



Substance Use Disorders Prevalence and Mental Health Comorbidity July, 2013

Substance use disorder prevalence

Substance use disorders (including substance abuse and dependence) are highly prevalent in the U.S. with an estimated 23.6% of young adults 18 to 25 years old and 7.8% of the adults over the age of 26 having experienced a substance use disorder in the past year (Substance Abuse and Mental Health Services Administration & 2012).

Substance Use Disorders Definitions Used in the 2011 NSDUH

For **substance dependence** the individual met three or more of following criteria related to use of marijuana, hallucinogens, inhalants, tranquilizers, alcohol, cocaine, pain relievers, sedatives or stimulants

- spending large amounts of time obtaining, using, or recovering from the effects of the substance
- using more than intended or setting limits on use
- needing to use more of the substance to get the desired effect
- attempting to cut down without success
- continuing to use despite problems with mental or physical health
- use resulting in reduced participation in important events
- withdrawal symptoms appeared when not using the substance

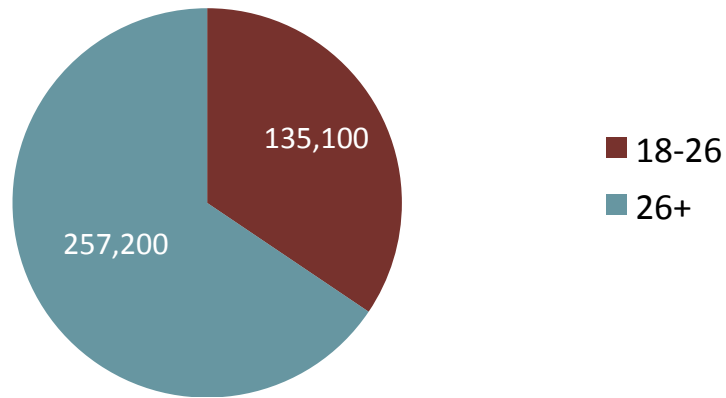
For **substance abuse** the individual met one or more of the following criteria

- serious problems at home, work or school caused by substances
- use the substance regularly resulting in placing self in danger
- use of the substance caused the person to get in trouble with the law
- use caused problems with family or friends

Note: Criteria used in 2011 NSDUH (Substance Abuse and Mental Health Services Administration & 2012) instrument relies on criteria from DSM-IV (American Psychiatric Association, 1994)

When applying the national rates of substance use disorders to population estimates from the US Census Bureau (2011), it estimated that in Colorado 135,100 young adults ages 18-25 and 257,200 adults over the age of 25 have substance use disorders. As depicted in Figure 1, this totals nearly 400,000 adults with either substance abuse or dependence in the past year.

Figure 1: Estimates of Colorado Adults with Substance Use Disorder



Note: Applies estimates from the 2011 National Survey on Drug Use and Health to the 2011 Colorado Census data.

Co-occurring substance use and any mental health disorder

Rates of co-occurrence of substance use and mental health disorders are high. When applying national estimates to the Colorado population, 800,700 Colorado adults have a substance use disorder or any mental health condition.

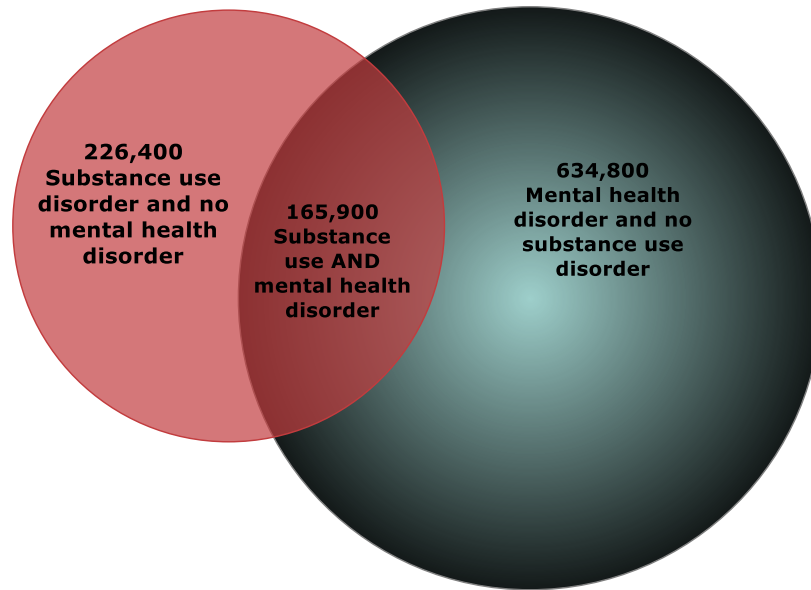
Definition of Any Mental Illness Used in the 2011 NSDUH Study

Adults aged 18 and older with a diagnosable mental, behavioral, or emotional disorder (excluding developmental or substance use disorders) in the past year. This included diagnoses of mood disorders, anxiety disorders, Posttraumatic Stress Disorder, eating disorders, adjustment disorders and intermittent explosive disorder.

Note: Criteria used in 2011 NSDUH (Substance Abuse and Mental Health Services Administration & 2012) instrument relies on criteria from SCID-I/NP (First, Spitzer, Gibbon, & Williams, 2002).

Of the individuals with any substance use or mental health disorder, 226,400 have a substance use disorder only (with no mental health disorder) and 165,900 have a substance use disorder along with a mental health disorder. Therefore, approximately 40% of the individuals with substance use disorders also have a mental health disorder. Substance use disorders are known to commonly co-occur with a variety of mental health conditions but the most common co-occurring mental health conditions are anxiety disorders (Grant et al., 2004; Robinson, Sareen, Cox, & Bolton, 2011; Smith & Randall, 2012) and mood disorders (Grant et al., 2004; Pettinati, O'Brien, & Dundon, 2013). Estimates of Colorado adults with a substance use or mental health disorder in Colorado are shown Figure 2.

Figure 2: Estimates of Past Year Substance Use and Any Mental Health Disorder among Adults Aged 18 or Older in Colorado: 2011



Note: Chart adapted from Results from the 2011 National Survey on Drug Use and Health: Mental Health Findings (SAMHSA, 2012)

Co-occurring substance use and serious mental health disorders

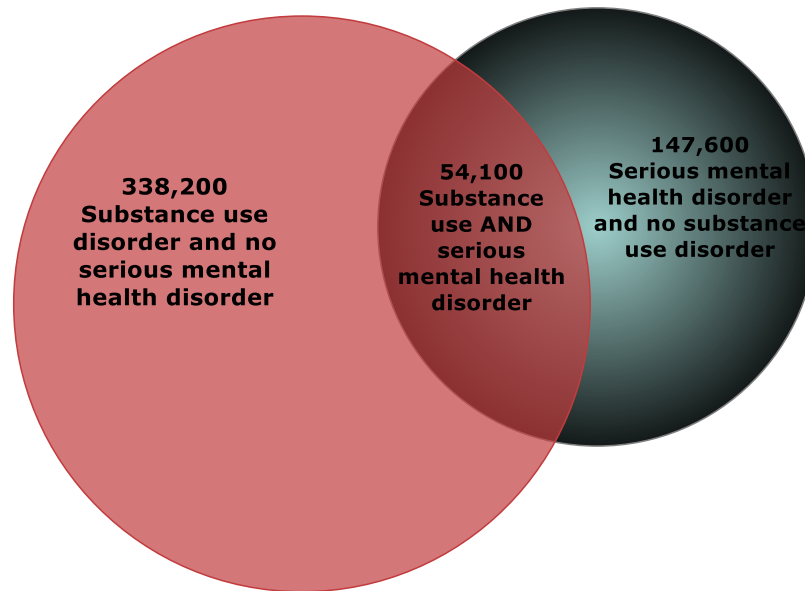
When examining the subset of individuals with a serious mental health disorders and substance use disorders we find that twice as many Coloradans have a substance use disorder alone than have a serious mental health disorder alone and nearly one third (27%) of the individuals with a serious mental health disorder also have a substance use disorder. In contrast, only 14% of the individuals with a substance use disorder also have a serious mental illness. See Figure 3 for the population estimates.

Definition of Any Serious Mental Illness

Adults aged 18 and older with a diagnosable mental, behavioral, or emotional disorder (excluding developmental or substance use disorders) in the past year that resulted in serious functional impairment that limited one or more major life activities such as eating, bathing, dressing, managing money or social relationships. This was assessed by a Global Functioning Score of 50 or lower.

Note: Criteria used in 2011 NSDUH (Substance Abuse and Mental Health Services Administration & 2012) instrument relies on criteria from SCID-I/NP (First et al., 2002) and the Global Assessment of Functioning (Endicott, Spitzer, Fleiss, & Cohen, 1976)

Figure 3: Estimates of Past Year Substance Use and Serious Mental Health Disorder among Adults Aged 18 or Older in Colorado: 2011



Note: Chart adapted from Results from the 2011 National Survey on Drug Use and Health: Mental Health Findings (SAMHSA, 2012)

Theories on the interaction of substance use and mental health disorders

There are three primary theories about how co-occurring substance use and mental health disorders develop and interact. First, experts think that certain mental health and substance use disorders may be linked to a common factor such as genetics (Compton, Thomas, Stinson, & Grant, 2007; Smith & Randall, 2012). For example, people with a particular genetic make-up might be more likely to develop both substance use and mental health disorders.

Second, researchers maintain that people with certain mental health disorders, such as anxiety disorders or depression, may use substances to self-medicate their symptoms. Over time, this self-medication results in problem use of alcohol or drugs (Boden & Fergusson, 2011; Compton et al., 2007; Robinson et al., 2011; Wolitzky-Taylor, Bobova, Zinbarg, Mineka, & Craske, 2012). This theory suggests that in many cases, mental health problems begin before the onset of substance use disorders.

Third, researchers suggest that mental health symptoms can be caused by heavy or prolonged use of alcohol or drugs. They believe that the cycle of intoxication and withdrawal that individuals undergo as they use substances can cause mental health symptoms that would not be present in the absence of substance use (Smith & Randall, 2012).

Thus, most researchers and practitioners believe that there are a number of pathways to development of co-occurring disorders. These pathways are influenced by the genetics and history of the individual, the type of substance used, and the combination of certain substances with specific mental health symptoms or diagnoses (Pettinati et al., 2013; Robinson et al., 2011). Because of these

multiple pathways, a range of treatments and treatment settings are necessary including specialty substance use disorder treatment.

Conclusion

The prevalence of substance use disorders is quite high and often develops in isolation from serious mental health disorders necessitating a strong network of specialty substance use disorder prevention and treatment services. It is estimated that 40% of adults with substance use disorders have a co-existing mental health disorder and 14% are estimated have a serious mental health disorder suggesting that effective treatment should include mental health interventions. Specialty substance abuse treatment coupled with mental health interventions such as psychotropic medications are likely to be effective in treating many of these co-occurring disorders (Pettinati et al., 2013).

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