. About 35% of Mat-Su adults and 25% of seniors participated in strength exercises two or more days during a week in 2011, achieving the Healthy People 2020 Goal of 24.1%.

When respondents were asked what one change they could make to improve the overall health of members of their households, 19% said “exercise more” and 15% said “eat healthier food.” Other responses involved leading healthier lifestyles (more sleep, remove stress, diet, give up alcohol), improving their housing (energy efficiency, new heating

system, air purified, air cleaning system), and accessing health care services. Some respondents felt no need to make changes. Respondents with household incomes over \$50,000 were more likely to pick “more exercise/recreation” (24%) than those with incomes less than \$50,000 (13%).

TABLE 3.1 EXERCISE – YOUTH, 2011			
Indicator	Mat-Su Percent	Alaska Percent	Healthy People Goal Percent
Physical activity – aerobic, 60 minutes, 5 times/week			
Middle school	54.9	51.7	-
Traditional high school	48.0	45.3	47.9
Alternative high school	34.2	NA	-
Inactivity – 3 or more hours of non-school screen time daily			
Middle school	56.1	56.9	-
Traditional high school	51.3	52.5	-
Alternative high school	54.4	NA	-
Attended daily physical education classes at school			
Middle school	6.7	40.8	-
Traditional high school	7.9	17.4	37
Alternative high school	17.4	NA	-
<i>Data Source: ADHSS, YRBS.</i>			

TABLE 3.2 EXERCISE– ADULTS, 2011				
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval
Physical Activity -18+ years 2.5 hrs. moderate; or 1.25 vigorous/week	55.9	50.4-61.2	57.5	55.0-60.0
Physical Activity 65+ years 2.5 hrs. moderate; or 1.25 vigorous/week	62.2	59.4-64.9	NA	NA
Strengthening activities 18+ years 2 or more times per week	35.4	30.3-40.9	33.3	31.0-36.0
Strengthening activities 65+ years 2 or more times per week	25.1	22.3-28.1	NA	NA
<i>Data Source: ADHSS, BRFSS.</i>				

TABLE 3.3 IF YOU COULD MAKE JUST ONE CHANGE TO IMPROVE THE OVERALL HEALTH OF YOUR HOUSEHOLD IN THE NEXT YEAR, WHAT WOULD THAT BE? (2012)

Type of Change	Percent
More exercise/recreation	19
Healthier food	15
Get/afford insurance	5
Lower cost of medical care	5
Lose weight	5
Nothing	4
See doctor/dentist more often	3
Stop smoking	3
Get/earn more money	2
Cure health condition	2
Better/cheaper home heating	1
More sports	<1
Other	15
Answered "Don't know" or refused to answer	21
<i>Data Source: MSHF, HHS. Note: Due to rounding, some columns may not add up to 100%.</i>	

NUTRITION

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.¹ In 2011, only 17% of traditional high school

students and 18% of alternative students ate fruits and vegetables five or more times per day during the past seven days. A similar percentage (17%) of Mat-Su adults and seniors ate the recommended number of fruits and vegetables per day on average in 2011.

TABLE 3.4 EATS FIVE OR MORE SERVINGS OF FRUITS/VEGETABLES DAILY, 2011

	Mat-Su Percent	Alaska Percent
Traditional High School	17.0	21.4
Alternative High School	18.1	NA
Adults 18+ years	17.2	19.6
Adults 65+ years	16.9	NA
<i>Data Sources: ADHSS, YRBS and BRFSS.</i>		

TABLE 3.5 EATS FIVE OR MORE SERVINGS OF FRUITS/VEGETABLES DAILY – ADULT TREND DATA

Year	Mat-Su Percent	Mat-Su (95% Confidence Interval)	Alaska Percent	Alaska (95% Confidence Interval)
1991, 92, 94	19.5	12.2 - 29.7	20.8	19.0 - 22.7
1996, 1998	31.7	22.5 - 42.6	25.5	23.3 - 27.9
2000, 2002	25.1	18.2 - 33.7	24.9	23.0 - 26.8
2003	29.1	20.9 - 38.8	23.2	21.0 - 25.5
2005	27.7	19.7 - 37.5	24.8	22.6 - 27.2
2007	23.3	15.6 - 33.2	23.1	20.5 - 26.0
2009	24.4	16.4 - 34.6	22.6	20.1 - 25.4
2011	17.2	13.5 - 21.6	19.6	17.8 - 21.6
<i>Data Source: ADHSS, BRFSS.</i>				

OVERWEIGHT AND OBESITY

TABLE 3.6 OBESITY AND OVERWEIGHT INDICATORS			
Indicator	Mat-Su Percent	Alaska Percent	Healthy People Goal Percent
Overweight, 2011			
Middle school	15.9	16.8	-
Traditional high school	13.9	14.4	-
Alternative high school	14.1	NA	-
Adults 18+ years	34.3	37.5	-
Adults 65+ years	42.2	NA	-
Obese, 2011			
Middle school	11.6	11.7	16.1
Traditional high school	11.7	11.5	16.1
Alternative high school	18.0	NA	-
Adults 18+ years	26.8	28.0	30.6
Adults 65+ years	30.0	29.3	-

TABLE 3.6 OBESITY AND OVERWEIGHT INDICATORS (CONT.)

Indicator	Mat-Su Percent	Alaska Percent	Healthy People Goal Percent
Overweight and Obese, 2011			
Kindergarten	22.0	NA	-
First grade	21.0	NA	-
Third grade	25.0	NA	-
5 th grade	31.0	NA	-
7 th grade	32.0	NA	-
K-7 th total	26.0	NA	-
Middle school	27.5	28.5	-
Traditional high school	25.6	25.9	-
Alternative high school	32.1	NA	-
Adults 18+ years	61.2	28.0	-
Adults 65+ years	72.2	NA	-

Data Sources: ADHSS, BRFSS and YRBS; ADHSS and MSBSD. Note: NA – Data not available; (-) means no goal set for this indicator.

TABLE 3.7 OVERWEIGHT OR OBESE – ADULT TREND DATA		
Year	Mat-Su Percent	Alaska Percent
1991-93	50.6	49.3
1994-96	66.5	53.4
1997-99	63.1	58.2
2000-02	62.7	61.2
2003	61.8	60.8
2004	59.6	61.5
2005	62.6	63.4
2006	62.3	64.8
2007	71.3	67.0
2008	72.3	65.6
2009	69.2	65.9
2010	76.5	67.3
2011	61.2	65.6
<i>Data Source: ADHSS, BRFSS.</i>		

The percentage of underweight children in Mat-Su has held steady at two percent since 2003-2004, while the percentage of overweight and obese children decreased from 32% to 26%. This data resulted from a joint study of the MSBSD and the Alaska Department of Health and Social Services (AKDHSS) in which the MSBSD school nurses collected 19,357 individual reports of heights and weights from students from K-7th grade. ⁱⁱ The percentage of students in K-7th grade who were a healthy weight increased from 67% in 2003-2004 to 71% in 2009-2010.

Self-reported data reveals that almost 28% of Mat-Su middle school students, 26% of traditional high school students, and 32% of alternative high school students were overweight or obese in 2011. The borough achieved the Healthy People 2020 Goal of no more than 16% of high school students being obese.

Sixty-one percent of Mat-Su adults and 72% of adults 65 years or older were considered overweight or obese in 2011. The percentage of obese adults increased between 2001 and 2011 from 23% to almost 27%.

SCHOOL POLICIES THAT AFFECT NUTRITION AND EXERCISE

The MSBSD has a written wellness policy that sets guidelines for food and beverages sold during school hours. It includes a ban on soda and candy in vending machines. The MSBSD also has School Board Policies and Administrative Regulations for nutrition and physical activity in order to provide environments that promote and protect students' health, well-being and ability to learn by supporting quality nutrition and physical activity. The MSBSD and individual schools are expected to work with a Wellness Committee. For the most part, it is up to individual schools to implement fitness and wellness programs (other than the mandated physical education time). In the past few years, the number of positions for physical education teachers and school nurses has been cut due to budget constraints and increased emphasis on core classes.

MSBSD policy addresses fat content and what can be served at school. According to the MSBSD's guidelines, school breakfasts and lunches must comply with federal nutrition standards under the School Meals Initiative.

Food and beverages available during the school day (other than school meals) must be consistent with the standards

in the Administrative Regulations. No soda is allowed in schools during the school day. When the MSBSD supplied healthy snacks and drinks to all vending machines on school property, revenues from vending machine sales declined from \$40,000/year to \$6,000/year in one year but the percentage of children who were a healthy weight increased.

Food and beverages sold outside of the school meal programs should meet the Alliance for Competitive Foods Guidelines and the nutrition standards in the MSBSD Administrative Guidelines (BP 3554 – Other Food Sales). Food sold during school-sponsored activities (athletic and sporting events) must also offer healthy food and beverage choices in addition to the standard menu. For fundraising activities outside of school hours, the nutrition guidelines do not apply.

MSBSD has no physical activity policy other than providing a lunch recess through 5th grade. Physical activity is encouraged during the school day before, during and after school by promoting participation in recess, physical education classes, classroom activities and other school events. The MSBSD also encourages students to walk or bike to school and it permits individual schools to allow use of their facilities after school, on weekends and during school vacations by keeping grounds unlocked and open to the public.

MSBSD health education is coordinated with physical education to teach the benefits of being physically active. Elementary schools have physical education 90 minutes/week; middle schools - 45 minutes/day; and high schools - two semesters (including one semester of health education) within the four years.

In the 2012 MSHF Household Survey, most respondents said the MSBSD should take an active role in health-related behavior and education. Respondents considered the following roles as “very important” for the MSBSD:

- Making sure students get exercise every day (86%)
- Teaching students about health in general (82%)
- Improving the nutrition of food made available at school (77%)
- Teaching students about healthy relationships (68%)
- Providing afterschool recreational sports activities (67%).

TABLE 3.8 HOW IMPORTANT IS IT THAT SCHOOLS TAKE AN ACTIVE ROLE IN..... (%).					
Topic	Very Important	Somewhat Important	Not Important	Don't know	Refused
Improving the nutrition of food made available at school	77	14	5	3	<1
Making sure students get exercise every day	86	9	3	2	<1
Teaching students about their changing bodies	61	26	10	3	<1
Teaching students about healthy relationships	68	20	10	3	<1
Providing afterschool recreational sports activities	67	24	7	2	<1
Teaching students about health in general	82	14	3	2	<1
<i>Data Source: MSHF, HHS. Note: Due to rounding, some rows may not add up to 100%.</i>					

ENVIRONMENTAL POLICIES THAT AFFECT NUTRITION AND EXERCISE

Respondents to the 2012 Mat-Su Household Survey considered the healthiest aspects of living in the Mat-Su Borough to be a clean environment (18%), wilderness/nature (13%), and exercise opportunities (10%). Of the nine percent who gave “other” answers, responses ranged from the environment (less traffic, peaceful, more open space, less stress) to community (small town feeling), safety, and the weather. Higher income respondents were more likely to say exercise opportunities or wilderness/nature are the best things about living in the Mat-Su Borough than lower income respondents.

TABLE 3.9 WHAT IS THE BEST HEALTH-RELATED THING ABOUT LIVING IN MAT-SU?

Best Thing	Percent
Clean environment	18
Don't know	17
Wilderness/nature	13
Exercise opportunities	10
Good health care	8
Trails	6
Nice community	5
New hospital	4
Healthy foods	4
Not Anchorage	2
Friends/family	2
Hunting/fishing	2
Good schools	<1
Affordable	<1
Other	9

Data Source: MSHF, HSS. Note: Due to rounding, some columns may not add up to 100%.

SIDEWALKS

Sidewalks, bike paths, and trails provide safe space for a population to get exercise. In Mat-Su, few sidewalk policies exist and codes do not require them for new developments, though some incentives exist for developers to include them. It is not clear the extent to which these incentives are cost-effective for developers. As a result, few policies exist regarding sidewalk compliance with the Americans with Disabilities Act (ADA). Nevertheless, Palmer has worked to bring all sidewalks into ADA compliance.

Outside of housing developments, Palmer and Wasilla use sales tax funds to install sidewalks as well as street-crossing enhancements such as signs and stoplights. State grants pay for the associated walkways/sidewalks on state maintained roads in Mat-Su.

PARKS

All areas in the borough maintain, repair and upgrade existing parks. Palmer planning documents include enhancements, development of new parks, and other strategic park goals.

ACCESS TO FOOD

Strategic planning around access to food is not apparent in comprehensive planning reports for the larger communities. The Willow Comprehensive Plan Draft (January 2012) acknowledges and supports policies to “encourage local agriculture and sale/consumption of local agricultural products.” In addition, it encourages the “development of an improved venue for selling local agricultural products, such as a farmers market in the Town Center area.”

The Sutton Comprehensive Plan (November 2009) recognizes the importance of policies to encourage “small farms geared to production of high-value crops and specialized crops for local and regional markets.” In addition, it supports the promotion of “community gardens program to enable residents to rent small tracts of farmland for family use.”

An analysis of the whole borough showed that six percent of the low-income population does not have close access to healthy food. Approximately 47% of the borough’s restaurants sell “fast food.”

CHAPTER 4: CHRONIC AND INFECTIOUS DISEASE

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 are linked to four modifiable risk factors: inactivity, poor diet, tobacco use, and alcohol abuse.ⁱⁱⁱ 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?

Three of the top five leading causes of death for Mat-Su residents are chronic diseases – cancer (#1), heart disease (#2), and chronic respiratory disease (#4). In Mat-Su, coronary heart disease and stroke death rates are lower than for the rest of the country. Both of these death rates have been decreasing since 1999-2001. Overweight and obesity contributes to several chronic diseases. The level of adult obesity in Mat-Su has been steadily increasing since the early 1990s. Twelve percent of middle and high school students were considered obese in 2011, which is better than the Healthy People 2020 goal of 16.1%.

Smoking contributes to several chronic diseases such as cancer, stroke, and chronic lower respiratory disease. Currently, 11% of Mat-Su high school students report smoking and twice as many adults smoke (22.5%). Smoking during pregnancy can be very dangerous for the baby. Sixteen 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 as compared to the U.S. as a whole. Mat-Su has a higher cancer incidence rate but a lower cancer death rate than both Alaska and the U.S. The colorectal cancer death rate in Mat-Su meets the Healthy People 2020 goal; however the Mat-Su death rates for prostate 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. Only six out of ten women forty years or older, received a mammogram screening in the past two years and only six out of ten adults aged 50 or older have ever had a colorectal cancer screen. Although Mat-Su doesn't meet the Healthy People 2020 goal for women aged 18 years or older receiving their cervical cancer screening test, 80% 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. Heart disease is the second leading cause of death in Mat-Su. In 2011, 36% of Mat-Su adults reported they have had high cholesterol during their lifetimes. Mat-Su has not achieved the Healthy People 2020 Goal of 13.5%. About three out of five Mat-Su adults aged 65 years or older reported ever having high cholesterol.

In 2011, 35% of Mat-Su adults reported ever having high blood pressure, a higher proportion than reported in 2001 and 2003. Sixty-seven percent of Mat-Su adults aged 65 or older reported ever having had high blood pressure.

The Mat-Su coronary heart disease death rate was 89.4 out of 100,000 people during 2007-2009. Mat-Su has achieved the Healthy People 2020 Goal since 2006. The Mat-Su coronary heart disease death rate decreased 45% between 1999-2001 and 2007-2009.

The Mat-Su stroke death rate was 40.1 out of 100,000 people during 2007-2009, which was a decrease of 37% since the years 1999-2001.

TABLE 4.1 HEART DISEASE AND STROKE INDICATORS

Indicator	Mat-Su	Alaska	U.S.	Healthy People Goal
High Cholesterol, 2011 (%)				
Adults 18+ years	35.9	34.8	38.3	13.5
Adults 65+ years	59.2	52.4	NA	-
High Blood Pressure, 2011 (%)				
Adults 18+ years	34.9	30.1	30.8	-
Adults 65+ years	67.3	62.2	NA	-
Deaths, 2007-2009				
Coronary heart disease death rate per 100,000 people	89.4	87.6	126.0	100.8
Stroke disease death rate per 100,000 people	40.1	43.1	42.2	33.8
<i>Data sources: ABVS; ADHSS, BRFSS; CDC, BRFSS Prevalence and Trends; NCHS, National Vital Statistics Reports. Note: NA – Not Available; (-) means no goal set for this indicator.</i>				

TABLE 4.2 HIGH CHOLESTEROL - ADULTS					
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval	Healthy People Goal Percent
1991, 92, 93, 95	35.8	26.1 - 46.7	27.8	25.7 - 30.1	13.5
1997, 99	31.6	22.2 - 42.8	27.3	24.8 - 29.9	13.5
2001	33.6	23.7 - 45.2	28.7	25.9 - 31.8	13.5
2003	30.7	21.8 - 41.2	27.7	25.1 - 30.5	13.5
2005	33.9	27.1 - 41.4	31.8	29.9 - 33.8	13.5
2007	42.4	31.9 - 54.2	37.4	33.8 - 41.0	13.5
2009	27.6	19.4 - 37.6	35.8	32.6 - 39.2	13.5
2011	35.9	30.7 - 41.4	34.8	32.4 - 37.2	13.5
<i>Data source: ADHSS, BRFSS.</i>					

TABLE 4.3 HIGH BLOOD PRESSURE - ADULTS				
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval
1991-1993, 1995	21.5	15.6 - 28.8	18.3	16.9 - 19.7
1997, 1999	25.8	18.4 - 34.8	21.9	20.0 - 24.0
2001, 2003	25.8	20.2 - 32.4	21.4	19.9 - 22.9
2005	22.6	17.8 - 28.1	21.7	20.3 - 23.3
2007	24.4	16.9 - 33.8	26.8	24.0 - 29.9
2009	22.8	15.9 - 31.4	27.1	24.6 - 29.8
2011	34.9	30.2 - 40.0	30.1	28.1 - 32.2
<i>Data source: ADHSS, BRFSS.</i>				

TABLE 4.4 CORONARY HEART DISEASE DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su Rate	Mat-Su Deaths	Alaska Rate	U.S.	Healthy People Goal Percent
1999-2001	161.2	138	135.6	195.6	100.8
2000-2002	143.7	138	130.4	186.9	100.8
2001-2003	126.7	133	127.0	177.8	100.8
2002-2004	111.9	134	112.7	170.8	100.8
2003-2005	111.9	145	103.5	162.9	100.8
2004-2006	102.9	146	90.7	150.2	100.8
2005-2007	101.3	141	87.3	144.4	100.8
2006-2008	87.5	126	85.5	134.9	100.8
2007-2009	89.4	132	87.6	126.0	100.8

Data sources: ABVS; NCHS, National Vital Statistic Reports.

TABLE 4.5 STROKE DISEASE DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su	Mat-Su Deaths	Alaska	U.S.	Healthy People Goal Percent
1999-2001	63.8	42	66.3	61.8	33.8
2000-2002	59.0	44	59.9	60.9	33.8
2001-2003	53.3	41	58.2	57.9	33.8
2002-2004	50.8	45	55.9	56.2	33.8
2003-2005	50.9	48	55.1	53.5	33.8
2004-2006	55.5	59	50.8	50.0	33.8
2005-2007	58.9	62	48.4	46.6	33.8
2006-2008	48.3	55	45.2	43.6	33.8
2007-2009	40.1	49	43.1	42.2	33.8

Data sources: ABVS; NCHS, National Vital Statistic Reports.

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 type of diabetes, Type 2, include older age, obesity, family history, prior history of gestational diabetes, physical inactivity, and race/ethnicity.^{iv} Almost eight percent of Mat-Su adults and 21.3% of adults 65 or older reported having diabetes during their lifetimes in 2011.

In 2011, approximately 12% of Mat-Su middle school and high school students were obese, 27% of adults and 30% of seniors. The borough achieved the Healthy People 2020 Goal of 16.1% obesity for high school students.

TABLE 4.6 OBESITY AND DIABETES INDICATORS, 2011				
Indicator	Mat-Su Percent	Alaska Percent	U.S. Percent	Healthy People Goal Percent
Overweight				
Middle School Students	15.9	NA	NA	-
High School Students	13.9	14.5	15.2	-
Obese				
Middle School Students	11.6	NA	NA	16.1
High School Students	11.7	11.3	13.0	16.1
Adults 18+ years	26.8	28.0	33.9	30.6
Adults 65+ years	30.0	29.3	NA	-
Diabetes				
Adults 18+ years	7.5	7.8	26.9	-
Adults 65+ years	21.3	20.3	NA	-
<i>Data Source: ADHSS, BRFSS and YRBS. Note: NA – Data not available; (-) means no goal set for this indicator.</i>				

TABLE 4.7 DIABETES - ADULTS				
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval
1991-95	4.5	2.4 - 8.2	3.3	2.8 - 3.9
1996-99	3.7	2.0 - 6.8	3.3	2.8 - 4.0
2000-2002	1.2	2.6 - 6.8	3.8	3.2 - 4.4
2003	8.3	4.0 - 16.2	5.0	3.9 - 6.4
2004	5.2	3.0 - 8.9	4.6	3.9 - 5.4
2005	7.5	4.9 - 11.4	4.9	4.2 - 5.7
2006	6.4	3.8 - 10.6	6.3	5.3 - 7.5
2007	7.9	4.7 - 13.2	6.3	5.3 - 7.5
2008	4.9	2.8 - 8.4	6.4	5.5 - 7.5
2009	1.9	.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
<i>Data source: ADHSS, BRFSS.</i>				

TABLE 4.8 OBESITY – ADULTS				
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval
1991-93	10.8	6.4 - 17.6	13.1	11.7 - 14.6
1994-96	18.7	12.3 - 27.5	16.9	15.4 - 18.6
1997-99	22.7	16.9 - 29.8	20.5	19.0 - 22.1
2000-02	23.2	18.0 - 29.3	22.2	20.8 - 23.6
2003	24.6	16.9 - 34.4	23.6	21.4 - 26.0
2004	22.5	17.3 - 28.8	23.0	21.0 - 24.7
2005	26.5	21.0 - 32.8	25.7	24.0 - 27.4
2006	31.3	24.4 - 39.2	26.0	24.1 - 28.0
2007	29.4	23.1 - 36.6	28.3	26.3 - 30.4
2008	29.7	23.5 - 36.9	28.5	26.5 - 30.6
2009	27.1	20.7 - 34.6	26.9	24.9 - 29.0
2010	36.7	27.3 - 47.3	28.9	26.3 - 31.8
2011	26.8	22.6 - 31.5	28.0	26.3 - 29.9
<i>Data source: ADHSS, BRFSS.</i>				

CHRONIC LOWER RESPIRATORY DISEASE

Smoking contributes to the occurrence of chronic lower respiratory disease. Almost 23% of Mat-Su adults reported smoking in 2011, nearly double the Healthy People 2020 Goal for adults of 12%. Nevertheless, the percentage of Mat-Su adults smoking in 2011 was significantly lower than the 29.7% reported in the years 2000-2001. Among Mat-Su adults aged 65 or older, 12.2% were active smokers in 2011.

In 2011, six percent of Mat-Su middle school students, 8.5% of Mat-Su traditional, and 10.1% of alternative high school students reported using smokeless tobacco products. The Healthy People 2020 Goal for high school students was 6.9%.

Sixteen percent of Mat-Su mothers reported smoking during the first three months of their pregnancy compared to 13.5% of mothers state-wide.

Less than four percent of Mat-Su adults and two percent of adults 65 or older said they used smokeless tobacco in 2011. Mat-Su has not achieved the Healthy People 2020 Goal of 0.3% among adults aged 18+.

Many chronic lower respiratory deaths are considered preventable such as some deaths due to bronchitis, asthma and chronic obstructive pulmonary disease. All of these conditions are complicated by smoking. The Mat-Su chronic lower respiratory disease death rate was 48.7 per 100,000 people during 2007-2009. The chronic lower respiratory disease rate decreased 25% from 1999-2001 to 2007-2009.

TABLE 4.9 TOBACCO-RELATED INDICATORS

Indicator	Mat-Su Percent	Alaska Percent	U.S. Percent	Healthy People Goal Percent
Current Smoking, 2011				
Middle school	5.8	8.8	NA	-
High school	11.2	14.2	18.1	16.0
Alternative high school	39.9	NA	NA	-
Adults 18+ years	22.5	22.6	19.0	12.0
Adults 65+ years	12.2	12.4	NA	-
Pregnant women (last 3 months of pregnancy), 2009-2010	16.1	13.5		1.7
Smokeless Tobacco, 2011				
Middle school	6.0	8.7	NA	-
High school	8.5	8.4	7.7	6.9
Alternative high school	10.1	NA	NA	-
Adults 18+ years	1.4	1.8	NA	0.3
Adults 65+ years	2.1	NA	NA	NA
<i>Data Sources: ADHSS BRFSS, YRBS, and Pregnancy Risk Assessment Monitoring System (PRAMS). Note: NA – Data not available; (-) means no goal set for this indicator.</i>				

TABLE 4.10 ADULT SMOKING				
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval
1991-93	28.4	20.0 - 38.6	27.5	25.6 - 29.4
1994-96	30.8	23.3 - 39.6	27.2	25.3 - 29.2
1997-99	29.5	22.2 - 38.0	26.7	25.0 - 28.4
2000-01	29.7	23.0 - 37.5	25.6	23.8 - 27.5
2002-03	33.5	26.6 - 41.1	27.8	26.0 - 29.6
2004	25.1	19.7 - 31.4	24.3	22.6 - 26.0
2005	30.5	24.4 - 37.4	24.8	23.2 - 26.6
2006	32.0	24.3 - 40.8	24.0	22.1 - 26.0
2007	28.9	22.5 - 36.4	24.4	22.4 - 26.4
2008	26.6	20.3 - 34.1	23.8	21.9 - 25.8
2009	25.5	19.3 - 33.0	21.5	19.5 - 23.5
2010	29.0	20.3 - 39.5	22.2	19.7 - 24.9
2011	22.51	18.5 - 27.1	22.6	20.9 - 24.4
<i>Data Source: ADHSS, BRFSS.</i>				

TABLE 4.11 ADULT SMOKELESS TOBACCO					
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval	Healthy People Goal
1991-93	5.3	1.5 - 16.9	5.4	4.5 - 6.5	0.3
1994-95	3.8	1.2 - 11.6	6.3	5.1 - 7.6	0.3
1996-97	3.5	1.4 - 8.3	4.8	3.9 - 6.0	0.3
1998-99	4.6	2.0 - 10.5	5.4	4.5 - 6.4	0.3
2000-02	6.1	3.3 - 10.9	6.2	5.4 - 7.1	0.3
2004	3.4	1.2 - 9.7	4.4	3.4 - 5.7	0.3
2005	4.9	2.3 - 9.8	4.9	4.1 - 5.8	0.3
2006	4.9	2.1 - 10.9	4.6	3.8 - 5.6	0.3
2007	6.1	3.0 - 12.0	5.3	4.4 - 6.4	0.3
2008	4.8	2.1 - 10.4	5.2	4.3 - 6.2	0.3
2009	5.4	2.5 - 11.2	4.8	3.9 - 5.9	0.3
2010-2011	3.6	1.2 - 10.1	4.1	3.3 - 5.1	0.3
<i>Data Source: ADHSS, BRFSS.</i>					

TABLE 4.12 CHRONIC LOWER RESPIRATORY DISEASE DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su Rate	Mat-Su Deaths	Alaska Rate	U.S.
1999-2001	64.9	55	51.8	45.8
2000-2002	51.9	48	48.4	44.3
2001-2003	50.2	48	48.0	43.7
2002-2004	36.7	42	44.3	43.5
2003-2005	40.9	49	42.6	43.3
2004-2006	33.5	44	39.7	41.1
2005-2007	39.9	53	41.5	43.2
2006-2008	41.3	61	42.5	40.5
2007-2009	48.7	73	46.5	40.8
<i>Data Sources: ABVS; NCHS, National Vital Statistics Reports.</i>				

CANCER

Although cancer is the leading cause of death in Mat-Su, many forms of the disease are preventable and treatable if detected early. Similar to heart disease, lifestyle practices such as smoking, obesity, and drinking alcohol can contribute to the development of cancer.

The Mat-Su cancer death rate was 175.3 per 100,000 people from 2007-2009. Although the Mat-Su cancer death rate decreased 22.5% between 1999-2001 and 2007-2009, Mat-Su has not achieved the Healthy People 2020 Goal of 160.6. Mat-Su has a higher cancer incidence rate but a lower cancer death rate than both Alaska and the U.S.

TABLE 4.13 CANCER SCREENING						
	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval	U.S. Percent	Healthy People Goal Percent
Mammogram past 2 years: women 40+ years, 2006-2010	60.7	(50.3 - 70.2)	69.9	(67.1 - 73.0)	75.2	81.1
Cervical Cancer Pap test past 3 years: women 18+ years, 2006-2010	81.5	(72.3 - 88.2)	82.7	(79.9 - 85.0)	81.0	92.0
Colorectal Cancer Screening Ever, 2011						
Adults 50+ years	59.5	(52.4 - 66.3)	65.0	(62.0 - 68.0)	64.2	70.5
Adults 65+ years	78.0	(75.0 - 80.7)	NA	NA	NA	-
Colorectal Cancer Screening Past 5 Years, 2011						
Adults 50+ years	45.6	(38.8 - 52.5)	47.9	(44.7 - 51.0)	NA	-
Adults 65+ years	60.3	(56.0 - 64.5)	NA	NA	NA	-
<i>Data sources: ADHSS, BRFSS; CDC, BRFSS Prevalence and Trends. Note: NA – Not Available; (-) means no goal set for this indicator.</i>						

Three cancers commonly screened for are breast cancer, cervical cancer, and colorectal cancer. Mammograms can detect breast cancer early. The U.S. Preventive Services Task Force recommends screening mammography for women aged 50-74 years every two years. In Mat-Su from 2006-2010, 60.7% of women over the age of 40 years had a mammogram in the last two years. The Mat-Su breast cancer death rate (22.5 per 100,000) was slightly lower than the Alaska rate (24) and similar to the U.S. rate (22.9) during 2007-2009. In Mat-Su from 2006-2010, 81.5% of women aged 18 years or more were screened for cervical cancer. This percentage was lower than the Healthy People 2020 Goal of 92%. Cervical cancer screening is recommended for women ages 21-65 years every three years.

Mat-Su has met the Healthy People 2020 goal for the colorectal cancer death rate but has not met the goal for prostate cancer and lung cancer death rates. Colorectal cancer screening (using fecal occult blood testing, sigmoidoscopy, or colonoscopy), is recommended for 50-75 year olds. From 2006-2010, 59.5% of Mat-Su adults and 78% of seniors had ever had a colorectal cancer screening test. In the last five years, 60.3% percent of seniors and 45.6% of adults had the screening. The Mat-Su colorectal cancer death rate was 13.6 per 100,000 people in 2007-2009. Mat-Su achieved the Healthy People 2020 Goal in 2007-2009. The Mat-Su colorectal cancer death rate decreased 55.3% between 1999-2001 and 2007-2009.

TABLE 4.14 CANCER DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su Rate	Mat-Su Deaths	Alaska Rate	U.S. Rate	Healthy People Goal
1999-2001	226.1	212	197.8	2,010	160.6
2000-2002	195.8	210	196.9	2,100	160.6
2001-2003	186.1	216	189.9	2,124	160.6
2002-2004	179.8	231	186.9	2,167	160.6
2003-2005	200.3	266	180.2	2,178	160.6
2004-2006	181.9	263	176.9	2,227	160.6
2005-2007	180.5	227	177.0	2,341	160.6
2006-2008	176.8	284	180.7	2,474	160.6
2007-2009	175.3	301	182.9	2,584	160.6
<i>Data Sources: ABVS; NCHS, National Vital Statistics Reports.</i>					

TABLE 4.15 CANCER INCIDENCE RATE PER 100,000 PEOPLE

Years	Mat-Su Rate	Mat-Su Residents Affected	Alaska Rate	U.S. Rate
1999	571.4	205	506.1	483.0
2000	538.6	207	515.5	483.9
2001	447.4	201	516.6	490.8
2002	504.2	231	503.0	486.4
2003	532.7	277	493.8	476.5
2004	526.9	278	511.7	475.1
2005	533.1	311	480.6	474.3
2006	530.1	314	485.6	476.9
2007	492.7	308	471.5	479.3
2008	541.8	361	479.1	472.3
2009	526.4	375	460.7	459.0
2010	495.2	370	453.5	NA

Data Sources: ADHSS; NCHS, National Vital Statistics Reports.

TABLE 4.16 BREAST CANCER DEATH RATE PER 100,000 PEOPLE (MALE AND FEMALE)

Years	Mat-Su Rate*	Mat-Su Deaths	Alaska Rate	U.S. Rate
1999-2001	35.4	16	23.7	27.0
2000-2002	31.7	16	23.5	27.1
2001-2003	29.7	18	21.9	26.0
2002-2004	21.1	14	20.8	25.6
2003-2005	20.4	15	19.7	25.3
2004-2006	26.5	19	21.4	24.4
2005-2007	33.7	27	23.9	24.1
2006-2008	32.7	26	23.6	23.5
2007-2009	22.5	20	24.0	22.9

*Data Sources: ADHSS; NCHS, National Vital Statistics Reports. Note: * Indicates that one or more of these rates are based upon less than 20 deaths. Rates calculated with small numbers are considered statistically unreliable and should be used with caution.*

4.17 COLORECTAL CANCER DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su Rate*	Mat-Su Deaths	Alaska Rate	U.S. Rate	Healthy People Goal
1999-2001	30.4	24	22.4	21.1	14.5
2000-2002	21.8	22	21.3	20.9	14.5
2001-2003	23.6	25	19.7	20.1	14.5
2002-2004	21.3	25	17.6	19.7	14.5
2003-2005	24.5	27	16.5	19.1	14.5
2004-2006	17.2	20	16.1	18.0	14.5
2005-2007	16.8	21	17.1	17.5	14.5
2006-2008	15.2	22	18.0	17.2	14.5
2007-2009	13.6	25	17.5	16.9	14.5

*Data Sources: ADHSS; NCHS, National Vital Statistics Reports. Note: * Indicates that one or more of these rates are based upon less than 20 deaths. Rates calculated with small numbers are considered statistically unreliable and should be used with caution.*

TABLE 4.18 LUNG CANCER DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su* Rate	Mat-Su Deaths	Alaska Rate	U.S. Rate	Healthy People Goal
1999	43.1	13	54.1	55.4	45.5
2000	74.0	27	60.2	55.8	45.5
2001	50.3	19	55.2	55.3	45.5
2002	50.3	22	51.1	55.0	45.5
2003	47.2	23	56.4	54.2	45.5
2004	68.3	37	58.1	53.4	45.5
2005	50.5	22	50.6	52.9	45.5
2006	46.4	24	46.6	51.7	45.5
2007	31.2	19	56.3	50.7	45.5
2008	53.7	29	53.2	49.6	45.5
2009	56.7	34	55.8	48.5	45.5

*Data Sources: ADHSS, Cancer Mortality Rates for Alaska, 1999-2009; CDC, National Program of Cancer Registries, United States Cancer Statistics, 1999-2009. Note: * Indicates that one or more of these rates are based upon less than 20 deaths. Rates calculated with small numbers are considered statistically unreliable and should be used with caution.*

TABLE 4.19 PROSTATE CANCER DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su* Rate	Mat-Su Deaths	Alaska Rate	U.S. Rate	Healthy People Goal
1999-2001	31.3	11	25.9	30.9	21.2
2000-2002	30.3	10	31.8	29.7	21.2
2001-2003	30.3	13	25.9	29.1	21.2
2002-2004	29.5	13	25.5	25.6	21.2
2003-2005	24.6	13	21.3	25.3	21.2
2004-2006	22.7	12	21.8	24.4	21.2
2005-2007	20.3	11	20.1	24.1	21.2
2006-2008	22.3	12	19.6	23.5	21.2
2007-2009	24.2	14	21.0	23.5	21.2

*Data Sources: ADHSS; NCHS, National Vital Statistics Reports. Note: * Indicates that one or more of these rates are based upon less than 20 deaths. Rates calculated with small numbers are considered statistically unreliable and should be used with caution.*

The Mat-Su prostate cancer death rate was 24.2 per 100,000 people during 2007-2009. The Mat-Su prostate cancer death rate decreased 22.7% between 1999-2001 and 2007-2009. However, the Mat-Su rate is higher than the Healthy People 2020 Goal of 21.2 deaths per 100,000 people.

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.^v

WHAT IS MAT-SU'S STATUS?

Prevention in the form of immunization is a big part of controlling infectious disease. We don't have good data on the level of children in our borough who are immunized. We do know that for 10% of children enrolled in the MSBSD, their parents have received a religious or medical exemption from demonstrating proof of vaccination. This puts Mat-Su at risk of widespread infectious disease for children in particular. Research demonstrates that at least 80-95% of the population must receive a vaccine to prevent spread of the disease. Seniors are another population for whom immunizations are highly beneficial. In the last 12 months, 49% of seniors received the influenza vaccine, and 66% the pneumonia vaccine, far less than the Health People 2020 goal of 90%.

In regard to sexually transmitted diseases, the Mat-Su/Anchorage area has a very high rate of chlamydia (716.5 per 100,000 people) as compared to the rest of the country (457.6 per 100,000); however, the rate of gonorrhea is lower than the U.S.

INFECTIOUS DISEASE – CHILDREN

Childhood vaccines have made many childhood diseases that lead to death and disability, as well as significant discomfort, rare events. The State of Alaska requires a schedule of vaccines be documented by individual school districts for all children entering kindergarten (see State of Alaska Childcare & School Immunization Requirements, <http://www.epi.hss.state.ak.us/id/iz/factsheet/IZReqPacket2013.pdf>). Exceptions to these requirements are made for parents who can document their child should be exempt due to already having the disease, a clinical or medical complication, or religious grounds.

When a large percentage of the population is vaccinated, the spread of disease is limited. If enough people are immunized it will protect the small percentage of people who are not. However, in order to achieve this level for some diseases, often called “herd immunity,” 80 to 95% of the population must receive the vaccine. In 2012-2013, approximately 10% of students entering Mat-Su schools requested and received an exemption for their child for at least one vaccine. This negatively affects the minimum level of vaccination among a population to prevent the spread of disease.

TABLE 4.20 MSBSD SCHOOL DISTRICT IMMUNIZATION DECLINATION, 2012-2013

School	Religious Exemption	Medical Exemption	Total
North Schools (Big Lake, Goose Bay, Houston High, Houston Middle, Knik, Meadow Lakes, Snowshoe, Su Valley, Talkeetna, Trapper Creek, Willow and Beryozova)	9% (302 children)	3% (90 children)	12%
Wasilla Area Schools (Burchell High, Career Tech HS, Colony High School, Cottonwood, Finger Lake, Iditarod, Larson, Machetanz, Mat-Su Day School, Pioneer Peak, Shaw, Tanaina, Teeland, Wasilla High, Wasilla Middle)	7% (581 children)	4% (294 children)	11%
Palmer Area Schools (Butte, Glacier View, Palmer High, Sherrod, Sutton, Swanson, Valley Pathways)	5% (144 children)	4% (105 children)	9%
Total	7% (1027 children)	3% (489 children)	10%

Data source: MSBSD.

Although the State of Alaska is working to have all child immunizations entered into the Alaska Immunization System (VAcTrAK), all Mat-Su providers are not currently participating in this initiative. The Childhood Understanding Behaviors Survey (CUBS) conducted by the State of Alaska found that 23% of Mat-Su mothers of three-year-olds have delayed or didn't get a vaccine for their child. Another survey entitled Searching for Hardships and Obstacles to Shots (SHOTS) conducted by the State of Alaska in 2010 found that the top worries of Mat-Su parents regarding immunizations included worry about: safety issues like side effects and sickness from the shots, the number of shots the child needed to get, and feeling responsible if something bad happens as a result of the immunization.

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 65 years or older, even healthy people can get very sick from the flu. The pneumococcal vaccine is recommended for adults aged 65 years 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.^{vi}

TABLE 4.21 ADULT IMMUNIZATIONS, 2011				
Preventive Measure	Mat-Su Percent	Alaska Percent	U.S. Percent	Healthy People Goal Percent
Influenza Immunization				
Adults 18+ years	24.1	32.0	NA	80.0
Adults 65+ years	49.1	51.8	60.7	90.0
Pneumonia Immunization				
Adults 18+ years	29.3	27.7	NA	-
Adults 65+ years	65.1	66.2	70	90.0
<i>Data Sources: ADHSS, BRFSS; CDC, Prevalence and Trends Data. Note: NA – Not Available; (-) means no goal set for this indicator.</i>				

In 2011, nearly one in four Mat-Su adults had received the flu vaccine within the previous 12 months. This did not achieve the Healthy People 2020 Goal of 80%, and was lower than the statewide average. Nearly half of Mat-Su adults aged 65 and older received a flu vaccine in 2011, below the Healthy People 2020 Goal of 90% for adults aged 50 and older.

As of 2011, 29.3% of Mat-Su adults and 65.1% of those 65 years or older reported receiving pneumococcal immunization at some point during their lifetimes. While the percentage of adults receiving the vaccine increased statewide from 2001 to 2011, the percent among Mat-Su adults remained relatively the same during that time period.

TABLE 4.22 FLU VACCINE					
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval	Healthy People Goal Percent
1993, 95, 97	19.6	13.8 - 27.1	23.8	22.0 - 25.7	80.0
1999, 2001-02	28.9	22.1 - 36.8	32.4	30.8 - 34.1	80.0
2003-04	30.6	24.5 - 37.4	34.9	33.0 - 36.7	80.0
2005-06	25.6	19.8 - 32.5	32.7	30.8 - 34.6	80.0
2007-08	27.5	21.8 - 34.1	36.4	34.4 - 38.6	80.0
2009-10	31.2	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
<i>Data Source: ADHSS, BRFSS.</i>					

TABLE 4.23 PNEUMOCOCCAL IMMUNIZATION				
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval
1993, 1995	11.3	5.3 - 22.5	11.3	9.6 - 13.2
1997, 1999	18.6	12.2 - 27.4	15.0	13.3 - 16.8
2001-02	25.0	18.4 - 33.0	19.2	17.6 - 20.9
2003-04	22.9	17.4 - 29.6	22.4	20.7 - 24.1
2005-06	27.0	20.6 - 34.5	24.5	22.7 - 26.5
2007-08	26.5	20.3 - 33.9	24.1	22.1 - 26.3
2009-10	22.9	16.8 - 30.5	25.0	22.8 - 27.2
2011	29.3	24.7 - 34.4	27.7	25.5 - 30.0
<i>Data Source: ADHSS, BRFSS.</i>				

TABLE 4.24 AGE-ADJUSTED CHLAMYDIA RATE PER 100,000 PEOPLE			
Year	Mat-Su/ Anchorage Rate	Alaska Rate	U.S. Rate
2001	406.2	565.60	274.5
2002	520.2	770.52	289.4
2003	527.3	779.42	301.7
2004	560.1	780.14	316.5
2005	614.7	844.80	329.4
2006	642.4	858.54	344.3
2007	663.1	910.63	367.5
2008	653.6	896.51	398.1
2009	674.4	939.03	405.3
2010	733.8	847.5	423.6
2011	716.5	808.0	457.6
<i>Data sources: ADHSS, Interactive Display of Alaska Chlamydia and Gonorrhea Data; CDC, NCHHSTP Atlas.</i>			

Sexually transmitted diseases are a form of infectious disease and are 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/Anchorage region chlamydia rate was 716.5 per 100,000 people in 2011, slightly lower than the statewide rate of 808.0 but significantly higher than the U.S. rate of 457.6. The rate has been steadily rising since 2001. 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.^{vii} In 2011, the gonorrhea rate in the Mat-Su/Anchorage region was 78.6 per 100,000 people, significantly less than the Alaska rate of 138.5 or the U.S. rate of 104.2.

In Mat-Su, there are several chronic-disease and associated-risk-factor coalitions, including the Mat-Su Substance Abuse Prevention Coalition, Teens Against Tobacco Use, Mat-Su Coalition of Senior Centers, Recover Alaska, Breathe Free Mat-Su, and the Mat-Su Vaccine Coalition.

TABLE 4.25 AGE-ADJUSTED GONORRHEA RATE PER 100,000 PEOPLE			
Year	Mat-Su/Anchorage Rate	Alaska Rate	U.S. Rate
2001	72.3	94.97	126.6
2002	91.1	130.82	126.8
2003	69	115.48	122.0
2004	86.1	112.13	112.4
2005	94.8	116.85	114.6
2006	118.1	120.02	119.7
2007	105.4	107.99	119.0
2008	72.9	106.75	110.7
2009	138	180.15	98.1
2010	131.8	179.2	100.2
2011	78.6	138.5	104.2
<i>Data sources: ADHSS, Interactive Display of Alaska Chlamydia and Gonorrhea Data. CDC, NCHHSTIP Atlas.</i>			

CHAPTER 5: MENTAL HEALTH AND ALCOHOL AND SUBSTANCE ABUSE

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. 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.^{viii} 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?

The majority of Mat-Su adults and seniors said they did not have any poor mental health days in the last month. It is difficult to measure how many people are affected by mental health issues due to the social stigma associated with admitting to mental illness or challenges. We do know that over one out of every four Mat-Su traditional high school students said that in the past twelve months they had felt so sad or hopeless for two weeks or more in a row that they stopped doing some usual activities. About the same percentage of mothers of 3-year-olds reported similar depressive symptoms. Thirteen percent of adults reported ten or more poor mental health days in the last month. The suicide death rate in Mat-Su is twice that of the rest of the country and one out of every five high school students reported seriously considering suicide in the past year.

Mental stress and health problems are often linked to abuse of alcohol and drugs. In the 2013 community meetings held by MSHF, residents overwhelmingly ranked alcohol and substance abuse as the leading health issue facing their community.

Almost 20% of Mat-Su adults and between 15-36% of high school students report binge drinking in the last month. Mat-Su youth are reporting that they are trying different kinds of drugs. Forty-three percent of traditional high school students and 75% of alternative high school students report ever using marijuana, cocaine, solvents, heroin, meth, ecstasy, or un-prescribed drugs. A State of Alaska analysis revealed that from 2005-2009, the alcohol-induced death rate for the borough was 11.8 deaths per 100,000 people, and the drug-induced death rate was 17.7 per 100,000 people. Additionally, drugs and alcohol were involved with 22% of injuries that required hospitalization.

People who attended the community meetings recognized that abusing drugs and alcohol is intricately linked to the other behavioral health issues such as depression and suicide, child abuse and violence, and domestic violence and sexual assault. These were all ranked in the top five major health issues facing the borough. Behavioral health professionals at the community meetings confirmed that there are gaps in the continuum of behavioral and mental health care for all ages that prevent Mat-Su children and adults from getting the care they need.

THE DATA

CHILDREN AND YOUTH MENTAL HEALTH

No local data are available that 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; emotional and physical neglect; and household dysfunction (mother treated violently, household substance abuse, household mental illness, parental separation/divorce, incarceration of a household member).¹

In 2012, the Alaska State Troopers handled 26 cases of child sexual abuse in Mat-Su. In 2011, The Children's Place, which provides evaluation, investigation, and treatment for child abuse survivors, served 240 children. From April 2012 to March 2013, the Wasilla branch of the State of Alaska Office of Children Services (OCS) received 1,625 protective service reports of child maltreatment. Of these reports, 420 were substantiated and 1,305 were not; 152 children were removed from their homes during that time period.

TABLE 5.1 YOUTH DEPRESSION AND SUICIDE INDICATORS, 2011				
Indicator	Mat-Su Percent	Alaska Percent	U.S. Percent	Healthy People Goal Percent
Sad or hopeless for at least 2 weeks or more in a row that they stopped doing usual activities in the last year				
Traditional high school	26.9	25.9	28.5	-
Alternative high school	34.8	NA	NA	-
Suicide consideration in past year				
Middle school	20.6	20.9		-
Traditional high school	15.1	14.5	15.8	-
Alternative high school	20.6	NA		-
Made a plan about how to attempt suicide in past year				
Middle school	13.2	14.0	NA	-
Traditional high school	13.5	12.8	12.8	-
Alternative high school	15.0	NA		-

In 2011, 26.9% of Mat-Su traditional and 34.8% of alternative high school students reported depressive symptoms. In 2011, 20.6% of Mat-Su middle school students said they had ever seriously considered suicide. Fifteen percent of traditional high school students and 20.6% of alternative high school students reported that they had seriously considered suicide in the past 12 months. The percentage of those who actually made a plan to commit suicide was 13% for middle school students and traditional high school students and 15% for alternative high school students. According to self report, 13.2% of middle school and 12.3% of alternative high school students actually attempted suicide, compared to only 7.4% of traditional high school students. Two percent of traditional high and 3.9% of alternative school students needed medical attention after the attempt.

**TABLE 5.1 YOUTH DEPRESSION AND SUICIDE INDICATORS, 2011
(CONT.)**

Indicator	Mat-Su Percent	Alaska Percent	U.S. Percent	Healthy People Goal Percent
Attempted suicide one or more times in past year				
Middle school, ever	7.0	14.0	NA	-
Traditional high school	7.4	8.7	7.8	1.7
Alternative high school	12.3	NA	NA	-
Suicide attempt needed to be treated by doctor or nurse				
Traditional high school	2.0	2.7	2.4	-
Alternative high school	3.9	NA	NA	-
<i>Data Sources: ADHSS, YRBS; CDC, BRFSS Data and Trends. Note: NA – Data not available; (-) means no goal set for this indicator.</i>				

ADULT MENTAL HEALTH

In 2011, 68% of Mat-Su adults reported no poor mental health days in the last month; 11% had one to three poor days; 7.3% had three to nine poor days; 8% had between 10-29 poor days; and 5.4% reported that their entire month was poor. Almost 82% of seniors reported no poor mental health days in the last month; 5% had one to two days; 6.2% had three to five days; 5.8% had six to 29 days; and 1.3% reported all poor mental health days. One out of four mothers of three-year-olds reported depressive symptoms in 2009-2010.

The Mat-Su suicide death rate was 23.2 deaths per 100,000 people from 2007-2009, similar to the Alaska rate but two times higher than the U.S. rate. The rate has fluctuated up and down in the last 10 years. Mat-Su has not achieved the Healthy People 2020 Goal for suicide deaths.

TABLE 5.2 ADULT MENTAL HEALTH INDICATORS				
Indicator	Mat-Su	Alaska	U.S.	Healthy People Goal
Depression				
Adults who report 10 or more poor mental health days in the last month, 2011 (%)	13.4	11.7	NA	-
Seniors who report 6 or more poor mental health days in the last month, 2011 (%)	7.1	NA	NA	-
Mothers of 3 year olds who reported depressive symptoms in past 3 months, 2009 (%)	25.4	22.3	NA	-
Suicide Death Rate per 100,000 people, 2007-2009	23.2	22.7	11.3	10.2
<i>Data Sources: ADHSS, BRFSS and CUBS; ABVS.</i>				

TABLE 5.3 AVERAGE NUMBER OF POOR MENTAL HEALTH DAYS IN LAST MONTH

Years	Mat-Su	Mat-Su 95% Confidence interval	Alaska	Alaska 95% Confidence interval
1993-96	3.3	2.2 - 4.4	2.9	2.6 - 3.1
1997-99	7.8	2.6 - 4.9	2.9	2.6 - 3.1
2000-02	3.0	2.2 - 3.8	2.9	2.7 - 3.1
2003	3.2	1.7 - 4.8	2.8	2.5 - 3.2
2004	3.2	2.2 - 4.3	2.9	2.6 - 3.2
2005	3.6	2.7 - 4.5	3.1	2.9 - 3.4
2006	4.0	2.3 - 5.6	3.3	3.0 - 3.7
2007	3.3	2.3 - 4.2	3.6	3.2 - 3.9
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	2.9 - 3.5

Data Sources: ADHSS, BRFSS. Note: NA – Data not available; (-) means no goal set for this indicator.

TABLE 5.4 SUICIDE DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su Rate	Mat-Su Deaths	Alaska Rate	U.S. Rate	Healthy People Goal
1999-2001	19.0	32	18.3	10.5	10.2
2000-2002	22.4	42	19.6	10.4	10.2
2001-2003	21.6	38	19.4	10.7	10.2
2002-2004	22.8	45	21.5	10.9	10.2
2003-2005	21.5	45	21.0	10.8	10.2
2004-2006	25.6	56	21.0	10.9	10.2
2005-2007	26.6	55	20.9	10.9	10.2
2006-2008	26.8	58	22.6	10.9	10.2
2007-2009	23.2	53	22.7	11.3	10.2

Data Sources: ABVS.

ALCOHOL ABUSE

Binge drinking for youth is defined as having five or more drinks at one sitting. In 2011, 15.2% of Mat-Su traditional and 35.6% of alternative high school students reported binged drinking in the last month. While Mat-Su has not achieved the Healthy People 2020 Goal of 8.5% for this measure, Mat-Su traditional high school students binged at lower rates than high school students nationally. The percentage of Mat-Su traditional high school students reporting binge drinking in the last month decreased 42% between 2005 and 2011.

TABLE 5.5 ALCOHOL-RELATED INDICATORS				
Indicator	Mat-Su Percent	Alaska Percent	U.S. Percent	Healthy People Goal Percent
Binge Drinking, 2011				
Traditional high school	15.2	16.7	21.9	8.5
Alternative high school	35.6	NA	NA	-
Adults 18+ years	19.5	20.2	18.3	24.3
Adults 65+ years	8.1	7.5	NA	-
Heavy Drinking, 2011				
Adults 18+ years	6.8	7.3	6.6	-
Adults 65+ years	5.1	6.9	NA	-
Drinking During Pregnancy, 2007-2009	1.6	2.8	NA	1.7
<i>Data Sources: ADHSS, BRFSS and YRBS; CDC, BRFSS Data and Trends. Note: NA – Data not available; (-) means no goal set for this indicator.</i>				

TABLE 5.6 BINGE DRINKING					
Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval	Healthy People Goal Percent
1991-94	18.2	11.8 - 27.0	22.7	21.1 - 24.3	24.3
1995-97	13.1	8.0 - 20.8	18.5	16.8 - 20.3	24.3
1998-2000	18.8	13.5 - 25.7	19.3	17.9 - 20.8	24.3
2001-02	19.4	13.7 - 26.8	18.2	16.6 - 19.9	24.3
2003	18.9	12.3 - 27.8	18.4	16.3 - 20.6	24.3
2004	15.3	10.9 - 21.2	17.2	15.7 - 18.8	24.3
2005	9.5	4.5 - 19.1	17.5	15.3 - 20.2	24.3
2006	13.2	7.1 - 23.3	16.7	14.5 - 19.2	24.3
2007	12.5	6.8 - 21.8	19.5	16.9 - 22.3	24.3
2008	15.5	10.6 - 22.2	16.2	14.6 - 18.0	24.3
2009	16.4	9.9 - 25.8	18.1	15.8 - 20.8	24.3
2010	24.9	14.8 - 38.7	21.8	18.4 - 25.6	24.3
2011	19.5	15.4 - 24.4	20.2	18.3 - 22.2	24.3
<i>Data Source: ADHSS, BRFSS.</i>					

For adults, binge drinking is defined as having five or more drinks at one sitting for a male and four or more for a female. Almost 20% of Mat-Su adults reported binge drinking during the past month in 2011, with reported levels remaining flat since 2001. Mat-Su achieved the Healthy People 2020 Goal for 2011. Only eight percent of Mat-Su adults aged 65 or older reported binge drinking in the last month in 2011. Nearly seven percent of Mat-Su adults reported heavy drinking behaviors in 2011. Heavy drinking is defined as having two or more drinks daily for a male and one or more for a female. In 2007-2009, 1.6% of Mat-Su mothers reported drinking during pregnancy. Mat-Su has achieved the Healthy People 2020 Goal of 1.7 percent since 2000.

TABLE 5.7 HEAVY DRINKING

Year	Mat-Su Percent	Mat-Su 95% Confidence Interval	Alaska Percent	Alaska 95% Confidence Interval
1991-94	6.4	2.7 - 14.4	5.0	4.2 - 5.9
1995-97	1.3	0.3 - 4.9	3.6	2.9 - 4.5
1998-2000	2.8	1.2 - 6.2	4.3	3.6 - 5.0
2000-01	8.6	4.8 - 14.9	5.9	5.1 - 6.9
2002-03	2.2	0.8 - 6.1	7.1	5.8 - 8.7
2004	3.8	1.8 - 7.8	4.7	4.0 - 5.6
2005	4.4	1.5 - 12.4	5.1	3.9 - 6.6
2006	2.1	0.6 - 6.7	5.9	4.6 - 7.5
2007	5.3	2.6 - 10.3	6.5	5.2 - 8.1
2008	5.0	3.0 - 8.2	4.9	4.2 - 5.8
2009	6.1	3.1 - 11.6	6.2	4.9 - 7.9
2010	11.2	4.1 - 27.0	6.1	4.3 - 8.5
2011	6.8	4.6 - 10.1	7.3	6.2 - 8.6

Data Source: ADHSS, BRFSS.

SUBSTANCE ABUSE

Almost 15% of Mat-Su middle school students reported ever using marijuana in 2011, a decrease of 44% from 2003. As students moved into high school, the percent increased to 36.2% at traditional high schools and 71.7% at alternative high schools. Nine percent of Mat-Su middle school students reported huffing at least once during their life, a 33% decrease between 2003 and 2011. Huffing appears to increase as students move into high school. Nearly 10% of Mat-Su traditional high school students huffed along with 18.2% of alternative high students.

Roughly four percent of Mat-Su traditional high school and 12.1% of alternative school students reported ever using methamphetamines in 2011. Other forms of drug use are reported in Table 5.8 below.

Of the top five leading causes of death in Mat-Su, all are related to substance abuse. Chronic lower respiratory disease, heart disease, and many cancers have a strong association with smoking and other substance abuse. Many unintentional injuries involve alcohol and substance abuse.^{ix} Research has shown that alcohol and drug abuse are second only to depression and other mood disorders as a risk factor for suicide.^x

Approximately 22% of injuries to Mat-Su residents that required hospitalization involved drugs or alcohol. This percentage has remained constant since the 1992-1996 time period. Of the 22%, 15% involved alcohol, and 13% involved drug use, and some involved both drugs and alcohol. Alcohol and drug use can be contributing factors to suicide and homicide. Mat-Su has a suicide death rate that is over twice as high as the Healthy People 2020 Goal.

Alcohol and drug use can also contribute to death due to chronic liver disease and cirrhosis. Mat-Su has a lower death rate (7.4 per 100,000 people) for this cause than Alaska (11.7) and the U.S. (9.1). Alcohol use can contribute to motor vehicle accident injury and death. The Mat-Su motor vehicle death rate (13.7 per 100,000) was similar to Alaska (13.2), and the U.S. (14.4). Poisoning death may include overdose of alcohol and drugs. Mat-Su has a poisoning death rate (20 deaths per 100,000 people) that is twice as high as the U.S. (9.8).

When pregnant women drink alcohol, this introduces the risk that their child will have Fetal Alcohol Syndrome (FAS). According to the Alaska Births Defects Registry, from 1980-2012, one percent of Mat-Su children were diagnosed with FAS.

TABLE 5.8 YOUTH DRUG-RELATED INDICATORS			
Indicator	Mat-Su Percent 2011	Alaska Percent 2011	U.S. Percent 2009
Marijuana, ever			
Middle school	14.7	18.0	NA
Traditional high school	36.2	41.2	39.9
Alternative high school	71.7	NA	NA
Huffing, ever			
Middle school	8.9	8.0	NA
Traditional high school	9.8	7.3	11.4
Alternative high school	18.2	NA	NA
Methamphetamines, ever			
Traditional high school	3.5	3.1	3.8
Alternative high school	12.1	NA	NA
Any form of cocaine, ever			
Middle school	5.1	4.7	NA
Traditional high school	7.4	4.9	NA
Alternative high school	26.3	NA	NA

TABLE 5.8 YOUTH DRUG-RELATED INDICATORS (CONTINUED)

Indicator	Mat-Su Percent 2011	Alaska Percent 2011	U.S. Percent 2009
Prescription drugs without a prescription from their doctors, ever			
Middle school	15.4	13.4	NA
Traditional high school	18.3	15.8	NA
Alternative high school	41.0	NA	NA
Ecstasy, ever			
Traditional high school	6.6	5.7	NA
Alternative high school	23.8	NA	NA
Heroin, ever			
Traditional high school	3.1	2.4	NA
Alternative high school	11.2	NA	NA
Ever used marijuana, cocaine, solvents, heroin, meth, ecstasy or un-prescribed drugs.			
Traditional high school	42.7	46.5	NA
Alternative high school	74.9	NA	NA
<i>Data Sources: ADHSS, BRFSS; CDC, BRFSS Data and Trends. Note: NA – Data not available.</i>			

TABLE 5.9 SELECT CAUSES OF DEATH OFTEN RELATED TO SUBSTANCE ABUSE

Indicator	Mat-Su Rate	Alaska Rate	U.S. Rate	Healthy People Goal
Alcohol-induced death rate per 100,000 people, 2005-2009	11.8	21.3	NA	-
Drug-induced death rate per 100,000 people, 2005-2009	17.7	14.8	NA	-
Percent of injuries requiring hospitalization that involved drugs or alcohol, 2007-2011	22%	28%	NA	-
Unintentional injury death rate per 100,000 people, 2007-2009	50.4	55.3	40.0	36.0
Suicide death rate per 100,000 people, 2007-2009	23.2	22.7	11.3	10.2
Homicide death rate per 100,000 people, 2007-2009	5.0*	5.2	5.9	5.5
Chronic liver disease and cirrhosis death rate per 100,000 people, 2007-2009	7.4*	11.7	9.1	8.2
Motor vehicle death rate per 100,000 people, 2007-2009	13.7	13.2	14.4	12.4
Poisoning death rate per 100,000 people, 2007-2009	20.0	16.9	9.8	13.1
<i>Data sources: ADHHS, DBH; ATR; ABDR; ABVS. Note: NA Not Available; (-) means no goal set for this indicator. * Indicates that one or more of these rates are based upon less than 20 deaths. Rates calculated with small numbers are considered statistically unreliable and should be used with caution.</i>				

TOP 5 LEADING CAUSES OF DEATH IN MAT-SU

- Cancer
- Heart Disease
- Injury
- Chronic Respiratory Disease
- Suicide

CHAPTER 6: SAFETY AND INJURY

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 of 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) and provision of resources and changes to the built environment (i.e. bike lanes or the “Kid’s Don’t Float” campaign).

WHAT IS MAT-SU’S STATUS?

During the 2013 community engagement meetings, Mat-Su community members ranked child and youth abuse and violence as the second most concerning health issue followed by domestic violence and sexual assault, which tied with two other issues for third place. The secondary data reflects these concerns. In 2012, the Children’s Place, a Mat-Su child advocacy center for children who have been abused, saw 240 children. The Wasilla office of the State of Alaska Office of Children’s Services (AK OCS) substantiated 420 allegations of child abuse in Mat-Su between April 2012 and March 2013.

As children grow to adulthood, the period of adolescence can be traumatic. Almost half of Mat-Su middle school children have ever been bullied at school. And slightly less than half have ever been in a physical fight. About one out of four traditional high school students have had these experiences in the last year. The patterns show that with the exception of bullying, students in Mat-Su alternative high schools have a greater likelihood of being victims of violence and aggression.

Teen dating violence, which is a precursor for adult domestic violence, affects 11% of traditional and 15% of alternative high school students. Eight percent of our traditional high school students and 17.5% of our alternative high school students have been forced to have intercourse against their will. This violence carries on into adulthood and affects not only Mat-Su but the whole state. Alaska has the highest per capita rate of men murdering women and rape in the nation (2.5 times the national average).^{xi} The data on domestic violence and sexual assault in Mat-Su is likely underreported because of the hesitancy of individuals to reveal their experiences in these areas over the phone to a survey interviewer. In 2009, one in five Mat-Su adults reported being threatened or physically hurt by a partner in their lifetime. Slightly more than this amount had witnessed a parent physically hurt by a spouse or partner. Violence in Mat-Su is also high outside of homes. This is demonstrated by a violent crime rate considerably higher than the U.S. rate.

Another important way to protect Mat-Su residents is to prevent injury that occurs by accident (i.e., motor vehicle crashes, drowning, and falls). Mat-Su has an unintentional death rate of 50.4 incidents per 100,000 people. Although this rate has decreased 22 percent during 2000-2009, the rate is still higher than the rest of the U.S. (40.0). Mat-Su youth are reporting higher rates of wearing a bike helmet, not riding with a drunk driver, and wearing a seatbelt as compared to U.S. youth. Despite decreasing since 2002-2004, Mat-Su's motor vehicle death rate is still higher than the U.S. Approximately 22% of Mat-Su injuries requiring hospitalization involved drugs or alcohol. The leading causes of injury requiring hospitalization in Mat-Su were 1) falls; 2) car accidents; 3) suicide related; and 4) all-terrain vehicle accidents.

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 which has since been disbanded. Table 6.1 outlines the numbers of crimes for various offenses that were reported to the city departments and Alaska State Troopers who serve Mat-Su in 2010.

TABLE 6.1 CRIMINAL OFFENSES							
	Homicide	Rape	Robbery	Assault	Burglary (breaking and entering)	Larceny (except motor vehicle)	Motor vehicle theft
Houston, 2010	0	2	0	20	18	27	8
Palmer, 2010	0	3	3	107	25	170	12
Wasilla, 2010	0	0	8	90	32	263	31
Alaska State Troopers (2011)	3	13	1	421	8	3	1
Total	3	18	12	638	83	463	52
<i>Data Source: Alaska Department of Public Safety (ADPS)</i>							

TABLE 6.2 HOMICIDE DEATH RATE PER 100,000 PEOPLE					
Years	Mat-Su Rate*	Mat-Su Deaths	Alaska Rate	US Rate	Healthy People Goal
1999-2001	4.3	8	6.5	6.2	5.5
2000-2002	5.3	10	5.9	6.1	5.5
2001-2003	6.6	13	6.4	7.1	5.5
2002-2004	6.4	13	6.5	6.1	5.5
2003-2005	5.9	13	6.2	6.0	5.5
2004-2006	3.5	8	5.9	5.9	5.5
2005-2007	3.3	8	6.3	6.1	5.5
2006-2008	2.7	7	6.0	6.2	5.5
2007-2009	5.0	13	5.2	5.9	5.5

*Data Sources: ABVS; NCHS, National Vital Statistics Reports. Note: * An asterisk (*) indicates that one or more of these rates are based upon less than 20 deaths. Rates calculated with small numbers are considered statistically unreliable and should be used with caution.*

TABLE 6.3 VIOLENT CRIME RATE PER 100,000 PEOPLE, 2007-2009		
	Rate	Number of Crimes
Mat-Su	555.9	349
Alaska	650.2	13,255
U.S.	431.9	1,325,896

Data Source: RWJF, Country Health Rankings and Roadmaps.

In 2010, the most common crime reported and/or investigated by city police and state troopers was assault, followed by larceny and then motor vehicle theft. The Mat-Su homicide rate was 5.0 per 100,000 people during 2007-2009. Mat-Su has achieved the Healthy People 2020 Goal of 5.5 deaths per 100,000 people since 2004. The Mat-Su rate has been lower than the statewide rate and the national rate since 2004.

Violent crime includes murder, non-negligent manslaughter, forcible rape, and aggravated assault. According to the Uniform Crime Reporting data compiled by the FBI, the Mat-Su violent crime rate was 555.9 per 100,000 people during 2007-2009. The Mat-Su violent crime rate was lower than the average crime rate for all boroughs in the state. However it was considerably higher than the U.S. rate (431.0 per 100,000 people).^{xii}

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."^{xiii} 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.

In 2011, 49.7% of Mat-Su middle school students reported having ever been in a physical fight, a decrease of nearly 20% between 2003 and 2011. Nearly 30% of Mat-Su traditional high school students and 43.1% of alternative high school students reported getting in a physical fight in the past 12 months. The alternative high schools surveyed were identified as American Charter Academy, Burchell High School, Mat-Su Day School, and Valley Pathways.

Eleven percent of Mat-Su traditional high school students and almost 15% of alternative school students reported experiencing dating violence during the past twelve months in 2011. Eight percent of traditional high school students report

having intercourse against their will and 17.5% alternative high school students experienced this type of trauma.

Almost 24% of Mat-Su traditional and 20% of alternative high school students reported being bullied in the past 12 months on school property. Mat-Su did not achieve the Healthy People 2020 Goal of 17.9%. Electronic bullying in the last 12 months was reported by 17.2% of traditional and almost 21% of alternative school students. Twenty-three percent of middle school students reported ever being electronically bullied.

Many cases of child abuse go unreported. In 2012, the Alaska State Troopers handled 26 cases of child sexual abuse in Mat-Su. In 2011, The Children's Place, which provides evaluation, investigation, and treatment for child abuse survivors, served 240 children. From April 2012 to March 2013, the Wasilla branch of OCS received 1,625 protective service reports of child maltreatment in families. Out of these reports, 420 allegations were substantiated and 1,305 were not and 152 children were removed from their homes during that time period. There may be more than one allegation per report of child maltreatment.

TABLE 6.4 YOUTH VIOLENCE INDICATORS

Indicator	Mat-Su	Alaska	U.S.	Healthy People Goal
Physical fight				
Middle school, ever, 2011 (%)	49.7	NA	32.8	28.4
Traditional high school, in past 12 months, 2011 (%)	29.2	23.7	NA	28.4
Alternative high school, in past 12 months, 2011 (%)	43.1	NA	NA	-
Dating violence in past 12 months				
Traditional high school, 2011 (%)	11.1	12.0	9.4	-
Alternative high school, 2011 (%)	14.8	NA	NA	-
Forced intercourse ever				
Traditional high school, 2011 (%)	8.1	9.2	8.0	-
Alternative high school, 2011 (%)	17.5	NA	NA	-
Bullying on school grounds				
Middle school, ever, 2011 (%)	44.8	47.5	NA	-
Traditional high school, in past 12 months, 2011 (%)	23.6	23.0	20.1	17.9
Alternative high school, in past 12 months, 2011 (%)	19.7	NA	NA	-

TABLE 6.4 YOUTH VIOLENCE INDICATORS (CONT.)

Indicator	Mat-Su	Alaska	U.S.	Healthy People Goal
Electronic bullying				
Middle school, 2011 (%)	22.9	24.6	NA	-
Traditional high school, 2011 (%)	17.2	15.3	NA	-
Alternative high school, 2011 (%)	20.5	NA	NA	-
Child maltreatment				
Cases of sexual abuse of a minor handled by AK State Troopers, 2010	26	NA	NA	-
Protective service reports received by the Wasilla Office of Children's Services, April 2012-March 2013	1625	NA	NA	-
Allegations of child maltreatment substantiated, April 2012-March 2013	420	NA	NA	-
Allegations of child maltreatment not substantiated, April 2012-March 2013	1305	NA	NA	-
Children removed from their homes due to maltreatment, April 2012-March 2013	152	NA	NA	-
Children reunified with their family, April 2012 - March 2013	71	NA	NA	-
Children served by Children's Place Child Advocacy Center, 2011	240	NA	NA	-
<i>Data sources: ADHSS, YRBS; CDC, YRBS; ADPS; ABVS; Children's Place; State of Alaska Office of Children Services (AOCS) , Wasilla Office.; RWJF, County Health Rankings & Roadmaps. Note: NA – Not Available; (-) means no goal set for this indicator.</i>				

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 or actions to influence the other person.^{xiv} Many cases of

domestic violence and sexual assault go unreported. The Alaska State Troopers handled approximately 903 cases of domestic violence in 2010 up from 545 cases in 2001. They handled 59 cases of sexual assault in 2010.

TABLE 6.5 NUMBER OF MAT-SU SEXUAL ASSAULT AND DOMESTIC VIOLENCE REPORTS RESPONDED TO AND/OR INVESTIGATED BY ALASKA STATE TROOPERS										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sexual Assault	51	35	51	34	59	46	58	34	78	59
Domestic Violence	545	542	656	749	848	813	845	679	845	903
<i>Data source: ADPS.</i>										

TABLE 6.6 MAT-SU DOMESTIC VIOLENCE/SEXUAL ASSAULT INDICATORS (%)					
	1999	2001	2004	2006	2009
Witnessed parent hurt by spouse/partner	19.1	17.5	17	17.8	22.7
Had unwanted sexual activity, ever	13.5	14	11.3	12.8	11
Threatened or hurt by partner, ever	23	23.6	19.4	18.7	19.4
Threatened of hurt by partner in last 5 years	NA	7.3	5.1	7.3	4.6
<i>Data Source: ADHSS, BRFSS.</i>					

Surveyed in regard to their personal experience with domestic violence or sexual assault, 11% of Mat-Su residents said they had been sexually assaulted and 19.4% percent had experienced domestic violence during their lifetime. Almost five percent of residents said they were threatened or hurt by a partner in the last five years. These numbers may be low due to the reluctance of individuals to share this type of information with a stranger on the phone and the exclusion of survivors without phones who did not participate in the survey.

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 individual's physical and emotional health.^{xv} In 2009, 22.7% of Mat-Su adults reported that they witnessed a parent hurt by a spouse or partner as a child.

SAFETY BEHAVIOR AND INJURY

Between 2003 and 2011, Mat-Su middle school students reported decreasing use of bicycle helmets with nearly 68% reporting they rarely or never wore a bicycle helmet in 2011. Among traditional high school students who rode bikes, three out of four rarely or never wore a helmet in 2011. Almost 88% of Mat-Su alternative high school students rarely or never wore a bike helmet.

Nearly 25% of Mat-Su middle school students, 15% of traditional and 25.3% of alternative high school students reported riding with a drunk driver during the previous thirty days in 2011. The proportion of Mat-Su middle school students who reported riding with a drunk driver decreased 36 percent between 2003 and 2011. The percentage of Mat-Su traditional school students riding with a drunk driver was lower than the nationwide average. Mat-Su achieved the Healthy People 2020 Goal of 25.5% in 2011.

Approximately six percent of Mat-Su middle school students reported rarely or never wearing a seat belt in 2011. The percentage of Mat-Su middle school students who rarely or never wore their seat belt decreased 34% between 2003 and 2011. Ninety-five percent of Mat-Su high school students used seat belts in 2011.

TABLE 6.7 SAFETY BEHAVIOR AND INJURY INDICATORS				
Safety Behavior	Mat-Su	Alaska	U.S.	Healthy People Goal
Bike Helmet, Rarely/Never Wore (%)				
Middle school	67.7	NA	NA	-
High school	76.4	72.3	87.5	-
Alternative high school	87.8	NA	NA	-
Rode with a Drunk Driver in the past 30 days (%)				
Middle school	23.9	NA	NA	25.5
High school	15.3	18.6	24.1	25.5
Alternative high school	25.3	NA	NA	-
Seat Belt, Rarely/Never Wore (%)				
Middle school	5.8	NA	NA	-
High school	5.3	8.7	7.7	-
Alternative high school	8.1	NA	NA	-
Injury Deaths per 100,000 people				
Unintentional Injury Death Rate	50.4	55.3	40.0	36.0
Motor Vehicle Death Rate	13.7	13.2	14.4	12.4
<i>Data Sources: ADHSS, YRBS; ABVS; NCHS, National Vital Statistics Reports. NA – Not Available; (-) means no goal set for this indicator.</i>				

TABLE 6.8 UNINTENTIONAL INJURY DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su	Mat-Su Number	Alaska	U.S.	Healthy People Goal
1999-2001	64.8	100	60.7	35.3	36.0
2000-2002	68.8	116	61.2	34.9	36.0
2001-2003	72.2	127	58.5	35.6	36.0
2002-2004	64.3	120	56.6	37.0	36.0
2003-2005	60.1	117	53.6	37.4	36.0
2004-2006	54.3	111	52.6	37.8	36.0
2005-2007	52.8	115	53.4	39.2	36.0
2006-2008	53.2	117	54.6	39.9	36.0
2007-2009	50.4	117	55.3	40.0	36.0
<i>Data Sources: ABVS; CDC, WISQARS.</i>					

TABLE 6.9 MOTOR VEHICLE DEATH RATE PER 100,000 PEOPLE

Years	Mat-Su	Mat-Su Number	Alaska	U.S.	Healthy People Goal
1999-2001	27.1	47	18.9	15.5	12.4
2000-2002	28.2	48	19.8	15.7	12.4
2001-2003	27.9	51	18.5	15.3	12.4
2002-2004	28.3	53	18.9	15.7	12.4
2003-2005	26.7	53	17.4	15.3	12.4
2004-2006	22.6	46	15.4	15.2	12.4
2005-2007	19.3	42	14.4	15.2	12.4
2006-2008	14.9	35	13.4	15.0	12.4
2007-2009	13.7	33	13.2	14.4	12.4
<i>Data Sources: ABVS; CDC, WISQARS.</i>					

TABLE 6.10 INJURY REQUIRING HOSPITALIZATION BY AGE

		Age		1992 -1996		1997 - 2001		2002 - 2006		2007 - 2011	
Mat-Su	<5 yrs	61	4%	100	5%	87	4%	111	5%		
	5-14	171	12%	216	11%	200	9%	161	7%		
	15-19	164	12%	243	12%	249	12%	199	9%		
	20-39	499	35%	586	29%	547	26%	546	25%		
	40-64	356	25%	633	32%	706	33%	781	35%		
	>64	172	12%	211	11%	320	15%	425	19%		
Anchorage	<5 yrs	323	5%	388	5%	356	5%	341	5%		
	5-14	602	9%	669	9%	615	8%	460	6%		
	15-19	566	9%	620	8%	663	9%	494	7%		
	20-39	2678	41%	2595	34%	2318	31%	1996	28%		
	40-64	1649	25%	2301	30%	2455	32%	2393	34%		
	>64	734	11%	1076	14%	1179	16%	1405	20%		
<i>Data Source: State of Alaska Trauma Registry (ATR)</i>											

In Mat-Su, from 2007-2011, the highest percentage of injury requiring hospitalization occurred in the 40-64 year old age group (35%) followed by the 20-39 year old age group (25%). This changed from 1992-1996 when the age group most often affected was 20-39 years (35%) followed by 40-64 year olds (25%). This same pattern was also found in Anchorage.

In 2007 to 2011, approximately 22% of injuries that required hospitalization involved drugs or alcohol. This percentage has remained constant since the 1992-1996 time period. This percent was slightly less than in Anchorage (28%).

TABLE 6.11 INJURY REQUIRING HOSPITALIZATION WITH DRUGS/ALCOHOL INVOLVED								
	1992-1996		1997-2001		2002-2006		2007-2011	
Mat-Su	320	22%	430	22%	491	23%	499	22%
Anchorage	1611	25%	2122	28%	2015	27%	1999	28%
<i>Data Source: ATR.</i>								

TABLE 6.12 TOP 4 LEADING CAUSES OF INJURIES REQUIRING HOSPITALIZATION, 2007-2011	
Mat-Su	1. Falls
	2. Car accidents
	3. Suicide related
	4. All-terrain vehicle accidents
Anchorage	1. Falls
	2. Suicide-related
	3. Assaults
	4. Car accidents
<i>Data Source: ATR.</i>	

Deaths from unintentional injury can be prevented. The Mat-Su unintentional injury death rate was 50.4 per 100,000 people during 2007-2009, a decrease of 22% between 2000 and 2009. In Mat-Su, the top four leading causes of injury requiring hospitalization in 2007-2011 were falls, car accidents, suicide related, and all-terrain vehicle accidents. The Mat-Su motor vehicle injury death rate was 13 per 100,000 people in 2007-2009, a decrease of 49% between 1999-2001 and 2007-2009. Mat-Su did not achieve the Healthy People 2020 Goal for unintentional injury deaths.

The Mat-Su Borough provides emergency medical services 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 the schools.

The extent to which the Mat-Su region has management programs to improve transportation safety is unclear, in part because the majority of 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. A few local initiatives to improve safety in the borough were identified. For example, the Mat-Su Borough received a grant to build bus-stop shelters, and Palmer participates in the Safe Routes to School Program.

CHAPTER 7: MAT-SU SUB-POPULATIONS

WHY IS IT IMPORTANT TO LOOK AT SUB-POPULATIONS?

Examining the health of people of different ages and races and 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; senior health; and the health of Alaska Native people.

MAT-SU MOTHERS AND YOUNG CHILDREN

DEMOGRAPHICS

In 2009, there were 1,293 babies born to mothers from the Mat-Su Borough. The fertility rate can be used to compare the rate of births that occur in different regions. The 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 (76.8 per 1,000 females) as compared to the rest of the United States (69.3), but a lower rate than Alaska (79.9).

During 2007 - 2011, there were 17,079 women of child bearing age (15-44 years) living in Mat-Su. Children and youth 19 years or younger made up 31.5% of the population (28,847) and children 4 years and under totaled 7,023 and made up 7.7% of the population. The portion of the population 19 years or younger has decreased almost 11% since 2000.

BIRTH OUTCOMES

Infants born to unmarried mothers may have poorer health outcomes compared to married mothers. Fewer babies are born to unmarried mothers in Mat-Su (28.6%) compared to Alaska (37.6%) and the U.S. (39.7%). When infants are born full-term and a healthy weight (2,500 grams - 4000 grams) they have less risk of serious health issues, lasting disabilities, and even death. Alaska and Mat-Su have more healthy weight and full term infants as compared to the United States. From 2007-2009, only 6.1% 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. During 2007-2009, 73.5% of Mat-Su mothers received adequate or adequate-plus prenatal care compared to only 58.9% of Alaskan mothers. The adequacy of prenatal care is defined according to the Adequacy of Prenatal Care Utilization Index which measures both the frequency and timing of prenatal care.

Using alcohol, illegal drugs, and tobacco during pregnancy can lead to health problems for the baby before and after it is born. During 2007-2009, 14.4% of Mat-Su mothers reported smoking when they were pregnant, four percent reported using alcohol in their last three months of pregnancy, and two percent said they used marijuana prenatally.

INFANT AND YOUNG CHILD PHYSICAL HEALTH

Infants who are breastfed have a lower risk of many health conditions, including lower respiratory infection, asthma, obesity, diabetes, and sudden infant death syndrome.^{xvi} More babies are breastfed at birth (97.3%) and at two months (79%) in Mat-Su compared to Alaska statewide (92.8% and 71.7%).

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 Mat-Su during 2009-2010, 93.6% of infants were seen for their first well-baby visit during their first week of life.

In 2009-2010, 84.1% of three-year-olds had a medical provider who knew the child well, and 88.5% received a well-child check-up in the last year. Approximately half of all three-year-olds had 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 MSBSD has immunization requirements that children must meet to attend borough schools. Exceptions to these requirements are made for parents who can document their child should be exempt due to already having the disease, a clinical or medical complication, or religious grounds. In 2012-2013, approximately 10% of students entering Mat-Su schools requested and received an exemption for their child for at least one vaccine. In 2009-2010 almost one in four (23.4%) Mat-Su mothers of three-year-olds 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. Almost six percent of Mat-Su mothers of three-year-olds had concerns about their child's behavior in the last 12 months.

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.^{xvii} In 2009-2010, 27.7% of three-year-old Mat-Su children had ever experienced a change in household members, 17.1% had been away from either parent for more than a month, and five percent had experienced a death in the immediate family. Eleven percent had an overnight hospital stay (other than at birth) and almost five percent had ever witnessed violence or physical abuse in person.

Maternal depression can negatively affect a child. Conversely, the more support that a mother has the more likely she can be emotionally available for her child. One in four Mat-Su mothers of three-year-olds reported frequent or occasional symptoms of depression in 2009-2010. In the same time period, 83.1% of mothers of three-year-olds reported that they had someone they could borrow money from if in need and 90.1% 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. According to the MSHF HHS, 5.9% of mothers of three-year-olds could not find childcare in the last month. Eleven percent had difficulty obtaining appropriate sports and recreation programs for their children. Seven percent had difficulty obtaining children's after-school programs and four percent had a hard time obtaining preschool for their child.

INFANT MORTALITY

Total infant deaths include neonatal (in the first 28 days of life) and post-neonatal deaths (from 29 days to the end of the first year of life). The Mat-Su total infant death rate was 5.5 deaths per 1,000 live births during 2007-2009. Mat-Su has achieved the Healthy People 2020 Goal for this indicator since 2002. The Mat-Su infant death rate has remained lower than Alaska and the U.S. since 2002.

The 2007-2009 Mat-Su neonatal infant death rate of 1.6 deaths per 1,000 live births was better than the Healthy People 2020 Goal. However, for the post-neonatal death rate, the Mat-Su (3.9 per 1,000 live births) did not achieve the Healthy People Goal during the 2007-2009 time period. The child death rate for Mat-Su was 19 deaths per 100,000 persons – this rate is lower than Alaska (25) and the U.S. (28.6)

TABLE 7.1 SUMMARY MEASURES FOR MAT-SU PREGNANT WOMEN AND INFANTS

Births (2007-2009)	Mat-Su	Alaska	US
Fertility Rate per 1,000 population of females 15-44 years	76.8	79.9	69.3
Births to unmarried mothers (%)	28.6	37.6	39.7
Low birth weight births (%)	6.1	5.8	8.2
Pre-term Births (%)	10.0	10.6	12.7
Infant and Child Deaths (2007-2009)	Mat-Su	Alaska	US
Neonatal Infant Mortality (per 1,000 live births)	1.6	3.0	4.4
Post-neonatal Infant Mortality (per 1,000 live births)	3.9	3.3	2.3
Infant Mortality Rate (per 1,000 live births)	5.5	6.2	6.8
Child Deaths per 100,000 population	19.0	25.0	28.6
During Pregnancy (%)			
Received adequate or adequate-plus prenatal care (APNCU Index) (2007-2009)	73.5	58.9	NA
Smoked cigarettes during pregnancy (2007-2009)	14.4	15.5	9.3
Used alcohol during last 3 months of pregnancy (2009-2010)	3.8	6.3	NA
Used marijuana during pregnancy (2009-2010)	2.1	6.7	NA
<i>Data Source: ABVS; ADHSS, Pregnancy Risk Factor Monitoring System (PRAMS); NCHS, National Vital Statistics Reports.</i>			

TABLE 7.2 SUMMARY MEASURES FOR MAT-SU MOTHERS AND YOUNG CHILDREN, (2009-2010)

	Mat-Su Percent	Alaska Percent
Access to Care for Three Year Olds		
Has a health care provider who knows child well	84.1	83.2
Had well-child check-up or physical exam in last year	88.5	84.7
Ever delayed or did not get a vaccine	23.4	25.9
Child has ever been to dentist	52.1	47.4
Behavioral Health of Three Year Olds		
Mother had concerns about child's behavior during last year	5.8	12.8
Mother could not find childcare in past 30 days	5.9	6.5
Child ever experienced a death in immediate family	5.1	7.9
Child ever experienced being away from either parent for more than one month	17.1	22.1
Child ever experienced a change in household members	27.7	31.0
Child ever experienced seeing violence or physical abuse in person	4.6	5.6
Someone read aloud to child yesterday for 30 minutes or more	60.7	62.1
Child watched TV, videos, or DVDs for 2 or more hours yesterday	41.5	44.1

**TABLE 7.2 SUMMARY MEASURES FOR MAT-SU MOTHERS AND YOUNG CHILDREN, (2009-2010)
(CONT.)**

Mothers of Three Year Olds – Behavioral Health and Support	Mat-Su Percent	Alaska Percent
Mother reports symptoms of depression (always, often or sometimes) in past 3 months	25.4	22.6
Social support - mother knows someone who would loan her money	83.1	82.2
Social support - mother knows someone who can help when mother is sick	90.1	91.0
<i>Data Source: ADHSS, Child Understanding Behaviors Survey (CUBS.)</i>		

MAT-SU YOUTH

DEMOGRAPHICS

In 2011, there were 7,345 10-14 year old and 7,056 15-19 year old youth living in Mat-Su. Youth 10-19 years make up 15.7% of the population. In Mat-Su, 14.6% of residents who are under 18 years old live in poverty. This is similar to Alaska (13.2%), but less than the rest of the country (21.4%). In the 2008-2009 school year, 76.4% of high school students graduated within four years. This is similar to the rest of the country and lower than the Healthy People 2020 Goal of 82.4%; however, the graduation percentage for Mat-Su youth increased 10.1% between 2006-2007 and 2008-2009.

NUTRITION AND EXERCISE

Seven out of ten Mat-Su middle and traditional high school students are a healthy weight, similar to high school students in the rest of the United States. In Mat-Su, students at alternative high schools (65.1%) were less likely to be a healthy weight as compared to traditional students (71.7%).¹ Few Mat-Su youth eat five or more servings of fruits and vegetables each day (traditional 17%, alternative 18%). About half of traditional

¹ The Alaska Department of Health and Social Services labeled Mat-Su alternative high schools who participated in the Youth Risk Behavior Survey in 2011 as American Charter Academy, Burchell High School, Mat-Su Day School, and Valley Pathways.

students and only 34.2% of alternative students were physically active for one hour five times per week. Over half of Mat-Su youth had three or more hours of non-school related screen time each school day.

SEXUAL HEALTH

Infants born to non-teenage mothers tend to have better health outcomes. The teen birth rate (34.3 births per 1,000 females aged 15-19 years) in Mat-Su is lower than the rate for the rest of the country (41.5). The majority of middle and traditional high school students are not having sexual intercourse. However, the majority of alternative school students (71.5%) have had sex. Less traditional high school students (38.9%) have ever had sex as compared to U.S. high school students (47.4%). Of those high school students who are sexually active over half (traditional 62%, alternative 52.8%) reported using a condom at their last sexual intercourse.

ALCOHOL AND SUBSTANCE ABUSE

Almost two out of ten traditional high school students and over three out of ten alternative high school students had their first drink of alcohol (more than a few sips) before the age of 13 years. In high school, 15.2 % of traditional students and 35.6% of alternative school students report binge drinking (five or more drinks at one time) in the last month.

About 15% of middle school students report having tried marijuana, while 18.7% of traditional and 43.8% of alternative school students have smoked it in the last month. Almost 43% of traditional and 74.9% of alternative school students have ever used marijuana, cocaine, solvents, heroin, meth, ecstasy, or unprescribed drugs.

In general, a higher percentage of Mat-Su traditional high school students reported that their parents thought it was very wrong for them to use drugs, tobacco, and alcohol as compared to alternative high school students. When asked if their parents thought using the following substances regularly was very harmful, high school students responded as follows: smoking marijuana (traditional 65.7%, alternative 35.8%), drinking alcohol (traditional 52.5%, alternative 39.3%), and smoking cigarettes (traditional 76.1%; alternative 50.4%). Traditional and alternative high school students did not differ greatly in their perceptions of what is seen as being cool. Just over half (traditional 52.3%, alternative 54.7%) felt that there is no or very little chance that drinking alcohol regularly is seen as being cool. Similarly, just over half (traditional 58.8%, alternative 54.4%) felt that there is no or very little chance that smoking marijuana is seen as being cool. Seventy-six percent of traditional students and 62.4% of alternative students felt

that there is no or very little change of smoking cigarettes is seen as being cool.

VIOLENCE

Middle and high school are places where youth may be exposed to peer violence. Close to half of Mat-Su middle school students have ever carried a knife, gun, or club to school; been bullied on school property, or ever been in a physical fight. Almost 24% of Mat-Su traditional and 20% of alternative high school students reported being bullied in the past 12 months on school property. Mat-Su did not achieve the Healthy People Goal of 17.9%. Electronic bullying in the last 12 months was reported by 17.2% of traditional and 20.5% of alternative school students. Twenty-three percent of middle school students reported ever being electronically bullied.

Eleven percent of Mat-Su traditional high school students and almost 15 percent of alternative school students reported experiencing dating violence during the past twelve months in 2011. Eight percent of traditional high school students reported having been forced to have intercourse against their will and over twice as many (17.5%) alternative high school students experienced this type of trauma.

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 learn during that time. The data on Mat-Su high school students reveal that less than half of children participate in some of these practices - talking to parents daily about school (44.2% traditional, 28.2% alternative), having youth volunteer to help others (49.3% traditional, 41.1% alternative) and having youth take part in organized out-of-school activities (49.6% traditional, 35.2% alternative). Other indicators associated with success are that youth have adults other than their parents who they can ask for help (86.2% traditional, 84.5% alternative), that youth feel their teachers are supportive (57.1% traditional, 70.1% alternative), and youth feel that their community supports youth (52.1% traditional, 78.1% alternative).

In 2011, one in five (20.6%) Mat-Su middle school students had ever seriously considered suicide. Fifteen percent of traditional high school students and 20.6% of alternative high school students reported seriously considering suicide in the past 12 months. The percentage of those who actually made a plan to commit suicide was 13% for middle school students and traditional high school students and 15% for alternative high school students. A similar percent of middle school (7.0%) and traditional high school students (7.4%) actually attempted suicide. Almost twice the amount of alternative high school students (12.3%) attempted suicide as compared to traditional school students. Two percent of traditional high and 3.9% of alternative school students reported that they needed medical attention after the attempt.

TABLE 7.3 PHYSICAL HEALTH - MAT-SU YOUTH, 2011

	Middle School Percent	Traditional High School Percent	Alternative High School Percent	U.S. Traditional High School Percent
Healthy Lifestyle				
Healthy weight (not overweight or obese)	69.1	71.7	65.1	71.8
Obese	11.6	11.7	18.0	13.0
Eats 5 fruit/vegetables daily	NA	17.0	18.1	NA
Physically active for 60 minutes 5 or more times /wk.	54.9	48.0	34.2	NA
Watched TV, videos, non-school computer 3 or more hours on average school day	56.1	51.3	54.4	NA
Attended daily physical education class	46.7	7.9	17.4	31.5
Played a sports team during past 12 months	63.5	57.2	25.2	58.4
Sexual Behavior				
Ever had sexual intercourse	12.2	38.9	71.5	47.4
Had sexual intercourse before age 13 years	NA	5.9	13.6	6.2
Of those who had sex, those who used condom	69.9	62.0	52.8	60.2
Teen birth rate per 1,000 females aged 15-19		34.3		41.5
<i>Data Source: ADHSS, YRBS.</i>				

TABLE 7.4 BEHAVIORAL HEALTH AND DEVELOPMENT - MAT-SU YOUTH, 2011

	Middle School Percent	Traditional High School Percent	Alternative High School Percent	U.S. High School Percent
Protective Behaviors				
Parents talked to them daily about school	NA	44.2	28.2	NA
Teachers strongly cared about/encouraged them	NA	57.1	70.1	NA
Would feel comfortable asking adult other than parent for help	NA	86.2	84.5	NA
Spent 1 or more hours volunteering/helping weekly	NA	49.3	41.1	NA
Take part in organized out of school activities 1 or more days per week.	NA	49.6	35.2	NA
Feel community supports youth	NA	52.1	78.1	NA
Violence				
Carried a gun, knife, or club to school in last 30 days	50.7 (ever)	26.0	26.7	16.6
In a physical fight in last 12 months	49.7 (ever)	29.2	43.1	32.8
Experienced dating violence in past 12 months	NA	11.1	14.8	9.4
Forced to have sex when they didn't want to	NA	8.1	17.5	8.0
Bullied on school property in last 12 months	44.8 (ever)	23.6	19.7	20.1
Electronically bullied in last 12 months	22.9 (ever)	17.2	20.5	16.2

TABLE 7.4 BEHAVIORAL HEALTH AND DEVELOPMENT - MAT-SU YOUTH, 2011 (CONT.)

Mental Health	Middle School Percent	Traditional High School Percent	Alternative High School Percent	U.S. High School Percent
Sad or depressed for two weeks in a row in past 12 months	NA	26.9	34.8	28.5
Seriously considered suicide in past 12 months	20.6 (ever)	15.1	20.6	15.8
Attempted suicide in past 12 months	7.0 (ever)	7.4	12.3	7.8
Suicide attempt results in injury that needed treatment by a doctor or nurse	NA	2.0	3.9	2.4
<i>Data Source: ADHSS, YRBS; CDC BRFSS Data and Trends.</i>				

MAT-SU SENIORS

DEMOGRAPHICS

In 2011 in Mat-Su, approximately 8% of the population was over the age of 65 years (7,601). It is anticipated that in 2030 the senior population aged 65-74 years will more than double, while the age 74-84 year cohort will triple.^{xviii} 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 2011, almost all (97.9%) Mat-Su seniors reported having some form of medical insurance and 91% have at least one primary care provider. Only five percent of seniors said that they did not see a doctor in the last year due to cost. Most Mat-Su seniors preferred to get their healthcare information from their family doctor (50%). The next most popular source for information was the Internet (25%). Most seniors who responded to the household survey did not have difficulty signing up for benefit programs, getting home health services, adult day care, transportation, or recreation services. However, when all household survey respondents were asked about the

greatest needs of seniors or elders in the community, transportation was identified as the greatest need. The two other most common needs that were mentioned were more affordable healthcare and more doctors who take Medicare. Similar themes were also mentioned in the community engagement meeting held with seniors (i.e. lack of transportation, lack of affordable dental care, and the need for more doctors who take Medicare). Approximately, 68% of seniors in the households that were surveyed in 2012 reported having a living will and 22% had purchased long-term care insurance. Although 85% of Mat-Su seniors had an annual exam or preventive screening in the last year, only 49% had a flu shot, 65% had a pneumonia immunization, and 60% had a colorectal screening in the past five years.

NUTRITION AND EXERCISE

Only 17% of seniors report eating five fruits or vegetables daily. Sixty-two percent report getting 2.5 hours of moderate exercise and 1.25 hours of vigorous exercise each week – the amount of exercise prescribed in the Healthy People 2020 Goal. Twenty-five percent of seniors report participating in strength training two or more times per week. In 2011, thirty percent of seniors were a healthy weight.

ALCOHOL AND SUBSTANCE ABUSE

Approximately eight percent of seniors report binge drinking which is defined as consuming five or more drinks at a sitting for males and four or more for females. Five percent of seniors consider themselves heavy drinkers and 12% are smokers.

PHYSICAL AND BEHAVIORAL HEALTH

Almost 80% of seniors stated that their health is excellent, very good, or good. Sixty percent stated that they had no poor physical health days in the last month and 82% said they had no poor mental health days. Sixty-seven percent report having high blood pressure, 60% had high cholesterol, and 21% had diabetes.

TABLE 7.5 MAT-SU SENIOR MEASURES, 2011

	Mat-Su Percent	Alaska All Adults Percent	Healthy People Goal Percent
Access to Health Care			
Have medical insurance	97.9	79.9	100
Have at least one primary care	90.9	67.7	-
Did not visit doctor because of cost, last 12 months	4.7	17.4	-
Had flu shot in last 12 months	49.1	32.0	80.0
Had pneumonia shot in last 12 months	65.1	27.7	-
Had colorectal screening in past 5	60.3	65.1 (ever)	70.5
Nutrition and Exercise			
Consumed 5 fruits/vegetables per day	16.9	19.6	19.6
Did strength training 2 or more times per week	25.1	33.3	24.1
Reported 2.5 hours moderate or 1.25 hours vigorous exercise/week	62.2	57.5	47.9
Healthy weight	30	34.4	-

TABLE 7.5 MAT-SU SENIOR MEASURES, 2011 (CONT.)			
Alcohol and Substance Abuse	Mat-Su Percent	Alaska All Adults Percent	Healthy People Goal
Binge drinking	8.1	20.2	24.3
Heavy drinking	5.1	7.3	-
Smoking	12.2	22.6	12.0
Physical and Behavioral Health			
States health is	79.8	91.7	-
Had no poor mental health days	81.7	67.1	-
Had no poor physical health days	60.0	63.4	-
Have diabetes	21.3	7.8	-
Have high blood pressure	67.3	30.1	-
Have high cholesterol	59.2	34.8	13.5
Healthy weight	30	34.4	-
<i>Data Source: ADHSS, BRFSS.</i>			

TABLE 7.6 ACCESS TO SENIOR SERVICES IN MAT-SU, 2012	
Type of Care	Mat-Su Percent
Seniors with difficulty getting help signing up for benefit programs	3
Seniors with difficulty getting home health services, such as personal care attendants or home health nurses	2
Seniors with difficulty getting access to day care programs for adults	2
Seniors with difficulty getting transportation services	2
Seniors needing help with coordinating health care services	5
Seniors with difficulty getting exercise programs and other recreational activities	5
Senior households with a member who have long-term care insurance to cover care expenses	24
Senior households with a member who has written instructions or a living will	68
<i>Data Source: MSHF, HSS.</i>	

TABLE 7.7 WHAT IS THE GREATEST HEALTH-RELATED NEED OF MAT-SU SENIORS?

Greatest Health Need	Mat-Su Percent
Transportation services	13
More affordable healthcare	10
More doctors taking Medicare	6
Home health care	4
Place to socialize	3
Housing options	3
Better coverage	3
Nutrition services	2
Exercise programs	2
Help finding information or services	2
Help with cleaning, cooking, or shopping	1
Case management	1
Emergency response	1
Help signing up for benefits	<1
Day care programs	<1

Data Source: MSHF, HSS. Due to exclusion of "don't know" and "no response" responses rows do not add up to 100 percent.

MAT-SU ALASKA NATIVE PEOPLE

DEMOGRAPHICS

In 2009-2011, the total number of Mat-Su residents who consider themselves Alaska Native and/or American Indian alone or in combination with another race was 9,047. In 2011, 41% of the Alaska Native population was 19 years or younger, 54% were between 20-64 years and five percent were aged 65 years or older. Eighteen percent of the population aged 25 years or older do not have a high school degree, 82% have a high school diploma or equivalent, 34% have an associate's degree or some college, and three percent have a bachelor's degree or higher. Twenty-three percent earn \$25,000 or less and the same percentage earn between \$25,000 and \$49,999. Approximately 25% earn between \$50,000 and \$99,999 and 29% earn \$100,000 or more.

ACCESS TO HEALTH CARE AND OTHER SERVICES

While almost all Alaska Native people in Mat-Su report having medical insurance (94%), only 36% report having a primary care provider. Twelve percent reported that they did not see a doctor in the last 12 months due to cost. The three most common places that Alaska Native people report seeking

information on health is from their family doctor (38%), the Internet (35%) and the hospital (14%).

In 2012, 72% of Alaska Native adults reported that they had a medical exam or preventive screening in the last 12 months. Thirty-eight percent of Alaska Native seniors had a flu shot during June 2009-2010 and 88.3% reported ever receiving the pneumococcal vaccine. In 2012, nine percent of those Alaska Native households who had a member who needed dental care did not receive that care. Ten percent of the households with a member who needed vision care did not receive that care. Six percent of Alaska Native people said that in the past 12 months a member of their household did not know where to go for medical care, 16% were not able to get transportation to a medical appointment, 11% did not get health care because they couldn't afford it, and 20% could not get an appointment at a time that worked for their household. Thirteen percent of Alaska Native households reported a member went without needed medication in the past 12 months. Almost half of households with an Alaska Native elder reported that they have a "living will" that explains the kinds of medical treatment they want at the end of their life.

NUTRITION AND EXERCISE

Approximately 19.3% of Alaska Native adults are a healthy weight. Sixty-six percent of Alaska Native adults in Mat-Su and Anchorage report meeting the exercise level prescribed by the Healthy People 2020 Goal. In 2012, when Alaska Native adults were asked what one change they would make to improve the health of their household in the next year, the two most common answers were to eat healthier (15%) and to get more exercise/recreation (10%). Ninety-six percent of Alaska Native adults said that they agreed that a somewhat or very important role for MSBSD schools is to improve the nutrition

of food made available at school and to make sure students get exercise every day.

PHYSICAL AND BEHAVIORAL HEALTH

Most Alaska Native adults (88.8%) report having excellent, very good, or good health. Almost 68% of adults report having no poor mental health days in the last month and 63% report no poor physical health days in the same time period. Thirty-six percent of adults report smoking. Twenty-two percent of adults report that a member of their household has a chronic disease, such as diabetes.

TABLE 7. 8 DEMOGRAPHICS AND ACCESS TO HEALTH CARE - MAT-SU ALASKA NATIVE PEOPLE

Demographics	Mat-Su Percent
Age, 2011	
0-19 years	41
20-64 years	54
65 years or more	5
Highest education level at 25 years or older, 2007-2011	
Less than high school degree	18
High school diploma or equivalent	45
Some college or Associates degree	34
Bachelor's degree or higher	3
Annual household income, 2011	
Less than \$25,000	23
Between \$25,000 - \$49,999	23
Between \$50,000 - \$74,999	12
Between \$75,000 - \$99,999	13
Between \$100,000 - \$199,999	22
\$200,000 or more	7

TABLE 7. 8 DEMOGRAPHICS AND ACCESS TO HEALTH CARE - MAT-SU ALASKA NATIVE PEOPLE (CONT.)

Access to health care	
Have medical Insurance, 2011	93.8
Have a least one primary care provider, 2011	35.7
Did not see a doctor in last 12 months because of cost, 2011	11.6
Had a medical exam or preventive screening in the past year, 2012	72
Barriers	
Had member of household with a dental issue in last 12 months, but didn't get care, 2012	9
Had a member of household with a vision issue in the last 12 months, but didn't get care, 2012	10
A member of the household could not get transportation to a medical appointment in the last year, 2012	16
A member of the household could not get health care because they could not afford it in the last year, 2012	11
A member of the household could not get an appointment at a time that worked for the household in the last year, 2012	20
A member of the household went without needed medication in the past 12 months, 2012	13
Elder in household has a living will	47
Seniors who received flu vaccine during June 2009 to June 2010	38
Seniors who have ever received pneumococcal vaccine, 2010	88.3
<i>Data sources: ADHSS, BRFSS; Alaska Native Tribal Health Consortium (ANTHC), Alaska Native Epidemiology Center, (EpiCenter); ANTHC, Immunization Registry; MSHF, HHS.</i>	

TABLE 7.9 PHYSICAL AND BEHAVIORAL HEALTH - MAT-SU ALASKA NATIVE PEOPLE

Indicator	Percent
Adults who exercise 2.5 hours moderate or 1.25 hours vigorous/week (Mat-Su and Anchorage), 2007 and 2009	66
Adults who are a healthy weight, 2009 - 2011	19.3
Adults who report excellent, very good, or good health (2011, BRFSS)	88.8
Adults who report no poor mental health days in the last month (2011, BRFSS)	67.9
Adults who report no poor physical health days in the last month (2011, BRFSS)	63
Adults who report smoking, 2011	36.2
Report that a member in their household had a chronic disease such as diabetes, 2012	22
<i>Data sources: ADHSS, BRFSS; Alaska Native Tribal Health Consortium (ANTHC), Alaska Native Epidemiology Center, (EpiCenter); ANTHC, Immunization Registry; MSHF, HHS.</i>	

CHAPTER 8: COMMUNITY MEETING FINDINGS

A series of meetings for the community engagement phase of the Community Health Needs Assessment (CHNA) were held February - April, 2013. During these meetings a variety of stakeholder groups and residents identified the top five health issues and goals for Mat-Su. Key stakeholders included: health and social services professionals; educators (school counselors, nurses, teachers and principals); local and state government officials; business owners and civic leaders; tribal leaders; seniors, youth, and residents from communities throughout the Mat-Su.

The meetings, including an on-line forum, were attended by approximately 526 community residents. A description of the community engagement meeting methodology can be found in the Data and Methods section of this report and information on attendees can be found in Appendix B.

ISSUES + GOALS

During each community meeting participants ranked both health issues and goals for Mat-Su in order of priority. This section describes the responses from participants when they were asked to rank their top five priority issues and top five priority goals. The aggregated responses are included as an additional meeting labeled “MindMixer Virtual Meeting” in the results below.

TOP 5 HEALTH ISSUES

During the community meetings, participants were asked to identify their top five priority community health issues from the following list:

- Access to medical care
- Access to mental health care
- Alcohol and drug abuse
- Cancer
- Child and youth abuse and violence
- Depression and suicide
- Domestic violence and sexual assault
- Overweight and obesity
- Smoking and smokeless tobacco
- Unintentional injury
- Violent crime – homicide, aggravated assault, rape, robbery

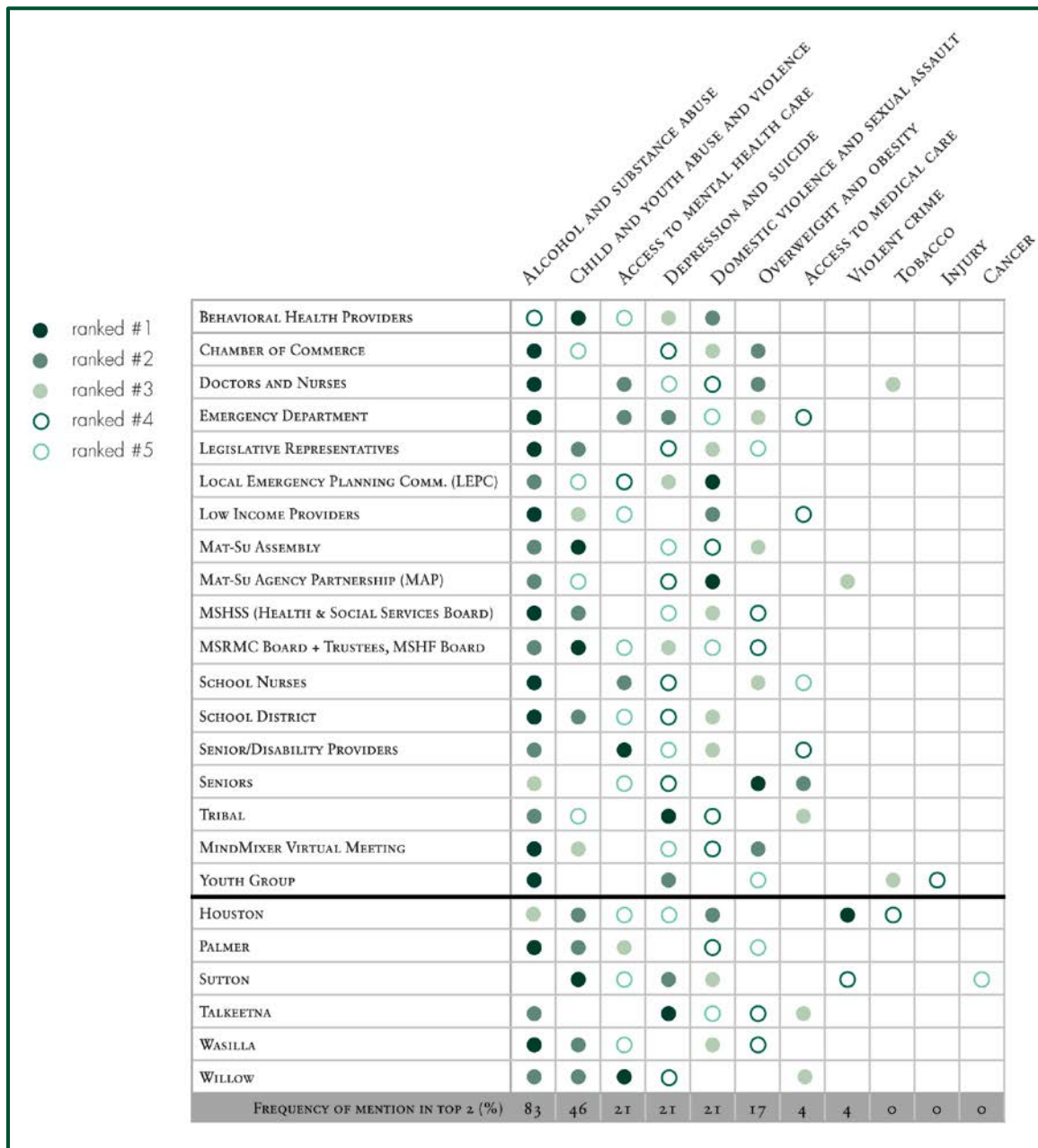


Figure 8.1, displays participant priorities. Results are displayed, in order from left to right, by how frequently (in percentage) an issue was ranked as #1 or #2 by meeting participants.

Alcohol and substance abuse was the overall top priority issue. It was among the top three priorities in all of the stakeholder meetings except two (Behavioral Health Providers and the Sutton community meetings), and was ranked in the top two priorities at 83% of the meetings.

The other four priority issues in the top five selected included: *child and youth abuse and violence* (#2 overall); *access to mental health care*, *depression and suicide*, and *domestic violence and sexual assault* (all tied for #3).

FIGURE 8.1 PRIORITIZATION OF MAT-SU HEALTH ISSUES

Meeting participants never or rarely ranked the health issues of tobacco (3 out of 24 groups), injury (only 1 group), violent crime (3 out of 24 groups), and cancer (only 1 group) as their top five issues. Meeting participants identified several possible reasons for these low priority rankings, such as believing that enough is already being done (tobacco), that the impact is not broad enough to prioritize as a community issue (injury), or that the health issue cannot be tackled locally or in the near future (cancer).

TABLE 8.1 PRIORITIZATION OF #1 HEALTH ISSUE BY TYPE OF GROUP

Issue Listed as Top Priority	Group
Alcohol and substance abuse	<ul style="list-style-type: none"> • Chamber of Commerce • Doctors and Nurses • Emergency Department • Legislative Representatives • Low Income Providers • Mat-Su Health + Social Services Board • School Principals/Administrators • School Nurses • MindMixer Virtual Meeting • Youth • Community Resident Meeting - Palmer • Community Resident Meeting - Wasilla
Child and youth abuse and violence	<ul style="list-style-type: none"> • Behavioral Health Providers • Mat-Su Borough Assembly • MSRMC and MSHF Boards of Directors • Community Resident Meeting – Sutton
Access to mental health care	<ul style="list-style-type: none"> • Senior/Disability Providers • Community Resident Meeting – Willow
Depression and suicide	<ul style="list-style-type: none"> • Tribal • Community Resident Meeting – Talkeetna
Domestic violence and sexual assault	<ul style="list-style-type: none"> • Local Emergency Planning Committee • Mat-Su Agency Partnership
Overweight and obesity	<ul style="list-style-type: none"> • Seniors
Violent crime	<ul style="list-style-type: none"> • Community Resident Meeting – Houston

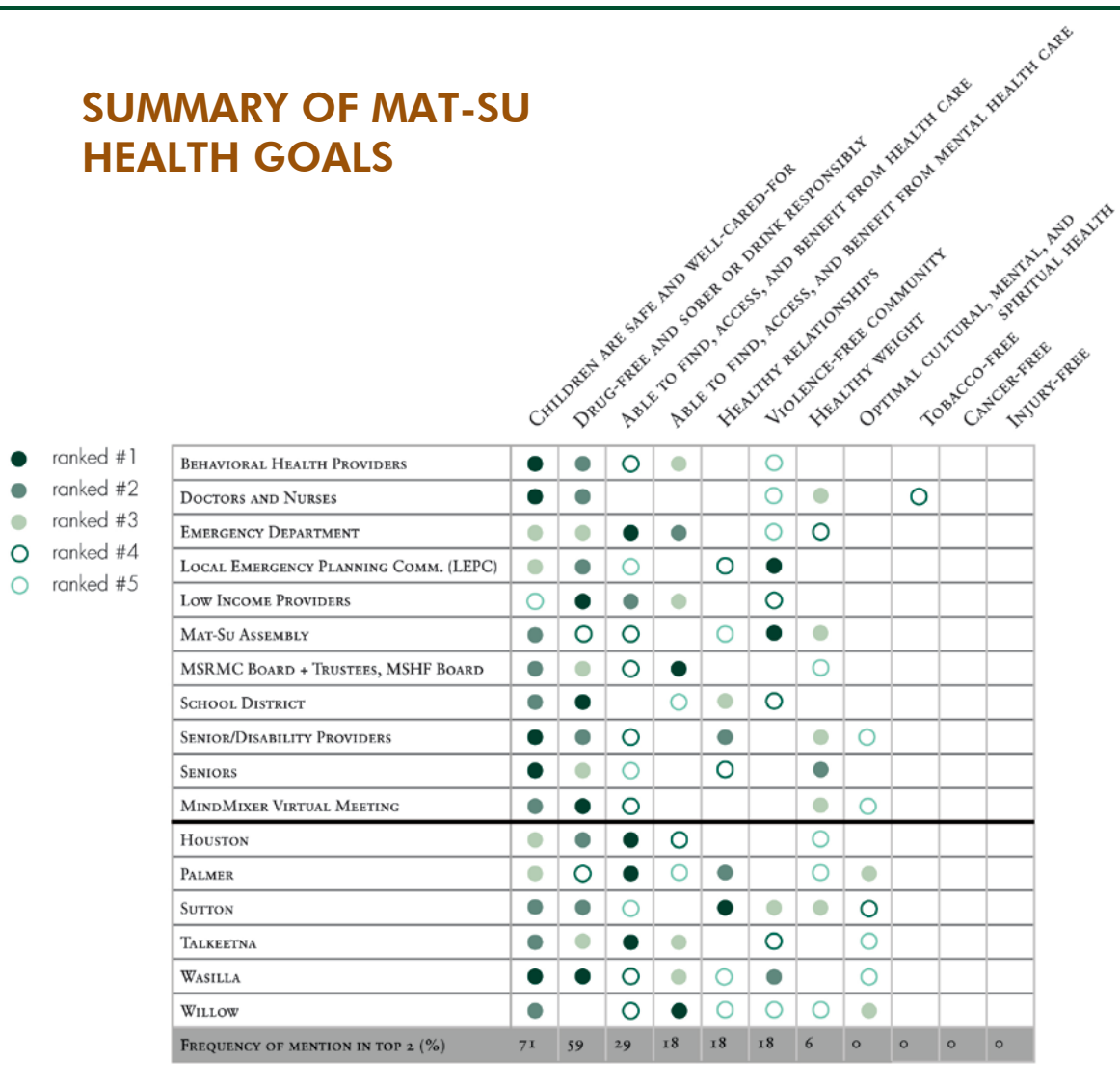
Part way through the series of community meetings, based on input from tribal representatives, it was decided to have participants rank community health goals, as well as issues. At the remaining 17 meetings and on the Mindmixer website the following goals which paralleled the health issues were ranked.

TOP 5 HEALTHY GOALS

All Mat-Su residents...

- are able to find, access and benefit from health care services.
- are able to find, access and benefit from mental health care services.
- are drug-free and sober or drink responsibly.
- are cancer-free.
- who are children are safe and well-cared-for.
- have optimal cultural, mental and spiritual health.
- enjoy healthy relationships.
- are healthy weights.
- are tobacco-free.
- are not at risk for being injured at work, play and home.
- live in a violence-free community.

SUMMARY OF MAT-SU HEALTH GOALS



Meeting participants identified the following top six priority health goals:

1. *Children are safe and well-cared-for* (ranked in top 2 at 71% of total meetings),
2. *All residents are drug-free and sober or drink responsibly* (ranked in top 2 at 59% of total meetings),
3. *All residents have access to health care services* (ranked in top 2 at 29% of total meetings),
- 4-6. Three-way tie between: *all residents have access to mental health care services, all residents have healthy relationships, and all residents live in a violence-free community* (all ranked in Top 2 at 18% of total meetings).

FIGURE 8.2 PRIORITIZATION OF #1 HEALTH GOAL BY TYPE OF GROUP

TABLE 8.2 PRIORITIZATION OF #1 HEALTH GOAL BY TYPE OF GROUP

Goal Listed as Top Priority	Group
All children are safe and well-cared-for	<ul style="list-style-type: none"> • Behavioral Health • Doctors + Nurses • Senior/Disability Providers • Seniors • Community Resident Meeting – Wasilla
All residents are drug-free and sober or drink responsibly	<ul style="list-style-type: none"> • Low Income Providers • School District • MindMixer Virtual Meeting • Community Resident Meeting – Wasilla
All residents are able to find, access and benefit from health care services	<ul style="list-style-type: none"> • Emergency Department • Community Resident Meeting – Houston • Community Resident Meeting – Palmer • Community Resident Meeting – Talkeetna
All residents are able to find, access and benefit from mental health care services	<ul style="list-style-type: none"> • Mat-Su Regional Medical Center and Mat-Su Health Foundation Boards of Directors • Community Resident Meeting – Willow
All residents enjoy healthy relationships	<ul style="list-style-type: none"> • Community Resident Meeting – Sutton
All residents live in a violence-free community	<ul style="list-style-type: none"> • Local Emergency Planning Comm. (LEPC) • Mat-Su Assembly

ANALYSIS

The high prioritization of the issues *alcohol and substance abuse* and *children are safe and well-cared for*, indicates that while participants might be concerned about alcohol and substance abuse for a variety of reasons, one of their primary concerns is the impact that those behaviors have on children.

The second and third priority health goals, *all residents are drug-free and sober or drink responsibly* and *all residents are able to find, access, and benefit from health care*, may indicate that meeting participants would like to improve or expand resources for individuals in the Mat-Su to prevent and to treat substance abuse issues, using the primary care system as a gateway to those services. This theme was echoed in the “Strengths and Strategies” sections, as well. Above, Figure 8-2 shows the ranking of health goals from all groups. Table 8.2 indicates the top priority goal for each stakeholder group.

Similar to the ranking of priority issues, meeting participants never ranked the health goals of *tobacco-free*, *cancer-free*, and *injury-free* among the top three goals. These categories

received very minimal attention from participants. However, doctors and nurses ranked *tobacco-free* as their #4 health goal.

Overall, for both health issues and health goals, meeting participants consistently prioritized as high the well-being of Mat-Su children, a reduction in alcohol and substance abuse, and increased access to both health care and mental health. Also important to meeting participants were the **issues** of *domestic violence and sexual assault*, *depression and suicide*, and *overweight and obesity*. Priority **goals** that correlate with these issues included *healthy relationships* and a *violence-free community*.

While the rankings reveal significant, consistent patterns among stakeholder groups overall, they can also point to localized variations in health priorities. For example, residents from the Sutton communities identified their top issue as *child and youth abuse and violence*, while their top goal was enjoy *healthy relationships*. *Alcohol and substance abuse*, the number one issue overall, was not identified in Sutton top five issues.

Additional outlying data points included:

- Doctors and nurses, Houston residents, and Mat-Su youth identified *tobacco use* in their top five issues. Doctors and nurses identified tobacco-free in their top five goals.
- Houston was the only community that ranked *violent crime* as their top issue.
- The Mat-Su Agency Partnership (MAP) and the Local Emergency Planning Commission (LEPC) both ranked *domestic violence and sexual assault* as their top priority issue. LEPC also ranked *violence-free community* as its top goal.
- Willow was the only community that did not rank *drug free and sober or drink responsibly* as a top five goal.
- Doctors and Nurses did not list *access to healthcare or mental healthcare* as a top five priority goal.
- Sutton/Chickaloon was the only participant group to list *cancer* as a top five priority issue.

STRENGTHS AND STRATEGIES

During each community meeting, the facilitator first defined “strength” and “strategy”, and then asked participants, either as part of a large or small group, to identify community strengths and also strategies to address one or more of the health issues, or to achieve one or more of the health goals. Approximately 300 comments were made regarding strengths and over 350 comments for strategies.

MAT-SU STRENGTHS

Meeting participants were asked “Which Mat-Su strengths will help us address our top five priority health issues and healthy future goals?” A large number of comments indicated that community involvement, caring for others, and a strong faith-based community were primary strengths within the Mat-Su. These comments reveal available resources of strong human and social capital in the community. Below are some comments that describe these sentiments from meeting participants:

“[We have] pride in our community - we are compassionate about our community.”

“[We have] Alaska pride - residents are proud and coordinate to get things done in their community.”

“There is a willingness to help, cooperate, and collaborate in our community.”

“[There is a] sense of community and involvement with large attendance at community gatherings - this creates a large venue for raising awareness.”

“There are good churches and a good faith-based community. This allows us to rely on each other and is an indicator of strong families.”

Meeting participants frequently identified existing programs and activities as community strengths, such as the Lion’s Club, Alcoholics Anonymous, Friends of Mat-Su, and the Free Box, among many others, were identified as positive influences that promote community cohesion and healthy lifestyles. Below are community strengths that were identified by meeting participants:

“Community activities - parades, celebrations, farmers’ markets, health fairs, outdoor recreation, and trails [are community strengths].”

“Good infrastructure for community involvement –active Chambers of Commerce,

community councils, and legislation affected by the council.”

Meeting participants frequently identified the quality of schools and school-related programs as community strengths. Some examples of this feedback are the following quotes:

“Programming in schools that encourage healthy lifestyles (e.g. Healthy Futures program).”

“Strong teacher support in alternative high schools.”

“The School District is a great partner in health and wellness.”

Other strengths that were frequently identified include existing community infrastructure such as area farms, recreation centers, roads, and housing. Many participants stated that the quality of existing healthcare facilities and services is a strength. Finally, a number of participants identified the environment as a critical strength for the community. This included air quality, access to outdoor recreation, and scenic beauty.

STRATEGIES

Meeting participants were asked “Which strategies should we use to address our top five priority health issues and healthy future goals?” More than 350 responses were collected at the community meetings and from the MindMixer virtual meeting.

Meeting participants identified a wide range of strategies - some explicitly related to an issue or goal - while others were broad and less targeted. To obtain the greatest utility from the responses, each statement has been aligned with an issue or goal category. The strategy statements are valuable because they indicate 1) the complexity of the issues and goals, and 2) some of the various methodologies available to make improvements. If a response did not relate to an issue or goal, these have been placed into an “other” category.

A top-ranked issue and goal related to health and well-being of Mat-Su children and youth (this was the top rated health goal and second-most important health issue). According to the participant statements, the leading strategy for achieving goals and resolving issues related to this topic was enhancements to education services. Many participants stated that children within the Mat-Su would benefit from additional education programs that foster healthy decision making (i.e. food choices and recreation) and healthy relationships. Some of these suggestions include:

“Increase early childhood education opportunities.”

“Teach what abuse and violence is in elementary schools so that kids can recognize it and can seek help.”

“Educate medical, behavioral, and education providers on Adverse Childhood Experiences and create a trauma-informed community.”

“Add more counselors and nurses within the schools.”

Meeting participants also gave high priority to alcohol and substance abuse (this was the second-most important health goal and top-rated health issue). This topic received nearly the same amount of strategy statements that safety and well-being of children received, which continues the correlation between the topics that was outlined previously. The most frequent strategies for substance abuse are for additional treatment centers or expanded support services (this includes both preventative support and for those with an existing substance addiction).

Here are some examples of these strategies:

“The Mat-Su could use more substance abuse treatment centers, including a detox center.”

“Improve education regarding parenting and alcohol abuse. This could include home visits by nurses for new patients.”

“Enforce drug testing for employees and encourage employee wellness programs.”

“We need more cultural events that are alcohol-free.”

When tied to the issue/goal categories, the strategy statements most frequently relate to access to healthcare and mental health care. The primary strategy for these topics was better transportation throughout the Mat-Su Borough. Other considerations included more clinics, better information/communication, and more collaboration between agencies. Below are some strategy statements related to these categories:

Overall, the results from the strategy suggestions confirm the trends outlined earlier in the chapter. Meeting participants gave priority to *alcohol and substance abuse, child/youth safety and well-being, and access to medical and mental healthcare*. The access topic likely received more responses (even though it was a lower ranked priority) because it’s a less complex

“Encourage the Mat-Su Borough to extend transportation funds toward buses and public transit (not just roads and trails).”

“Develop transportation from Upper Valley to providers in Wasilla.”

“Shorten cycles to get patients into counseling sooner; typically there is a 60 day wait, especially for youth.”

“Create a phone app about what is available for health care in the Mat-Su Borough.”

“Develop a nurse/family partnership program with expanded services, including home visitation and parenting education.”

“Recruit more psychologists.”

“Develop mental health services in Upper Susitna area of borough and borough-wide, especially for kids.”

issue/goal to solve. Suggesting better transportation, more clinics, or more healthcare professionals are straightforward and apparent strategies. The dearth of responses for the top ranked issues/goals of substance abuse and child/youth safety and well-being may simply indicate the complexities of these

topics and the resources that may be necessary for improvements.

As mentioned above, many of the strategies (about one quarter of the responses) fell into an “other” category. Some of these statements are rather far-reaching and don’t result in a clear strategy for MSHF. For example, some statements recommend improving borough-wide socioeconomic standards or having better political advocacy within the borough/state. A sample of these statements includes:

“Tracking and understanding the changing demographics of Mat-Su due to prison populations and corresponding need for services.”

“Encouraging and advocating for more equitable distribution of funds from the state to Mat-Su.”

“Holding a community strategic planning session; encouraging collaboration between providers, schools, nonprofits, etc.”

“Developing policy and encouraging more evidence-based policies and regulations that cater to residents.”

In summary, there was clear, overwhelming consensus in the borough that the top health issues facing residents related to behavioral health, either the challenge itself such as alcohol

and substance abuse addiction, child abuse and violence, depression and suicide, and domestic violence and sexual assault or how to access services to address the cause and consequences of these issues. The Mat-Su professionals and residents who attended the 23 meetings that were held recognized the many strengths found in the borough and they identified numerous ideas that could contribute to meeting the challenges.

APPENDIX A: DATA SOURCES

DATA SOURCE	TYPE OF DATA	FOR MORE INFORMATION
Alaska Births Defects Registry (ABDR)	Birth defects data	Data provided to MSH. http://www.epi.hss.state.ak.us/mchebi/abdr/default.stm
Alaska Bureau of Vital Statistics (ABVS)	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://dhss.alaska.gov/dph/chronic/pages/cancer/registry.aspx
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://dhss.alaska.gov/dph/InfoCenter/Pages/ia/brfss/maps.aspx
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 provided to MSHF, some data available on-line: http://www.epi.hss.state.ak.us/mchebi/cubs/
Alaska Department of Health and Social Services (ADHSS), Interactive Display of Alaska Chlamydia and Gonorrhea Data	Sexually transmitted disease data	Data available on-line: http://www.epi.alaska.gov/hivstd/std2010/atlas.html
Alaska Department of Health and Social Services (ADHSS), Pregnancy Risk Assessment Monitoring System (PRAMS)	Maternal and child health data	Data provided to MSHF, some data available on-line: http://www.epi.hss.state.ak.us/mchebi/PRAMS/
Alaska Department of Health and Social Services (ADHSS), Youth Risk Factor Survey (YRBS)	Middle and high school health behaviors and attitudes.	Data provided to Mat-Su Health Foundation. http://dhss.alaska.gov/dph/Chronic/Pages/yrbs/yrbsresults.aspx

DATA SOURCE	TYPE OF DATA	FOR MORE INFORMATION
Alaska Department of Labor and Workforce Development (ADOLWD)	Demographic, economic, workforce and labor data	Data available on-line: http://laborstats.alaska.gov/
Alaska Division of Behavioral Health (DBH), <i>Epidemiologic Profile on Substance Use, Abuse and Dependency</i>	Alcohol and substance abuse data	Report available on-line: http://www.epi.hss.state.ak.us/injury/sa/SEOW-2005-2009.pdf
Alaska Immunization Program	Barriers to immunization data	Data provided to MSHF. http://www.epi.hss.state.ak.us/id/immune.stm
Alaska Trauma Registry (ATR)	Injury data	Data provided to MSHF. http://dhss.alaska.gov/dph/Emergency/Pages/trauma/registry.aspx
Alaska Department of Public Safety	Alaska State Trooper crime data	Data provided to Mat-Su Health Foundation. 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 on-line: http://www.cdc.gov/brfss/
Centers of Disease Control and Prevention (CDC), National Program of Cancer Registries	Cancer incidence and mortality data	Data available on-line: http://www.cdc.gov/cancer/npcr/
Centers for Disease Control and Prevention (CDC), National Center for HOV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas	Sexually transmitted disease data	Data available on-line: http://www.cdc.gov/nchhstp/
Centers for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting System (WISQARS)	Injury data	Data available on-line: http://www.cdc.gov/injury/wisqars/index.html

DATA SOURCE	TYPE OF DATA	FOR MORE INFORMATION
Economic Research Service (ERS)	Income inequality	Data available on-line: http://www.ers.usda.gov/data-products.aspx
Mat-Su Coalition on Housing and Homelessness	Number of homeless individuals	Data provided to MSHF. http://www.mschh.org/
Mat-Su Health Foundation (MSHF), 2012 Household Survey (HHS)	Health insurance and health access, attitudes about community services and schools, and other community data	Data available on-line: http://www.healthymatsu.org/health-resources/msb-health-statistics
Matanuska Susitna Borough School District (MSBSD)	Immunization declination rates	Data provided to MSHF. http://www.matsuk12.us/site/default.aspx?PageID=1
Matanuska Susitna Borough School District (MSBSD) and Alaska Department of Health and Social Services	Child healthy weight and obesity and overweight data	Data available on-line: http://dhss.alaska.gov/dph/Chronic/Pages/Obesity/resources.aspx
National Center for Health Statistics (NCHS), National Vital Statistics Reports	Birth and death data	Data available on-line: http://www.cdc.gov/nchs/nvss/about_nvss.htm
Robert Wood Johnson Foundation (RWJF), County Health Rankings	Primary care physician ratio, preventable hospitalization, sexually transmitted disease rates, violent crime rate	Data available on-line: http://www.countyhealthrankings.org/
United Way of Mat-Su	Mat-Su Valley Resource Guide	Report available on-line: http://unitedwaymatsu.org/
US Census, 2010 census	Population demographics and household data, physical disability	Data available on-line: http://www.census.gov/

DATA SOURCE	TYPE OF DATA	FOR MORE INFORMATION
US Census, American Community Survey (ACS)	Population, population, race data, income and poverty	Data available on-line: http://www.census.gov/acs/www/
US Department of Agriculture (USDA), Food Environment Atlas	Free lunch eligible	Data available on-line: http://www.ers.usda.gov/data-products/food-environment-atlas.aspx
US Bureau of Economic Analysis (USBEA)	Economic data	Data available on-line: http://www.bea.gov/itable/index.cfm
US Department of Education (USDE)	Graduation rates	Data available on-line: http://www.ed.gov/rschstat/landing.jhtml
US Department of Justice (USDOJ), Federal Bureau of Investigations (FBI)	Crime data by region	Data available on-line: http://www.fbi.gov/about-us/cjis/ucr/ucr-publications#Crime
US Bureau of Labor Statistics (USBLS)	Unemployment rate data	Data available on-line: http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/violent-crime/violent-crime

APPENDIX B: COMMUNITY MEETING PARTICIPANT DATA

BEHAVIORAL HEALTH PROVIDERS	
APRIL 24, 2013, MAT-SU HEALTH SERVICES (WASILLA)	17 PARTICIPANTS
About half of those attending this meeting were staff from Mat-Su Health Services, which is a local Community Mental Health Center (CMHC) based in Wasilla. There were also representatives from Sunshine Community Health Center, Valley Residential Services, and Set Free Alaska.	
CHAMBER OF COMMERCE	
MARCH 13, 2013, MOOSE LODGE (PALMER)	62 PARTICIPANTS
Most of the attendees at this meeting were members of the Wasilla or Palmer Chambers of Commerce, although there was a representative from the Big Lake Chamber of Commerce, as well.	
DOCTORS AND NURSES	
MARCH 21, 2013, EVANGELO'S RESTAURANT (WASILLA)	35 PARTICIPANTS
This meeting included doctors, nurses, nurse practitioners and a phlebotomist. Continuing medical education (CME) credits were offered to encourage attendance.	
EMERGENCY DEPARTMENT	
APRIL 7, 2013, EVANGELO'S RESTAURANT (WASILLA)	13 PARTICIPANTS
This meeting included doctors, nurses and a social worker.	

LEGISLATIVE REPRESENTATIVES	
FEBRUARY 21, 2013, THE PROSPECTOR HOTEL (JUNEAU)	9 PARTICIPANTS
This lunchtime meeting included four legislators and nine staff aides. Some of the staff chose to abstain from voting.	
LOCAL EMERGENCY PLANNING COMMISSION (LEPC)	
APRIL 17, 2013, STATION 6-1 (WASILLA)	26 PARTICIPANTS
The Mat-Su Health Foundation presented at the LEPC's monthly meeting. Participants at the meeting represented the Mat-Su Borough, Mat-Su Department of Emergency Services, Wasilla Police Department, Chickaloon Village Justice, the National Weather Service, Amateur Radio Emergency Service, the Municipality of Anchorage and Mat-Su Regional Medical Center.	
LOW INCOME RESIDENT PROVIDERS	
MARCH 20, 2013, THE GARRETT BUILDING (WASILLA)	30 PARTICIPANTS
This meeting was held in conjunction with the monthly Mat-Su Vaccine Coalition meeting. The Vaccine Coalition focuses their efforts on low income residents and allowed MSHF to invite additional stakeholders who do not typically come to the meeting. Participants at the meeting represented a broad group of organizations including CCS Head Start, Alaska Center for Resource Families, Mat-Su Project Homeless Connect, Big Brothers Big Sisters of Alaska, Mat-Su Public Health Center, Mat-Su Borough School District, Sunshine Community Health Center, Alaska Division of Public Health, Alaska Family Services, Alaska Job Corps, University of Alaska - Anchorage, Mat-Su Services for Children and Adults, Co-Occurring Disorders Institute and Adventures in Pediatrics.	
MAT-SU BOROUGH ASSEMBLY	
APRIL 25, 2013, MAT-SU SCHOOL DISTRICT ADMIN. OFFICE (PALMER)	6 PARTICIPANTS
This special meeting was arranged with six of the seven Mat-Su Borough Assembly members.	

MAT-SU AGENCY PARTNERSHIP (MAP)	
MARCH 14, 2013, MENARD SPORTS CENTER (WASILLA)	23 PARTICIPANTS
This unique collaboration includes representatives from the health, education, public safety and social service fields. Mat-Su Health Foundation presented at their monthly March meeting.	
MSHSS (HEALTH & SOCIAL SERVICES BOARD)	
FEBRUARY 28, 2013, STATION 6-1 (WASILLA)	15 PARTICIPANTS
This board meets monthly and includes representatives from Alaska Family Services, Mat-Su Health Foundation, Mat-Su Health Services, the Mat-Su Borough, Set Free Alaska, Alaska Assistance Dogs, United Way Mat-Su, Upper Susitna Seniors, Inc., Mat-Su Seniors, Food Pantry of Wasilla and Wasilla Area Seniors, Inc.	
MAT-SU REGIONAL MEDICAL CENTER (MSRMC) BOARD + TRUSTEES, MAT-SU HEALTH FOUNDATION (MSHF) BOARD	
APRIL 27, 2013, SETTLER'S BAY LODGE (PALMER)	27 PARTICIPANTS
This meeting included the full board and trustees for the Mat-Su Regional Medical Center as well as the Mat-Su Health Foundation board.	
MAT-SU BOROUGH SCHOOL NURSES	
FEBRUARY 18, 2013, FINGER LAKE ELEMENTARY SCHOOL (WASILLA)	22 PARTICIPANTS
The Mat-Su Health Foundation presented at a mandatory in-service day meeting to all the nurses at elementary, middle and high school students in the Mat-Su Borough School District.	

MAT-SU BOROUGH SCHOOL DISTRICT – PRINCIPALS AND ADMINISTRATION	
MARCH 28, 2013, MAT-SU SCHOOL DISTRICT ADMIN. OFFICE (PALMER)	53 PARTICIPANTS
This lunchtime meeting brought together almost all of the principals in the Mat-Su Borough School District as well as district administrators, including the MSBSD superintendent.	
SENIOR AND DISABILITY SERVICE PROVIDERS	
MARCH 21, 2013, EVANGELO'S RESTAURANT (WASILLA)	13 PARTICIPANTS
This lunchtime meeting was held with senior and disability service providers from the following organizations: Hope Community Resources, Access Alaska, Alzheimer's Resources of Alaska, Mat-Su Services for Children and Adults, Alaska Home Care, Nataliya's Care Services and Hearts and Hands Adult Day Services.	
SENIORS	
APRIL 25, 2013, WASILLA AREA SENIORS, INC.	23 PARTICIPANTS
This meeting was held following the daily senior lunch at Wasilla Area Seniors, Inc., Seniors from around the borough were invited to join.	
TRIBAL REPRESENTATIVES	
MARCH 14, 2013, VALLEY NATIVE PRIMARY CARE CENTER (WASILLA)	7 PARTICIPANTS
This meeting included representatives from the Chickaloon Community Council, the Knik Tribal Council, Southcentral Foundation and Alaska Native Tribal Health Consortium.	

YOUTH GROUP	
MARCH 6, 2013, EVANGELO'S RESTAURANT (WASILLA)	65 PARTICIPANTS
This meeting brought together Peer Helpers from around the Mat-Su Borough, including both middle and high school students.	
COMMUNITY MEETING - BIG LAKE / HOUSTON / MEADOW LAKES	
APRIL 4, 2013, HOUSTON HIGH SCHOOL	12 PARTICIPANTS
Residents from in and around the communities of Meadow Lakes, Big Lake and Houston, Alaska.	
COMMUNITY MEETING - PALMER	
APRIL 3, 2013, PALMER HIGH SCHOOL	19 PARTICIPANTS
Residents from the City of Palmer, Alaska, and surrounding areas.	
COMMUNITY MEETING - SUTTON / CHICKALOON	
APRIL 10, 2013, SUTTON PUBLIC LIBRARY	10 PARTICIPANTS
Residents from in and around the communities of Sutton and Chickaloon, Alaska.	
COMMUNITY MEETING - UPPER SUSITNA VALLEY / TALKEETNA	
APRIL 1, 2013, UPPER SUSITNA SENIORS, INC.	17 PARTICIPANTS
Residents from in and around the communities of Talkeetna, The "Y," Trapper Creek, Caswell Lakes and the Upper Susitna Valley, Alaska.	

COMMUNITY MEETING - WASILLA	
APRIL 8, 2013, WASILLA HIGH SCHOOL	12 PARTICIPANTS
Residents from the City of Wasilla, Alaska, and surrounding areas.	
COMMUNITY MEETING - WILLOW	
APRIL 11, 2013, WASILLA COMMUNITY CENTER	5 PARTICIPANTS
Residents from in and around the community of Willow, Alaska.	
ONLINE PARTICIPANTS – MIND MIXER VIRTUAL MEETING	
WEB PLATFORM	17 PARTICIPANTS
This “virtual meeting” was developed using Mind Mixer, an interactive webpage. This interactive webpage was modeled after the community meeting format and included a portion of the data presentation, a link to the video and an opportunity for users to weigh in on the top issues and goals. There was also a forum for discussing strengths and strategies.	

APPENDIX C: MAT-SU RESOURCES

MAT-SU RESOURCES FOR LOW INCOME ASSISTANCE

Alaska Family Services: Women Infant and Children (WIC)
1825 Chugach Street, Palmer, AK 99645, (907) 746-6242; 899 W Commercial Drive, Wasilla, AK 99654, (907) 376-4080
Promotes healthy eating and lifestyle habits that last a lifetime.

Alaska Legal Services
634 S. Bailey Street Suite 102, Palmer, AK 99645, (907) 746-4636
Provides free clinics, legal advice and representation to qualified Alaskans on a variety of topic including family law, foreclosures, bankruptcy, consumer protection, and Medicaid/SSI appeals.

American Red Cross
851 E. Westpoint Drive Suite B9, Wasilla, AK 99654, (907) 357-6060
Provides emergency and disaster support, first aid, CPR, and babysitting training.

Big Lake Community Clothing Closet
2955 Big Lake Road, Big Lake, AK 99652, (907) 376-8042
Provides clothing to individuals and/or families in need.

Bishop's Attic II
840 S. Bailey, Palmer, AK 99645, (907) 745-4215
Provides no cost items in cases of disaster.

Blood-N-Fire Ministries of Alaska
7362 W. Parks Hwy #276, Wasilla, AK 99623, (907) 864-0463
Provides emergency food/rent/mortgage and utility assistance.

MAT-SU RESOURCES FOR LOW INCOME ASSISTANCE

Faith Bible Fellowship Food Pantry
14225 W Kluane Rd. Big Lake, AK, (907) 892-6646
Provides food for low-income residents.

Family Promise of Mat-Su
561 W. Nelson, Wasilla, AK 99654, (907)357-6160
Provides shelter, meals, and case management to homeless families.

Growing Spurts
4931 Mayflower Lane, Wasilla, AK 99654, (907) 376-4404
Provides free items on a case-by-case basis for disaster relief.

Family Christian Center
203 W. Dogwood Avenue, Palmer, AK 99645, (907) 373-2617
Provides food as needed.

Food Pantry of Wasilla
501 Bogard Rd, Wasilla, AK 99654, (907) 357-3769
Provides food for low-income families.

Manna Independent Baptist Church
10151 Palmer Wasilla Highway, Palmer, AK 9964, (907)745-3898
Provides food to low-income members.

Mat-Su Senior Services Palmer
1132 S. Chugach St., Palmer, AK 99645, (907)745-5454
Provides "Meals on Wheels" to home-bound seniors and disabled adults.

MAT-SU RESOURCES FOR LOW INCOME ASSISTANCE

Mid-Valley Senior Center
11975 W. Mid-Valley Way, Houston, Alaska 99694, (907) 892-6114
Provides “Meals on Wheels” to home-bound seniors and disabled adults.

My House
P.O. Box 870536, Wasilla, AK 99654, (907)357-6160
Provides emergency shelter for homeless youth.

Palmer Food Bank
221 S. Valley Way, Palmer, AK 99645, (907) 746-3565
Provides food for low-income residents.

Salvation Army
209 W. Evergreen, Palmer, AK 99645, (907) 745-7079
Provides temporary/short-term hotel vouchers.

Sunshine Food Bank
#1 Walstead Road, Mile 4.2, Talkeetna, AK 99676, (907) 892-6492
Provides food for low-income residents.

Upper Susitna Food Pantry
1.5 Petersville Road, Trapper Creek, AK 99683, (907) 733-3358

Upper Susitna Seniors, Inc.
HC 89 Box 592, Willow, AK 99688, (907) 733-6200
Provides “Meals on Wheels” for seniors and home delivered meals for locals who are medically incapacitated.

Wasilla Area Senior Center
1301 Century Circle, Wasilla, AK 99654, (907) 376-3104
Provides lunch to senior citizens.

RESOURCES FOR HEALTH CARE ACCESS

Alaska Center for the Blind and Visually Impaired
3903 Taft Drive, Anchorage, AK 99507, (907) 745-2647
Provides assistance to people who are blind and/or visually impaired in the Mat-Su Valley.

AK Health Reform
<http://www.akhealthreform.org/contact-us/>
Provides factual research, data and analysis regarding the state of health care in Alaska.

Alaska Primary Care Association
903 W Northern Lights Blvd., Suite 200, Anchorage, AK 99503, (907) 929-2722
Provides state-wide technical assistance and training, recruiting and workforce development, and advocacy and legislative affairs.

Chickaloon Village Traditional Council Health and Social Services
PO Box 1105, Chickaloon, AK 99674, (907) 745-0749
Provides a community health clinic, behavioral health services, non-emergent transportation, and an elders outreach program.

Geneva Woods Pharmacy
3674 Country Field, Wasilla, AK 99654, (907) 376-8200
Accepts Medicare, Medicaid, and third party insurance and assists patients who are uninsured or unable to pay.

Valley Native Primary Care Center
Southcentral Foundation
10001 Knik-Goose Bay Rd., Wasilla, AK 99654, (907) 352-6000
Provides medical services for Alaska Native and American Indian people, along with health education, referrals.

Sunshine Community Health Center
Mile 4.4 Talkeetna Spur Rd., Talkeetna, AK 99676, (907) 733-2273
Provides primary care, behavioral health and dental services with a sliding fee schedule.

RESOURCES FOR HEALTH CARE ACCESS

Sunshine Community Health Center

Willow Location, Mile 67 Parks Highway, Willow, AK 99683, (907) 495-4100

Provides health and oral health screening and fluoride treatments, as well minor dental procedures, senior care, and limited laboratory procedures with a sliding fee schedule.

Sertoma – Mat-Su Club

(907) 352-8333

Provides hearing health education, referrals, and free monthly hearing screenings.

Turn-A-Leaf

400 N. Yenlo, Wasilla, AK 99654, (907) 376-5708

Provides access to medical equipment through a loaner program.

Mat-Su Public Health Nursing

3223 E. Palmer-Wasilla Hwy, Ste 3, Wasilla, AK 99654, 352-6600; Satellite clinics in Glennallen, Palmer, Big Lake, Willow, Talkeetna, Trapper Creek and Sutton. Call for times and locations.

Provides sliding fee schedule for immunizations, family planning, postpartum home visits, senior clinics, well-child visits, pregnancy testing, prenatal monitoring, exams, TB screening, HIV prevention and counseling, and health education.

Mat-Su Regional Medical Center

2500 S. Woodworth Loop, Palmer, AK 99645, (907) 861-6000

Provides general medical and surgical care for inpatient, outpatient, emergency room patients, and participates in the Medicare and Medicaid programs.

Mat-Su Veteran's Affairs Community Based Outpatient Clinic

865 N. Seward Meridian Parkway, Suite 105, Wasilla, AK 99654, (907) 631-3100

Provides primary care and mental health care.

HEALTHY WEIGHT RESOURCES

Healthy Futures

PO Box 110201, Anchorage, AK 99511

info@healthyfuturesak.org

Works to empower Alaska's youth to build the habit of daily physical activity through two core programs, the Healthy Futures Activity Log and increasing youth attendance at community recreational events. In addition, Healthy Futures provides youth with access to positive, physically active role models through the literary publication, Healthy Heroes, and classroom events.

Healthy Schools Program

Mat-Su Health Foundation

951 Bogard Road, Suite 218, Wasilla, AK 99654, (907) 352-2894

Provides support to schools by providing them with seed money to implement and sustain a healthier school environment.

Mat-Su Trails and Parks Foundation

PO Box 876781, Wasilla, AK 99687

Strives to develop and maintain a quality trails and park system, which promotes healthy lifestyles, enriches residents' quality of life, and provides economic value by enhancing recreation, tourism, and business opportunities for all.

North America Outdoor Institute

1770 N Pittman Road, Wasilla, AK 99654, (907) 376-2898

Provides education and training for outdoor safety and environmental awareness.

State of Alaska, Obesity Prevention and Control Program

Promotes statewide healthy weight campaigns including Play Everyday Campaign, Healthy Futures Challenge, and coordinates the Alaska Food Policy Council.

UAF Cooperative Extension Service

(907) 745-3360

Provides programming in 4-H and Youth Development; agriculture and horticulture and land resources; health, home and family development; and nutrition education.

CHRONIC AND INFECTIOUS DISEASE

American Cancer Society
(800) 227-2345
Provides cancer information and resources.

American Lung Association
Coordinates the Alaska Asthma Coalition.

Alaska Statewide AIDS Helpline
(800) 478-AIDS
Provides assistance to people living with HIV/AIDS.

Healthy Futures
PO Box 110201, Anchorage, AK 99511-0201
Works to empower Alaska's youth to build the habit of daily physical activity through two core programs, the Healthy Futures Activity Log and increasing youth attendance at community recreational events. In addition, Healthy Futures provides youth with access to positive, physically active role models through the literary publication, Healthy Heroes, and classroom/events.

Mat-Su Public Health Nursing
3223 E. Palmer-Wasilla Hwy, Ste. 3, Wasilla, AK 99654, (907) 352-6600 Fax: 376-3096
Satellite clinics in Glenallen, Palmer, Big Lake, Willow, Talkeetna, Trapper Creek and Sutton.
Sliding fee schedule for immunizations, family planning, pregnancy testing, prenatal monitoring, postpartum home visits, senior clinics, well child exams, TB screening, HIV prevention and counseling, health education, and community assessment.

Mat-Su Regional Medical Center
2500 S. Woodworth Loop, Palmer, AK 99645
Provides general medical and surgical care for inpatient, outpatient, emergency room patients, and participates in the Medicare and Medicaid programs.

CHRONIC AND INFECTIOUS DISEASE

Mat-Su Vaccine Coalition

c/o Mat-Su Public Health Center, 3223 East Palmer-Wasilla Highway, Wasilla, AK 99654-7277, (907) 352-6630

Works to increase the immunization coverage of all Alaskans through positive immunization promotion campaigns and increased public and provider participation in immunization activities

State of Alaska, Obesity Prevention and Control Program

Promotes statewide healthy weight campaigns including Play Everyday Campaign, Healthy Futures Challenge, and coordinates the Alaska Food Policy Council.

MENTAL AND BEHAVIORAL HEALTH SERVICES

Alaska Family Services

1825 S. Chugach St. Palmer, AK 99645, (866) 746-4080

Provides family services including substance abuse assistance and behavioral health.

Alaska Psychiatric Institute (API)

3700 Piper St., Anchorage, AK 99508, (907) 269-7100

Provides mental health services, including in-patient care and vocational education.

Alaska Vocational Counseling Services

8201 N Michaelson Street, Palmer, AK 99645, (907) 745-5066

Provides mental health services including counseling and mental health facilities.

Co-Occurring Disorders Institute, Inc.

7335 E Palmer-Wasilla Hwy, Suite 2C, Wasilla, AK 99654, (907) 745-2634

Provides family support groups and care management.

MENTAL AND BEHAVIORAL HEALTH SERVICES

Daybreak Inc.

263 S. Bonanza, Palmer, AK 99645, (907) 745-6012

Provides case management/service coordination for adults who experience mental illness.

Alpha Counseling and Education

500 N. Main St. Suite B, Wasilla, AK 99564, (907) 373-5595

Provides counseling and mental health services and has a sliding fee scale and/ or accepts Medicaid or Medicare.

Denali Family Services

291 E. Swanson Boulevard, Wasilla, AK 99654, (907) 376-3275

Provides behavioral health services to children with acute mental illness residing outside of psychiatric residential settings.

Mat-Su Health Services

1363 W. Spruce Ave., Wasilla, AK 99654, (907) 376-2411

Provides treatment for mental illness, substance abuse and traumatic brain trauma, runs a 24/7 crisis line, and has a sliding fee scale and/ or accepts Medicaid or Medicare.

Mat-Su Valley Services

3169 St. Mihiel Circle, Wasilla, AK 99654, (907) 357-7519

Provides a therapeutic foster group home program that gives children experiencing low to moderate behavioral or mental health issues a place to live.

Mat-Su Veteran's Affairs Community-Based Outpatient Clinic

865 N. Seward Meridian Parkway, Suite 105, Wasilla, AK 99654, (907) 631-3100 and (866) 323-8648

Provides primary care and mental health care for veterans.

Nugen's Ranch

PO Box 871545, Wasilla, AK 99687, (907) 376-4534

Provides long-term in-patient alcohol and drug addiction treatment.

MENTAL AND BEHAVIORAL HEALTH SERVICES

Presbyterian Hospitality House
1365 E. Parks Highway Wasilla, AK 99654, (907) 357-6445
Provides residential care for youth and emergency shelter for troubled teens.

Providence Behavioral Medicine
2250 S. Woodworth Loop Suite 202, Palmer, AK 99645 and 1700 E. Bogard Road, Wasilla, AK 99654 (907) 761-5800
Provides out-patient mental health services and behavioral medicine.

Recover Alaska
Rasmuson Foundation
301 W. Northern Lights Blvd., Anchorage, AK 99503, (907) 297-2700
A substance abuse initiative focusing on the prevention of substance abuse and improvement of treatment centers in Alaska.

Thrive Mat-Su
(907) 373-5818
A coalition of Mat-Su alcohol and substance abuse providers.

Valley Native Primary Care Center
1001 Knik-Goose Bay Road, Wasilla, AK 99654, (907) 631-7800
Provides primary care and behavioral healthcare.

Veteran's Center
851 E. Westpoint Drive, Wasilla, AK 99654, (907) 376-4318
Provides counseling for combat veterans.

MAT-SU FAMILY AND CHILD SAFETY RESOURCES

AGAPE Foster Care Network

Mile 40 Glenn Highway, Palmer, AK 99645-6619, (907) 863-2144

Provides faith-based foster/adoptive parents support groups, clothing closet open to foster and adoptive families, and community board with available furniture and supplies.

AK Resource Center for Families

(907) 376-4638, 5050 Dunbar Dr., Wasilla, AK 99654

Provides training, referral services, individual support and information to those who are or are interested in becoming foster parents, adoptive parents, relative caretakers or guardians.

Alaska Family Services

1825 S Chugach Street, Palmer, AK , (907) 746-4080

Provides a domestic violence shelter for women over 18 or with children. Also provides family services including substance abuse assistance, behavioral health, and access to healthy food.

Alaska Family Violence Prevention Project

(907) 226-5528, <http://dhss.alaska.gov/dph/Chronic/Pages/InjuryPrevention/akfvpp/default.aspx>

Supports Alaskan healthcare providers in their intentional injury prevention and intervention efforts.

Big Brothers – Big Sisters

1075 Check Street, Suite 209, Wasilla AK 99654, (907) 376-4617

Provide children facing adversity with strong and enduring professionally supported 1-to-1 relationships that change their lives for better.

Children's Place

P.O. Box 871788, Wasilla, AK 99687, (907) 357-5157, (907) 357-5159

Screens, investigates, and provides referral and treatment for child maltreatment.

MAT-SU FAMILY AND CHILD SAFETY RESOURCES

CODI

7335 E. Palmer-Wasilla Highway, Suite 2C, Wasilla, AK 99654, (907) 745-2634

Provides family support groups.

Council on Domestic Violence and Substance Abuse

State of Alaska Department of Public Safety, Council on Domestic Violence & Sexual Assault

P.O. Box 111200, Juneau, AK 99811-1200, (907) 465-4356

Works to ensure that Alaska has a system of statewide crisis intervention services, perpetrator accountability programs, and prevention services.

Mat-Su Domestic Violence Task Force

(907) 746-6273

The Task Force's goals are to increase services to victims, hold offenders accountable, and increase awareness.

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