



King County

**Mental Health, Chemical Abuse
and Dependency Services Division**
Department of
Community and Human Services

Public Health
Seattle & King County



Behavioral Health in King County, Washington

**Assessment, Policy Development and Evaluation Unit
Public Health — Seattle & King County**

**Mental Health, Chemical Abuse and Dependency Services
Division**

**King County Department of Community and Human
Services**

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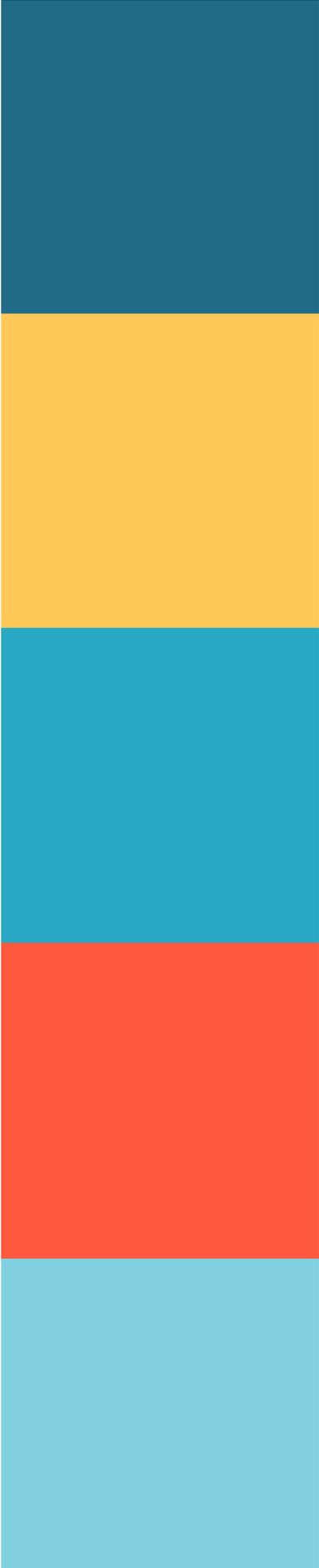


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Key Findings

Behavioral health conditions include both mental health and substance use disorders. They manifest in a range from less severe, but very prevalent symptoms (e.g., mental distress; any alcohol use) to rare but, serious events (e.g., hospitalizations, severe mental illnesses such as schizophrenia). When behavioral health symptoms interfere with daily functioning, treatment is warranted. Prevalence and risk factors for moderate-to-severe symptoms is the primary focus of this report. Through a better understanding of behavioral health indicators in King County, interventions can be tailored to best serve those in need.

Consequences of severe behavioral health issue – hospitalizations and deaths

In 2012, there were 10,358 hospitalizations and 749 deaths among King County residents associated with alcohol, drug use, or self-harm/suicide. Of note, young adults (age 18-24) were nearly twice as likely to be hospitalized than 25-64 year olds, while older adults (≥45 years) were more likely to die from suicide. American Indians/Alaska Natives were five times more likely to die from alcohol-related causes than the average King County resident.

Serious psychological distress – limits social, work, or school functioning.

- Three percent of King County adults report experiencing serious psychological distress in the past 30 days.ⁱ Nationally, twelve-month prevalence of mental illness is estimated to be 19-25 percent, and estimates are as high as 49 percent for adult Medicaid recipients.ⁱⁱ
- Adults experiencing poverty (household incomes <200% of the federal poverty level) report more serious psychological distress (8% vs. 2%).
- About a quarter (27%) of King County youth report having had depressive feelings during the past 12 months, and suicidal thoughts (16%) and attempts (7%) are not uncommon. Rates of depressive feelings, suicidal thoughts and attempts are higher among girls, Native Hawaiian/Pacific Islanders and American Indian/Alaska Natives, youth from lower socioeconomic levels, and youth living in South King County.ⁱⁱⁱ

Substance use – excessive alcohol or drug use on multiple days per month

- A fifth of King County adults (21%) report excessive alcohol drinking (either binge or heavy drinking or both) and six percent report excessive marijuana use (at least four days in past month). Excessive alcohol drinking and marijuana use are more common in younger adults and men. Excessive alcohol drinking is more common among Seattle residents than those in other parts of the County. Excessive marijuana use is associated with poverty and is least common among East county residents.
- Thirteen percent of youth report excessive alcohol use and nine percent report excessive marijuana use (three or more days in past month). Older youth and those from lower socioeconomic backgrounds are more likely to report using alcohol and marijuana.

Risk and protective factors for behavioral health conditions

- Adverse childhood experiences (e.g. child abuse, neglect, witnessing violence, having a parent who is mentally ill, addicted or incarcerated) and bullying are risk factors for developing behavioral health conditions.
- Adequate social support (for adults) and connection to a supportive adult (for youth) are protective against developing behavioral health conditions.

ⁱ Behavioral Risk Factor Surveillance System, 2009-2013

ⁱⁱ R.G. Kronick, M. Bella, T.P. Gilmer. The Faces of Medicaid III: Refining the Portrait of People with Multiple Chronic Conditions. Center for Health Care Strategies, Inc., October 2009. Retrieved December 29, 2014 from: <http://www.unz.org/Pub/PolicyArchive-2009oct-00021>

ⁱⁱⁱ Washington State Healthy Youth Survey, 2012

Background

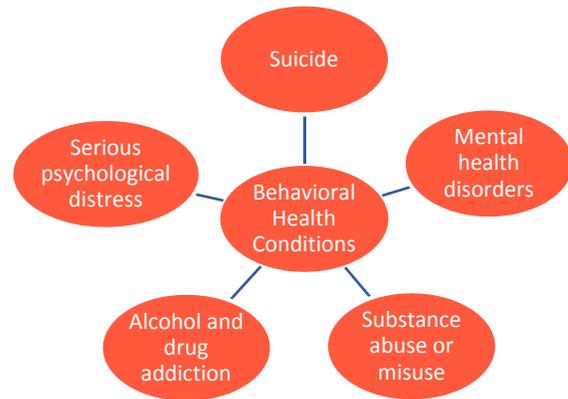
Introduction

Behavioral health refers to mental and emotional well-being and/or actions that affect wellness.¹ Behavioral health conditions encompass both mental health and substance use disorders (Figure 1).² They affect persons across all age, racial, ethnic, educational, and gender groups, regardless of income. According to the Institute for Health Metrics and Evaluation, behavioral health problems produce more than a quarter of total years lived with disability in the United States. Depression is the second leading cause of years lived with disability among Americans, while anxiety disorders are the fifth leading cause.³

The human toll is striking for individuals who have behavioral health conditions as well as for their close friends and family members. People who experience behavioral health issues have increased rates of incarceration⁴, homelessness⁵, chronic health conditions⁶, and death.⁷ In the U.S. the annual direct medical cost for behavioral health conditions is estimated at \$120 billion (based on 2002 dollars).⁸ An additional \$193 billion (based on 2003 dollars) is associated with lost earnings.⁹

Behavioral health is intricately related to physical health; poor mental health and poor physical health are linked. Integrating primary health care with behavioral health services is critical to treating the whole person and improving overall health outcomes. Preventing behavioral health conditions and supporting recovery for those with behavioral health issues are essential to improving overall health. Recovery support is one of the strategic initiatives identified by the U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMHSA) to improve the nation's behavioral health and reduce the impact of substance abuse and mental illness on our nation's communities. In focusing on recovery support, SAMHSA promotes the message that: prevention works, treatment is effective, and people can and do recover.²

Figure 1. What are behavioral health conditions?



Did you know? Recovery is not only possible, it is probable. Most people, even those with serious mental illnesses and substance use disorders, are able to recover and live full, productive lives, given adequate treatment and support.

Access to insurance coverage for behavioral health treatment is expanding under the Affordable Care Act. The Washington State Health Benefits Exchange reports a total of 192,198 King County residents enrolled in health care plans between October 2013 and March 2015, including 139,397 adults who are newly eligible for Medicaid.¹⁰ This can improve access to all forms of health care, including behavioral health care.

Scope of the report

This report reviews population-level data about behavioral health conditions and their risk factors in King County. For additional information see the online behavioral health section of King County Community Health Indicators (www.kingcounty.gov/health/indicators).

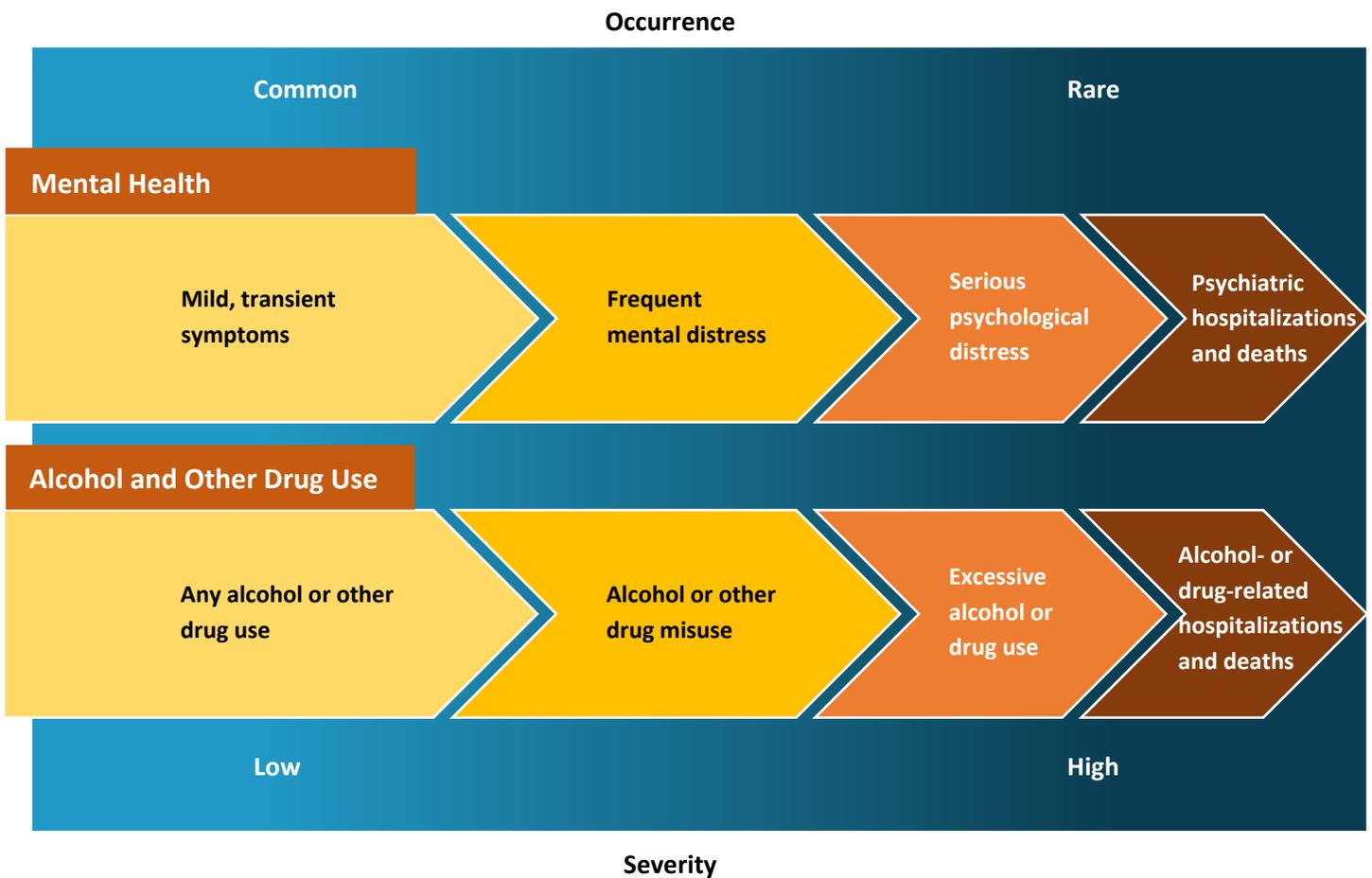
Recognizing that there is a range of behavioral health symptoms, this report focuses primarily on serious symptoms and excessive alcohol and drug use. Data on hospitalizations and deaths due to behavioral health conditions are also provided. It would be preferable to identify emergent problems and

initiate help when symptoms are only mild to moderate but population data on mild symptomatology were not available for this report.

Conceptual framework for understanding behavioral health indicators

Behavioral health can be viewed along a continuum (Figure 2) ranging from less severe, but more common symptoms at one end of the spectrum, to serious but rare events (e.g., hospitalizations, severe mental illnesses such as schizophrenia) at the other end.

Figure 2. Continuum of behavioral health symptoms



Although mental distress and low frequency use of alcohol or drugs may not necessarily warrant intervention, assistance is needed when distress, symptoms, or substance use begin to interfere with daily functioning. At this point, individuals may choose to receive mental health and substance use treatment services from a range of providers and in a variety of settings depending on needs, payment mechanisms (i.e., private insurance, Medicaid, etc.), and access/availability of treatment services.

Part I: King County Behavioral Health Indicators

A. Interpreting data presented in this report

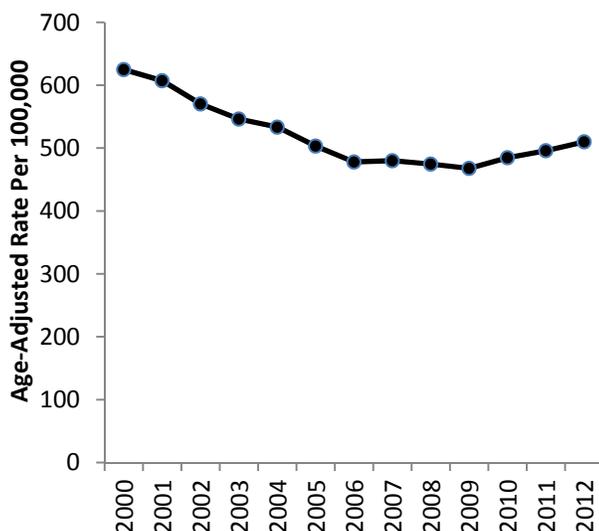
The estimated percentage of adults and youth with behavioral health conditions in this report come from self-report surveys of the general population.¹¹ For youth, the data come from a self-administered school-based survey of public school students. For adults, data come from random telephone-based surveys. A limitation of a random telephone survey of adults is that it excludes certain people who may be more likely to experience behavioral health problems (e.g. people who are institutionalized, incarcerated, homeless, or do not have a telephone). Youth and adults may not report behavioral health problems due to the stigma associated with these issues and those who are successfully receiving treatment may not report current or previous symptoms. Therefore, the numbers presented in this report are likely to underestimate the extent of behavioral health issues.

In most figures, an error bar is provided for each estimate. This error bar represents the confidence interval, which is the range of values that includes the true value 95% of the time. Estimates from small populations have wider confidence intervals than those based on larger numbers. If the confidence intervals of two groups do not overlap, the difference between groups is considered statistically significant (meaning that chance or random variation is unlikely to explain the difference).

B. Consequences of severe behavioral health issues: hospitalizations and deaths

Data on rates of hospitalizations for behavioral health conditions in acute care hospitals combine hospitalizations for specific mental illnesses, substance-related disorders, alcohol-related disorders, and non-fatal suicide attempts (categorized broadly as "mental illness" according to International Classification of Disease guidelines). The estimates do not account for admissions to state psychiatric hospitals, which provide longer-term care for individuals with chronic mental illnesses, or evaluation and treatment centers, which provide short-term emergency care, or federal hospitals.

Figure 3. Nonfatal hospitalizations for behavioral health conditions, King County, 2000-2012

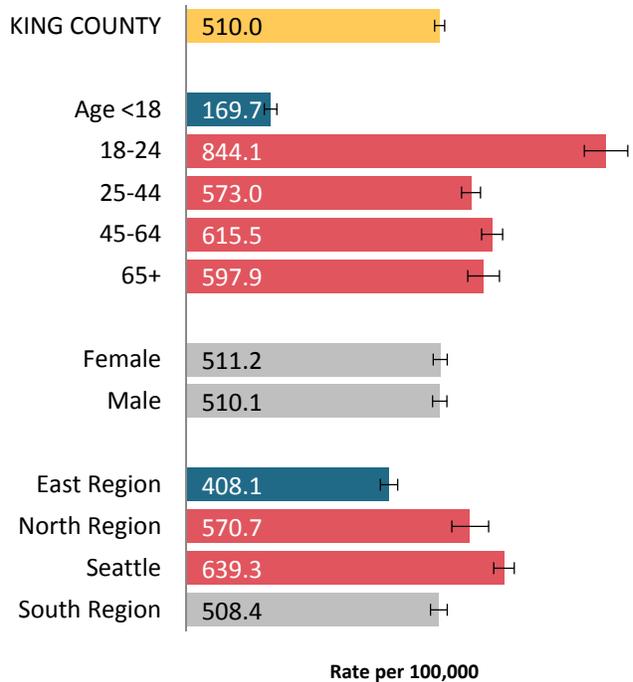


- Between 2000 and 2006, the annual age-adjusted rate of non-fatal hospitalizations for behavioral health conditions decreased. There was no change between 2006 and 2009. Between 2009 and 2012, the rate increased (Figure 3).
- In 2012, there were 10,330 non-fatal hospitalizations among King County residents for behavioral health conditions (age-adjusted rate of 510 per 100,000).

Source: Hospitalization Discharge Data, Washington State Department of Health, Office of Hospital and Patient Data Systems

- Compared to adults of all ages, adults age 18-24 were 1.7 times more likely to have been hospitalized for a behavioral health condition (Figure 4).
- Figure 5 shows age-adjusted rates of death by year for behavioral health-related causes. Deaths from suicide increased since 2008. Although drug- and alcohol-related deaths appear to be increasing, their trends did not change significantly.
- In 2012, King County had 266 drug-related deaths (an age-adjusted rate of 12.5 per 100,000).
- American Indians/Alaska Natives were three times more likely to have died from drug-related causes than King County residents as a whole (Figure 6).
- There were 214 alcohol-related deaths 2012 (age adjusted rate of 9.8 per 100,000) among King County residents in 2012.
- American Indians/Alaska Natives, the group most affected by drug-related deaths, were nearly five times more likely to have died from alcohol-related causes than all King County residents (Figure 7).

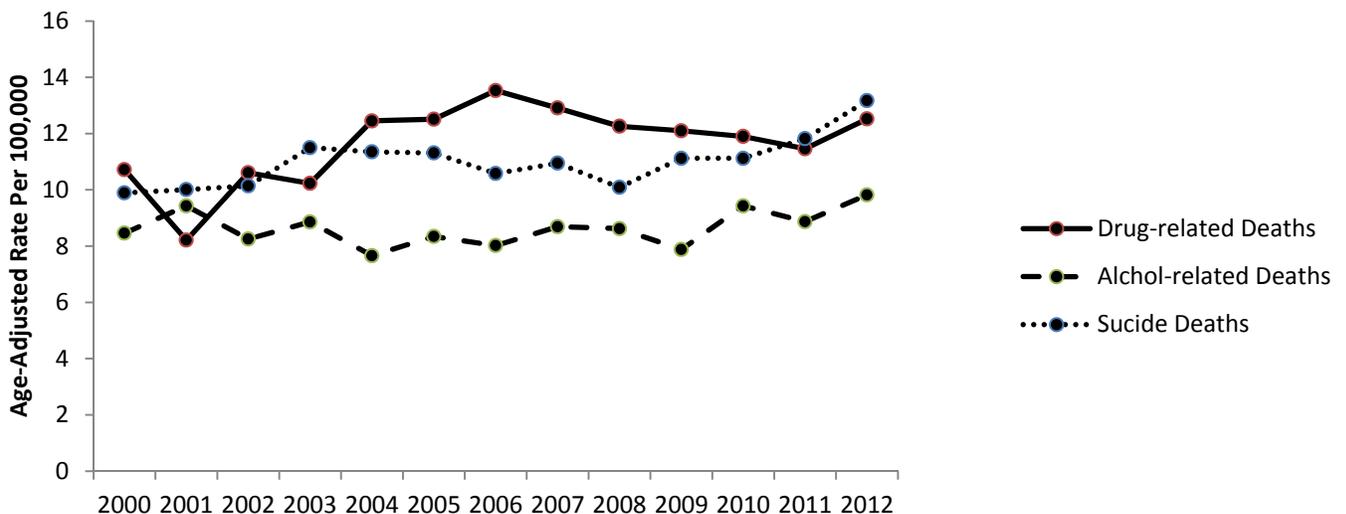
Figure 4. Nonfatal hospitalizations for behavioral health conditions, King County, 2012



Source: Hospitalization Discharge Data, Washington State Department of Health, Office of Hospital and Patient Data Systems

■ Worse than County ■ Same ■ Better than County

Figure 5. Deaths due to behavioral health conditions, King County, 2000 –2012



Source: Washington State Department of Health, Center for Health Statistics, Death Certificates

- In 2012, King County had 269 suicide deaths (age-adjusted rate of 13.2 per 100,000).
- Adults age 45+ and males were 1.5 to 1.6 times more likely to have committed suicide than all King County residents (Figure 8).
- Racial/ethnic disparities are different for suicide than for drug- and alcohol-related deaths. Whites had the highest race/ethnic suicide rate, higher than the county average.

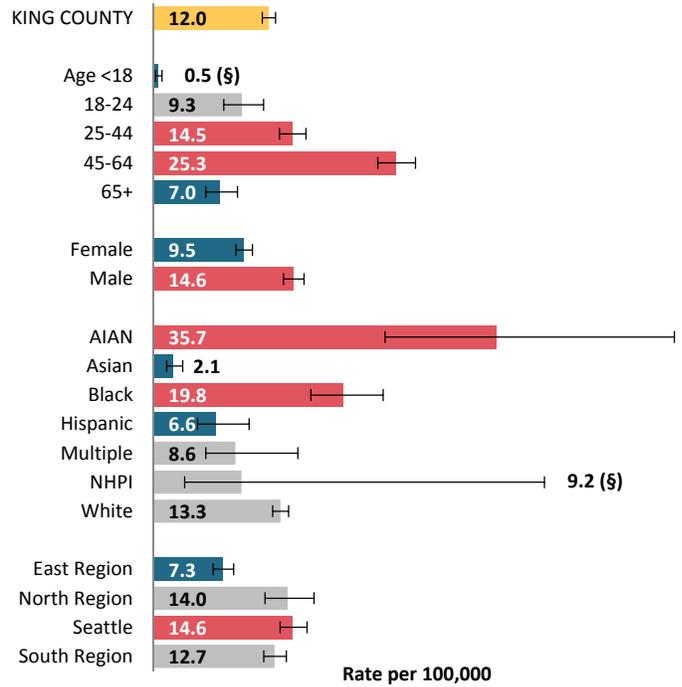
Legend for Charts

- **Worse than County**
- **Same**
- **Better than County**

§ Too few occurrences to meet precision standard. Interpret with caution.

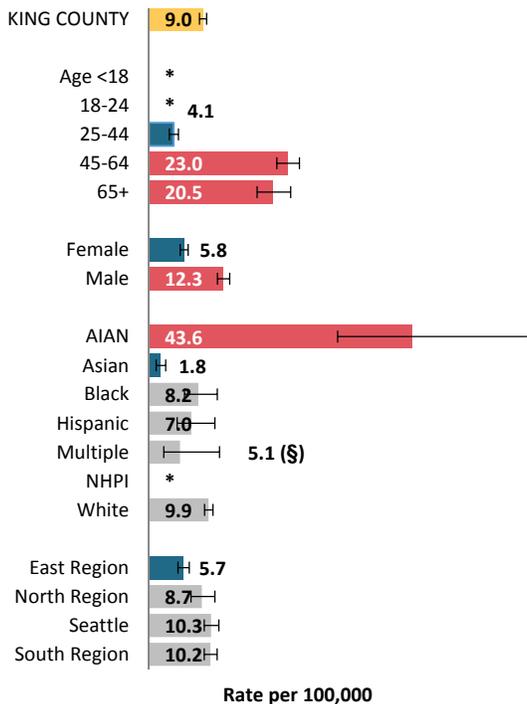
*Too few occurrences to protect confidentiality and/or report reliable rates.

Figure 6. Drug related deaths, King County, 2008-2012 average



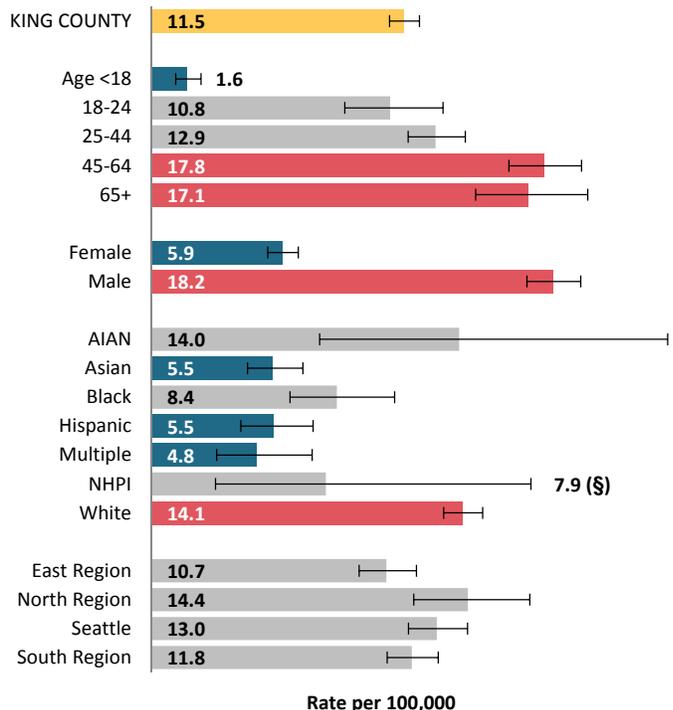
Source: Death Certificate Data, Washington State Department of Health, Center for Health Statistics

Figure 7. Alcohol related deaths, King County, 2008-2012 average



Source: Death Certificate Data, Washington State Department of Health, Center for Health Statistics

Figure 8. Suicide deaths, King County, 2008-2012 average



Source: Death Certificate Data, Washington State Department of Health, Center for Health Statistics

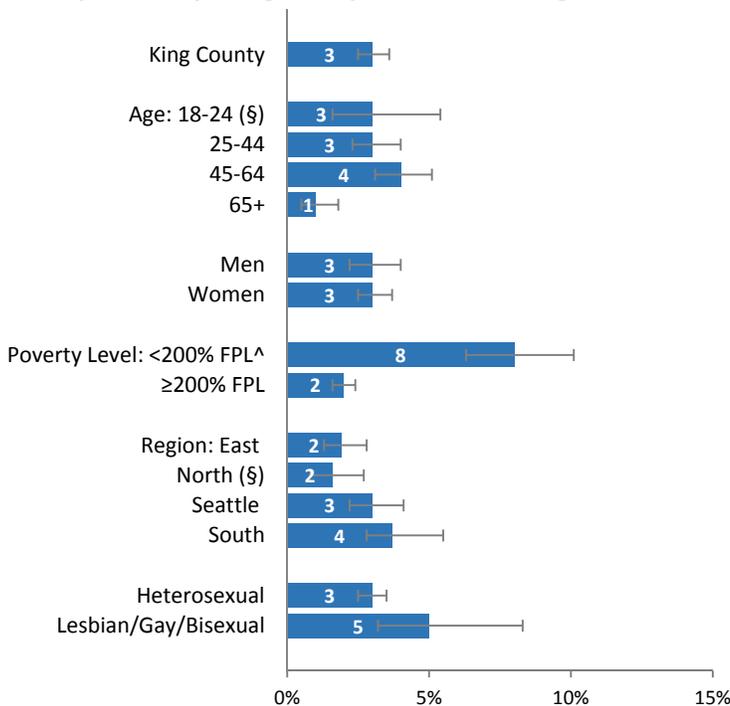
C. Mental health in King County

Mental health refers to “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.”¹² In contrast, impaired mental health or mental illness can be defined as a diagnosable mental disorder or a “health condition characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning.”¹³ Absence of mental illness does not imply presence of mental health as these are related but independent dimensions.

“Frequent mental distress” is a proxy measure for population-level poor mental health and is defined as self-reported stress, depression, or emotional problems on 14 or more days during the past 30 days. Frequent mental distress is often used by physicians and researchers as a marker of possible clinical depression or anxiety disorders, though it is not in and of itself a diagnostic indicator.^{14,15} While survey methodology has limitations as noted earlier, this measure finds that about 10 percent of adults in King County experience frequent mental distress (see also www.kingcounty.gov/health/indicators).

The mental health indicators presented here use a 30-day timeframe. This snapshot may be an underestimate given that rates of mental health indicators increase when the measurement timeframe is lengthened or when using other data collection methods (e.g. insurance claims data or medical records are higher than self-report). When using a 12-month timeframe, rates of mental illnesses among adults reported nationally are estimated to be between 19 and 25 percent^{16,17} and estimates are as high as 49 percent for adult Medicaid recipients.¹⁸

Figure 9. Percent of adults with serious psychological distress in past 30 days, King County, 2009-2013 average



Adults: serious psychological distress

Serious psychological distress identifies people with mental health concerns that are severe enough to limit social, occupational, or school functioning and to require treatment. It is based on a 6-item symptom scale (Kessler 6 or “K6”) that asks survey respondents about the frequency in the past 30 days of six symptoms of mental illness or psychological distress: nervousness; hopelessness; worthlessness; restlessness; depression; or that everything is an effort. Items are rated on 5-point scales. A score of 13 or more out of a possible 24 signifies “serious psychological distress.” The K6 is often used as a proxy for more specific diagnoses of serious mental illness in community populations^{19,20} and to assess potentially unmet mental health needs of the U.S. civilian, non-institutionalized adult population.

§ Not enough respondents to meet precision standard. Interpret with caution.

^ Poverty level based on self-reported income category and household size

Source: Behavioral Risk Factor Surveillance System

Sample sizes: n=10,788 for King County, age, and gender; n=9,443 for poverty level;

n=10,582 for region; n=10,510 for sexual orientation

- One in every five King County adults (21%) report receiving a diagnosis of depression at some time during their lives.
- The percent of serious psychological distress among King County adults (Figure 9), reported for the previous 30-day period (3%), is similar to the national estimate (4%).²¹
- Of those reporting serious psychological distress, 69 percent report five or more days of functional impairment (being unable to carry out usual activities).
- Those with incomes under 200% of the federal poverty level (FPL)²² experience four times more serious psychological distress than those with higher income.
- There is wide variation in rates of serious psychological distress by race/ethnicity but the estimates are not statistically significant, meaning that chance or random variation cannot be ruled out as an explanation for the difference (see data appendix, page 20).

Youth: depressive feelings and suicidal thoughts and attempts

Psychological distress for youth in grades 8, 10, and 12 is measured through self-reported depressive feelings and suicidality during the prior 12 months. To assess depressive feelings students are asked: "During the past 12 months, did you ever feel so sad or hopeless almost every day for 2 weeks or more in a row that you stopped doing some usual activities?" Questions measuring suicidal thoughts and attempts are: "During the past 12 months, did you ever seriously consider attempting suicide?" and "During the past 12 months, how many times did you actually attempt suicide?" respectively. Figures 10 and 11 show the percent of King County youth reporting depressive feelings and suicide thoughts and attempts in the past year.

- The rates of youth reporting depressive feeling in the past 12 months (27%), suicidal thoughts (16%), and suicide attempts (7%) are similar to Washington State and national averages (see data appendix, page 21).
- Girls are significantly more likely than boys to report depression, suicidal thoughts, and suicide attempts.
- Tenth and 12th graders report significantly more depressive feelings than do 8th grade students.
- Youth from low socioeconomic status (SES) families²³ report significantly higher levels of depression, suicide ideation, and suicide attempts.
- Native Hawaiian/Pacific Islander (NHPI), American Indian/Alaska Native (AIAN), and Hispanic youth show significantly higher levels of depression compared to Black, Asian, and white youth. The NHPI and AIAN youth also show more suicidal thoughts and attempts compared to other youth.
- Youth in the South King County region report significantly more depressive feelings, suicidal thoughts, and suicide attempts than other regions (see data appendix, page 22).

Figure 10. Youth with depressive feelings in past year, King County, 2012

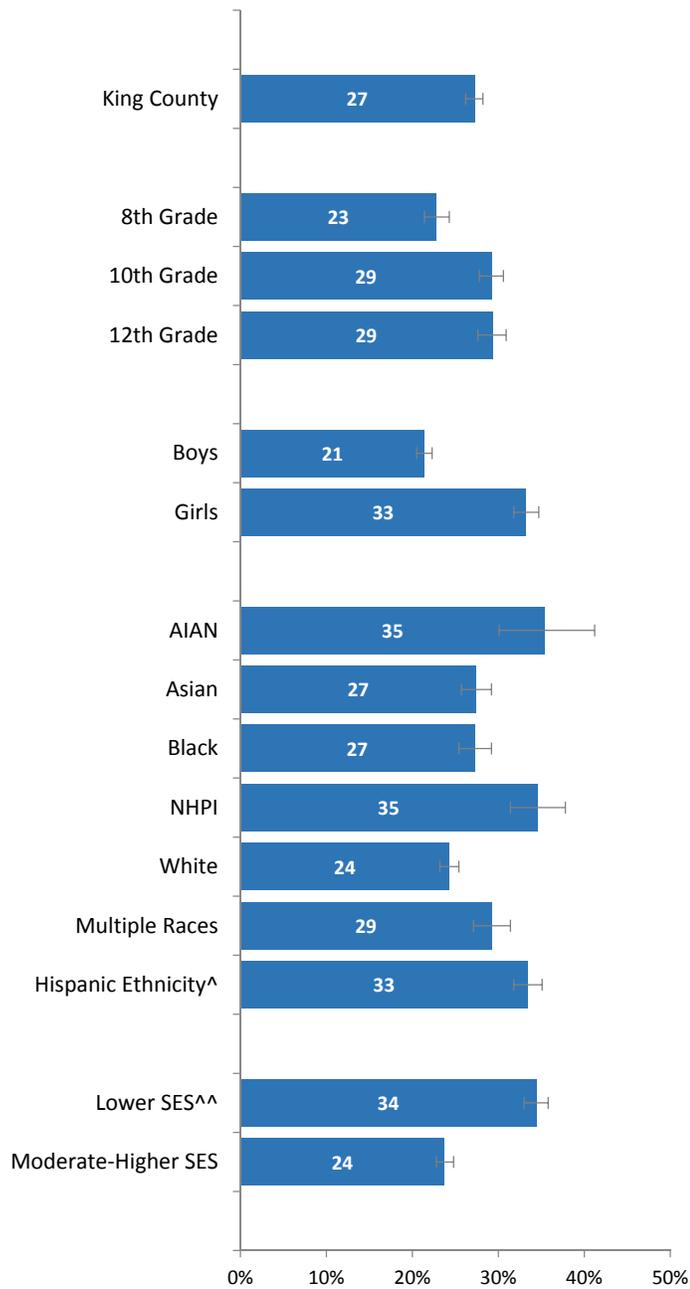
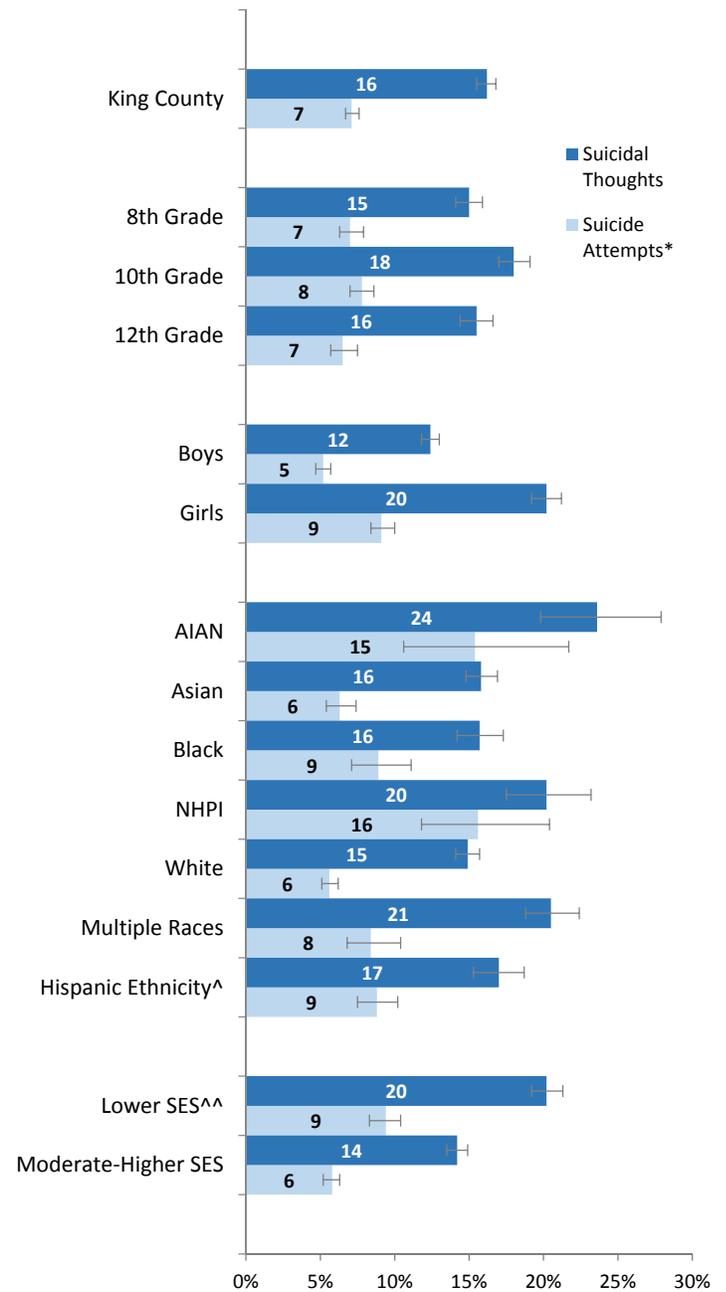


Figure 11. Youth reporting suicidality (thoughts and attempts) in past year, King County, 2012



^Persons of Hispanic ethnicity can be of any race and may be included in a racial category in addition to the Hispanic category.
 ^^Low socioeconomic status (SES) indicates maternal education is high school diploma/GED or less. Higher-moderate SES indicates maternal education includes post-high school education.²³

Source: WA State Healthy Youth Survey
 Grades: 8th, 10th, 12th
 Sample sizes: n= 35,542 for King County, grade and gender; n=35,300 for race/ethnicity; n=28,719 for SES

*Indicates one or more suicide attempt in the past year

^Persons of Hispanic ethnicity can be of any race and may be included in a racial category in addition to the Hispanic category.

^^Low socioeconomic status (SES) indicates maternal education is high school diploma/GED or less. Higher-moderate SES indicates maternal education includes post-high school education.²³

Source: WA State Healthy Youth Survey
 Grades: 8th, 10th, 12th
 Sample sizes for suicide ideation: n=35,342 for King County, grade, gender; n=35,240 for race/ethnicity; n=28,661 for SES
 Sample sizes for suicide attempts: n=17,929 for King County, grade and gender; n=17,856 for race/ethnicity; n=14,271 for SES

D. Substance use in King County

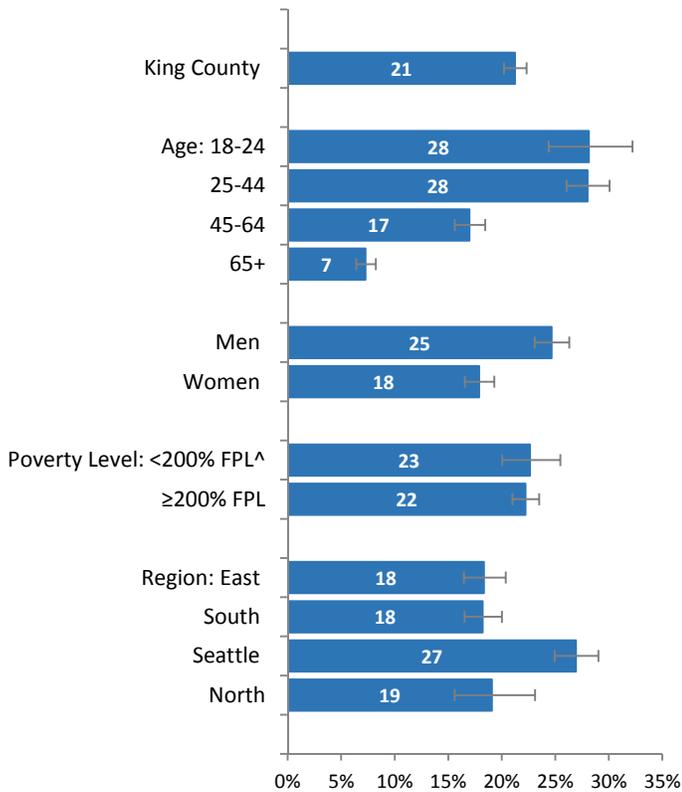
This section focuses on “excessive” drinking or drug use. In this report, ‘drinking’ refers to alcohol use. Excessive drinking is defined as either binge drinking or heavy drinking or both. For adults, binge drinking is defined as consuming four or more drinks (women) or five or more drinks (men) on a single occasion in the past month. Heavy drinking among adults is defined as consuming more than 30 drinks in the past month (women) or more than 60 drinks in the past month (men). Among youth, binge drinking is defined as consuming five or more drinks on a single occasion in the past two weeks and heavy drinking involves drinking on three or more days in the past month.

“Excessive” drug use is defined as using drugs on at least four days in the past month for adults and at least three days in the past month for school-age youth.

Adults

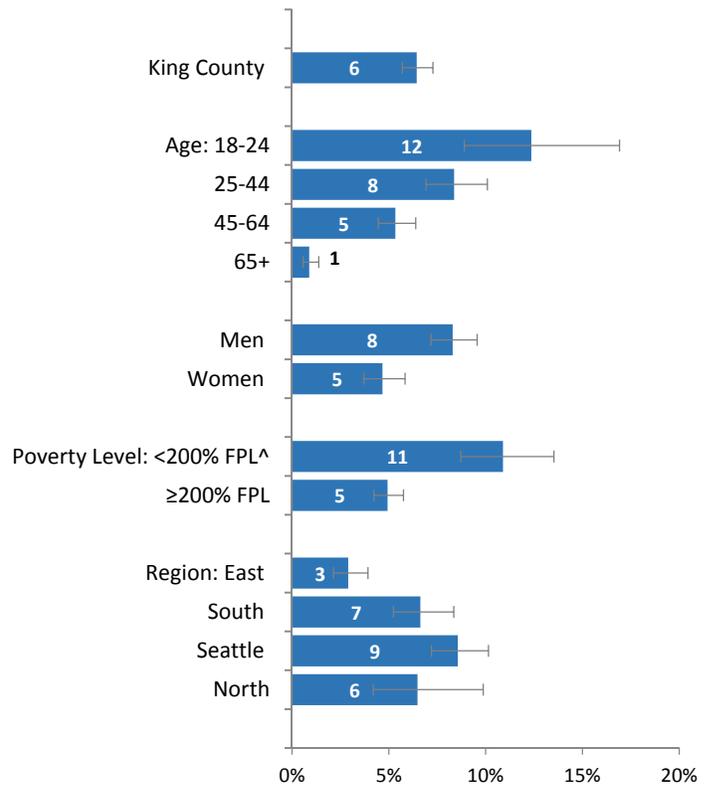
- Younger adults and men report significantly more excessive drinking than older adults and women, respectively (Figure 12).
- Adults in Seattle report significantly more excessive drinking than adults in other regions of the county.
- There is wide variation in the prevalence of excessive drinking by race/ethnicity. However, the differences between groups are not statistically significant, meaning that chance or random variation cannot be ruled out as an explanation for the difference (see data appendix, page 23).
- Six percent of adults report using marijuana excessively in the past 30 days (Figure 13).
- Younger adults and men report significantly more excessive marijuana use than older adults and women, respectively.
- People with incomes less than 200% FPL are more likely to report excessive marijuana use than those with higher income.
- Adults in the East King County region report significantly less excessive marijuana use than adults in the other three regions.

Figure 12. Adult excessive alcohol use, King County, 2009-2013 average



^ Poverty level based on self-reported income category and household size
 Sample sizes: n=16,011 for King County, age, and gender; n=14,070 for poverty level; n=15,692 for region
 Source: Behavioral Risk Factor Surveillance System

Figure 13. Adult excessive marijuana use, King County, 2009-2013 average

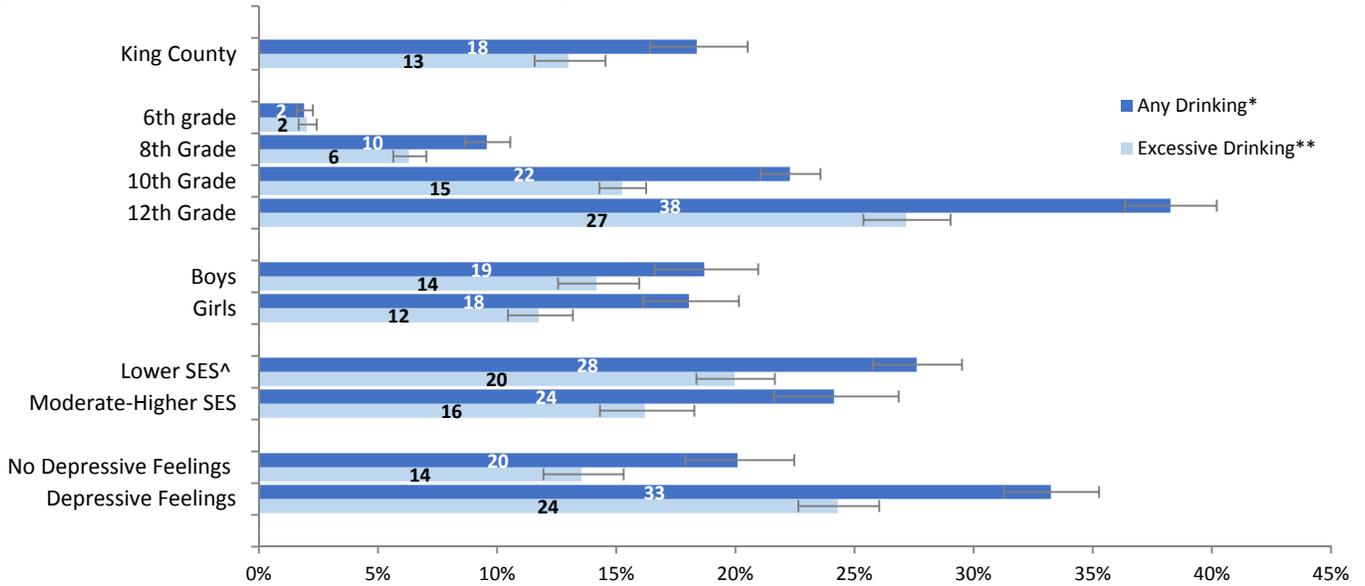


^ Poverty level based on self-reported income category and household size
 Sample sizes: n=11,068 for King County, age and gender; n= 9,829 for poverty level; n= 10,939 for region
 Source: Behavioral Risk Factor Surveillance System

Youth

- Eighteen percent of youth report any alcohol drinking and 13% drank alcohol excessively in the past 30 days (Figure 14).
- Fourteen percent of youth report some marijuana use and 9% used it excessively in the past 30 days (Figure 15).
- For both alcohol and marijuana, the percent of youth reporting use increases with grade level. There are no significant gender differences in reported youth alcohol use; however, boys are more likely than girls to use marijuana.
- Youth who are from lower SES families are significantly more likely to report using alcohol and drugs.
- Youth who report depression in the past year are significantly more likely to also have used alcohol or marijuana.
- Asian youth report significantly less drinking (11% any drinking and 8% excessive drinking) and any marijuana use (7%) than other racial/ethnic groups (see data appendix, page 24-25).

Figure 14. Youth alcohol use (any and excessive), King County, 2012



*Used alcohol on at least 1 day of the past 30; Sample size for any drinking: n=50,260 for King County, grade, and gender; n=28,692 for SES

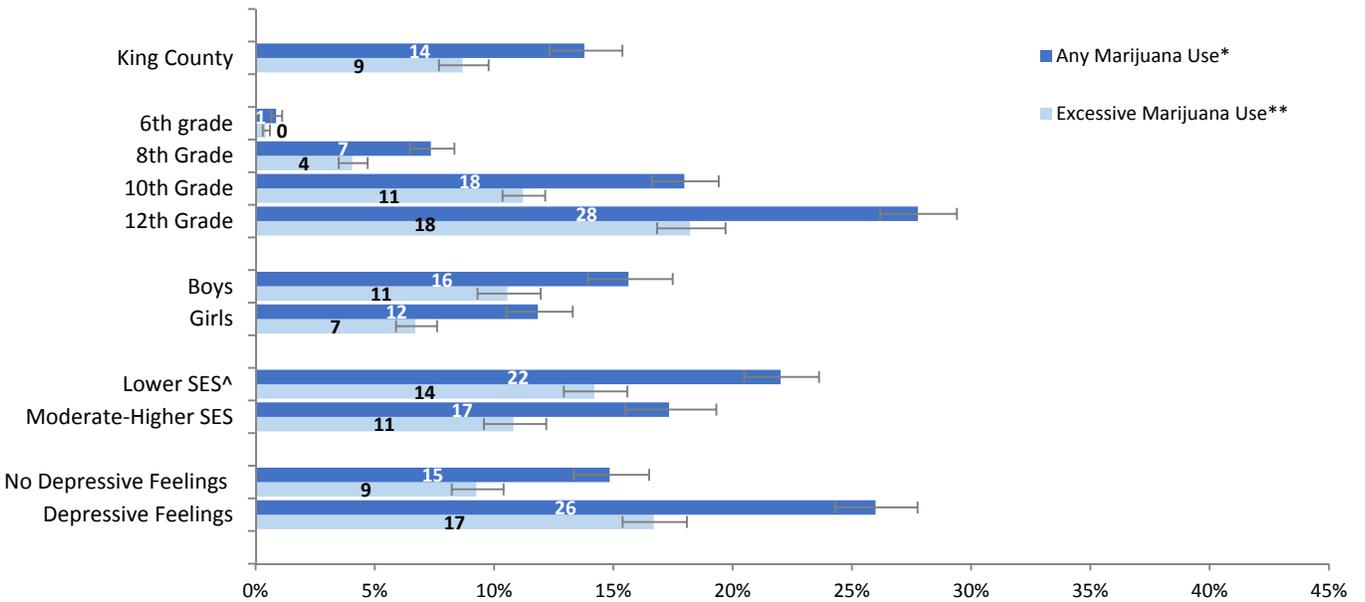
**Includes both binge drinking and/or heavy drinking; Sample sizes for excessive drinking: n=49,540 for King County, grade, and gender; n=28,430 for SES

^Low socioeconomic status (SES) indicates maternal education is high school diploma/GED or less. Higher-moderate SES indicates maternal education includes post-high school education.²³

Source: WA State Healthy Youth Survey

Grades: 6th, 8th, 10th, 12th for King County, grade, and gender. Grades 8th, 10th, and 12th for SES and depressive feelings.

Figure 15. Youth marijuana use (any and excessive), King County, 2012



*Used marijuana on at least 1 day of the past 30; **Used marijuana on 3 or more days of the past 30

^Low socioeconomic status (SES) indicates maternal education is high school diploma/GED or less. Higher-moderate SES indicates maternal education includes post-high school education.²³

Sample sizes, any and excessive marijuana use: n=50,159 for King County, grade, and gender; n=28,657 for SES

Source: WA State Healthy Youth Survey

Grades: 6th, 8th, 10th, 12th for King County, grade, and gender. Grades 8th, 10th, and 12th for SES and depressive feelings.

Part II: Selected Risk and Protective Factors for Behavioral Health Conditions

Behavioral health is influenced by a wide variety of biological, social, cultural, and environmental factors. These include social/emotional support and adverse childhood experiences (ACE) and other highly negative experiences such as being bullied. These factors have been shown to contribute to both adolescent and adult behavioral health issues.

Adults

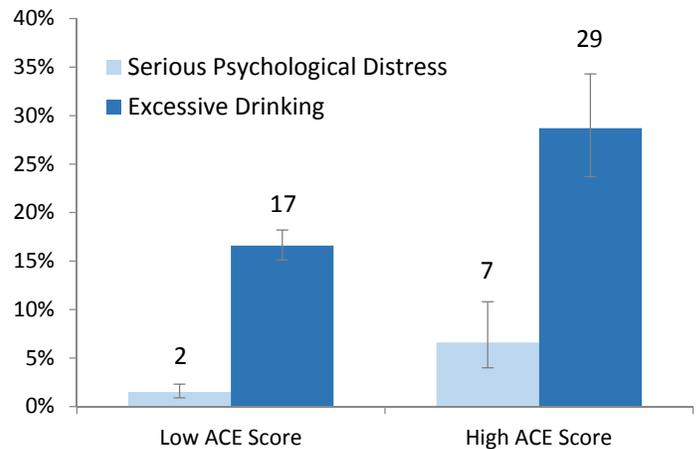
Adults reporting three or more of the following experiences before they were 18 years of age are categorized as having a high ACE score:

- Childhood physical, sexual or emotional abuse
- Growing up in a household where there was:
 - substance abuse,
 - mental illness,
 - domestic violence,
 - a parental separation/divorce, or
 - a member of the household incarcerated.

Adequate social and emotional support is associated with reduced risk of mental and physical illness²⁴ through improved ability to cope with stressful events.²⁵ Level of social/emotional support is measured by responses to the question: “How often do you get the social and emotional support you need?”

- Adults who report a higher ACE score are more likely to have serious psychological distress and drink alcohol excessively (Figure 16).
- Low social and emotional support is associated with serious psychological distress but not with excessive drinking (Figure 17).

Figure 16. Adult behavioral outcomes by adverse childhood experiences, King County, 2009-2011

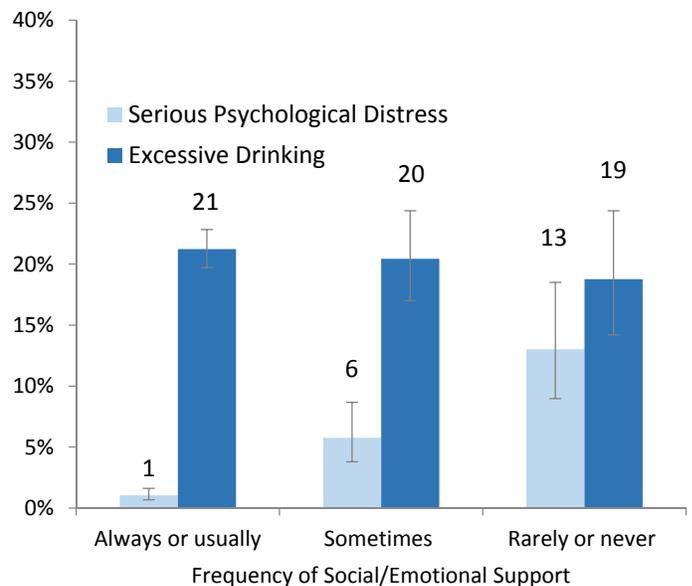


High ACE Score is 3 or more experiences of childhood abuse or family dysfunction.

Source: Behavioral Risk Factor Surveillance System

Sample sizes: n = 4,236 for serious psychological distress; n = 6,898 for excessive drinking

Figure 17. Adult behavioral outcomes by frequency of social and emotional support, King County, 2009-2012*



*Not asked in 2011

Source: Behavioral Risk Factor Surveillance System

Sample sizes: n = 5,556 for serious psychological distress; n = 9,847 for excessive drinking

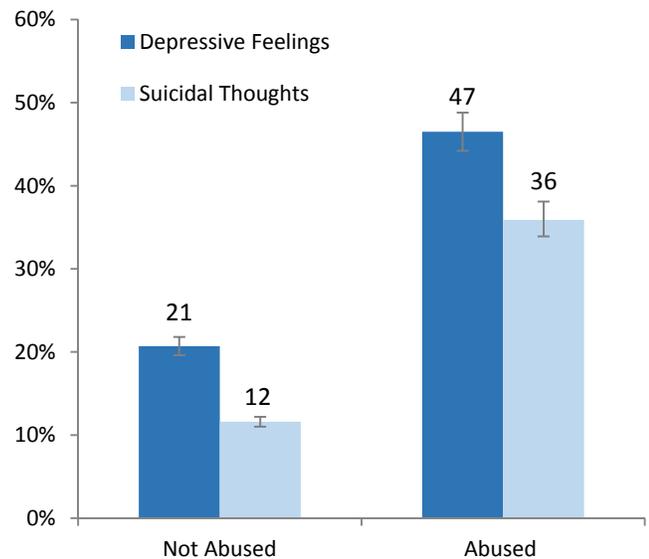
Youth

For youth, bullying is defined as “when another student, or group of students, say or do nasty or unpleasant things to him or her” in the past 30 days. It is also bullying when a student is teased repeatedly in a way he or she doesn’t like. Excluded from the definition of bullying are instances when students of about the same strength argue or fight.

Physical abuse by an adult is based on self-reported affirmative responses to the question: “Have you ever been physically abused by an adult?”

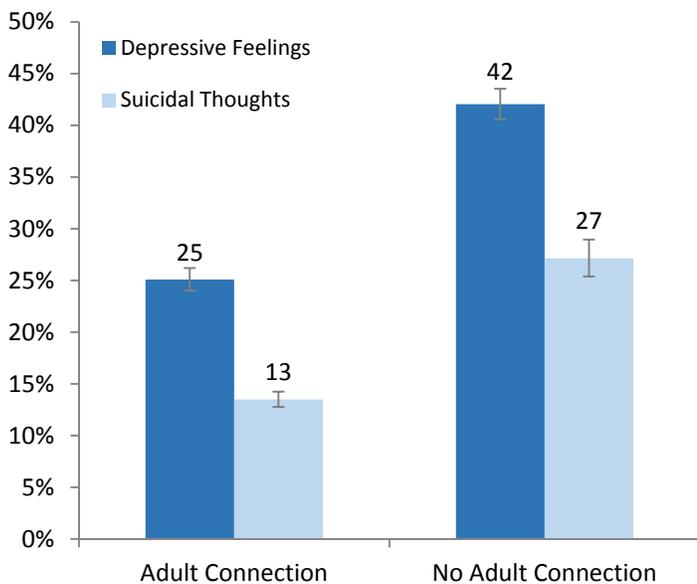
- For youth, physical abuse by an adult is associated with depression and suicidality (Figure 18).
- Youth who have an adult to talk to about something important report less depression and suicidality (Figure 19).
- Frequency of being bullied is associated with depression and suicidality (Figure 20).
- Almost half of the youth who report being bullied several times a week reported suicidal thoughts, compared to 12% those who were not bullied.

Figure 18. Youth depression and suicidal thoughts by adult physical abuse, King County, 2012



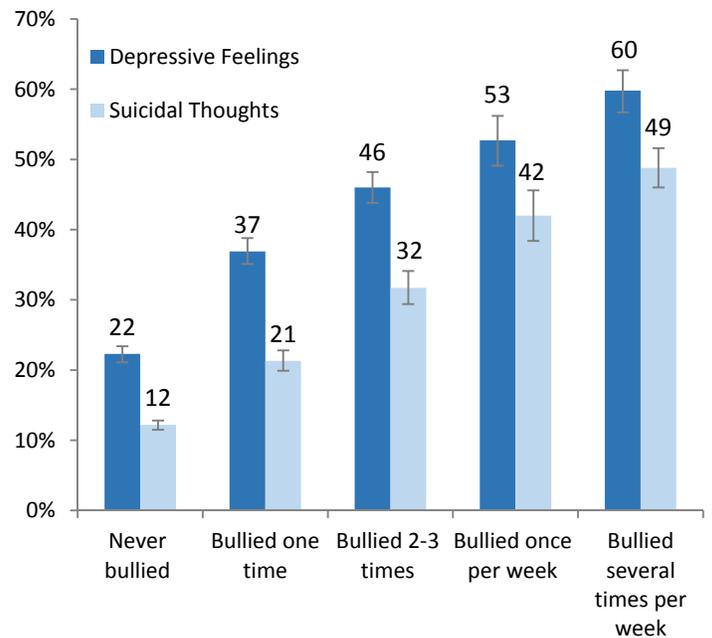
Source: WA State Healthy Youth Survey
 Grades: 8th, 10th, 12th
 Sample Size: n=15,473 for depressive feelings; n=15,465 for suicidal thoughts

Figure 19. Youth depression and suicidal thought by adult connection*, King County, 2012



*Children were asked if there were adults in their neighborhood or community they could talk to about something important
 Source: WA State Healthy Youth Survey
 Grades: 8th, 10th, 12th
 Sample Sizes: n=17,387 for depressive feelings; n=17,309 for suicidal thoughts

Figure 20. Youth depression and suicide by bullying experience, King County, 2012



Source: WA State Healthy Youth Survey
 Grades: 6th, 8th, 10th, 12th
 Sample size: n=35,348 for depressive feelings; n=35,240 for suicidal thoughts

Conclusion

Behavioral health conditions range in symptom and severity from less severe, but very common symptoms (e.g., mental distress; any drinking) to rare but, serious events (e.g., hospitalizations, severe mental illnesses such as schizophrenia). This report noted disparities in moderate to severe symptoms of mental health and frequent substance use by age, gender, income and geography among adults and youth in King County. Assuring equitable access to the broad array of services and treatment provided to promote prevention, intervention, and recovery remains a priority for our County. Through a better understanding of the distribution of behavioral health indicators in King County, government agencies and community partners will be better able to serve those in greatest need and to promote recovery and well-being for all.

For questions about behavioral health services and eligibility, please contact Mental Health, Chemical Abuse and Dependency Services Division in King County's Department of Community and Human Services at: 206-263-9000.

For questions about King County data presented in this report, please contact data.request@kingcounty.gov.

Acknowledgments

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For more information about behavioral health indicators see King County Community Health Indicators

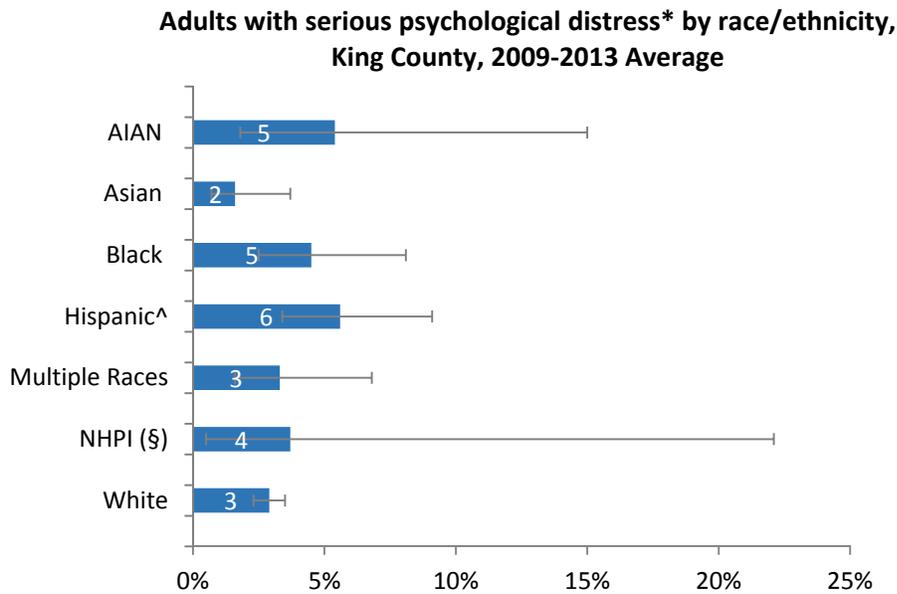
www.kingcounty.gov/health/indicators

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Data Appendix

A. Adult serious psychological distress by race/ethnicity



*Measured by Kessler-6 scale: Subjects asked how often they felt nervous, hopeless, restless or fidgety, depressed, that everything was an effort, and/or worthless during the past 30 days. A score of 13 or more out of a possible 24 signifies "serious psychological distress."

§ Not enough respondents to meet precision standard. Interpret with caution.

^ Persons of Hispanic ethnicity can be of any race and may be included in any of the racial categories in addition to the Hispanic category.

Source: Behavioral Risk Factor Surveillance System

Sample size: 10,788

- There is variability in the prevalence of serious psychological distress by racial/ethnic group. Hispanic adults have the highest rate (6%) while Asians have the lowest rate (2%). However, differences between the racial/ethnic groups are not statistically significant, meaning that chance or random variation cannot be ruled out as an explanation for the difference.

B. Youth depressive feelings, suicidal thoughts and suicide attempts by comparison area

School-age youth depressive feelings and suicidality (thoughts and attempts) by comparison area							
	Data Year	Depressive Feelings*		Suicidal Thoughts		Suicide Attempts**	
		Percent	CI	Percent	CI	Percent	CI
King County, WA	2012	27	26-28	16	16-17	7	7-8
Washington State	2012	29	28-30	17	17-18	7	7-8
United States	2013	30	28-32	17	16-18	8	7-9

Notes:

CI = 95% Confidence Interval; may be same value as point estimate due to rounding

*Felt sad or hopeless almost every day for 2 or more weeks in a row so that they stopped doing some usual activities.

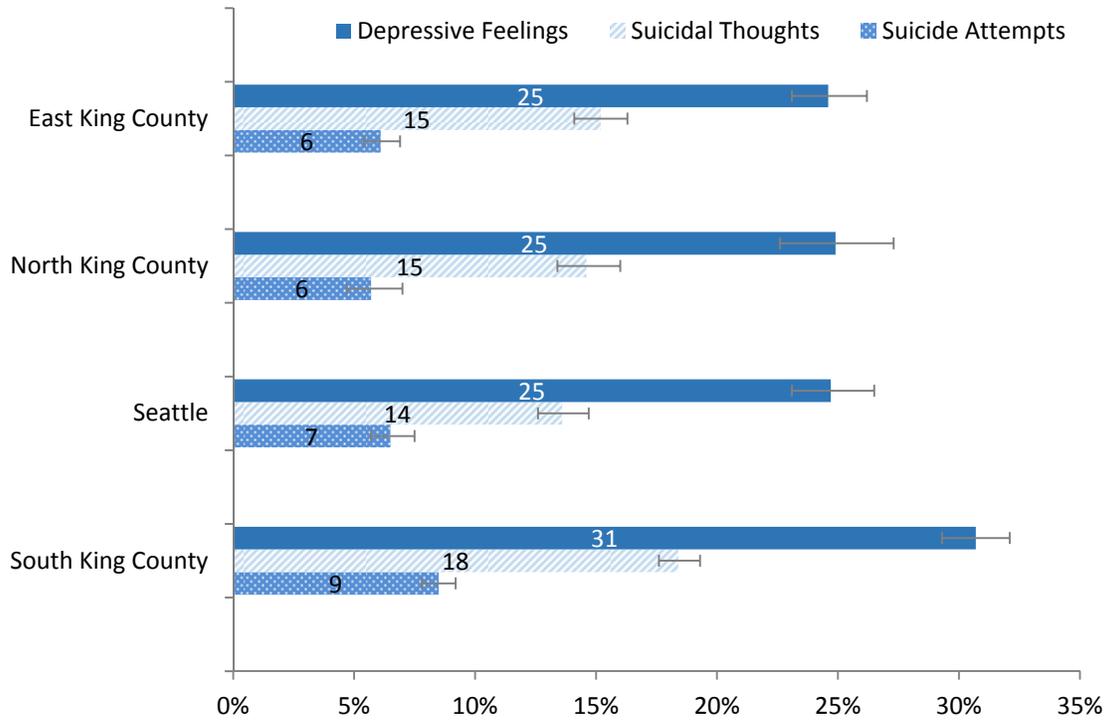
**One or more times in the past year.

Data Source: Washington State Healthy Youth Survey (grades 8, 10, 12) for county- and state-level data; national data is from the Youth Risk Behavior Surveillance System (grades 9-12; see <http://www.cdc.gov/mmwr/pdf/ss/ss6304.pdf>)

- School-aged youth in King County report similar rates of depressive feelings, suicidal thoughts and suicide attempts as youth statewide and nationally.

C. Youth depressive feelings, suicidal thoughts, and suicide attempts by region

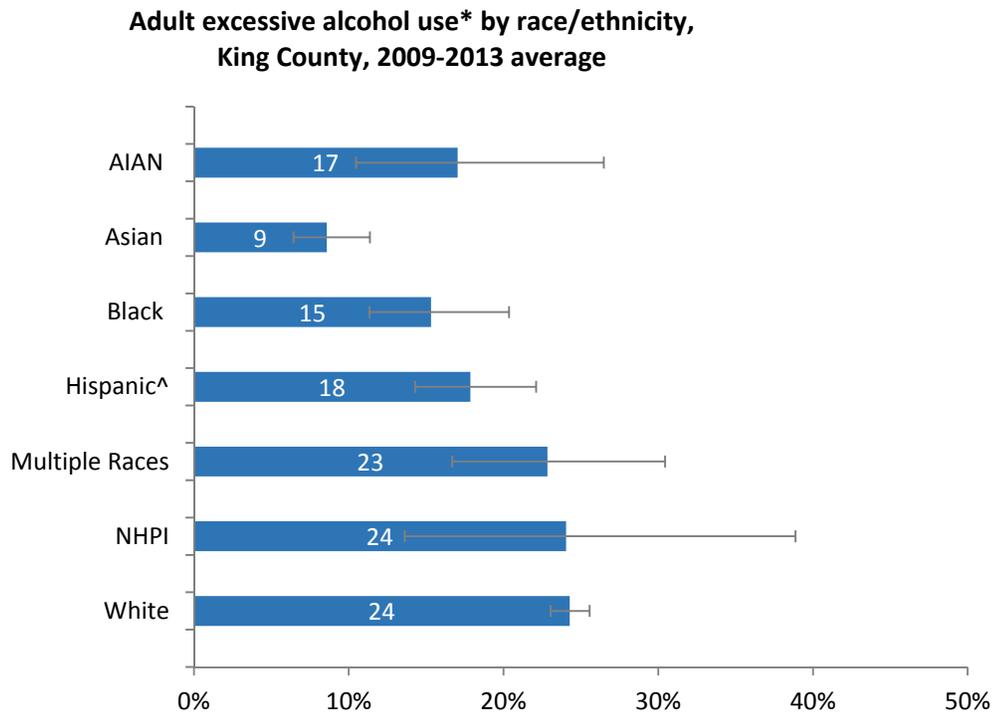
Youth depressive feelings and suicidality (thoughts and attempts*) by region, King County, 2012



*Indicates one or more suicide attempt in the past year
Source: WA State Healthy Youth Survey
Grades: 8th, 10th, 12th
Sample size: n=35,300

- Youth in South King County are significantly more likely to report depressive feelings, have suicidal thoughts, and make a suicide attempt compared to youth from the other three regions of King County.

D. Adult excessive alcohol use by race/ethnicity



Note: AIAN = American Indian/Alaskan Native; NHPI = Native Hawaiian/Alaskan Native

*Includes both binge drinking (consuming which 4 or more drinks (women) or 5 or more drinks (men) on one single occasion in the past month and heavy drinking (consuming more than 30 drinks in the past month (women) or more than 60 drinks in the past month (men).

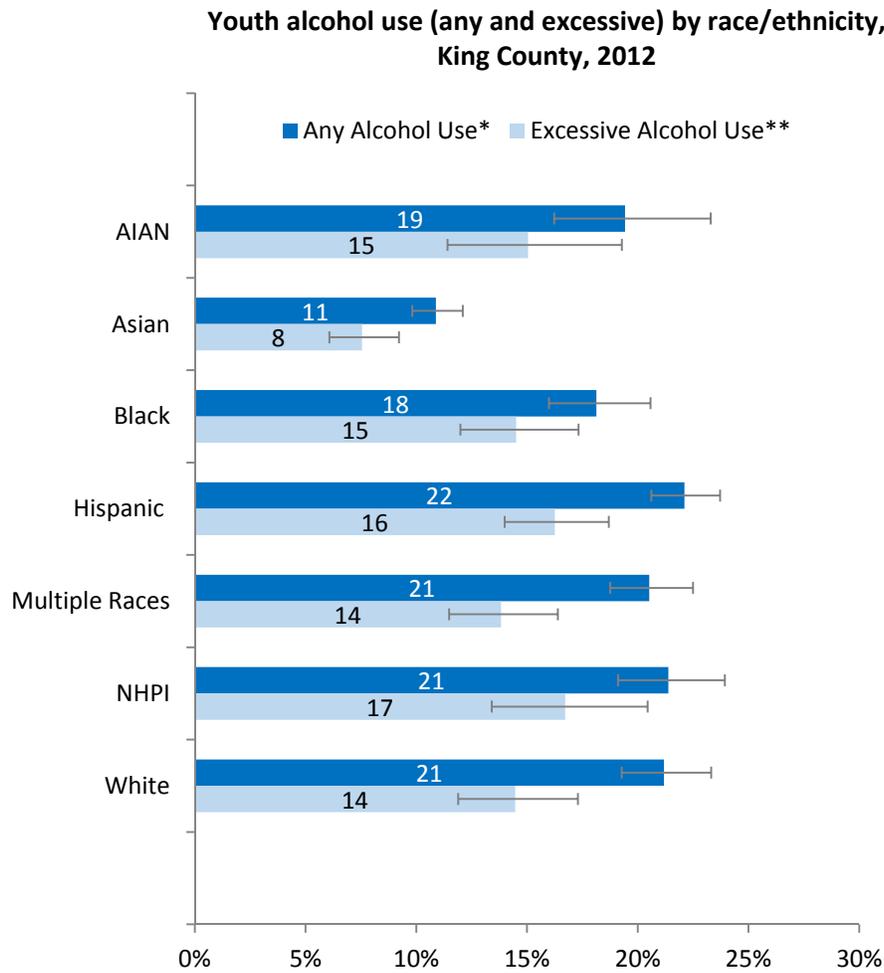
^ Persons of Hispanic ethnicity can be of any race and may be included in any of the racial categories in addition to the Hispanic category.

Source: Behavioral Risk Factor Surveillance System

Sample sizes: n=14,017

- Native Hawaiian/Pacific Islanders, whites, and adults identifying with multiple races report the highest prevalence of excessive alcohol use, while Asians report the lowest. These differences between race/ethnic groups are not statistically significant, meaning that chance or random variation cannot be ruled out as an explanation for the difference.

E. Youth any and excessive alcohol use by race/ethnicity



*Used alcohol on at least 1 day of the past 30

**Includes both binge drinking (consuming 5 or more drinks on a single occasion in the past two weeks) or heavy drinking (drinking on 3 or more days in the past month).

Source: WA State Healthy Youth Survey

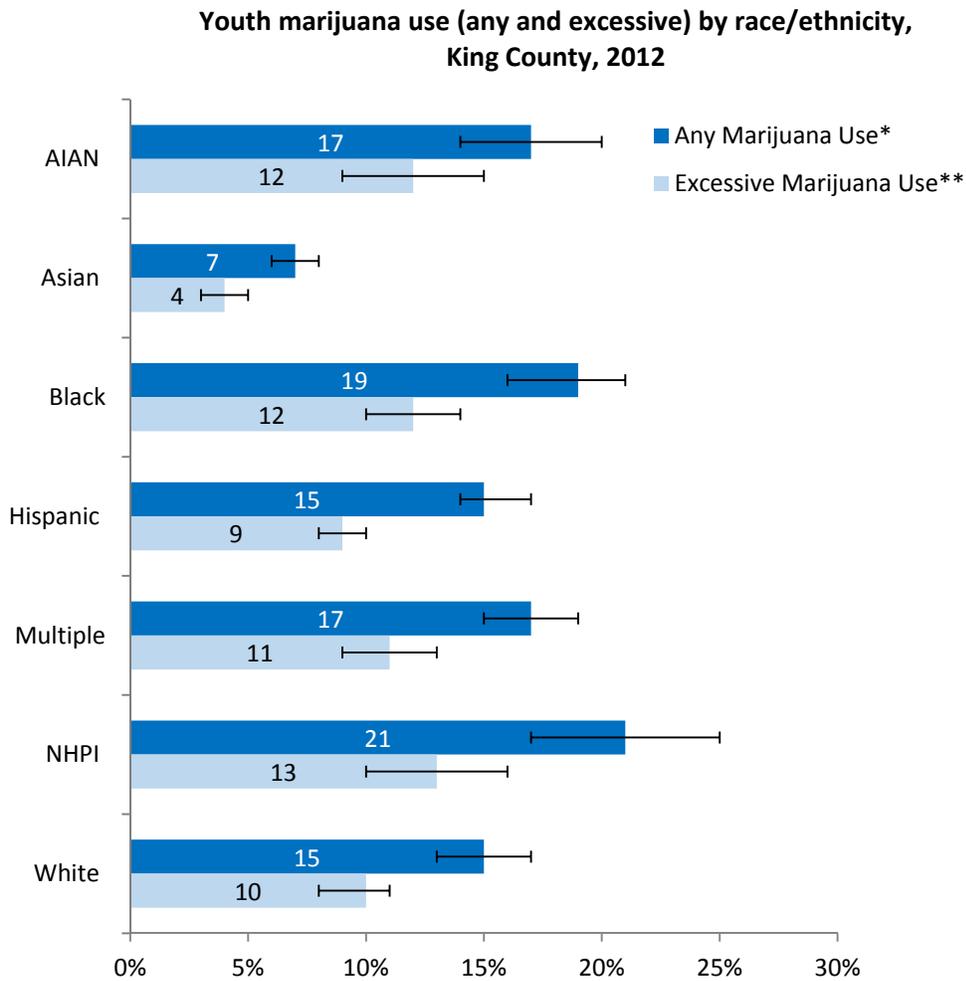
Grades: 6th, 8th, 10th, 12th

Sample size for any drinking: n=50,260

Sample sizes for excessive drinking: n=49,540

- Compared to other racial/ethnic groups, Asian youth report significantly less alcohol use: any drinking (11%) and excessive drinking (8%).

F. Youth any and excessive marijuana use by race/ethnicity

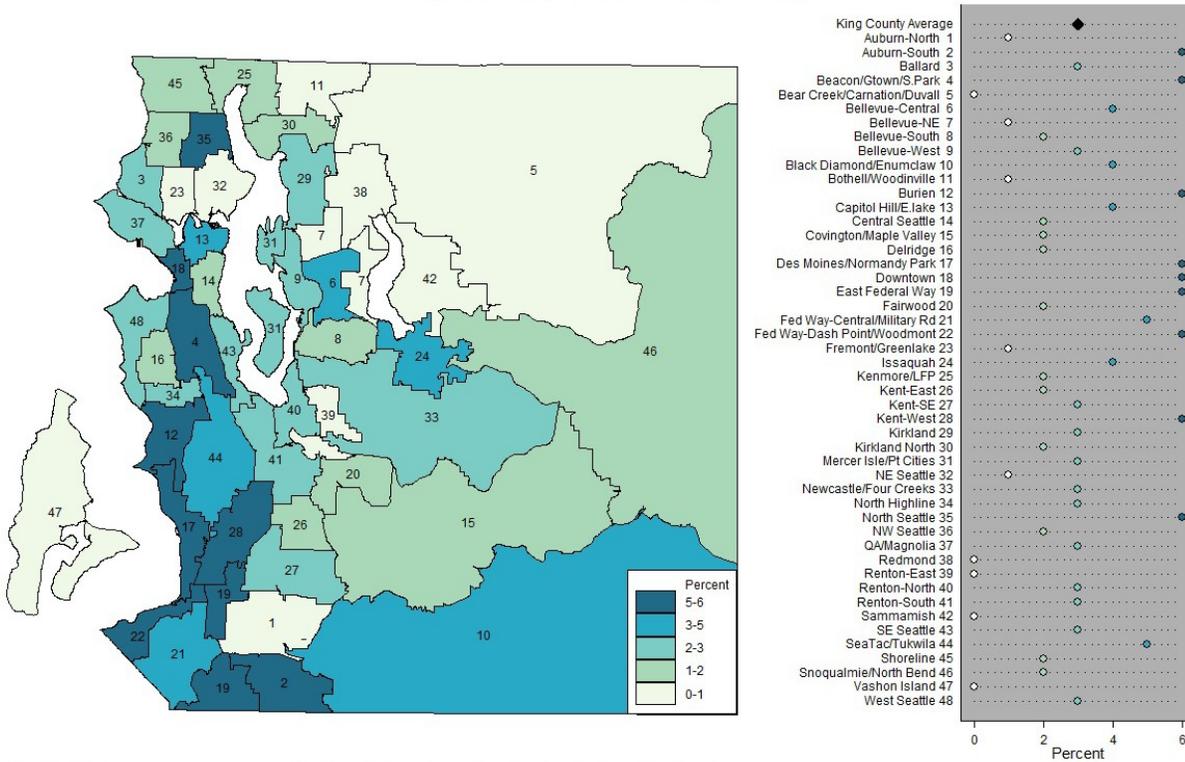


*Used marijuana on at least 1 day of the past 30
 **Used marijuana on 3 or more days of the past 30
 Source: WA State Healthy Youth Survey
 Grades: 6th, 8th, 10th, 12th
 Sample size for any and excessive marijuana use: n=49,605

- Asian youth reported significantly less marijuana use (any and excessive) than other racial/ethnic groups.

G. Geographical distribution of adult serious psychological distress and excessive alcohol use

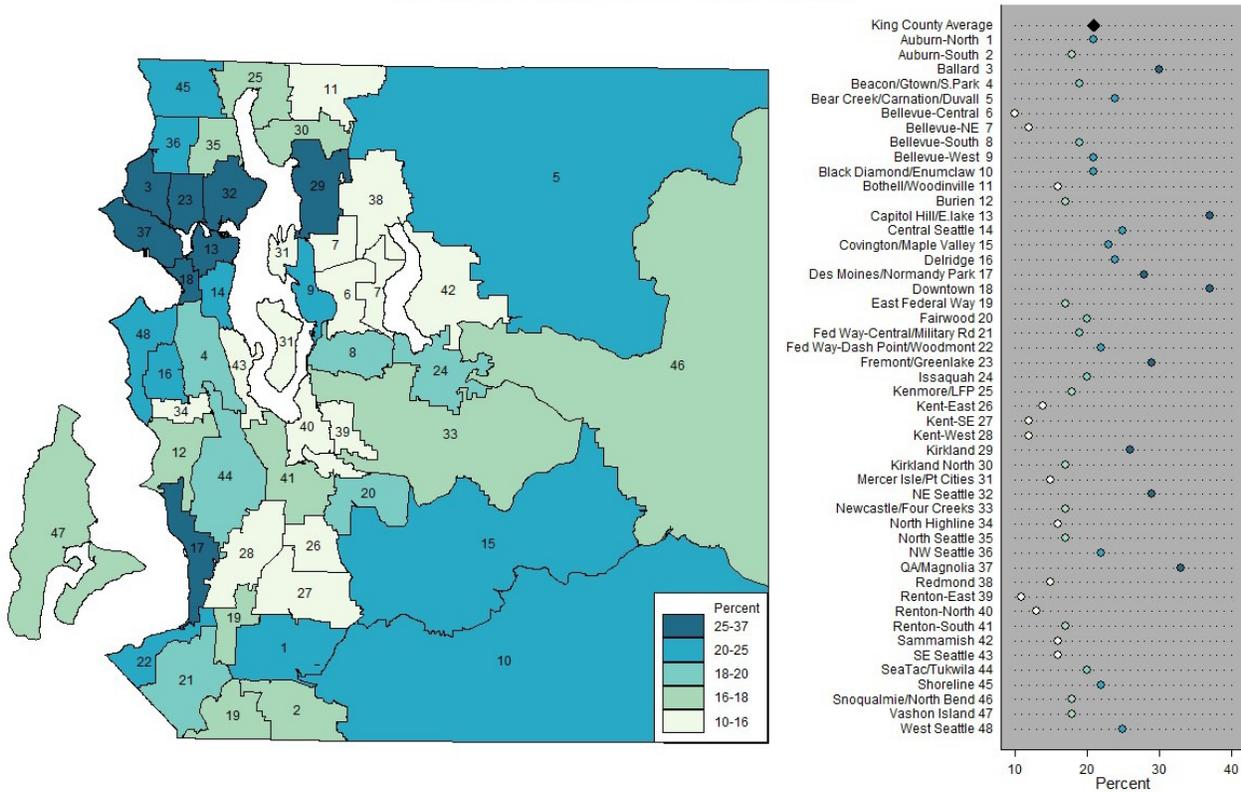
**Serious psychological distress (adults) by health reporting areas
King County, 2009-2013 average**



Note: HRA labels on the map match the chart on the right, listed in alphabetical order
 Source: Behavioral Risk Factor Surveillance System.
 Prepared by Public Health - Seattle & King County, APDE, 12/2014.

- Adults living in south King County communities report more serious psychological distress than King County residents as a whole (3%)

Excessive drinking (adults) by health reporting areas King County, 2009-2013 average



Note: HRA labels on the map match the chart on the right, listed in alphabetical order
 Source: Behavioral Risk Factor Surveillance System.
 Prepared by Public Health - Seattle & King County, APDE, 01/2015.

- The geographic distribution of excessive alcohol drinking is different from the pattern for serious psychological distress.
- Adults in North King County communities report levels of excessive drinking higher than the county as a whole (21%).