Behavioral Health Summary – Churchill and Frontier Community Coalitions

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Division of Public and Behavioral Health
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Demographic Snapshot

Table 1. Selected demographics for Churchill and Frontier Community Coalitions, and Nevada.

	Churchill	Humboldt	Lander	Pershing	Nevada
Population, 2015 estimate*	25,104	17,169	6,545	6,743	2,874,075
Population, 2010 estimate*	25,055	16,627	5,743	6,771	2,705,845
Population, percent change*	0.2%	3.3%	14.0%	-0.4%	6.2%
Male persons, estimated percent 2015*	49.9%	52.1%	50.6%	63.5%	50.3%
Female persons, estimated percent 2015*	50.1%	47.9%	49.4%	36.5%	49.7%
Land area (square miles), 2010**	4,930	9,641	5,490	6,037	109,781
Median household income**	$46,195	$62,632	$76,558	$48,165	$52,800
Persons below poverty level, percent**	13.2%	10.7%	11.0%	18.5%	15.0%

*Source: Nevada State Demographer's Office

**Source: US Census Bureau

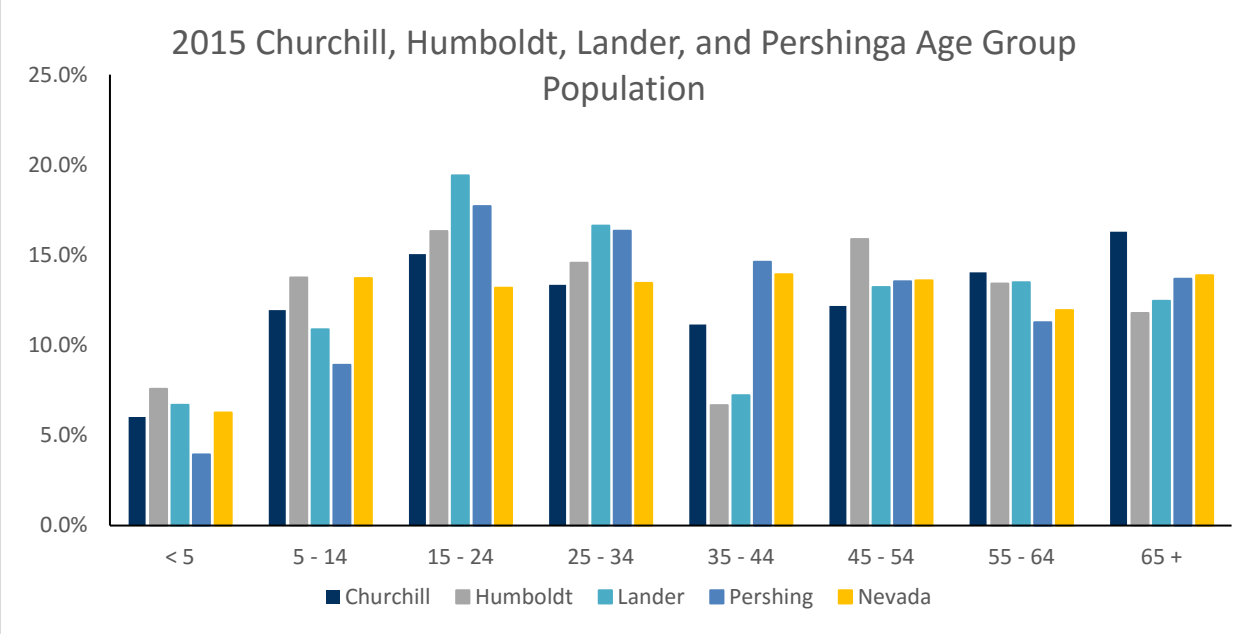
In 2015, the estimated population for Churchill County, Nevada was 25,104, a 0.2% increase from the 2010 estimated population. The population is made up of approximately 50% males and 50% females. The median household income is $46,195 with approximately 13% of the population living below the poverty level. Churchill County's land area is approximately 4,930 square miles and represents 4.5% of Nevada's total land area.

In 2015, the estimated population for Humboldt County, Nevada was 17,169, a 3.3% increase from the 2010 estimated population. The population is made up of approximately 52% males and 48% females. The median household income is $62,632 with approximately 11% of the population living below the poverty level. Humboldt County's land area is approximately 9,641 square miles and represents 8.8% of Nevada's total land area.

In 2015, the estimated population for Lander County, Nevada was 6,545, a 14.0% increase from the 2010 estimated population. The population is made up of approximately 51% males and 49% females. The median household income is $76,558 with approximately 11% of the population living below the poverty level. Lander County's land area is approximately 5,490 square miles and represents 5.0% of Nevada's total land area.

In 2015, the estimated population for Pershing County, Nevada was 6,743, a 0.4% decrease from the 2010 estimated population. The population is made up of approximately 63% males and 37% females. The median household income is $48,165 with approximately 19% of the population living below the poverty level. Churchill County's land area is approximately 6,037 square miles and represents 5.5% of Nevada's total land area.

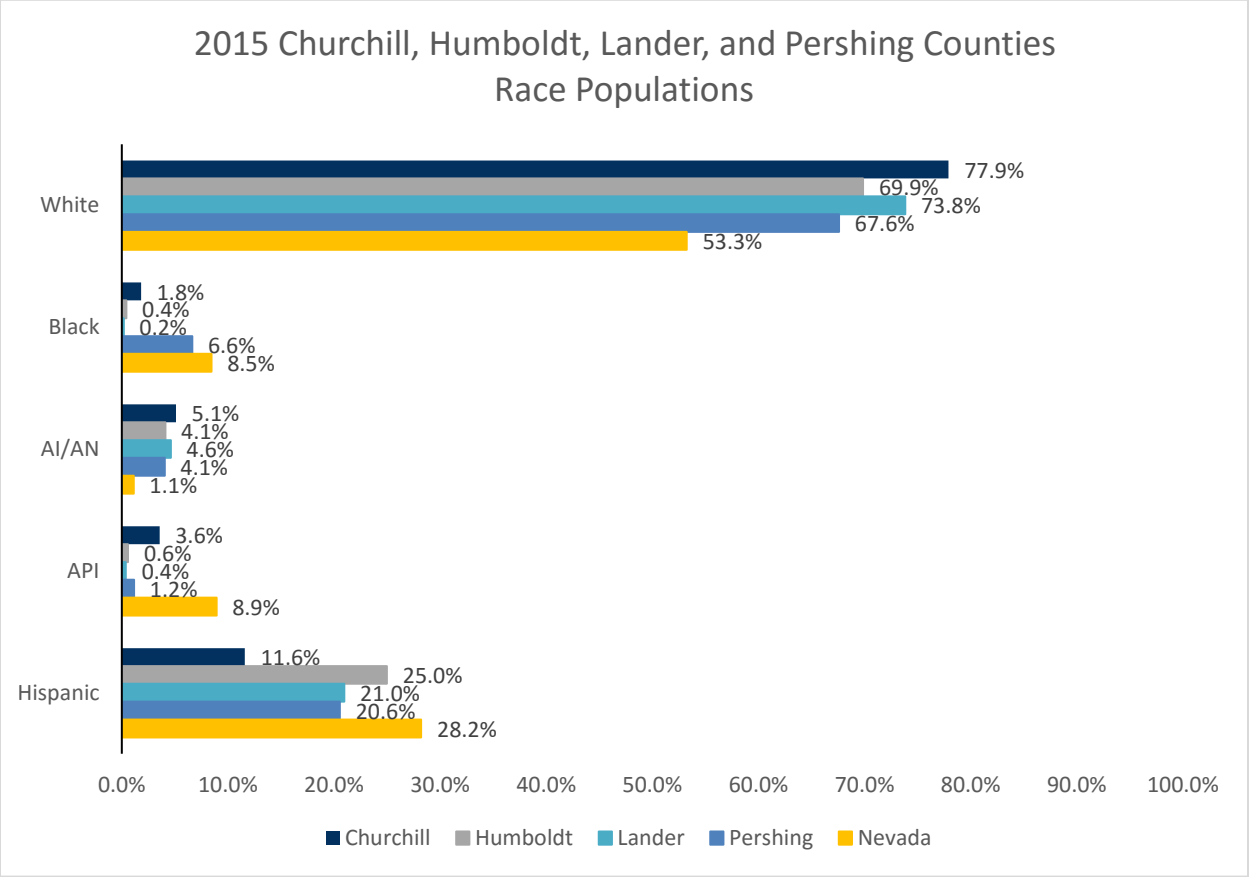
Figure 1. Churchill and Frontier Community Coalitions, and Nevada populations by age group.



Source: Nevada State Demographer

Age population breakdowns for Churchill, Humboldt, Lander, and Pershing counties vary from each other and from Nevada's age population breakdown in a majority of the age groups. The 15-24 year old age group accounted for only 13.2% of Nevada population, but accounted for 19.4% of Lander's population. The 35-44 year old age group accounted for 13.9% of Nevada's population, whereas it accounted for only 6.7% and 7.2% of Humboldt's and Lander's population, respectively.

Figure 2. Churchill and Frontier Community Coalitions, and Nevada racial/ethnic breakdowns for 2015.



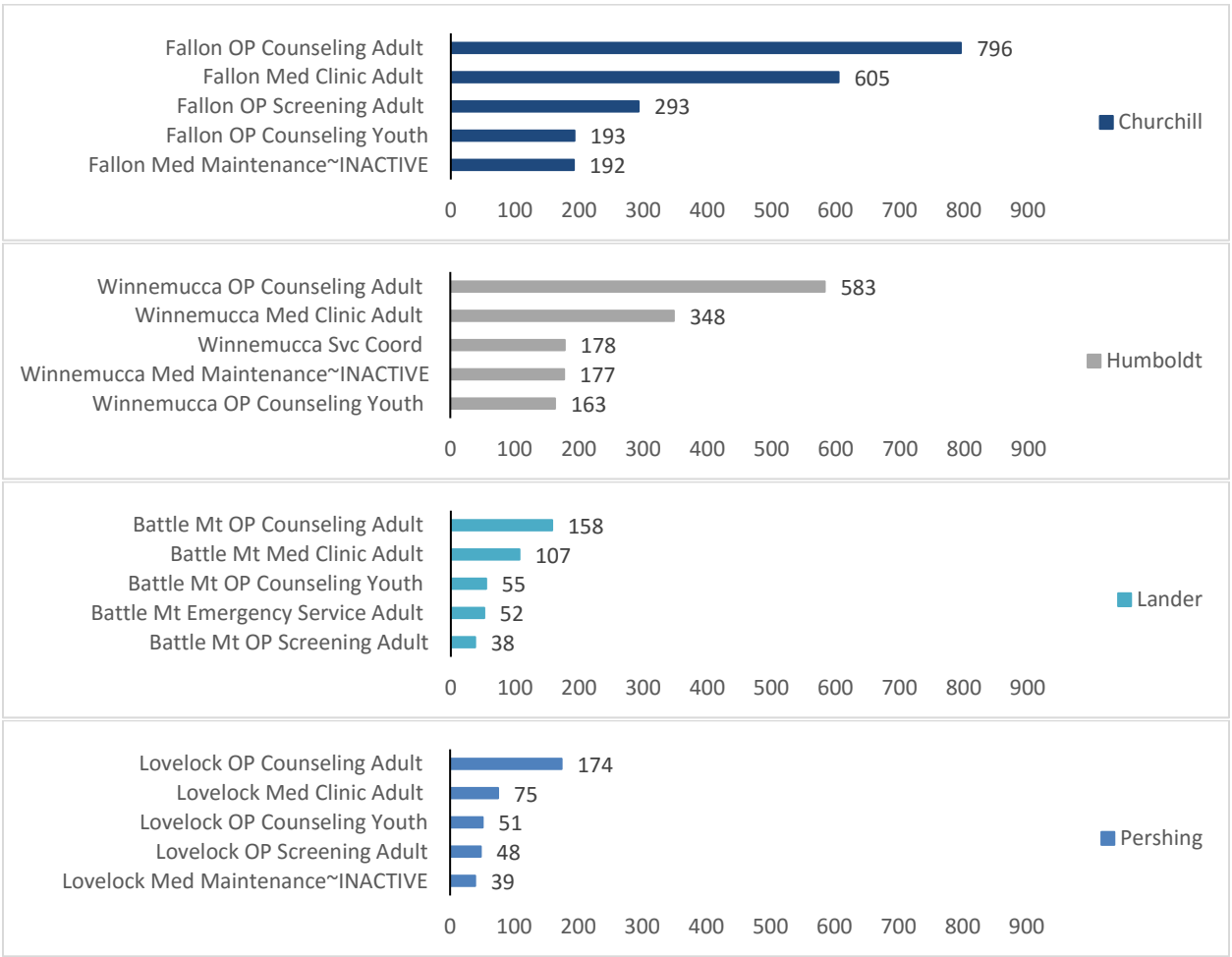
Source: Nevada State Demographer

The Churchill, Humboldt, Lander, and Pershing racial/ethnic breakdown compared to Nevada's shows that these counties have a greater proportion of White and American Indian/Alaskan Native while Nevada's population as a whole has a greater proportion of Hispanic, Asian, and Black populations.

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).

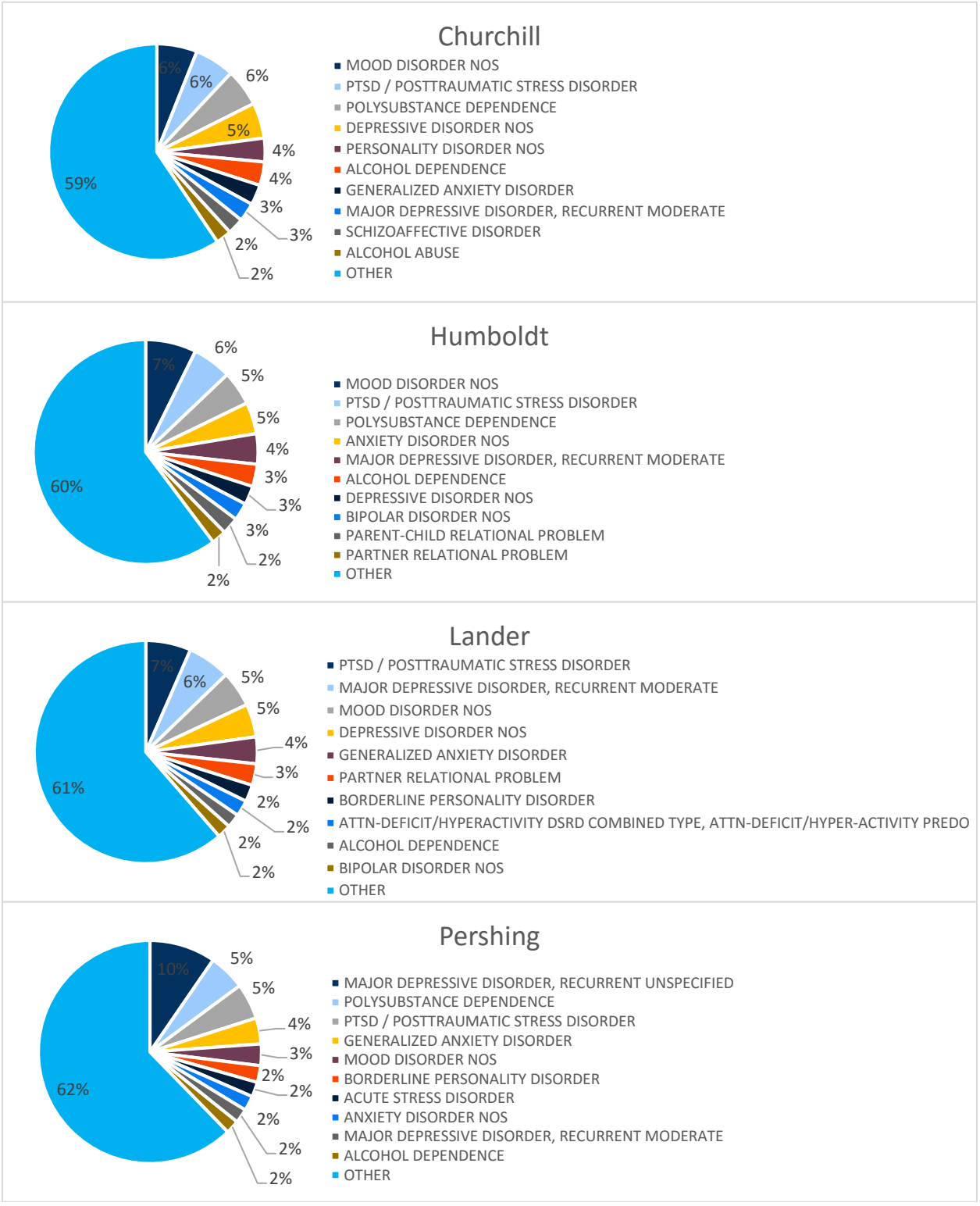
Figure 3. Top 5 mental health clinic services for Churchill and Frontier Community Coalitions residents with number of patients served, 2010-2014.



*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.

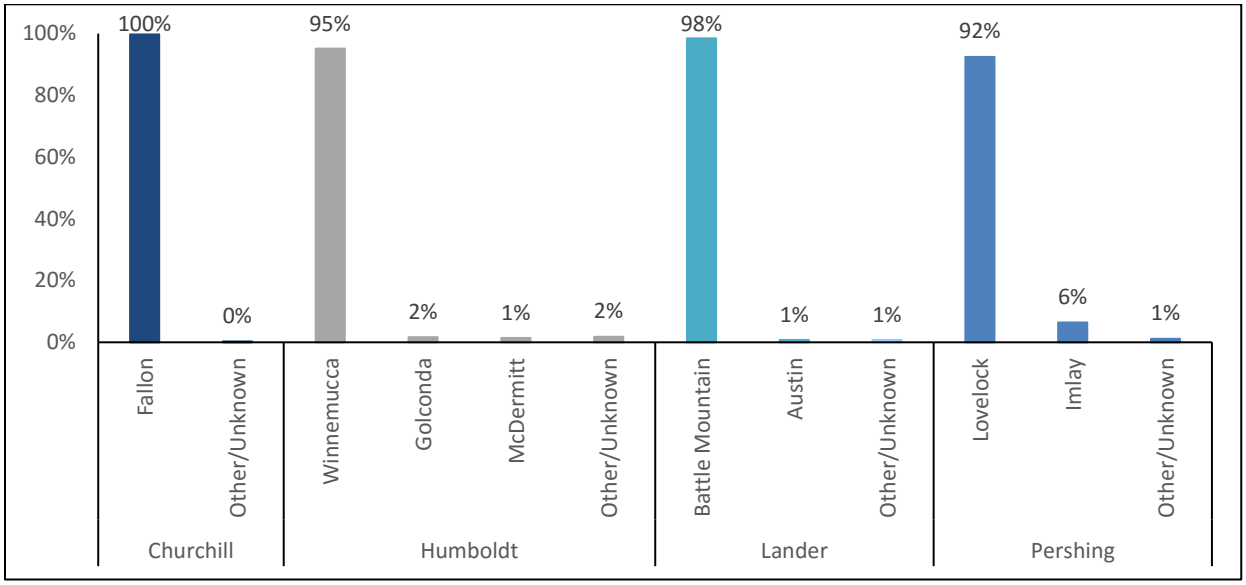
During the time from 2010 to 2014, 2,431 Churchill, Humboldt, Lander, and Pershing residents received mental health services from DPBH. Overall services totaled 6,374, as many patients used multiple services. The most common location of services occurred in an out-patient counseling setting, followed by med clinic within each county.

Figure 4. Most Common Diagnosis among Churchill and Frontier Community Coalitions residents, 2010-2014.



During the period of 2010 to 2014, in the Churchill and Frontier Community Coalition counties, mood disorder and posttraumatic stress disorder appeared in the top three most common primary mental health diagnosis for in the majority of counties. Patients may have multiple diagnoses noted during the course of their treatment, but the primary diagnosis noted is the most dominant.

Figure 5. Churchill and Frontier Community Coalitions residents who access mental health clinics city of residence, 2010-2014.



Of the county residents in the Churchill and Frontier Community Coalitions accessing DPBH mental health services between 2010 and 2014, the majority of population resides within one city in each county. 100% of Churchill residents resided in Fallon, 95% of Humboldt resided in Winnemucca, 98% of Lander resided in Battle Mountain, and 92% of Pershing resided in Lovelock.

Table 2. Demographics of Churchill and Frontier Community Coalitions residents who accessed state funded adult mental health clinics, 2010-2014.

	2010	2011	2012	2013	2014
Sex					
Female	536	547	468	434	495
Male	392	343	330	276	322
Unknown	6	4	3	4	1
Total	934	894	801	714	818
Age					
0-17	207	174	133	103	133
18-30	246	236	203	170	201
31-50	326	314	298	283	295
51-65	134	149	143	137	160
66-100	17	15	21	21	24
Unknown	4	6	3	0	5
Total	930	888	798	714	813
Race					
White	766	735	638	567	614
Black	6	9	7	6	10
Asian	2	4	3	2	3
Alaskan Native/American Indian	29	31	33	23	27
Native Hawaiian/Pacific Islander	5	5	7	2	1
Two or more races	37	37	29	17	22
Other	32	27	26	30	36
Unknown	10	16	21	32	35
No Entry	47	30	37	35	70
Total	887	864	764	679	748
Ethnicity					
Hispanic or Latino	89	84	74	59	63
Not Hispanic or Latino	746	729	648	572	589
Unknown/No Entry	99	81	79	83	166
Total	934	894	801	714	818
Education					
=< 12th Grade - No Diploma	296	274	242	222	247
High School Graduate	216	210	192	193	208
GED	77	83	71	63	60
Some College	134	136	127	100	105
Undergraduate Degree	34	38	24	25	34
Graduate Degree	10	11	10	12	18
No Formal Education	25	16	11	5	11
Other	142	126	124	94	135
Total	934	894	801	714	818

During the 5-year period of 2010 to 2014, there were 2,431 Churchill and Frontier Community Coalition adult residents that accessed mental and/or behavioral health services from DPBH state funded facilities. The totals in Table 2 above equal 4,161, reflecting that the some individuals used DPBH services during more than one year. Females comprised 60% of the patient population and males comprised 40%. White non-Hispanic made up 80% of the population, The most populous age group was the 31-50 year olds, accounting for 36% of the patients. Patients with less than 12th grade education or no diploma accounted for 31% of the patients, followed by "high school graduate" (25%).

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.

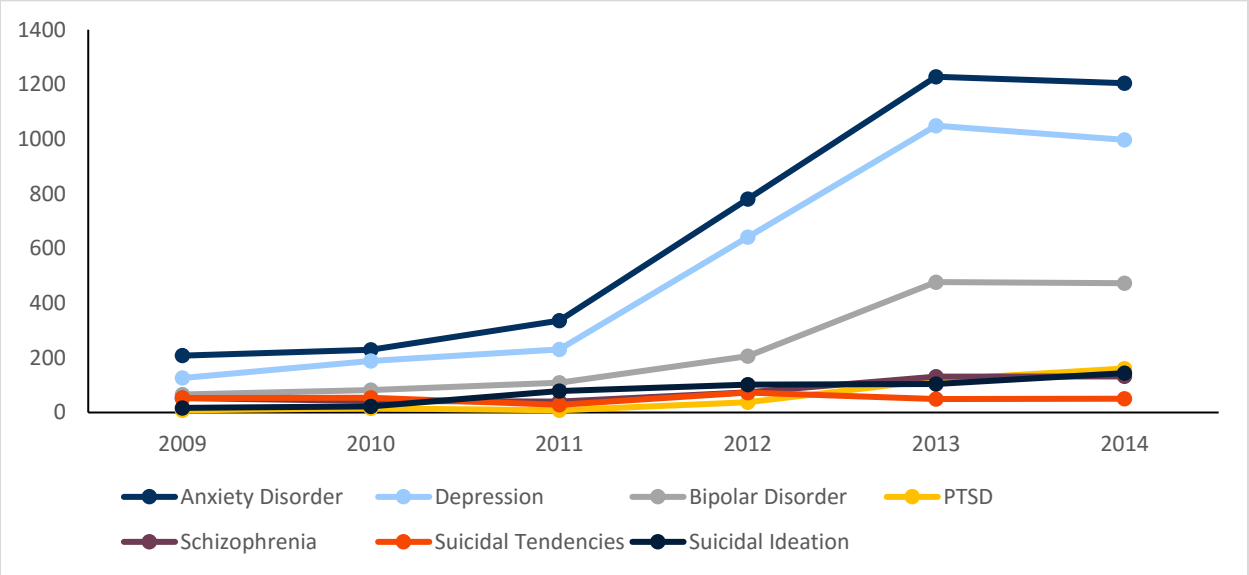
The following ICD-9 codes were used for analysis of alcohol-related admissions: 291-291.9, 303-303.93, 305.0-305.03, 535.3-353.31, 571-571.3, 980-980.9, 357.5, 425.5, 790.3, and E860-E860.9.

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 11,870 visits related to mental health and substance use disorders among Churchill and Frontier Community Coalition 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 8,142 ER visits, there were 3,224 ER visits related to alcohol-related issues, 1,896 ER visits with diagnoses for drug-related issues, and 435 ER visit with diagnoses codes related to suicide attempts.

Figure 6. Number of Visits per Year for Select Mental Disorders, Churchill and Frontier Community Coalitions, 2009-2014.



Depression is the most common mental disorder seen in the emergency rooms (ER) among Churchill and Frontier Community Coalitions residents, related to for 49.0% of the 8,142 visits in the categories listed in Figure 6. The number of depression-related ER visits increased 691% from 2009 to 2014. The largest percent increase was among patient visits for issues related to PTSD which increased 1,913% with 8 visits in 2009 to 161 in 2014. All visits for the selected mental disorders increased over the six year period with the exception of suicidal tendencies which decreased from 53 in 2009 to 51 in 2014.

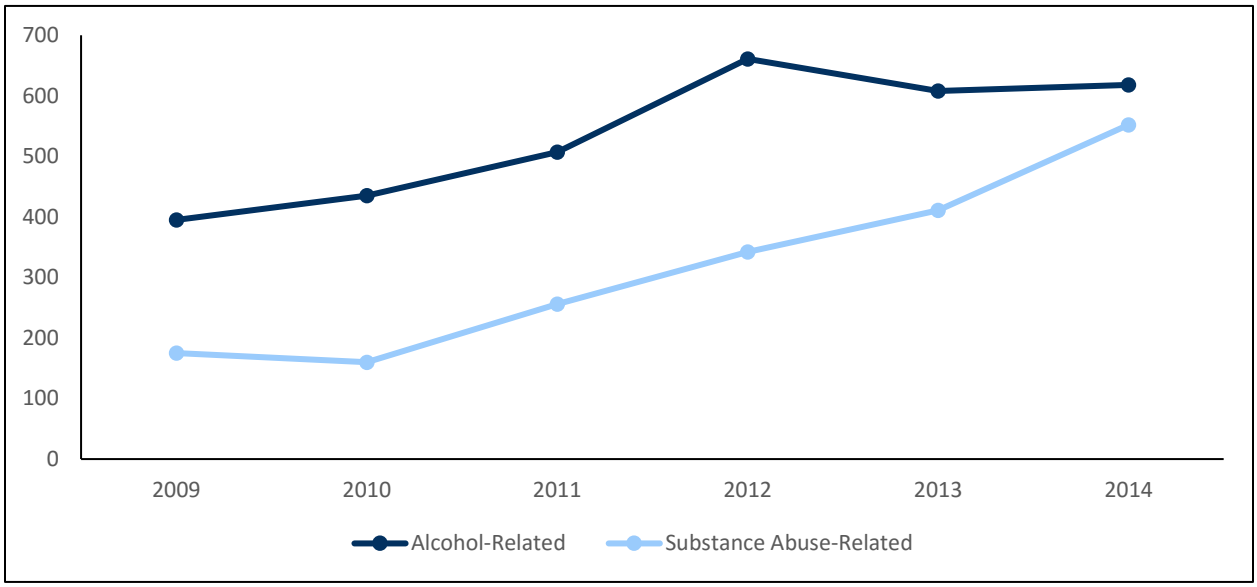
Table 3. Demographics of Churchill and Frontier Communicty Coalition resident visits to the ER for select behavioral disorders 2009-2014.

Condition*	Female		Male		Unknown		Total
	N	Row %	N	Row %	N	Row %	
Anxiety	2,877	72.2%	1,108	27.8%	1	0.0%	3,986
Depression	2,257	69.8%	976	30.2%	0	0.0%	3,233
Bipolar	992	70.2%	420	29.7%	1	0.0%	1,413
PTSD	252	72.2%	97	27.8%	0	0.0%	349
Schizophrenia	191	40.5%	281	59.5%	0	0.0%	472
Suicidal Tendencies	168	54.5%	140	45.5%	0	0.0%	308
Suicidal Ideation	256	54.8%	211	45.2%	0	0.0%	467
Alcohol Related	1,088	33.7%	2,134	66.2%	2	0.0%	3,224
Substance Abuse Related	1,028	54.2%	866	45.7%	2	0.0%	1,896
Suicide - Solid or Liquid	176	73.0%	65	27.0%	0	0.0%	241
Suicide - Gases in Domestic Use	1	25.0%	3	75.0%	0	0.0%	4
Suicide - Other Gases and Vapors	1	12.5%	7	87.5%	0	0.0%	8
Suicide - Hanging, Strangulation, & Suffocation	8	47.1%	9	52.9%	0	0.0%	17
Suicide - Cutting & Piercing Instrument	87	57.6%	64	42.4%	0	0.0%	151
Suicide - Firearms, Air Guns, & Explosives	3	30.0%	7	70.0%	0	0.0%	10
Suicide - Jumping from High Place	1	50.0%	1	50.0%	0	0.0%	2
Suicide - Other Unspecified Means	5	35.7%	9	64.3%	0	0.0%	14

*Categories are not mutually exclusive

Females made up the majority of Churchill and Frontier Community Coalition residents who visited the ER for depression (72%), anxiety (70%), bipolar (70%), and PTSD (72%), while the majority who visited for schizophrenia were males (60%).

Figure 7. Trend of Churchill and Frontier Community Coalition residents' visits to ER for alcohol- and drug-related issues, 2009-2014.



Churchill and Frontier Community Coalition ER visits increased for both alcohol-related and substance abuse-related issues from 2009 to 2014. Alcohol-related visits jumped from a low of 395 visits in 2009 to 618 visits in 2014, a 56% increase. Drug-related increased from 175 visits in 2009 to a high of 552 visits in 2014, a 215% increase.

Table 4. Demographics of Churchill and Frontier Community Coalition resident visits to the ER for alcohol and drug-related disorders, 2009-2014.

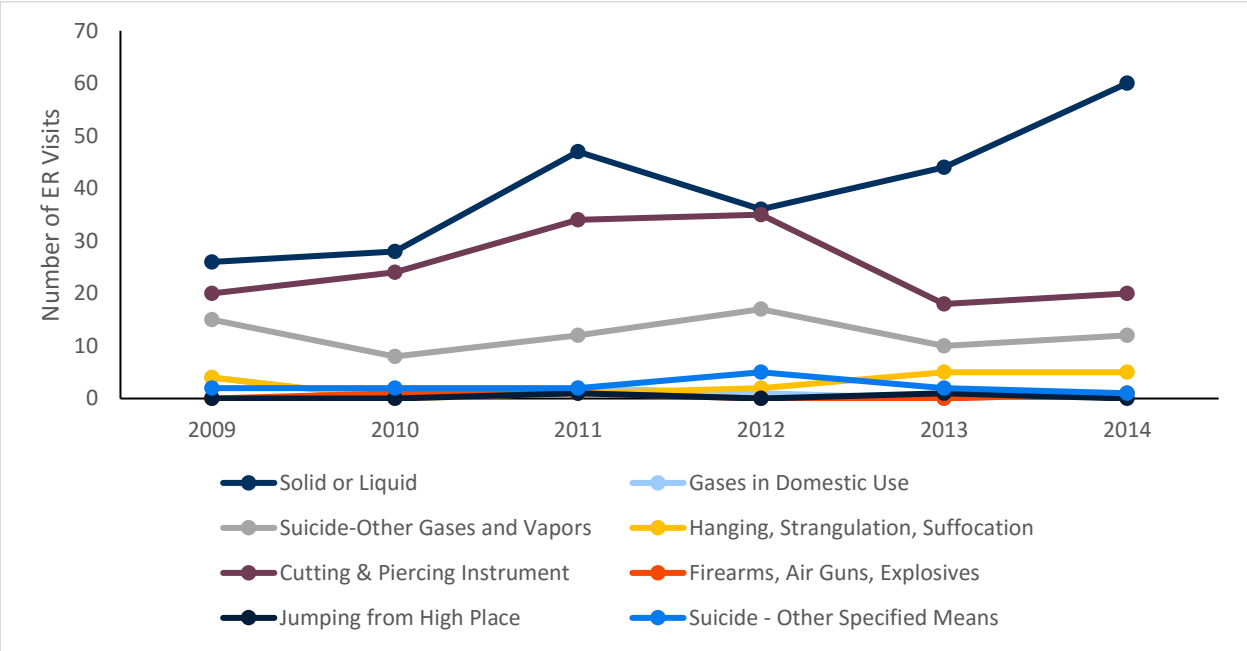
	Alcohol-Related		Drug- Related	
	N	Column %	N	Column %
Sex				
Female	1,088	33.8%	1,028	54.3%
Male	2,134	66.2%	866	45.7%
Race				
White	2,393	74.2%	1,535	81.0%
Native American	397	12.3%	133	7.0%
Hispanic	227	7.0%	126	6.6%
Asian/Pacific	7	0.2%	4	0.2%
Black	34	1.1%	22	1.2%
Other	28	0.9%	22	1.2%
Unknown	138	4.3%	54	2.8%
Age				
0-14	14	0.4%	57	3.0%
15-24	415	12.9%	367	19.4%
25-34	641	19.9%	499	26.3%
35-44	565	17.5%	373	19.7%
45-54	968	30.0%	332	17.5%
55-64	436	13.5%	185	9.8%
65-74	125	3.9%	58	3.1%
75-84	50	1.6%	18	0.9%
85+	10	0.3%	7	0.4%

Males accounted for a greater percentage over females for alcohol-related ER visits (66%) and females accounted for a greater percentage of drug-related visits (54%) among Churchill and Frontier Community Coalition residents between 2009 and 2014.

Whites made up the majority of alcohol and substance abuse-related ER visits, 74% and 81% of visits, respectively.

Alcohol-related ER visits was highest among the 25-34 (26%) and 35-44 (20%) year age groups. In general, ER visits declined progressively as ages increased.

Figure 8. Trend of Churchill and Frontier Community Coalition visits to the ER for Suicides, 2009-2014.

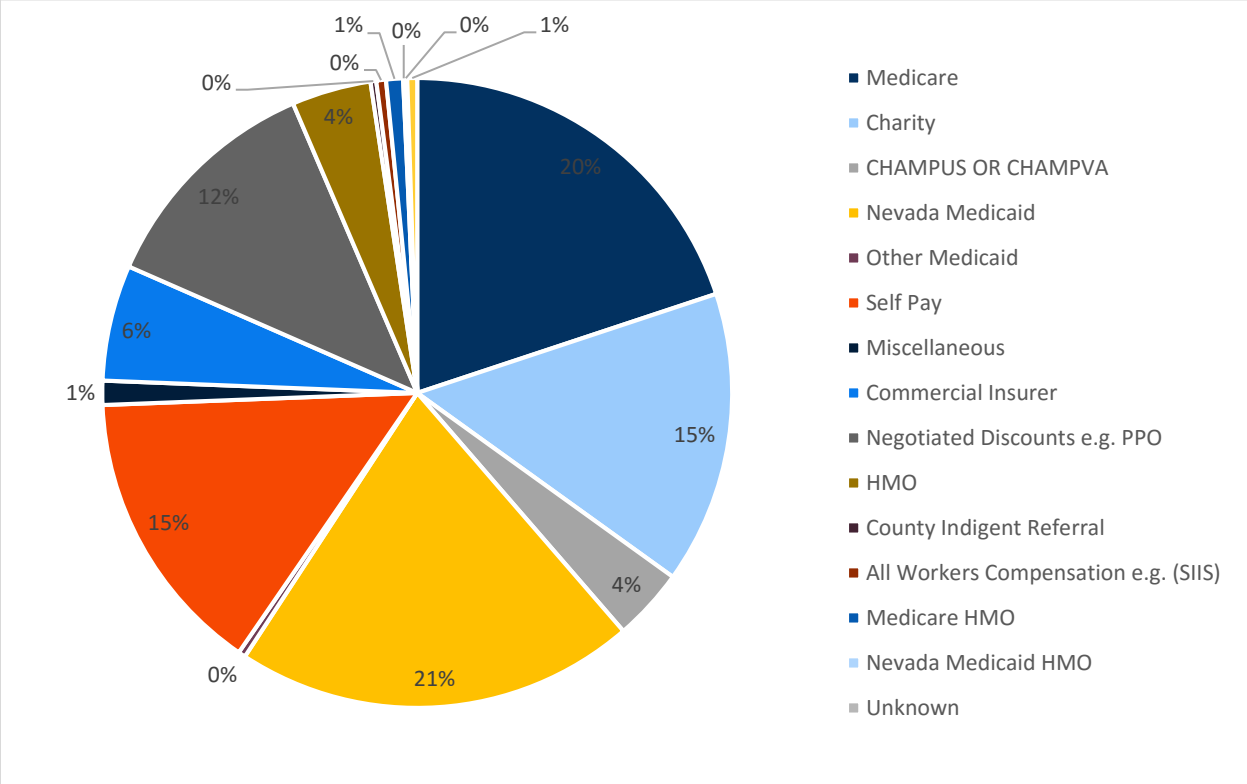


Overall number of visits to the ER for suicide among Churchill and Frontier Community Coalition residents has increased by 53% from 2009-2014, from 59 visits in 2009 to 90 in 2014. The lowest number was in 2010 with 54 visits.

Suicide by solid or liquid was the top method of suicide and suicide attempts resulting in an ER visit in Churchill and Frontier Community Coalition, accounting for 53% of all suicide-related ER visits from 2009-2014. In 2009, there were 26 ER visits resulting from suicide by solid or liquid and 60 visits in 2014, an increase of 131%. The high was in 2014 with 60 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 35% of all suicide-related visits from 2009-2014. The high 35 visits in 2012 and the low was 18 visits in 2013.

Figure 9. Percentages of Churchill and Frontier Community Coalition resident visits to the ER for mental health and substance-related disorders by payment source, 2009-2014 (n=11,870).



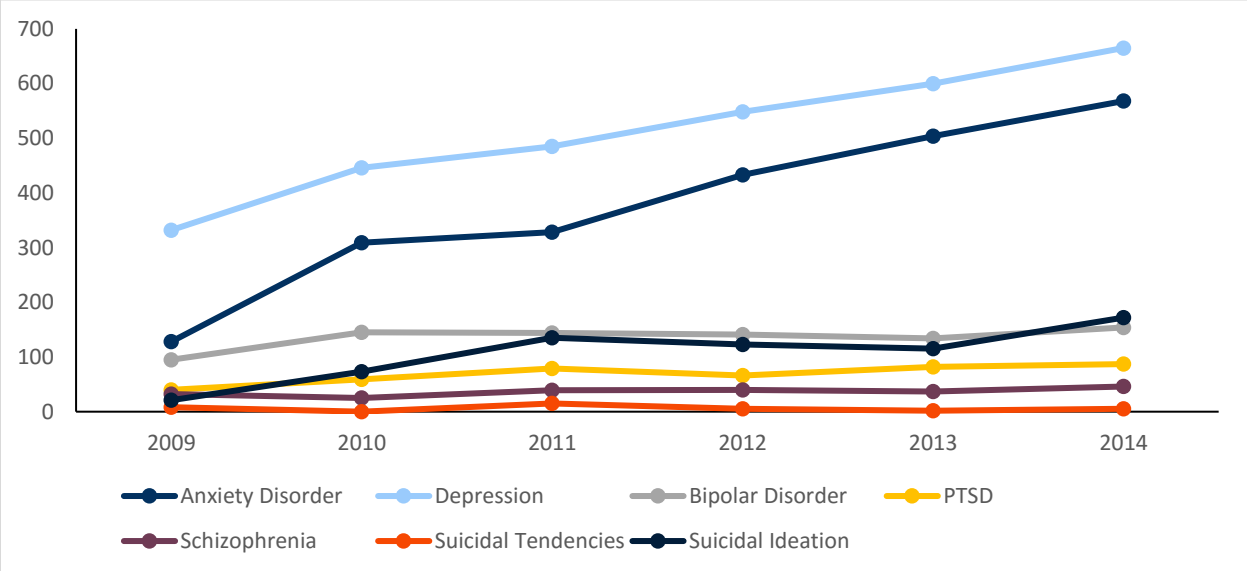
Nevada Medicaid accounted for 21% of sources of payment for ER visits among Churchill and Frontier Community Coalition residents with mental health and substance-related disorders. Medicare accounted for 20% of payment types, Self-Pay represented 15%, and Charity represented 15%.

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 7,212 inpatient admissions related to mental health and substance use disorders among Churchill and Frontier Community Coalition 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 5,400 inpatient admissions, there were 2,223 inpatient admissions related to alcohol-related issues, 1,397 inpatient admissions for drug-related issues, and 162 inpatient admissions with diagnoses codes related to suicide attempts.

Figure 10. Trend of Churchill and Frontier Community Coalition inpatient admissions for select mental health disorders, 2009-2014.



Depression was the most common mental health disorder for inpatient admissions for Churchill and Frontier Community Coalition residents between 2009 and 2014, related to for 42% of the admissions from the disorders listed above in Figure 10. Depression inpatient admissions has increased consistently over the four year period, from 332 admissions in 2009 to 665 in 2014, a 100% 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 128 admissions in 2009 to 568 in 2014, a 344% increase.

Bipolar disorder is the third most common mental health disorder seen in inpatient admissions among Churchill and Frontier Community Coalition residents, related to 15% of admissions for the mental health conditions listed in Figure 10. There was a 62% increase from 2009 to 2014.

Inpatient admissions for suicidal ideation experienced the greatest percent change from 2009 to 2014 with a 719% increase. The inpatient admission counts increased from 21 in 2009 to 172 in 2014.

Table 5. Demographics of Churchill and Frontier Community Coalition 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	2,106	68.5%	1573	69.3%	560	68.9%	395	61.8%
Male	970	31.5%	697	30.7%	253	31.1%	244	38.2%
Race								
White	2,382	77.4%	1,875	82.6%	553	68.0%	248	38.8%
Black	22	0.7%	26	1.1%	3	0.4%	2	0.3%
Native American	91	3.0%	62	2.7%	17	2.1%	19	3.0%
Asian/Pacific	10	0.3%	7	0.3%	2	0.2%	2	0.3%
Hispanic	89	2.9%	50	2.2%	18	2.2%	17	2.7%
Other	37	1.2%	18	0.8%	15	1.8%	8	1.3%
Unknown	445	14.5%	232	10.2%	205	25.2%	343	53.7%
Age								
0-14	64	2.1%	24	1.1%	30	3.7%	54	8.5%
15-24	308	10.0%	144	6.3%	122	15.0%	201	31.5%
25-34	260	8.5%	241	10.6%	151	18.6%	113	17.7%
35-44	295	9.6%	229	10.1%	144	17.7%	74	11.6%
45-54	491	16.0%	372	16.4%	197	24.2%	97	15.2%
55-64	552	17.9%	352	15.5%	97	11.9%	51	8.0%
65-74	521	16.9%	416	18.3%	51	6.3%	28	4.4%
75-84	355	11.5%	319	14.1%	18	2.2%	15	2.3%
85+	230	7.5%	173	7.6%	3	0.4%	6	0.9%

Females accounted for a greater percent of inpatient admissions over males for the top mental health disorders in Churchill and Frontier Community Coalition, ranging from 62% of admissions for suicidal ideations to 69% of anxiety admissions.

A majority of inpatient admissions are white, such as with depression admissions (77%) and anxiety admissions (83%). 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 54% of all admissions.

The largest age groups varied depending on the mental health disorder. Residents 55-64 accounted for the most admissions in depression, 65-74 in anxiety, 45-54 in bipolar, and 15-24 in suicidal ideation.

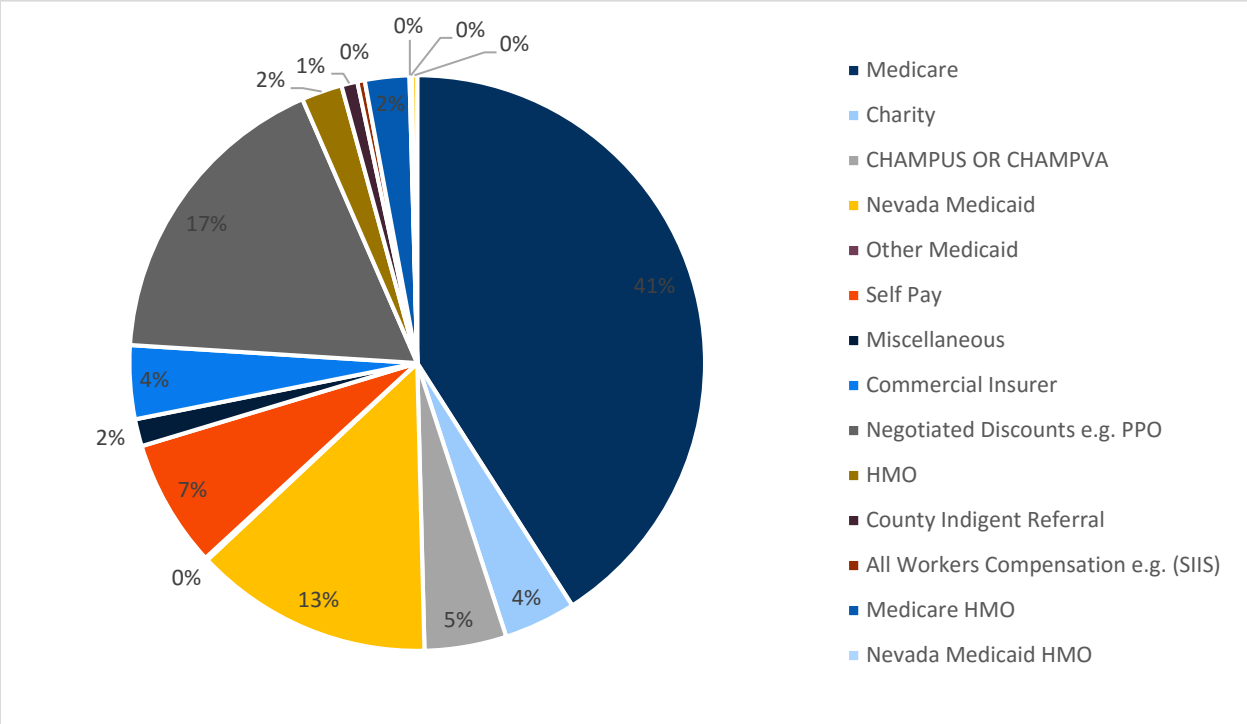
Table 6. Demographics of Churchill and Frontier Community Coalition resident's inpatient admissions by suicide attempts, 2009-2014.

Inpatient	Solid or Liquid		Cutting and Piercing Instrument		Firearms, Air Guns and Explosives	
	N	Column %	N	Column %	N	Column %
Sex						
Female	93	69.9%	6	46.2%	4	57.1%
Male	40	30.1%	7	53.8%	3	42.9%
Race						
White	103	77.4%	10	76.9%	7	100.0%
Black	2	1.5%	0	0.0%	0	0.0%
Native American	11	8.3%	0	0.0%	0	0.0%
Asian/Pacific	0	0.0%	0	0.0%	0	0.0%
Hispanic	4	3.0%	2	15.4%	0	0.0%
Other	1	0.8%	0	0.0%	0	0.0%
Unknown	12	9.0%	1	7.7%	0	0.0%
Age						
0-14	2	1.5%	0	0.0%	0	0.0%
15-24	27	20.3%	5	38.5%	0	0.0%
25-34	26	19.5%	4	30.8%	2	28.6%
35-44	26	19.5%	0	0.0%	0	0.0%
45-54	28	21.1%	2	15.4%	3	42.9%
55-64	18	13.5%	1	7.7%	1	14.3%
65-74	4	3.0%	1	7.7%	1	14.3%
75-84	2	1.5%	0	0.0%	0	0.0%
85+	0	0.0%	0	0.0%	0	0.0%

Females led in suicide attempts by solid or liquid (70%) and firearms, air guns and explosives (57%), while males made up 54% of admission for suicide attempts by cutting and piercing instrument. Whites represent 77% of suicide inpatient admissions by solid or liquid, about 77% of suicide by cutting and piercing instrument and 100% of suicide by firearms, air guns and explosives.

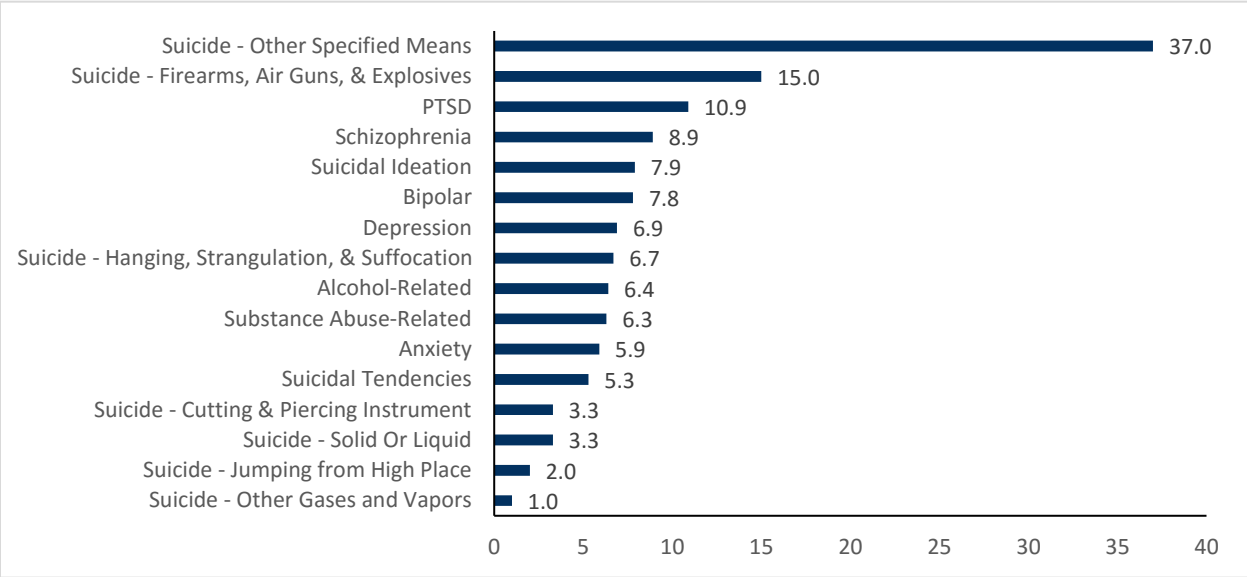
The largest age group representing suicide-related inpatient admissions by solid or liquid is 45 to 54 (21%). The age group representing the most admissions due to suicide attempts by cutting and piercing instrument was also the 15-24 age group (39%).

Figure 11. Percentages of Churchill and Frontier Community Coalition resident inpatient admissions for mental health and substance-related disorders by payment type, 2010-2014 (n=7,212).



The most common payment source of mental health and substance-related inpatient admissions for Churchill and Frontier Community Coalition residents was Medicare (41%). Negotiated Discounts accounted for 17%, and Nevada Medicaid accounted for 13%. The remainder of payment methods are each 7% or less of inpatient admissions.

Figure 12. Average length of stay for Churchill and Frontier Community Coalition 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 2015, inpatient admissions for suicide “other specified means” had the longest average length of stay at 37 days, but was not included in the previous analysis due to small counts. Suicide by firearms, air guns, and explosives had an average length of stay of 15 days. Inpatient admissions for PTSD had an average stay of about 11 days.

Substance Abuse Treatment Facilities

The data in this section is reflective of services received by Churchill, Humboldt, Lander, and Pershing residents at treatment facilities funded by the DPBH's Substance Abuse Treatment and Prevention Agency (SAPTA). This is not a comprehensive accounting of all Churchill, Humboldt, Lander, and Pershing 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, Churchill, Humboldt, Lander, and Pershing County residents, 2010-2014.

Churchill (2014 Only)		
Rank	**Substance**	**Percent**
1	Alcohol	37.6%
2	Amphetamines/Methamphetamines	34.8%
3	Marijuana/Hashish	10.0%
4	Heroin	6.6%
5	Other Opiates/Synthetic Opiates	4.7%

Humboldt (2014 Only)		
Rank	**Substance**	**Percent**
1	Alcohol	51.1%
2	Amphetamines/Methamphetamines	23.4%
3	Marijuana/Hashish	20.2%
4	Heroin	3.2%
5	Other Opiates/Synthetic Opiates	1.1%

Lander (2010-2014 Aggregate)		
Rank	**Substance**	**Percent**
1	Alcohol	51.6%
2	Marijuana/Hashish	20.1%
3	Amphetamines/Methamphetamines	16.9%
4	Other Opiates/Synthetic Opiates	6.3%
5	Heroin	2.1%

Pershing (2010-2014 Aggregate)		
Rank	**Substance**	**Percent**
1	Alcohol	47.8%
2	Amphetamines/Methamphetamines	26.0%
3	Marijuana/Hashish	16.8%
4	Heroin	6.8%
5	Other Opiates/Synthetic Opiates	1.7%

All listed counties had the same top five most common substances abused. Alcohol was most common substance abused in all counties, range from 37.6% to 51.1%. Amphetamines/Methamphetamines ranged from 16.9% to 34.8%, and marijuana ranged from 10.0% to 26.0%.

Figure 13. Trends of Churchill and Frontier Community Coalition residents in Nevada state funded substance abuse treatment facilities by select substances, 2010-2014.

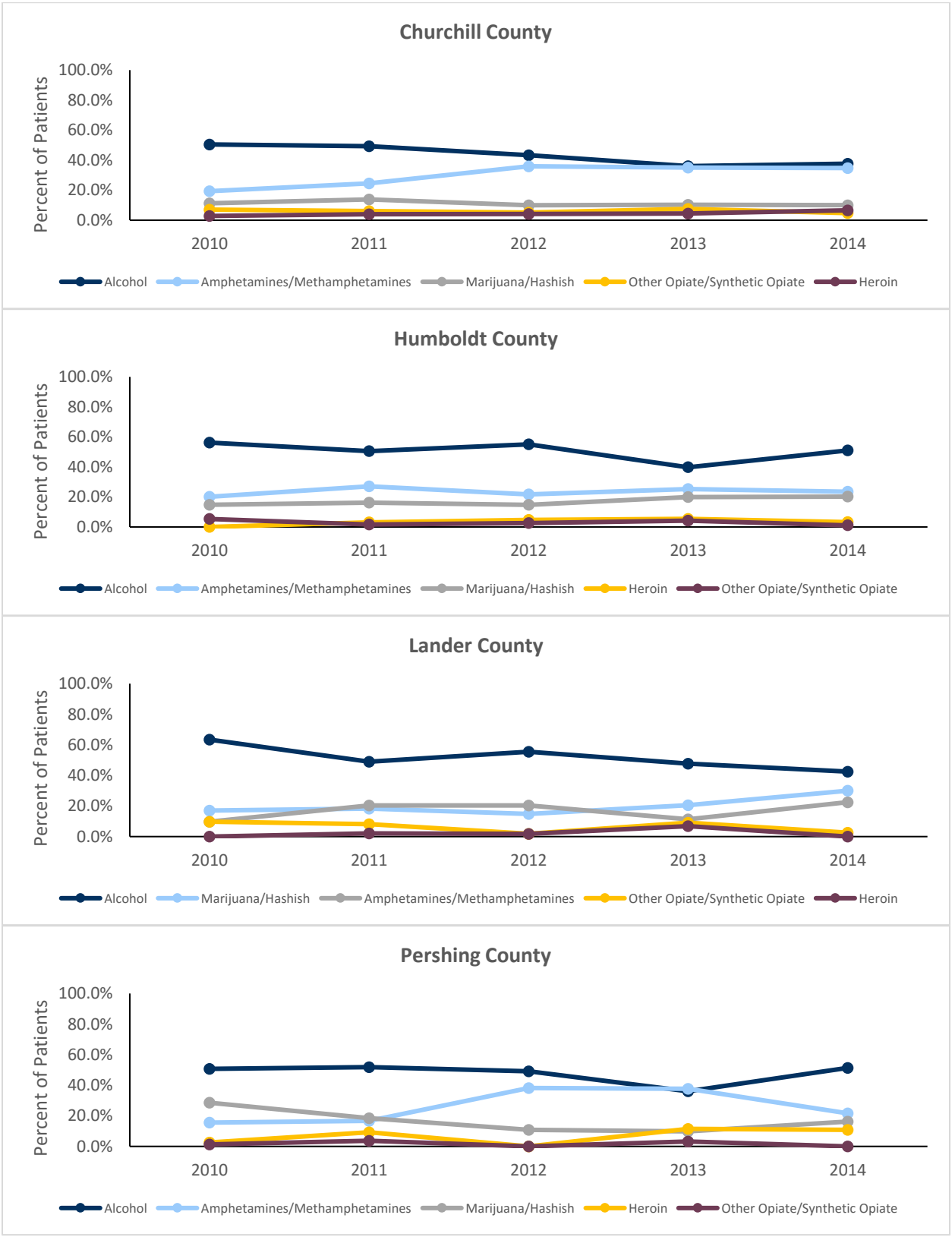


Table 8. Demographics of Churchill and Frontier Community Coalition residents in Nevada substance abuse treatment facilities, 2010-2014.

	N	Column %
Sex		
Female	1,089	39.1%
Male	1,695	60.9%
Age		
0-14	42	1.5%
15-24	904	32.5%
25-34	864	31.0%
35-44	450	16.2%
45-54	378	13.6%
55-64	129	4.6%
65+	17	0.6%
Unknown	0	0.0%
Race/Ethnicity		
White non-Hispanic	1,878	67.5%
Black non-Hispanic	18	0.6%
Hispanic	449	16.1%
American Indian/Native Am/Alaska Native non-Hispanic	202	7.3%
Asian, Hawaiian, PI non-Hispanic	11	0.4%
Other/Unknown	226	8.1%
Tobacco Use		
Yes	1,678	60.3%
No	914	32.8%
Unknown	147	5.3%

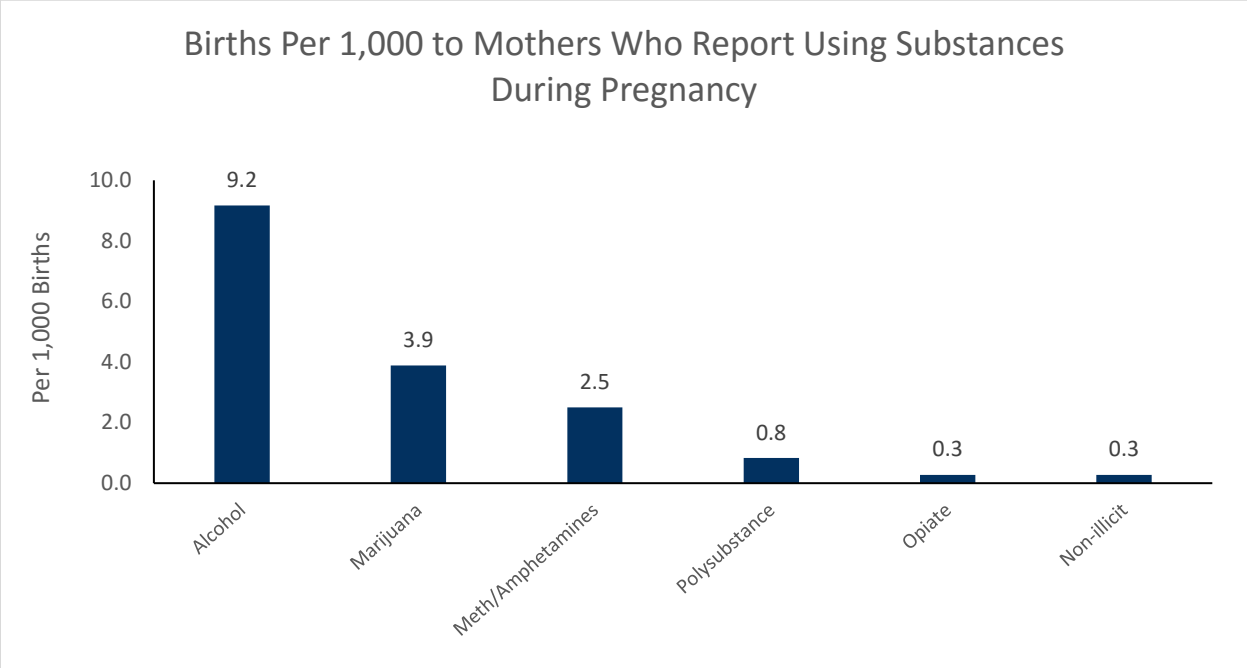
There were a total of 2,784 admissions for Churchill and Frontier Community Coalition residents to Nevada state funded substance abuse treatment facilities from 2010-2014. This number is exclusive to SAPTA-funded facilities and does not include privately funded facilities. By age group, the most common groups that received treatment were between 15 to 34 years (64%). More than half were male patients (61%). For race/ethnicity, white non-Hispanics made up the largest proportion of admissions, with 68%. Tobacco use was indicated on 60% 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), Churchill and Frontier Community Coalition, 2010-2014.

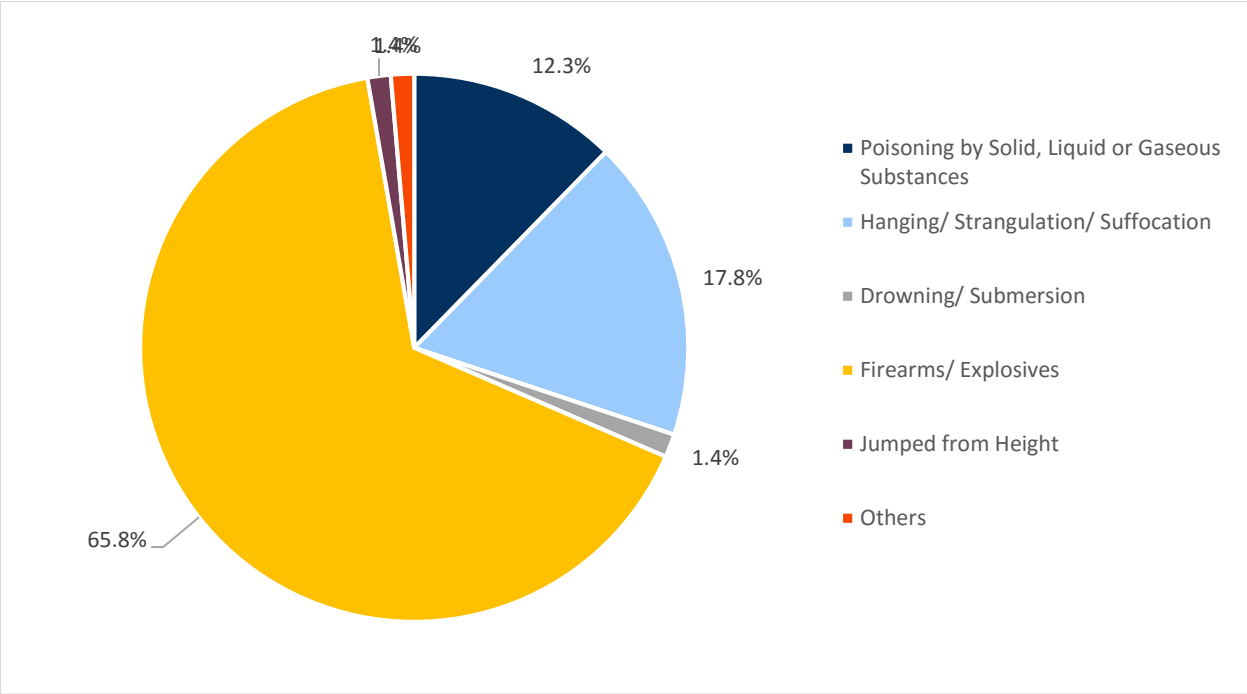


Of the Churchill and Frontier Community Coalition mothers who gave birth between 2010 and 2014 that self-reported using a substance while pregnant, alcohol has the highest prenatal substance abuse birth rate at 9.2 per 1,000 births. A rate of 3.9 per 1,000 self-reported using marijuana, 2.5 per 1,000 reported using amphetamines/methamphetamines, and 0.8 per 1,000 births reported polysubstance. 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

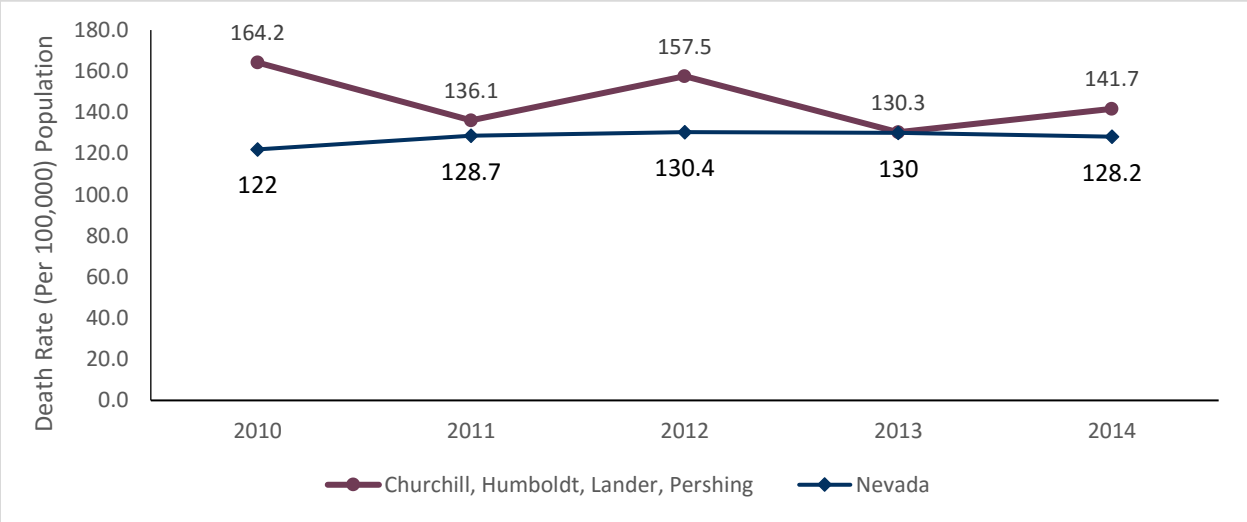
The data in this section are from the electronic death registry at DPBH. The Substance Abuse and Mental Health Service Administration (SAMHSA) reports suicide and mental illness are highly correlated with as many as 90% of those persons who die of suicide completion having a diagnosable mental illness.

Figure 15. Immediate cause of death by suicide, Churchill and Frontier Community Coalition, 2010-2014 (n=73).



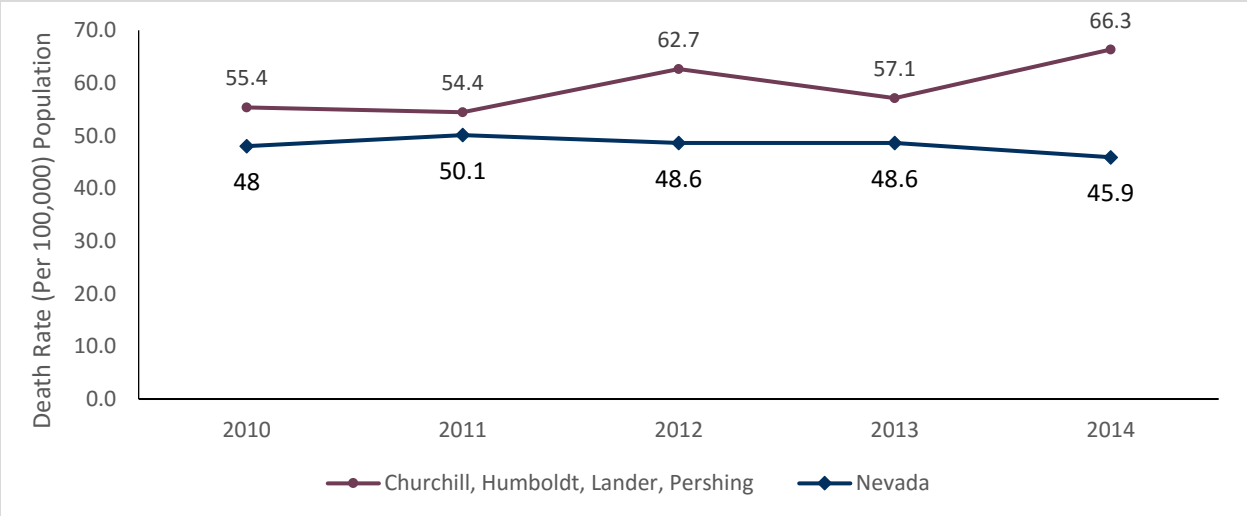
Among Churchill and Frontier Community Coalition residents who died of a suicide between 2010 and 2014, the most common method of suicide was Firearms/explosives (76%), followed by hanging/strangulation/suffocation (18%), and poisoning solid, liquid or gaseous substance (12%).

Figure 16. Trend of Mental and Behavioral Disorders Deaths, Churchill and Frontier Community Coalition, 2010-2014.



Churchill and Frontier Community Coalition's death rate for mental and behavioral related deaths in 2010 was 164.2 per 100,000. This means that for every 100,000 deaths, around 164 deaths are primarily related to mental and behavioral health disorders. There was an overall percent decrease of 11% between 2010 and 2014 and the rate dropped to 141.7. Overall, Churchill and Frontier Community Coalition mental and behavioral related death rates are higher than the Nevada rate.

Figure 17. Trend of substance-related deaths, Churchill and Frontier Community Coalition, 2010-2014.



There were 164 substance-related deaths in the Churchill and Frontier Community Coalition between 2010 and 2014. Between 2010 and 2014 the rate increased from 55.4 deaths per 100,000 to 66.3 deaths per 100,000. Churchill and Frontier Community Coalition's combined substance-related death rates are higher than Nevada's rate every year.

Table 9. Demographics of Substance Related Deaths, Churchill and Frontier Community Coalition, 2010-2014.

	N	Column %
Sex		
Female	66	40.2%
Male	98	59.8%
Race		
White	140	85.4%
Black	0	0.0%
Native American	10	6.1%
Hispanic	12	7.3%
Asian/Pacific	0	0.0%
Other	1	0.6%
Unknown	1	0.6%
Age		
<1	0	0.0%
1-4	0	0.0%
5-14	2	1.2%
15-24	8	4.9%
25-34	22	13.4%
35-44	17	10.4%
45-54	45	27.4%
55-64	46	28.0%
65-74	15	9.1%
75-84	6	3.7%
85+	3	1.8%

In Churchill and Frontier Community Coalition, the most common demographic groups to die of a substance-related death included: males (60), Whites (85%), and those aged 55 to 64 years of age (28%).

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). There were 358 patients.

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

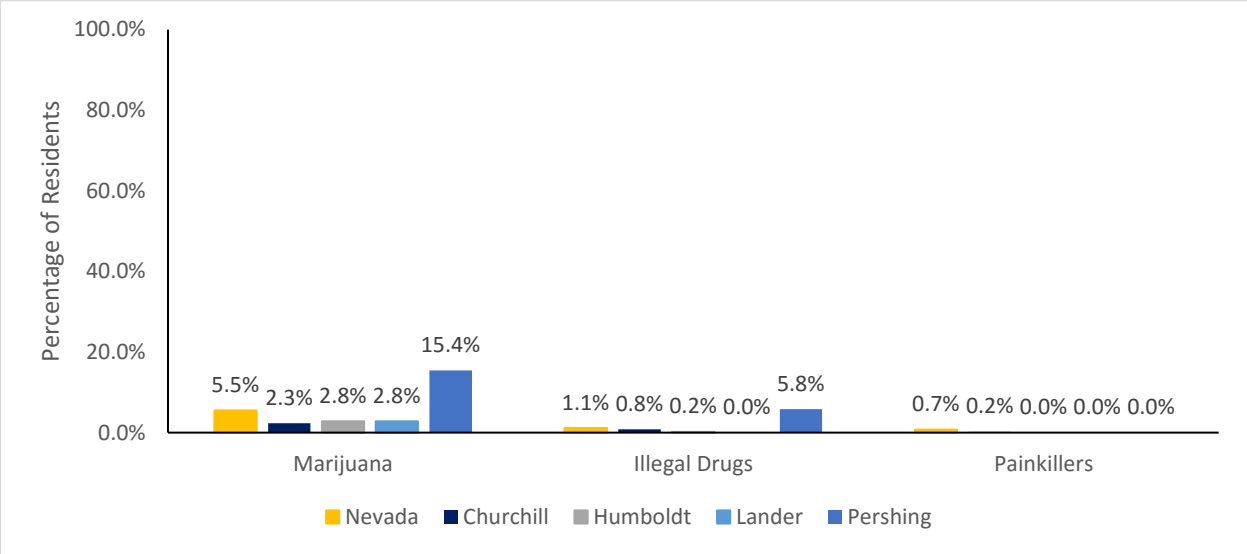
	N	Percent
Sex		
Female	163	45.5%
Male	195	54.5%
Unknown	0	0.0%
Age		
Under 13	6	1.7%
14-19	34	9.5%
20-29	89	24.9%
30-39	63	17.6%
40-49	62	17.3%
50-59	57	15.9%
60+	47	13.1%
Unknown	0	0.0%

There were more male (55%) patients among mental health and substance-related chief complaints in Churchill and Frontier Community Coalition facilities. The largest age group among patients were those aged 30-39 (249%). Not enough information was available to provide race/ethnicity patient demographics.

Behavioral Risk Factor Surveillance System

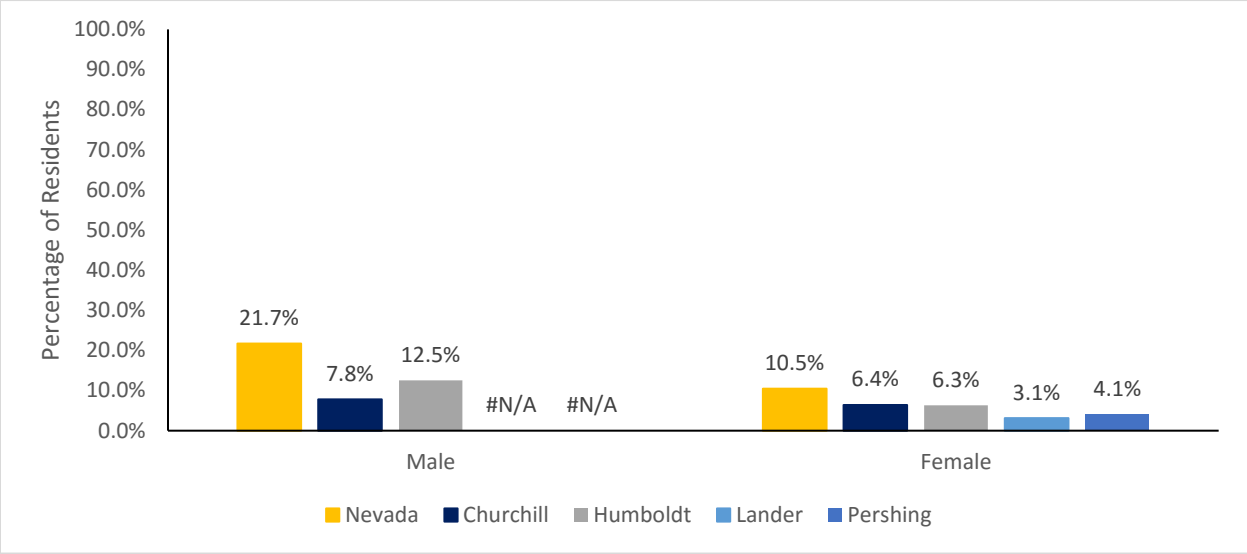
Data in this section are from Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is the nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. 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 Churchill, Humboldt, Lander, and Pershing County residents who used illegal substances, or painkillers 'to get high,' in the last 30 days (aggregate 2011-2014 data).



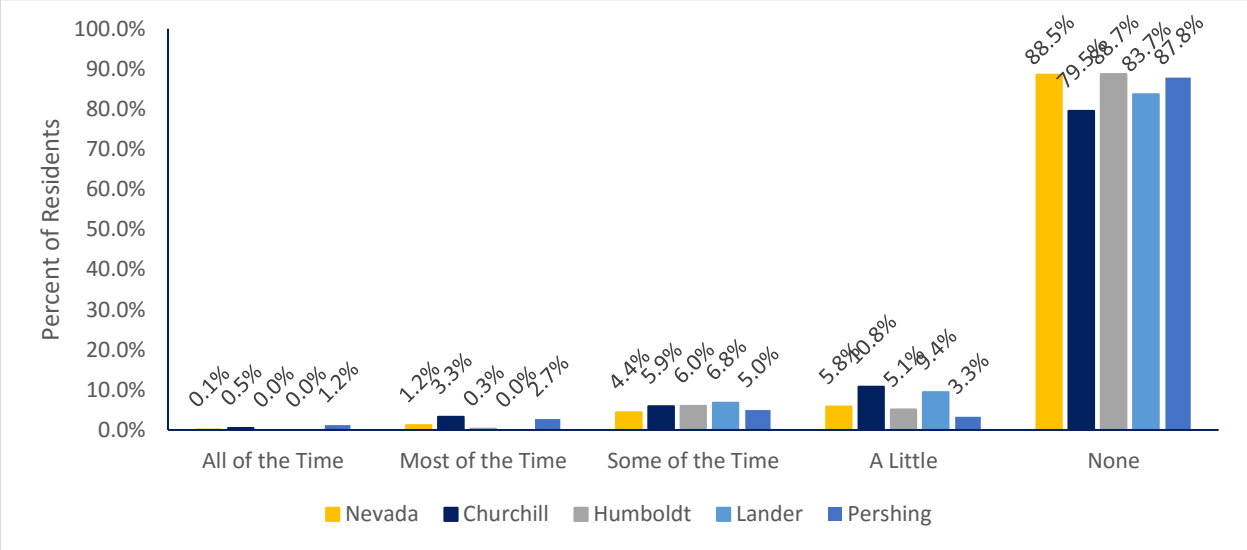
Although 5.5% of adults in Nevada reported using marijuana illegally in the last 30 days, only 2-3% of adults in Churchill, Humboldt, and Lander County and 15% of adults in Pershing reported doing the same.

Figure 19. 2011-2014 BRFSS: Percentages of adult Churchill, Humboldt, Lander, and Pershing County residents who are considered "heavy drinkers" - more than one drink (females) or two drinks (males) per day.



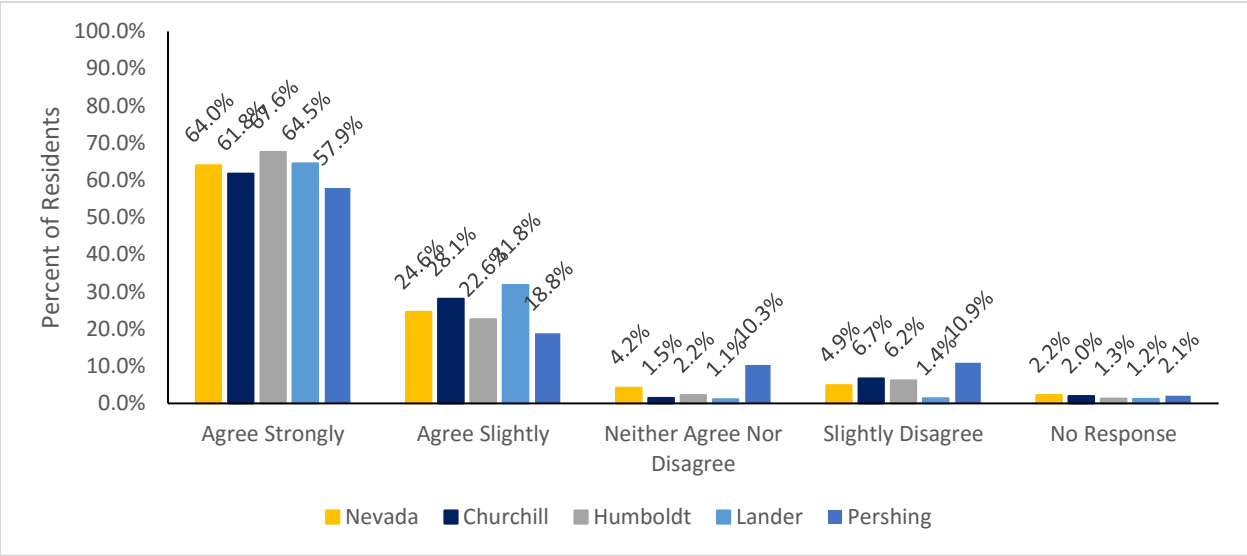
Nevada adult males and females more often reported being heavy drinkers compared to males and females in both all counties. Heavy drinking consists of males consuming more than two alcoholic beverages a day and females consuming more than one alcoholic beverage a day.

Figure 20. Percentages of how often adult Churchill, Humboldt, Lander, and Pershing County residents have felt depressed in the past 30 days, 2012-2014.



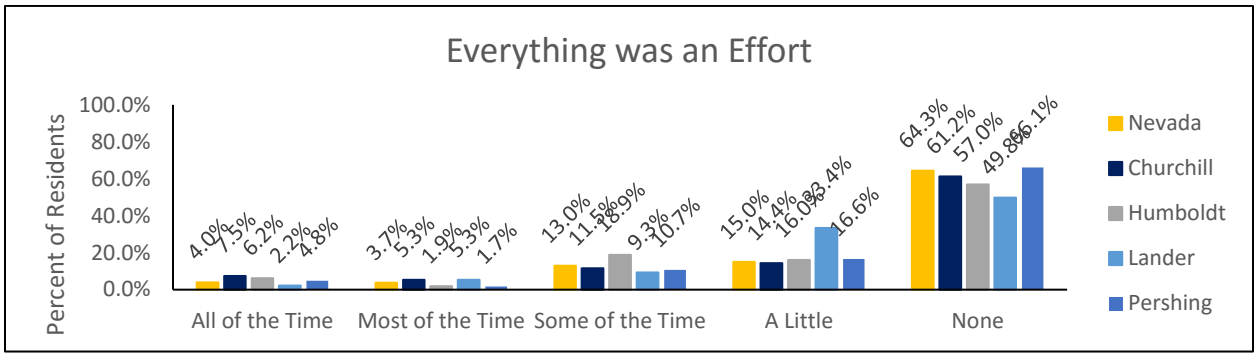
From 2012 to 2014, adult residents in Churchill, Humboldt, Lander, Pershing, and Nevada almost equally reported not experiencing depression in the last 30 days (80%-89%). The rest of the residents reported experiencing a little depression (3%-10%), experiencing depression some of the time (4%-7%), most of the time (0%-3%), and all of the time (0%-1%).

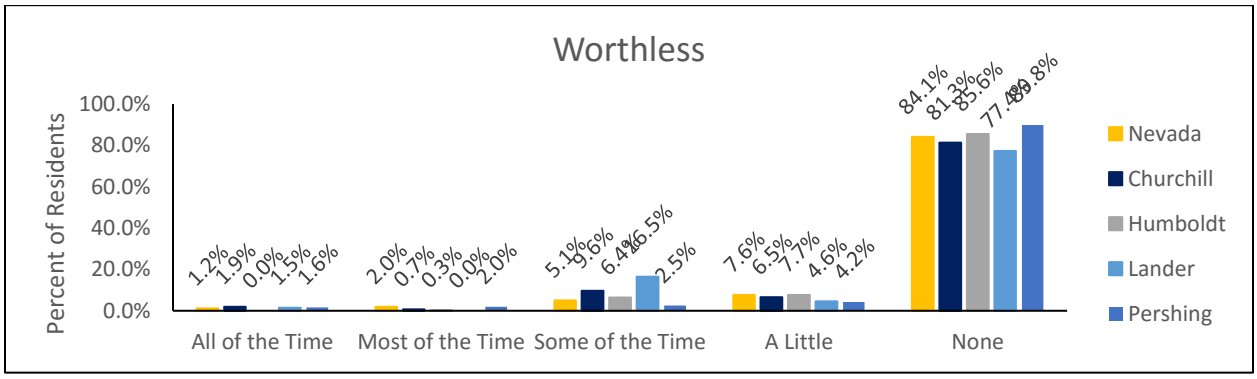
Figure 21. 2012-2014 BRFSS: Percentages of adult Churchill, Humboldt, Lander, and Pershing residents who agree that with treatment, people with a mental illness can live normal lives.

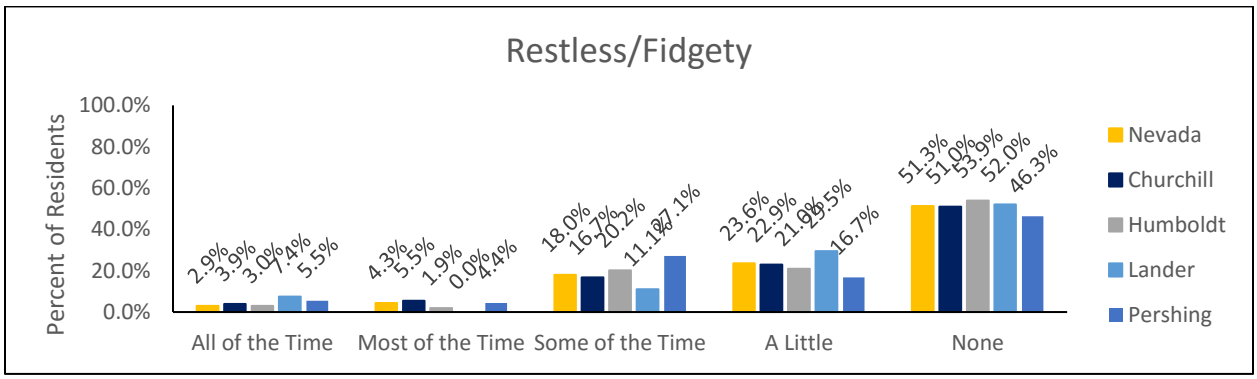


From 2012 to 2014, BRFSS data was collected on perception related to the efficacy of mental health treatment. In Churchill, Humboldt, and Lander, approximately 90%-96% of adults agreed in some capacity that those with mental disorders can live a normal life with treatment, but only 77% of adult residents in Pershing agreed.

Figure 22. 2012-2014 BRFSS: Percentages of adult Churchill, Humboldt, Lander, and Pershing residents who have experienced the following mental health concerns in the past 30 days.

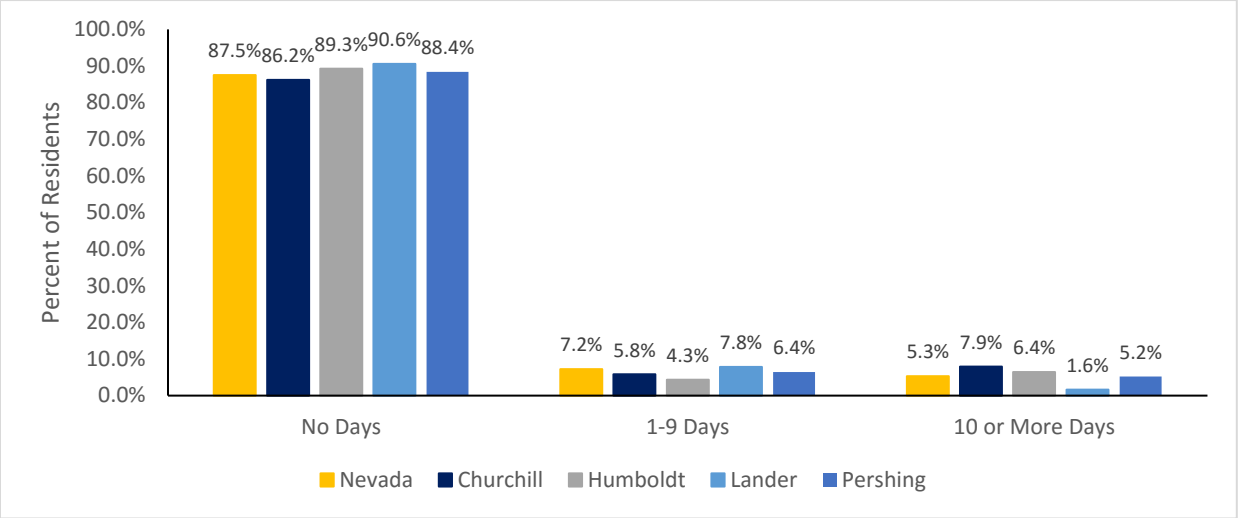






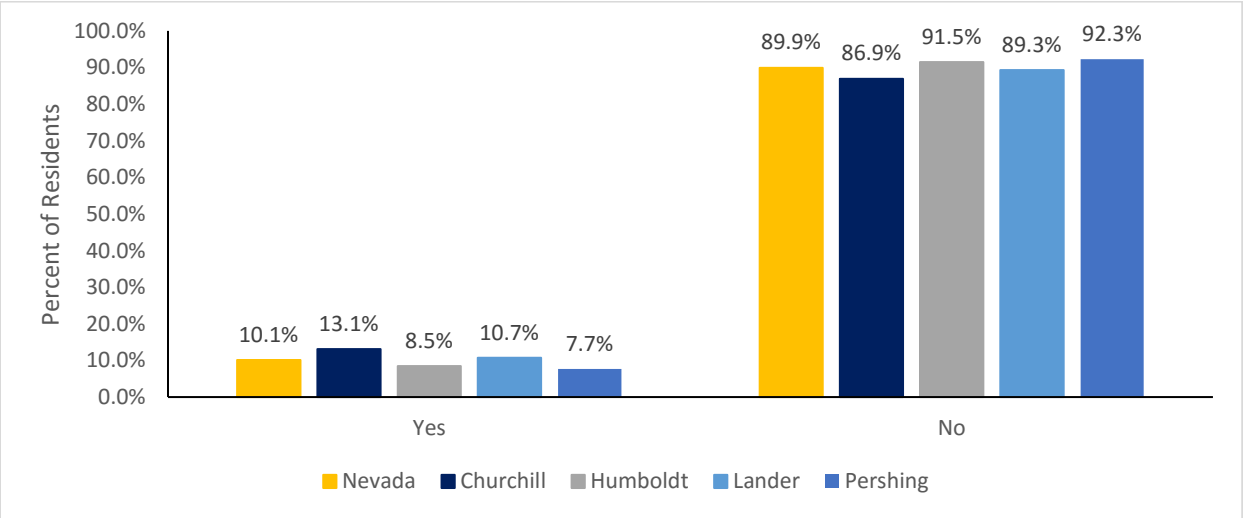
There are a number of BRFSS questions that collect data on feelings/emotions. From 2012 to 2014, 34%-50% of adults in Churchill, Humboldt, Lander, and Pershing reported feeling everything they did took effort, 10%-23% felt worthless, and 46%-54% felt restless and or fidgety.

Figure 23. 2012-2014 BRFSS: Percentages of adult Churchill, Humboldt, Lander, and Pershing 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.



Churchill, Humboldt, Lander, and Pershing 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 86%-91% reported missing no days of work or activities, 4%-8% experiencing missing one to nine days, and 2%-8% missed 10 or more days.

Figure 24. 2012-2014 BRFSS: Percentages of adult Churchill, Humboldt, Lander, and Pershing residents who are taking medication or receiving treatment for any type of mental health condition or emotional problem.

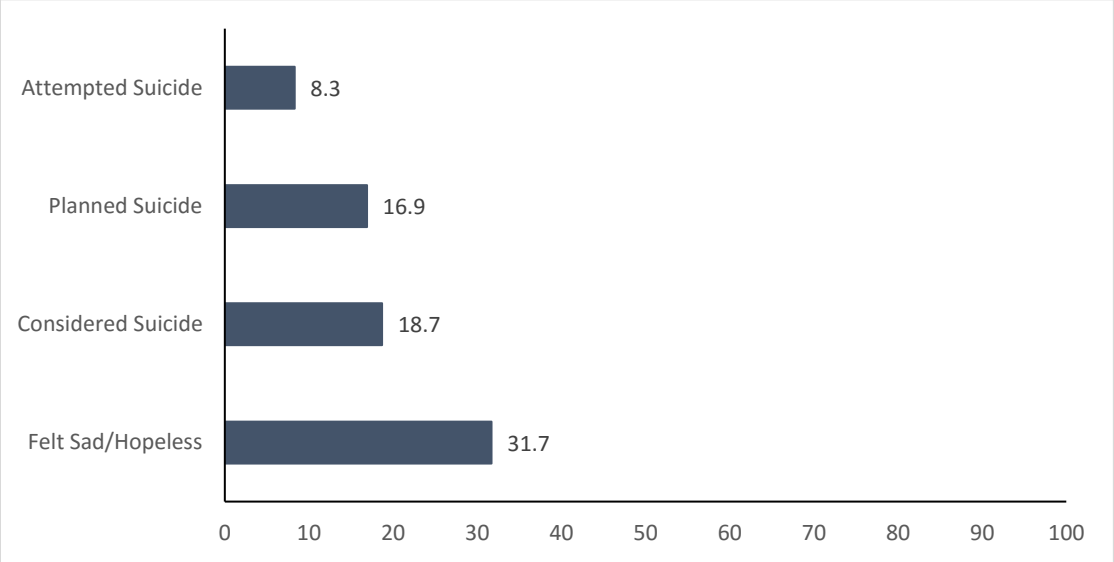


Churchill, Humboldt, Lander, and Pershing residents were asked if they were taking medication or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem. Approximately 87%-92% reported that they were not.

Youth Risk Behavior Surveillance System

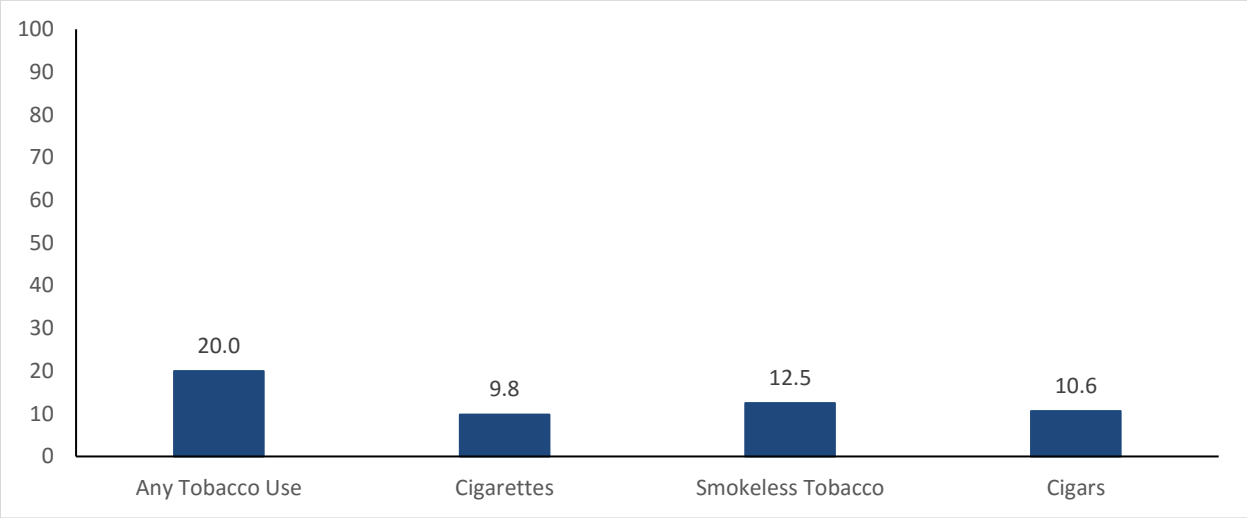
The data in this section is provided through a survey from the Youth Risk Behavioral Surveillance System (YRBSS) at a regional level for Churchill, Humboldt, Lander, and Pershing high school students. YRBSS is a national surveillance system that was established in 1991 by the Centers for Disease Control (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), Churchill and Frontier Community Coalitions, 2015.



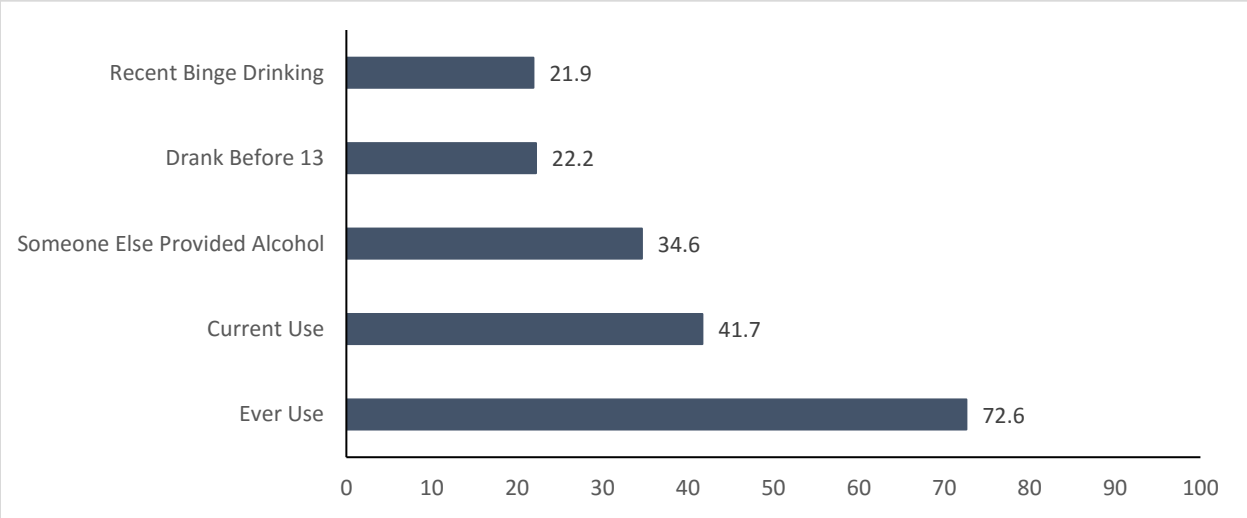
Approximately 32% of Churchill and Frontier Community Coalitions high school students have felt sad or hopeless in the last 12 months. About 19% of students have considered suicide, while 17% have actually planned their suicide. Over 8% of high school students have actually attempted suicide.

Figure 26. Percentages of High School Students Current Tobacco Use, Churchill and Frontier Community Coalitions, 2015.



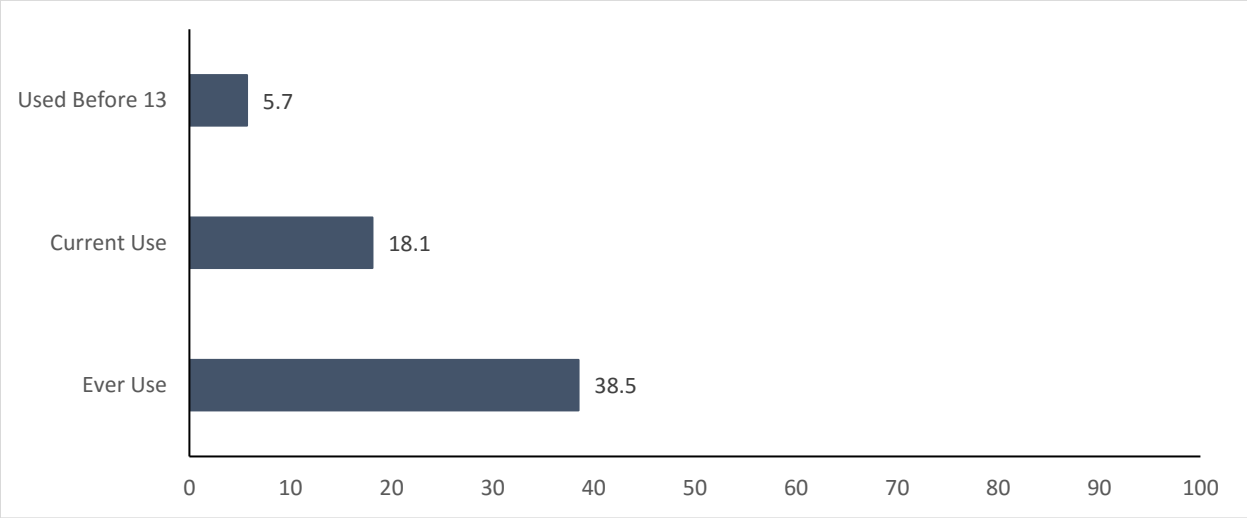
Around 20% of high school students in Churchill and Frontier Community Coalitions are currently using tobacco. About 10% of these high school students smoke cigarettes, while 11% are currently smoking cigars. About 13% are using smokeless tobacco products.

Figure 27. Percentages of High School Students - Alcohol Behavior Summary, Churchill and Frontier Community Coalitions, 2015.



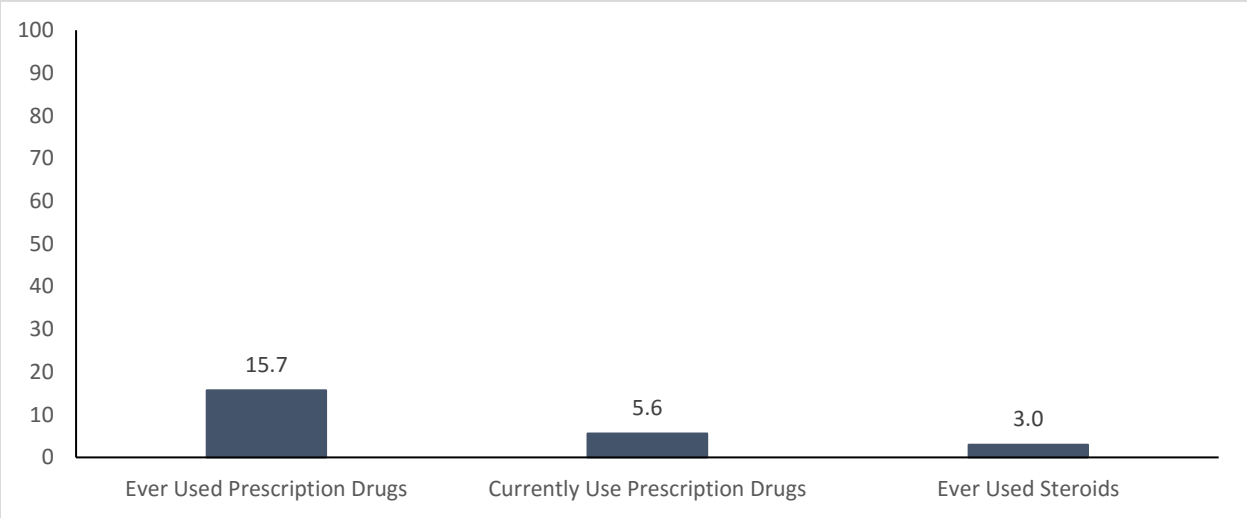
Approximately 73% of high school students in Churchill and Frontier Community Coalitions have had at least one drink of alcohol (more than a few sips). About 42% of high school students currently drink. Nearly 35% of high schools students had alcohol provided to them by someone else. About 22% of high school students had alcohol before the age of 13 years, and approximately 22% 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, Churchill and Frontier Community Coalitions, 2015.



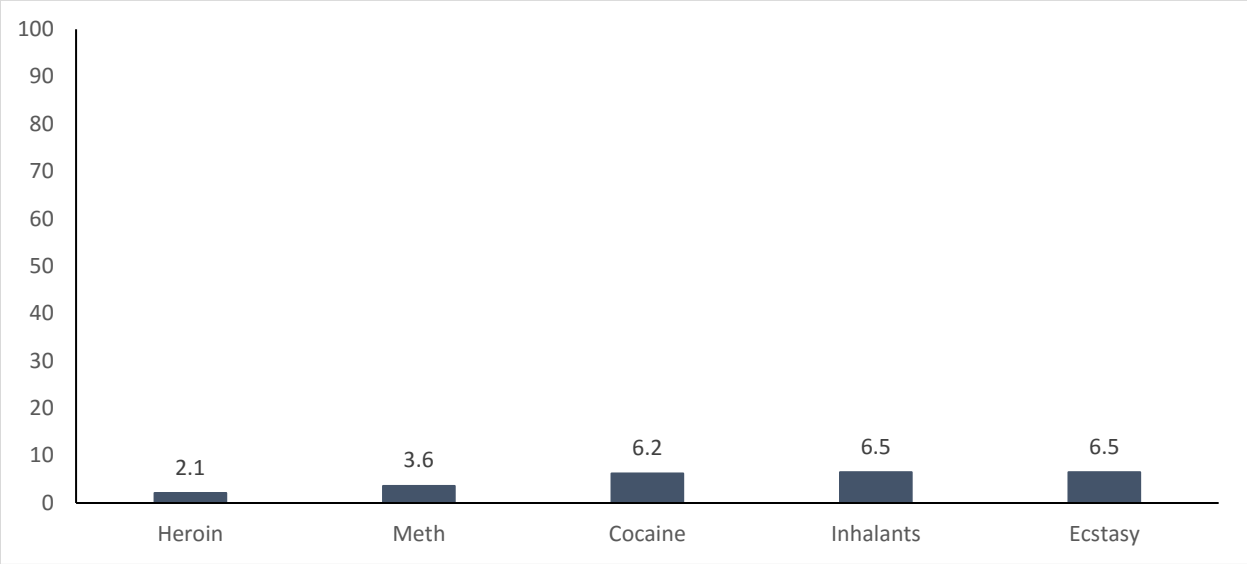
Approximately 39% of high school students in Churchill and Frontier Community Coalitions reported trying marijuana, and 18% are currently using. Approximately 6% of high school students have tried marijuana before the age of 13 years.

Figure 29. Percentages of High School Students Nonprescription Substance Use Summary, Churchill and Frontier Community Coalitions, 2015.



Approximately 16% of high school students have already tried prescription drugs that were not prescribed to them in their lifetime. About 3% have tried non-prescribed steroids.

Figure 30. Percentages of High School Students - Substance Abuse Summary, Churchill and Frontier Community Coalitions, 2015.

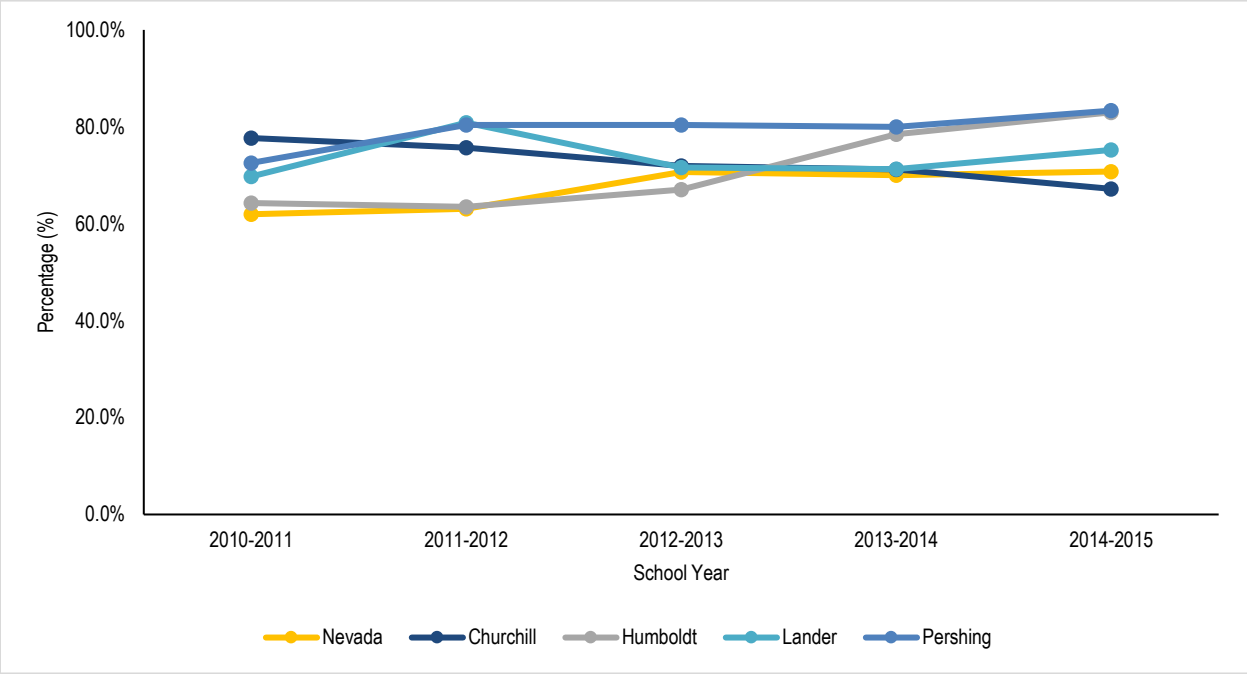


In terms of substance abuse among high school students in Churchill and Frontier Community Coalitions, nearly 7% have used inhalants and ecstasy, the highest percentage of the select substances. About 6% have used cocaine, and 4% of students have tried methamphetamines.

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, Churchill, Humboldt, Lander, Pershing, 2011 – 2015 by Class Cohort.



Similar to Nevada, graduation rates have increased in all counties from the 2010-2011 class cohort to the 2014-2015 class cohort, except in Churchill County. Graduation rates in the Churchill and Frontier Community Coalitions are consistently higher than overall Nevada graduation rates for most years.

Conclusion

This report is intended to provide an overview of behavioral health in Churchill, Humboldt, Lander, and Pershing, 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 Churchill and Frontier Community Coalitions for most 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 1,913%, 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.

From 2009 to 2014, the trend for death rates in mental health-related deaths has decreased from 2009 to 2014. Mental and behavioral health-related deaths, while increasing in Nevada, has decreased from 164.2 to 141.7 deaths per 100,000 in the Churchill and Frontier Community Coalitions.

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