



# Community Behavioral Health Assessment Report

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## Anchorage Youth & Young Adults

Report Prepared for the **STATE OF ALASKA DIVISION of BEHAVIORAL HEALTH**  
by the **ANCHORAGE COLLABORATIVE COALITIONS**

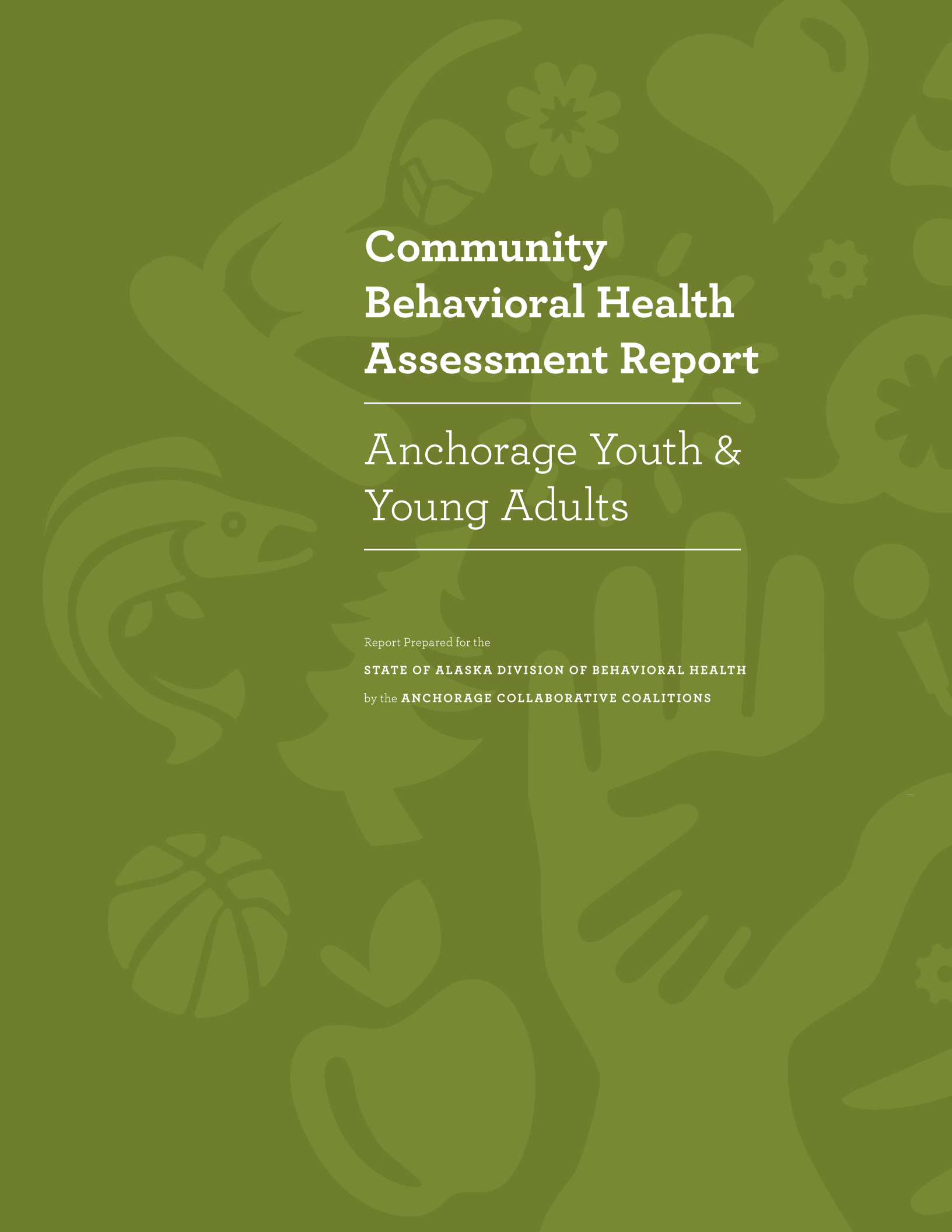


ANCHORAGE  
COLLABORATIVE  
COALITIONS

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*Together creating communities where youth  
and young adults thrive and are resilient*

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# I. INTRODUCTION

## **I. Introduction**

In 2014, The State of Alaska's Department of Health and Social Services, Division of Behavioral Health (DBH) issued Comprehensive Behavioral Health Prevention and Early Intervention Services grants to coalitions across the state of Alaska. Within Anchorage, three coalitions were awarded funding: Anchorage Youth Development Coalition (AYDC), Healthy Voices Healthy Choices with Volunteers of America (HVHC), and Spirit of Youth (SOY). In order to better serve the Anchorage community, the State asked AYDC, HVHC, and SOY to combine resources and work together through the grant implementation process. Together, AYDC, HVHC, and SOY are working as the Anchorage Collaborative Coalitions (ACC).

### **a. Division of Behavioral Health Grant**

The DBH presented grantees with three behavioral health conditions of interest: mental health, substance use, and suicide. Coalitions are to select one of these three behavioral health conditions as their priority area. After conducting a community assessment, coalitions are to identify a priority area and, within that priority area, an intermediate variable or variables based on assessment data. Community assessments such as this are the first step in utilizing the Substance Abuse and Mental Health Services Administration's Strategic Prevention Framework (SPF). Learning more about Anchorage, as well as understanding the prevalence and consequences of mental health, suicide, and substance abuse in Anchorage, allows the ACC to strategically target and address relevant local conditions to be changed and improved. Once intermediate variables have been identified, the coalition is to develop a logic model and plan for addressing the identified variable or variables.

### **i. Strategic Prevention Framework**

The SPF is a prevention model used by community coalitions to improve the behavioral health of their communities. The SPF takes a comprehensive approach to behavioral health and prevention and is rooted in principles of public health and community organizing. Strategies based on the SPF should address both the individual and the environment. The SPF outlines five processes for implementation: 1) Assessment, 2) Capacity Building, 3) Planning, 4) Implementation, and 5) Evaluation. The SPF places Cultural Competency and Sustainability at the core of this process, meaning that at each step of the SPF, coalitions should work to ensure their actions demonstrate cultural competence and that the work being done is sustainable.

Figure 1 illustrates the SPF model. To ensure that the ACC focused their efforts around the SPF, the DBH provided the coalition with checklists to measure the ACC's fidelity to the model. This document primarily addresses the Assessment process of the SPF, but also includes some information about the coalition's efforts in regard to Capacity Building.

**Figure 1. Strategic Prevention Model**

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*Note.* Image retrieved from Substance Abuse and Mental Health Services Administration. (n.d.). *Programs & Campaigns: Strategic Prevention Framework*. Retrieved January 2016, 2016, from SAMHSA: <http://www.samhsa.gov/spf>

## **b. Anchorage Collaborative Coalitions**

Each of the three ACC coalitions (AYDC, HVHC, and SOY) has a youth focus and, as such, the work of the ACC is focused on youth in Anchorage. The ACC defines youth to include youth and young adults ages 12-24. For the purposes of the Assessment, the ACC considered data for youth ages 9-24. The ACC is comprised of the membership from each of the three coalitions. In order to complete the Assessment step of the SPF, the ACC assembled the Community Behavioral Health Assessment (CBHA) Team. This team is comprised of the ACC Executive Committee, ACC Assessment Workgroup, and the University of Alaska Anchorage (UAA) Assessment Team, all of which are further described in this section. A list of individuals involved and their organization affiliation can be found in Appendix A.

### **i. ACC Executive Committee**

The ACC Executive Committee is comprised of director-level representatives from AYDC, HVHC, and SOY, as well as the Alaska Injury Prevention Center and Volunteers of America Alaska. AYDC is a program and coalition of the Alaska Injury Prevention Center, and HVHC is a coalition within Volunteers of America Alaska. Tom Begich of CW Communications was contracted to serve as the facilitator for the ACC Executive Committee, and he retained Sarah Sledge to serve as the group's project manager.

### **ii. ACC Assessment Workgroup**

The Community Behavioral Health Assessment (CBHA) Team was comprised of the UAA Assessment Team, the ACC Executive Committee, and the ACC's own Assessment



Workgroup. The ACC Assessment Workgroup is comprised of assessment-minded coalition team members and acts as an advisory committee to the ACC Executive Committee. This workgroup met eight times with at least 22 organizations represented.

### iii. UAA Assessment Team

In November 2014, the ACC issued a request for proposal for a contractor to conduct an assessment to evaluate behavioral health indicators and related demographic, social, economic, and environmental factors pertaining to youth and young adults aged 9-24 in Anchorage, Alaska. After a thoughtful review process, the ACC selected the UAA Center for Human Development (CHD) and a team of UAA researchers to work collaboratively with the ACC on a community assessment. Members of the UAA Assessment Team included researchers at CHD as well as additional university researchers from the Center for Behavioral Health Research and Services, the Department of Health Sciences, and the Justice Center. The UAA Assessment Team began their work in January 2015. The UAA Assessment Team met bimonthly throughout their contract a total of 22 times.

### c. Anchorage Community<sup>1</sup>

All three ACC coalitions are based in Anchorage, Alaska. The Municipality of Anchorage, Alaska includes the communities of Anchorage, Chugiak, Eagle River, Joint Base Elmendorf-Richardson, Girdwood, and communities along Turnagain Arm. It is estimated that in 2014, 301,010 people lived in Anchorage (United States Census Bureau, 2015). It is the largest community in the state, with just over 40% of Alaska's population. Located in Southcentral Alaska, the Anchorage metropolitan area sits in a bowl with Cook Inlet to the west, and Chugach State Park to the east. The Municipality is just over 1,700 square miles, with an average of 171.2 persons per square mile. Warmed by Pacific currents, the city has a mild northern climate (Anchorage Convention & Visitors Bureau, n.d.). The average temperature is 37°F, with an average annual high of 43.7°F, and average low of 30.3°F (US Climate Data, n.d.).

The Dena'ina Athabaskans are indigenous peoples of the Cook Inlet Region where Anchorage is situated. As other Alaska Native groups, the Dena'ina Athabaskan population has decreased by more than half of the pre-1700s numbers. Colonization of southern Alaska began with Russian explorers in the late 1700s, and English explorer Captain James Cook is often cited as one of the early non-Native outsiders to colonize the area in 1778. In 1867, the United States paid Russia \$7.2 million for settling rights. Alaska gained statehood in 1959 (Cook Inlet Historical Society, n.d.). Anchorage began to emerge around 1914 out of a tent city built in Ship Creek Landing, a port for the Alaska Railroad. Anchorage was incorporated on November 23, 1920. In the 1920s, the city's economy was centered on the railroad (Municipality of Anchorage, 2015a).

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<sup>1</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

Growth of Anchorage and the larger Alaska economy continued between 1930-1950 as military presence grew and air transportation became increasingly important. Anchorage International Airport opened in 1951, while Elmendorf Air Force Base and Fort Richardson Army Base, now known as Joint Base Elmendorf-Richardson, were constructed in the 1940s. The 1968 discovery of oil in Prudhoe Bay created an economic boom for Alaska, and the oil industry continues to be a major part of the economy to this day (Municipality of Anchorage, 2015a). In 1975, Anchorage merged with Eagle River, Girdwood, Glen Alps, and several other communities. The merger expanded the city, known officially as the Municipality of Anchorage.

According to 2013 estimates based on 2010 data from the United States Census Bureau, the racial/ethnic makeup of Anchorage is approximately as follows:

- 66.6% White
- 8.9% Asian
- 8.6% Hispanic or Latino
- 8.1% American Indian and Alaska Native
- 7.8% Two or more races
- 6.3% Black or African American
- 2.3% Native Hawaiian and Other Pacific Islander

Anchorage is home to more Alaska Natives than any other city in the United States (Hunsinger & Sandberg, 2013). In 2010, 26% of the state's Alaska Native population lived in Anchorage (Williams, 2010). Today, parts of Anchorage are more than 50% people of color. As reported in the Alaska Dispatch News, Anchorage's Mountain View census area was recently identified as the most racially diverse census tract in the entire United States (McCoy, 2013). The Anchorage population also includes 5,500 military and civilian personnel from the military Joint Base Elmendorf-Richardson (Joint Base Elmendorf-Richardson, n.d.).

The median Anchorage household income between 2009-2013 was \$77,454 (State of Alaska Department of Commerce, Community, and Economic Development, 2016.). An estimated 7.9% of people were recorded as living below poverty level, with 32,947 people 125% below poverty level. Approximately 9.4% of Anchorage residents were not United States citizens at birth.

In 2010, there were an estimated 143,617 women and girls, and 148,209 men and boys in Anchorage. The average Anchorage household size in 2010 was 2.64 persons per household. Of the 107,332 Anchorage households in 2010, 36,788 were non-family households; 51,992 married couple households; and 18,552 remaining family households. In 2011, there were 40,575 family households and 9,910 single mother households containing people less than 18 years of age in Anchorage (Anchorage Economic Development Corporation [AEDC], 2013).

Table 1 provides a brief profile of the Anchorage youth populations by age. At the time of the 2010 census, there were over 65,000 youth between ages 10 and 24 living in Anchorage.

**Table 1. Anchorage Youth Population by Age, 2010 Census**

<b>Ages</b>	<b>Number of Youth</b>
20-24	24,379
15-19	21,187
10-14	20,443
5-9	20,618
4 and under	21,961

*Note.* Adapted from the State of Alaska Department of Labor and Workforce Development, Research and Analysis. (2016). *Demographic Profile for Anchorage Municipality*. Retrieved from: [http://live.laborstats.alaska.gov/cen/dppdfs/dem\\_profile\\_52.pdf](http://live.laborstats.alaska.gov/cen/dppdfs/dem_profile_52.pdf)

Between October 1, 2013 and September 30, 2014 there were 7,506 people recorded as homeless in Anchorage (Alaska Coalition on Housing and Homelessness, 2014). This includes families and individuals in emergency shelters, transitional housing, and permanent supportive housing. In the same timeframe, 987 children were represented under the same categories. This does not include people using, “other programs whose primary mission is to provide services to victims of domestic violence, dating violence, sexual assault or stalking,” such as rape crisis centers or battered women’s shelters (Alaska Coalition on Housing and Homelessness, 2014).

As of 2012, 15,843 Alaska youth between 6 and 21 years old were being provided services as mandated by the Individuals with Disabilities Education Act (Mizrahi, 2015). In 2011, 7.9% of Alaskans between the ages of 18 and 64 years old reported a work limitation, or disability. This percentage translated to about 35,000 civilian, non-institutionalized adult Alaskans with disabilities (Cornell University, 2013). According to 2014 counts compiled in the Annual Disability Statistics Compendium, 21% of Alaska adults ( $n=115,613$ ) living in the community have disabilities (Institute on Disability, 2014). Data for prevalence of various disabilities among Municipality of Anchorage youth or Alaska in general were not found.

Anchorage School District (ASD) has more than 48,500 students, and more than 130 schools and programs (Anchorage School District [ASD], 2015). As of 2014, students of color made up more than 50% of total enrollment (ASD, 2015); the following shows the racial/ethnic makeup of the ASD student population:

- 45% White
- 14% Two or more races
- 11% Hispanic
- 11% Asian
- 9% Alaska Native or American Indian
- 6% Black
- 5% Native Hawaiian or other Pacific Islander

High schools in Anchorage are some of the most diverse in the nation (Allen-Young, 2014). As of fall of 2014, there were 99 different languages, including English, spoken by youth in ASD. Students speaking languages other than English made up 20% of the total student

population (ASD, 2015). According to ASD, the following are the most common languages spoken by these groups, and the total number of student speakers:

- Spanish: 2,127
- Hmong: 1,576
- Samoan: 1,409
- Filipino: 1,363
- Yup'ik: 372

Data from Anchorage Economic Development Corporation indicates the five largest industries in Anchorage in 2011 were as follows:

- Trade, transportation, or utilities
- Education and health services
- Professional and business services
- Leisure and Hospitality
- Local, state, and federal government (AEDC, 2012)

As of 2011, the Anchorage labor force was estimated at 157,210 persons, with 147,604 people employed (AEDC, 2012). Table 2 shows the top ten occupations in Anchorage as of 2012.

**Table 2. Top Ten Anchorage Occupations**

<b>Occupations</b>	<b>Number of Workers</b>	<b>Female</b>	<b>Male</b>
Retail Salespersons	5,087	2,831	2,256
Cashiers	3,290	2,066	1,223
Office and Administrative Support Workers, All Other	2,864	2,238	626
Combined Food Preparation and Serving Workers, Including Fast Food	2,627	1,513	1,111
Office Clerks, General	2,544	1,930	614
Personal Care Aides	2,256	1,711	542
Registered Nurses	2,233	2,011	221
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,014	688	1,323
Bookkeeping, Accounting, and Auditing Clerks	1,869	1,622	247
General and Operations Managers	1,114	677	1,137

*Note.* Data retrieved from the State of Alaska Department of Labor and Work Force Development, Research and Analysis: Alaska Local and Regional Information, Anchorage Municipality; accessed 4/6/15;

<http://live.laborstats.alaska.gov/alari/details.cfm?yr=2012&dst=01&dst=03&dst=04&r=1&b=3&p=15#ds03>

In 2013, housing was the top item of expenditure for Anchorage residents. Average distribution of expenditures included 40.6% housing; 16.9% transportation; 15.5% food and beverages; 6.6% medical care; 6.7% recreation; 5.7% education and communication; 5%



clothing; and 3.1% other goods and services (Fried, 2014).

Public highways connect Anchorage to a statewide system, as well as to the Lower 48 (State of Alaska, Department of Commerce, Community, and Economic Development, 2015). The city has a public transportation system with 14 routes, including commuter routes, with almost 1,100 stops, and wheelchair-accessible buses. Youth can ride for free on Thursdays during the summer (Municipality of Anchorage, Transit, 2015a). Anchorage also has a paratransit system called AnchorRIDES, which provides transportation to people with disabilities, senior citizens, recipients of Medicaid Home and Community Based Waivers, youth with disabilities transitioning out of public school services, and homeless students, among others (Municipality of Anchorage, Transit, 2015b). The Municipality also supports carpool and vanpool Share-A-Ride programs (Municipality of Anchorage, Transit, 2015c).

Anchorage is ranked the fourth highest in the nation for health care costs, preceded by three other Alaska cities: Fairbanks, Juneau, and Kodiak, respectively (Alaska Dispatch News, 2015). Anchorage has four major hospitals, and a wide range of behavioral and mental health services available. The National Alliance on Mental Illness Anchorage lists 15 community mental health service providers in the Anchorage metro area (National Alliance on Mental Illness Anchorage, 2015). The Anchorage Neighborhood Health Clinic serves uninsured and low-income individuals and families and provided \$7.8 million in services to almost 14,500 people in 2013 (Anchorage Neighborhood Health Center, 2014). The Alaska children's health insurance program Denali KidCare pays for healthcare for children and teens through age 18 (State of Alaska Department of Health and Social Services, Division of Health Care Services, 2016).

A query of the North American Industry Classification System shows there were 199 religious organizations employing 1,373 people in 2012 in the Anchorage metropolitan area (United States Census Bureau, 2015). As of April 2015, The State of Alaska's Department of Commerce, Community, and Economic Development contained records for a total of 85 Religious Organizations operating with an active business license in Anchorage, Eagle River, Chugiak, and Joint Base Elmendorf-Richardson. The Interfaith Council of Anchorage's members meet monthly to network, engage in dialogue, and address areas of need in the Anchorage community. Interfaith Council of Anchorage members include representatives from the Jewish, Buddhist, Catholic, Protestant, Religious Science, and Islamic faiths (Interfaith Council of Anchorage, n.d.).

There are 38 community councils representing Anchorage's neighborhoods that serve as advisories to the Anchorage Assembly (Municipality of Anchorage, Assembly, 2015). The community councils are private, non-profit associations comprised of volunteer citizens (e.g., property owners, business managers, and residents) within set geographical neighborhoods designated by the Assembly (Federation of Community Councils, 2015).

The Municipality of Anchorage lists 34 departments, divisions, and offices, including the Department of Health and Human Services, Office of Emergency Management, Fire Department, Police Department, Parks and Recreation Department, Municipal Light and

Power, Library, Anchorage Museum at Rasmuson Center, Solid Waste Services, Port of Anchorage, and Public Transportation, among others (Municipality of Anchorage, 2015b). As of 2013, a total of 344 police officers were fulltime law enforcement employees in Anchorage (The Federal Bureau of Investigation Uniform Crime Reports, 2013). The Anchorage Police Department is the largest police department in the state of Alaska. It maintains a Crisis Intervention Team of police officers who are educated on mental illness, suicide and crisis interventions, active listening, and de-escalation techniques so that they may respond to calls for persons with mental illness with empathy and respect. More than 90 officers have become APD Crisis Intervention Team members since the program's inception in 2011 (Municipality of Anchorage, Police Department, 2015).

Anchorage's court system is comprised of the Anchorage District Court, Anchorage Trial Courts, and the Anchorage Superior Court (Alaska Court System, 2015). In addition to the traditional court system, the Anchorage Youth Court "provides the opportunity for youth in grades 7 through 12 who are accused of breaking the law to be judged by their peers. It is a court in which the roles of attorneys, judges, bailiffs, clerks, and jurors are filled by youth" (Anchorage Youth Court, 2015). Anchorage Youth Court allows youth the opportunity to resolve their legal issues without creating a formal criminal record. Defendants are typically first time offenders and are referred to the Anchorage Youth Court through McLaughlin Youth Center's Juvenile Probation Office. There are eight youth facilities operated by the State of Alaska's Division of Juvenile Justice. Anchorage's youth facility, McLaughlin Youth Center, has the capacity to detain or provide treatment for 135 youth (State of Alaska Department of Health and Social Services, Division of Juvenile Justice, 2015).

Within the Municipality of Anchorage, there are nearly 11,000 acres of municipal parkland, including 223 parks with 82 playgrounds. There are over 250 miles of trails and greenbelts spanning Anchorage, of which 132 miles are paved. The parks, trails, and greenbelts in Anchorage are operated and maintained by the Anchorage Parks and Recreation Department, which is also responsible for 110 athletic fields, five pools, and 11 recreation facilities. In partnership with the Anchorage Park Foundation, the Anchorage Parks and Recreation Department offers a Youth Employment in Parks program that hires Anchorage teens to complete park improvement projects each summer (Municipality of Anchorage, Parks and Recreation, 2015).

In addition to the municipal parks and trails, the Chugach State Park begins just seven miles east of downtown Anchorage. According to the State of Alaska Division of Parks and Outdoor Recreation, "the park contains approximately 495,000 acres of land and is one of the four largest state parks in the United States" (2015). The Chugach State Park boasts 280 miles of trail and provides opportunities for off-road vehicle use, biking, boating, camping, hiking, snow machine use, and cross-country and backcountry skiing (Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation, 2015).

Anchorage offers year-round access to innumerable outdoor and urban activities. The Anchorage Convention and Visitors Bureau provides an extensive list of summer and winter

outdoor sporting opportunities; arts, culture, and entertainment sites and events; dining sites; and shopping locales (Anchorage Convention & Visitors Bureau, 2015).

Within Anchorage there are numerous sites that provide opportunities for recreation. Notable sites include:

### **Venues**

- Alaska Airlines Center
- Alaska Center for the Performing Arts
- Dena'ina Center
- Egan Center
- Mulcahy Stadium
- Sullivan Arena
- Wendy Williamson Auditorium

### **Arts, Sciences, and Culture Centers**

- Alaska Aviation Museum
- Alaska Botanical Garden
- Alaska Museum of Science and Nature
- Alaska Native Heritage Center
- Alaska Wildlife Conservation Center
- Alaska Zoo
- Anchorage Museum at Rasmuson Center

### **Outdoor Spaces**

- Alyeska Ski Resort
- Anchorage Town Square
- Cuddy Family Midtown Park
- Delaney Park Strip
- Hilltop Ski Area
- Kincaid Park
- Chugach State Park

Two prominent resources connecting youth with recreational and other opportunities include Que Pasa? Anchorage and Anchorage Youth Central. Que Pasa? Anchorage maintains a calendar of events for teens to find local events and opportunities. The organization also maintains a Facebook page that provides updates on recreational opportunities for Anchorage youth (Que Pasa? Anchorage, 2015). In addition, Anchorage Youth Central provides youth with a list of categorized resources to connect with local organizations for volunteer and recreational opportunities, as well as services (Anchorage Youth Central, 2015).

## II. METHODS





## II. Methods

The Assessment was conducted in two major phases. In the first phase, the CBHA Team focused on identifying, accessing, analyzing, and summarizing existing data regarding the behavioral health of Anchorage youth and young adults from local, state, and national sources. At the conclusion of the first phase, the ACC selected its priority issue, potential intermediate variables, and identified additional data needs. During the second phase of the assessment, the CBHA Team collected new data to address knowledge gaps left by the existing data analysis. The new data enabled the ACC to select the intermediate variable(s) with the strongest relationship to the selected priority issue amongst Anchorage youth. Each phase is described more fully below.

In addition to the work done in Phase One and Phase Two of the Assessment step of the SPF, Clare Ross of Ross Strategies conducted a review of prevention resources available in Anchorage. Additionally, the ACC Executive Committee coordinated an evaluation of the Anchorage community's ability to address the selected intermediate variables and priority issue to assess community readiness.

### a. Phase One

For each behavioral health condition of interest, the UAA Assessment Team assembled existing data to provide the coalition with a rich understanding of mental health, substance use, and suicide in Anchorage. The UAA Assessment Team collected trend data where applicable, compared local data to state and national data when possible, and identified multiple data sources for each priority issue. The UAA Assessment Team also conducted a literature review to identify consequences of each behavioral health condition of interest

### i. Existing Data

Existing data is data that has already been collected. For each of the three behavioral health conditions of interest the CBHA Team assembled data from existing datasets. These datasets included community level data to establish the size, trends, and demographic differences for mental health, substance use, and suicide. When available, data was also compiled on the national and state levels so community data could be compared.

### *Behavioral Health Conditions*

With guidance from the ACC Assessment Workgroup, the CBHA Team ultimately identified eight existing datasets that provided information on the behavioral health conditions of mental health, substance use, or suicide for Anchorage youth. Several datasets included data relevant to all three behavioral health issues of interest. The existing analysis included data from:

- State of Alaska Bureau of Vital Statistics (BVS)
- State of Alaska Department of Education and Early Development (ADEED)
- State of Alaska, Alaska Trauma Registry (ATR)
- State of Alaska, Alaska Behavioral Risk Factor Surveillance System (BRFSS)

- Centers for Disease Control and Prevention Youth Risk Behavior Survey (YRBS)
- Association of Alaska School Boards School Climate and Connectedness Survey (SCCS)
- American College Health Association National College Health Assessment (NCHA)
- US Department of Health and Human Services National Survey on Drug Use and Health (NSDUH)
- Centers for Disease Control and Prevention Pregnancy Risk Assessment Monitoring System (PRAMS)

### *Intermediate Variables*

In addition to identifying and gathering existing data on the priority areas, the CBHA Team also began collecting information on potential intermediate variables of interest. Intermediate variables are variables that theoretically precede or lead to a particular outcome or set of outcomes, whether they are behaviors or health conditions (Heath, et al., 2015). Intermediate variables that lead to risk behavior and/or poor health outcomes are called risk factors, while variables that inhibit one from engaging in risk behavior or prevent one from having poor health outcomes are considered protective factors. Members of the ACC, the ACC Assessment Workgroup, and the ACC Executive Committee brainstormed potential intermediate variables of interest for the UAA Assessment Team to explore. In addition, the CBHA Team identified potential intermediate variables of interest from a list contained in a report on preventing underage drinking created by the DBH (Alaska Division of Behavioral Health, 2012). Based on the ACC's brainstorming and the knowledge from the DBH, the UAA Assessment Team compiled existing data for intermediate variables for mental health, substance use, and suicide.

Data on intermediate variables was collected from the seven sources listed below.

- Alaska Department of Education and Early Development (ADEED)
- Pregnancy Risk Monitoring System (PRAMS)
- National College Health Assessment (NCHA)
- Behavioral Risk Factor Surveillance System (BRFSS)
- Anchorage School District's (ASD) Youth Risk Behavior Survey (YRBS)
- State of Alaska Office of Children's Services (OCS)
- Anchorage School District's (ASD) School Climate and Connectedness Survey (SCCS)

Data was collected for intermediate variables related to education, housing, domestic violence, childhood trauma, substance use, parent involvement, school environment, volunteer and organized activities, physical activity, safety, violence, abuse, meaningful adults, community connection, feeling alone, and bullying.

For each existing data source, the UAA Assessment Team scored data quality using the Data Indicator Quality Scoring scale designed for that purpose (Hull-Jilly & Casto, 2011). The UAA Assessment Team scored the validity, consistency, and sensitivity of each data

set. Definitions for validity, consistency, and sensitivity in the context of the scoring are stated below:

- Validity: the indicator accurately measures the specific construct and yields a true snapshot of the phenomenon at the time of the assessment.
- Consistency: the method or means of collecting and organizing data should be relatively unchanged over time.
- Sensitivity: the measure must be sufficiently sensitive to detect change over time.

Scores for each item ranged from 0 to 2, where 0=absence of desired quality; 1=lack of quality; 2=high level of quality (Hull-Jilly & Casto, 2011). Table 3 shows the scores given to each data source. The ACC Executive Committee and ACC Assessment Workgroup used the results of this scoring process to assess the quality of each data set.

**Table 3. Validity, Consistency, and Sensitivity of Existing Data Sources**

<b>Data Source</b>	<b>Validity</b>	<b>Consistency</b>	<b>Sensitivity</b>
Alaska Department of Education and Early Development	2	2	1
Alaska Trauma Registry	2	1	2
Behavioral Risk Factor Surveillance System	2	2	1
Bureau of Vital Statistics	2	2	1
National College Health Assessment	1	2	1
National Survey on Drug Use and Health	2	1	1
Alaska Office of Children's Services	1	1	1
Pregnancy Risk Assessment Monitoring System	2	2	1
School Climate and Connectedness Survey	2	2	1
ASD Youth Risk Behavior Survey	2	2	2

*Note.* Data quality scored by the UAA Assessment Team using a scale created by Hull-Jilly & Casto (2011).

More information about each existing data sources can be found in Appendix B.

## **ii. Identification of Priority Issue**

After the UAA Assessment Team compiled existing data on mental health, substance use, suicide, and key intermediate variables, they shared their data with the ACC Executive Committee and ACC Assessment Workgroup as a Microsoft Excel workbook containing 76 sheets of graphs and tables. The UAA Team also created a series of infographics based on key findings from the existing data (Heath et al., 2015). The ACC Executive Committee and ACC Assessment Workgroup reviewed the data and provided feedback. The input from the ACC was used by the UAA Assessment Team to guide strategies for sharing the results of their findings with the ACC and community as a whole. The selection of the priority issue and potential intermediate variables of interest were supported by the data and the will of the community. More information about the selection of the priority issue is provided in the Findings and Data Decisions section of this report.

### *Community Engagement*

From the onset of the contract, the ACC Executive Committee worked with the UAA Assessment Team to ensure that coalition members and the community at large had the opportunity to engage with and participate in the assessment. After the UAA Assessment Team completed their initial analysis of the existing data, the ACC Executive Committee organized a series of three meetings to take place in the first few weeks of May 2015. At each of the three meetings, members of the UAA Assessment Team presented data pertaining to Anchorage youth and mental health, substance use, suicide, and intermediate variables. Participants at each of the three presentations were asked to use a data review and prioritization tool to identify the top behavioral health priorities of most concern for Anchorage youth aged 12-24 years old. The prioritization tool can be found in Appendix E.

At the first meeting, the UAA Assessment Team presented data to 15 geographically, ethnically, and occupationally diverse representatives: five from each coalition (AYDC, HVHC, and SOY). At the second meeting, the ACC presented the UAA Assessment Team's findings at the AYDC Full Coalition meeting. This meeting was promoted amongst members of all three coalitions; 32 AYDC, SOY, and HVHC members attended. The CBHA Team collected a significant amount of feedback pertaining to the data from coalition members. A third meeting was held to collect feedback from the community at large. The ACC advertised the meeting through flyers, social media, newspaper ads, and radio. A total of 36 community members attended this presentation. The following 45 community organizations and entities were represented through this community engagement process.

- Abused Women's Aid in Crisis
- Alaska Afterschool Network
- Alaska Cares
- Alaska Children's Trust
- Alaska Injury Prevention Center
- Alaska Job Corps
- Alaska Mental Health Trust Authority
- Alaska Native Tribal Health Consortium
- Alaska Public Media
- Alaska Youth Advocates
- Anchorage Community Mental Health Services
- Anchorage Realizing Indigenous Student Excellence, Cook Inlet Tribal Council
- Anchorage School District
- Anchorage Youth Development Coalition
- Assembly of God
- Big Brothers Big Sisters of Alaska
- Black Arts North Academy
- Boy Scouts of America, Great Alaska Council
- Boys and Girls Clubs
- Center for Behavioral Health Research and Services, UAA



- Center for Human Development, UAA
- Community Pregnancy Center of Anchorage
- Cooperative Extension Services, University of Alaska Fairbanks
- Covenant House Alaska
- Department of Health Sciences, UAA
- Healthy Voices, Healthy Choices
- Hope Community Resources
- Housing First Assertive Community Treatment Reliance Team
- Justice Center, UAA
- Language Interpreter Center
- Municipality of Anchorage Public Libraries
- Northbridge LLC
- Parachutes
- Providence Health & Services Alaska
- Southcentral Foundation
- Spirit of Youth
- Standing Together Against Rape
- State of Alaska Commission on Postsecondary Education
- State of Alaska Division of Juvenile Justice
- Strength Based Strategies
- Trust Training Cooperative, Center for Human Development, UAA
- United Way of Anchorage
- Volunteers of America Alaska
- YEA! Inc. (Youth/Young Adults Empowered Achievers)
- YWCA Alaska

### ***Decision Making***

Based on the feedback provided from the community meeting, the ACC member meeting, and the meeting with selected representatives of each separate coalition, the ACC Executive Committee selected mental health as the priority issue for the assessment. The rationale for this selection is described more fully in the Findings and Data Decisions Section of this report. In addition to selecting mental health, the ACC Executive Committee identified bullying, feeling alone, and sadness/depression as potential intermediate variables of interest. Once the priority issue was identified, and potential intermediate variables of interest identified, the UAA Assessment Team began collecting data that would provide a more complete picture of mental health, bullying, feeling alone, and sadness/depression among Anchorage youth.

### **b. Phase Two**

During Phase Two of the Assessment, the CBHA Team focused on building the capacity of the coalition, collecting new data, and selecting the intermediate variables.

### i. Capacity Building

As part of Phase Two of the Assessment, the ACC Executive Committee and UAA Assessment Team coordinated a series of trainings for ACC members. The UAA Assessment Team provided 11 trainings on seven topics. These trainings provided coalition members with a broad understanding of various types of research data and increased the capacity of the ACC to conduct new research. Table 4 displays a list of trainings provided to ACC members, the number of times a training session was offered, and the total number of attendees. The UAA Institutional Review Board and Collaborative Institutional Training Initiative (CITI) were crucial in securing CITI certification for 24 members of the ACC. In order to participate in the new data collection process, ACC members were required to become CITI certified. Of the 24 ACC members that became CITI certified, 15 participated in the new data collection and analysis process.

**Table 4. Anchorage Collaborative Coalitions Member Trainings**

<b>Topic</b>	<b>Attendees</b>	<b>Events</b>
Infographics	26	1
Institutional Review Board and CITI Certification	18	2
How to Conduct Focus Groups for Research	19	2
Qualitative Data Analysis	9	2
Quantitative Data Analysis	12	1
Cultural Competency	13	1
Key Informant Interviews	18	2

### ii. New Data Collection

After presenting existing data to the ACC coalition and community, the UAA Assessment Team and ACC Executive Committee worked together to develop Phase Two of the assessment. Phase Two of the assessment revolved around new data collection. New data is data collected specifically for the research project at hand, which in this case was the ACC's community behavioral health assessment. The three data collection methods listed below were used to generate new data for the ACC:

- Adult Perceptions of Anchorage Youth (APAY) survey
- Young Adult Survey (YAS)
- Youth focus groups

The UAA Institution Review Board approved the protocol for each survey and the focus groups. The UAA Assessment Team took the lead on the APAY survey and YAS. The Center for Human Development research team coordinated the focus groups with support from the ACC Executive Committee and ACC Members. In order to facilitate or serve as support to the focus groups, ACC members were required to receive extensive training and obtain CITI certification.

The purpose and data methods for each new data collection approach are briefly summarized below. For more information about the methods of each survey and the focus groups, please see the Growing Up Anchorage: Anchorage youth and young adult

behavioral health and wellness assessment report generated by the UAA Assessment Team and included with the submission of this report.

### ***Adult Perceptions of Anchorage Youth Survey<sup>2</sup>***

The APAY survey was designed to replicate the Adult Underage Drinking Survey conducted in 2010 so that the coalition could assess how adult perceptions of underage drinking had changed over the course of five years. The Adult Underage Drinking Survey was conducted to gather community perceptions regarding the extent of the underage drinking problem, underage access to alcohol through social and retail outlets, and consequences of underage drinking. The APAY survey expanded its focus beyond alcohol to gather adult perceptions of youth marijuana use and prescription drug use for the express purpose of getting high. Lastly, this survey of adults was conducted to collect community readiness data in the form of adult perceptions regarding other behavioral health problems frequently experienced by Anchorage youth: bullying, feeling alone, extreme sadness, hopelessness, and suicide.

The APAY survey was comprised of 127 questions. Domains of interest included underage substance use problems, adult influences on youth substance use, knowledge and concern of youth bullying, feeling alone, sadness, hopelessness, suicide, engagement in youth's lives, and respondent background information. The APAY survey recruited randomly selected participants through a five-phase mail out strategy. Participants could complete a paper version of the survey or were directed to an online version of the survey if they preferred. The online version used a unique PIN login that restricted survey access to only those people who were included in the random sample.

The APAY survey was mailed to 2,237 potential participants and successfully delivered to 1,968 Anchorage residents. The results reflected in this report are preliminary findings. A total of 180 completed surveys were completed at the time of this report and the findings reported here are based on the responses of those 180 surveys. The UAA Assessment Team expects to receive more responses and publish a final report in spring 2016.

### ***Young Adult Survey<sup>3</sup>***

The YAS was designed as part of this project to capture information about the behavioral health of young adults aged 18-24 living in Anchorage, since the CBHA Team found there to be a lack of available existing data. While some data on UAA students was available, very

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<sup>2</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

<sup>3</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

little was available for Anchorage as a whole. To address this gap, a survey of young adults living in Anchorage was conducted.

The UAA Assessment Team, in collaboration with the ACC Executive Committee, created the YAS instrument. The survey instrument included the following domains of interest: social support, community perceptions and involvement, substance use behaviors, stress, bullying and/or harassment experiences, psychological wellbeing, help-seeking behaviors, perceptions, and demographic information. Where possible, established scales with psychometrically sound properties were used. Additionally, when appropriate, the research team integrated questions from other surveys into the YAS. The YAS was hosted online and participants were invited to take the survey through a variety of recruitment mechanisms, including extensive Facebook advertising, electronic sharing, posters, tabling at events, and local media advertising. A total of 329 Anchorage young adults aged 18-24 years old participated in the YAS.

### **Youth Focus Groups**

After reviewing the existing data, coalition members and the CBHA Team felt that it was essential to supplement the quantitative findings with qualitative data regarding youth experiences with mental health and bullying in Anchorage. To address this need, the coalition chose to organize and conduct a series of focus groups. The focus group data collection method was selected to provide the coalition with rich qualitative data, generate conversation among participants, and give a voice to Anchorage youth and young adults by providing an opportunity to express feelings, concerns, experiences, and solutions.

The CBHA Team was interested in learning five things from the focus groups. First, the CBHA Team wanted to know what bullying looked like among Anchorage youth and young adults. Second, the group sought to understand why Anchorage youth feel lonely, sad, and hopeless. Third, the team wanted to know which protective factors Anchorage youth and young adults endorsed. Fourth, the coalition hoped to gain a better understanding of what helps Anchorage youth and young adults thrive. Fifth and finally, the ACC hoped to have a better understanding of what helps Anchorage youth, who have experienced bullying, loneliness, sadness, and/or hopelessness thrive.

Based on those five overarching data needs, the UAA Assessment Team, ACC Executive Committee, and a small sample of Anchorage youth developed four sets of questions. Questions were separated into two categories: mental wellbeing and bullying. Within each category were questions specifically developed for youth aged 12-14 and young adults (18-24 years of age). Focus groups were further divided by age, with focus groups held for middle school-aged youth, high school-aged youth, and young adults.

Focus groups were designed to provide qualitative validation for existing and new data. Critical to focus group success was ensuring focus group facilitators were trained, privacy of respondents was protected, focus groups were conducted consistently, and that the outcomes were thoroughly reviewed. The first step toward accomplishing these criteria required each of the participating ACC members (those who facilitated or assisted with the



focus groups) to attend a series of trainings designed by the UAA Assessment Team. The trainings, as shown in Table 4 in the Capacity Building section of this report, covered each part of the focus group process, from question design to qualitative data analysis. The trainings were conducted from late summer through the fall and were interwoven with the focus group timetable to ensure that the relevant trainings were given at a time appropriate to the development of the overall assessment. The trainings further ensured that the overall assessment was considered IRB certified human research by assuring that all steps had been taken to keep the data collection confidential and that data use would not compromise participants.

The second step in the process was creating focus group materials, including the questionnaire, screening tools, outreach materials, and consent forms. The ACC and UAA Assessment Team developed four sets of focus group questions, and youth and young adults in Anchorage vetted final questions. This allowed ACC and the UAA Assessment Team to see how the language was being understood and how it might be improved to reflect current vocabulary used by the young people of Anchorage, specifically around subjects of bullying and mental wellbeing.

The third step in the focus group process related to youth outreach, recruitment of youth to participate, and conducting actual focus groups. Anchorage's expansive metropolitan area required the ACC to put special effort into hosting and recruiting from a large diverse cross section of the city. Each location and outreach effort was aimed at offering equal access to every part of the community, both demographically and physically. Youth and young adults were recruited for participation through flyers posted around town, email listservs, word of mouth, and social media. Appendix C lists the locations across Anchorage where flyers were posted. A total of 68 individuals attended a focus group event and 63 stayed to participate in a focus group. Twenty-five youth participated in the focus groups about bullying and 38 youth participated in the mental wellbeing focus groups. A map of focus group locations is found in Figure 2; Appendix D provides exact location and date information for each focus group event.

**Figure 2. Focus Group Summary**



*Note.* Adapted from *Growing Up Anchorage*, p. 24, by Heath, et al., 2015, University of Alaska Anchorage: Center for Human Development.

Finally, it was important to review the information derived from the focus groups and find out what this effort revealed about youth bullying and mental health in Anchorage. The ACC joined the UAA Assessment team in analyzing the focus group results through an initial group analysis. This included separately analyzing the results from each group with those who had conducted the session, and having all the findings moderated by a researcher who had not attended any of the focus groups to ensure that the process was conducted in an objective manner. Each group came to a consensus on the observations made from the focus group results and a primary team summarized the observations. Focus group findings are summarized in the Findings and Data Decisions section of this report.

### **iii. Intermediate Variable Selection**

After the UAA Assessment Team provided the ACC Executive Committee with the results of their analysis of existing and new data, the ACC Executive Committee met on several occasions to review the compiled data. The ACC Executive Committee systematically reviewed the existing and new data for the purpose of selecting the intermediate variable. All members of the ACC Executive Committee reviewed the data individually, and the ACC Executive Committee engaged in several lengthy meetings to review and discuss the data

collectively. A more detailed description of the intermediate variable selection process is discussed in the Findings and Data Decisions portion of this report.

### **c. Prevention Resources**

ACC utilized a systematic process to identify existing resources and infrastructure regarding bullying prevention and related areas. The ACC used three new sources of information:

- Resource Assessment Report
- Faith Community Report
- Key informant interviews

### **i. Resource Assessment Report**

After completing Phase One of the Assessment, ACC retained the services of Clare Ross to systematically review existing resources and infrastructure associated with the ACC's priority issue of mental health, initially identified intermediate variables, and consequences of behavioral health issues. Through extensive research and personal outreach, Ms. Ross prepared the Resource Assessment Report and identified resources for addressing bullying prevention, suicide prevention/mental health and promoting protective factors.

During the first part of the data collection process, Ms. Ross met with every member of the ACC Executive Committee and other people involved in the Coalition to obtain recommendations on known resources, programs, contact people, and gaps in service. She also sent a survey to all members of the ACC Assessment Workgroup. The ACC Executive Committee agreed that the Resource Assessment would be focused on organizations and programs that specifically and intentionally address the specified topics and/or have an impact on a large number of youth ages 12-24.

Ms. Ross did extensive online research, utilizing such Internet resources as Anchorage Youth Central (a comprehensive online directory of youth-serving organizations) and youth.gov. She also conducted phone and in-person interviews with 24 highly knowledgeable individuals from key organizations. The complete list of people interviewed and their organizational affiliations are listed below:

- Eric Boyer, UAA Center for Human Development
- Deb Casello, Alaska Police and Fire Chaplains
- Sylvia Craig, Alaska Injury Prevention Center
- Charlie Daniels, Volunteers of America Alaska
- Treshon Felder, Alaska Youth Advocates/POWER Teen Center
- Sharon Fishel, State of Alaska Department of Education and Early Development
- Janice Fleishman, Fire Island Bakery Owner
- Bridget Hanson, Center for Behavioral Health Research and Services
- Lindsay Henkelman, Alaska Native Tribal Health Consortium
- Will Hurr, Boys and Girls Club
- Mike Kerosky, Anchorage School District and Cook Inlet Tribal Council

- Joel Kiekintveld, Parachute Ministries, Inc.
- Nicole Lebo, Campfire Alaska
- Iris Matthews, United Way Anchorage, 90% by 2020 Initiative
- Patricia Newman, Yea! Inc.
- Glenn Olson, Alaska Native Heritage Center, Walking in Two Worlds Program
- Trina Resari-Salao, Big Brothers Big Sisters of Alaska
- Jake Ripp, Alaska Youth Advocates/POWER Teen Center
- Sarah Sledge, United Way of Anchorage
- Melanie Sutton, Anchorage School District
- Julie Vincek, Anchorage School District, King Career Center

Ms. Ross consulted frequently with ACC as she researched and wrote her report.

## **ii. Faith Community Assessment**

AYDC contracted with Parachutes Teen Club and Resource Center to collect local faith community input on bullying and mental health from faith-based youth workers. This assessment is submitted with this report.

## **iii. Key Informant Interviews**

As described below in the Community Readiness portion of the Methods section of this report, the ACC interviewed 23 key informants representing 12 sectors. From these interviews the ACC learned about additional resources and gaps.

## **d. Community Readiness**

The ACC conducted community readiness interviews in December of 2015 using and maintaining fidelity to the process laid out by the Community Readiness Manual of the National Center for Community Readiness at Colorado State University (Plested, Jumper-Thurman, & Edwards, 2015). Interviews were completed with 23 Anchorage community members representing 12 different sectors:

- Health and medical professions
- Social services
- Mental health and treatment services
- Schools/universities
- Tribal
- City/county government
- Law enforcement
- Clergy and spiritual community
- Military
- Community at large
- Elders
- Youth

The subject of the interviews was bullying in Anchorage with 19 interviews addressing bullying among ninth grade students and 15 examining bullying among the 18-24 year-old populations.

Interview questions addressed six dimensions of readiness:

- Community efforts,
- Community awareness of efforts,
- Leadership,
- Community climate,
- Community knowledge about the issue, and
- Resources related to the issue.

Nine individuals involved with the ACC conducted interviews with the following people:

- Jennifer Baker, Adolescent Health Project Coordinator in the Section of Women's, Children's, and Family Health, State of Alaska
- Dave Barney, Club Director, Mountain View Boys & Girls Club
- Wendy Barret, Creative Solutions and Services
- Brad Clark, School Resource Officer at Service High School, Anchorage Police Department
- Kris Craig, MS, LPC, Bridges Counseling Connection
- Logan Daniels-Engenvold, Student, West Anchorage High School
- Treshon Felder, POWER Teen Clinic, Anchorage Community Mental Health Services
- Arina Filippenko, Student, University of Alaska
- Wayne Jackson, Marketing Director, Volunteers of America
- Celeste Johnson, Crisis Recovery Center Providence Hospital Education
- Joel Kiekintveld, Executive Director, Parachutes
- Amanda Kookesh, Dean of Students Health and Wellness Educator, University of Alaska Anchorage
- Nichelle Mauk, Principal of The New Path High School and AVAIL, Anchorage School District
- Kris Pitts, MPS
- Lee Post, Anchorage Juvenile Probation Supervisor, Department of Juvenile Justice
- Clare Ross, Consultant, Ross Strategies
- Dr. Eileen Starr, Executive Director, Alaska Christian Ministries
- Tad Sumner, LCSW, CDCI Therapist
- Joe Zawodny, Supervisor of Secondary Education, Anchorage School District

Others who were interviewed declined to have their name included in this report.

Interviews were recorded by audio recorder and the recordings were then assessed by a pair of reviewers who had not participated in the interview. This process eliminated bias and subjectivity, which might have been experienced if the interviewer was also the individual scoring the interview.

Scorers reviewed the audio in its entirety and then reviewed again to provide scores for each dimension based on an anchored rating scale specific to that dimension. Scorers were then paired together to reach a consensus score for each interview and dimension, and then all scores were combined to calculate average stage scores for the community in every dimension. The final scores were rated on the following community readiness scale as follows:

- 1=no awareness,
- 2=denial/resistance,
- 3=vague awareness,
- 4=preplanning, 5=preparation,
- 6=initiation,
- 7=stabilization,
- 8=confirmation/expansion,
- 9=high level of community ownership.

In addition to scoring interviews, reviewers also collected findings as supplemental information to be included in the community resource assessment and gap analysis included in this assessment.



### III. FINDINGS AND DATA DECISIONS



### III. Findings and Data Decisions

The CBHA was comprised of two phases. During the first phase, the CBHA Team analyzed the existing data compiled and selected the priority issue. During the second phase, the CBHA Team collected new data and selected the intermediate variables of focus. The following sections outline the findings from each phase of data collection, as well as the decisions made by the ACC Executive Committee pertaining to the priority issue selection and identification of the intermediate variables.

#### a. Phase One: Existing Data on Mental Health, Substance Use, and Suicide

During the first phase of the CBHA, the research team collected data pertaining to each of the three priority issues: mental health, substance use, and suicide. During this phase, a large amount of data was gathered and reviewed. The data shown in this section of the report reflects the figures that were integral to the ACC's decision-making process. Table 5 outlines the complete datasets consulted and analyzed. All data referenced in this report is contained in a Microsoft Excel workbook submitted with this report.

**Table 5. Existing Data Pertaining to Behavioral Health Conditions Amongst Anchorage Youth (9-24 Years)**

<b>Substance Use</b>	
YRBS-Marijuana	NSDUH-Tobacco
NSDUH-Marijuana	PRAMS-Tobacco
SCCS-Marijuana, cocaine, crack	YRBS-Alcohol
PRAMS-Marijuana	SCCS-Alcohol
YRBS-Rx drugs	NSDUH-Alcohol
NSDUH-Rx drugs	BRFSS-Alcohol
YRBS-Methamphetamines, cocaine, inhalants	PRAMS-Alcohol
SCCS-Inhalants	ATR-Alcohol consequences Anchorage
NSDUH-Cocaine	NCHA-Alcohol consequences
ATR-Illicit Drugs and consequences Anchorage	BVS-Alcohol drug injury Alaska
NSDUH-Illicit drugs	BVS-Alcohol drug injury Anchorage
YRBS-Tobacco	
<b>Mental Health</b>	
NCHA-Mental health	PRAMS-Mental health
YRBS-Mental health	PRAMS-Mental health
NSDUH-Mental health	
<b>Suicide</b>	
ATR-Suicide Alaska	NCHA-Suicide
NSDUH-Suicide	BVS-Suicide Alaska
ATR-Suicide Anchorage	YRBS-Suicide
BRFSS-Suicide	BVS-Suicide Anchorage

## ii. Mental Health

Existing data concerning mental health for youth ages 9-24 were compiled from the datasets listed below.

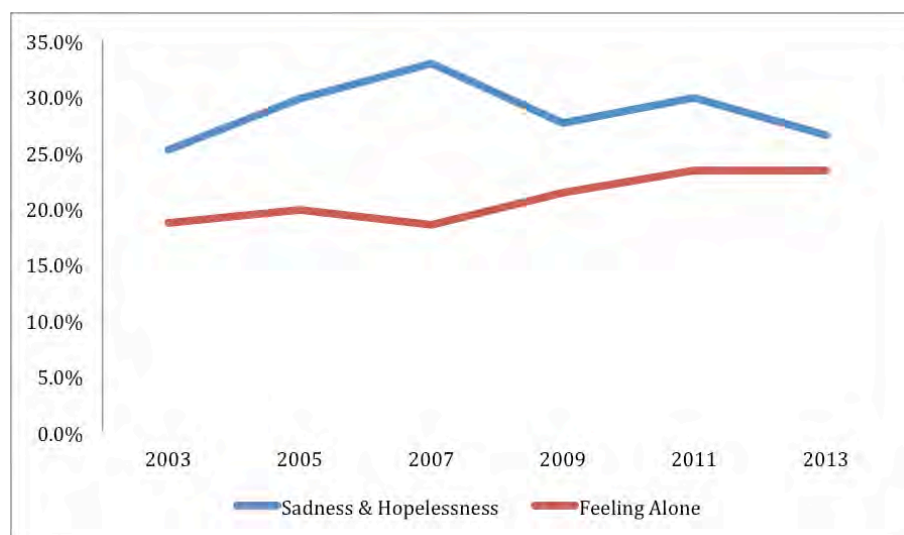
- Behavioral Risk Factor Surveillance System (BRFSS)
- National College Health Assessment (NCHA)
- National Survey on Drug Use and Health (NSDUH)
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- Youth Risk Behavior Survey (YRBS) for Anchorage School District (ASD)

The data available for mental health indicators showed that a substantial percentage of youth experience poor mental health as expressed through depression, feelings of loneliness, sadness, hopelessness, withdrawal from usual activities, and feeling overwhelmed. Where data was available over a substantial period of time, no meaningful improvements were shown. In some instances, the data reflected a decline of the mental health of youth and young adults over several data collection years.

### *Prevalence & Trends*

The YRBS contains two key questions addressing indicators for depression and mental health. The first question asks about feeling sad or hopeless to the point of withdrawing from usual activities during the past year. The second question asks about feeling alone in life. Figure 3 shows trends in sadness/hopelessness and feeling alone among ASD ninth through twelfth graders between 2003 and 2013. Table 6 and Table 7 show results for these two questions broken out to show differences by gender, race/ethnicity, and grade year.

**Figure 3. Anchorage School District Students Reporting Feelings of Sadness/Hopelessness and Feeling Alone in Life (2003-2013)**



*Note.* Figure created by data retrieved from the Youth Risk Behavior Survey by Heath et al., 2015, and



reflects responses from Anchorage School District students in grades 9 through 12.

In 2013, over a quarter of ASD ninth through twelfth grade students indicated that they felt so sad or hopeless every day for two weeks or more in a row that they stopped doing usual activities during the past year. Notably, female and Alaska Native students reported greater rates of withdrawal from usual activities as a result of sadness or hopelessness than other groups. Females reported withdrawal from usual activities at almost twice the rate of boys, 34.5% compared to 18.7% for ASD male students in 2013. A greater percentage (32.6%) of Alaska Native students also reported higher rates of sadness or hopelessness compared to students from all other racial and ethnic groups in 2013.

**Table 6. Percentage of ASD Students Reporting Sadness/Hopelessness by Race/Ethnicity and Gender (2003-2013)**

	2003	2005	2007	2009	2011	2013
Total	25.2%	29.8%	32.9%	27.6%	29.0%	26.5%
<i>Gender</i>						
Male	22.3%	22.7%	29.5%	17.4%	23.2%	18.7%
Female	28.3%	37.0%	36.5%	38.5%	35.0%	34.5%
<i>Race/Ethnicity</i>						
White	25.3%	28.8%	29.3%	26.1%	25.2%	24.4%
Alaska Native	NA	NA	42.4%	31.1%	32.7%	32.6%
Other Races	25.8%	30.7%	35.4%	29.2%	32.2%	26.1%
<i>Grade</i>						
9th Grade	23.4%	34.6%	29.5%	29.8%	26.4%	28.7%
10th Grade	23.4%	30.2%	30.2%	24.3%	30.1%	28.0%
11th Grade	28.8%	29.0%	33.7%	32.0%	29.6%	24.1%
12th Grade	25.8%	23.6%	39.1%	24.1%	29.8%	24.9%

*Note.* Table created from data retrieved by Heath et al., 2015, from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

Table 7 shows ASD YRBS results for the percentage of students who agree or strongly agree that they feel alone in their lives. Almost a quarter of ASD ninth through twelfth graders reported feeling alone in life. A larger percentage of Alaska Native students (35.0%) and ninth grade students (29.0%) reported feeling alone in their lives compared to other groups.

**Table 7. Percentage of ASD Students Feeling Alone in Life by Race/Ethnicity and Gender (2003-2013)**

	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2009</b>	<b>2011</b>	<b>2013</b>
Total	18.7%	19.8%	19.5%	21.4%	23.4%	23.4%
<i>Gender</i>						
Male	21.6%	17.5%	19.1%	18.6%	24.6%	24.5%
Female	15.8%	22.0%	19.9%	24.4%	22.2%	22.3%
<i>Race/Ethnicity</i>						
White	18.2%	16.8%	19.1%	18.3%	19.8%	21.8%
Alaska Native	NA	NA	15.5%	25.9%	23.9%	35.0%
Other Races	21.3%	25.1%	21.9%	23.6%	26.7%	21.0%
<i>Grade</i>						
9th Grade	17.6%	21.3%	21.3%	17.9%	22.0%	29.0%
10th Grade	20.0%	19.8%	17.5%	19.5%	24.7%	25.3%
11th Grade	15.7%	23.0%	19.0%	22.4%	23.8%	23.4%
12th Grade	22.1%	13.6%	20.1%	25.6%	23.0%	15.5%

*Note.* Table created from data retrieved by Heath et al., 2015, from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

Table 8 shows NCHA data for UAA students aged 18-24 years old. Overall, 23.2% of UAA students reported feeling that things were hopeless over the past month. Compared to white respondents, a greater percentage of Alaska Native/American Indian students reported that they felt things were hopeless over the past month, at 28.0%. Over half (64.0%) of UAA students reported feeling overwhelmed in the past month. A larger percentage of female students reported feeling overwhelmed as compared to the overall student body, at 72.0%. Over one third (35.6%) of UAA students reported feeling very lonely in the past month. Similarly, over one third of UAA students aged 18-24 reported feeling very sad in the past month. A slightly higher percentage of females reported feeling very sad over the past month at 39.8%. Overall, 14.9% of UAA students aged 18-24 years old reported feeling so depressed it was difficult to function.

**Table 8. Mental Health of University of Alaska Anchorage Students Aged 18-24 Years Old**

	<b>In past 2 weeks</b>	<b>In past 15-30 days</b>	<b>Total (Past month)</b>
<b>Felt things were hopeless</b>			
Overall	14.9%	8.3%	23.2%
Male	12.4%	6.2%	18.6%
Female	16.0%	9.1%	25.1%
White	13.9%	8.6%	22.5%
Alaska Native/American Indian	15.1%	12.9%	28.0%
<b>Felt overwhelmed</b>			
Overall	46.6%	17.4%	64.0%
Male	33.5%	14.5%	47.9%
Female	52.9%	19.0%	72.0%
White	49.0%	17.8%	66.7%
Alaska Native/American Indian	44.7%	13.8%	58.5%
<b>Felt very lonely</b>			
Overall	21.2%	14.4%	35.6%
Male	19.4%	9.5%	28.9%
Female	21.8%	16.7%	38.5%
White	19.9%	15.7%	35.6%
Alaska Native/American Indian	17.0%	10.6%	27.7%
<b>Felt very sad</b>			
Overall	23.1%	13.5%	36.6%
Male	20.0%	9.6%	29.6%
Female	24.2%	15.6%	39.8%
White	21.4%	13.7%	35.1%
Alaska Native/American Indian	20.4%	11.8%	32.3%
<b>Felt so depressed it was difficult to function</b>			
Overall	8.9%	6.0%	14.9%
Male	9.1%	2.5%	11.6%
Female	8.8%	7.3%	16.1%
White	7.4%	5.5%	12.9%
Alaska Native/American Indian	7.5%	0.1%	7.6%

*Note:* Table created from data retrieved by Heath et al., 2015, from the NCHA.

Table 9 displays data retrieved from the NSDUH on the percentage of youth reporting at least one major depressive episode in the past year from 2006 to 2012. This dataset contains information for youth aged 12-17 years old and young adults 18-25 years old. The percentage of Anchorage youth aged 12-17 years old reporting at least one major depressive episode in the past year remained relatively steady from the 2006-2008 reporting period (7.66%) to the 2010-2012 reporting period (7.99%). During the same time period, the percentage of Anchorage youth aged 18-24 years old reporting at least one major depressive episode in the



past year increased from 7.54% in the 2006-2008 reporting period to 11.89% in the 2010-2012 reporting period. During the 2010-2012 reporting period, a greater percentage of young adults in Anchorage reported experiencing a major depressive episode compared to their peers within the United States as a whole.

**Table 9. Estimated Percent of Youth With at Least One Major Depressive Episode in the Past Year (2006-2012)**

	2006-2008	2008-2010	2010-2012
<i>Youth 12-17 Years Old</i>			
Anchorage	7.66%	7.43%	7.99%
Alaska	7.75%	7.36%	7.72%
United States	8.11%	8.16%	8.45%
<i>Youth 18-25 Years Old</i>			
Anchorage	7.54%	7.02%	11.89%
Alaska	7.38%	6.90%	10.27%
United States	8.23%	8.24%	8.51%

*Note.* Table created from data retrieved by Heath et al., 2015 from NSDUH data.

The estimated percentages of young adults aged 18-25 with serious or any mental illness in the past year are shown in Table 10. From 2008-10 to 2010-12, the estimated percentage of Anchorage young adults with any mental illness increased from 17.15% to 24.02%. A greater percentage of young adults in Anchorage (24.02%) are estimated to have had any mental illness than in the United States as a whole (18.75%).

**Table 10. Estimated Percent of Young Adults Aged 18-25 With Serious Mental Illness or Any Mental Illness in the Past Year (2008-2012)**

	2008-2010	2010-2012
<i>Serious Mental Illness</i>		
Anchorage	3.14%	4.72%
Alaska	3.11%	4.38%
United States	3.67%	3.94%
<i>Any Mental Illness</i>		
Anchorage	17.15%	24.02%
Alaska	17.02%	22.15%
United States	18.18%	18.75%

*Note.* Table created from data retrieved by Heath et al., 2015 from NSDUH data.

Tables 11 and 12 present data from on the mental health of Anchorage youth aged 18-24 years as captured by the BRFSS. Data from the BRFSS shows that, between 2006 and 2013, the percentage of 18-24 year olds who reported that a doctor, nurse, or other health professional had told them they have a depressive disorder stayed almost constantly at 18.8%. That same percentage in 2012-2013 reported their mental health was not good for 7 or more days during the past 30 days. This is up from 2006-2007, when it was 12.4%.

**Table 11. Number of Days During the Past Month that Mental Health, Including Stress, Depression, and Problems with Emotions, was Not Good**

Days	2004- 2005	2006- 2007	2008- 2009	2010-2011	2012-2013
1 or more days	41.4%	38.3%	33.4%	37.6%	44.8%
7 or more days	20.7%	12.4%	14.5%	15.5%	18.8%
Mean number of days	4.01	3.08	2.95	2.88	3.68

Note. Table created from data retrieved by Heath et al., 2015 from BRFSS and represents responses from Anchorage youth ages 18-24.

**Table 12. Doctor, Nurse, or Other Health Professional Ever Told Youth That They had a Depressive Disorder**

Group	2006	2011	2012	2013
Total	18.8%	9.6%	18.8%	18.8%
Male	DSU*	6.0%	13.1%	7.7%
Female	27.0%	13.8%	26.2%	30.6%

Note. Table created from data retrieved by Heath et al., 2015 from BRFSS and represents responses from Anchorage youth ages 18-24.

\*Insufficient number of responses (fewer than 50) and Data Statistically Unreliable

### Consequences<sup>4</sup>

Poor mental health is disproportionately associated with higher rates of co-morbid chronic illnesses and increased mortality (Parks, Svendsen, Singer, & Foti, 2006). Mental and substance use disorders are likely the third leading cause of suicide deaths (Ferrari, et al., 2014). In addition, adults with any history of mental illness are more than twice as likely as the general population to suffer from unintentional injuries such as motor vehicle crash injuries (Wan, Morabito, Khaw, Knudson, & Dicker, 2006), while their risk of homicide injuries can be sevenfold (Cooley-Strickland et al., 2009).

Individuals with severe mental illnesses such as schizophrenia, bipolar disorder, and major depressive disorder die on average 25 years earlier than the general population, and their rate of death from co-occurring chronic illnesses such as diabetes, cardiovascular disease, respiratory disease, and infectious diseases is two to three times that of the general population (Parks, Svendsen, Singer, & Foti, 2006). Severe mental illness is also associated with higher risk behaviors and conditions that can be prevented or modified. These include much higher rates of smoking, alcohol consumption, obesity, unsafe sexual behavior, intravenous drug use, homelessness, victimization, poverty, incarceration, social isolation, as well as increased exposure to tuberculosis and other infectious diseases (Parks, Svendsen, Singer, & Foti, 2006).

<sup>4</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

The economic burdens of mental health problems on individuals, families, employers, and society at large are significant to consider (Organisation for Economic Co-operation and Development [OECD], 2012). A longitudinal study following children with psychological conditions, their siblings and parents (35,000 individuals) over a 40-year period demonstrated a total lifetime economic cost of 2.1 trillion dollars for these families (Smith & Smith, 2010). One factor of that cost is young people who leave the workforce or never enter it, both in terms of losing what they would contribute and the cost of supporting them. Seventy percent of all new disability benefit claims for young adults are for mental illness reasons (OECD, 2012).

### **iii. Substance Use**

Existing data concerning mental health for youth aged 9-24 were compiled from the following:

- Alaska Bureau of Vital Statistics (BVS)
- Alaska Trauma Registry (ATR)
- Behavioral Risk Factor Surveillance System (BRFSS)
- National College Health Assessment (NCHA)
- National Survey on Drug Use and Health (NSDUH)
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- School Climate and Connectedness Survey (SCCS)
- Youth Risk Behavior Survey (YRBS) for Anchorage School District (ASD)

The existing data available for substance use among youth in Anchorage prove substance use and abuse is an important behavioral health issue. However, the data does show that the community has made clear progress on reducing substance use among youth. Notably, data from the YRBS on substance use shows a downward trend of alcohol and marijuana use for high school-aged youth in Anchorage.

### ***Prevalence & Trends***

Analysis of the existing data shows that alcohol, prescription drugs, and marijuana are the most frequently used drugs among youth and young adults living in Anchorage. Overall, substance use is trending downward across nearly all age groups. The tables and figures in this section show data on drug and alcohol use among youth and young adults in Anchorage.

Table 13 compares past month substance use trend estimates for youth aged 12-17 years old as captured by the NSDUH. The rates for the observation periods shown are the average annual rates based on three years of data. Past month alcohol use and past month binge alcohol use among Anchorage youth declined from the 2006-08 observation period to the 2010-12 observation period. Illicit drug use remained relatively stable across all three observation periods. Marijuana use increased from 7.82% in 2006-08 to 9.32% in 2010-12. Estimated rates of past month substance use among Anchorage youth were comparable to substance use rates for youth in the state of Alaska as a whole. Rates of past month

marijuana use were higher for Anchorage youth compared to rates of past month marijuana use for youth in the United States.

**Table 13. Comparison of Past Month Substance Use Trend Estimates Over Time and by Region Among Youth Aged 12-17 (2006-2012)**

<b>Substance Use</b>	<b>2006- 2008</b>	<b>2008- 2010</b>	<b>2010- 2012</b>
<i>Anchorage Substance Use %</i>			
Alcohol use in the past month	15.58	14.66	13.89
Binge alcohol use in the past month	9.29	9.88	6.94
Illicit drug use in the past month	10.88	10.96	11.00
Marijuana use in the past month	7.82	8.38	9.32
<i>Alaska Substance Drug Use %</i>			
Alcohol use in the past month	15.10	14.45	14.09
Binge alcohol use in the past month	9.27	9.10	6.80
Illicit drug use in the past month	10.98	10.66	10.63
Marijuana use in the past month	8.26	8.63	9.15
<i>National Substance Use %</i>			
Alcohol use in the past month	15.75	14.41	13.25
Binge alcohol use in the past month	9.59	8.59	7.48
Illicit drug use in the past month	9.59	9.87	9.93
Marijuana use in the past month	6.72	7.19	7.48

*Note.* Table created from data retrieved by Heath et al., 2015, from NSDUH.

Similar to Table 13, Table 14 compares past month substance use trend estimates by region for young adults aged 18-25 years old, as captured by the NSDUH. Among Anchorage young adults, past month alcohol use, binge alcohol use, illicit drug use, and marijuana use have remained relatively stable or slightly increased from the 2006-08 observation period to the most recent 2010-12 observation period. Compared to the young adults in the state of Alaska as a whole, Anchorage young adults present with a higher rate of past month alcohol and binge alcohol use. Young adults in Anchorage also report higher rates of past month substance use across all four categories compared to rates of young adults in the United States as a whole.

Table 15 shows substance use and dependence among youth aged 12-17 in Anchorage, Alaska and the United States. While the number of youth aged 12-17 dependent on alcohol and illicit drugs has declined, youth in Anchorage present with higher rates than national averages for use of marijuana and pain relievers, as well as illicit drug dependence and alcohol dependence.

**Table 14. Comparison of Past Month Substance Use Trend Estimates Over Time and by Region Among Young Adults Aged 18-25 (2006-2012)**

<b>Substance Use</b>	<b>2006- 2008</b>	<b>2008- 2010</b>	<b>2010- 2012</b>
<i>Anchorage Substance Use %</i>			
Alcohol use in the past month	63.58	62.13	65.30
Binge alcohol use in the past month	43.45	44.64	44.89
Illicit drug use in the past month	23.71	27.70	26.95
Marijuana use in the past month	20.22	24.34	24.33
<i>Alaska Substance Use %</i>			
Alcohol use in the past month	60.84	58.77	59.16
Binge alcohol use in the past month	40.38	39.91	40.44
Illicit drug use in the past month	23.80	26.50	26.31
Marijuana use in the past month	20.19	23.61	24.22
<i>National Substance Use %</i>			
Alcohol use in the past month	61.38	61.22	60.66
Binge alcohol use in the past month	41.78	41.04	39.79
Illicit drug use in the past month	19.78	20.80	21.37
Marijuana use in the past month	16.42	17.71	18.71

*Note.* Table created from data retrieved by Heath et al., 2015, from NSDUH.

**Table 15. Substance Use and Dependence Amongst Youth by Age Group (2010-2012)**

<b>Behavior*</b>	<b>Anchorage</b>	<b>Alaska</b>	<b>United States</b>
<i>Ages 12-17</i>			
Marijuana Use	16.48%	16.68%	13.91%
Nonmedical Use of Pain Relievers	7.2%	6.41%	5.85%
Cocaine Use	.87%	.84%	.87%
Illicit Drug Dependence	2.77%	2.64%	2.36%
Alcohol Dependence	1.54%	1.46%	1.46%
<i>Ages 18-25</i>			
Marijuana Use	39.50%	37.66%	30.66%
Nonmedical Use of Pain Relievers	12.53%	11.78%	10.29%
Cocaine Use	5.99%	5.11%	4.60%
Illicit Drug Dependence	4.77%	4.78%	5.40%
Alcohol Dependence	7.26%	7.69%	6.15%

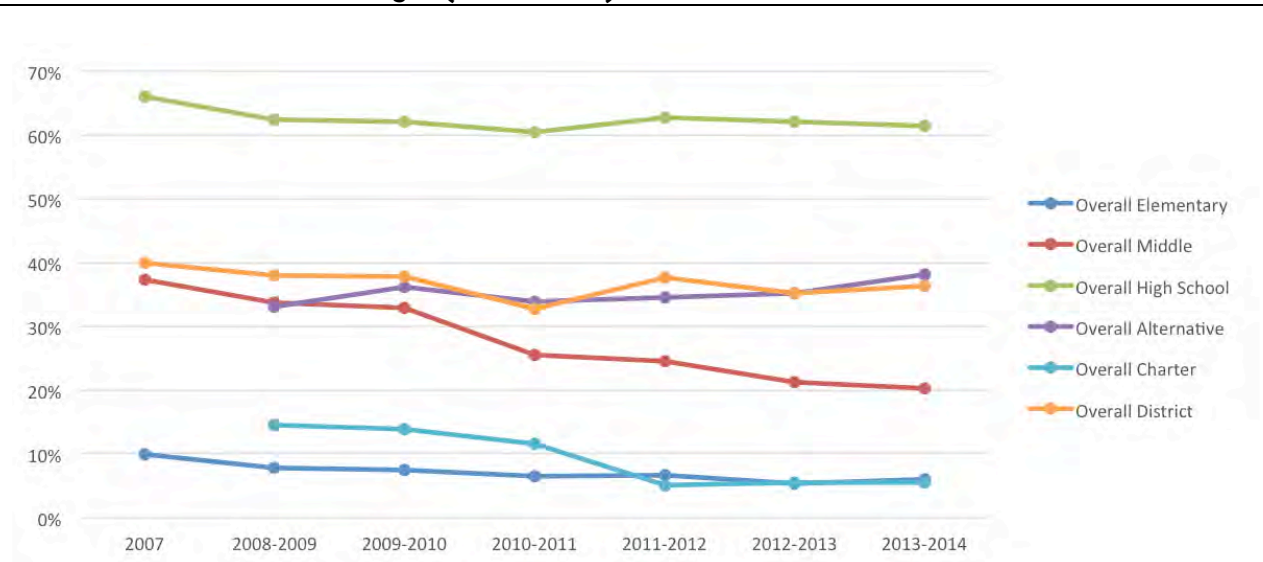
*Note.* Table created from data retrieved by Heath et al., 2015, from NSDUH.

\*Refers to substance use or dependence in the year preceding survey.

Figures 4 through 6 show the rate of observed alcohol and drug use reported by students in the ASD. Rates of drug and alcohol use were highest in ASD high schools, with the exception of inhalants. Figure 4 shows data from the SCCS on observed drug use in schools. Across all school years between 2009 and 2014, just over 60% of ASD high school students report observing peers under the influence of drugs such as marijuana, cocaine, or crack at

their schools. Observed alcohol use in ASD high schools decreased from 62.5% in 2007 to 44.9% in the 2013-14 school year, as shown in Figure 5.

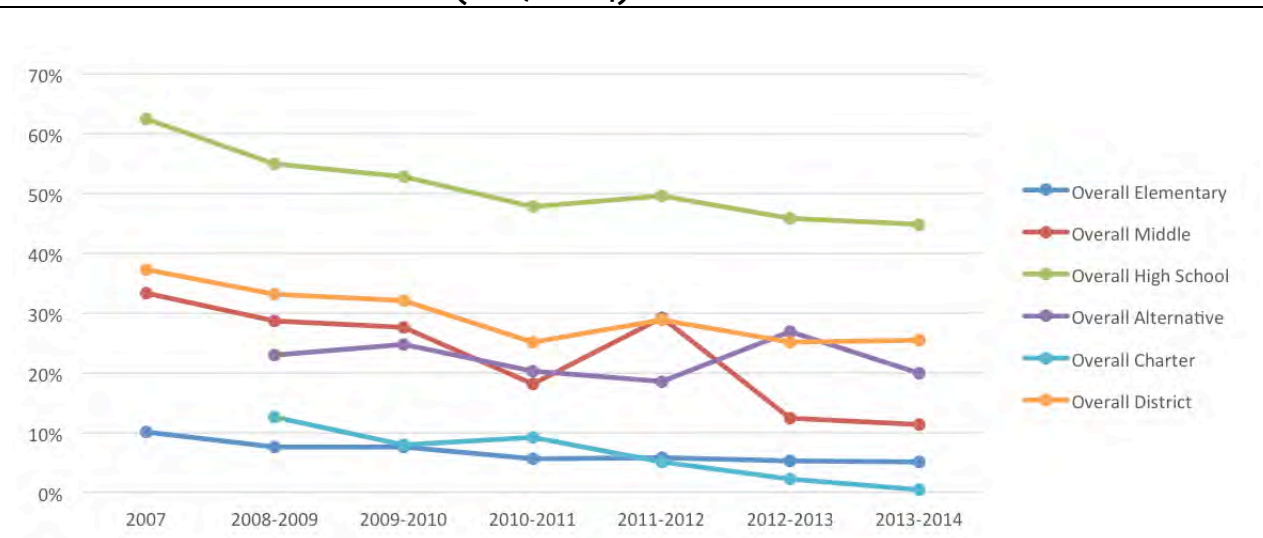
**Figure 4. Percentage of ASD Students Reporting at Least One Observation of Students Under the Influence of Drugs\* (2007-2014)**



*Note.* Figure created from data retrieved by Heath et al., 2015, from the Anchorage School District's School Climate and Connectedness Survey (SCCS).

\*Marijuana, cocaine, or crack

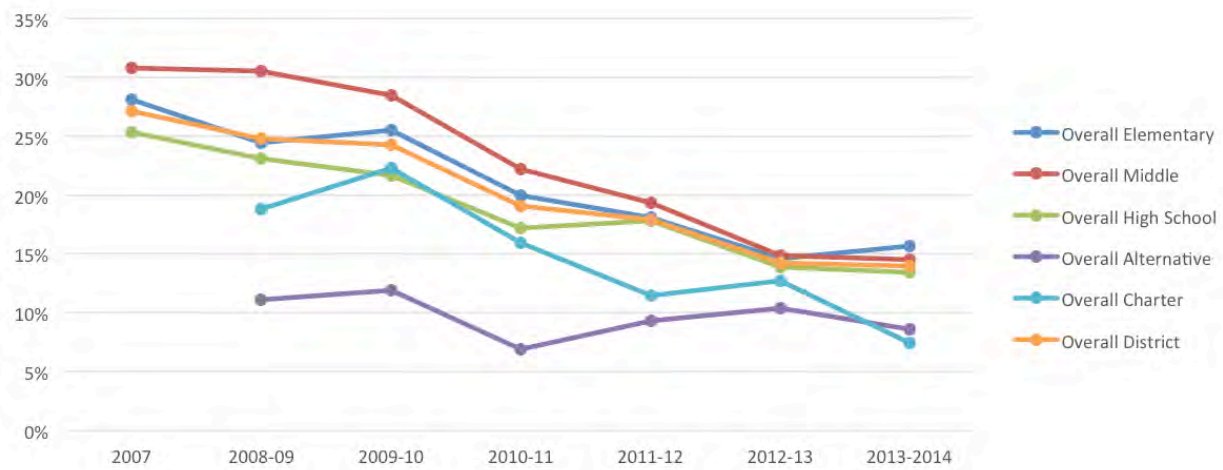
**Figure 5. Percentage of ASD Students Reporting at Least One Observation of Students Under the Influence of Alcohol (2007-2014)**



*Note.* Figure created from data retrieved by Heath et al., 2015, from the Anchorage School District's School Climate and Connectedness Survey (SCCS).



**Figure 6. Percentage of ASD Students Reporting at Least One Observation of Students Under the Influence of Inhalants (2007-2014)**



*Note.* Figure created from data retrieved by Heath et al., 2015, from the Anchorage School District's School Climate and Connectedness Survey (SCCS).

From 2005 to 2013, both alcohol and marijuana use trended downward. In 2005, 41.3% of students reported consuming at least one drink of alcohol on at least one of the past 30 days, and 22.7% of students reported using marijuana one or more times during the past 30 days. In 2013, these percentages were substantially less at 24.2% for alcohol and 16.9% for marijuana.

### **Consequences<sup>5</sup>**

Individual consequences of substance use can include school suspensions and expulsions, as well as legal charges for consumption and driving while intoxicated (Parker, 2010). Substance use in adolescence can put people at higher risks for major life impairments and chronic conditions, including severe mental illnesses (Alaska Mental Health Trust Authority, 2013). More immediately, it is often associated with other high-risk behaviors that can lead to serious injury or death.

Alaska's financial burden for underage drinking alone related to acts of violence, traffic accidents, high-risk sexual behavior, crimes, poisonings, psychoses, fetal alcohol syndrome other injuries, and alcohol treatment runs well over \$300 million per year (Parker, 2010). In per capita dollars (per youth in the population), that puts Alaska at the top in the nation, and nearly twice the national average (Parker, 2010).

<sup>5</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

#### iv. Suicide

Data on suicide ideation, suicide attempts, and suicide among youth and young adults were compiled from the sources listed below.

- Alaska Bureau of Vital Statistics (BVS)
- Alaska Trauma Registry (ATR)
- Behavioral Risk Factor Surveillance System (BRFSS)
- National College Health Assessment (NCHA)
- National Survey on Drug Use and Health (NSDUH)
- Youth Risk Behavior Survey (YRBS)

Alaska's suicide rate is consistently among the highest in the United States. Within the State of Alaska, rates of suicide attempt and completion are highest among youth and young adults.

#### *Prevalence & Trends*

Between 2004 and 2013, 408 Alaskans aged 9-24 committed suicide at a rate of 23.6 per 100,000. During the same time period, there were 107 suicide deaths recorded for Alaskans aged 9 to 24 years old at a rate of 15.0 per 100,000. Amongst Alaskan youth and young adults, suicide occurred more frequently among those aged 18-21 years old. Suicide deaths and frequency rates for youth and young adults in Anchorage and Alaska as a whole are shown in Table 16.

**Table 16. Suicide Death Frequency and Rate\* (2004-2013)**

Population	Anchorage		Alaska	
	Frequency	Rate	Frequency	Rate
Overall	107	15.0	408	23.6
Gender				
Male	85	23.0	334	37.0
Female	22	6.4	74	9.0
Age Group				
Youth aged 9 to 17	12	3.11**	85	8.8
Young adults aged 18 to 20	31	23.2	123	37.8
Young adults aged 21 to 24	64	33.8	200	46.6

Note. Table created from data retrieved by Heath et al., 2015 from the Alaska Bureau of Vital Statistics.

\*Rate per 100,000 \*\*Rate is based on 10-19 incidents and should be interpreted with caution

Table 17 shows the frequency and rates of suicide attempt and self-harm for youth and young adults aged 9-24 in Anchorage and Alaska between 2011 and 2013. Rates of suicide attempt and self-harm in Anchorage remained lower than the statewide rate between 2011 and 2013.

Table 18 compares statewide and local rates of suicide attempt and self-harm for youth and young adults aged 9-24 years old by gender and race/ethnicity. The data in Table 13 is from the Alaska Trauma Registry. Local rates of suicide and suicide attempt for this population

are lower than statewide rates for almost all subgroups. Within Anchorage, female and Alaska Native/American Indian individuals had the highest rates of suicide attempt and self-harm amongst 9-24 year olds.

**Table 17. Frequency and Rates\* of Suicide Attempt and Self-Harm, Ages 9-24 (2011-2013)**

	2011		2012		2013	
	Frequency	Rate	Frequency	Rate	Frequency	Rate
Anchorage	18	2.6	19	2.4	25	3.2
Alaska	112	6.7	93	5.0	104	5.6

Note. Table created from data retrieved by Heath et al., 2015 from the Alaska Trauma Registry.

\*Rate per 10,000

**Table 18. Comparison of Rates\* of Suicide Attempt and Self-Harm, Ages 9-24 (2004-2013)**

Population	Anchorage	Alaska
<i>Gender</i>		
Male	4.8	9.2
Female	8.8	17.1
<i>Race/Ethnicity</i>		
Alaska Native/American Indian	18.4	37.2
White	5.0	5.9
Black/African American	4.3	5.3
Asian/Pacific Islander	2.8	2.9

Note. Table created from data retrieved by Heath et al., 2015 from the Alaska Trauma Registry.

\*Rate per 10,000

The YRBS asks four questions about suicide ideation and attempt. The four questions ask if youth had, in the past year, contemplated suicide, made suicide plans, attempted suicide, and made a suicide attempt that resulted in treatment. Table 19 displays the percentage of youth reporting these four conditions across survey years 2003 to 2013 for ASD students in grades 9 to 12. From 2003 to 2013, there was little difference in the percentage of students in grades 9 to 12 reporting suicide ideation or attempts.

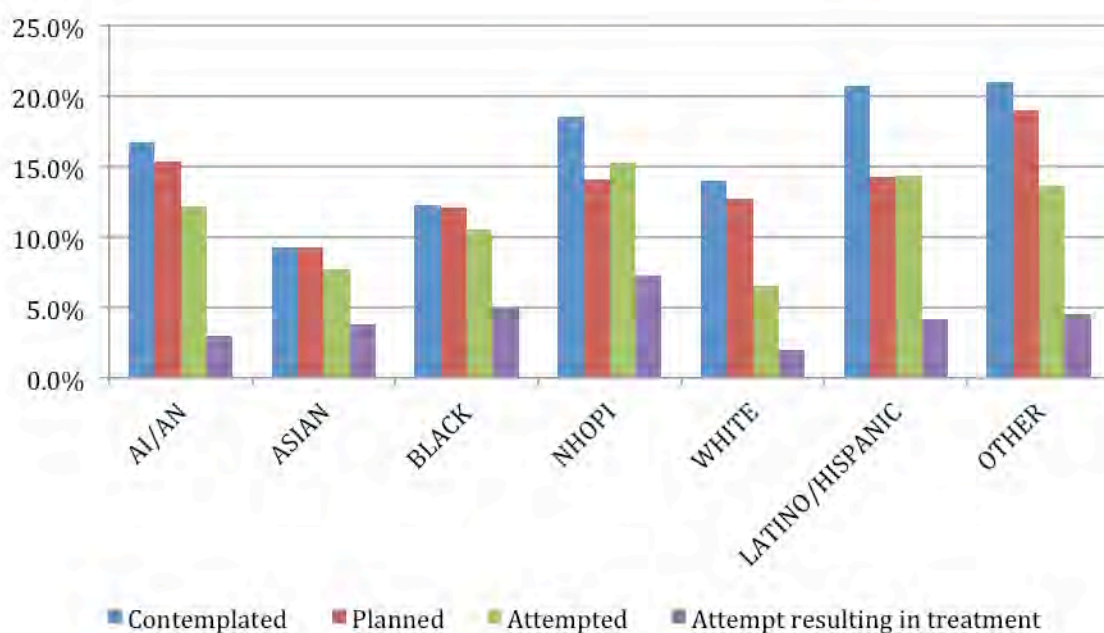
**Table 19. Percentage of ASD Students Reporting Suicide Ideation or Attempt (2003-2013)**

	2003	2005	2007	2009	2011	2013
Contemplated	16.3%	18.0%	15.5%	14.0%	15.1%	17.2%
Planned	11.9%	17.7%	15.1%	12.9%	13.8%	14.3%
Attempted	7.7%	9.9%	9.5%	10.1%	9.1%	9.1%
Attempt resulting in treatment	2.5%	5.3%	2.4%	3.6%	3.7%	2.5%

Note. Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

ASD YRBS indicators for suicide ideation and attempts by race/ethnicity are shown in Figure 7. Students identifying as “Other” or a race/ethnicity not captured within American Indian/Alaska Native, Asian, Black, Native Hawaiian or Pacific Islander, White, or Latino/Hispanic groups reported higher rates of contemplating (21.0%) and planning (19.0%) suicide in the past year compared to their peers in those ethnic groups. One fifth (20.7%) of Latino/Hispanic students reported contemplating suicide in the past year. Native Hawaiian or Pacific Islander students presented with the greatest percent of self-reported suicide attempts at 15.3%.

**Figure 7. ASD Student Suicide Ideation and Attempts by Race/Ethnicity (2009-2013)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

### Consequences<sup>6</sup>

The individual consequences of suicide attempts include serious injury and death. In 2012 the overall age-adjusted suicide rate in the nation was 12.6 per 100,000 persons in the population (Centers for Disease Control & Prevention [CDC], 2014). This represented more than 40,000 deaths, making suicide the 10th leading cause of death in the U.S. (CDC, 2015). Alaska had the second highest state per capita rate of suicide in 2012 at 23.0 (CDC, 2014).

<sup>6</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

The family members and friends of people who die by suicide experience a range of grief reactions, often more complex due to the nature of the loved one's death. For example, exacerbated feelings of guilt, anger, abandonment, and shock (Jordan, 2001). Survivors are often at a higher risk for committing suicide in the future (Brent, 2010). Estimates of the number of people impacted by a single suicide death range from 6 to 32 people (Berman, 2011).

In terms of consequences to society, the CDC estimated suicide costs over \$44.6 billion per year in the U.S. (medical plus work loss), or an average of \$1,164,499 per person [2015]. This per person cost along with an estimated 2.6 suicides per week in Alaska (Statewide Suicide Prevention Council, 2010) renders an estimated total cost of \$157,440,265 per year to the State of Alaska. However, a recent study put the national cost of reported suicide deaths much higher, at \$58.4 billion per year. An adjustment for underreporting increases that estimate to \$93.5 billion per year (Shepard, Gurewich, Lwin, Reed, & Silverman, 2015).

#### **v. Intermediate Variables<sup>7</sup>**

Data for intermediate variables is shared in this section. This section includes existing data reflecting the prevalence and trends of intermediate variables, as well as the results of additional analysis that assessed the relationships between intermediate variables and behavioral health indicators as captured by the YRBS for ASD high school students.

##### ***Prevalence and Trends***

###### ***Community Connection***

The YRBS asks high school students whether they feel like they matter to people in their communities; data for this question is presented in Table 20. In 2013, around 48% of youth agreed or strongly agreed that they felt like they mattered in their communities. This is about a 5% decline when compared to the same data from the 2009 and 2011 survey periods.

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<sup>7</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

**Table 20. Percentage of ASD Students Who Feel They Matter to People in the Community**

<b>Matter to Community</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2009</b>	<b>2011</b>	<b>2013</b>
Total	52.3%	50.8%	51.4%	54.9%	53.1%	48.3%
<i>Gender</i>						
Male	52.9%	55.1%	51.3%	58.0%	50.9%	50.0%
Female	51.7%	46.5%	51.5%	51.6%	55.4%	46.7%
<i>Grade</i>						
9 <sup>th</sup> Grade	43.0%	46.4%	55.0%	60.0%	50.2%	46.7%
10 <sup>th</sup> Grade	53.4%	52.9%	52.1%	52.0%	52.4%	45.9%
11 <sup>th</sup> Grade	54.3%	48.3%	51.0%	55.6%	52.5%	46.8%
12 <sup>th</sup> Grade	61.2%	57.4%	46.7%	51.9%	57.4%	54.0%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

### Feeling Alone

The YRBS also asks whether or not students feel alone in life. From 2003 to 2013, an increasing proportion of youth reported feeling alone in their lives. In 2003, approximately 19% of ASD high school students reported feeling alone versus 23% in 2013. These results are reflected in Table 21.

**Table 21. Percentage of ASD Students Who Agree or Strongly Agree They Feel Alone in Life (2003-2013)**

<b>Feel Alone</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2009</b>	<b>2011</b>	<b>2013</b>
Total	18.7%	19.8%	19.5%	21.4%	23.4%	23.4%
<i>Gender</i>						
Male	21.6%	17.5%	19.1%	18.6%	24.6%	24.5%
Female	15.8%	22.0%	19.9%	24.4%	22.2%	22.3%
<i>Grade</i>						
9 <sup>th</sup> Grade	17.6%	21.3%	21.3%	17.9%	22.0%	29.0%
10 <sup>th</sup> Grade	20.0%	19.8%	17.5%	19.5%	24.7%	25.3%
11 <sup>th</sup> Grade	15.7%	23.0%	19.0%	22.4%	23.8%	23.4%
12 <sup>th</sup> Grade	22.1%	13.6%	20.1%	25.6%	23.0%	15.5%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

### School Environment

Three questions from the YRBS capture the high school environment as perceived by students. One question asks students if their school has clear rules and consequences for behavior. A second question asks students if they have not gone to school on at least one of the past 30 days because they felt they would be unsafe at school or on their way to school. The third question asks students if they have been in a physical fight one or more times on school property during the past 12 months. Table 22 summarizes the data from these three YRBS questions. In 2013, about 68% of youth agreed or strongly agreed their schools had



clear rules and consequences for student behaviors, a nearly 4% increase from 2003. Approximately 5% of students reported not going to school because they felt unsafe in 2003. This increased to 8.7% in 2005, with rates decreasing to 6.7% in 2013. In 2003, 7.7% of youth reported being in a physical fight in school, which increased to almost 14% in 2005, and decreased to 7.7% in 2013.

**Table 22. ASD Student Responses on High School Environment (2003-2013)**

	2003	2005	2007	2009	2011	2013
Clear rules and consequences at school	64.4%	66.9%	58.3%	64.5%	67.2%	67.9%
Stayed home because felt unsafe at school or on the way to school	5.2%	8.7%	7.5%	6.5%	6.5%	6.7%
Physical fight on school property	7.7%	13.7%	9.0%	11.1%	8.9%	7.7%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

Five variables from the 2009 National College Health Assessment (NCHA) capture experiences of harassment and assault on campus. These variables included experiences of physical assault, verbal threat, sexual touching without consent, sexual penetration without consent, and stalking on campus. Table 23 shows the percentage of students reporting experiences of physical assault, verbal threats, sexual assault, and stalking on the UAA campus as captured by the NCHA in 2009. Overall, less than 10% of respondents reported experiencing physical or sexual or assault on campus. Almost one in five (19.5%) students reported being verbally threatened. A greater percentage of males were verbally threatened (26.0%) compared to females (16.3%).

**Table 23. Reported Experiences of Physical Assault, Verbal Threats, Sexual Assault, and Stalking on UAA Campus (2009)**

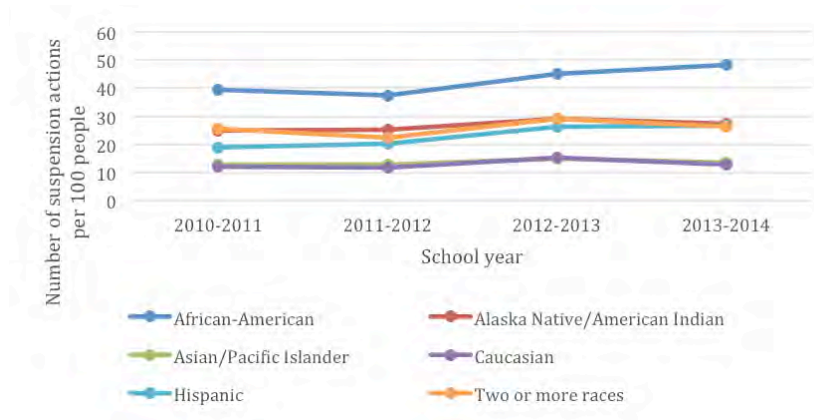
Campus Safety	Overall	Male	Female	White	AI/AN
Physically assaulted	5.9%	6.6%	5.6%	6.0%	8.5%
Verbally threatened	19.5%	26.0%	16.3%	21.6%	16.0%
Sexually touched without consent	5.5%	2.9%	6.9%	6.0%	7.4%
Sexually penetrated without consent	1.9%	0.8%	2.5%	2.5%	2.1%
Stalked	7.3%	1.5%	8.8%	7.0%	7.4%

*Note.* Table created from data retrieved by Heath et al., 2015 from the 2009 National College Health Assessment (NCHA) and reflects responses from University of Alaska Anchorage (UAA) students aged 18 to 24 years old ( $n=725$ ).

### School Performance and Attendance

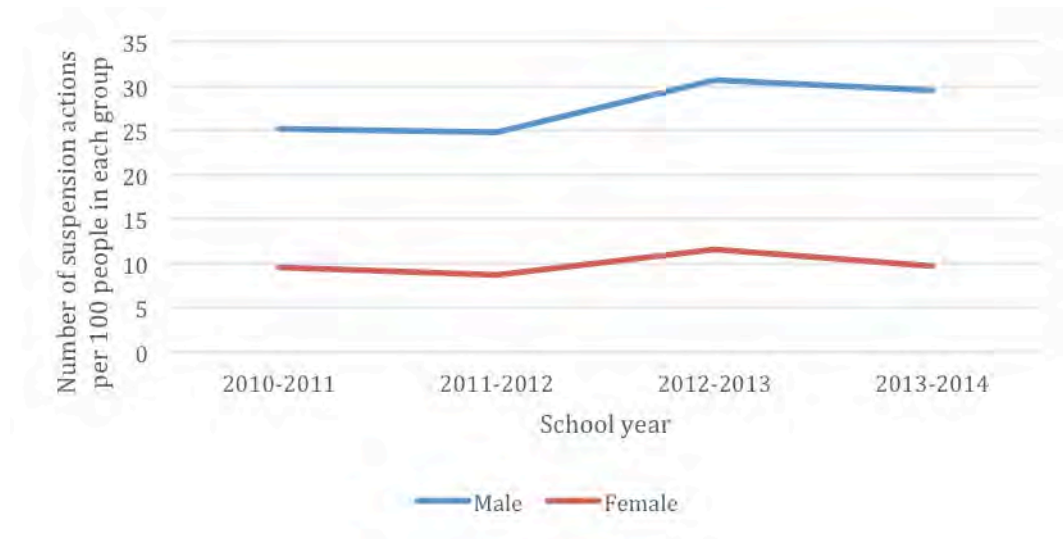
The Alaska Department of Education and Early Development (ADEED) collects data on school suspensions/expulsions, dropout, and graduation rates. Figures 8 through 10 show data on ASD suspension rates by racial/ethnic group, gender, and grade. Combined suspensions rates for grades 3 through 12 tended to be fairly stable from 2010 to 2014. In the 2010-11 school year, the ASD suspension rate was 17.5 per 100 students; in the 2013-2014 school year the suspension rate was 19.8 per 100 students. Suspension rates tended to be highest among males, eighth grade students, and ethnic minorities.

**Figure 8. ASD Suspension Rates by Racial/Ethnic Group (2010-2014)**



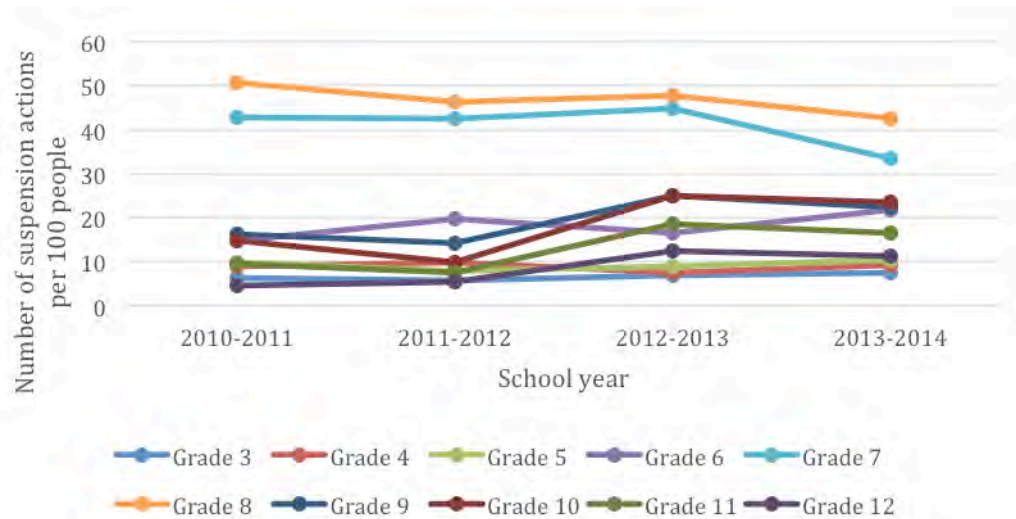
*Note.* Figure created from data retrieved by Heath et al., 2015 from the Alaska Department of Education and Early Development (ADEED) and captures suspensions for ASD students in grades 3 through 12.

**Figure 9. ASD Suspension Rates by Gender (2010-2014)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Alaska Department of Education and Early Development (ADEED) and captures suspensions for ASD students in grades 3 through 12.

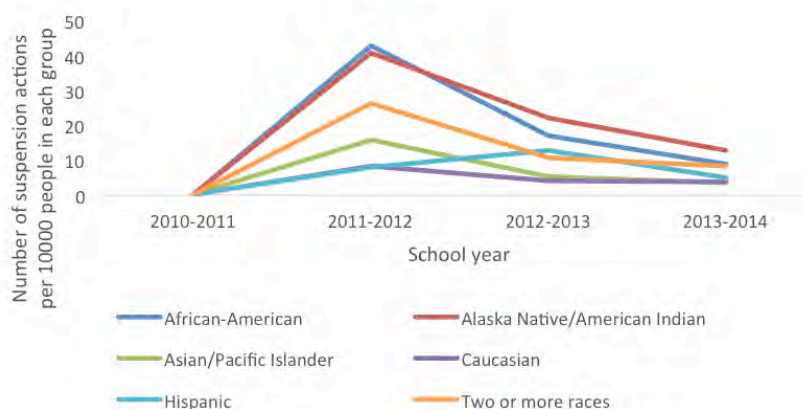
**Figure 10. ASD Suspension Rates by Grade (2010-2014)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Alaska Department of Education and Early Development (ADEED) and captures suspensions for ASD students in grades 3 through 12.

Figures 11 through 13 reflect differences in ASD expulsion rates by racial/ethnic group, gender, and school grade. Rates of school expulsions have tended to be fairly low for grades 3 to 12. The combined ASD expulsion rate was highest in the 2011-12 school year at 16.6 per 10,000 students, and dropped to 5.6 in 2013-14. Expulsion rates were highest among male students in grades 9 and 10, and ethnic minorities. During the 2011-12 school year, the expulsion rate for ninth grade students was 55 per 10,000 students—the highest expulsion rate observed by grade between 2010 and 2014.

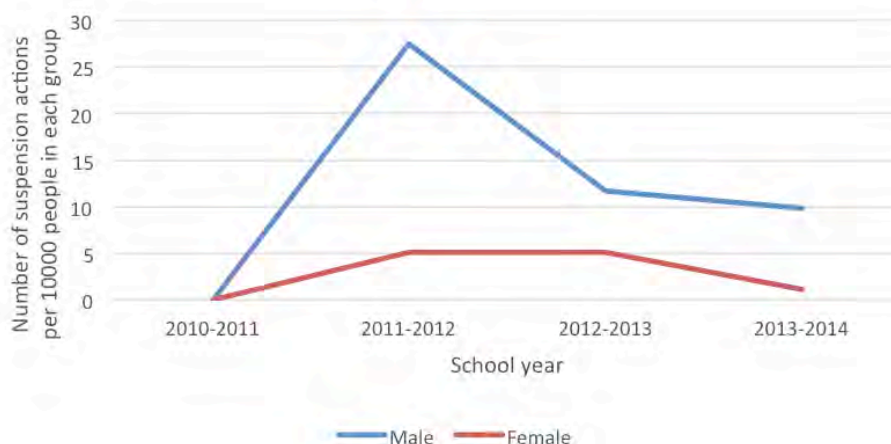
**Figure 11. ASD Expulsion Rates by Race/Ethnicity (2010-2014)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Alaska Department of

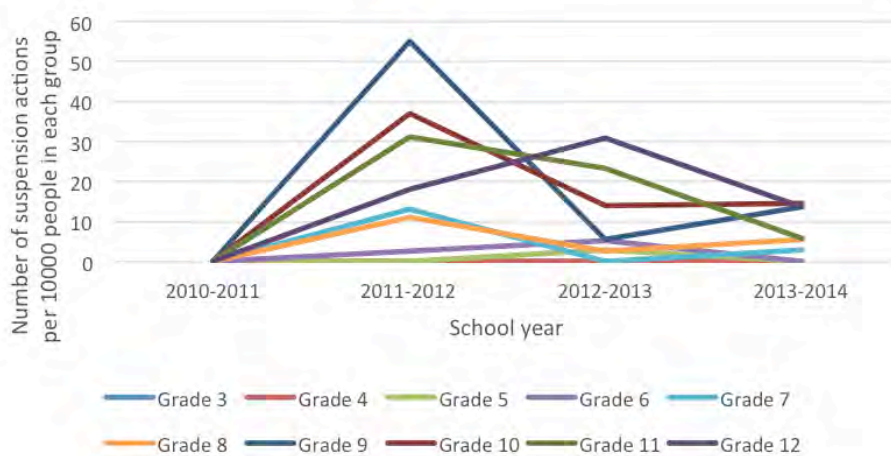
Education and Early Development (ADEED) and captures suspensions for ASD students in grades 3 through 12.

**Figure 12. ASD Expulsion Rates by Gender (2010-2014)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Alaska Department of Education and Early Development (ADEED) and captures suspensions for ASD students in grades 3 through 12.

**Figure 13. ASD Expulsion Rates by Grade (2010-2014)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Alaska Department of Education and Early Development (ADEED) and captures suspensions for ASD students in grades 3 through 12.

Tables 24 and 25 show data on ASD graduation rates from ADEED. Two types of graduation rates are recorded by ADEED: the 4-year cohort graduation rate and the 5-year cohort

graduation rate. The 4-year rates improved by a few percentage points, from around 71% in the 2009-10 school year to about 74% in the 2013-14 school year. The 5-year rates also improved. In school year 2010-11 the graduation rate was around 76%, while for 2013-14 it rose to 81%. For both 4-year and 5-year cohort, boys, ethnic minorities, and students with limited English proficiency tended to have graduation rates consistently lower than their peers of the same age.

**Table 24. ASD Graduation Rate, 4-Year Cohort (2009-2014)**

<b>Graduation</b>	<b>2009- 2010</b>	<b>2010- 2011</b>	<b>2011- 2012</b>	<b>2012- 2013</b>	<b>2013- 2014</b>
All Students	71.04%	72.14%	72.79%	76.22%	73.54%
<i>Gender</i>					
Female	76.80%	78.26%	77.60%	79.56%	77.65%
Male	65.54%	66.58%	68.39%	73.18%	69.48%
<i>Race/Ethnicity</i>					
African American	56.25%	66.79%	62.50%	63.64%	65.58%
Alaska Native/American Indian	44.01%	50.88%	42.37%	53.77%	47.33%
Asian	74.88%	78.29%	79.91%	82.19%	77.86%
Native Hawaiian or Pacific Islander	62.90%	56.74%	61.48%	63.46%	55.49%
Caucasian	78.11%	78.76%	79.16%	83.59%	81.74%
Hispanic	63.72%	61.32%	71.01%	73.41%	71.53%
2 or More Races	66.75%	65.33%	68.70%	68.03%	68.06%
<i>Student Circumstances</i>					
Economically Disadvantaged Students	58.37%	61.60%	57.43%	62.10%	59.87%
Students with Disabilities	45.22%	39.47%	42.36%	43.96%	41.67%
Limited English Proficiency	41.14%	48.92%	51.43%	45.27%	34.19%
Migrant	68.04%	65.60%	61.54%	56.47%	64.18%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Alaska Department of Education and Early Development (ADEED) and captures suspensions for ASD students in grades 3 through 12.

**Table 25. ASD Graduation Rate, 5-Year Cohort (2009-2014)**

<b>Graduation</b>	<b>2009- 2010</b>	<b>2010- 2011</b>	<b>2011- 2012</b>	<b>2012- 2013</b>	<b>2013- 2014</b>
All Students	75.50%	77.48%	79.59%	81.02%	75.50%
<i>Gender</i>					
Female	79.61%	82.52%	83.54%	84.07%	79.61%
Male	71.57%	72.86%	75.97%	78.25%	71.57%
<i>Race/Ethnicity</i>					
African American	59.85%	73.26%	69.71%	69.92%	59.85%
Alaska Native/American Indian	50.17%	60.99%	55.09%	61.37%	50.17%
Asian	81.26%	82.26%	85.09%	86.02%	81.26%
Native Hawaiian or Pacific Islander	66.93%	65.00%	68.18%	69.87%	66.93%

**Table 25. ASD Graduation Rate, 5-Year Cohort (2009-2014)**

<b>Graduation</b>	<b>2009- 2010</b>	<b>2010- 2011</b>	<b>2011- 2012</b>	<b>2012- 2013</b>	<b>2013- 2014</b>
Caucasian	81.64%	82.77%	85.56%	87.29%	81.64%
Hispanic	70.12%	68.08%	76.45%	77.78%	70.12%
2 or More Races	72.68%	72.48%	75.75%	74.74%	72.68%
<i>Student Circumstances</i>					
Economically Disadvantaged Students	78.08%	66.30%	67.97%	70.97%	78.08%
Students with Disabilities	52.38%	48.84%	50.40%	52.03%	52.38%
Limited English Proficiency	51.31%	56.88%	57.38%	52.63%	51.31%
Migrant	75.51%	78.15%	70.83%	68.35%	75.51%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Alaska Department of Education and Early Development (ADEED) and captures suspensions for ASD students in grades 3 through 12.

The YRBS asks students about truancy, or missing classes or school without permission, during the past 30 days. Rates of truancy in ASD decreased from 32% in 2011 to 24% in 2013. Table 26 shows data on truancy from the ASD YRBS.

**Table 26. Percentage of ASD Students Reporting They Missed Classes or School Without Permission Over Past 30 Days (2011-2013)**

<b>Truancy</b>	<b>2011</b>	<b>2013</b>
Total	32.4%	23.5%
<i>Gender</i>		
Male	34.2%	25.6%
Female	30.5%	21.4%
<i>Grade</i>		
9 <sup>th</sup> Grade	21.1%	12.4%
10 <sup>th</sup> Grade	24.5%	23.6%
11 <sup>th</sup> Grade	33.1%	24.0%
12 <sup>th</sup> Grade	50.8%	34.2%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

### Violence, Abuse, and Adverse Childhood Experiences

The Alaska Office of Children's Services (OCS) provided data on victimization among children, shown in Tables 27 and 28. The number of children aged 9 and up with at least one



substantiated report of harm during screening decreased from 490 in 2008 to 155 in 2014. A greater proportion of girls than boys were harmed through the years. OCS also provided data on children or youth in out-of-home care. As of January 1, 2015, a total of 949 children or youth from Anchorage were in out-of-home care status. They made up 41% of state placements.

**Table 27. Count of Children Over Nine Years Old with at Least One Substantiated Report of Harm (2008-2014)**

<b>Report of Harm</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Total	490	402	289	325	220	152	155
<i>Gender</i>							
Female	275	202	164	179	133	82	90
Male	214	199	125	146	85	70	65

*Note.* Table created from data retrieved by Heath et al., 2015 from the Alaska Office of Children's Services and reflects children in Anchorage over 9 years old with at least one substantiated report of harm at report screen-in.

**Table 28. Children or Youth in Out-of-Home Care in Anchorage as of January 1, 2015**

<b>Region</b>	<b>Children/Youth</b>	<b>Percentage of State Placements</b>
Anchorage	949	41%
Statewide	2,304	100%

*Note.* Data retrieved from the Alaska Office of Children's Services.

The YRBS asks students whether their boyfriend or girlfriend has physically hurt them in the past 12 months. Rates of ASD students who reported in the YRBS as having been physically hurt by their boyfriend or girlfriend increased in ASD from about 12% in 2003 to about 18% in 2005. Between 2005 and 2011, rates decreased to around 13%. This data is shown in Table 29.

**Table 29. Percentage of ASD Students Who Were Hit, Slapped, or Physically Hurt by their Boyfriend or Girlfriend During the Past 12 Months (2003-2011)**

<b>Physically Hurt</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2009</b>	<b>2011</b>
Total	11.5%	17.8%	13.7%	13.5%	12.9%
<i>Gender</i>					
Male	12.7%	15.9%	16.5%	15.3%	15.1%
Female	10.2%	19.8%	10.7%	11.5%	10.5%
<i>Grade</i>					
9 <sup>th</sup> Grade	11.4%	18.2%	11.4%	10.4%	9.5%
10 <sup>th</sup> Grade	8.4%	14.3%	14.1%	11.4%	8.8%
11 <sup>th</sup> Grade	8.5%	23.5%	11.2%	13.3%	14.6%
12 <sup>th</sup> Grade	18.6%	14.8%	18.5%	18.9%	18.7%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

Table 30 displays information pertaining to abusive relationships among UAA students. In the 2009 NCHA survey, less than 4% of UAA students reported being in physically abusive or sexually abusive relationships, while about 12% reported being in emotionally abusive relationships.

**Table 30. Percentage of UAA Students in Emotionally, Physically, or Sexually Abusive Relationships (2009)**

<b>Abusive Relationships</b>	<b>Overall</b>	<b>Male</b>	<b>Female</b>	<b>White</b>	<b>AI/AN</b>
Emotionally abusive relationship	11.5%	7.9%	13.4%	11.7%	15.2%
Physically abusive relationship	3.2%	2.5%	3.6%	3.6%	5.4%
Sexually abusive relationship	2.4%	0.8%	3.1%	2.7%	2.2%

*Note.* Table created from data retrieved by Heath et al., 2015 from the 2009 National College Health Assessment and reflects responses from University of Alaska Anchorage (UAA) students aged 18 to 24 years old ( $n=725$ ).

Table 31 displays data on adverse childhood experiences, as captured by the BRFSS, among young adults aged 18-24 years old in Anchorage. Almost one third (31.8%) of Anchorage's young adults are estimated to have lived with someone who was depressed, mentally ill, or suicidal when they were a child. One fourth (24.8%) of Anchorage young adults lived with a problem drinker or alcoholic when they were a child under 18, and 22.2% lived with someone who used illegal street drugs or abused prescription medication.

Table 32 displays data retrieved from the Alaska PRAMS on mothers under 25 years old. Reported domestic violence among young mothers seems to be decreasing overall.

**Table 31. Anchorage Young Adults Who Reported Adverse Childhood Experiences Before Age 18 (2013)**

<b>Adverse Childhood Experiences</b>	<b>%</b>
Parent or adults in home ever swear at, insult, or put you down twice or more	31.3%
Parent or adult in home ever hit, beat, kick or physically hurt you	10.8%
Anyone at least 5 years older ever touch you sexually	5.8%
Anyone at least 5 years older ever try to make you touch them sexually	3.5%
Anyone at least 5 years older force you to have sex	4.0%
Live with anyone who was depressed, mentally ill, or suicidal	31.8%
Live with anyone who served time or was sentenced to prison or jail	17.8%
Live with anyone who was a problem drinker or alcoholic	24.8%
Live with anyone who used illegal street drugs or abused prescription medications	22.2%
Parents separated or divorced	39.9%
Parents or adults in home ever slap, hit, kick, punch, or beat each other up	20.0%
Potential 4 or more adverse childhood experiences	22.0%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Behavioral Risk Factor Surveillance System and reflects Adverse Childhood Experiences reported by young adults aged 18-24 living in the Municipality of Anchorage.

**Table 32. Housing Stability and Domestic Violence Among Mothers Under 25 (2008-2012)**

<b>Housing Stability and Domestic Violence</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<i>Housing (%)</i>					
Moved to a new address	53.79	54.57	55.40	46.35	51.70
Homelessness	6.59	12.21	7.82	8.33	5.18*
<i>Domestic Violence (%)</i>					
12 months pre-pregnancy abuse by husband/partner	9.43	9.97	10.17	8.86	4.83
12 months prenatal abuse by husband/partner	7.32	9.20	7.89	5.75	0.58
12 months pre-pregnancy controlling partner	4.68	4.94	8.24	7.14	1.56
Prenatal controlling partner	10.36	6.27	6.50	8.53	1.93

*Note.* Table created from data retrieved by Heath et al., 2015 from data retrieved from Alaska PRAMS

\* Signifies question change, trend is not applicable.

### Relationships With Adults

Table 33 summarizes the data from the YRBS on ASD youth's relationships with the adults in their lives. The YRBS asks youth if one parent talks with them about what they do in school. Over the past decade, ASD youth reporting at least one parent who talked with them about what they did in school every day remained at around 44%. Another YRBS question asks youth whether they feel comfortable seeking help from at least one adult besides their parents when they had an important question affecting their lives. In 2003 around 86% of ASD youth had at least one other adult to go to for help, while in 2013 it was down to 82%. Youth's relationships with teachers are also measured in the YRBS. Students were asked whether their teachers really cared about them and gave them a lot of encouragement. The rates for this specific variable increased through the years, but not by significant amounts. In 2003, 57% of ASD students agreed or strongly agreed that teachers really cared about them and gave them a lot of encouragement, while in 2013 it increased to 61%.

**Table 33. ASD Student Relationships with Parents, Other Adults, and Teachers (2003-2013)**

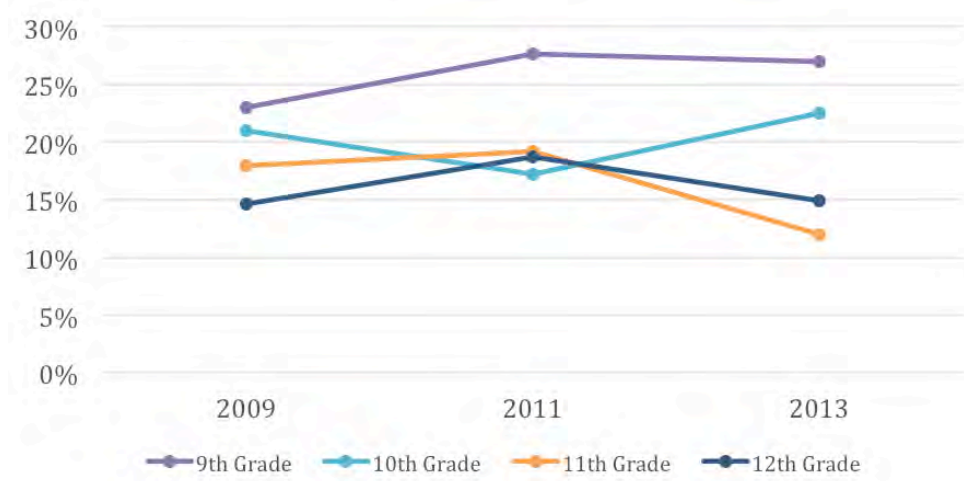
<b>Youth Relationships</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2009</b>	<b>2011</b>	<b>2013</b>
Parent talks with youth about school	46.4%	44.3%	48.6%	41.3%	42.6%	44.8%
Relationship with other adults	85.6%	83.0%	87.6%	82.0%	82.9%	81.9%
Teachers care and give encouragement	57.0%	60.2%	54.8%	57.8%	58.6%	61.2%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

### Bullying

The YRBS asks whether youth have been bullied on school property and whether they have been bullied electronically in the past 12 months. Figure 14 shows differences in bullying by grade. ASD students in grade 9 report higher rates of bullying than students in other grades.

**Figure 14. Percentage of ASD Students Reporting Being Bullied on School Property by Grade (2009-2013)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

Table 34 shows the percentage of students reporting bullying for both questions. Rates of having been bullied on school property remained at approximately 20% from 2009 to 2013. The rate of having been bullied electronically was 15.7% in 2011 and 14.8% in 2013.

**Table 34. Percentage of ASD Students Reporting Being Bullied on School Property or Electronically (2009-2013)**

Bullying	2009	2011	2013
<b>Bullied on school property in past 12 months</b>			
Total	19.9%	20.6%	19.3%
<i>Gender</i>			
Male	15.4%	20.0%	16.3%
Female	23.1%	21.2%	22.3%
<i>Race/Ethnicity</i>			
White	20.5%	19.5%	21.2%
Alaska Native	21.0%	19.0%	22.8%
Other Races	16.9%	21.4%	15.2%
<i>Grade</i>			
9 <sup>th</sup> Grade	23.0%	27.6%	27.0%
10 <sup>th</sup> Grade	21.0%	17.2%	22.5%
11 <sup>th</sup> Grade	17.9%	19.2%	12.0%

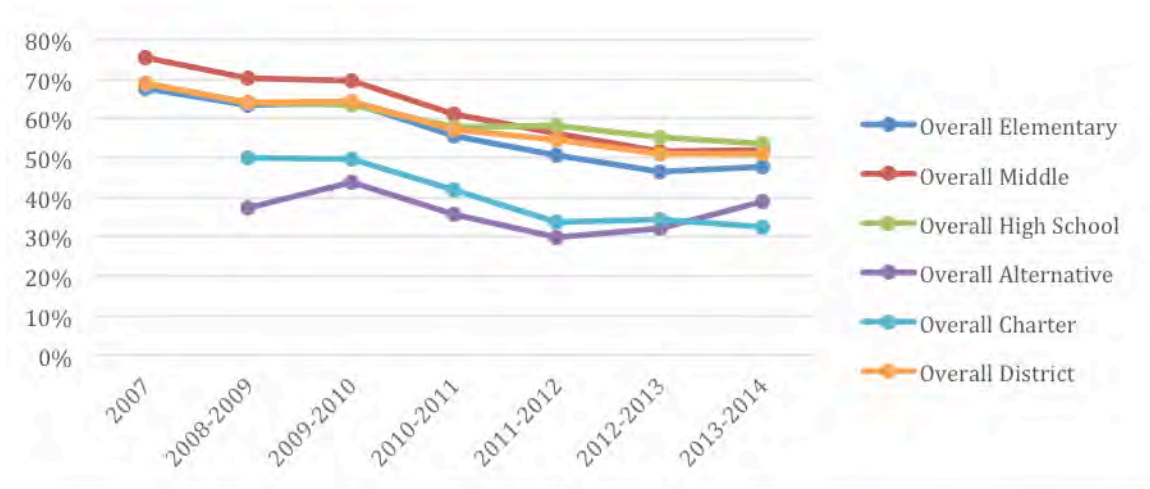
**Table 34. Percentage of ASD Students Reporting Being Bullied on School Property or Electronically (2009-2013)**

<b>Bullying</b>	<b>2009</b>	<b>2011</b>	<b>2013</b>
12 <sup>th</sup> Grade	14.6%	18.7%	14.9%
<b>Electronically bullied in past 12 months</b>			
Total	DNC	15.7%	14.8%
<i>Gender</i>			
Male	DNC	10.9%	11.2%
Female	DNC	20.7%	18.6%
<i>Race/Ethnicity</i>			
White	DNC	15.1%	16.2%
Alaska Native	DNC	16.9%	22.3%
Other Races	DNC	16.2%	10.8%
<i>Grade</i>			
9 <sup>th</sup> Grade	DNC	17.9%	18.7%
10 <sup>th</sup> Grade	DNC	14.1%	15.4%
11 <sup>th</sup> Grade	DNC	16.0%	11.0%
12 <sup>th</sup> Grade	DNC	14.7%	13.8%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

The SCCS asks about bullying among elementary, middle school, and high school students. Figure 15 displays the trends in observed bullying based on ASD data from the SCCS. Where the YRBS asks about personal experiences of bullying, the SCCS asks students about bullying they have observed in school. Observed bullying among students in schools has declined for elementary, middle school, and high school students from 2007 to 2014. In 2007, approximately 68% of elementary students, 76% of middle school students, and 70% of high school students reported seeing at least one incidence of bullying in their schools. In school year 2013-2014, the rates declined substantially to 48%, 52%, and 54% among elementary, middle, and high school students, respectively.

**Figure 15. Percentage of ASD Students Reporting at Least One Observation of Students Threatening or Bullying Other Students in Past 12 Months (2007-2014)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Anchorage School District's School Climate and Connectedness Survey (SCCS).

#### Youth Perceptions of Alcohol and Marijuana Use

Table 35 shows results from the YRBS on youth perceptions of alcohol and marijuana use. Through the YRBS, youth are asked if drinking one or two alcoholic beverages nearly every day has a moderate or great risk of harm. From 2007 to 2013, ASD student perception of harm increased from 57% to 65%. Additionally, YRBS asked youth if drinking alcohol was cool. The rate of ASD student perception that drinking alcohol is not cool increased from 59% in 2007 to 74% in 2013.

Youth perception regarding the harm of marijuana use is also assessed in YRBS. However, this specific topic was asked two different ways through the years, so the rates of youth perceptions of harm are not directly comparable. In 2009 and 2011, ASD students were asked if they perceived people to have moderate or great risk of harming themselves if they smoked marijuana regularly. Alternatively, in 2013 youth were asked if they perceived people to have moderate or great risk of harming themselves if they smoked marijuana once or twice a week (operationalizing the term "regularly"). In 2009 and 2011, over 50% of ASD YRBS respondents perceived people had moderate or great risk of harming themselves if they smoked marijuana regularly. In 2013, around 37% of respondents perceived smoking marijuana once or twice a week posed moderate or great risk. Whether youth think smoking marijuana is cool is also assessed in YRBS. Rates of this variable did not change significantly through the years. In 2007, 66% of youth thought there was little or no chance of being seen as cool if they smoked marijuana, while in 2013 the rate slightly increased to 69%.



**Table 35. ASD Student Attitudes Towards Alcohol and Marijuana Use (2007-2013)**

<b>Substance Use Attitudes</b>	<b>2007</b>	<b>2009</b>	<b>2011</b>	<b>2013</b>
Drinking alcohol everyday has a moderate risk or great risk of harm	56.9%	65.2%	65.5%	65.4%
Little chance or no chance of being seen as cool if they drink alcohol regularly	59.2%	71.5%	66.4%	73.7%
Moderate risk or great risk of harm if they smoke marijuana regularly	NA	54.0%	50.1%	NA
Little chance or no chance of being seen as cool if they smoke marijuana	65.8%	73.4%	67.6%	68.9%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

### Parent Perceptions of Alcohol and Marijuana Use

As part of the YRBS, youth are asked about parental perceptions of alcohol and substance use. Results for these questions are shown in Table 36. From 2009 to 2013, the percentage of youth reporting that their parents consider it very wrong for youth to have one or two alcoholic drinks per day declined. In 2009, almost 80% perceived that their parents considered it very wrong for them to have one or two alcoholic drinks per day, while in 2013 it was down to about 64% of students. On the other hand, the proportion of youth who perceived their parents considered it very wrong for them to smoke marijuana did not significantly change through the four-year period.

**Table 36. ASD Student Perceptions of Parent Beliefs About Alcohol and Substance Use (2009-2013)**

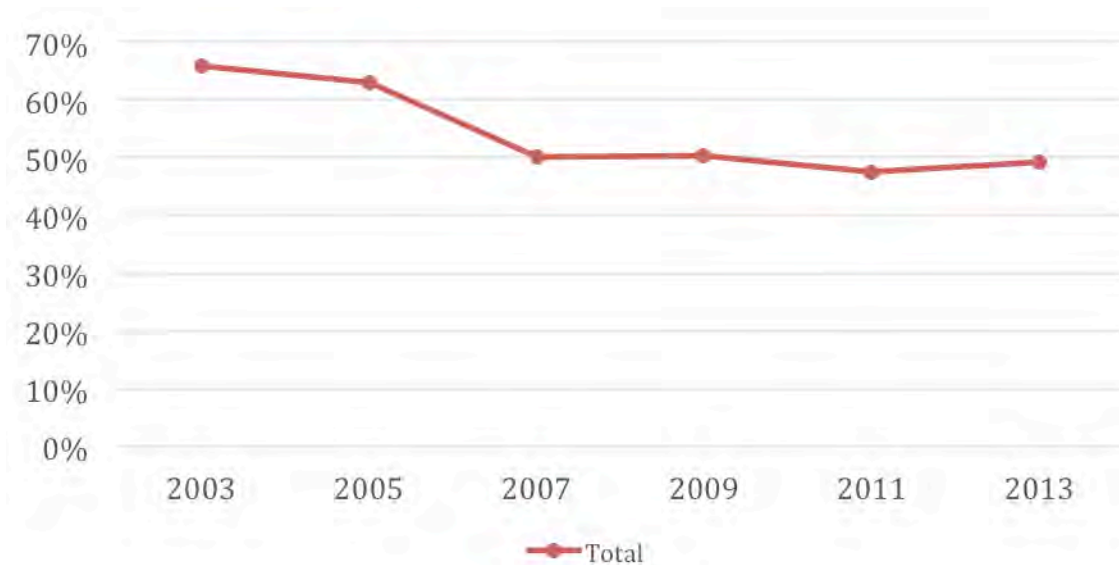
<b>Parent Perceptions</b>	<b>2009</b>	<b>2011</b>	<b>2013</b>
Parents consider it very wrong for youth to have one or two alcoholic drinks per day	78.7%	78.3%	63.5%
Parents consider it very wrong for youth to smoke marijuana	66.4%	64.6%	62.6%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

### Youth Activities

Volunteerism among youth is assessed in the YRBS. In particular, the survey asks about spending one or more hours per week helping people without getting paid or volunteering at school or in the community. YRBS comparisons show rates of ASD youth volunteering one or more hours per week decreased over a ten-year period, from 66% in 2003 to 49% in 2013, as shown in Figure 16.

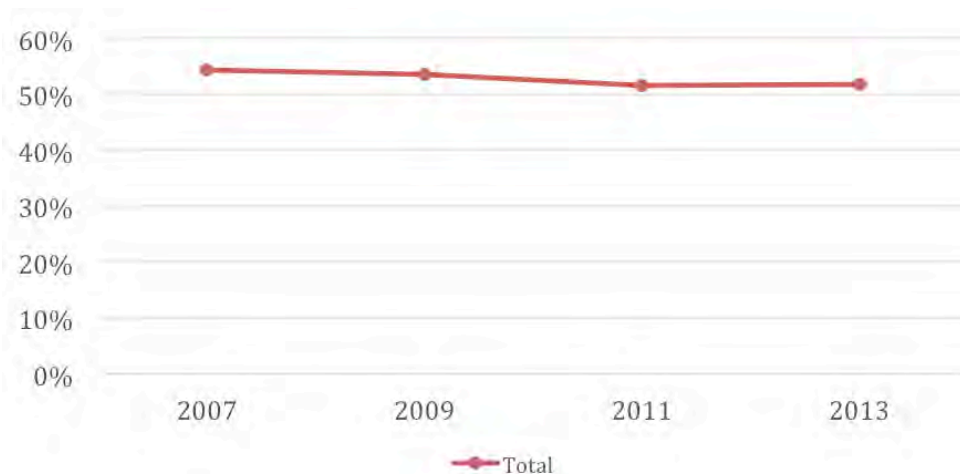
**Figure 16. Percentage of ASD Students Who Volunteer (2003-2013)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

The YRBS asked youth if they took part in any organized afterschool, evening, or weekend activities each week. Rates did not significantly change through the years. This can be seen in Figure 17. In 2007, approximately 54% of youth took part in organized afterschool/evening/weekend activities per week, while in 2013 this rate slightly decreased to 52%.

**Figure 17. Percentage of ASD Students Who Take Part in Organized Activities (2007-2013)**



*Note.* Figure created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

Recent research has found that physical activity may protect youth from poor mental health conditions, such as sadness and suicidal ideation among bullied adolescents (Sibold, Edwards, Murray-Close, & Hudziak, 2015). The YRBS asks youth about engaging in physical activity 60 minutes per day on one or more days in the past week. Results for this question by gender and grade are shown in Table 37. Rates of physical activity have increased from 2005 to 2013. In 2005, about 78% of youth reported engaging in physical activity, while in 2013, this rate increased to 84%.

**Table 37. Percentage of ASD Students Physically Active 60 Minutes Per Day One or More of Past Seven Days**

<b>Physically Active</b>	<b>2005</b>	<b>2007</b>	<b>2009</b>	<b>2011</b>	<b>2013</b>
Total	78.3%	85.1%	84.0%	85.4%	84.4%
<i>Gender</i>					
Male	82.4%	85.4%	85.9%	88.7%	86.4%
Female	74.2%	84.7%	81.9%	81.9%	82.4%
<i>Grade</i>					
9 <sup>th</sup> Grade	79.2%	85.6%	82.1%	88.0%	82.5%
10 <sup>th</sup> Grade	80.7%	88.0%	85.2%	85.1%	85.0%
11 <sup>th</sup> Grade	74.9%	84.0%	87.7%	85.4%	85.1%
12 <sup>th</sup> Grade	77.9%	82.4%	80.9%	82.9%	85.4%

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

### Demographic factors

The YRBS dataset was analyzed to identify which specific demographic variables were associated with bullying, feeling sad or hopeless, and suicidal ideation. The findings showed that girls and youth with mixed race/ethnicity were more likely to be bullied in school or electronically, to report feeling sad or hopeless almost everyday, to consider suicide, and to plan an attempt to commit suicide (Heath et al., 2015).

**Table 38. Strength of Association between Demographic Factors and Behavioral Health Indicators**

<b>Behavioral Health Indicator</b>	<b>Ninth Grade Students</b>	<b>Females</b>	<b>Mixed Race/Ethnicity</b>
Bullied in school	85.1% more likely	39.5% more likely	Not significant
Bullied electronically	Not significant	98.4% more likely	Not significant
Bullied in school or electronically	Not significant	43.5% more likely	138% more likely
Feel sad/hopeless	Not significant	87.7% more likely	43.8% more likely
Feeling alone	Not significant	Not significant	58.0% more likely
Seriously considered suicide	61.2% more likely	84.1% more likely	49.9% more likely
Planned a suicide attempt	53.2% more likely	44.0% more likely	60.5% more likely

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

### **Strength of Association Between Potential Intermediate Variables and Behavioral Health**

The UAA Assessment team conducted odds ratio analysis to determine the strength of the association between intermediate variables and behavioral health. Table 39 shows the strength of association between bullying and behavioral health indicators.

**Table 39. Strength of Association Between Bullying and Behavioral Health Indicators<sup>a</sup>**

<b>Health Indicators</b>	<b>Bullied in School or Electronically</b>	<b>Bullied Electronically</b>	<b>Bullied in School</b>
Currently drink	90% more likely	169% more likely	119% more likely
Binge drinking	65% more likely	120% more likely	82% more likely
Currently use marijuana	61% more likely	118% more likely	87% more likely
Feeling alone	69% more likely	92% more likely	83% more likely
Feeling sad or hopeless	175% more likely	210% more likely	201% more likely
Seriously considered suicide	222% more likely	199% more likely	189% more likely
Planned a suicide attempt	183% more likely	194% more likely	168% more likely

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

<sup>a</sup> Controlling for sex and grade level with data pooled from those years common to each respective pairing of variables.

Table 40 displays the results of analysis determining the strength of association between feeling alone and behavioral health indicators for suicide ideation. ASD students who reported they feel alone or sad/hopeless were overwhelmingly more likely to report suicide ideation.

**Table 40. Strength of Association Between Feeling Alone and Suicide Ideation<sup>a</sup>**

<b>Health Indicators</b>	<b>Seriously Considered Suicide</b>	<b>Planned a Suicide Attempt</b>
Feeling alone	299% more likely	246% more likely
Feeling sad or hopeless	794% more likely	687% more likely

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

<sup>a</sup> Controlling for sex and grade level with data pooled from those years common to each respective pairing of variables.

### **b. Phase One Data Decisions: Selecting the Priority Issue**

After the CBHA Team identified, compiled, and analyzed data from existing data sources, the ACC was ready to identify the priority issue and further refine the list of potential intermediate variables.

#### **i. Community Engagement**

After the UAA Assessment Team completed their initial analysis of the existing data, the ACC Executive Committee organized a series of three presentations for ACC members and the community at large as described in the Methods section of this report. At each

presentation, members of the UAA Assessment Team presented data pertaining to the prevalence, trends, and consequences of mental health, substance use, and suicide. The data also showed differences by gender and race/ethnicity where available and relevant. The UAA Assessment Team additionally presented data on intermediate variables and, where feasible, their relationship to each of the three behavioral health issues.

At each of the three data presentation meetings, participants were able to discuss in small groups the data that they reviewed. ACC Executive Committee members captured notes. Participants were also provided with a worksheet that asked them to identify one or two behavioral health issues that emerged through the data as the top priorities of concern for Anchorage youth ages 12-24 (Appendix E). Participants were instructed to consider prevalence of the issue, trends over time, and urgency of the issue in their decisions. For each issue, participants were also prompted to identify a population most at risk, and pinpoint a risk factor and protective factor for their chosen priority issue.

A total of 72 individuals participated in the three data presentation meetings. The majority of participants selected two issues. Suicide and mental health emerged as the top behavioral issues based on coalition and community response from the data presentation meetings. Bullying and loneliness were selected most frequently as intermediate variables of interest. The ACC Executive Committee used the results of this process to select a priority issue.

## **ii. Prioritization**

Once the existing data was compiled and reviewed, ACC Executive Committee members considered both the data and the input from over 70 coalition and community members to decide the priority issue. The ACC Executive Committee developed and utilized a prioritization process tool to assist with the selection of the priority issue and potential intermediate variables of focus. This tool can be found in Appendix F. Criteria used to select the priority issue included prevalence data, trends, urgency of the issue, cultural competence, change potential, community will, and magnitude of the issue. After carefully reviewing all of the existing data and community input, the ACC Executive Committee chose to narrow its scope of work as follows.

- Priority issue: mental health
- Intermediate variables to address: bullying, feeling alone, and sadness/depression
- Consequences to achieve: improve mental health, reduce suicide and suicide ideation, and reduce substance abuse
- Goal: decrease conditions that lead to suicide and suicide attempts and increase those that lead to mentally healthy 12-24 year olds

The selection of the priority issue and potential intermediate variables of interest were supported by the data and the will of the community.

### ***Priority Issue: Mental Health***

The community and ACC Executive Committee found the following prevalence, trend, and consequence data to support selecting mental health as the priority issue:

- From 2003 to 2013, the percentage of ASD students in grades 9 through 12 reporting through the YRBS that they felt so sad or hopeless almost every day for two weeks or more in a row, to the point of withdrawing from usual activities, fluctuated between about one quarter to one third of students. There was no evidence of a decrease between 2003 and 2013 (Table 6).
- Students feeling sad/hopeless are 794% more likely to have seriously considered suicide compared to their peers who do not report feeling sad/hopeless (Table 37). They are also 687% more likely to have planned a suicide attempt.
- Based on findings from the NCHA, noteworthy percentages of UAA students reported they felt that things were hopeless (23.2%), felt overwhelmed (64.0%), felt very lonely (35.6%), felt very sad (36.6%), and felt so depressed it was difficult to function (14.9%) over the past month (Table 8). Almost half of UAA students (45.9%) reported experiencing high stress, or more than average or a tremendous amount, over the past 12 months.
- From 2008-10 to 2010-12, the average annual rate of Anchorage young adults aged 18-25 with any mental illness in the past year increased from 17.15% to 24.02% (Table 10). The percentages in 2010-2012 in Anchorage were higher than the state or national percentages. Also, the number of Anchorage young adults aged 18-25 who reported having at least one major depressive episode in the past year increased from 7.54% in 2006-2008 to 11.89% in 2010-2012 (Table 9). Once again, the percentages in Anchorage in 2010-2012 were higher than the state or national percentages.
- Data from BRFSS is consistent with the NSDUH data described immediately above. Between 2006 and 2013, the percentage of 18-24 year olds who reported that a doctor, nurse, or other health professional had told them they have a depressive disorder stayed almost constantly at 18.8% (Table 12). That same percentage reported their mental health was not good for 7 or more days during the past 30 days in 2012-2013 (Table 11). This is up from 2006-2007, when it was 12.4%.

The community and coalition members noted that mental health has a direct effect on substance use and suicide within Anchorage's youth population. Additionally, the community felt that the change potential and the will of the community to initiate change for mental health were high compared to substance use and suicide.

### ***Potential Intermediate Variables***

In order to focus the new data collection portion of the assessment, the ACC Executive Committee asked the three data review groups to identify intermediate variables of interest. The community and ACC Executive Committee found bullying, feeling alone, and sadness/hopelessness to be of particular interest in relationship to mental health.

### ***Bullying***

The three data review groups and the ACC Executive Committee were exceedingly concerned about bullying amongst Anchorage youth. In particular, the following findings were of note to the coalition and community:



- Based on analysis of ASD YRBS data from 2003 to 2013, ASD students who reported that they had been bullied at school were at an increased risk for the following compared to their not-bullied peers:
  - 222% more likely to have seriously considered suicide (Table 39)
  - 183% more likely to have planned a suicide attempt
  - 175% more likely to feel sad or hopeless
  - 90% more likely to currently drink
  - 65% more likely to report binge drinking
- Based on analysis of ASD YRBS data from 2003-2013, ASD students who reported they had been bullied electronically were at increased risk for the following compared to their not-bullied peers:
  - 199% more likely to have seriously considered suicide (Table 39)
  - 194% more likely to have planned a suicide attempt
  - 210% more likely to feel sad or hopeless
  - 169% more likely to currently drink
  - 120% more likely to report binge drinking
- According to data from the 2013 YRBS, almost 1 in 5 (19.3%) ASD high school students reported they had been bullied on school property in the past year (Table 34). Data was first collected through the YRBS on bullying on school property in 2009 and little change has been observed across the three observation periods. In 2009, 19.9% of students reported they had been bullied on school property; in 2011, 20.6% of students reported that they had been bullied on school property.
- In 2013, 14.8% of ASD high school students reported they had been electronically bullied in the past year (Table 34). Data was first collected through the YRBS for bullying on school property in 2011. In 2011, 15.7% of students reported they had been bullied electronically in the past 12 months.

### Feeling Alone

The three data groups were particularly concerned about the data on loneliness or feeling alone amongst youth in Anchorage. The following data listed below were of note to the coalition and community.

- From 2003 to 2013, the percentage of ASD high school students reporting that they agree or strongly agree they feel alone in life increased from 18.7% to 23.4% (Table 21)
- ASD high school students agreeing or strongly agreeing that they feel alone in life were 299% more likely to have seriously considered suicide and 246% more likely to report planning a suicide attempt (Table 40)
- Over one third (35.6%) of UAA students reported feeling very lonely in the past 30 days, according to the NCHA (Table 8).

### Sadness/Hopelessness

While sadness/hopelessness was operationalized as an indicator of mental health, ACC coalition members and Anchorage community members also expressed great interest in

sadness/hopelessness as an intermediate variable for behavioral health outcomes such as suicide. The following data demonstrates the magnitude of the prevalence of feelings of sadness/hopelessness, and its consequences, among Anchorage youth:

- From 2003 to 2013, the percentage of ASD students in grades 9 through 12 reporting through the YRBS that they felt so sad or hopeless almost every day for two weeks or more in a row, to the point of withdrawing from usual activities, fluctuated between about one quarter to one third of students (Table 6).
- A total of 23.2% of UAA students reported feeling things were hopeless in the past month (Table 8).
- Over one third (36.6%) of UAA students surveyed reported feeling very sad over the past month (Table 8).
- Students feeling sad/hopeless were 794% more likely to have seriously considered suicide compared to their peers who did not report feeling sad/hopeless (Table 40). They were also 687% more likely to have planned a suicide attempt.

### **c. Phase Two: New Data on Mental Wellness and Bullying**

During the second phase of the assessment, the CBHA Team performed additional analysis of existing data pertaining to intermediate variables of interest and collected new data. The three data collection methods listed below were used to generate new data for the ACC:

- Adult Perceptions of Anchorage Youth (APAY) Survey
- Young Adult Survey (YAS)
- Youth focus groups

The APAY survey provided the coalition with new data pertaining to adult perceptions of youth substance use, bullying, feeling alone, extreme sadness, hopelessness, and suicide. The YAS captured local information about the behavioral health of young adults (18-24) living in Anchorage. The youth focus groups provided the coalition with rich qualitative data pertaining to the experience of bullying and mental wellness among youth and young adults aged 12-24 years old in Anchorage. The results of the three new data collection processes are summarized below. For more detailed explanations, please see the Methods section of the Growing Up Anchorage report created by the UAA Assessment Team that is submitted with this report.

### **i. Additional Analysis of Existing Data<sup>8</sup>**

In order to better understand the relationships between intermediate variables of interest, behavioral health outcomes, and risk and protective factors, the UAA Assessment Team conducted additional analysis using data from the YRBS. The following describes the analysis conducted.

#### ***Relationship Between Intermediate Variables of Interest and Risk/Protective Factors***

Logistic regression analysis was conducted using data from the YRBS dataset. This method of analyzing YRBS data allowed the ACC to understand the relationship between potential intermediate variables of interest (dependent variables) and risk and protective factors (independent variables) among ASD high school students.

The dependent variables of interest in the logistic regression analysis model were as follows:

- Bullied electronically or on school property
- Sadness/hopelessness
- Suicide ideation

Independent variables included in the logistic regression analysis model included the following:

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<sup>8</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

- Youth talking to parents about school everyday
- Youth having one or more adult they are comfortable seeking help from
- Youth spending one or more hours per week volunteering in school or community
- Youth participating in organized afterschool activities at least one day per week
- Youth feeling they matter to people in their community
- Youth feeling that they have teachers who really care about them
- Youth reporting their school has clear rules and consequences for behavior
- Youth engaging in physical activity at least 60 minutes per day in the past seven days
- Youth reporting they feel alone in life
- Youth missing school in the past 30 days because they felt unsafe at or on the way to/from school

Table 41 displays the significant findings of the logistic regression analysis. Volunteering, mattering to the community, having teachers who care, feeling alone in life, and missing school because they felt unsafe there or on the way to/from school were found to be significantly associated with being bullied electronically or in school, sadness/hopelessness, and suicide ideation. Youth who reported feeling as though they mattered to people in the community were less likely to report they experienced bullying, sadness/hopelessness, and suicide ideation. Anchorage youth reporting they feel alone in their lives were more likely to report experiencing sadness/hopelessness and suicide ideation. ASD students who reported they missed school in the past 30 days because they felt unsafe at school or on the way to/from school were more likely to report they experienced bullying, sadness/hopelessness, and suicide ideation.

**Table 41. Significant Findings of ASD YRBS Logistic Regression Analysis**

	<b>Bullied Electronically or in School</b>	<b>Sadness / Hopelessness</b>	<b>Suicide Ideation</b>
Volunteering	-	More likely	-
Matter to people in community	Less likely	Less likely	Less likely
Having teachers who care	Less likely	Less likely	Less likely
Feel alone in life	-	More likely	More likely
Missed school because felt unsafe	More likely	More likely	More likely

*Note.* Table created from data retrieved by Heath et al., 2015 from the Youth Risk Behavior Survey and reflects responses from Anchorage School District students in grades 9 through 12.

## ii. APAY Survey<sup>9</sup>

The APAY was designed to gather adult perceptions regarding substance use and behavioral health problems of youth, such as bullying, feeling alone, extreme sadness/hopelessness, and suicide. Data from completed and returned surveys as of December 11, 2015 were analyzed and preliminary results are provided here as descriptive statistics, and largely percentages and frequencies. Once the survey has closed in January 2016 and all survey data have been entered, the data will be cleaned and recoded. In addition, data will be weighted to increase the representativeness of the sample relative to proportions of demographic characteristics in the Anchorage adult population. Preliminary results for adult knowledge of issues, concern about issues, efforts to address issues, adult engagement in youth's lives, and adult perceptions of school environment are presented in this report.

### *Knowledge of Issues*

The majority of responding adults to date reported that they were not knowledgeable or were only somewhat knowledgeable about behavioral health issues among Anchorage youth, such as bullying, extreme sadness/hopelessness, feeling alone, and suicide. Table 42 shows the results of the preliminary data collected on knowledge of youth behavioral health issues.

Forty-six percent of adults reported that they were not knowledgeable and another 36% reported they were only somewhat knowledgeable about the problem of extreme sadness/hopelessness among Anchorage youth. Forty-six percent of adults also reported they were not knowledgeable and another 38% reported they were only somewhat knowledgeable about the problem of Anchorage youth feeling alone in their lives. Similarly, more than 80% of adults reported they were not knowledgeable (38%) or only somewhat knowledgeable (43%) about suicide among Anchorage youth. Adults were slightly more knowledgeable about bullying among Anchorage youth. Seventy-five percent of adults reported they were not knowledgeable (36%) or only somewhat knowledgeable (39%) about bullying while 25% reported they were very knowledgeable or knowledgeable.

**Table 42. Percentage of Anchorage Adults Knowledgeable About Youth Behavioral Health Issues (n=171)**

<b>Behavioral Health Issues</b>	<b>Very Knowledgeable</b>	<b>Knowledgeable</b>	<b>Somewhat Knowledgeable</b>	<b>Not Knowledgeable</b>
Bullying among Anchorage youth	6.4%	18.7%	38.6%	36.3%
Extreme sadness and hopelessness among	5.8%	12.3%	35.7%	46.2%

<sup>9</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

Anchorage youth				
Youth feeling alone in their lives	5.8%	10.5%	38.0%	45.6%
Suicide among Anchorage youth	5.8%	12.9%	43.3%	38.0%

*Note.* Adapted from *Growing Up Anchorage*, p. 58, by Heath et al., 2015, University of Alaska Anchorage: Center for Human Development.

### Concern About Issues

Adults reported a great deal of concern about behavioral health issues among youth, especially suicide. Table 43 displays the preliminary results from the APAY for questions pertaining to adult level of concern regarding youth behavioral health issues. Eighty-four percent of adults reported they were concerned or very concerned about suicide among Anchorage youth. Seventy-one percent reported that they were concerned or very concerned about each of the following youth behavioral issues: bullying, extreme sadness/hopelessness, and feeling alone. Between one and four percent of adults reported that they were not at all concerned about the various behavioral health issues among youth.

**Table 43. Percentage of Anchorage Adults Concerned About Youth Behavioral Health Issues (n=171)**

Behavioral Health Issues	Very Concerned	Concerned	Somewhat Concerned	Not Concerned
Bullying among Anchorage youth	32.2%	39.2%	25.1%	3.5%
Extreme sadness and hopelessness among Anchorage youth*	31.2%	39.4%	27.6%	1.8%
Youth feeling alone in their lives	31.0%	39.8%	28.1%	1.2%
Suicide among Anchorage youth	50.9%	32.7%	14.6%	1.8%

*Note.* Adapted from *Growing Up Anchorage*, p. 59, by Heath et al., 2015, University of Alaska Anchorage: Center for Human Development.

\*Percentage based on responses from 170 participants.

### Efforts to Address Issues

Anchorage adults reported most frequently that there are only a little or some community efforts in place to address various behavioral health issues among youth. Table 44 shows adult perceptions of the Anchorage community's efforts to address youth behavioral health issues. Approximately two thirds (62.7%) of adults indicated that there is either a lot or some efforts to address bullying among Anchorage youth. Eighty-seven percent of adults reported at least a little or some community efforts to address extreme sadness/hopelessness among

Anchorage youth and 86% reported a little or some community efforts to address Anchorage youth feeling alone. Eighty percent of adults reported at least a little or some efforts to address suicide among Anchorage youth. Few adults reported either extensive efforts or a lack of efforts in the community to address behavioral health issues among youth. Fifteen percent of adults reported knowledge of a lot of efforts to address suicide among Anchorage youth. Eleven percent of adults reported knowledge of no efforts addressing Anchorage youth feeling alone.



**Table 44. Degree of Effort to Address Youth Behavioral Health Issues**

<b>Behavioral Health Issues</b>	<b>A Lot</b>	<b>Some</b>	<b>A Little</b>	<b>Nothing</b>	<b>Total (n)</b>
Bullying among Anchorage youth	13.0%	49.7%	28.4%	8.9%	169
Extreme sadness and hopelessness among Anchorage youth	4.8%	48.8%	38.1%	8.3%	168
Youth feeling alone in their lives	3.0%	46.1%	39.5%	11.4%	167
Suicide among Anchorage youth	14.9%	57.7%	22.6%	4.8%	168

*Note.* Adapted from *Growing Up Anchorage*, p. 59, by Heath et al., 2015, University of Alaska Anchorage: Center for Human Development.

### **Engagement in Youth's Lives**

The majority of Anchorage adults are likely or very likely to engage in youths' lives. More than two-thirds of adults surveyed indicated that they are likely or very likely to help a youth address important questions about their lives (68%), make youth feel like they are not alone (68%), and make youth feel like they matter in the community (67%). Just under two thirds of adults surveyed indicated that they talk to youth about how they are doing in school every day (65%) and encourage youth to take part in organized activities (63%). Table 45 shows the preliminary results for this indicator from the APAY survey.

**Table 45. Adult Engagement in Youth's Lives (n=169)**

<b>Circumstances</b>	<b>Very Likely</b>	<b>Likely</b>	<b>Somewhat Likely</b>	<b>Not Likely</b>
Talk to youth about how they are doing in school every day	50.3%	14.2%	11.8%	23.7%
Help youth seeking help from you in addressing important questions about their lives	52.7%	15.4%	10.1%	21.9%
Help make youth feel that they are not alone in their lives	51.5%	16.6%	9.5%	22.5%
Help make youth feel like they matter in your community*	45.8%	20.8%	12.5%	20.8%
Encourage youth to take part in organized afterschool, evening, or weekend activities	51.5%	11.8%	15.4%	21.3%

*Note.* Adapted from *Growing Up Anchorage*, p. 60, by Heath et al., 2015, University of Alaska Anchorage: Center for Human Development.

\*Percentage based on responses from 168 participants.

### Perceptions of School Environment

The APAY survey asked adults about their perceptions of the school environment. Table 46 shows these results. Over 65% of surveyed adults in Anchorage agreed or strongly agreed and another 32% somewhat agreed that Anchorage teachers care about and give encouragement to youth. Only 3% of adults disagreed. There was less agreement that junior high and high schools in Anchorage have clear rules and consequences for youth behavior. Just over 50% of surveyed adults strongly agreed or agreed and another 36% somewhat agreed that junior high and high schools in Anchorage have clear rules and consequences. Nearly 13% of surveyed adults disagreed that junior high and high schools in Anchorage have clear rules and consequences for youth behavior.

**Table 46. Adult Perceptions of School Environment**

Circumstances	Strongly Agree	Agree	Somewhat Agree	Disagree	Total (n)
Teachers in Anchorage really care and give a lot of encouragement to youth	24.3%	40.8%	32.0%	3.0%	169
Junior high and high schools in Anchorage have clear rules and consequences for youth behavior	16.1%	35.1%	36.3%	12.5%	168

*Note.* Adapted from *Growing Up Anchorage*, p. 60, by Heath et al., 2015, University of Alaska Anchorage: Center for Human Development.

### Summary

Adults respondents to the APAY survey to date reported being engaged in youths' lives based on several indicators. Engagement with adults, particularly parents, is an important protective factor for several behavioral health issues. Anchorage adults reported being concerned about the behavioral health issues of bullying, extreme sadness/hopelessness, youth feeling alone, and suicide, but these adults did not feel particularly knowledgeable about the issues. From a community readiness perspective, this creates an opportunity to educate and inform parents and adults about these behavioral health issues among youth in the Anchorage community. The surveyed adults felt that there are few or only some community efforts in place to address these behavioral health issues. This may suggest that more can be done to address these issues in the Anchorage community and that parents and adults need to be informed about current and new efforts, and other resources.

### iii. YAS Results<sup>10</sup>

The YAS was designed to gather data from young adults (ages 18-24) on social support, community perception and involvement, substance use, stress, bullying and/or harassment experiences, psychological wellbeing, and help-seeking behaviors and perceptions. Multiple

<sup>10</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

linear regression analysis was conducted to predict mental health scores. Analyses including gender were limited to comparing men to women, as the small sample size of other gender responses prevented comparison of those groups. Similarly, analyses including race and sexual orientation were limited to comparing the majority groups (Caucasian and heterosexual) to all other groups. Qualitative responses to open-ended questions were free-coded for content and grouped by theme. Comments were not limited to one group; rather, each comment was included in as many groups as appropriate given its content.

### **Participant Demographics**

A total of 329 participant responses were included in the analysis. Fourteen of the 329 responses were partially complete. All participants reported that they currently lived in Anchorage. The length of time they had lived in Anchorage (during their current period of living in Anchorage and not including any previous time living in Anchorage) ranged from less than one year to their entire lives (i.e., up to 24 years). On average, participants had lived in Anchorage for 11.9 years ( $SD = 8.1$ ). Participants identified as men (41.0%), women (57.1%), transgender (0.3%), and gender non-conforming (1.6%). Most frequently, participants indicated their sexual orientation as heterosexual (77.6%), bisexual (9.8%), and homosexual (5.0%). The sample was predominantly Caucasian (81.4%), with Alaska Native (11.4%), and Asian (11.0%) represented as well. Most frequently, participants reported having a high school diploma (34.1%) or some college (34.4%). Approximately half of the sample (52.4%) indicated that they were currently either a full- or part-time student. More information about the YAS participant demographics can be found in Table 47.

**Table 47. Demographics of Young Adult Survey (n=329)**

<b>Characteristic</b>	<b><i>M</i></b>	<b><i>SD</i></b>
Age	21.0	2.1
Years lived in Anchorage	11.9	8.1
	<b><i>n</i></b>	<b>%</b>
Gender		
Man	130	41.0
Woman	181	57.1
Transgender	1	0.3
Gender non-conforming	5	1.6
Sexual Orientation		
Asexual	13	4.1
Bisexual	31	9.8
Gay/lesbian/homosexual	16	5.0
Pansexual	6	1.9
Straight/heterosexual	246	77.6
Other/unknown	5	1.6
Race		
Alaska Native	36	8.8
American Indian	12	3.8
Asian/Asian American	35	11.0
Black/African American	10	3.2

**Table 47. Demographics of Young Adult Survey (n=329)**

Native Hawaiian/Other Pacific Islander	10	3.2
White/Caucasian	258	81.4
Ethnicity		
Hispanic	32	10.1
Education		
Less than high school diploma	28	8.8
High school diploma or GED	108	34.1
Trade/technical/vocational training	13	4.1
Some college, no degree	109	34.4
Associate's degree or higher	59	18.6
Student Status		
Full-time student	46	14.5
Part-time student	120	37.9
Not a student	151	47.6
Health Insurance		
Insured	236	74.4
Not Insured	55	17.4
Unsure	26	8.2
Marital Status		
Single	218	69.2
Married	49	15.6
Unmarried, living with partner	46	14.6
Divorced/separated	2	0.6
Children		
Yes, has and lives with child(ren)	35	11.1
Yes, has but does not live with child(ren)	3	1.0
No	277	87.9
Housing Status		
Own apartment house, or room	142	44.7
Parent/relative's apartment, house, or room	147	46.2
Apartment, house, or room of non-relative	13	4.1
Dorm/college residence	13	4.1
Street/outdoors	3	0.9
Public Assistance		
Yes, qualify for public assistance	59	18.7
No, do not qualify for public assistance	176	55.9
Unsure	80	25.4
Refugee Status		
Refugee	3	1.0
Military Affiliation		
Currently serving	17	5.4
Previously served	3	1.0
No military affiliation	295	93.7

Note. Adapted from *Growing Up Anchorage*, p. 31, by Heath et al., 2015, University of Alaska

**Table 47. Demographics of Young Adult Survey (n=329)**

Anchorage: Center for Human Development.

### **Bullying**

Respondents reported whether they had experienced bullying or harassment within the past year and also if they had engaged in bullying or harassing behaviors. More than a quarter of respondents (29.4%) had experienced verbal bullying within the past year; 10.7% had experienced verbal bullying within the last 30 days. Fewer reported experiencing cyber bullying/harassment (17.1%) or physical harassment (8.5%) within the past year. Overall, more than a third (36.2%) reported experiencing at least one kind of bullying or harassment over the past year. Among reports of engaging in bullying or harassment, verbal was the most common type (6.5%). Cyber bullying or harassment was reported by slightly fewer respondents (4.9%), with physical bullying or harassment least common (2.1%). Overall, 9.4% of respondents reported engaging in at least one kind of bullying or harassment over the past year.

Respondents were also asked to describe their most recent experience of engaging in bullying or harassment. Comments provided limited insight into the motivations behind the behavior. Participants often described cyber bullying in online forums, on social media, and via text message. Some participants described their behaviors (both cyber and verbal) lightheartedly, such as “I harass people a lot but never maliciously,” or describing it as teasing. A few participants justified the behavior by describing traits or actions of the other individual(s) as deserving of the response. Justification occurred for all three types of bullying or harassment (cyber, verbal, and physical). Many participants described experiences from more than one year ago (e.g., in elementary school or 10 years ago).

### **Suicide**

About 20% of respondents reported seriously considering suicide within the past year, with 6.2% considering within the last 30 days. Three percent had attempted suicide within the past year, with 1.6% attempting within the last 30 days. Women reported considering suicide slightly more often than men, and men reported attempting suicide slightly more often than women.

### **Help Seeking**

More than half of respondents (61.1%) indicated that they have had a problem for which they thought psychological or mental health services would be helpful. Among these individuals, for those who reported problems as minors, approximately three-quarters did receive services. For those who reported problems as adults, approximately 60% received services. Respondents who reported experiencing an issue for which services would have been helpful but did not report receiving any such services were asked to explain why they did not seek services. Four new themes emerged in the responses: cost, lack of resources, stigma, and skepticism. In reference to cost, participants described their own lack of economic resources as well as perceiving the cost of seeking services as quite high. Representative comments included, “I have no health insurance and seeking services is costly,” and “At the time I could not afford it.”

Participants also described a lack of knowledge regarding available services and how to obtain services. For example, one respondent wrote, “As an adult, I didn’t know where to even begin to find help.” Another noted, “I wasn’t sure how to ask for help.” Respondents described stigma surrounding seeking mental health services as a barrier. Comments included, “I felt like...I would be judged by everyone around me tremendously,” and “It seemed like a weird thing to do.”

Respondents described skepticism about mental health services in two major ways. First, some individuals indicated doubtfulness that professional help is or would be effective. For example, one individual acknowledge knowing of specific resources, but “had not heard good things about the mental health professionals.” Another respondent “didn’t think it was worth the money.” Other respondent comments reflected skepticism that their problems or issues were severe enough to warrant mental health services. For example, one participant wrote, “I thought I would eventually get over it.” Another youth responded that, “I have a mindset that says to just deal with it - never seemed serious enough to really seek help.” Despite these barriers, the majority of respondents (63.9%) indicated they would consider seeking professional help services in the future if they experienced a serious personal problem.

### ***Predictors of Mental Health***

Respondents indicated their experiences of mental health issues over the past year through seven indicators: hopeless, overwhelmed, lonely, very sad, depressed (so much so that it was difficult to function), consideration of suicide, and suicide attempt. Responses to each variable were summed to create an overall mental health score ranging from 0 (no endorsement of mental health issues over the past year) to 7 (endorsement of all seven issues over the past year). On average, participants endorsed half of the mental health indicators ( $M = 3.6$ ,  $SD = 2.0$ ). Most participants (91.1%) endorsed at least one mental health issue over the past year, while few participants (2.9%) indicated experiencing all seven indicators. Multiple linear regression analyses were conducted to determine which other personal and interpersonal factors were associated with experiencing mental health issues. The variables considered for inclusion were as follows:

- Psychosocial variables: stress, optimism, social support, and feeling like one matters to the community
- Substance use: alcohol and marijuana use
- Bullying experience
- Work/volunteer
- Demographic variables: gender, sexual orientation, race, and years lived in Anchorage

The mean score and standard deviation for psychosocial variables are shown in Table 48.

**Table 48. Mean Scores for Psychosocial Variables\***

<b>Psychosocial variables</b>	<b><i>M</i><sup>*</sup></b>	<b><i>SD</i></b>
Feeling like they matter to community	3.5	1.0
Social support	4.1	0.9
Optimism	4.0	0.7
Stress	3.6	0.9

*Note.* Adapted from *Growing Up Anchorage*, p. 64, by Heath et al., 2015, University of Alaska Anchorage: Center for Human Development.

\* Reliability for multi-item scales was confirmed (Cronbach's alpha > .75 for all); \*\* Each item was scaled 1-5 with higher scores indicating greater experiences of each.

The final model significantly predicted mental health and included the following variables as significant predictors, which are listed here in decreasing order of strength: stress, bullying experience, optimism, years lived in Anchorage, gender, and sexual orientation. The directional relationship for each significant predictor is described in Table 49 below. The other considered variables were not significant predictors of mental health issues. Living in Anchorage longer was associated with more mental health issues, while fewer years living in Anchorage was associated with fewer mental health issues. Finally, identifying as a woman (as opposed to a man) was associated with greater mental health issues while identifying as a heterosexual (as opposed to any other sexual identity group) was associated with fewer mental health issues.

**Table 49. Predictors of Mental Health\***

	<b><i>R</i><sup>2</sup></b>	<b><i>p</i></b>
<i>Overall</i>		
Model	0.34	0.00
<i>Included Variables</i>		
Stress	0.24	0.00
Bullied or harassed	0.20	0.00
Optimism	-0.20	0.00
Years lived in Anchorage	0.14	0.00
Gender	0.13	0.01
Sexual orientation	0.12	0.02
<i>Excluded Variables</i> <sup>**</sup>		
Social support	-0.11	0.09
Alcohol use	0.09	0.08
Marijuana use	0.09	0.08
Feeling like matter to community	-0.03	0.53
Work/volunteer	0.01	0.80
Race	-0.01	0.92

*Note.* Adapted from *Growing Up Anchorage*, p. 64, by Heath et al., 2015, University of Alaska Anchorage: Center for Human Development.

\* The final model significantly predicted mental health,  $F(12) = 13.64$ ,  $p < 0.01$

\*\* Not significant at the  $p \leq 0.05$  level.



### *Limitations of Data*

Because the sample was obtained by convenience, results may not be representative of the population of all 18-24 year olds in Anchorage. In particular, estimates of rates or frequency should be interpreted cautiously. Similarly, any observed differences between subgroups (e.g., men and women) should be noted with caution. Comparatively, analyses of relationships between variables, such as those described in the model predicting mental health, are less problematic with a convenience sample.

### *Summary*

As anticipated, the young adults surveyed reported a variety of experiences with bullying and a variety of mental health concerns. Respondents' experiences with mental health issues over the past year were significantly predicted by a number of individual and interpersonal factors. Greater endorsement of mental health issues was associated with, in order of strength of association: experiencing greater stress, having been bullied or harassed, being less optimistic, having lived in Anchorage for more years, identifying as a woman (as opposed to a man), and identifying as a sexual minority (as opposed to heterosexual). The majority of participants indicated a willingness to seek professional mental health services in the future if needed. At the same time, respondents described a variety of barriers to seeking services in the past, including cost, lack of resources, stigma, and skepticism about the usefulness of services.

### *iv. Focus Groups*

Findings for focus groups are shown below by age.

#### *Findings for 12-14 Year Old Participants*

- Need to give bullying behavior a face: What does it look like? How does it feel from all sides (bully, bullied, bystander)? What is it not? This will help when trying to set up space to admit to a bullying act.
- Bullying is not just about being a bully, rather it is a response to some other environmental issue affecting young peoples lives, whether external (home life, school, neighborhood) or internal (attention, mental well being, social standing).
- Bullying has some gender-specific expressions.
- Self-image and self-esteem are the first to be attacked when someone is bullied.
- Any bullying intervention should include all the parties involved in the majority of bullying: the person who bullies, the bullied, and the bystander.
- Above all else, start the conversation on bullying and make space for all sides of the conversation on a regular basis.

#### *Selected comments from the 12-14 year old focus groups*

- “She’d just bully people for fun. Then some kids—I don’t really know why they bully kids but probably it might also be just for fun maybe because they have—some of my friends also might have problems going on in their life and they don’t really know

how to handle it and they really have no one to turn to probably. So they're probably just lost" (Heath et al., 2015, p. 73).

- "[Bullying] just makes people very depressed, lowers self-esteem. I don't think it would make them go suicide and stuff at my school, but it lowers their self-esteem a lot" (Heath et al., 2015, p. 74).
- "To help the bully we could see why they're so mean to other people or why they're so upset and help them through that" (Heath et al., 2015, p. 78).

### *Findings for 14-18 Year Old Participants*

- Cyber bullying is a problem on its own and is not just an extension of some physical interaction.
- Bullying progresses, as you get older: starts with a focus on appearances and grows to include more of the person, as one gets older, i.e. bullying grows more complex as the mind/body matures.
- Bullying is at its worst when individuals being bullied are in the process of trying to define themselves and their personalities.
- Mental unrest can be caused/exacerbated by bullying.
- Expand the idea about what bullying is; it is not just physical abuse but also mental degradation.

### *Selected comments from the 14-18 year old focus groups*

- "Yeah. They take it - they take it okay, but like - in front of people, but behind closed doors, they can like be having a tough time . . . trying to put on a brave face for other people" (Heath et al., 2015, p. 74).
- "You can just say 'you're not alone.' They are; if they're doing it because they're hurt it's probably because they're alone" (Heath et al., p. 78).
- "So, I feel like bullying kind of progresses as you age" (Heath et al., p. 72).

### *Findings for 18-24 Year Old Participants*

- Bullying is about people being different; both bully and bullied know this.
- Bullying behavior can come from reciprocating the abuse or from non-bully-related hurt.
- Bullying is a signifier of other problems affecting the parties involved.
- Showing the effects of bullying could be a form of intervention.
- Self-awareness and self-expression are skills that need to be developed to support young people in the face of bullying.
- Cyber bullying seems less of an issue for the 18-24 year olds compared to its affect on younger age groups. However, it is still prevalent in school environments.

### Selected comments from the 18-24 year old focus groups:

- “I think it happens to people who are just quiet, who dress differently, who don’t conform to the patterns of everyone else and listen to the same music as everyone else. I think people who are sitting in the back of the room, they are always the one getting bullied . . . Me, I was thinking that people didn’t like me because of how different I was” (Heath et al., p. 72).
- “Yeah. That’s why I don’t like bullying, because it follows you. And when you break those barriers and you try to bring it all together and you try to change it, it takes a while” (Heath et al., p. 76).

According to the UAA Assessment Team’s review of the focus groups, there is a direct link between poor mental health outcomes (including feelings of loneliness, sadness, and hopelessness) and bullying. As they observed in their review, “This is an important finding as it suggests the two main variables the team examined are inextricably linked” (Heath, et al., 2015, p. 73). This finding underscores the importance of the selection of this intermediate variable and these focus groups, and the data from other sources underscore the importance of selecting ninth grade youth and 18-24 year olds as the target populations for interventions. The focus groups also identified that interventions ought to be both focused on victims of bullying and those who bully. They understood that those who bully might well have been bullied in the past or come from environmental or other circumstances that drove them to bully (Heath, et al., 2015, p. 71). This underscores an additional finding that there was considerable empathy offered by participants toward bullies, without condoning the behavior.

The focus groups identified and stressed both cyber bullying and school-based settings for bullying, though cyber bullying in particular was less associated with the youngest age cohort. The focus groups also underscored a lack of understanding and awareness of bullying, though this improved through each age cohort to the point that the oldest age group (18-24) saw a direct link between bullying and potential criminal behavior. Paradoxically, this same group of 18-24 year olds could identify bullying behaviors, but did not necessarily describe these behaviors as bullying when looking at their own age group. As the UAA Assessment Team observed, “Many of those participants who said bullying wasn’t a problem went on to give plenty of examples of bullying that they either experienced or witnessed” (Heath, et al., 2015, p. 62). Both of these findings imply one avenue to explore in planning, and will be how we define and develop awareness of bullying.

When asked about potential interventions, the focus groups for both the younger and older cohorts emphasized interventions that included peer-to-peer involvement. The youngest cohort identified engagement of bully, victim, and bystanders in resolving bullying situations, and the older cohort observed that self-awareness and self-expression were important, as was peer support. According to the UAA Assessment Team, “There seemed to be consensus across focus groups that peers were of primary importance when it comes to community level interventions in loneliness/sadness/hopelessness, as well as bullying” (Heath, et al., 2015, p. 81).

## Summary

Youth who attended focus groups conducted by members of the ACC and the UAA Assessment Team helped identify important qualitative data that created a better understanding of the depth and reach of bullying as an intermediate variable. One finding that seemed to cross each age group was the lack of clarity many had with bullying, including its prevalence and even the meaning of bullying. This creates an opportunity for defining and creating greater awareness of bullying in the community and, specifically, with the targeted age groups (ninth grade and 18-24 year old youth). Among all youth, bullying was often tied to image, beginning with the youngest cohort identifying gender or difference as possible links, developing beyond appearance to personality in the middle age cohort, and finally becoming more complex and difficult to define in the oldest youth. Both cyber and school-based bullying were identified as potential points of intervention, as were interventions that were peer-based and involved both bullies and the bullied. These findings further support the choice of bullying as an intermediate variable to address in the targeted ninth grade and 18-24 year old youth, and suggest a number of possible paths for intervention.

### d. Phase Two Data Decisions: Selecting the Intermediate Variables

After carefully reviewing all new and existing data, community input, the UAA Assessment Team report, and readiness and resource information, the ACC Executive Committee prioritized and selected the following two intermediate variables:

- Bullying in Grade 9
- Bullying in 18-24 year olds

These two intermediate variables are supported by the data and are clearly linked to the consequences and priority issue of mental health. Furthermore, the data supported the prioritization of the target populations and did not indicate stronger support for any other intermediate variables. Additionally, in all three of the public forums, bullying was identified as the intermediate variable of greatest concern to the community.

Data that was gathered during Phase Two of the Assessment process, together with the Resources Analysis and the Community Readiness interviews, provided the information necessary to prioritize these intermediate variables. All members of the ACC Executive Committee reviewed the data individually, and the ACC Executive Committee engaged in several lengthy meetings to review and discuss the data collectively. As a result of these comprehensive reviews, the ACC prioritized bullying amongst students in grade 9 and bullying amongst those aged 18-24 years old as the intermediate variables.

#### i. Bullying in Ninth Grade

Based on the data reviewed by the ACC, bullying was found to have the greatest effect on mental health. The following data demonstrated the correlation between bullying and mental health:

- According to YRBS data collected in 2003-2013 from ASD students in grade 9 through 12 who are bullied at school are 201% more likely to feel so sad or hopeless

almost every day for two weeks or more in a row that they stopped doing some usual activities (Table 39). Based on the coalition's data assessment, there were no other intermediate variables that had a correlation this high to mental health/depression.

- According to the same YRBS data set, if students are electronically bullied, they are 210% more likely to feel so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities, indicating depression (Table 39). There were no other intermediate variables that had a correlation this high to mental health/depression except for bullying at school.

The consequences of bullying were also noted to be very serious. The UAA Assessment Team's analysis of YRBS data found that ASD high school students who are bullied at school are more likely to use alcohol and marijuana and report suicide ideation. The following clearly demonstrate the consequences of bullying:

- Students who are bullied at school are 90% more likely to currently drink and 65% more likely to binge drink. They are also 61% more likely to currently use marijuana (Table 39).
- Students who are bullied at school are 222% more likely to have seriously considered suicide and 183% more likely to report planning a suicide attempt (Table 39).
- Students who are bullied electronically at school are 169% more likely to currently drink and 120% more likely to binge drink. They are also 118% more likely to currently use marijuana (Table 39).
- Students who are bullied electronically are 199% more likely to have seriously considered suicide and 194% more likely to plan a suicide attempt compared to their peers who have not been bullied electronically (Table 39).

Trend data from the YRBS shows that rates of bullying within the ASD have not decreased and that bullying impacts a substantial number of Anchorage high school-aged youth. The following data shows trends for bullying on school property and electronic bullying:

- According to YRBS data collected in 2009-2013 from ASD students in grades 9 through 12, both bullying on school property and electronic bullying have remained relatively flat, or have increased (Table 34). For example, among ninth grade students, 23% reported being bullied in school in 2009, 27.6% reported being bullied in school in 2011, and 27.0% reported being bullied in school in 2013. With respect to electronic bullying amongst ninth grade students, 17.9% reported being electronically bullied in 2011 and 18.7% reported being electronically bullied in 2013.
- While observed bullying in school percentages have decreased, according to the ASD SCCS, in 2013-2014, 53.6% of high school students reported they made at least one observation of a student threatening or bullying other students (Figure 15). Additionally, bullying observations in "Overall Alternative" schools have been trending upward from 2011-2012 to 2013-2014.

Among Anchorage high school students, ninth grade students have been shown to be especially vulnerable to bullying. The following data demonstrated ninth grade students' vulnerability to bullying:

- As noted above, 27% of ninth grade students in ASD traditional schools in 2013 reported being bullied at school. This was higher than any other grade and, in that year, for any other demographic group (Table 34).
- With respect to electronic bullying, students in grade 9 also had the highest rates compared to any other grade, and higher for that year than any other group except Alaska Native (Table 34).
- In an analysis of the strength of association between demographic factors and variables associated with bullying, mental health, and suicide, grade 9 was the only grade that increased the likelihood of being bullied, with students in grade 9 showing to be 85.1% more likely to have been bullied at school (Table 38).
- Being in grade 9 also was the only grade that increased the likelihood of seriously considering suicide with students in grade 9 61.2% more likely to have seriously considered suicide than their peers (Table 38).
- Data from the 2013 YRBS shows that, by grade, ASD students in grade 9 had the highest percentages of youth who feel so sad or hopeless almost every day for two weeks or more in a row that they stopped doing usual activities during the past 12 months, at 28.7% (Table 6).

## **ii. Bullying in 18-24 Year Olds**

Bullying continues to be a serious issue for 18-24 year olds, and emerged as the intermediate variable that had a very strong correlation with mental health; a stronger correlation, in total, than any other that was examined. According to the ACC's new data, bullying emerged as a crucial issue to mental health in this age group. The following findings clearly demonstrated the prevalence of bullying among young adults 18-24 years old in Anchorage and its connection to mental health:

- In the YAS, which gathered data from young adults aged 18-24, 29.4% of respondents reported they had been verbally bullied in the past year, and 17.1% reported they had been cyber bullied in the past year (Heath et al., 2015, p. 61). Overall, more than a third (36.2%) reported experiencing at least one kind of bullying or harassment (verbal, physical, or cyber) during the past year. Notably, many respondents volunteered additional information and described bullying experiences "in elementary school" or "10 years ago" (Heath, et al., 2015, p. 62).
- Results from the YAS indicate that being bullied or harassed is associated with reduced mental health. When placed in a model with other factors, bullying was found to have a greater relationship to mental health than social support, feeling like one matters to the community, race, sexual orientation, and other factors (Heath et al., 2015, p. 64).

Existing data compiled by the UAA Assessment Team shows that mental health is a significant behavioral health issue for young adults in Anchorage. The following trend data demonstrates the prevalence of self-reported mental illness or depression in young adults aged 18-25 years old:

- According to the NSDUH, between 2008-2010 and 2010-2012, the percentage of young adults in Anchorage between 18 and 25 who reported having any mental illness in the past year increased from 17.15% to 24.02% (Table 10). The percentages in 2010-2012 in Anchorage were higher than the state or national percentages. Also, the number of people in Anchorage between 18-25 who reported having at least one major depressive episode in the past year increased from 7.54% in 2006-2008 to 11.89% in 2010-2012 (Table 9). Once again the percentages in Anchorage in 2010-2012 were higher than the state or national percentages.
- Data from the BRFSS is consistent with the NSDUH data described above. Between 2006 and 2013, the percentage of 18-24 year olds who reported that a doctor, nurse, or other health professional had told them that they have a depressive disorder stayed almost constantly at 18.8% (Table 12). That same percentage in 2012-2013 reported that their mental health was not good for seven or more days during the past 30 days (Table 11). This is up from 2006-2007, when it was 12.4%.

Throughout this assessment, the CBHA Team continually explored the relationships between mental health, suicide, and substance use. While the coalition looked at each behavioral health issue separately, it was noted repeatedly that substance use and suicide could be seen as indicators of mental health status or consequences of poor mental health. Existing data directly related to mental health was limited. However, because of the connections between each of the three behavioral health issues up for consideration, the following data on substance use and suicide were of note to the coalition during conversations on the mental health of young adults in Anchorage:

- The NSDUH data shows a sharp increase in risk behaviors when comparing 12-17 year olds and 18-25 year olds. For example, in 2010-2012, illicit drug use in the past month jumps from 11% in 12-17 year olds to 26.96% in 18-25 year olds and is higher in Anchorage for 18-25 year olds than in the rest of the state and the nation (Table 13; Table 14).
- For binge drinking in the past month, the rate increases from 6.94% in 2010-2012 for 12-17 year olds to 44.89% in 18-25 year olds (Table 13; Table 14). Binge drinking among 18-25 year olds in Anchorage is also higher than the rest of the state and nation (Table 14).
- For dependence or abuse of illicit drugs or alcohol in the past year, the rate among 12-17 year olds in 2010-2012 is 7.15% and it increases to 20.6% in 18-25 year olds (Table 15).
- According to the BVS, suicide rates are different for 18-20 year olds compared to 21-24 year olds. The suicide rate is 23.2 per 100,000 for those aged 18-20 and 33.8 per 100,000 for 21-24 year olds (Heath et al., 2015, p. 39).



The youth focus groups on mental health repeatedly pointed to bullying as a cause of and risk factor for poor mental health. As CHD/UAA noted in their focus group summary, “One of the most commonly cited reasons for poor mental health outcomes, including loneliness, sadness and hopelessness, was bullying...Being bullied by peers in social contexts was frequently mentioned as a direct cause or reason for poor mental wellbeing” (Heath, et al., 2015, p. 73). This data is significant, as bullying arose frequently and entirely unprompted during the mental health focus groups.

The public and leaders have sufficient understanding about youth bullying to support identifying bullying amongst ninth grade youth and young adults aged 18-24 as intermediate variables.

- Preliminary results from the APAY survey show that “more adults reported being knowledgeable to some degree about bullying among youth than they did about extreme sadness/hopelessness among Anchorage youth, Anchorage youth feeling alone in their lives, or about suicide among Anchorage youth” (Heath et al., p. 58). For bullying, 63.7% of the respondents reported being very knowledgeable, knowledgeable, or somewhat knowledgeable about bullying among Anchorage youth (Heath et al., 2015, p. 59).
- The Community Readiness Survey results show moderate level of readiness for addressing bullying for both ninth grade youth and young adults aged 18-24 years olds.

For all of the above reasons, the intermediate variables of Bullying in ninth Grade and Bullying in 18-24 year olds are supported by the data. ACC’s thorough review of the extensive community-level existing and new data revealed a strong relationship between bullying and the priority issue of mental health for youth in ninth grade and young adults aged 18-24 years old. The data reviewed by the ACC does not indicate stronger support for other intermediate variables.

#### **e. Consequences of Bullying<sup>11</sup>**

Bullying can have several long-term health consequences for victims, perpetrators, and bystanders (Brank, Hoetger, & Hazen, 2012; Haynie et al., 2001; Hindujah & Patchin, 2010). Documented effects on perpetrators of bullying include alcohol and drug abuse as adults, getting into fights, vandalism, dropping out of school, early sexual activity, criminal convictions, traffic citations, and abusive behavior toward partners as adults (Vanderbuilt & Augustyn, 2010). In one large-scale study, data from the 2007 National Survey of Children’s Health were reviewed and children aged 6-17 with a diagnosis of depression, anxiety, or ADHD were found to be more than three times as likely to be a bully (Benedict, Vivier, & Gjelsvik, 2015). The study examined a total of 63,997 children who had data for both parental

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<sup>11</sup> Excerpted and edited from: Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., Reed, D., Smith, C., Craig, S. (2015). *Growing up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.

reported mental health and bullying status nationwide and found that the diagnosis of a mental health disorder is strongly associated with being identified as a bully.

Victims of bullying experience increased likelihood of depression, anxiety, feelings of sadness and loneliness, changes in sleep and eating patterns, loss of interest in activities they used to enjoy, health complaints (often expressed as strategies to avoid school), decreased academic achievement, and increased likelihood of skipping and/or dropping out of school (Klomek, Marrocco, Klienment, Schonfeld, & Gould, 2007; Vanderbilt & Augustyn, 2010). Effects on bystanders include increased use of alcohol, tobacco and other drugs, increased mental health problems, including depression and anxiety, and increased school absence.

#### **f. Prevention Resources for Bullying**

The ACC's systematic review of existing prevention resources for bullying revealed numerous programs and resources available to ninth grade youth, with fewer identified for young adults aged 18-24 years old.

##### **i. Resources for Youth in Ninth Grade**

Resources appropriate for ninth grade youth are shown here. Many of these resources are provided for students in grades below ninth grade.

##### ***School-Based Resources***

The ASD has several programs that focus on bullying prevention. The most comprehensive program—Aggressors, Victims, Bystanders—is curriculum taught in grades 6, 7 and 8. Also, ASD recognizes Bullying Awareness Month in October. Bullying prevention information is provided in the High School Student Handbook, which students receive in the fall. Rachel's Challenge, a strong anti-bullying campaign, is provided in some schools, and some Anchorage youth have created YouTube videos as part of this program (Eaton, 2012). A key informant also reported that some ninth grade teachers give presentations on resources. School Resource Officers were also mentioned for their role in bullying prevention. While not provided to ninth graders, there is a literature-based elective course through the ASD for high school juniors and seniors that covers many issues that teens face, including bullying.

In addition to in-school programming, the ASD provides parent outreach. Bullying prevention information is provided at parent nights every other year. Parents are also provided the student handbook with bullying information in it. Notably, the ASD offers dedicated evening discussions for parents and community members regarding bullying. The most current anti-bullying community conversation took place on January 28, 2016, and featured a presentation by the superintendent.

The ASD also utilizes various social and emotional learning programs and events, such as Chain Reaction, Change of Heart, and Be the Change, which are designed to create a safe environment in schools. There are also student-run programs such as You Are Not Alone. In key informant interviews, it was mentioned that the Alaska Youth Military Academy

engages in bullying prevention efforts, and that the DARE program includes bullying prevention.

### ***Afterschool Programs***

Numerous afterschool programs address bullying prevention to various degrees, including Boys and Girls Club, Campfire, Girl Scouts, Q Club (Identity Inc.), Shiloh Community Development Services, Stone Soup Group, and Volunteers of America. The Community Resource Assessment has an extensive appendix that describes bullying prevention and other related programs that over 50 programs in Anchorage offer. In key informant interviews, the Boys and Girls Clubs curriculum was especially highlighted, as was the YMCA. Also, there are online bullying prevention training and resources from the Special Education Service Agency for people who work with these youth.

### ***Faith-Based Programs***

Some faith-based youth programs (41% of those surveyed) address bullying. In key informant interviews, Youth for Christ was especially mentioned.

### ***Cyber Bullying Prevention Resources***

There are several online cyber-bullying resources. These include

- The Whisper App,
- The Cyber Bullying Research Center, and
- StopCyberBullying.org.

### ***Other Resources***

There are many other online resources on bullying prevention, such as

- StopBullying.gov,
- The National Bullying Prevention Center's webpage, parent/educator webpage, and youth portal,
- StompOutBullying.org,
- KindCampaign.com, and
- Cartoon Network's Stop Bullying Speak Up web campaign.

There are also multiple online and other resources to build protective factors and resiliency, which also include information on bullying, such as

- The Jed Foundation's Love is Louder campaign,
- Anchorage Youth Central, and
- Que Pasa? Anchorage.

Additionally, there are public and private therapeutic/counseling services available in Anchorage for youth who experience bullying or engage in bullying behavior.

## ***ii. Gaps in Prevention Resources for Ninth Grade Youth***

In addition to assessing the available resources for ninth grade youth, the ACC identified gaps in existing prevention resources. Gaps are identified below.

### ***School Based Resources***

Gaps identified for resources available to ninth grade students are listed below:

- The ASD curriculum Aggressors, Victims, Bystanders is not extended into high schools.
- There is no systematic bullying prevention curriculum in ninth grade.
- While parents of ninth grade students have the potential to go to parent's nights and read the student handbook to learn more about bullying (and other issues), some parents do not engage.
- Some parents find that obtaining information on the ASD website is difficult.
- The various social and emotional learning programs are not offered at all schools and some are not designed for ninth grade students.
- Full connection between ASD staff and students on the issue of bullying is difficult because some bullying happens online or is kept within student culture. Also, teachers do not always understand teen language, making it difficult to distinguish between what is joking and what is serious.
- Many adults do not recognize how serious an issue bullying is, and its documented deleterious consequences. It is likely that relatively few adults are aware of recent research indicating that being bullied as a child is associated with mental health problems in adulthood (Lereya, Copeland, Costello, & Wolke, 2015).
- Sometimes the victims of bullying are isolated further, such as when a functioning student is pulled from class to remove them from a bad situation, which further isolates the student.

### ***Afterschool Programs***

Not all afterschool programs have bullying prevention programs, and those that do have various levels of focus on bullying.

### ***Faith-Based Programs***

A majority of youth faith-based programs surveyed (59%) do not specifically address bullying, even though 74% of youth in these groups report experiencing bullying. Youth leaders in this area expressed the need for the issue of cyber skills and cyber safety to be addressed proactively. Though noting some fatigue around the issue of bullying, there was also an expressed need for a creative and engaging faith-based bullying curriculum to be developed.

### ***Cyber Bullying Prevention Resources***

There is a large gap in addressing cyber bullying, other than some online resources.

### ***Other Resources***

There is often a gap between the stated position that "bullying is bad," and the bullying behaviors that youth observe in adults. Also, there is not as clear a connection as there might be between programs that build protective factors and resiliency and how these

programs help to reduce bullying behaviors and/or help youth be resilient to bullying behaviors.

### **iii. Resources For 18-24 Year Olds**

Resources appropriate for 18-24 year olds included college-based resources, workplace resources, cyber bullying prevention resources, and other resources, such as Que Pasa? Anchorage.

#### **College-Based Resources**

UAA offers many programs to address and reduce bullying. UAA investigates reports from students, faculty, and staff regarding bullying and other issues, and is also working to increase Care Team awareness with commuter students. Resident assistants are trained on bullying prevention and awareness. Also, UAA is a Safe Zone for LGBTQ and other marginalized persons, and offers inclusion, support, and advocacy through a two-hour Ally training.

APU offers several classes that contain information about bullying prevention, including *Manage it All: Students, Curriculum & Time*, and *Anger Management & Effective Discipline to Prevent Violence*.

#### **In Work**

Noted Anchorage columnist, author, and trainer Lynne Curry recently published a book entitled *Beating the Workplace Bully*, which is available on Amazon (Curry, 2016). In key informant interviews, it was mentioned that the National Guard engages in bullying prevention efforts. There are also many online resources focused on preventing and addressing workplace bullying, including:

- The Workplace Bullying Institute,
- Articles such as Psychology Today's "Four Steps for Stopping Workplace Bullies," and
- CIO.com's "How to Prevent Workplace Bullying" (Riggio, 2011; Florentine, 2015).

#### **Cyber Bullying Prevention Resources**

The cyber bullying prevention resources listed above for ninth grade students are also available to 18-24 year olds.

#### **Other Resources**

The online resources listed above (in the ninth grade section) are also available to 18-24 year olds.

### **iv. Gaps in Prevention Resources for 18-24 Year Olds**

In general, there is a major gap between what is being done about bullying in this age group, which is minimal, and the prevalence of bullying in this age group, which is significant. Some of this gap appears to be based on the reluctance of people to call behavior bullying in this age group, even though that behavior clearly qualifies under the definition of bullying.

Also, some people may think that this age group should “adult-up” or that bullying only involves children.

### ***College-Based Resources***

Though some programs are described above, there do not appear to be any comprehensive bullying prevention efforts in colleges in Anchorage.

### ***In Work***

Even though there is increased attention on bullying in the workplace as evidenced by recent books and articles, it is not clear how many workplaces have bullying prevention programs, especially for young adults (18-24).

### ***Cyber Bullying Prevention Resources***

There is a large gap involving cyber bullying other than some on-line resources.

### ***Other Resources***

Research shows that the impacts from bullying, such as anxiety, depression, substance use, suicide ideation, self-esteem problems, interpersonal difficulties, and isolation can manifest themselves in subsequent years (Copeland, Wolke, Angold & Costello, 2013). There is a gap in understanding and addressing this in the 18-24 year old age group. In addition to this gap, not every young adult who has experienced bullying or has engaged in bullying behavior can afford and/or knows about seeking therapeutic services.

In summary, while there are some community resources devoted to bullying prevention and recovery from being bullied (resilience), there are many gaps. The Anchorage Collaborative Coalitions looks forward to working with the community during the Planning phase to prioritize these gaps as part of developing the strongest and most effective Logic Model and Strategic Plan for Anchorage youth and young adults.

## ***g. Community Readiness***

Overall, the level of readiness in the Anchorage community was moderate for both the ninth grade population as well as 18-24 year olds.

Table 50 shows the stage scores and readiness scores of the Anchorage community and Table 51 shows results of the community stage scores and readiness scores for each intermediate variable by sector. There were some slight differences in readiness between dimensions. With prevention programming coming in at the highest level of readiness: 6=initiation (ninth grade)/5=preparation (18-24 year olds), and community climate and knowledge about the problem falling to the bottom with a score of 4=preplanning (ninth grade)/3=vague awareness (18-24 year olds). In addition to variances within dimensions, there were also notable differences among sectors. Healthcare had the highest readiness rating of 6=initiation, with the other sectors scoring between stages 4=preplanning and 5=preparation. Scores for individual interviews and the calculations can be seen in Appendix G and Appendix H.

A few trends were noticed throughout the community readiness interviews that will be further explored in the planning stage:

- Contradictions emerged such as individuals believing that bullying prevention programming existed while not being able to name the program or where it could be accessed.
- Some interviewees told us that every student receives bullying prevention in the schools but in interviews with students and schools it was concluded that bullying prevention programming is only provided in some schools and to some youth.
- Parents told us that they feel the school district is unresponsive to bullying complaints while others told us that the school district has a zero tolerance policy when it comes to bullying.
- A majority of interview participants stated that leadership would only be supportive of further bullying prevention efforts if there were no cost associated with such endeavors.
- Though a common sense best practice to bullying would be to report an incident to a trusted adult it appears youth believe doing so would just cause them to be further bullied.
- Furthermore, there was recognition of the pervasiveness of bullying or harassment through all segments of society and many said that it could not be addressed in youth while adults are still modeling the behavior.

As prescribed by the community readiness manual, with the majority of scores within the stages of preplanning and preparation the ACC will focus on raising awareness of concrete ideas about bullying and gathering existing information with which to plan more specific strategies in the planning stage of our efforts.

**Table 50. Community Stage Scores and Readiness Scores**

<b>Intermediate Variables</b>	<b>Stage Score</b>	<b>Readiness</b>
<i>Bullying Among 9<sup>th</sup> Graders</i>		
Prevention programming	6	Initiation
Community knowledge about prevention	5	Preparation
Leadership	5	Preparation
Community climate	4	Preplanning
Knowledge about the problem	4	Preplanning
Resources for prevention efforts	5	Preparation
<i>Bullying Among 18-24 Year Olds</i>		
Prevention programming	5	Preparation
Community knowledge about prevention	4	Preplanning
Leadership	4	Preplanning
Community climate	4	Preplanning
Knowledge about the problem	3	Vague Awareness
Resources for prevention efforts	4	Preplanning



**Table 51. Sector Differences in Community Stage Scores and Readiness Scores**

<b>Intermediate Variables</b>	<b>Stage Score</b>	<b>Readiness</b>
<i>Bullying Among 9<sup>th</sup> Graders</i>		
Health Care	6	Initiation
Social Services	5	Preparation
Law Enforcement	5	Preparation
Community at Large	5	Preparation
Clergy	5	Preparation
Schools	4	Preplanning
Youth	4	Preplanning
Mental Health Providers	4	Preplanning
Anchorage Municipality	4	Preplanning
Elders	4	Preplanning
Tribal	4	Preplanning
<i>Bullying Among 18-24 Year Olds</i>		
Health Care	6	Initiation
Social Services	5	Preparation
Law Enforcement	5	Preparation
Community at Large	5	Preparation
Clergy	4	Preplanning
Schools	4	Preplanning
Youth	4	Preplanning
Mental Health Providers	4	Preplanning
Anchorage Municipality	3	Vague Awareness
Elders	3	Vague Awareness
Tribal	3	Vague Awareness



# IV. DISCUSSION



## **IV. Discussion**

The purpose of this assessment was to evaluate and better understand the behavioral health of youth aged 12-24 in Anchorage so that the ACC could develop an intervention or interventions to improve the behavioral health for that same population. As part of the assessment, the ACC examined existing data, collected and analyzed new data, conducted youth focus groups, systematically reviewed existing prevention resources, interviewed members of the community, and involved members of the coalition and the greater Anchorage community in the process.

### **a. Findings**

The ACC found the status of mental health of Anchorage youth and young adults to be of particular concern and selected mental health as the priority issue of focus. While the analysis considered the intermediate variables of feeling alone and bullying, the ACC found bullying amongst ninth grade students in the ASD and bullying amongst young adults (18-24 years old) to be the most highly connected intermediate variables to the mental health of youth in Anchorage.

#### **i. Mental Health**

The ACC was able to identify three data sources with indicators for mental health for Anchorage young adults 18-24 years old: the NCHA, NSDUH, and BRFSS. Based on findings from the NCHA, a survey administered to college students in 2009, noteworthy percentages of UAA students ages 18-24 reported they felt that things were hopeless (23.2%), felt overwhelmed (64.0%), felt very lonely (35.6%), felt very sad (36.6%), and felt so depressed it was difficult to function (14.9%) over the past month. Almost half of UAA students (45.9%) reported experiencing high stress over the past 12 months. Between 2006 and 2013, the percentage of 18-24 year olds who reported that a doctor, nurse, or other health professional had told them they had a depressive disorder stayed almost constant at 18.8%. That same percentage reported that their mental health was not good for seven or more days in the past 30 days during the 2012-2013 reporting period.

New data from the UAA Assessment Team provided more information about the mental health of youth and young adults (18-24) in Anchorage. Results from the YAS found stress, bullying, level of optimism, years lived in Anchorage, gender, and sexual orientation to be significant predictors of mental health for young adults 18-24 years old. Qualitative data from the youth focus groups provided greater insight into the mental wellbeing of youth and young adults in Anchorage.

#### **ii. Bullying**

Bullying is unwanted, aggressive behavior that involves a real or perceived power imbalance. The behavior is repeated, or has the potential to be repeated, over time. Bullying includes actions such as making threats, spreading rumors, attacking someone physically or verbally, and excluding someone from a group on purpose.

Across several datasets and sources, bullying was significantly tied to poor mental health outcomes among youth in Anchorage. Analysis of YRBS data shows that ASD high school students who were bullied, either in school or electronically, were more likely to report that they seriously considered suicide, planned a suicide attempt, felt sad or hopeless, currently drink, and binge drink. Analysis of data from the YAS, a survey administered to 18-24 year olds living in Anchorage, shows that bullying, second only to stress, is a significant predictor of mental health status for young adults in Anchorage. Qualitative data from focus groups with youth aged 12-24 reflect the extent to which bullying influences the mental health of youth in those age groups. Together, these findings further reinforced the ACC intermediate variable choices of bullying in ninth grade and among 18-24 year olds.

Furthermore, in the assessment of all the data available, clear connections were made between bullying and suicide, substance use, and mental health issues. This and the ACC's thorough review of available resources in our community should assist the coalition in charting an effective path forward over the next few years.

## **b. Limitations & Strengths**

The results of this assessment should be considered in light of its limitations. Where possible, the ACC used high quality and up to date existing datasets. With that said, each dataset comes with its own limitations. Those limitations are noted in Appendix B. There are also limitations to the new data collected for this assessment. Results presented in this document from the APAY survey are based on a small, preliminary sample of the earliest survey returns and should be interpreted as such. The YAS relied on a convenience sample so the results from this study may not be representative of all 18-24 year olds in Anchorage. Due to budget constraints, the CBHA Team was unable to provide survey materials or host focus groups in languages other than English. This may have prohibited community members and youth speaking a language other than English from participating. This is noteworthy considering that youth participating in focus groups noted that victims of bullying are often targeted for their differences or perceived differences.

Far offsetting this assessment's limitations are its strengths. Chief among the strengths of this assessment is the total number of people the ACC engaged through this process. This assessment reflects an incredible amount of collaboration on the part of Anchorage youth, the Anchorage community, ACC coalition members, the ACC Assessment Workgroup, and the UAA Assessment Team. Anchorage youth volunteered their time to contribute to the new data collection efforts, namely through focus group participation, survey taking, and key informant interviews. The Anchorage community provided their time and input through the existing data analysis meetings. ACC coalition members meaningfully provided their time to the CBHA, as well as their knowledge and expertise regarding the behavioral health of youth and young adults in Anchorage. The UAA Assessment Team coordinated a remarkable effort to collect new data on the behavioral health of youth in Anchorage. In particular, the ability of the UAA Assessment Team and ACC to collect new data from Anchorage youth and young adults strengthened the CBHA.

Further strengths may be found in the extensive and exhaustive datasheets and analysis provided by the UAA Assessment Team, which helped quantify both existing and new data and helped identify key areas of focus. With the identification of existing resources, qualitative analysis of the proposed intermediate variables, and community dialogue, the ACC was able to make its final determination with confidence. This has been a data-driven process and interventions developed will truly be driven by the direction that data and additional research have indicated.

### **c. Future**

The ACC will use the results of this assessment throughout the life of the DBH grant. The decisions made by the ACC through this assessment will guide the Planning and Implementation steps of the SPF process over the next six months. Identifying interventions that are appropriate to our level of readiness, built on strong data, and developed in conjunction with our community is essential. Toward that end, the ACC is developing a planning process for late February that will draw on coalition members, people from the community, and youth from the identified age groups. This planning process will yield a strategic plan for identifying and implementing interventions, a final logic model reflecting that planning, and a cohesive evaluation strategy to ensure that the work we do, is effective at addressing the intermediate variables and designed and measured appropriately.

The assessment has provided promising direction for our planning work that will be further explored and inform the planning stage.



# V. APPENDIX ITEMS



## V. Appendix Items

### *Appendix A: Community Behavioral Health Assessment Team*

#### **ACC Executive Committee**

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Deborah Williams, Anchorage Youth Development Coalition  
Karen Zeman, Spirit of Youth  
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Will Hurr	Ruth Schoenleben
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Nathan Johnson	Mandi Seethaler
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#### **UAA Assessment Team**

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Rebekah Moras, Center for Human Development  
Danielle Reed, Center for Human Development  
Curtis Smith, Center for Human Development



## *Appendix B: Existing Data Sources Cited*

### **Alaska Department of Education and Early Development (ADEED)**

Note: For this report, data was only analyzed on suspensions/expulsions, dropout, and graduation rates in the Anchorage School District.

Purpose: To collect relevant school information (e.g., attendance, graduation rates, suspensions/expulsions) on Alaska public school students.

Dates Collected: Ongoing data collection.

Participants: Data collected on students attending Anchorage's public schools.

Limitations: Data are presented by counts instead of percentages (in the absence of total student population for each year). ASD graduation and dropout rates were calculated differently prior to the 2009-2010 school year.

Website: <http://www.eed.state.ak.us/>

UAA Assessment Team Rating: Validity-2 Consistency-1 Sensitivity-1

### **Behavioral Risk Factor Surveillance System (BRFSS)**

Purpose: To collect data on preventive health practices and risk behaviors linked to chronic diseases, injuries, and preventable infectious diseases.

Dates Collected: Yearly since 1984. Computer-assisted telephone interviewing began in 2005.

Participants: Nationwide survey. Participants are non-institutionalized civilian adults 18 and older.

Website: <http://www.hss.state.ak.us/dph/chronic/hsl/brfss/default.htm>

UAA Assessment Team Rating: Validity-2 Consistency-2 Sensitivity-1

### **Alaska Bureau of Vital Statistics (BVS)**

Purpose: To collect information on infant mortality, cancer and chronic disease deaths, other leading causes of death, unintentional injuries, pregnancy rates, and marriage and divorce rates.

Dates Collected: Ongoing data collection.

Participants: Data collected from all birth, death, marriage, and divorce statistics (vital statistics) in state of Alaska.

Limitations: The data includes all vital statistic information occurring in the state and the data can be used to assess trends over time.

Website: <http://www.hss.state.ak.us/dph/bvs/>

UAA Assessment Team Rating: Validity-2 Consistency-2 Sensitivity-1

### **National College Health Assessment (NCHA)**

Purpose: To collect information on college students' health habits, behaviors, and perceptions.

Dates Collected: UAA collected in 2009.

Participants: Students enrolled in university participating in the survey.

Limitations: Only one year of data so trend data not available.

Websites: <http://www.acha-ncha.org/overview.html>

<http://www.achancha.org/>

UAA Assessment Team Rating: Validity-1 Consistency-2 Sensitivity-1

### **National Survey of Drug Use and Health (NSDUH)**

Purpose: To collect US national and state-level data on the use of tobacco, alcohol, illicit drugs, and mental health. Used to assess and monitor drug and alcohol use and consequences of abuse.

Dates Collected: 1990-present conducted every year. 1972-1990 conducted every two-three years.

Participants: Randomly selected individuals age 12 and older.

Limitations: Excludes individuals without households (i.e, homeless, military, living in dorms, living in institutions like jails, prisons, and hospitals).

Website: <https://nsduhweb.rti.org/respweb/homepage.cfm>

UAA Assessment Team Rating: Validity-2 Consistency-2 Sensitivity-1

### **Office of Children's Services (OCS)**

Purpose: To collect information on children and families utilizing OCS, and on providers for out-of-home placements.

Dates Collected: Ongoing data collection.

Participants: Participants using OCS.

Limitations: Not all data is publically available.

Website: <http://dhss.alaska.gov/ocs/Pages/default.aspx>

UAA Assessment Team Rating: Validity-1 Consistency-1 Sensitivity-1

### **Pregnancy Risk Assessment Monitoring System (PRAMS)**

Purpose: To collect information on state-specific population-based maternal attitudes and experiences before, during, and after pregnancy.

Dates Collected: 1990 to present. Ongoing data collection.

Participants: Stratified random sample of approximately one in six mothers of live births in Alaska (minimum of two months and a maximum of six months have passed since the date of birth). Stratification is on both race (native and non-native) and birth weight (<2500 g and  $\geq 2500$  g).

Limitations: Only collected from mothers with live births, therefore pregnancy issues generalized to that population.

Websites: <http://dhss.alaska.gov/dph/wcfh/pages/mchept/prams/default.aspx>;

<http://www.cdc.gov/prams/>

UAA Assessment Team Rating: Validity-2 Consistency-2 Sensitivity-1

### **School Climate and Connectedness Survey (SCCS)**

Purpose: To measure student and staff perceptions of school climate and connectedness.

Dates Collected: Yearly since 2005; ASD from 2007-present.

Participants: Survey offered to Alaska school districts. Additional questions included in Anchorage School District (ASD) survey to address issues unique to ASD. Participants are public school staff with student contact, and students. For ASD, the grades are 3-12.

Limitations: Self-reported, which is subject to recall bias and social desirability; less than 10 years data which limits availability of trend data.

Website: <http://alaskaice.org/wordpress/wp-content/uploads/2010/11/SCCS-2014-Statewide-Report-combined.pdf>

UAA Assessment Team Rating: Validity-2 Consistency-2 Sensitivity-1

### **Alaska Trauma Registry (ATR)**

Purpose: To collect information on trauma patient injury and treatment from Alaska's acute care hospitals.

Dates Collected: 1991-present.

Participants: 24 of Alaska's acute care hospitals contribute to the registry.

Limitations: The Trauma Registry includes all poisoning injuries reported for children (patients under age 18), but limits the reporting of poisoning injuries for adults. Initially the ATR included unintentional occupational, unintentional inhalational, and self-inflicted poisoning injuries for adults. As of January 1, 2011, the ATR no longer included self-inflicted poisoning injuries for adults age 18 and older. This included drug-related suicide attempts, which account for the majority of suicide attempts in Alaska.

Website: <http://dhss.alaska.gov/dph/Emergency/Pages/trauma/registry.aspx>

UAA Assessment Team Rating: Validity-2 Consistency-1 Sensitivity-2

### **Youth Risk Behavior Survey (YRBS)**

Purpose: To measure the prevalence of behaviors and protective factors that most influence the health of youth in grades 9-12.

Dates Collected: 1990, but Alaska first participated in 1995. Conducted every other year.

Participants: Nationwide survey established by CDC. Participants are public high school students in grades 9-12.

Limitations: Cross-sectional survey which does not allow for researchers to establish causation; self-reported, which is subject to recall bias and social desirability; conducted only in English (ASD reported 99 languages in 2014); and does not collect information on socioeconomic status, gender identity/sexual orientation, and neighborhood environment. In Alaska, it cannot be administered without written parent permission (active parental consent beginning in 2001).

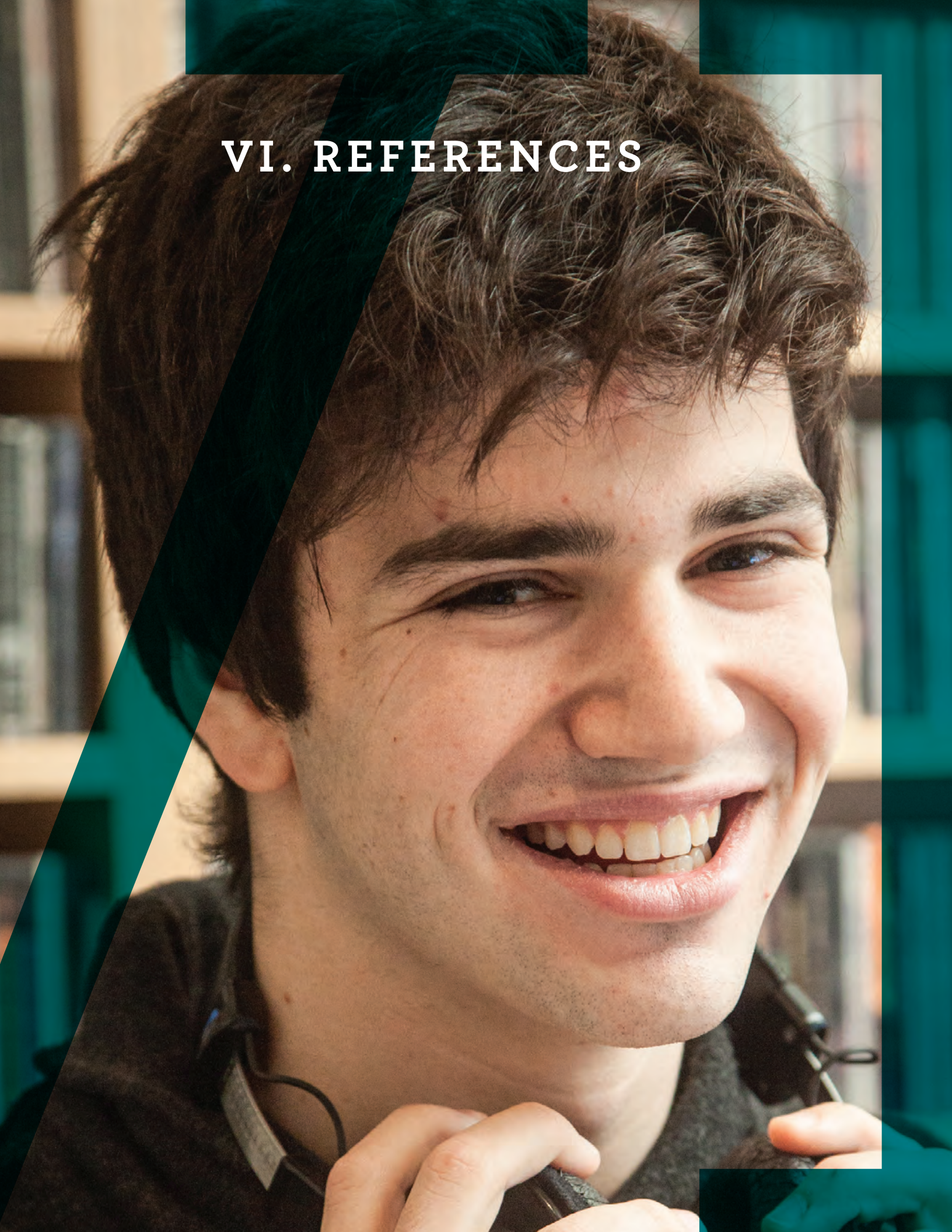
Websites: [http://dhss.alaska.gov/dph/Chronic/Documents/School/pubs/YRBS\\_FAQ.pdf](http://dhss.alaska.gov/dph/Chronic/Documents/School/pubs/YRBS_FAQ.pdf)

<http://www.hss.state.ak.us/dph/chronic/school/YRBS.htm>

UAA Assessment Team Rating: Validity-2 Consistency-2 Sensitivity-2



## VI. REFERENCES





## VI. References

- Adam, E.K., Chyu, L., Hoyt, L.T., Doane, L.D., Boisjoly, J., Duncan, G.J., . . . McDade, T.W. (2011). Adverse adolescent relationship histories and young adult health: Cumulative effects of loneliness, low parental support, relationship instability, intimate partner violence, and loss. *Journal of Adolescent Health*, 49, 278-286. doi: 10.1016/j.jadohealth.2010.12.012
- Alaska Coalition on Housing and Homelessness. (2014). Annual homeless assistance report: *Sheltered homeless persons in Anchorage, 10/1/2013 - 9/30/2014*. Retrieved from <http://www.alaskahousing-homeless.org/sites/default/files/AHAR%202014%20Anchorage.pdf>
- Alaska Court System. (2015). *Alaska Courts Directory*. Retrieved April 10, 2015, from Alaska Court System: <http://courts.alaska.gov/reports/profile2015.pdf>
- Alaska Mental Health Trust Authority. (2013). Alaska scorecard: Key issues impacting Alaska Mental Health Trust beneficiaries. State of Alaska: Department of Health & Social Services. <http://dhss.alaska.gov/dph/HealthPlanning/Pages/scorecard/default.aspx>
- Allen-Young, C. (2014, February 27). *Study Calls Anchorage Schools America's Most Diverse High Schools*. Retrieved April 6, 2015, from KTUU Channel 2 News: <http://www.ktuu.com/news/news/study-calls-east-bartlett-west-americas-most-diverse-high-schools/24725354>
- Anchorage Convention and Visitors Bureau. (n.d.). *Anchorage Weather*. Retrieved April 7, 2015, from Visit Anchorage Alaska: <http://www.anchorage.net/plan-your-trip/weather/>
- Anchorage Economic Development Corporation. (2012). *Planning Division Publications, Studies, Adopted Plans*. Retrieved April 15, 2015, from Official Web Site of the Municipality of Anchorage, Alaska: <http://www.muni.org/Departments/OCPD/Planning/Publications/Documents/Full%20Indicators%20Report.pdf>
- Anchorage Economic Development Corporation. (2013). *2012 Anchorage Indicators*. Retrieved April 10, 2015, from Municipality of Anchorage Community Planning and Development: <http://www.muni.org/Departments/OCPD/Planning/Publications/Documents/FullIndicatorsReport.pdf>
- Anchorage Federation of Community Councils. (2014). *About Us*. Retrieved April 9, 2015, from Anchorage Federation of Community Councils: <http://communitycouncils.org/servlet/content/1548.html>
- Anchorage Neighborhood Health Center. (2014). *2013 Annual Report*. Retrieved April 10, 2015, from Anchorage Neighborhood Health Center: [http://anhc.org/wp-content/uploads/2014/05/2013\\_Annual\\_Report\\_WEB-v.21.pdf](http://anhc.org/wp-content/uploads/2014/05/2013_Annual_Report_WEB-v.21.pdf)

- Anchorage School District. (2015). *About ASD*. Retrieved January 25, 2016, from Anchorage School District: <http://www.asdk12.org/aboutasd/>
- Anchorage Youth Central. (2015). *Anchorage Youth Central*. Retrieved January 28, 2016, from Anchorage Youth Central: <http://www.anchorageyouthcentral.org/index.php>
- Anchorage Youth Court. (2015). *What is Anchorage Youth Court*. Retrieved April 10, 2015, from Anchorage Youth Court: [http://www.anchorageyouthcourt.org/intro\\_to\\_ayc.html](http://www.anchorageyouthcourt.org/intro_to_ayc.html)
- Bellmore, A., Witkow, M., Graham, S., & Juvonen J. (2004). Beyond the individual: The impact of ethnic context and classroom behavioral norms on victims' adjustment. *Developmental Psychology*, 40(6), 1159-72. 10.1037/0012-1649.40.6.1159
- Benedict, F., Vivier, P., & Gjelsvik, A. (2015). Mental health and bullying in the United States among children aged 6 to 17 years. *Journal of Interpersonal Violence*, 30(5), 782-95.
- Berman, A. (2011). Estimating the population of survivors of suicide: Seeking an evidence base. *Suicide & Life-Threatening Behavior*, 41(1), 110-6. doi: 10.1177/088626051453627
- Blake, J., Lund, E., Zhou, Q., Kwok, O., & Benz, M. (2012). National prevalence rates of bully victimization among students with disabilities in the United States. *School Psychology Quarterly*, 27(4), 210-22. doi: 10.1037/spq0000008
- Bobakova, D., Geckova, A., Klein, D., Reijneveld, S., & van Dijk, J. (2012). Protective factors of substance use in youth cultures. *Addictive Behaviors* 37, 1063-7. doi: 10.1016/j.addbeh.2012.04.014
- Bollmer, J., Milich R., Harris M., & Maras M. (2005). A friend in need: The role of friendship quality as a protective factor in peer victimization. *Journal of Interpersonal Violence*, 20, 701-12. doi: 10.1177/0886260504272897
- Bontempo, D., & D'Augelli, A. (2002). Effects of at-school victimization and sexual orientation on lesbian, gay, or bisexual youths' health risk behavior. *Journal of Adolescent Health*, 30, 364-74. doi: [http://dx.doi.org/10.1016/S1054-139X\(01\)00415-3](http://dx.doi.org/10.1016/S1054-139X(01)00415-3)
- Boulton, M. (1995). Patterns of bully/victim problems in mixed race groups of children. *Social Development*, 4, 277-93. doi: 10.1111/j.1467-9507.1995.tb00066.x
- Bradshaw, C., Waasdorp, T., Goldweber, A., & Johnson, S. (2013). Bullies, gangs, drugs, and school: Understanding the overlap and the role of ethnicity and urbanicity. *Journal of Youth and Adolescence*, 42(2), 220-34. doi: 10.1007/s10964-012-9863-7
- Brank, E., Hoetger, L., & Hazen, K. (2012). Bullying. *Annual Review of Law and Social Science*, 8, 213-30.
- Brent, D. (2010). What family studies teach us about suicidal behavior: Implications for research, treatment, and prevention. *European Psychiatry*, 25(5), 260-3. doi: 10.1016/j.eurpsy.2009.12.009
- Cacioppo, J., Hawkey, L., Crawford, L., Ernst, J., Burleson, M., Kowaleski, R., et al. (2002). Loneliness and Health: Potential mechanisms. *Psychosomatic Medicine*, 64, 407-417.
- Centers for Disease Control and Prevention (CDC) National Center for Injury Prevention and Control (NCIPC). (2015). Web-based Injury Statistics Query and Reporting System (WISQARS). [www.cdc.gov/injury/wisqars](http://www.cdc.gov/injury/wisqars)

- Centers for Disease Control and Prevention. (2014). Age-adjusted suicide rates, by state: United States, 2012. *Morbidity & Mortality Weekly Report*, 63(45), 1041.
- Centers for Disease Control and Prevention. (2015). Suicide: Consequences. <http://www.cdc.gov/violenceprevention/suicide/consequences.html>
- Conchas, G., & Clark, P. (2002). Career academies and urban minority schooling: Forging optimism despite limited opportunity. *Journal of Education for Students Placed at Risk*, 7, 287-311.
- Cook Inlet Historical Society. (n.d.). *Anchorage History*. Retrieved April 6, 2015, from Cook Inlet History: <http://www.cookinlethistory.org/anchorage-history.html>
- Cook, C., Williams, K. Guerra, N., Kim, T., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly*, 25, 65-83. doi: 10.1037/a0020149
- Cooley-Strickland, M., Quille, T., Griffin, R., Stuart, E., Bradshaw, C., & Furr-Holden, D. (2009). Community violence and youth: Affect, behavior, substance use, and academics. *Clinical Child and Family Psychology Review* 12, 127-56. doi: 10.1007/s10567-009-0051-6
- Copeland, W. W. (2013). Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *JAMA Psychiatry*, 70 (4), 419-426. doi: 10.1001/jamapsychiatry.2013.504
- Cornell University. (2013). *Disability Statistics*. Retrieved April 10, 2015, from Online Resource for U.S. Disability Statistics: <http://www.disabilitystatistics.org/reports/cps.cfm?statistic=prevalence>
- Crump, C., Sundquist, K., Winkleby, M., & Sundquist, J. (2013). Mental disorders and vulnerability to homicidal death: Swedish nationwide cohort study. *British Medical Journal*, 346:f557. <http://www.bmj.com/content/bmj/346/bmj.f557.full.pdf>
- D'Augelli, A., Grossman, A., & Starks, M. (2006). Childhood gender atypicality, victimization and PTSD among lesbian, gay, and bisexual youth. *Journal of Interpersonal Violence*, 21, 1462-82. doi: 10.1177/0886260506293482
- Eaton, D. (2012, May 8). *Anchorage Kids Use YouTube to Stand Up to Bullying*. Retrieved January 26, 2015, from Alaska Public Media: <http://www.alaskapublic.org/2012/05/08/anchorage-kids-use-youtube-to-stand-up-to-bullying/>
- Ferrari, A., Norman, R., Freedman, G., Baxter, A., Pirkis, J., Harris, M., Page, A., Carnahan, E., Degenhardt, L., Vos, T., & Whiteford, H. (2014). The burden attributable to mental and substance use disorders as risk factors for suicide: Findings from the Global Burden of Disease Study 2010. *PLoS ONE* 9(4), e91936. doi:10.1371/journal.pone.0091936
- Florentine, S. (2015). *How to prevent workplace bullying*. Retrieved January 30, 2016, from CIO: <http://www.cio.com/article/2867980/careers-staffing/how-to-prevent-workplace-bullying.html>
- Fried, N. (2014, July). *Alaska's Cost of Living*. Retrieved April 7, 2015, from State of Alaska Department of Labor and Workforce Development Research and Analysis: <http://laborstats.alaska.gov/>



- Goodman, E., & Berecochea, J. (1994). Predictors of HIV testing among runaway and homeless adolescents. *Journal of Adolescent Health*, 15, 556-572.
- Graham, S., & Juvonen J. (2002). Ethnicity, peer harassment and adjustment in middle school: An exploratory study. *Journal of Early Adolescence*, 22, 173-99. doi: 10.1177/0272431602022002003
- Grossman, A., Haney, A., Edwards, P., Alessi, E., Ardon, M., & Howell, T. (2009). Lesbian, gay, bisexual and transgender youth talk about experiencing and coping with school violence: A qualitative study. *Journal of LGBT Youth*, 6(1), 24-46. doi: 10.1080/19361650802379748
- Hanlon, T. (2014, March 27). *Alaska Dispatch News*. Retrieved April 10, 2015, from Alaska Dispatch News: <http://www.adn.com/article/20140327/study-health-care-prices-alaska-top-nations-cities>
- Haynie, D., Nansel, T., Eitel, P., Crump A., Saylor K., Yu, K., & Simons-Morton, B. (2001). Bullies, victims, and bully/victims: Distinct groups of at-risk youth. *Journal of Early Adolescence*, 21(1), 29-49.
- Heath, K., Garcia, G., Hanson, B., Rivera, M., Hedwig, T., Moras, R., et al. (2015). *Growing Up Anchorage: Anchorage youth and young adult behavioral health and wellness assessment*. University of Alaska Anchorage: Center for Human Development.
- Heinrich, L., & Gullone, E. (2006). The clinical significance of loneliness: A literature review. *Clinical Psychology Review*, 26, 695-718. doi: doi:10.1016/j.cpr.2006.04.002
- Hill, C., Thompson, B., Hess, S., Knox, S., Williams, E., Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology*, 52(2), 196-205.
- Hill, C., Thompson, B., Williams, E. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist*, 25(4), 517-72.
- Hinduja, S., & Patchin, J. (2010). Bullying, cyberbullying and suicide. *Archives of Suicide Research*, 14(3), 206-21. doi: 10.1080/13811118.2010.49413
- Hull-Jilly D., & Casto L. (2011). State epidemiologic profile on substance use, abuse and dependency: Revised August 2011. Juneau, AK: Section of Prevention and Early Intervention Services, Division of Behavioral Health, Alaska Department of Health and Social Services.
- Hunsinger, E., & Sandberg, E. (2013, September). *Research and Analysis*. Retrieved April 7, 2015, from State of Alaska Department of Labor and Workforce Development: <http://labor.alaska.gov/research/trends/sep13art1.pdf>
- Institute on Disability. (2014). *2014 Compendium*. Retrieved April 13, 2015, from Disability Compendium: [http://www.disabilitycompendium.org/docs/default-source/2014-compendium/2014\\_compendium.pdf](http://www.disabilitycompendium.org/docs/default-source/2014-compendium/2014_compendium.pdf)
- Interfaith Council of Anchorage. (n.d.). *Welcome*. Retrieved April 10, 2015, from Interfaith Council of Anchorage: [http://www.interfaithanchorage.org/Interfaith\\_Council/Welcome.html](http://www.interfaithanchorage.org/Interfaith_Council/Welcome.html)
- Ireland, J., & Power, C. (2004). Attachment, emotional loneliness, and bullying behavior: A study of adult and young offenders. *Aggressive Behavior*, 30, 298-312.

- Johnson, J., Evers, K., Paiva, A., Van Marter, D., Prochaska, J. O., Prochaska, J. M., Mauriello, L., Cummins, C., & Padula, J. (2006). Prevention profiles: Understanding youth who do not use substances. *Addictive Behaviors*, 31(9), 1593-1606. doi:10.1016/j.addbeh.2005.12.006
- Joint Base Elmendorf Richardson. (n.d.). *Welcome*. Retrieved January 25, 2016, from The Official Web Site of Joint Base Elmendorf-Richardson.
- Jordan, J. (2001). Is suicide bereavement different? A reassessment of the literature. *Suicide & Life-Threatening Behavior*, 31(1), 91-102.
- Kaestner, R., Sasso, A., Callison, K., & Yarnoff, B. (2013). Youth employment and substance use. *Social Science Research*, 42(1), 169-85. doi: 10.1016/j.ssresearch.2012.07.007
- Kidd, S., & Kral, M. (2002). Suicide and prostitution among street youth: A qualitative analysis. *Adolescence*, 37, 411-430.
- Kidd, S., & Shahar, G. (2008). Resilience in homeless youth: The key role of self esteem. *American Journal of Orthopsychiatry*, 78(2), 163-172. doi: 10.1037/0002-9432.78.2.163
- King, E., & Furrow, J. (2004). Religion as a resource for positive youth development: Religion, social capital, and moral outcomes. *Developmental Psychology*, 40(5), 703-13. doi: <http://dx.doi.org/10.1037/0012-1649.40.5.703>
- Klomek, A., Marrocco, F., Klienmen M., Schonfeld I., & Gould M. (2007). Bullying, depression and suicidality in adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46, 40-9. doi: <http://dx.doi.org/10.1097/01.chi.0000242237.84925.18>
- Koenig, L., & Abrams, R. (1999). Adolescent loneliness and adjustment: a focus on gender differences. In K. J. Rotenberg & S. Hymel (Eds.), *Loneliness in childhood and adolescence*, Cambridge, England: Cambridge University Press, 296-322.
- Ladd, G., & Ettekal, I. (2013). Peer-related loneliness across early to late adolescence: Normative trends, intra-individual trajectories, and links with depressive symptoms. *Journal of Adolescence*, 36, 1269-1282. doi: 10.1016/j.adolescence.2013.05.004
- Lalayants, M., & Prince, J. (2015). Loneliness and depression or depression-related factors among child welfare-involved adolescent females. *Child Adolescent Social Work Journal*, 32, 167-176. doi: 10.1007/s10560-014-0344-6
- Lasgaard, M., Goossens, L., & Elkit A. (2011). Loneliness, depressive symptomatology, and suicide ideation in adolescence: Cross-sectional and longitudinal analyses. *Journal of Abnormal Child Psychology*, 39, 137-150. doi: 10.1007/s10802-010-9442-x.
- Lereya, S.T., Copeland, W.E., Costello, E.J., & Wolke, D. Adult mental health consequences of peer bullying and maltreatment in childhood: two cohorts in two countries. *The Lancet Psychiatry*, 2(6), 524-531. doi: [http://dx.doi.org/10.1016/S2215-0366\(15\)00165-0](http://dx.doi.org/10.1016/S2215-0366(15)00165-0)
- Levitt, M., Guacci-Franco, N., & Levitt, J. (1994). Social support and achievement in childhood and adolescents: a multicultural study. *Journal of Applied Developmental Psychology*, 15, 207-222. doi: 10.1007/s10964-008-9367-7
- Martin, J., & D'Augelli, A. (2003). How lonely are gay and lesbian youth? *Psychological Reports*, 93, 486. doi: 10.2466/pro.2003.93.2.486

- McCoy, K. (2013, April 6). *Alaska Dispatch News*. Retrieved January 25, 2016, from Alaska Dispatch News: <http://www.adn.com/article/20130406/hometown-u-data-show-mountain-view-most-diverse-neighborhood-america>
- McDonald, C., Deatrack, J., Kassam-Adams, N., & Richmond, T. (2011). Community violence exposure and positive youth development in urban youth. *Journal of Community Health*, 36, 925-32. doi: 10.1007/s10900-011-9391-5.
- McWhirter, B., Besett-Alesch, T., Horibata, J., & Gat, I. (2002). Loneliness in high risk adolescents: the role of coping, self-esteem, and empathy. *Journal of Youth Studies*, 5(1), 69-84.
- Mizrahi, J. L. (2015). *Resources*. Retrieved April 10, 2015, from RespectAbility USA: <http://respectabilityusa.com/Resources/By State/Alaska and Jobs for PwDs.pdf>
- Municipality of Anchorage. (2015). *History*. Retrieved April 6, 2015, from Official Web Site of the Municipality of Anchorage, Alaska: <http://www.muni.org/FastFacts/Pages/History.aspx>
- Municipality of Anchorage. (2015). *Municipal Departments, Divisions, and Offices*. Retrieved April 9, 2015, from Official Web Site of the Municipality of Anchorage, Alaska: <http://www.muni.org/departments/Pages/default.aspx>
- Municipality of Anchorage, Assembly. (2015). *Assembly: Community Councils*. Retrieved April 10, 2015, from Official Web Site of the Municipality of Anchorage, Alaska: <http://www.muni.org/Departments/Assembly/Pages/CommunityCouncils.aspx>
- Municipality of Anchorage, Parks and Recreation. (2015). *Parks and Recreation*. Retrieved January 31, 2016, from the Official Web Site of the Municipality of Anchorage, Alaska: <http://www.muni.org/departments/parks/pages/default.aspx>
- Municipality of Anchorage, Police Department. (2015). *APD Crisis Intervention Team*. Retrieved April 10, 2015, from The Official Web Site of the Municipality of Anchorage, Alaska: [http://www.muni.org/Departments/police/Pages/Mental\\_Health.aspx](http://www.muni.org/Departments/police/Pages/Mental_Health.aspx)
- Municipality of Anchorage, Public Safety. (2015). *Public Safety*. Retrieved April 9, 2015, from Official Web Site of the Municipality of Anchorage, Alaska: [http://www.muni.org/public\\_safety/Pages/default.aspx](http://www.muni.org/public_safety/Pages/default.aspx)
- Municipality of Anchorage, Transit Department. (2015). *People Mover: Reasons to Ride*. Retrieved April 9, 2015, from Official Web Site of the Municipality of Anchorage, Alaska: <http://www.muni.org/Departments/transit/PeopleMover/Pages/ReasonstoRide.aspx>
- Municipality of Anchorage, Transit Department. (2015). *AnchorRIDES Quick Reference Guide*. Retrieved April 9, 2015, from Municipality of Anchorage Transit: AnchorRides: <http://www.muni.org/Departments/transit/AnchorRides/Documents/AnchorRIDES%20Quick%20Reference%20Guide%20v10-2013.pdf>
- Municipality of Anchorage, Transit Department. (2015). *Municipality of Anchorage Transit: Share A Ride*. Retrieved April 9, 2015, from Official Web Site of the Municipality of

- Anchorage, Alaska:  
<http://www.muni.org/Departments/transit/ShareARide/Pages/default.aspx>
- Nagle, D., Erdley, C., Newman, J., Mason, C., & Carpenter, E. (2003). Popularity, friendship quantity, and friendship quality: Interactive influences on children's loneliness and depression. *Journal of Clinical Child and Adolescent Psychology*, 32, 546-555. doi: 10.1207/S15374424JCCP3204\_7
- Narvaez, D. (2006). Guide for using the Positivity Scale. Notre Dame, IN: Center for Ethical Education, University of Notre Dame.
- National Alliance on Mental Illness Anchorage. (n.d.). *Mental Health Community Resources*. Retrieved April 10, 2015, from NAMI Anchorage: <http://www.namianchorage.org/>
- Organisation for Economic Co-operation and Development. (2012). Sick on the Job?: Myths and realities about mental health and work. Paris, France: OECD Publishing.  
<http://dx.doi.org/10.1787/9789264124523-en>
- Page, R. (1990). High school size as a factor in adolescent loneliness. *High School Journal*, 73, 150-153. Retrieved from <http://www.jstor.org/stable/40364606>
- Parker, K. (2010). Problems and costs associated with underage drinking. Research Overview, No. 10. University of Alaska Anchorage: Justice Center.  
<http://justice.uaa.alaska.edu/overview/2010/10.underageddrinking.html>
- Parks, J., Svendsen, D., Singer, P., & Foti, M. (2006). Morbidity and mortality in people with serious mental illness. Alexandria, VA: National Association of State Mental Health Program Directors, Medical Directors Council. <http://www.nasmhpd.org/>
- Patterson, G., DeBaryshe, B., & Ramsey, E. (1998). A developmental perspective on antisocial behavior, *American Psychologist*, 44(2), 329-355. doi: <http://dx.doi.org/10.1037/0003-066X.44.2.329>
- Perron, J., Cleverley, K., & Kidd, S. (2014). Resilience, loneliness, and psychological distress among homeless youth. *Archives of Psychiatric Nursing*, 28, 226-229.
- Plested, B. A., Jumper-Thurman, P., & Edwards, R. W. (2015, February). Community Readiness Manual. Fort Collins, Colorado: The National Center for Community Readiness, Colorado State University.
- Pretty, G., Andrewes, L., & Collett, C. (1994). Exploring adolescence sense of community and its relationship to loneliness. *Journal of Community Psychology*, 22, 346-358. doi 10.1002/1520-6629(199410)22:4<346::AID-JCOP2290220407>3.0.CO;2-J
- Pritchard, M., & Yalch, K. (2009). Relationships among loneliness, interpersonal dependency, and disordered eating in young adults. *Personality and Individual Differences*, 46, 341-346. doi: 10.1016/j.paid.2008.10.027
- Proctor, C., Linley, P., & Maltby, J. (2009). Youth life satisfaction: A review of the literature. *Journal of Happiness Studies*, 10, 583-630. doi: 10.1007/s10902-008-9110-9
- Qualter, P., Brown, S., Munn, P., & Rotenberg, K. (2010). Childhood loneliness as a predictor of adolescent depressive symptoms: an 8-year longitudinal study, *European Child & Adolescent Psychiatry*, 19, 493-501. doi: 10.1007/s00787-009-0059-y

- Que Pasa? Anchorage. (2015) Retrieved January 27, 2016, from <http://quepasaanchorage.org/>
- Rew, L. (2002). Relationships of sexual abuse, connectedness, and loneliness to perceived well-being in homeless youth. *JSPN*, 7(2), 51-63. doi: 10.1111/j.1744-6155.2002.tb00151.x
- Rew, L., Taylor-Seehafer, M., Thomas, N., & Yockey, R. (2001). Correlates of resilience on homeless adolescents. *Journal of Nursing Scholarship*, 33, 33-40. doi: 10.1111/j.1547-5069.2001.00033x
- Riggio, R.E. (2011). *Four Steps for Stopping Workplace Bullies*. Retrieved January 30, 2016, from Psychology Today: <https://www.psychologytoday.com/blog/cutting-edge-leadership/201105/four-steps-stopping-workplace-bullies>
- Rivera, M., Parker, K., & McMullen, J. (2012). Youth alcohol access, consumption, and consequences in Anchorage, Alaska: 2012 update. Report JC 1010. University of Alaska Anchorage: Justice Center. [http://justice.uaa.alaska.edu/research/2010/1010.voa/1010.04.youth\\_alcohol\\_access.update.html](http://justice.uaa.alaska.edu/research/2010/1010.voa/1010.04.youth_alcohol_access.update.html)
- Rose, C., Espelage, D., & Monda-Amaya, L. (2009). Bullying and victimization rates among students in general and special education: A comparative analysis. *Educational Psychology*, 29(7), 761-76. doi: 10.1080/01443410903254864
- Schinka, K., Van Dulmen, M., & Bossarte, R. Swahn, M. (2012). Association between loneliness and suicidality during middle childhood and adolescence: Longitudinal effects and the role of demographic characteristics. *The Journal of Psychology*, 146(1-2), 105-118. doi: 10.1080/00223980.2011.584084
- Segrin, C., & Passalacqua, S. (2010). Functions of loneliness, social support, and health behaviors in association with poor health. *Health Communication*, 25, 312-32, doi: 10.1080/10410231003773334
- Segrin, C., Nevarez, N., Arroyo, A., & Harwood, J. (2012). Family of origin environment and adolescent bullying predict young adult loneliness. *The Journal of Psychology*, 146(1-2), 119-134. doi: 10.1080/00223980.2011.555791
- Shepard, D., Gurewich, D., Lwin, A., Reed, G., Silverman, M. (2015). Suicide and suicidal attempts in the United States: Costs and policy implications. *Suicide & Life-Threatening Behavior*. DOI: 10.1111/sltb.12225 Published online: <http://onlinelibrary.wiley.com.proxy.consortiumlibrary.org/doi/10.1111/sltb.12225/epdf>
- Sibold, J., Edwards, E., Murray-Close, D., & Hudziak, J. J. (2015). Physical activity, sadness, and suicidality in bullied U.S. Adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 54(10), 808-815. doi: <http://dx.doi.org/10.1016/j.jaac.2015.06.019>
- Smith, E. (2007). The role of afterschool settings in positive youth development. *Journal of Adolescent Health*, 41(3), 219-20.
- State of Alaska Department of Commerce, Community, and Economic Development. (2016). *Community and Regional Affairs*. Retrieved January 31, 2016, from Department of Commerce, Community, and Economic Development:

- <https://www.commerce.alaska.gov/dcra/DCRAExternal/community/Details/2d5ef9f0-9855-4b68-9350-bc9d20e81807>
- State of Alaska Department of Health and Social Services, Division of Behavioral Health. (2011). Risk and protective factors for adolescent substance use (and other problem behavior). Available at:  
[http://dhss.alaska.gov/dbh/Documents/Prevention/programs/spfsig/pdfs/Risk\\_Protective\\_Factors.pdf](http://dhss.alaska.gov/dbh/Documents/Prevention/programs/spfsig/pdfs/Risk_Protective_Factors.pdf)
- State of Alaska Department of Health and Social Services, Division of Health Care Services. (2016). *Denali Kid Care*. Retrieved January 31, 2016, from State of Alaska Department of Health and Social Services, Division of Health Care Services:  
<http://dhss.alaska.gov/dhcs/Pages/denalikidcare/default.aspx>
- State of Alaska Department of Health and Social Services, Division of Juvenile Justice. (2015). *DJJ Facilities*. Retrieved April 10, 2015, from State of Alaska Department of Health and Social Services, Division of Juvenile Justice:  
<http://dhss.alaska.gov/djj/Pages/Facilities/facilities.aspx>
- State of Alaska Department of Health and Social Services, Division of Public Health. (2015). *Marriage and Divorce Rates for Anchorage*. Retrieved April 9, 2015, from State of Alaska Bureau of Vital Statistics:  
[http://dhss.alaska.gov/dph/VitalStats/Documents/stats/marriage\\_divorce\\_statistics/Marriages\\_Divorces/frame.html](http://dhss.alaska.gov/dph/VitalStats/Documents/stats/marriage_divorce_statistics/Marriages_Divorces/frame.html)
- State of Alaska Department of Labor and Workforce Development, Research and Analysis. (2016). *Demographic Profile for Anchorage Municipality*. Retrieved from:  
[http://live.laborstats.alaska.gov/cen/dppdfs/dem\\_profile\\_52.pdf](http://live.laborstats.alaska.gov/cen/dppdfs/dem_profile_52.pdf)
- State of Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. (2015). *Parks*. Retrieved January 28, 2016, from  
<http://dnr.alaska.gov/parks/>
- Statewide Suicide Prevention Council. (2010). Alaska suicide facts and statistics. <http://dhss.alaska.gov/SuicidePrevention/Documents/pdfs/sspc/AKSuicideStatistics.pdf>
- Tebes, J., Feinn, R., Vanderploeg, J., Chinman, M., Shepard, J., Brabham, T., Genovese, M., & Connell, C. (2007). Impact of a positive youth development program in urban after-school settings on the prevention of adolescent substance use. *Journal of Adolescent Health*, 41(3), 239-47. doi: <http://dx.doi.org/10.1016/j.jadohealth.2007.02.016>
- United States Census Bureau. (2015, December 2). *State & County QuickFacts*. Retrieved January 2016, 2016, from United States Census Bureau:  
<http://quickfacts.census.gov/qfd/states/02/02020.html>
- United States Census Bureau. (n.d.). *Introduction to NAICS*. Retrieved April 9, 2015, from  
<http://www.census.gov/eos/www/naics>
- US Climate Data. (n.d.). *US Climate Data Anchorage Alaska*. Retrieved April 7, 2015, from US Climate Data: <http://www.usclimatedata.com/climate/anchorage/alaska/united-states/usak0012>
- Van Cleave, J., & David, M. (2006). Bullying and peer victimization among children with special health care needs. *Pediatrics*, 118(4), 1212-19.

- Vanderbilt, D., & Augustyn, M. (2010). The effects of bullying. *Paediatrics & Child Health*, 20(7), 315-20. <http://dx.doi.org/10.1016/j.paed.2010.03.008>
- Vanhalst, J., Klimsta, T., Luyckx, K., Scholte, R., Engels, R., & Goossens, L. (2012). The interplay of loneliness and depressive symptoms across adolescence: Exploring the role of personality traits. *Journal of Youth and Adolescence*, 41, 776-787. doi: 10.1007/s10964-011-9726-7
- Vanhalst, J., Luyckx, K., & Goossens, L. (2014). Experiencing loneliness in adolescence: A matter of individual characteristics, negative peer experiences, or both? *Social Development*, 23(1), 99-118. doi: 10.1111/sode.12019
- Walker, H., & Gersham, F. (1997). Making school safer and violence free. *Intervention in School Clinic*, 32, 199-204.
- Wan, J., Morabito, D., Khaw, L., Knudson, M., & Dicker, R. (2006). Mental illness as an independent risk factor for unintentional injury and injury recidivism. *Journal of Trauma-Injury Infection & Critical Care*, 61 (6), 1299-1304. doi: 10.1097/01.ta.0000240460.35245.1a
- Wang, J., Iannotti, R., & Nansel T. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health*, 45, 368-75. doi: 10.1016/j.jadohealth.2009.03.021
- Whitebeck, L., Chen, X., Hoyt, D., Tyler, K., & Johnson, K. (2004). Mental disorders, subsistence strategies, and victimization among gay, lesbian, and bisexual homeless youths and runaway adolescents. *Journal of Sex Research*, 41, 329-342.
- Wickrama, K., Wickrama, T., Lott, R. (2009). Heterogeneity in youth depressive symptom trajectories: Social stratification and implications for young adult physical health. *Journal of Adolescent Health*, 45, 335-43. doi: 10.1016/j.alcr.2010.08.003
- Williams, J. G. (2010, February). *Research and Analysis*. Retrieved January 2016, 2015, from State of Alaska Department of Labor and Workforce Development: <http://labor.alaska.gov/research/trends/feb10art1.pdf>
- Yadegarfar, M., Meinhold-Bergmann, M., & Ho, R. (2014). Family rejection, social isolation, and loneliness as predictors of negative health outcomes (depression, suicide ideation and sexual risk behavior) among Thai male-to-female transgender adolescents. *Journal of LGBT Youth*, 11, 347-363. doi: 10.1080/19361653.2014.910483
- Youngblade, L., Theokas, C., Schulenberg, J., Curry, L., Huang, I., & Novak, M. (2007). Risk and promotive factors in families, schools and communities: A contextual model of positive youth development in adolescence. *Pediatrics*, 119(1), S47-S53. doi: <http://dx.doi.org/10.1542/peds.2006-2089H>



