



## Background

### **Mental Health in the U.S. and Arizona**

The umbrella term “mental health condition” encompasses a broad range of disorders and denotes an affliction that has an effect on a person’s thought processes, sentiments, or humor<sup>1</sup>. Mental health conditions affect one in five American adults<sup>2</sup>, making mental health conditions a source of major disease burden both nationally and globally<sup>3</sup>.

In a countrywide assessment of state-level mental health, Mental Health America assigned each state a ranking based on thirteen important factors<sup>4</sup>. Arizona’s overall ranking was 50<sup>th</sup> due to factors such as a high percentage of the population living below the federal poverty line and low rates of high school graduation. In 2013, 4.2% of adults 18 and over in the state of Arizona had experienced a serious mental illness in the past year<sup>5</sup>. A significant portion of this cohort are untreated for their respective conditions. Between 2009 and 2013, 59.9% of adults over 18 presenting with any mental illness did not receive treatment<sup>5</sup>.

Factors associated with high rates of mental illness include medical illnesses, family history, lack of social support, substance abuse, low socioeconomic status, financial problems, social isolation, daily stress, being older, experiencing physical or mental abuse, and being female.<sup>6 7</sup>

### **Santa Cruz County, Arizona**

Narrow the focus on Santa Cruz County in southern Arizona bordering Mexico. This county has a population of approximately 47,420<sup>8</sup> and is comprised of 82.8% Hispanic or Latino<sup>8</sup> individuals. Santa Cruz County performs poorly compared to other U.S. and Arizona counties on socioeconomic factors, many of which have been linked to depression. It is rated in the highest level of social vulnerability.<sup>9</sup> 23.6%<sup>10</sup> of Santa Cruz County

inhabitants live below the federal poverty line as compared to 18.2%<sup>10</sup> in the state of Arizona. 35% of children in the county also grow up in poverty.<sup>11</sup> Additionally, the median household income in Santa Cruz County is \$37,500<sup>10</sup>, significantly lower than the median household income in the state of Arizona which is \$50,000<sup>10</sup>. Compounding these two factors is the high rate of unemployment in Santa Cruz County (13.2%<sup>10</sup>), close to two times higher than the Arizona state unemployment rate (6.9%<sup>10</sup>). There is also a large population of uninsured persons, with over 24% of the county lacking health insurance prior to Affordable Care Act implementation<sup>12</sup>. Finally, 38% of Santa Cruz households are headed by a single parent.<sup>13</sup>



Santa Cruz has a significant shortage of certified mental health professionals at a population to mental health provider ratio of 2,220:1<sup>10</sup>, although recent evidence demonstrates that this ratio may be even higher. This statistic includes only 18 registered providers. Half of providers included here (9) are counselors and not psychiatrists or psychologists. Per conversations with individuals in

the county, the others do not practice in the county with any regularity. This leaves many individuals with mental health conditions two options, 1) travel to Pima County for treatment or 2) avoid treatment because of the cost, time, and effort involved. There is an additional tool available from [Centpatico Integrated Care](#). This search tool lists behavioral health providers within a specified distance of an individual's home. It shows 10 results within 10 miles of Nogales, AZ. This includes nurse practitioners, social workers, and clinics. The providers' hours, location, language and other information are available on the website.

### **Hispanic/Latino Mental Health**

In the United States, 3.5% of Hispanic adults have at one point experienced a mental health condition<sup>14</sup>. Additionally, only 10% of Latinos with a mental health condition see a mental health specialist.<sup>15</sup> The rate of suicide attempts in Hispanic/Latino women in grades 9-12 is nearly twice that of Caucasian women of the same age<sup>16</sup>. This statistic is significant when coupled with the fact that the Hispanic/Latino community is drastically underserved when it comes to mental healthcare<sup>17</sup>. To illustrate this point, only 20% of Hispanic/Latino individuals presenting with psychological symptoms speak to their doctor about them, this is much lower than the rest of the U.S. population<sup>17</sup>.

Mental illnesses are often stigmatized or not recognized because of lack of knowledge on mental health conditions or mental health stigmatization in Hispanic/Latino communities<sup>17</sup>. This is at no fault of the members of these communities as there are significant disparities in insurance coverage<sup>17</sup> and language barriers that may be present between patient and provider<sup>17</sup>.

### **Women's Mental Health**

Women are more likely than men to experience certain mental health issues. Anxiety disorders, eating disorders, personality disorders, and depression (and subsequently suicide) are all more

common in women than men<sup>18</sup>. It is estimated that approximately 24% of U.S. women experienced a diagnosable mental health disorder during the last year.<sup>19</sup> Approximately 12% of women experience depression compared with 6% of men<sup>20</sup>. Additionally, women are also twice as likely as men to develop an anxiety disorder<sup>20</sup>. And for other mental health diseases although disease rates are similar across genders it is important to acknowledge that the disease may manifest itself differently across different genders. For example women who are bipolar are more likely to experience rapid cycling and more depressive episodes compared with men who are bipolar<sup>21</sup>.

### **Areas of Concern**

#### **Depression**

Depression is a common but severe mental health disorder that affects one's emotions, actions, and ability to think<sup>22</sup>. Depression can vary significantly in symptom severity from mild to debilitating<sup>22</sup>. Depression affects a significant portion of the adult population; at least 16.6% of adults will experience depression in their lifetime<sup>22</sup>. In Arizona, 8.44% of adults reported a diagnoses of clinical depression<sup>23</sup>. However, only 42% of adults in Arizona who have been diagnosed with depression are treated for their symptoms<sup>23</sup>.

#### **Postpartum Depression**

Postpartum depression is a mood disorder<sup>24</sup> with onset in most cases after childbirth due to chemical/hormonal changes after delivery<sup>24</sup>. Symptoms of postpartum depression may include, but are not limited to: mood swings, difficulty concentrating, physical aches and pains, and irritability<sup>24</sup>.

15% of new mothers experience postpartum depression<sup>24</sup>. The prevalence of postpartum depression in women of low socioeconomic status is higher at 25%<sup>24</sup>. Recent studies have demonstrated that the risk of postpartum depression is also higher in immigrant women<sup>25</sup>. Due to the fact that Santa

Cruz County is comprised of 32.6% foreign born persons this further increases the risk of women in this community developing postpartum depression<sup>8</sup>. Predictive factors for the development of postpartum depression have pinpointed early separation from child and complicated delivery<sup>26</sup>.

## Schizophrenia

Schizophrenia is characterized as a severe mental condition that has a profound effect on the thought processes, perceptual experience, and expression of the afflicted individual<sup>27</sup>. Symptoms of schizophrenia can be classified into three categories: positive (hallucinations), negative (decreased speech), and cognitive (difficulty maintaining focus)<sup>28</sup>.

1.1% of United States adults have schizophrenia<sup>29</sup>, the state of Arizona has a 1.8% prevalence rate of schizophrenia<sup>30</sup>. Individuals with schizophrenia are at a much higher risk of attempting suicide and 1 in 10 people with schizophrenia will die as a result of suicide<sup>31</sup>. Several identified risk factors for later development of schizophrenia are family history of schizophrenia, complications during pregnancy or delivery, and intrapartum infections<sup>32</sup>.

## Bipolar Disorder

Bipolar disorder is a condition resulting in drastic and often abrupt changes in mood and consequently drive and liveliness<sup>33</sup>. The term “bipolar disorder” refers to four basic types of the disorder<sup>33</sup>, each variation of the disorder include periods of extreme elation (manic episodes) and periods of extreme despair (depressive episodes)<sup>33</sup>.

2.6% of Americans over the age of 18 have bipolar disorder<sup>21</sup>, the prevalence of bipolar disorder in Arizona adults over the age of 18 is 3.74%<sup>23</sup>. In a survey of the most prevalent mental health disorders in Arizona, it was demonstrated that Hispanic/Latinos and American Indians reported higher rates of bipolar disorder than individuals of other races<sup>23</sup>. 40% of Hispanic/Latinos who had been diagnosed with bipolar disorder were not

being treated at the time of the study. Although there is no single conclusive factor that leads to the emergence of bipolar disorder, family history, substance abuse, and history of traumatic experiences are possible risk factors<sup>34</sup>.

## Domestic Violence

Domestic violence is any expression or pattern of abusive behavior utilized by one member of a intimate relationship to create or preserve a power dynamic<sup>35</sup>. Domestic violence can present itself in many forms and is not limited to physical and sexual abuse, a commonly held misconception. Nationally, domestic violence impacts 1 in 4 women and 1 in 7 men<sup>36</sup>.

Domestic violence comprises 15% of all violent crimes<sup>37</sup>, however, many cases of domestic violence go unreported. In the state of Arizona there were 107 deaths due to domestic violence in 2015<sup>38</sup>. In 2012, Arizona among the top 10 states for most femicides in the nation<sup>39</sup>. Santa Cruz County, Arizona has the lowest percentage of domestic violence related arrests resulting in a conviction in the entire state<sup>40</sup>. This is highly indicative of a lack of report perhaps because of intimidation tactics or fear to report crimes. Domestic violence affects people of all races/ethnicities, socioeconomic statuses, and genders. The wide range and large volume of affected individuals makes it a particularly difficult problem to target and eradicate.

## Substance Abuse

Substance abuse is the hazardous use of alcohol or illegal drugs<sup>41</sup> (or legal drugs for purposes other than intended). In 2013, it was estimated that 9.4% of the American population over the age of 12 had used an illicit substance in the past month<sup>42</sup>. Rates of substance abuse are even higher in Arizona. In a study conducted in 2010, 10% of Arizona respondents had abused prescription drugs within the last month with the national average being 3%<sup>43</sup>.

While Santa Cruz is the smallest geographic county in Arizona, it is one of the most heavily trafficked areas in Arizona<sup>44</sup>. Santa Cruz has the highest “opioid dependency” ER visit rate in the state<sup>44</sup>. Additionally, the largest proportion of drug-related ER visits in Santa Cruz are comprised of individuals between the ages of 12-17<sup>44</sup>. Santa Cruz is the only county for which this age range comprises the majority of drug-related emergency room visits<sup>44</sup>.

### **Prevalence Estimates**

Based on the geographic, ethnic, age, and sociodemographic, profile of Santa Cruz County Arizona, we estimate that annually there are 2,600 adults and 500 children (under 18 years) suffering from depression, 160 new mothers suffering from postpartum depression, 3,960 individuals suffering from anxiety, 3,500 women suffering from domestic violence, 2,700 individuals over age 16 experiencing some form of substance abuse, 1,050 individuals experiencing bipolar symptoms, and 350 adults with schizophrenia.

Since diagnosis and treatment rates are unavailable for Santa Cruz, but due to the lack of mental health providers we estimate that upwards of 80% of these individuals have not received a diagnosis and/or treatment. Thus, there is an enormous burden of unmet mental health care in Santa Cruz.

### **Possible Interventions**

Santa Cruz County is severely lacking in mental health professionals. Integrating behavioral health into primary care has been proven to lead to significant improvements in mental health<sup>45</sup>. Incorporating mental health providers into primary

care visits can increase the chances of diagnosis and may provide an opportunity for individuals who are not comfortable seeking out a mental health provider to voice and address concerns<sup>45</sup>. Adding screenings for depression to primary care visits has been shown to reduce depressive symptoms<sup>46</sup>. Behavior health integration has also been shown to reduce substance abuse<sup>45</sup>. Additionally, adding mental health providers who are Latino/Hispanic could lead to more feelings of ease and thus more reporting of mental health diseases.

Programs targeted at the adolescent demographic with the focus of preventing domestic violence can target the spike of intimate partner violence observed in the teenage years<sup>47</sup>. Prevention programs provide information on domestic violence, skill-building opportunities, and other useful information on healthy relationships<sup>47</sup>. These workshops may also engrain in young adults tendencies that deter from domestic violence and could lead to decreased chances of engaging in intimate partner violence later in life.

There are many opportunities for improvement related to mental health conditions in Santa Cruz. The next steps are to determine the population and interventions of interest. Some possible scientifically supported mental health improvement interventions include<sup>48</sup>: treatment for postpartum depression, tele-health programs to provide counseling services, increasing funding to federally qualified health centers, kinship care programs for children removed from homes, further integration of behavioral health with primary care, cultural competence training for health care professionals, rapid rehousing programs, and patient navigators.

<sup>1</sup> Mental Health Conditions. Retrieved from <https://www.nami.org/Learn-More/Mental-Health-Conditions>

<sup>2</sup> Mental Health Myths and Facts. Retrieved from <https://www.mentalhealth.gov/basics/myths-facts/index.html>

<sup>3</sup> Mental Health. (2016, June 8) Retrieved from <http://www.worldbank.org/en/topic/health/brief/mental-health>

<sup>4</sup> The State of Mental Health in America. Retrieved from <http://www.mentalhealthamerica.net/issues/state-mental-health-america#Overview>

---

<sup>5</sup> Substance Abuse and Mental Health Services Administration. *Behavioral Health Barometer: Arizona, 2014*. HHS Publication No. SMA-15-4895AZ. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2015.

<sup>6</sup> What are risk factors for depression? Retrieved from <http://psychcentral.com/lib/what-are-the-risk-factors-for-depression/>

<sup>7</sup> Depression (major depressive disorder). Retrieved from <http://www.mayoclinic.org/diseases-conditions/depression/basics/risk-factors/con-20032977>

<sup>8</sup> United States of America, U.S. Department of Commerce, United States Census Bureau. (2010). *Santa Cruz County, Arizona*.

<sup>9</sup> CDC's Social Vulnerability Index (SVI) Mapping Dashboard. Retrieved from <https://data.cdc.gov/Health-Statistics/CDC-social-Vulnerability-Index-SVI-Mapping-Dashb/6ssd-y5qt>

<sup>10</sup> Santa Cruz County, Arizona: Health Outcomes and Health Factors. (2016). Retrieved from <http://www.countyhealthrankings.org/app/arizona/2016/rankings/santa-cruz/county/outcomes/overall/snapshot>

<sup>11</sup> SAIPE. (2014). Retrieved from <http://www.census.gov/did/www/saipe/data/state-county/data/index.html>

<sup>12</sup> SAIHE. (2013). Retrieved from <http://www.census.gov/did/www/sahie/data/2008-2013/index.html>

<sup>13</sup> American Community Survey Demographic and Housing Estimates 2010 5-Year Estimates. (2014). Retrieved from <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

<sup>14</sup> Serious Mental Illness (SMI) Among U.S. Adults. Retrieved from <http://www.nimh.nih.gov/health/statistics/prevalence/serious-mental-illness-smi-among-us-adults.shtml>

<sup>15</sup> NAMI. Retrieved from: <https://www.nami.org/Find-Support/Diverse-Communities/Latino-Mental-Health>

<sup>16</sup> Mental Health and Hispanics. (2013, September 9). Retrieved from

<http://minorityhealth.hhs.gov/omh/browse.aspx?vl=4&lvlid=69>

<sup>17</sup> Latino Mental Health. Retrieved from <https://www.nami.org/Find-Support/Diverse-Communities/Latino-Mental-Health>

<sup>18</sup> Action Steps for Improving Women's Mental Health. U.S. Department of Health and Human Services Office on Womens Health; Substance Abuse and Mental Health Services Administration. 2009. Retrieved from: <http://womenshealth.gov/publications/our-publications/mental-health-action-steps/>

<sup>19</sup> How Many Americans Experienced Mental Illness in the Past Year? (2010). Retrieved from [http://media.samhsa.gov/samhsaNewsletter/Volume\\_18\\_Number\\_6/MentalHealthReport.aspx](http://media.samhsa.gov/samhsaNewsletter/Volume_18_Number_6/MentalHealthReport.aspx)

<sup>20</sup> Depression and Addiction. Retrieved from <http://www.dualdiagnosis.org/depression-and-addiction/>

<sup>21</sup> Bipolar Disorder Statistics. Retrieved from [http://www.dbsalliance.org/site/PageServer?pagename=education\\_statistics\\_bipolar\\_disorder](http://www.dbsalliance.org/site/PageServer?pagename=education_statistics_bipolar_disorder)

<sup>22</sup> What is Depression? (2015). Retrieved from <https://www.psychiatry.org/patients-families/depression/what-is-depression>

<sup>23</sup> Marsiglia, F.F., Wolfenstein, W.L., Ayers, S., Booth, J., Wagaman, A.. (2010). Adults: Mental Health Issues and Disparities in Arizona.

<sup>24</sup> Postpartum Depression Facts. Retrieved from <http://www.nimh.nih.gov/health/publications/postpartum-depression-facts/index.shtml>

<sup>25</sup> Lucero, N.B., Beckstrand, R.L., Callister, L.C., Sanchez Birkhead, A.C.. (2012). Prevalence of postpartum depression among Hispanic women. *Journal of the American Academy of Nurse Practitioners*, 24(12), 726-734.

<sup>26</sup> Righetti-Veltema, M., Conne-Perréard E., Bousquet, A., Manzano, J. (1998). Risk factors and predictive signs of postpartum depression. *Journal of affective disorders*, 49(3), 167-180.

<sup>27</sup> Mental health: Schizophrenia. Retrieved from [http://www.who.int/mental\\_health/management/schizophrenia/en/](http://www.who.int/mental_health/management/schizophrenia/en/)

<sup>28</sup> Schizophrenia. Retrieved from <http://www.nimh.nih.gov/health/publications/schizophrenia-booklet-12-2015/index.shtml>

---

<sup>29</sup> Mental Health By the Numbers. Retrieved from <https://www.nami.org/Learn-More/Mental-Health-By-the-Numbers>

<sup>30</sup> Arizona: Chronic Conditions Rates. Retrieved from <http://conditions-prevalence.healthgrove.com/l/3/Arizona>

<sup>31</sup> Burden of Mental Illness. Retrieved from <https://www.cdc.gov/mentalhealth/basics/burden.htm>

<sup>32</sup> h Mäki, P., Veijola, J., Jones, P.B., Murray, G.K., Koponen, H., Tienari, P., Miettunen, J., Tanskanen, P., Wahlberg, K., Koskinen, J., Lauronen, E., Isohanni, M. (2005). Predictors of schizophrenia—a review. *British Medical Bulletin*.

<sup>33</sup> Bipolar Disorder. Retrieved from <https://www.nimh.nih.gov/health/topics/bipolar-disorder/index.shtml>

<sup>34</sup> Bipolar Disorder. Retrieved from <http://www.mayoclinic.org/diseases-conditions/bipolar-disorder/basics/risk-factors/con-20027544>

<sup>35</sup> Domestic Violence. (2015). Retrieved from <https://www.justice.gov/ovw/domestic-violence>

<sup>36</sup> CDC. Retrieved from: <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/consequences.html>

<sup>37</sup> National Coalition against Domestic Violence Statistics. Retrieved from <http://www.ncadv.org/learn/statistics>

<sup>38</sup> Arizona Domestic Violence Related Deaths 2015. (2015). Retrieved from <http://www.azcadv.org/azcadv2014wp/wp-content/uploads/2016/02/2015-DV-Fatalities-final.pdf>

<sup>39</sup> Domestic Violence in Arizona. Retrieved from <http://www.ncadv.org/files/Arizona.pdf>

<sup>40</sup> Stevenson, Phillip & Matthew Bileski. (2013). Domestic Violence Arrest and Case Processing Data: An Analysis of the Information in Arizona's Computerized Criminal History Record System. Phoenix, AZ: Arizona Criminal Justice Commission.

<sup>41</sup> Substance abuse. Retrieved from [http://www.who.int/topics/substance\\_abuse/en/](http://www.who.int/topics/substance_abuse/en/)

<sup>42</sup> DrugFacts: Nationwide Trends. (2015, June). Retrieved from <https://www.drugabuse.gov/publications/drugfacts/nationwide-trends>

<sup>43</sup> Wolfersteig, W.L., Lewis, H., Sitzler, A., Deschine, N., Johnson, T., Deschine, D., Schepel, E., Wardian, J., Marsiglia, F. F.. (2010). Adult Substance Abuse in Arizona 2010.

<sup>44</sup> Arizona Border Substance Abuse Needs & Assets Assessments. (2012). Retrieved from [http://www.borderhealth.org/files/res\\_2471.pdf](http://www.borderhealth.org/files/res_2471.pdf)

<sup>45</sup> Behavioral health primary care integration. (2015, August 28).

<http://www.countyhealthrankings.org/policies/behavioral-health-primary-care-integration>

<sup>46</sup> Butler, M., Kane, R.L., McAlpine, D., Kathol, R.G., Fu, S.S., Hagedorn, H., Wilt, T.J.. (2008). Integration of mental health/substance abuse and primary care.

<sup>47</sup> Youth intimate partner violence prevention programs. (2016) Retrieved from <http://www.countyhealthrankings.org/policies/youth-intimate-partner-violence-prevention-programs>

<sup>48</sup> What Works for Health: Policies and programs that can improve health. Retrieved from <http://www.countyhealthrankings.org/policies>

	Santa Cruz County	Arizona
<b>County Demographics*</b>		
Population	46,695	6,731,484
% Below 18 years of age	28.3%	24.1%
% 65 and older	15.8%	15.9%
% Non-hispanic African American	0.4%	4.1%
% American Indian and Alaskan Native	1.3%	5.3%
% Asian	0.7%	3.3%
% Native Hawaiian/Other Pacific Islander	0.1%	0.3%
% Hispanic	82.8%	30.5%
% Non-Hispanic white	15.6%	56.2%
% Not proficient in English	16%	5%
% Females	52.0%	50.3%
% Rural	26.9%	10.2%
% Born in US	67.4%	86.3%
% US Citizens	52.2%	91.7%
% With a disability	9.6%	12.8%
<b>Quality of Life</b>		
In poor or fair health	25%	19%
Poor physical health days (average per 30 days)	4.1	3.9
Poor mental health days (average per 30 days)	3.8	3.7
Frequent physical distress	14%	12%
Frequent mental distress	13%	12%
<b>Health Behaviors</b>		
Adult smoking	15%	17%
Adult obesity	21%	24%
Excessive drinking	15%	17%
Alcohol impaired driving deaths	28%	27%
Teen births per 1,000 females ages 15-19	53	45
Limited access to healthy foods	11%	7%
Drug overdose deaths - modeled	10.1-12.0	18.2
<b>Clinical Care</b>		
Uninsured	24%	20%
Primary care physicians	2,600:1	1,510:1
Mental health providers	2,220:1	800:1
Uninsured adults	29%	23%
<b>Social &amp; Economic Factors</b>		
High school graduation	82%	75%
Unemployment	13.2%	6.9%
Children in poverty	35%	26%
Income inequality	5.3	4.6
Children in single-parent households	38%	36%
Violent crime	128	416
Median household income	\$37,500	\$50,000
Severe housing problems	23%	20%
<b>Estimated Disease Prevalence ~</b>		
Depression	3,100	
Postpartum depression	160	
Anxiety	3,960	
Domestic violence	3,500	
Substance abuse	2,700	
Schizophrenia	350	
Bipolar Disorder	1,050	

\*Measures from Countyhealthrankings.org and/or U.S. Census.

~Estimates from population demographics