

Behavioral Health Summary – Partnership of Community Resources and Carson City

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Demographic Snapshot

Table 1. Selected demographics for Carson City and Douglas County, and Nevada.

	Carson	Douglas	Nevada
Population, 2015 estimate*	54,199	48,568	2,874,075
Population, 2010 estimate*	55,360	47,197	2,705,845
Population, percent change*	-2.1%	2.9%	6.2%
Male persons, estimated percent 2015*	50.6%	49.3%	50.3%
Female persons, estimated percent 2015*	49.4%	50.7%	49.7%
Land area (square miles), 2010**	145	710	109,781
Median household income**	\$50,108	\$58,940	\$52,800
Persons below poverty level, percent**	19.3%	10.3%	15.0%

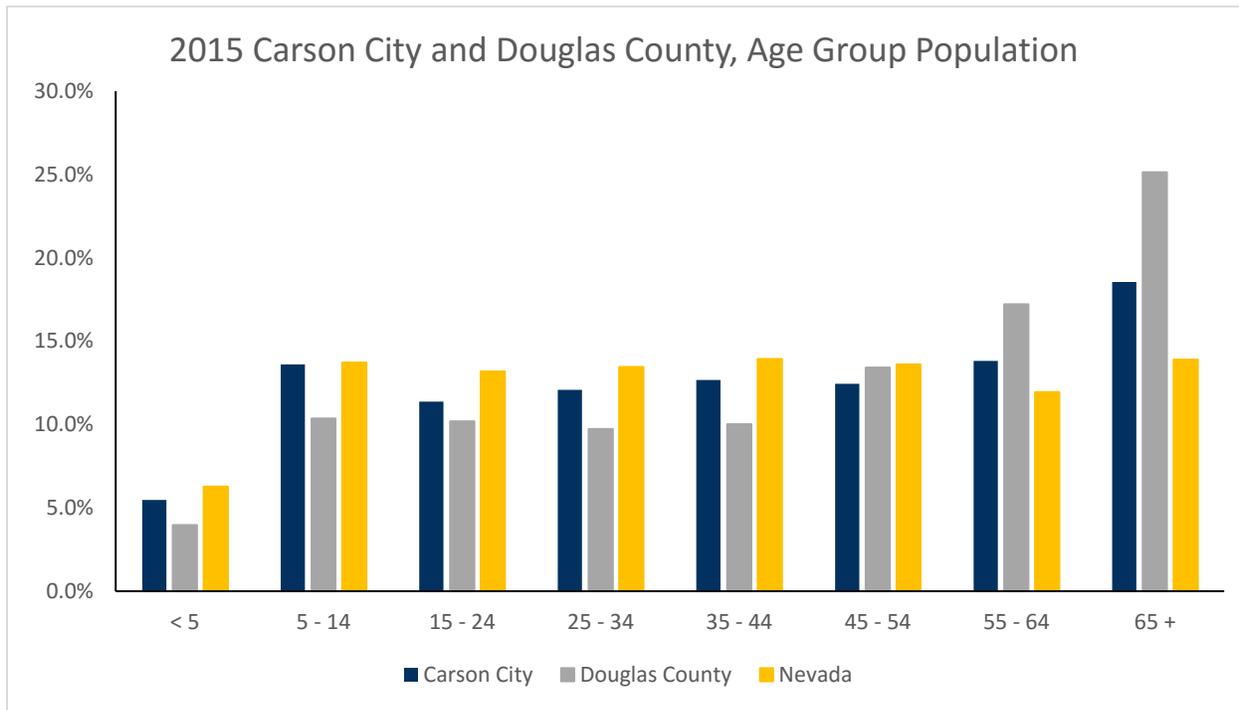
*Source: Nevada State Demographer's Office

**Source: US Census Bureau

In 2015, the estimated population for Carson City, Nevada was 54,199, a 2.1% decrease from the 2010 estimated population. The population is made up of approximately 51% males and 49% females. The median household income is \$50,108, lower than Nevada's median household income of \$52,800. Less than 20% of the population in Carson City live below the poverty level, compared to 15% of the population in Nevada. Carson City land area is approximately 145 square miles and represents 0.1% of Nevada's total land area.

The estimated population for Douglas County, Nevada in 2015 was 48,568, a 2.9% increase from the 2010 estimated population. The population is made up of approximately 49% males and 51% females. The median household income in Douglas County is \$58,940 with nearly 10% of the population living below the poverty level. Douglas County land area is approximately 710 square miles and represents 0.6% of Nevada's total land area.

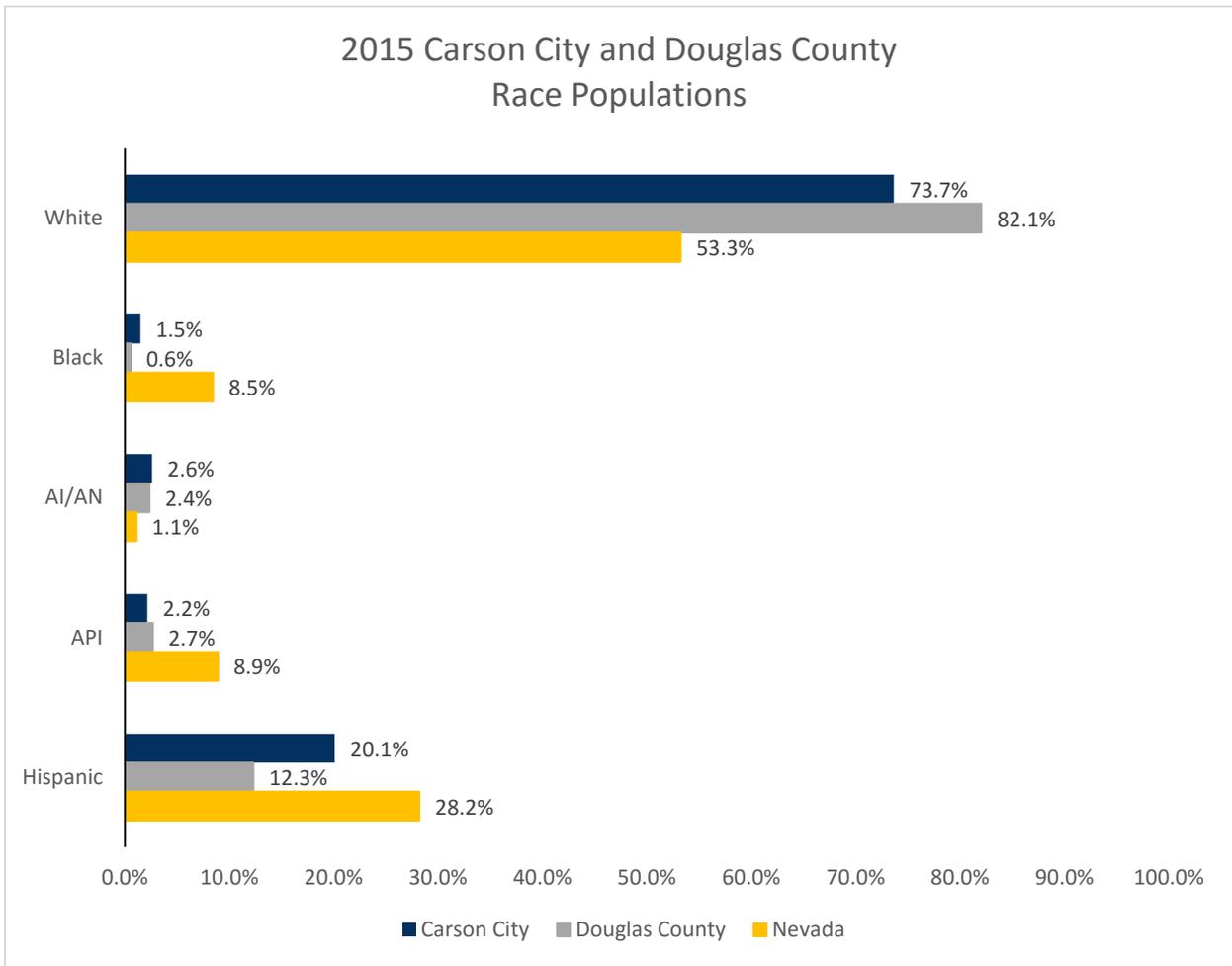
Figure 1. Carson City and Douglas County, and Nevada populations by age group.



Source: Nevada State Demographer

Age population breakdowns for Carson City and Douglas County vary from each other and from Nevada’s age population breakdown in a majority of the age groups. The largest difference was in the 65 and older age group. This age group accounted for 25% of the population of Douglas County and 19% of Carson City, while the same age group accounted for just 14% in Nevada. Individuals in Douglas County in general had a lower proportion of younger individuals when compared to Nevada.

Figure 2. Carson City and Douglas County, and Nevada racial/ethnic breakdowns for 2015.



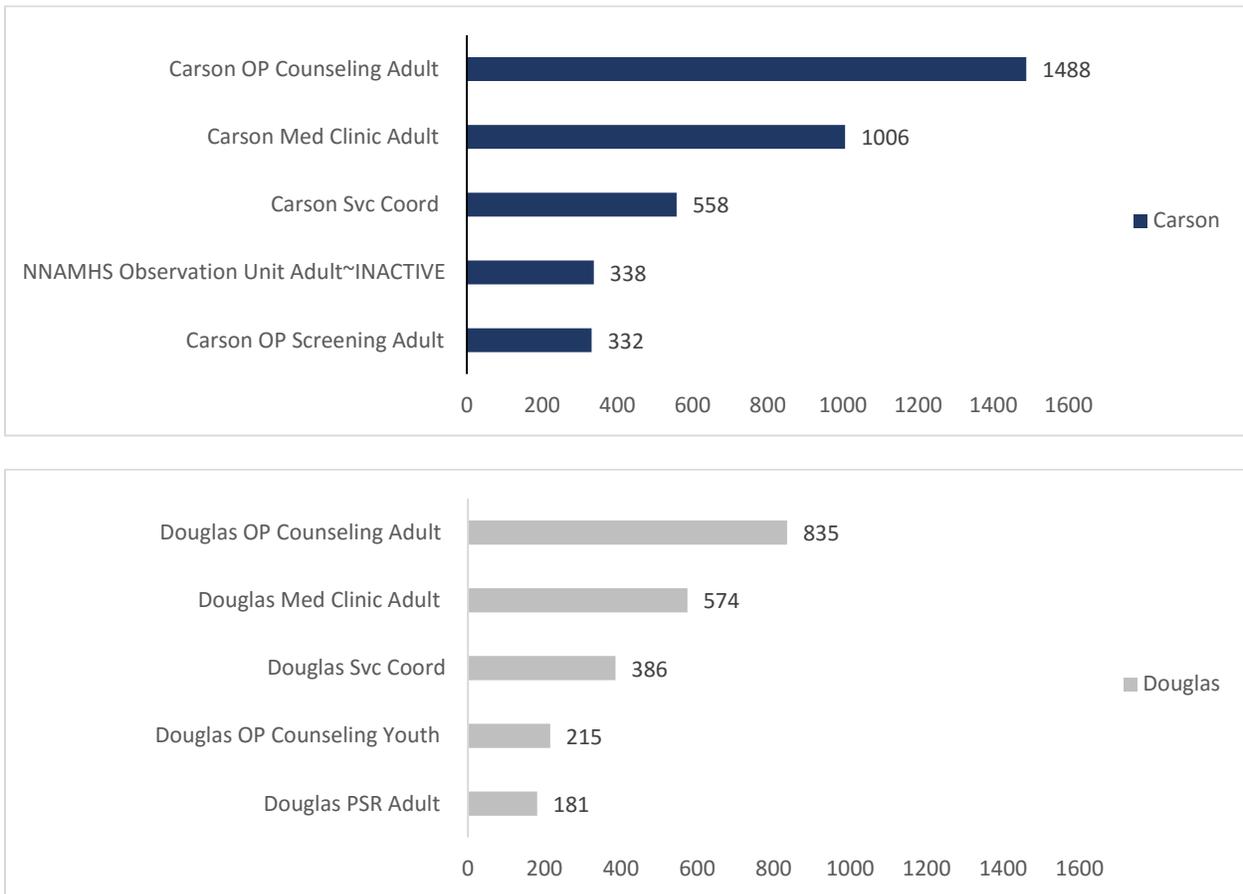
Source: Nevada State Demographer

Carson City and Douglas County race/ethnicity breakdown compared to Nevada’s shows that these counties have a greater proportion of White while Nevada’s population as a whole has a greater proportion of Hispanic, Asian, and Black.

Mental Health Clinics

The data in this section comes from Avatar, an electronic mental health medical record system used by the Division of Public and Behavioral Health (DPBH). DPBH is the largest provider of mental health services in Nevada. In northern Nevada, DPBH clinics are categorized as Northern Nevada Adult Mental Health Services (NNAMHS).

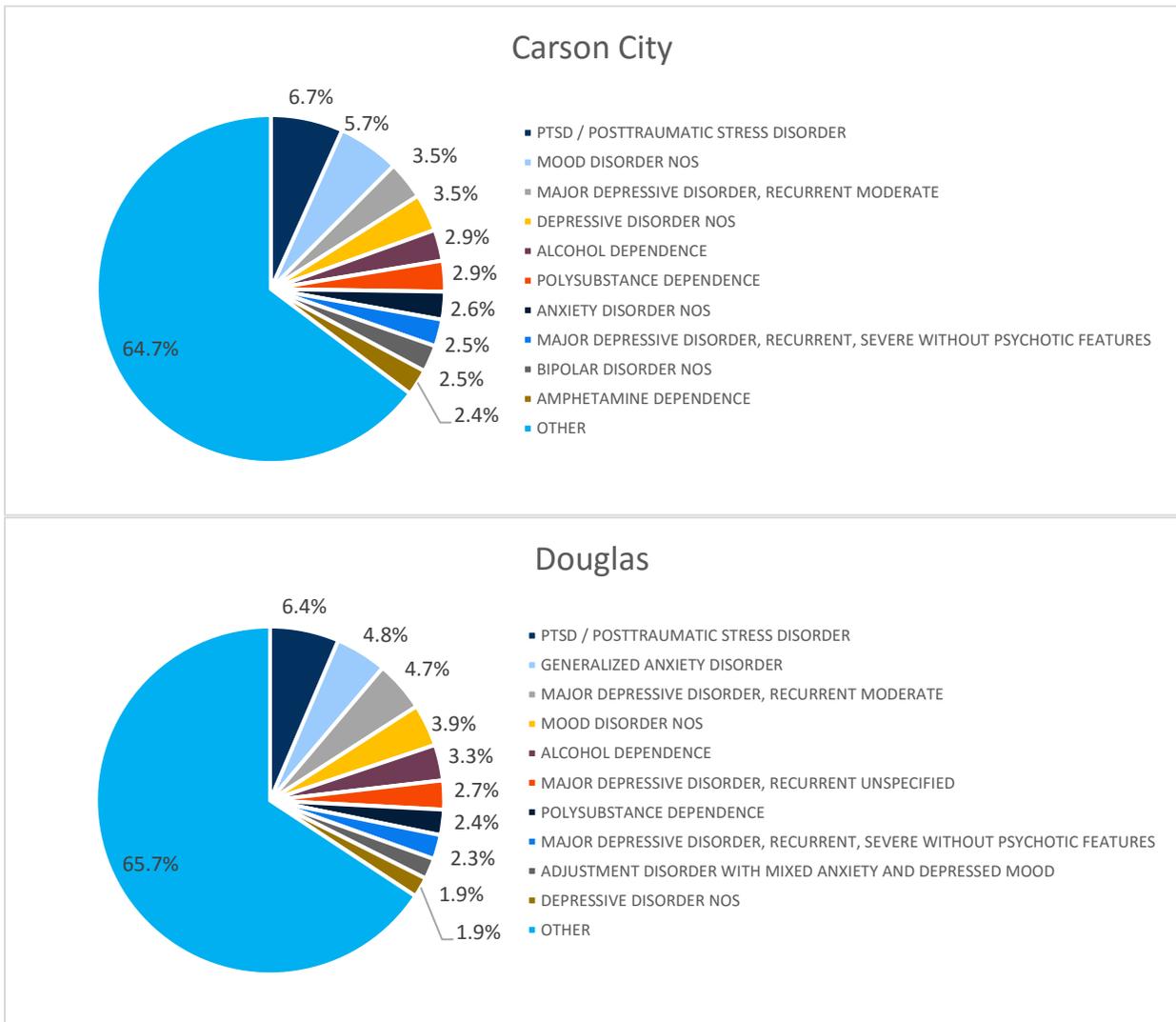
Figure 3. Top 5 mental health clinic services for Carson City and Douglas County residents with number of patients served, 2010-2014.



*Source: Nevada Avatar. De-duplicated patients. However, a patient can use more than one service during one admission period; while the services are de-duplicated, a patient can occur in more than one service.

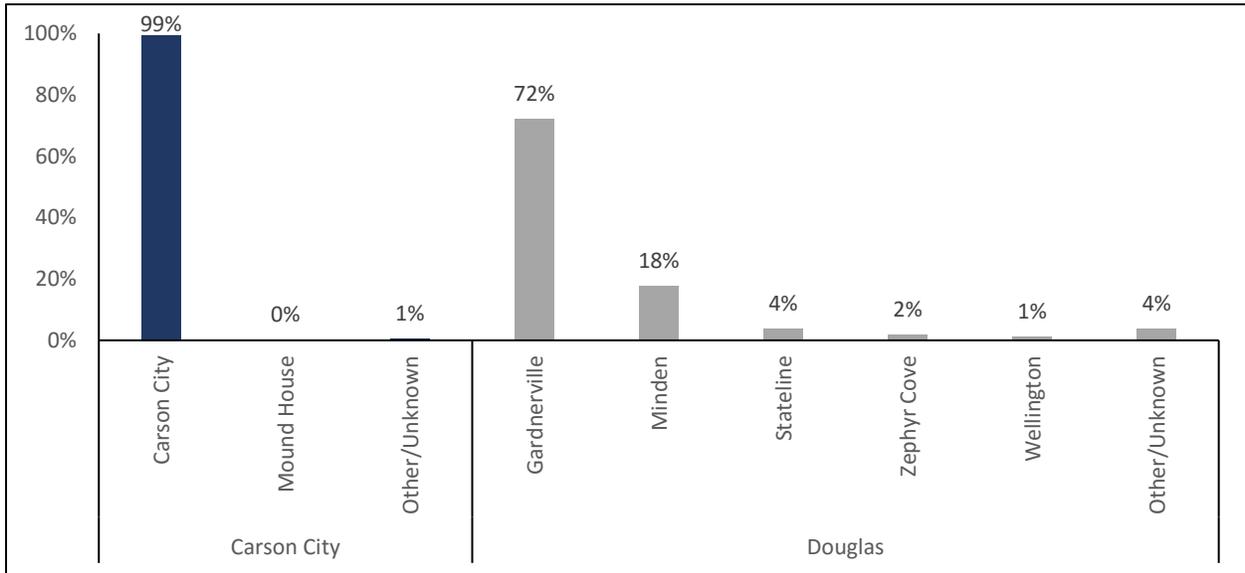
During the time from 2010 to 2014, 2,958 Carson City and Douglas County residents received mental health services from DPBH. Overall services totaled 13,981, as many patients used multiple services. The most common location of services occurred in an out-patient counseling setting, followed by med clinic within each county.

Figure 4. Most Common Diagnosis among Carson City and Douglas County residents, 2010-2014



During the period of 2010 to 2014, the most common primary mental health diagnosis for a Carson City and Douglas County residents was Post Traumatic Stress Disorder (PTSD) (7% and 6% respectively). In Carson City, this is followed by Mood Disorder NOS (6%), Major Depressive Disorder, Recurrent Moderate (4%), Depressive Disorder NOS (4%), and Alcohol Dependence (3%). In Douglas County, this is followed by Generalized Anxiety Disorder (5%), Major Depressive Disorder, Recurrent Moderate (5%), Mood Disorder NOS (4%), and Alcohol Dependence (3%). Patients may have multiple diagnoses noted during the course of their treatment, but the primary diagnosis noted is the most dominant.

Figure 5. Carson City and Douglas County residents who access mental health clinics city of residence, 2010-2014.



Of the Carson City residents accessing DPBH mental health services between 2010 and 2014, nearly everyone (99%) lived in Carson City. The remaining residents lived in Mound House or Other/Unknown (1%).

Of the Douglas County residents accessing DPBH mental health services between 2010 and 2014, 72% lived in Gardnerville. The remaining residents lived in Minden (18%), Stateline (4%), Zephyr Cove (2%), or Wellington (1%). Four percent of residents accessing mental and behavioral clinics had residences that are unknown, invalid, or listed as other.

Table 2. Demographics of Carson City and Douglas County residents who accessed state funded adult mental health clinics, 2010-2014.

	2010	2011	2012	2013	2014
Sex					
Female	718	756	746	764	836
Male	439	465	411	449	506
Unknown	6	4	4	8	2
Total	1,163	1,225	1,161	1,221	1,344
Age					
0-17	171	180	148	174	227
18-30	247	259	240	228	252
31-50	465	484	455	475	494
51-65	254	273	289	312	332
66-100	26	29	28	32	38
Unknown	0	0	0	0	0
Total	1,163	1,225	1,161	1,221	1,344
Race					
White	832	883	885	891	894
Black	11	12	11	15	13
Asian	4	5	1	1	0
Alaskan Native/American Indian	19	21	15	20	16
Native Hawaiian/Pacific Islander	4	3	3	4	4
Two or more races	22	30	17	19	28
Other	55	70	69	101	112
Unknown	216	201	160	170	277
No Entry	0	0	0	0	0
Total	1,163	1,225	1,161	1,221	1,344
Ethnicity					
Hispanic or Latino	75	113	89	104	86
Not Hispanic or Latino	730	744	688	676	615
Unknown/No Entry	358	368	384	441	643
Total	1,163	1,225	1,161	1,221	1,344
Education					
=< 12th Grade - No Diploma	225	253	234	254	271
High School Graduate	214	221	263	295	284
GED	94	108	97	90	82
Some College	204	227	211	218	221
Undergraduate Degree	30	31	31	32	37
Graduate Degree	27	22	15	18	23
No Formal Education	18	18	15	12	11
Other	351	345	295	302	415
Total	1,163	1,225	1,161	1,221	1,344

During the 5-year period of 2010 to 2014, there were 2,958 Carson City and Douglas County adult residents that accessed mental and/or behavioral health services from DPBH state funded facilities. The totals in Table 2 above equal 6,114, reflecting that the some individuals used DPBH services during more than one year. Females comprised 63% of the patient population and males comprised 37%. White made up 72% of the population, The most populous age group was the 31-50 year olds, accounting for 39% of the patients. Patients with “other” accounted for 28% of the patients, followed by “high school graduate” (21%) and “less than 12th grade education or no diploma” (20%).

Hospital Emergency Room Data

The data provided in this section are from the hospital emergency room (ER) billing data compiled by the University of Nevada, Las Vegas, Center for Health Information Analysis (CHIA). The data are based on visits, not patients, therefore a single person may represent multiple visits. The ER data are broken into three parts: mental conditions (anxiety, PTSD, suicidal ideations, etc.), suicide attempts by method (hanging, jumping, firearms, etc.) and alcohol- and drug-related visits.

The following ICD-9 codes were used for analysis of mental disorders: anxiety 300.00-300.09; depression 296.20-296.36, and 311.00; bipolar disorder 296.40-296.89; PTSD 309.81; schizophrenia 295.00-295.90 and V11.0; suicidal tendencies 300.90; suicidal ideation V62.84.

The following ICD-9 codes were used for analysis of suicide attempts by method: suicide by solid or liquid E950-E950.9; suicide by gases in domestic use E951-E951.8; suicide by other gases and vapors E952-E952.9; suicide by hanging, strangulation and suffocation E953-E953.9; suicide by drowning E954; suicide by firearms, air guns and explosives E955-E955.9; suicide by cutting and piercing instrument E956; suicide by jumping from high place E957-E957.9; suicide by other unspecified means E958-E958.9.

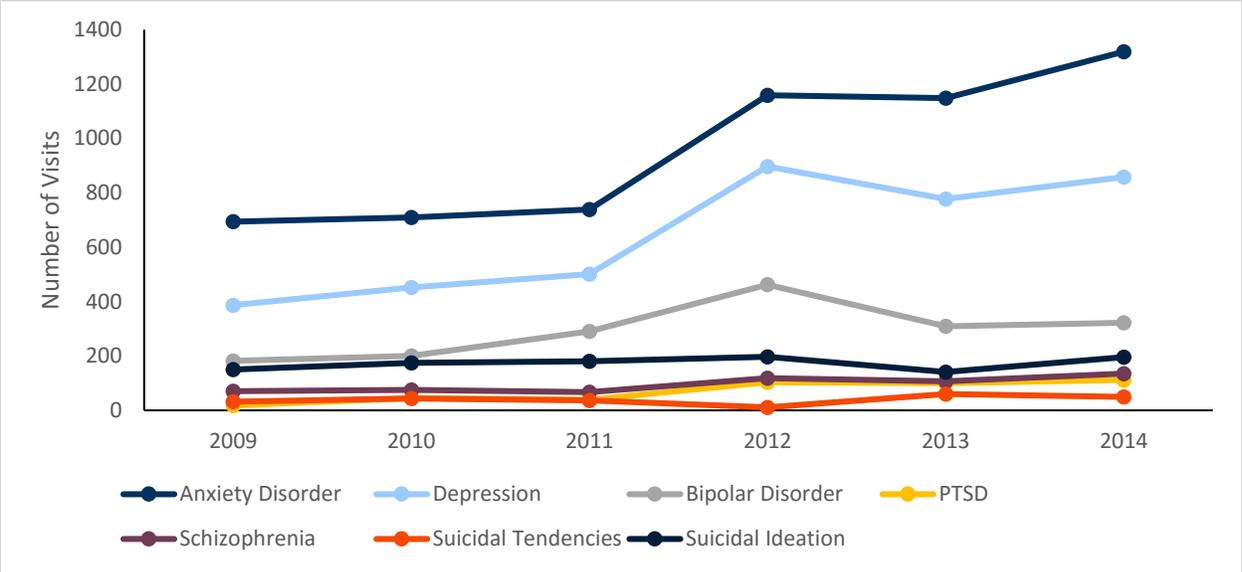
The following ICD-9 codes were used for analysis of alcohol-related admissions: 291-291.9, 303-303.93, 305.0-305.03, 535.3-535.31, 571-571.3, 980-980.9, 357.5, 425.5, 790.3, and E860-E860.9.

The following ICD-9 codes were used for analysis of substance-related admissions: 292-292.9, 304-304.93, 305.2-305.93, 965-965.99, and 967-970.99

There were a total of 17,600 visits related to mental health and substance use disorders among Carson City and Douglas County residents between 2009 and 2014 for the reasons listed above. Since an individual can have more than one diagnosis during a single ER visit, the following numbers reflect the number of times a diagnosis in each of these categories was given, and therefore the following numbers are not mutually exclusive. Diagnoses related to mental disorders occurred in 11,204 ER

visits, there were 4,925 ER visits related to alcohol- related issues, 4,074 ER visits with diagnoses for drug-related issues, and 549 ER visit with diagnoses codes related to suicide attempts.

Figure 6. Number of Visits per Year for Select Mental Disorders, Carson City and Douglas County, 2009-2014.



Anxiety is the most common mental disorder seen in the emergency rooms (ER) among Carson City and Douglas County residents, related to for 51.5% of the 11,204 visits in the categories listed in Figure 6. The number of anxiety-related ER visits increased 90% from 2009 to 2014. The largest percent increase was among patient visits for issues related to PTSD which increased 522% with 18 visits in 2009 to 112 in 2014. All visits for the selected mental disorders increased over the six year period.

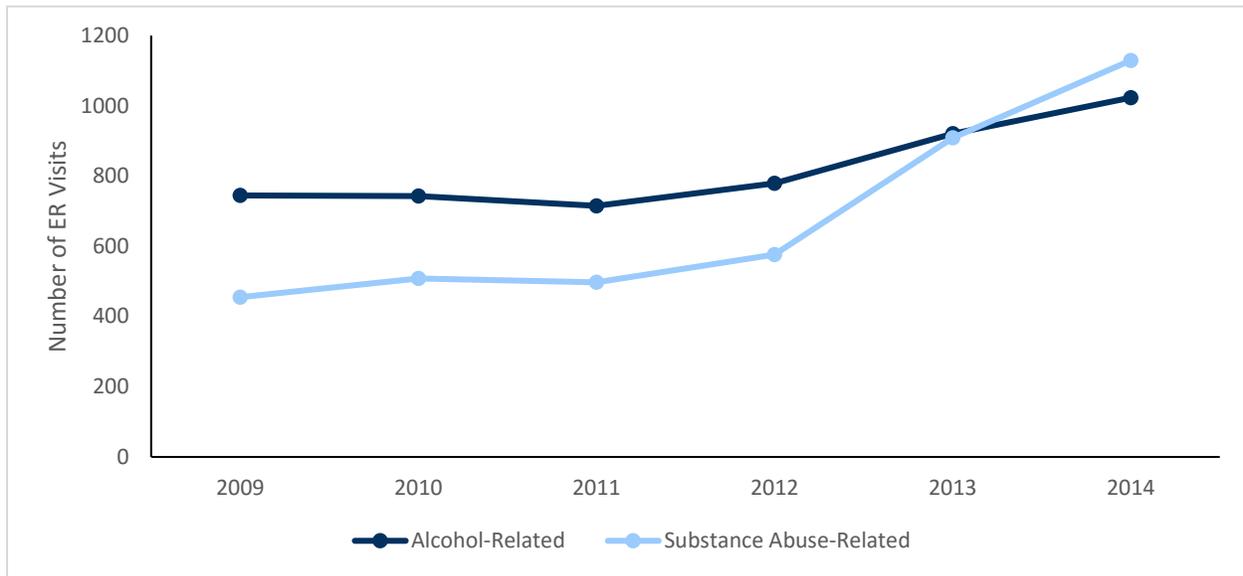
Table 3. Demographics of Carson City and Douglas County resident visits to the ER for select behavioral disorders 2009-2014.

Condition*	Female		Male		Unknown		Total
	N	Row %	N	Row %	N	Row %	
Anxiety	3,941	68.3%	1,827	31.7%	0	0.0%	5,768
Depression	2,708	69.9%	1,164	30.1%	0	0.0%	3,872
Bipolar	1236	70.0%	530	30.0%	0	0.0%	1,766
PTSD	245	58.8%	172	41.2%	0	0.0%	417
Schizophrenia	254	44.3%	320	55.7%	0	0.0%	574
Suicidal Tendencies	143	61.6%	89	38.4%	0	0.0%	232
Suicidal Ideation	565	54.4%	474	45.6%	0	0.0%	1039
Alcohol Related	1,968	40.0%	2,957	60.0%	0	0.0%	4,925
Substance Abuse Related	2,080	51.1%	1994	48.9%	0	0.0%	4,074
Suicide - Solid or Liquid	200	70.7%	83	29.3%	0	0.0%	283
Suicide - Gases in Domestic Use	1	25.0%	3	75.0%	0	0.0%	4
Suicide - Other Gases and Vapors	5	100.0%	0	0.0%	0	0.0%	5
Suicide - Hanging, Strangulation, & Suffocation	5	35.7%	9	64.3%	0	0.0%	14
Suicide - Cutting & Piercing Instrument	154	69.7%	67	30.3%	0	0.0%	221
Suicide - Firearms, Air Guns, & Explosives	0	0.0%	3	100.0%	0	0.0%	3
Suicide - Jumping from High Place	0	0.0%	2	100.0%	0	0.0%	2
Suicide - Other Unspecified Means	24	58.5%	17	41.5%	0	0.0%	41

*Categories are not mutually exclusive

Females made up the majority of Carson City and Douglas County residents who visited the ER for bipolar (70%), depression (70%), anxiety (68%), and PTSD (59%), while the majority who visited for schizophrenia were males (56%).

Figure 7. Trend of Carson City and Douglas County visits to ER for alcohol- and drug-related issues, 2009-2014.



Carson City and Douglas County ER visits increased for both alcohol-related and substance abuse-related issues from 2009 to 2014. Alcohol-related visits jumped from a low of 745 visits in 2009 to 1,023 visits in 2014, a 37% increase. Drug-related increased from 455 visits in 2009 to a high of 1,129 visits in 2014, a 148% increase.

Table 4. Demographics of Carson City and Douglas County resident visits to the ER for alcohol and drug-related disorders, 2009-2014.

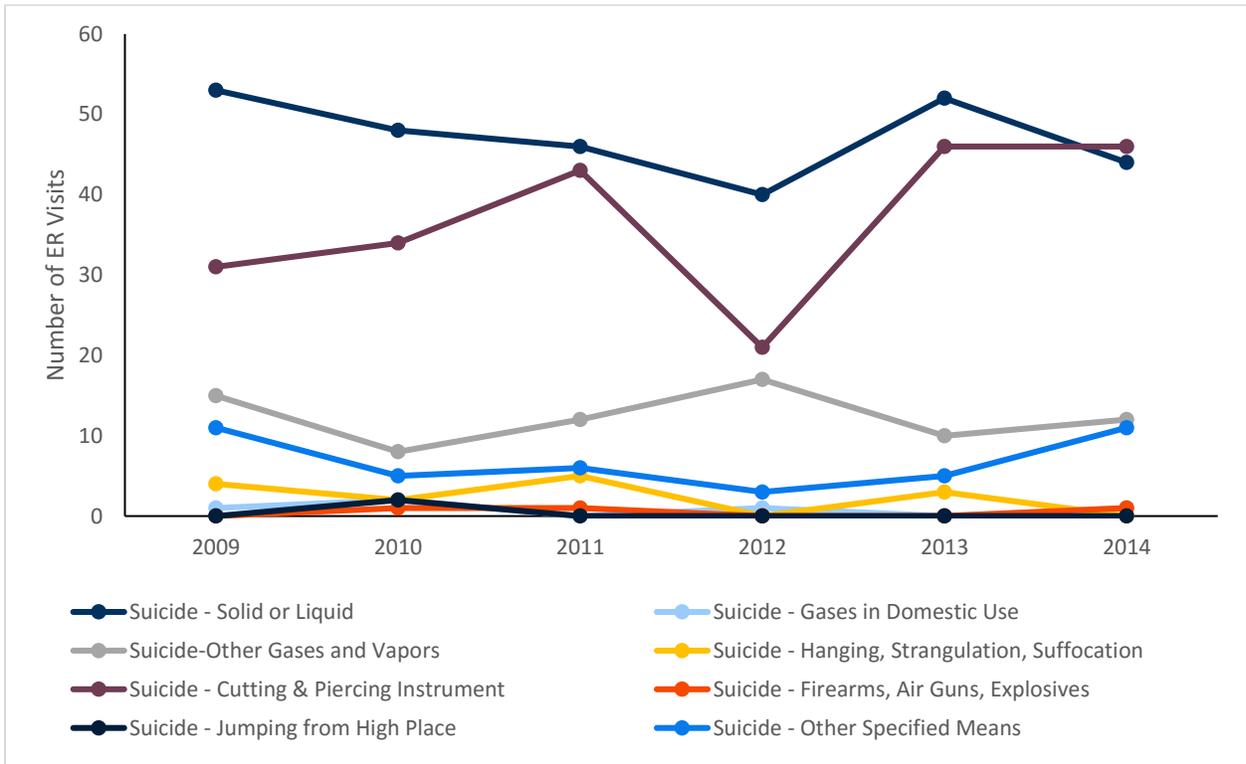
	Alcohol-Related		Drug- Related	
	N	Column %	N	Column %
Sex				
Female	1,968	40.0%	2,080	51.1%
Male	2,957	60.0%	1994	48.9%
Race				
White	3,966	80.5%	3,419	83.9%
Native American	237	4.8%	135	3.3%
Hispanic	284	5.8%	186	4.6%
Asian/Pacific	11	0.2%	13	0.3%
Black	62	1.3%	81	2.0%
Other	37	0.8%	31	0.8%
Unknown	328	6.7%	209	5.1%
Age				
0-14	33	0.7%	88	2.2%
15-24	546	11.1%	994	24.4%
25-34	748	15.2%	1031	25.3%
35-44	899	18.3%	713	17.5%
45-54	1422	28.9%	716	17.6%
55-64	808	16.4%	353	8.7%
65-74	305	6.2%	132	3.2%
75-84	136	2.8%	40	1.0%
85+	28	0.6%	7	0.2%

Males accounted for a greater percentage over females for alcohol-related ER visits (60%) and females accounted for a greater percentage of drug-related visits (51%) among Carson City and Douglas County residents between 2009 and 2014.

Whites made up the majority of alcohol and substance abuse-related ER visits, 81% and 84% of visits, respectively.

Alcohol-related ER visits was highest among the 45-54 (23%) and 35-44 (18%) year age groups. In general, ER visits declined progressively as ages increased. Approximately 25% of drug-related visits were among the age group 25-34 years.

Figure 8. Trend of Carson City and Douglas County visits to the ER for suicides, 2009-2014.

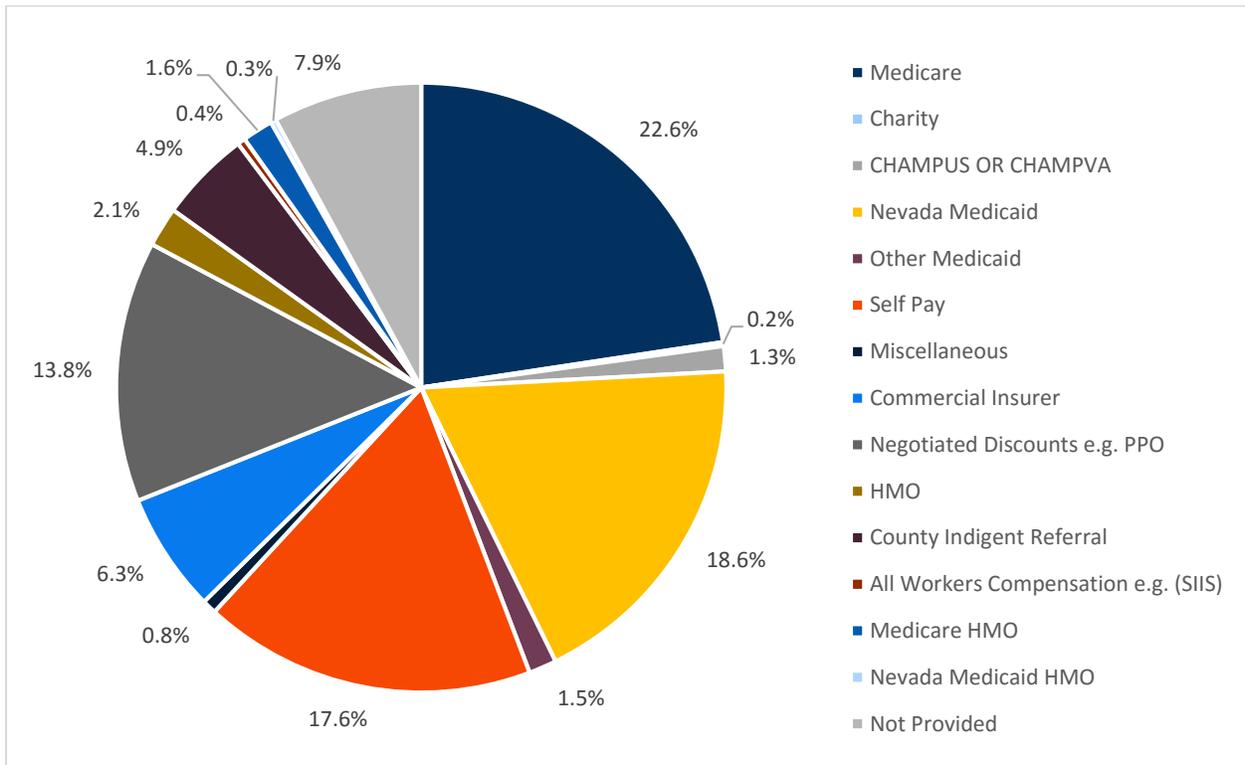


Overall number of visits to the ER for suicide among Carson City and Douglas County residents has remained the same from 2009-2014, from 98 visits in 2009 to 98 in 2014. The lowest number was in 2012 with 62 visits.

Suicide by solid or liquid was the top method of suicide and suicide attempts resulting in an ER visit in Carson City and Douglas Counties, accounting for 51% of all suicide-related ER visits from 2009-2014. In 2009, there were 53 ER visits resulting from suicide by solid or liquid and 44 visits in 2014, a decrease of 17%. The high was in 2009 with 53 visits. Suicide by solid or liquid includes all suicides where an individual entered liquid into his or her body, such as alcohols (ethanol, butanol, propanol, and methanol), fuel oil, petroleum, pesticides, herbicides, paints, dyes, and glues; or solids such as prescription pills and illegal drugs.

The second most common suicide ER visit was for those involving cutting and piercing instruments, accounting for 40% of all suicide-related visits from 2009-2014. The high was 46 visits in 2013 and 2014 and the low was 31 visits in 2009, a difference of 48%.

Figure 9. Percentages of Carson City and Douglas County resident visits to the ER for mental health and substance-related disorders by payment source, 2009-2014



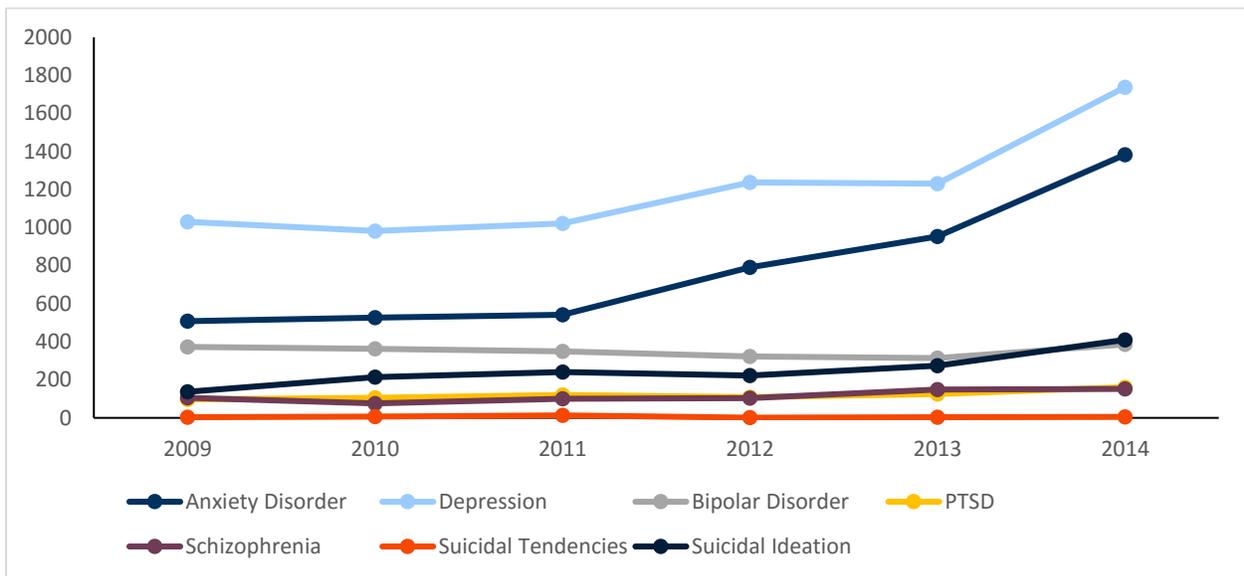
Medicare accounted for 24% of sources of payment for ER visits among Carson City and Douglas County residents with mental health and substance-related disorders. Medicaid accounted for 20% of payment types.

Hospital Inpatient Admissions

The data provided in this section are from the hospital inpatient billing data, collected by the University of Nevada, Las Vegas, Center for Health Information Analysis (CHIA). The data are based on admissions, not patients, therefore a single person may represent multiple admissions. The inpatient data are broken into three parts: mental conditions (anxiety, PTSD, suicidal ideations, etc.), suicide attempts by method (hanging, jumping, firearms, etc.) and alcohol- and drug-related admissions. The same ICD-9 codes were used for analysis as were used in hospital ER visit analysis.

There were a total of 15,273 inpatient admissions related to mental health and substance use disorders among Carson City and Douglas County residents between 2009 and 2014 for the reasons listed above. Since an individual can have more than one diagnosis during a single inpatient admission, the following numbers reflect the number of times a diagnosis was given and therefore the following numbers are not mutually exclusive. Diagnoses related to mental disorders occurred in 11,810 inpatient admissions, there were 4,547 inpatient admissions related to alcohol- related issues, 3,402 inpatient admissions for drug-related issues, and 401 inpatient admissions with diagnoses codes related to suicide attempts.

Figure 10. Trend of Carson City and Douglas County inpatient admissions for select mental health disorders, 2009-2014.



Depression was the most common mental health disorder for inpatient admissions for Carson City and Douglas County residents between 2009 and 2014, related to 61% of the admissions from the disorders listed above in Figure 10. Depression inpatient admissions has increased consistently over the six year period, from 1,030 admissions in 2009 to 1,737 in 2014, a 69% increase.

Anxiety was the second most common mental health disorder seen in inpatient admissions. Inpatient admissions has increased steadily over the six year period, from 508 admissions in 2009 to 1,383 in 2014, a 172% increase.

Bipolar disorder is the third most common mental health disorder seen in inpatient admissions among Carson City and Douglas County residents, related to 18% of admissions for the mental health conditions listed in Figure 10. There was a 4% increase from 2009 to 2014.

Inpatient admissions for suicidal ideation experienced the greatest percent change from 2009 to 2014 with a 199 % increase. The inpatient admission counts increased from 137 in 2009 to 410 in 2014.

Table 5. Demographics of Carson City and Douglas County resident inpatient admissions for top four mental health disorders, 2009-2014.

Inpatient	Depression		Anxiety		Bipolar		Suicidal Ideation	
	N	Column %	N	Column %	N	Column %	N	Column %
Sex								
Female	4,870	67.3%	3,298	70.2%	1,422	67.6%	929	62.1%
Male	2,369	32.7%	1,403	29.8%	683	32.4%	568	37.9%
Race								
White	6,025	83.2%	4,041	86.0%	1,645	78.1%	976	65.2%
Black	62	0.9%	33	0.7%	20	1.0%	16	1.1%
Native American	114	1.6%	61	1.3%	25	1.2%	22	1.5%
Asian/Pacific	32	0.4%	16	0.3%	3	0.1%	9	0.6%
Hispanic	132	1.8%	87	1.9%	21	1.0%	21	1.4%
Other	52	0.7%	26	0.6%	14	0.7%	25	1.7%
Unknown	822	11.4%	437	9.3%	377	17.9%	428	28.6%
Age								
0-14	135	1.9%	56	1.2%	71	3.4%	118	7.9%
15-24	450	6.2%	297	6.3%	284	13.5%	325	21.7%
25-34	418	5.8%	403	8.6%	294	14.0%	173	11.6%
35-44	646	8.9%	528	11.2%	344	16.3%	227	15.2%
45-54	1,132	15.6%	861	18.3%	564	26.8%	301	20.1%
55-64	1,449	20.0%	860	18.3%	286	13.6%	196	13.1%
65-74	1,368	18.9%	805	17.1%	190	9.0%	88	5.9%
75-84	1,054	14.6%	592	12.6%	54	2.6%	49	3.3%
85+	587	8.1%	299	6.4%	18	0.9%	20	1.3%

Females accounted for a greater percent of inpatient admissions over males for the top mental health disorders in Carson City and Douglas County, ranging from 62% of admissions for suicidal ideations to 70% of anxiety admissions.

A majority of inpatient admissions are white, such as with depression admissions (83%) and anxiety admissions (86%). There is a relatively large portion of “unknown” races for all selected mental health disorders, especially for admissions for suicidal ideation where unknown accounts for 29% of all admissions.

The two largest age groups for anxiety and depression inpatient admissions are those aged 45-74 years. The dominant age groups for bipolar inpatient admissions are those aged 45-54 years. The largest age group for suicidal ideation are those aged 15-24 years.

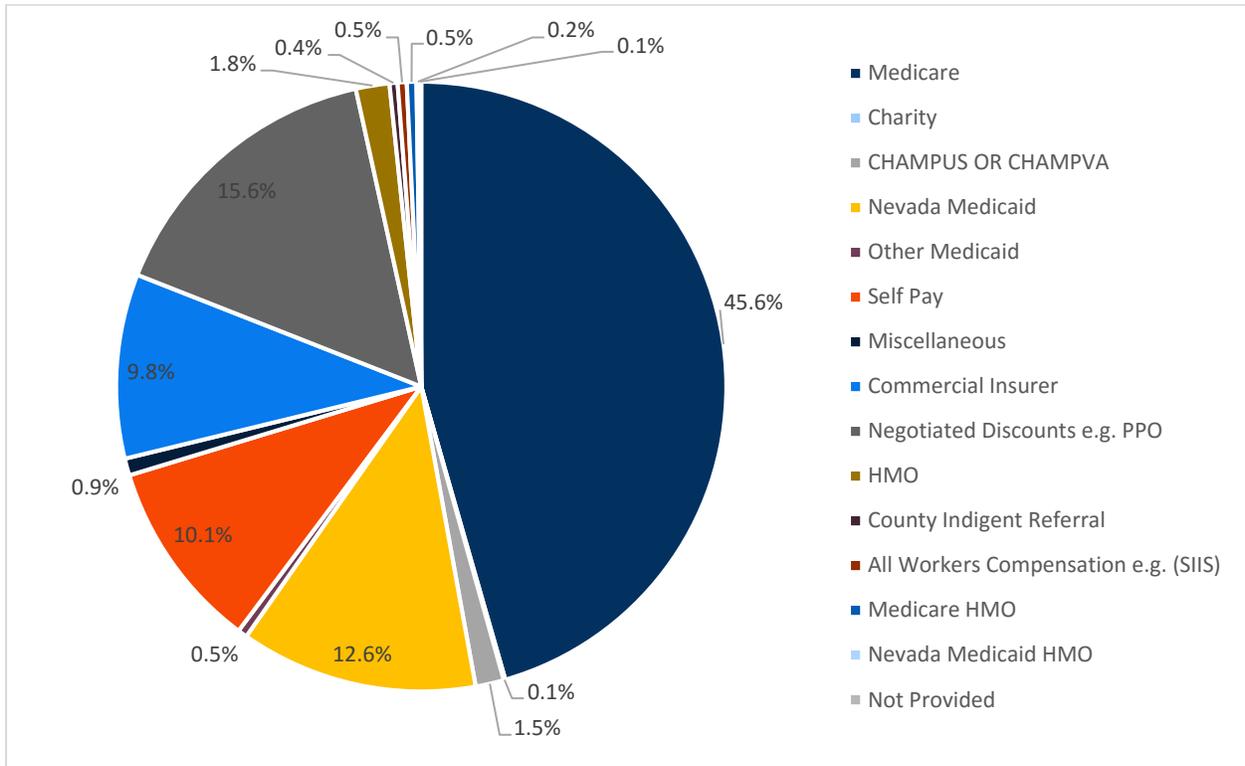
Table 6. Demographics of Carson City and Douglas County resident inpatient admissions by suicide attempts, 2009-2014.

Inpatient	Solid or Liquid		Cutting and Piercing Instrument		Firearms, Air Guns and Explosives	
	N	Column %	N	Column %	N	Column %
Sex						
Female	232	70.9%	21	52.5%	2	18.2%
Male	95	29.1%	19	47.5%	9	81.8%
Race						
White	276	84.4%	34	85.0%	7	63.6%
Black	3	0.9%	1	2.5%	0	0.0%
Native American	8	2.4%	0	0.0%	2	18.2%
Asian/Pacific	0	0.0%	0	0.0%	0	0.0%
Hispanic	12	3.7%	3	7.5%	0	0.0%
Other	1	0.3%	0	0.0%	0	0.0%
Unknown	27	8.3%	2	5.0%	2	18.2%
Age						
0-14	5	1.5%	0	0.0%	0	0.0%
15-24	58	17.7%	10	25.0%	0	0.0%
25-34	44	13.5%	7	17.5%	0	0.0%
35-44	54	16.5%	5	12.5%	3	27.3%
45-54	86	26.3%	6	15.0%	4	36.4%
55-64	46	14.1%	7	17.5%	0	0.0%
65-74	23	7.0%	4	10.0%	2	18.2%
75-84	8	2.4%	1	2.5%	2	18.2%
85+	3	0.9%	0	0.0%	0	0.0%

Females led in suicide attempts by solid or liquid (71%) and cutting and piercing instrument (53%) while males made up 82% of admission for suicide attempts by firearms, air guns and explosives. Whites represent 84% of suicide inpatient admissions by solid or liquid, and about 64% of suicide by firearms, air guns and explosives.

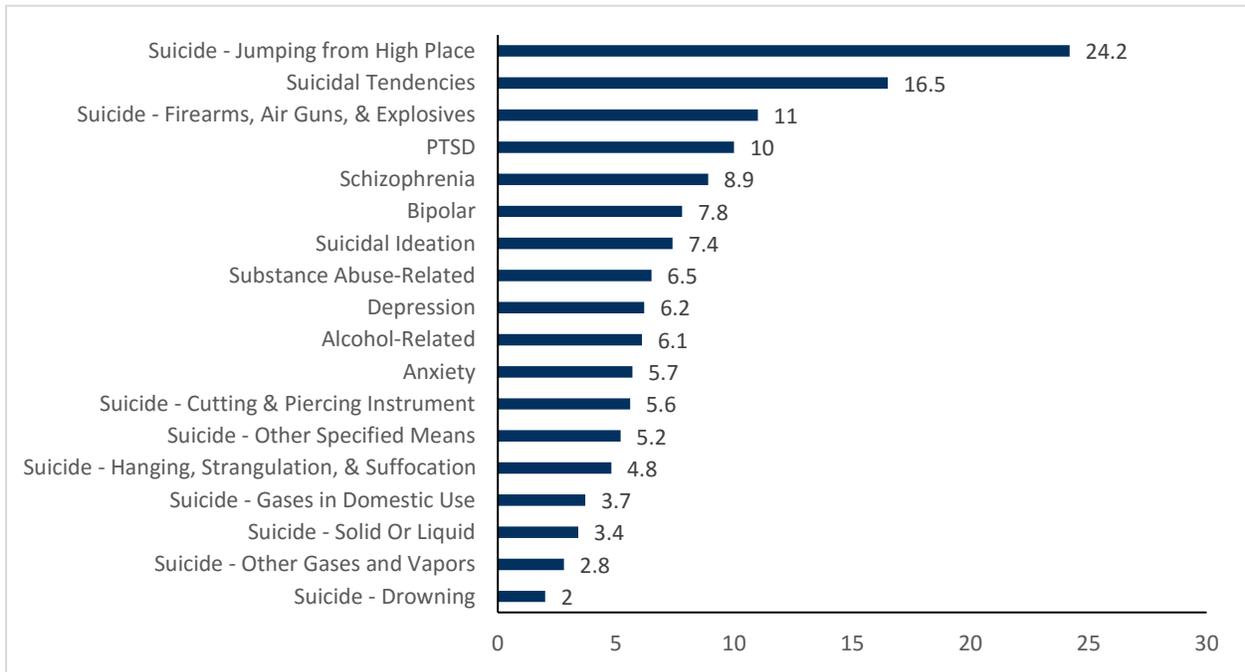
The largest age group representing suicide-related inpatient admissions by solid or liquid is 45 to 54 (26%). The age group representing the most admissions due to suicide attempts by cutting and piercing instrument was also the 15-24 age group (25%).

Figure 11. Percentages of Carson City and Douglas County resident inpatient admissions for mental health and substance-related disorders by payment type, 2010-2014



The most common payment source of mental health and substance-related inpatient admissions for Carson City and Douglas County residents was Medicare (46%). Negotiated Discounts (PPO) accounted for 16% and Medicaid accounted for 13%.

Figure 12. Average length of stay for Carson City and Douglas County resident inpatient admissions for mental health and substance-related disorders, 2009-2014.



Note: Since an individual can have more than one of the above diagnoses during an inpatient admission, a single hospitalization may be included in multiple categories, and would contribute to the average length of stay in each of these categories.

From 2009 to 2014, inpatient admissions for suicide attempts by jumping from a high place had the longest average length of stay at 24 days, but was not included in the previous analysis due to small counts. Suicidal tendencies had an average length of stay of approximately 17 days. Inpatient admissions for suicide by firearms, air guns, and explosive had an average stay of about 11 days, PTSD (10 days), schizophrenia (9 days), and bipolar disorder (8 days).

Substance Abuse Treatment Facilities

The data in this section is reflective of services received by Carson City and Douglas County residents at treatment facilities funded by the DPBH's Substance Abuse Treatment and Prevention Agency (SAPTA). This is not a comprehensive accounting of all Carson City and Douglas County residents who receive substance use treatment. The data are based on admissions, not patients, therefore a single person may represent multiple admissions.

Table 7. Top 5 substances by admissions to Nevada substance abuse treatment facilities, Carson City and Douglas County residents, 2014.

Carson City (2014 Only)		
Rank	Substance	Percent
1	Amphetamines/Methamphetamines	32.9%
2	Alcohol	28.0%
3	Heroin	18.8%
4	Marijuana/Hashish	12.8%
5	Other Opiates/Synthetic Opiates	4.7%

Douglas County (2014 Only)		
Rank	Substance	Percent
1	Alcohol	45.6%
2	Amphetamines/Methamphetamines	23.0%
3	Heroin	12.0%
4	Marijuana/Hashish	9.2%
5	Other Opiates/Synthetic Opiates	6.0%

Of the Carson City residents who received substance abuse treatment services from a SAPTA provider in 2014, amphetamines/methamphetamines was the most common substance abused (33%), followed closely by alcohol (28%), heroin (19%), and marijuana/hashish and other opiates (13% and 5% respectively). It is highly important to ensure that appropriate detoxification services are provided to persons who are under the influence of a substance. Many of the substances will cause withdrawal that can range from anxiety, hallucinations, seizures or even death.

For Douglas County residents in 2014, alcohol was also the most common substance abused (46%), followed by amphetamines/methamphetamines (23%) and heroin (12%). Marijuana/hashish and other opiates/synthetic opiates were abused by 9% and 6%, respectively.

Figure 13. Trends of Carson City and Douglas County residents in Nevada State funded substance abuse treatment facilities by select substances, 2010-2014.

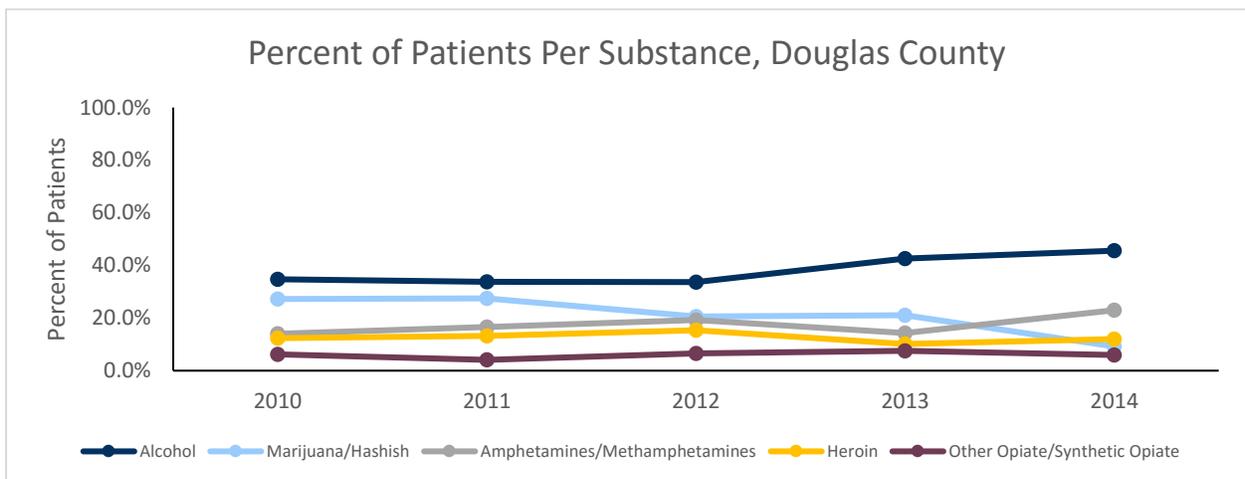
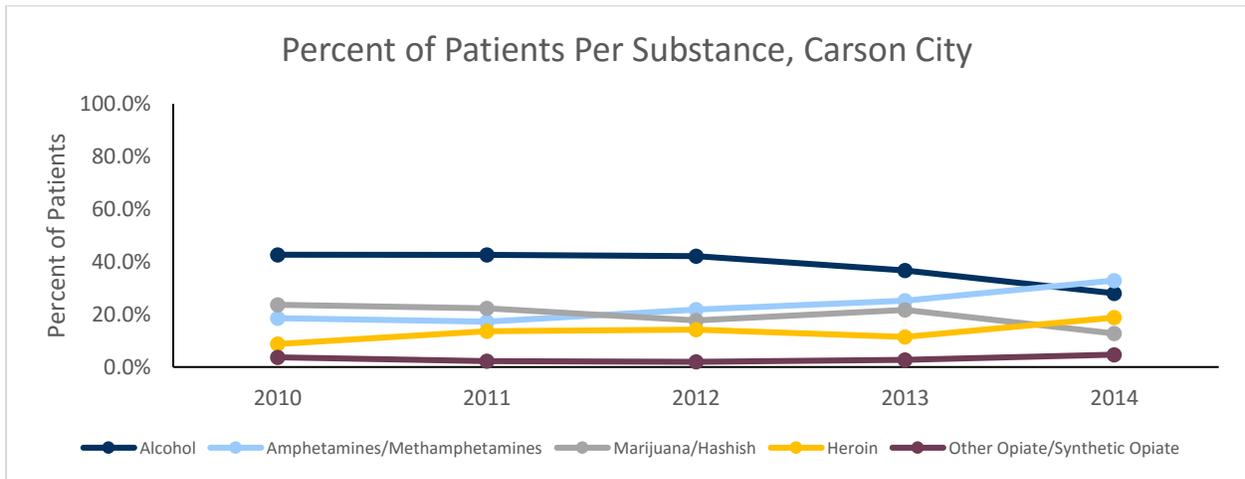


Figure 13 shows trend lines for the top five most common substances, and the percentages of Carson City and Douglas patients admitted into a treatment facility for that substance. Alcohol is the dominant substance seen in treatment facilities in Carson City with a low of 28% of patients seeking treatment at a SAPTA-funded treatment facility in 2014 and high of 43% of patients in 2010. For Douglas County treatment for the dependence of alcohol was highest in 2014 with 46%, and lowest in 2011 and 2012 with 34%.

The percentage of patients seeking treatment for Meth-/Amphetamines abuse in Carson City peaked in 2014 (33%) and 2011 for Douglas County (28%).

Percentages of patients seeking treatment for Marijuana peaked for Carson City in 2010 (24%) and in 2011 for Douglas County (28%).

Table 8. Demographics of Carson City and Douglas County residents in Nevada substance abuse treatment facilities, 2010-2014.

	N	Column %
Sex		
Female	2,197	38.2%
Male	3,554	61.8%
Age		
0-14	122	2.1%
15-24	2442	42.5%
25-34	1356	23.6%
35-44	818	14.2%
45-54	729	12.7%
55-64	253	4.4%
65+	31	0.5%
Unknown	0	0.0%
Race/Ethnicity		
White non-Hispanic	4,178	72.6%
Black non-Hispanic	93	1.6%
Hispanic	885	15.4%
American Indian/Native Am/Alaska Native non-Hispanic	170	3.0%
Asian, Hawaiian, PI non-Hispanic	46	0.8%
Other/Unknown	379	6.6%
Tobacco Use		
Yes	3,395	59.0%
No	1786	31.1%
Unknown	570	9.9%

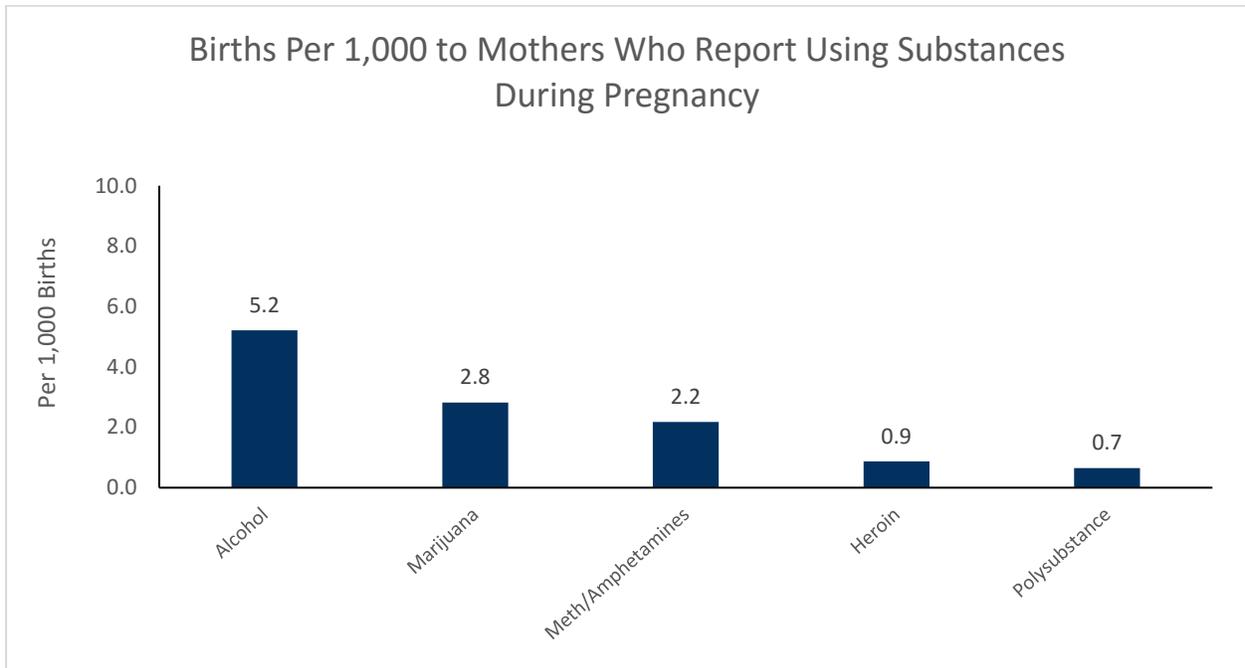
There were a total of 5,751 admissions for Carson City and Douglas County residents to Nevada state funded substance abuse treatment facilities from 2010-2014. This number is exclusive to SAPTA- funded facilities and does not include privately funded facilities. By age group, the most common groups that received treatment were between 15 to 34 years (66%). More than half were male patients (62%). For race/ethnicity, white non-Hispanics made up the largest proportion of admissions (73%). Tobacco use was indicated on 59% of admissions.

Since this data is exclusive to only SAPTA- funded providers, the data may not reflect statewide trends.

Prenatal Substance Use

The data in this section is reflective of self-reported information provided by the mother on the birth record.

Figure 14. Prenatal substance abuse birth rate (self-reported), Carson City and Douglas County, 2010-2014.

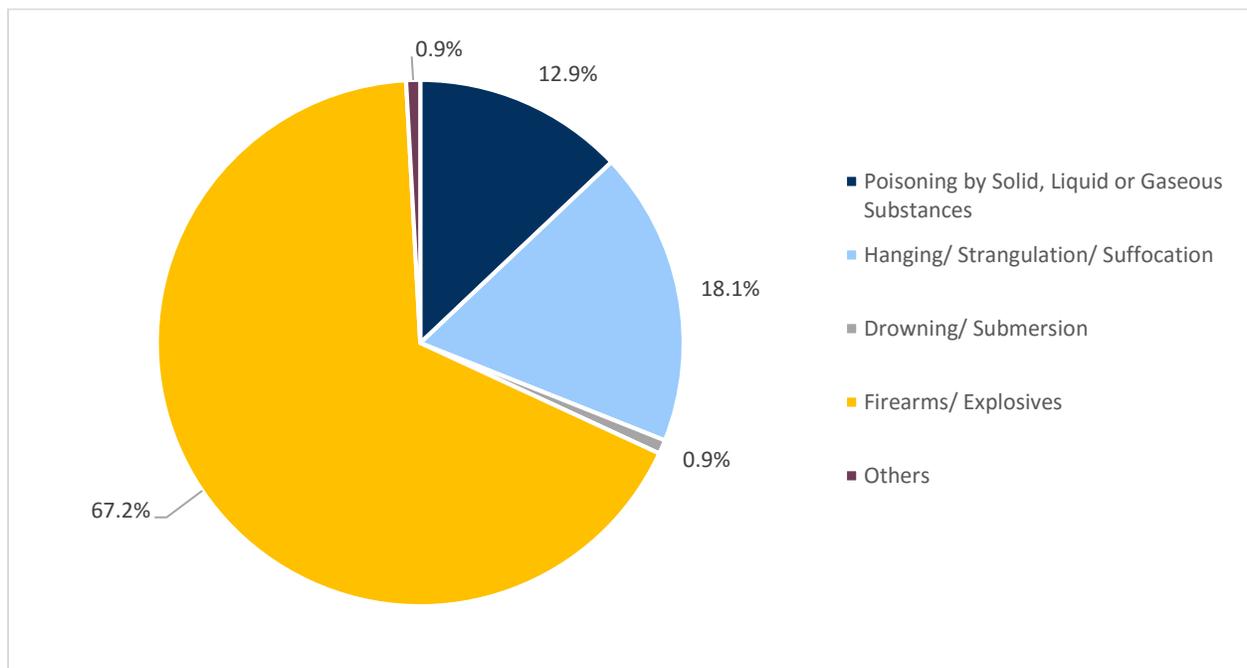


Of the Carson City and Douglas County mothers who gave birth between 2010 and 2014 that self-reported using a substance while pregnant, alcohol has the highest prenatal substance abuse birth rate at 5.2 per 1,000 births. A rate of 2.8 per 1,000 self-reported using marijuana, 2.2 per 1,000 reported using meth/amphetamines, and 0.9 per 1,000 births reported heroin. These numbers are grossly underestimated because data is self-reported by the mothers, and they may be reluctant to be forthcoming on the birth record for many reasons.

Mental and Substance Abuse Deaths

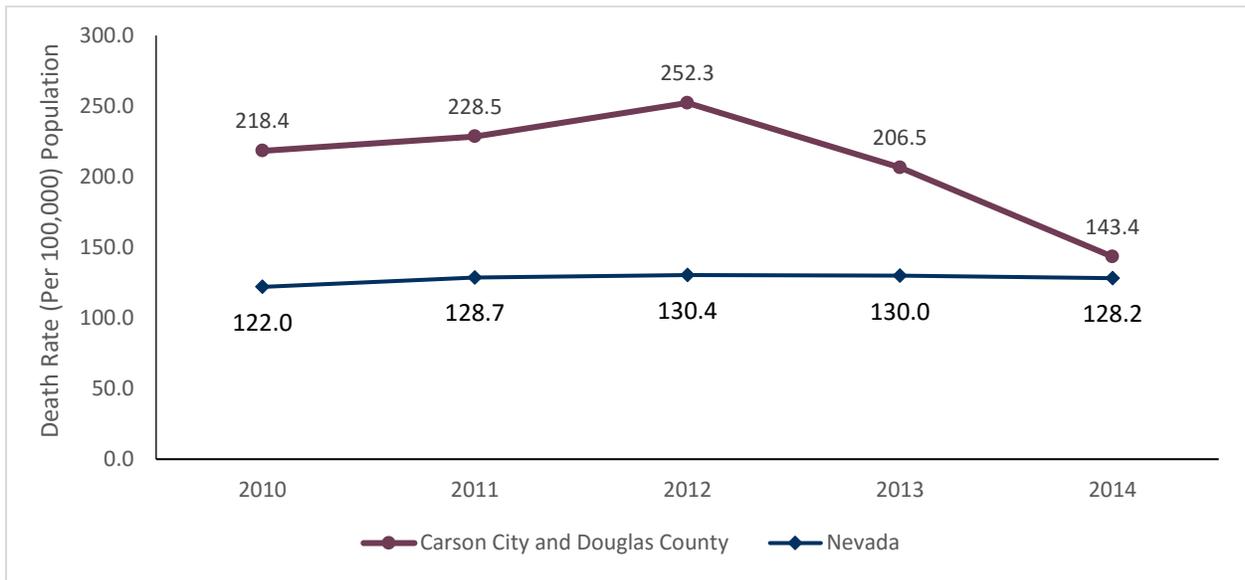
The data in this section are from the electronic death registry at DPBH. The Substance Abuse and Mental Health Service Administration (SAMHSA) reports suicide and mental illness are highly correlated with as many as 90% of those persons who die of suicide completion having a diagnosable mental illness.

Figure 15. Immediate cause of death by suicide, Carson City and Douglas County, 2010-2014.



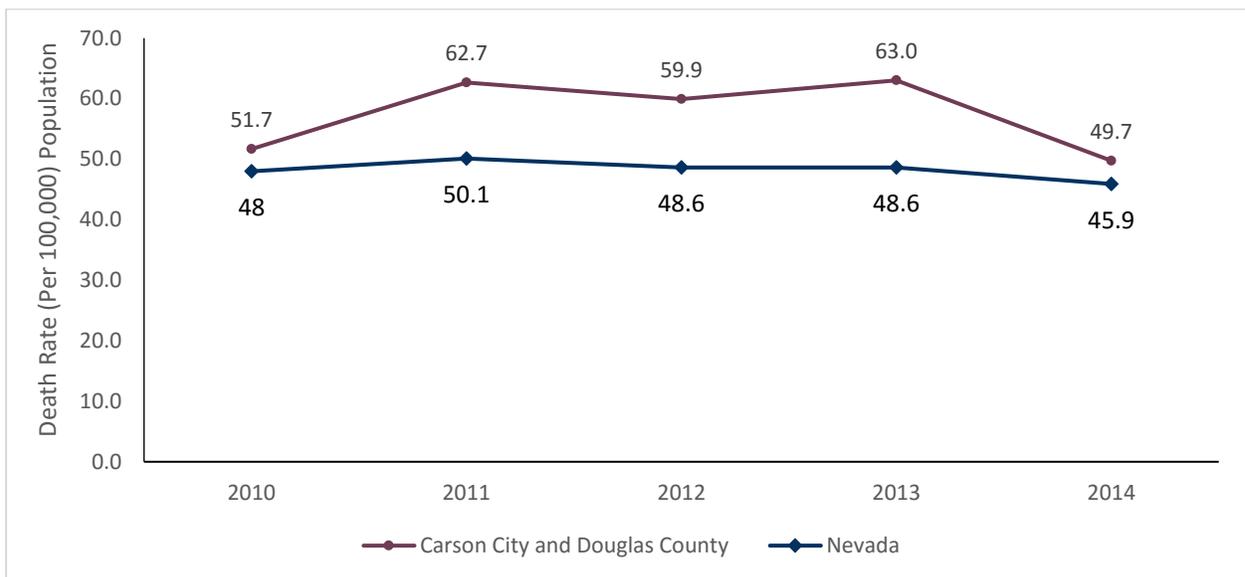
Among Carson City and Douglas County residents who died of a suicide between 2010 and 2014, the most common method of suicide was firearms/explosives (67%), followed by hanging/strangulation/suffocation (18%), poisoning solid, liquid or gaseous substance (13%), and drowning and other forms of suicide (1% each).

Figure 16. Trend of Mental and Behavioral Disorders Deaths, Carson City and Douglas County, 2010-2014.



Carson City and Douglas County’s death rate for mental and behavioral related deaths in 2010 was 218.4 per 100,000. This means that for every 100,000 deaths, around 218 deaths are primarily related to mental and behavioral health disorders. There was an overall percent decrease of 34% between 2010 and 2014 when the rate dropped to 143.4. Overall, Carson City and Douglas County mental and behavioral related death rates are higher than the Nevada rate.

Figure 17. Trend of substance-related deaths, Carson City and Douglas County, 2010-2014.



There were 296 substance-related deaths in Carson City and Douglas County between 2010 and 2014. Between 2010 and 2014 the rate decreased from 51.7 deaths per 100,000 to 49.7 deaths per 100,000. Carson City and Douglas County’s combined substance-related death rates are higher than Nevada’s rate every year between 2010 and 2014.

Table 9. Demographics of Substance Related Deaths, Carson City and Douglas County, 2010-2014.

	N	Column %
Sex		
Female	118	39.9%
Male	178	60.1%
Race		
White	261	88.2%
Black	2	0.7%
Native American	9	3.0%
Hispanic	13	4.4%
Asian/Pacific	1	0.3%
Other	1	0.3%
Unknown	9	3.0%
Age		
<1	0	0.0%
1-4	0	0.0%
5-14	0	0.0%
15-24	9	3.0%
25-34	23	7.8%
35-44	25	8.4%
45-54	91	30.7%
55-64	84	28.4%
65-74	34	11.5%
75-84	26	8.8%
85+	4	1.4%

In Carson City and Douglas County, the most common demographic groups to die of a substance-related death included: males (60%), Whites (88%), and those aged 45 to 54 years of age (31%).

Syndromic Surveillance

The data contained in this section came from DPBH’s BioSense, a syndromic surveillance system that tracks chief complaints in emergency departments, and the National Emergency Medical Services Information System (NEMSIS).

Table 10. BioSense: Mental health and substance-related chief complaints at select Carson City facilities, patient demographics, January 1, 2011-November 6, 2015.

	N	Percent
Sex		
Female	2,509	56.2%
Male	1,957	43.8%
Unknown	0	0.0%
Age		
Under 13	66	1.5%
14-19	229	5.1%
20-29	701	15.7%
30-39	746	16.7%
40-49	808	18.1%
50-59	930	20.8%
60+	986	22.1%
Unknown	0	0.0%

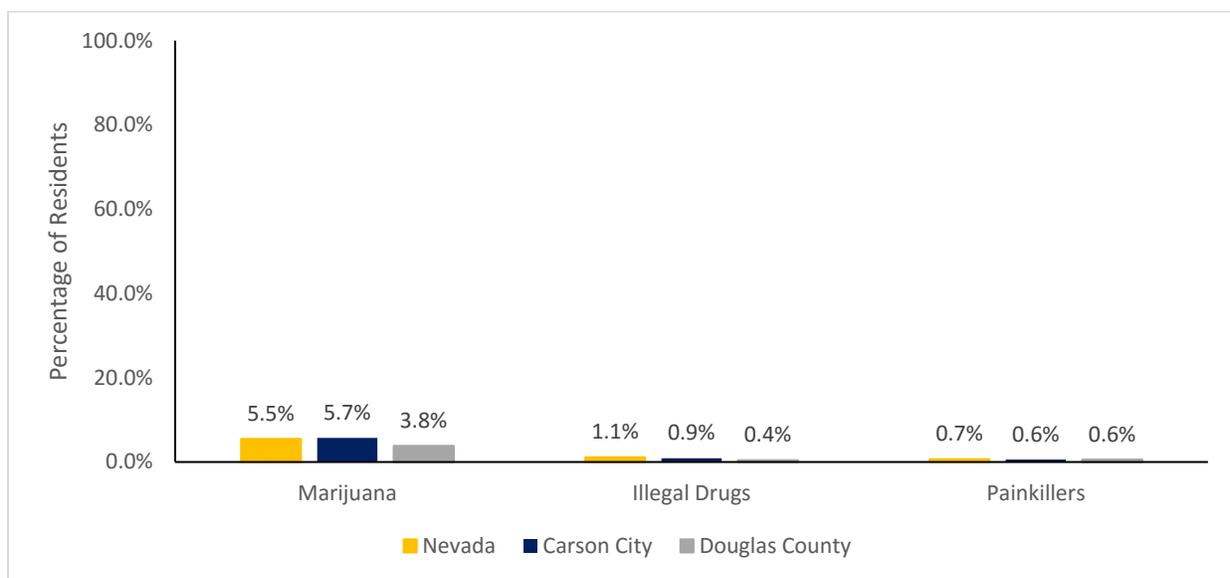
*Data from Douglas County is unavailable

There were a greater number of females (56%) than male (44%) patients among mental health and substance-related chief complaints in Carson City. The largest age group among patients were those aged 60+ (22%).

Behavioral Risk Factor Surveillance System

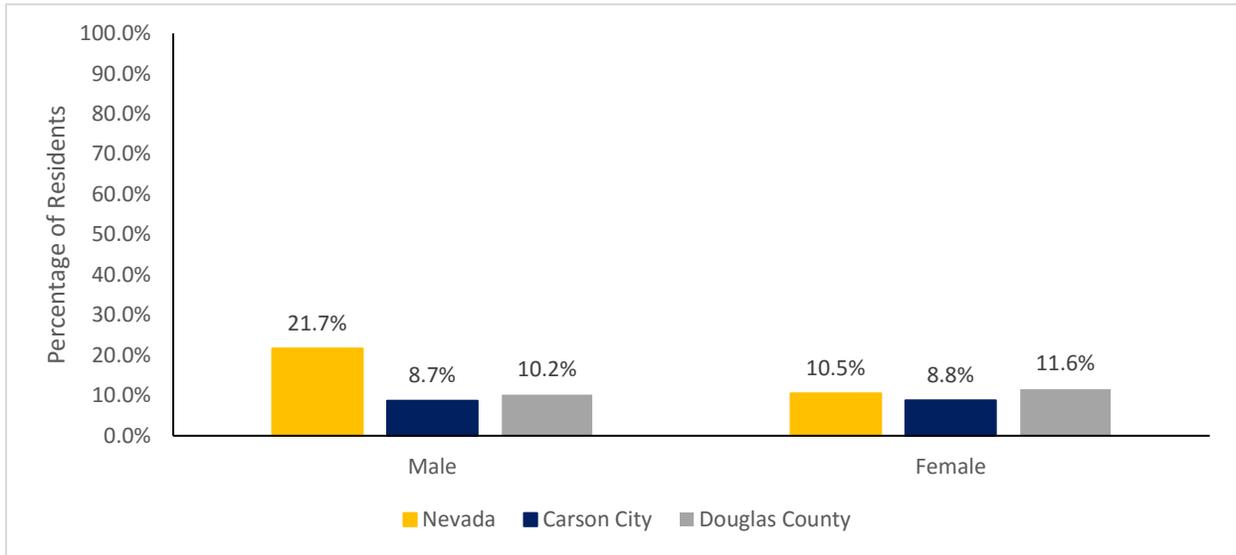
Data in this section are from Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is the nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. BRFSS collects data for adults aged 18 years and older. It allows for representative data to be analyzed at the county-level for many indicators.

Figure 18. 2011-2014 BRFSS: Percentage of adult Carson City and Douglas County residents who used illegal substances, or painkillers 'to get high,' in the last 30 days (aggregate 2011-2014 data).



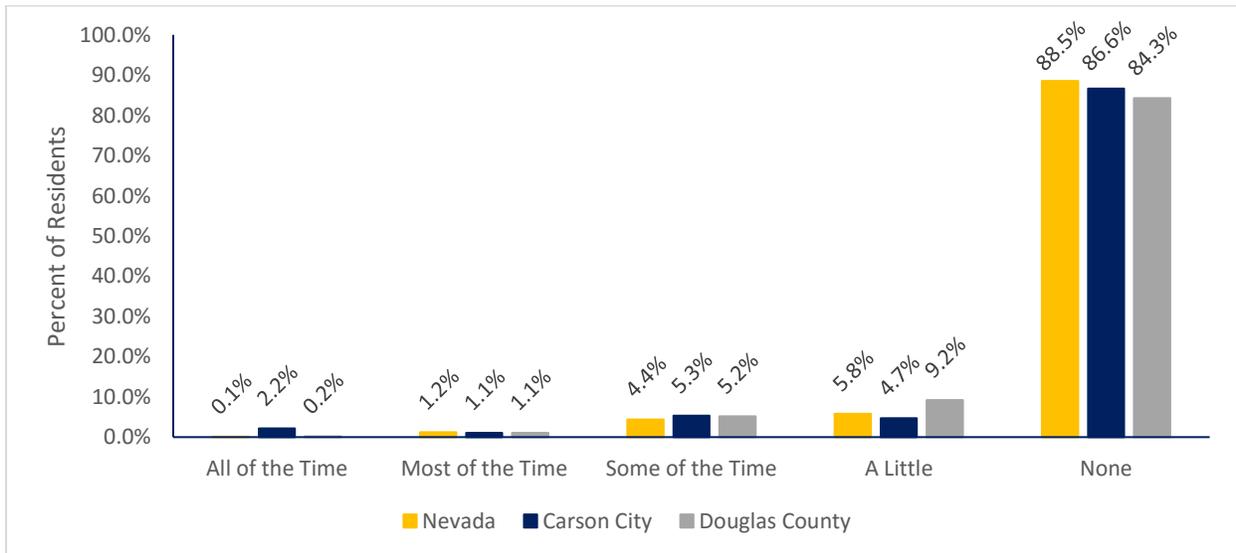
Although 5.5% of adults in Nevada reported using marijuana illegally in the last 30 days, 5.7% of adults in Carson City and 3.8% of adults in Douglas County reported doing the same.

Figure 19. 2011-2014 BRFSS: Percentages of adult Carson City and Douglas County residents who are considered “heavy drinkers” - more than one drink (females) or two drinks (males) per day.



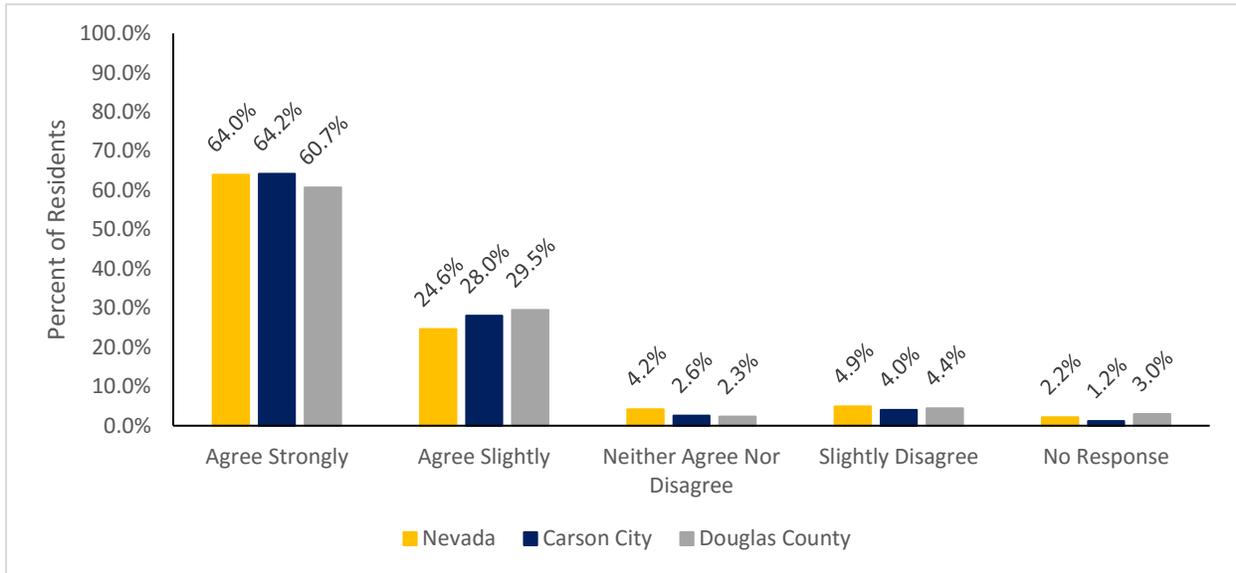
Nevada adult males and females more often reported being heavy drinkers compared to males and females in both Carson City and Douglas County. Heavy drinking consists of males consuming more than two alcoholic beverages a day and females consuming more than one alcoholic beverage a day.

Figure 20. Percentages of how often adult Carson City and Douglas County residents have felt depressed at least one day in the past 30 days, 2012-2014.



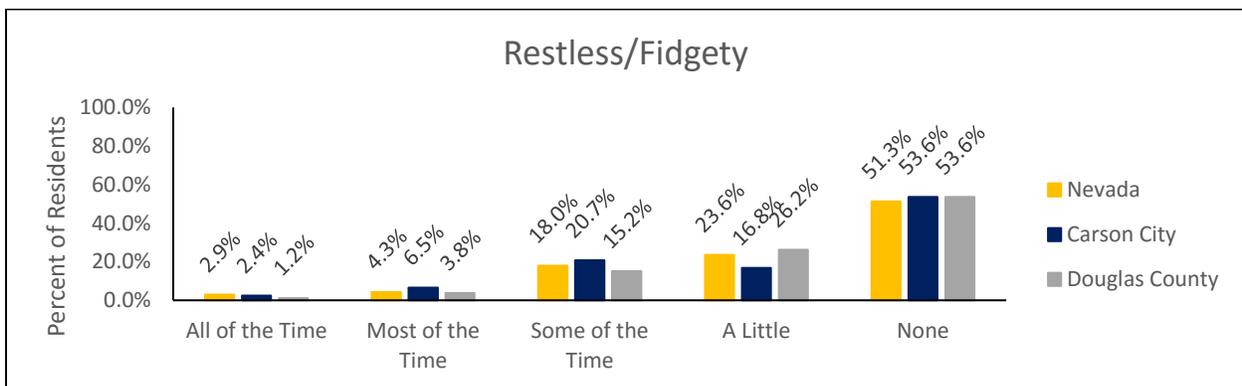
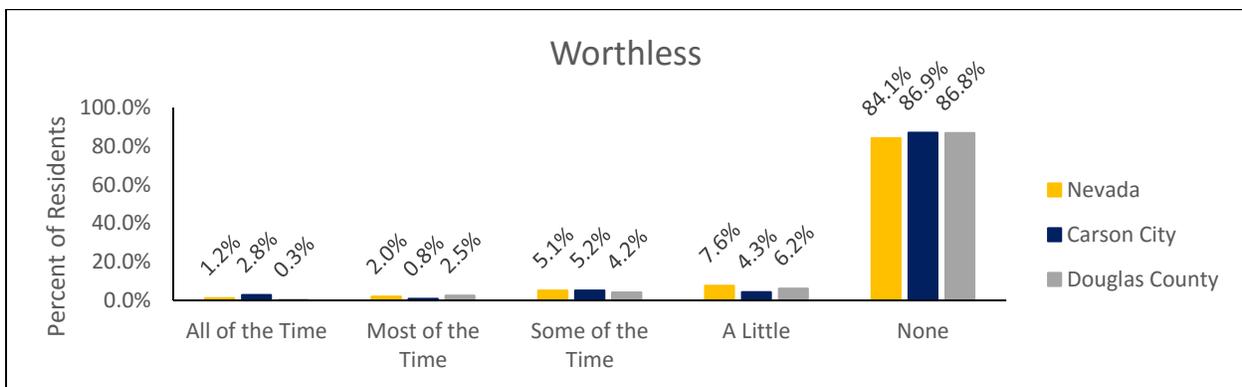
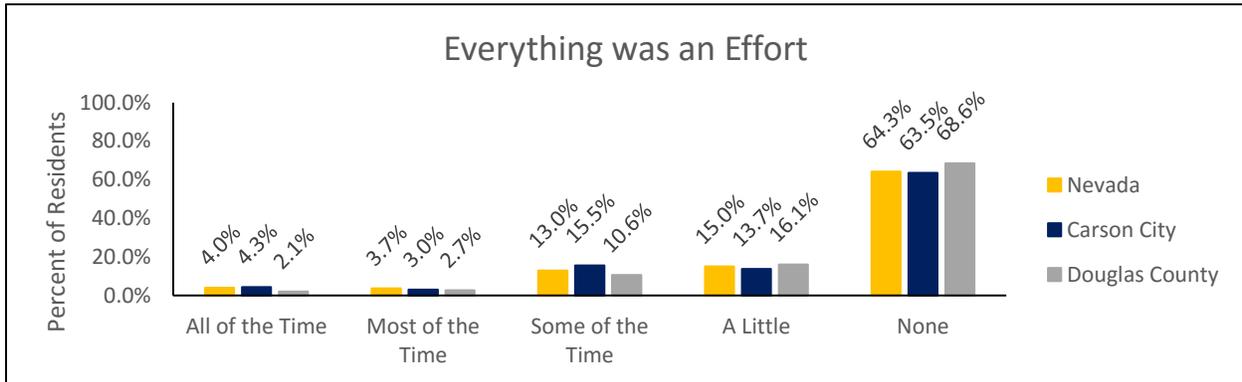
From 2012 to 2014, adult residents in Carson City, Douglas County, and Nevada almost equally reported not experiencing depression at least one day in the last 30 days (84%-89%). The rest of the residents reported experiencing a little depression (5%-9%), experiencing depression some of the time (4%-5%), most of the time (1%), and all of the time (0%-2%).

Figure 21. 2012-2014 BRFSS: Percentages of adult Carson City and Douglas County residents who agree that with treatment, people with a mental illness can live normal lives.



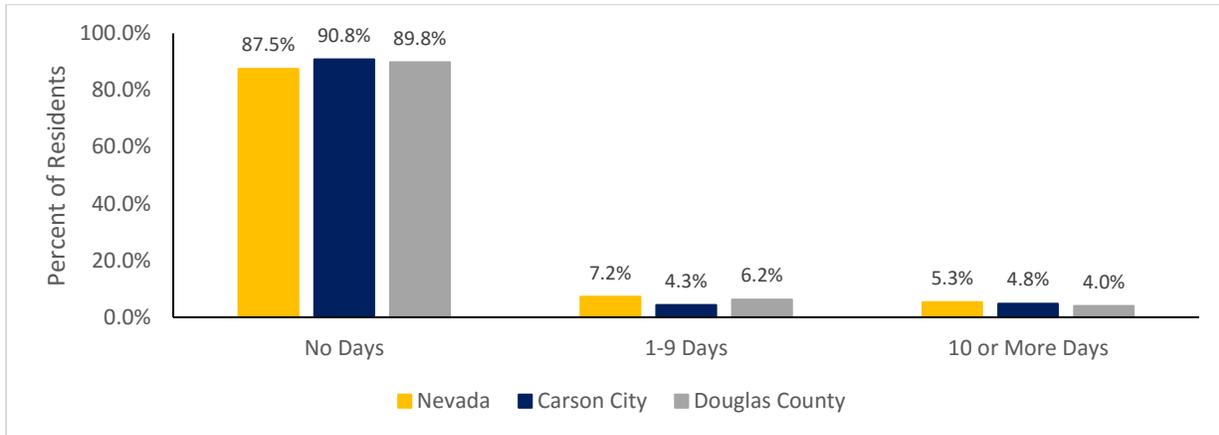
From 2012 to 2014, BRFSS data was collected on perception related to the efficacy of mental health treatment. In Carson City and Douglas County, approximately 90%-92% of adults agreed in some capacity that those with mental disorders can live a normal life with treatment. Approximately 5%-7% of adults disagree that those with mental disorders could live a normal life.

Figure 22. 2012-2014 BRFSS: Percentages of adult Carson City and Douglas County residents who have experienced the following mental health concerns in the past 30 days.



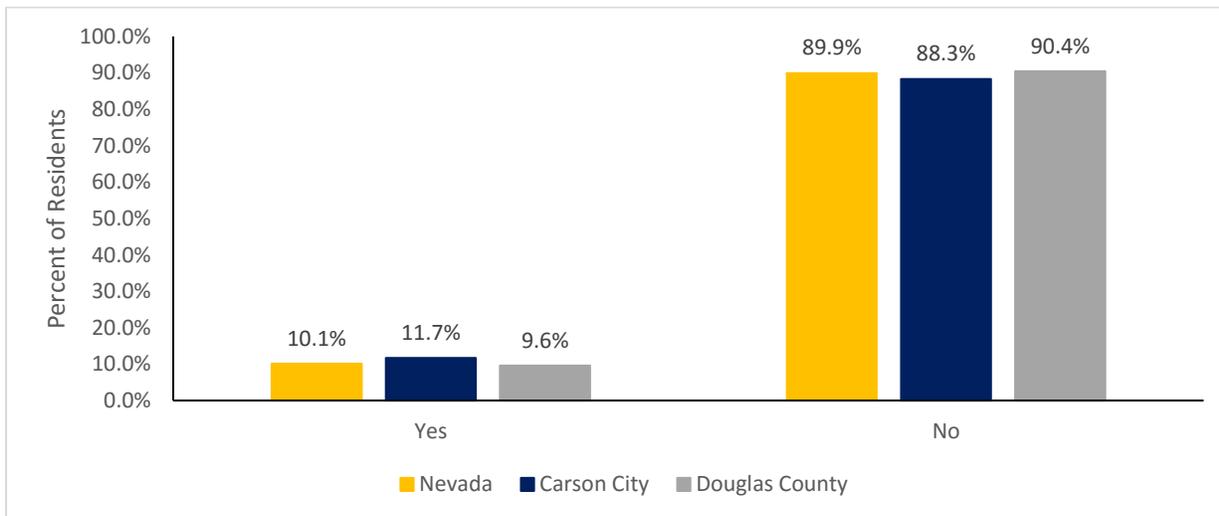
There are a number of BRFSS questions that collect data on feelings/emotions. From 2012 to 2014, 31%-36% of adults in Carson City and Douglas County reported feeling everything they did took effort, 13% felt worthless, and 46% felt restless and or fidgety.

Figure 23. 2012-2014 BRFSS: Percentages of adult Carson City and Douglas County residents who experienced that a mental health condition or emotional problem kept them from doing their work or other usual activities, by number of days.



Carson City and Douglas County residents were asked how many days, if any, did a mental health condition or emotional problem kept them from doing their work duties or other usual activities. Approximately 90%-91% reported missing no days of work or activities, 4%-6% experiencing missing one to nine days, and 4%-5% missed 10 or more days.

Figure 24. 2012-2014 BRFSS: Percentages of adult Carson City and Douglas County residents who are taking medication or receiving treatment for any type of mental health condition or emotional problem.

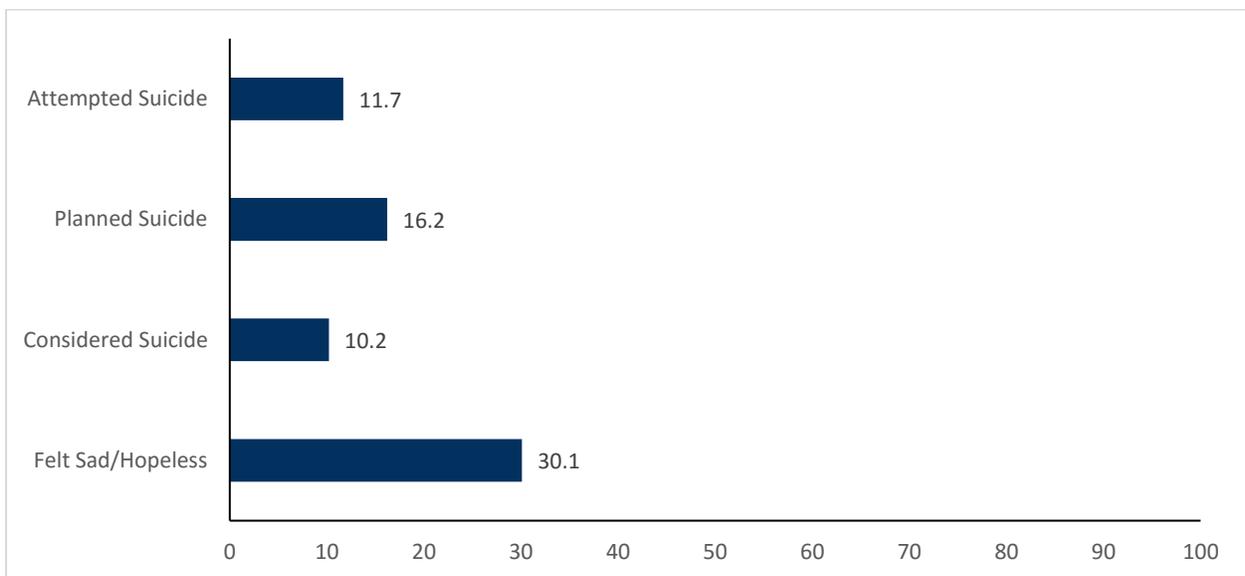


Carson City and Douglas County residents were asked if they were taking medication or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem. Approximately 88%-90% reported that they were not.

Youth Risk Behavior Surveillance System

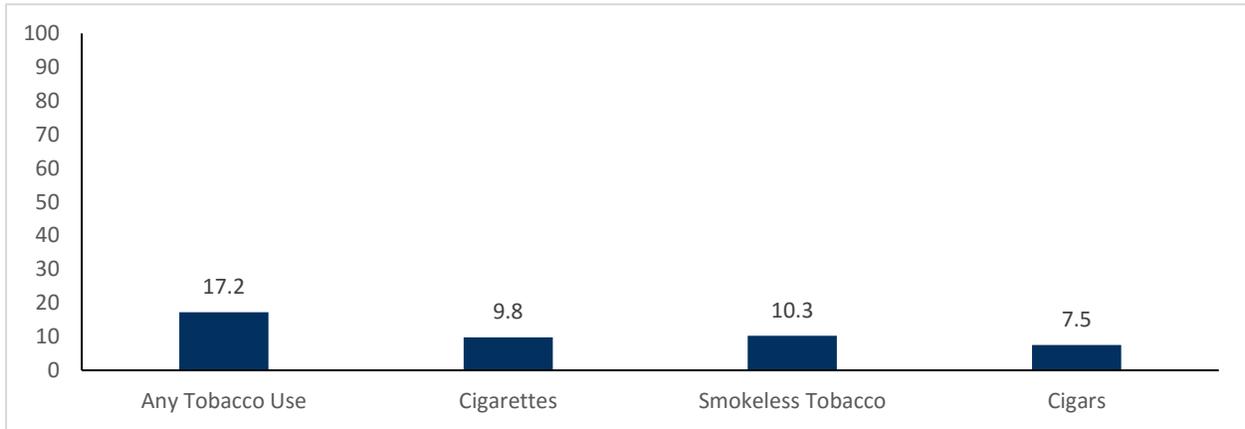
The data in this section is provided through a survey from the Youth Risk Behavioral Surveillance System (YRBSS) at a regional level for Carson City and Douglas County high school students. YRBSS is a national surveillance system that was established in 1991 by the Centers for Disease Control (CDC) and Prevention to monitor the prevalence of health risk behaviors among youth. It is an anonymous and voluntary survey of students in grades 9 through 12.

Figure 25. Percentages of high school students' mental health status (last 12 months), Carson City and Douglas County, 2015.



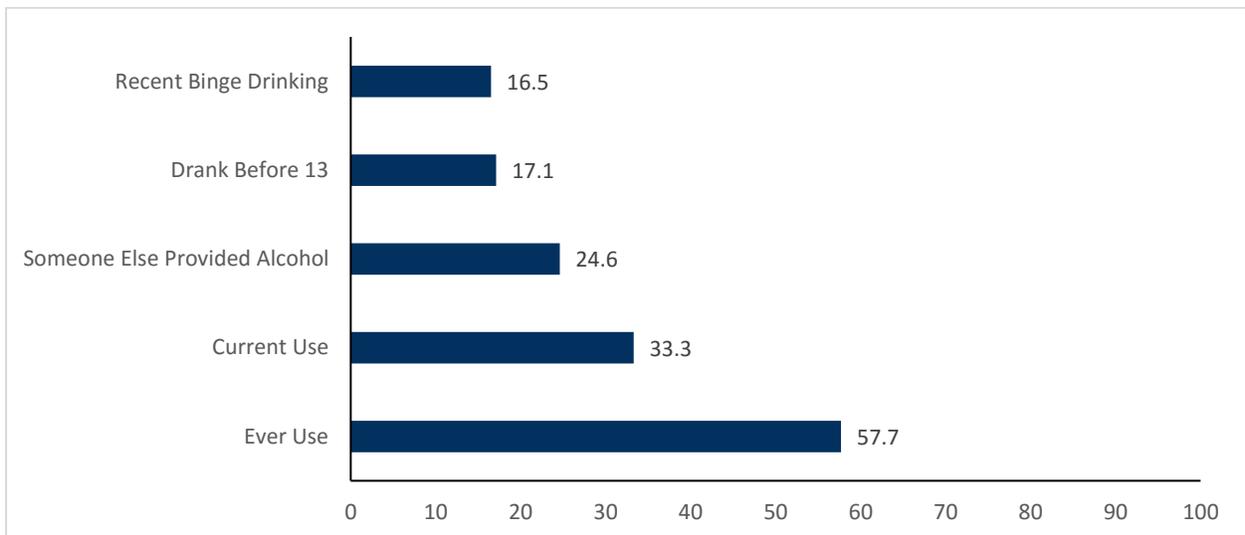
Approximately 30% of Carson City and Douglas County high school students have felt sad or hopeless in the last 12 months. About 10% of students have considered suicide, while 16% have actually planned their suicide. About 12% of high school students have actually attempted suicide.

Figure 26. Percentages of High School Students Current Tobacco Use, Carson City and Douglas County, 2015.



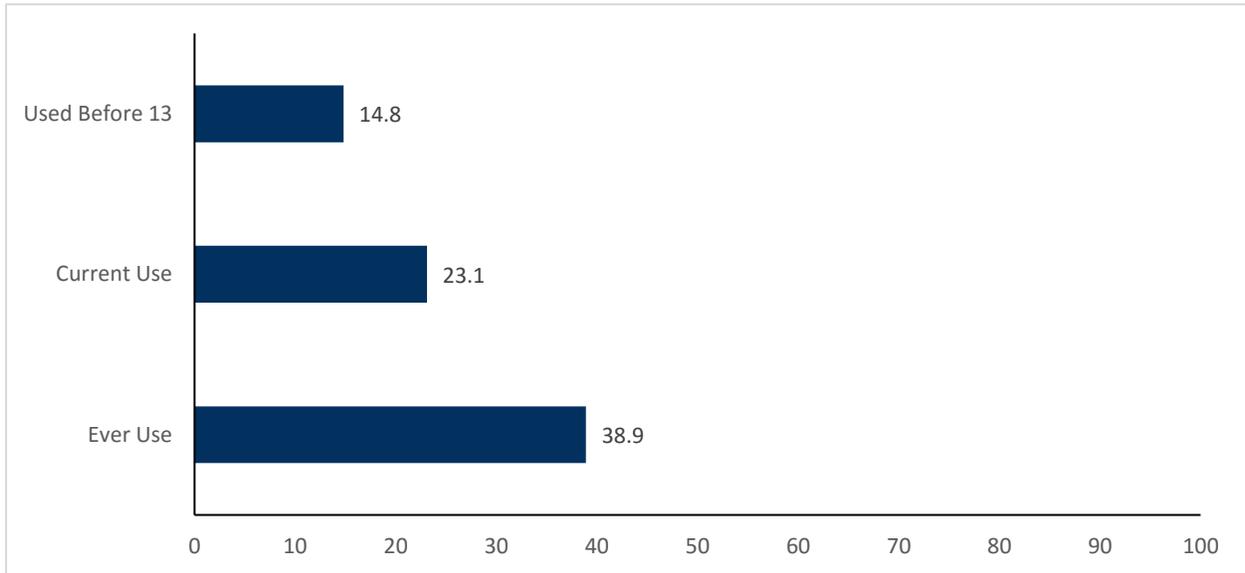
Around 17% of high school students in Carson City and Douglas County are currently using tobacco. About 10% of high school students smoke cigarettes, while 8% are currently smoking cigars and about 10% are using smokeless tobacco products.

Figure 27. Percentages of High School Students - Alcohol Behavior Summary, Carson City and Douglas County, 2015.



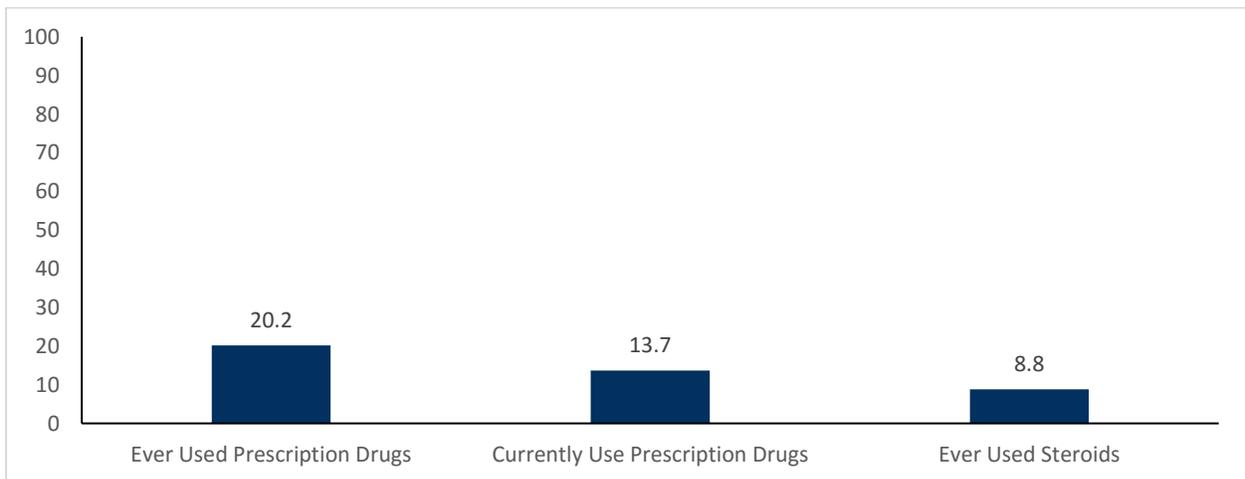
Approximately 58% of high school students in Carson City and Douglas County have had at least one drink of alcohol (more than a few sips). About 33% of high school students currently drink. Nearly 25% of high schools students had alcohol provided to them by someone else. About 17% of high school students had alcohol before the age of 13 years, and approximately 17% of students had a recent binge drinking experience (had at least 5 drinks in a couple of hours in the past 30 days).

Figure 28. Percentages of High School Students - Marijuana Behavior Summary, Carson City and Douglas County, 2015.



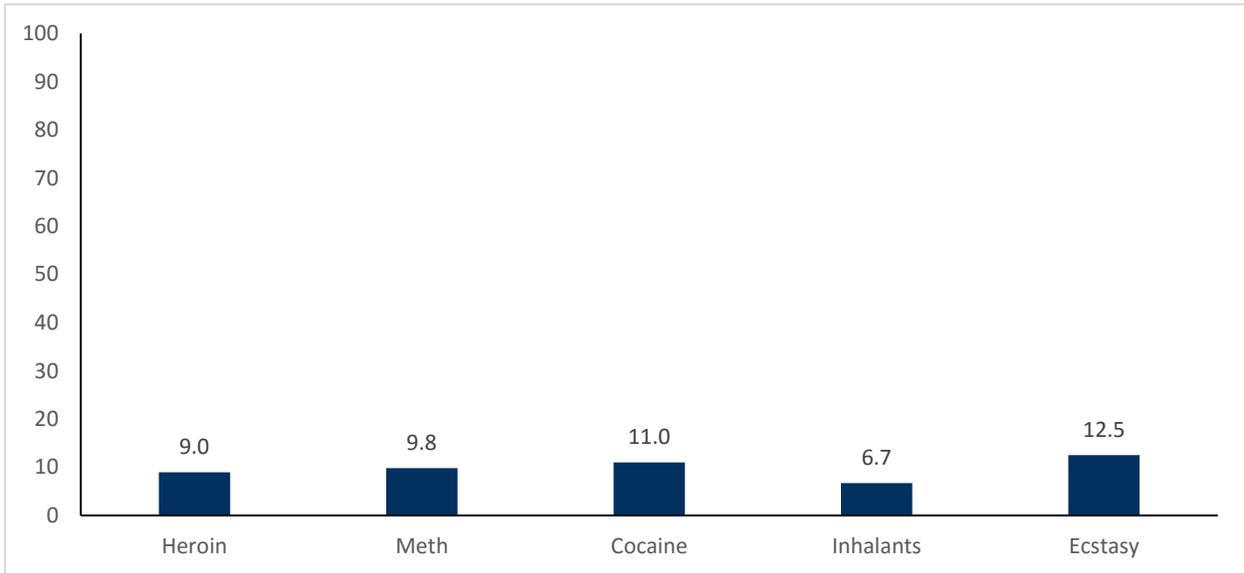
Approximately 39% of high school students in Carson City and Douglas County reported trying marijuana, and 23% are currently using. Approximately 15% of high school students have tried marijuana before the age of 13 years.

Figure 29. Percentages of High School Students Nonprescription Substance Use Summary, Carson City and Douglas County, 2015.



Approximately 20% of high school students have already tried prescription drugs that were not prescribed to them in their lifetime. About 9% have tried non-prescribed steroids.

Figure 30. Percentages of High School Students - Substance Abuse Summary, Carson City and Douglas County, 2015.

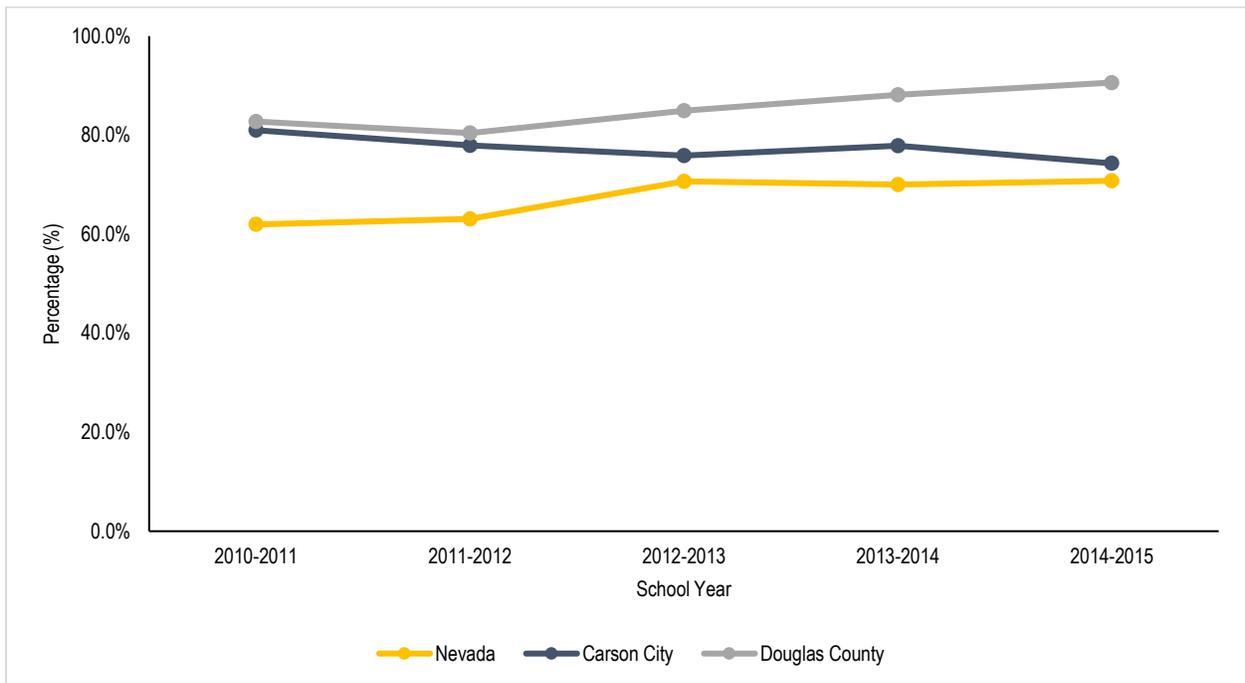


In terms of substance abuse among high school students in Carson City and Douglas County, nearly 13% have used ecstasy, the highest percentage of the select substances. About 11% have used cocaine, and 10% of students have tried methamphetamines.

School Success

When students' behavioral health needs are not identified, they are more likely to experience difficulties in school, including higher rates of suspensions, expulsions, dropouts, and truancy, as well as lower grades. Nationally, 50% of students age 14 and older who are living with a mental illness drop out of high school. This is the highest dropout rate of any disability group.

Figure 31. High School Graduation Rates, Carson City, Douglas County, Nevada 2011 – 2015 by Class Cohort.



Similar to Nevada, graduation rates have increased in Douglas County from the 2010-2011 class cohort to the 2014-2015 class cohort. However, graduation rates in Carson City have declined.

Conclusion

This report is intended to provide an overview of behavioral health in Carson City and Douglas County, Nevada. The analysis could be used to identify issues of concern and areas that may need to be addressed.

One finding is the number of visits to the ER by residents of the Partnership of Community Resources and Carson City for mental disorders, and alcohol- and drug-related issues have all increased during the time period from 2009 to 2014. Visits for PTSD had a percent change of 522%, the largest increase among the seven disorders. The ER visits for mental health disorders and treatment in SAPTA facilities appear to be sex-specific. For example, females made up a majority of ER visits for anxiety, depression, bipolar disorder and PTSD, while males made up the majority of ER visits for schizophrenia.

The trend for death rates in mental and behavioral health-related deaths has decreased from 2009 to 2014. Mental and behavioral health-related deaths, while increasing in Nevada, has decreased from 218.4 to 143.4 deaths per 100,000 in Carson City and Douglas County.

For more information and additional publications, please visit Nevada Division of Public and Behavioral Health at <http://dpbh.nv.gov/>.