

# *Opioid Surveillance*

*\*Data for 2018 are preliminary.*

*2010 - 2018\**



*Office of Analytics  
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## Emergency Department Encounters and Inpatient Visits

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Data Source: Division of Public and Behavioral Health, Hospital Inpatient and Emergency Department Billing Data.

Data Provided by: Center for Health Information Analysis.

*In October 2015, ICD-10-CM codes were implemented. Previous to October 2015, ICD-9-CM codes were used for medical billing. Therefore, 2015 data consists of two distinct coding schemes, ICD-9-CM and ICD-10-CM respectively. Due to this change in coding schemes, hospital billing data from October 2015 forward may not be directly comparable to previous data.*

The following ICD Codes are included in these data:

### Opioid Related Disorders

#### All Diagnosis

304.0	Opioid type dependence ICD-9-CM
304.7	Combinations of opioid type drug with any other drug dependence ICD-9-CM
305.5	Nondependent opioid abuse ICD-9-CM
F11	Opioid related disorders ICD-10-CM

#### Opiate Poisoning

##### Principal Diagnosis

965.0	Poisoning by opiates and related narcotics ICD-9-CM
T40.0	Poisoning by, adverse effect of and underdosing of opium ICD-10-CM
T40.1	Poisoning by and adverse effect of heroin ICD-10-CM
T40.2	Poisoning by, adverse effect of and underdosing of other opioids ICD-10-CM
T40.3	Poisoning by, adverse effect of and underdosing of methadone ICD-10-CM
T40.4	Poisoning by, adverse effect of and underdosing of other synthetic narcotics ICD-10-CM
T40.6	Poisoning by, adverse effect of and underdosing of other and unspecified narcotics ICD-10-CM

##### All Diagnosis

E850.0-E850.2	Accidental poisoning by heroin, methadone, and other opiates ICD-9-CM
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## Deaths

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Data Source: Division of Public and Behavioral Health, Electronic Death Registry System.

Deaths with any of the following ICD-10 codes as an underlying cause of death were first selected:

X40-X44	Accidental poisonings by drugs
X60-X64	Intentional self poisoning by drugs
X85	Assault by drug poisoning
Y10-Y14	Drug poisoning of undetermined intent

Opioids listed as a contributing cause of death:

T40.0	Opium~
T40.1	Heroin
T40.2	Natural and semi-synthetic opioids
T40.3	Methadone
T40.4	Synthetic opioids
T40.6	Other and unspecified opioids

~Opium was included in analysis, since there have been 0 deaths related to opium it is not included in the tables and charts.

## **Opioid Surveillance Summary, 2010 - 2018\***

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From 2010 to 2018 emergency department encounters increased by 94% and inpatient admissions increased by 95%. The rate of emergency department encounters per 100,000 Nevada residents increased from 109.5 to 212.2, and the rate per 100,000 Nevada residents of inpatient admissions increased from 161.2 to 314.2.

Opioid-related hospitalization visits, from 2010 to 2018, with stays 15 or more days has decreased by 4%.

In terms of demographics in 2018, 74% of the opioid-related emergency department encounters were white non-hispanic. In the hospital, 73% of the inpatient admissions were white and were most prevalent among 25-34 years old Nevada residents (23%).

In 2018 Medicaid paid 48% of the opioid-related Emergency department encounters and 40% of the opioid-related inpatient admissions.

From 2010 to 2018, opioid poisonings in the emergency department decreased by 16%, and inpatient admissions decreased by 28%. The rate per 100,000 Nevada residents in the emergency department decreased from 28.8 to 24.1 and inpatient admissions rates per 100,000 Nevada population decreased from 22.1 to 15.9.

In 2018:

- Heroin was included in 47% of the emergency department encounters and 21% of the inpatient admissions.
- Methadone was included in 3% of the emergency department encounters and 6% of the inpatient admissions.
- Other opioids and narcotics accounted for 51% of the emergency department encounters and 73% of the inpatient admissions.

From 2010 to 2018, the number of opioid-related overdose deaths decreased. The rate per 100,000 Nevada residents for opioid-related overdose deaths decreased by 29% from 16.2 to 11.4.

From 2010 to 2018, each year

- Roughly 85% of all benzodiazepine-related overdose deaths also involve opioids.
- Roughly 30% of all opioid-related overdose deaths also involve benzodiazepines.

In 2018, heroin accounted for 24%, natural and semi-synthetic, 48%, methadone, 8%, synthetic Opioids, 18%, and unspecified narcotics, 2%, of all opioid-related overdose deaths.

In terms of demographics in 2018, 78% of the opioid-related overdose deaths were white non-hispanic and opioid-related deaths were most prevalent among 45-54 years old Nevada residents.

Opioid-related overdose deaths, in 2018, were more prevalent among the male gender.

Opioid-related overdose deaths in Nevada by suicide accounted for 13% of all opioid-related deaths in 2018. Nevada has had 481 opioid-related suicide deaths between 2010 and 2018.

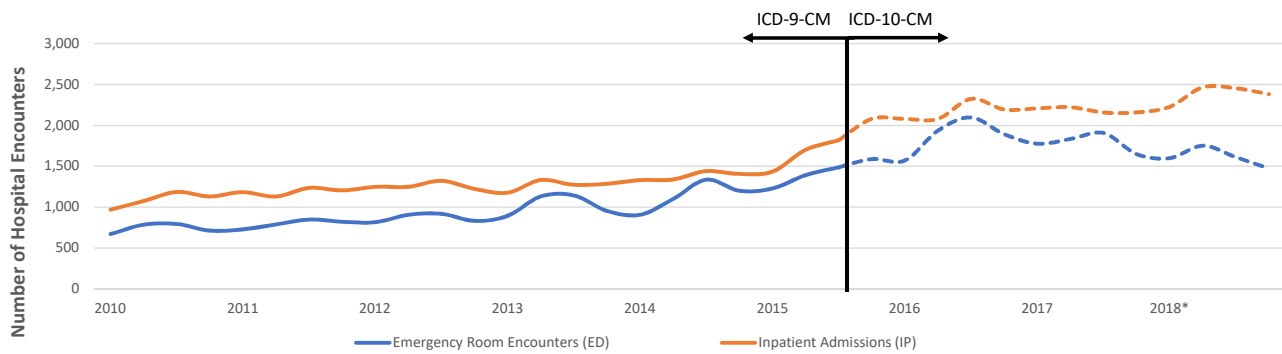
**Opioid-Related Hospital Data, State of Nevada Residents, 2010-2018\***

*In October 2015, ICD-10-CM codes were implemented. Previous to October 2015, ICD-9-CM codes were used for medical billing. Therefore, 2015 data consists of two distinct coding schemes, ICD-9-CM and ICD-10-CM respectively. Due to this change in coding schemes, hospital billing data from October 2015 forward may not be directly comparable to previous data.*

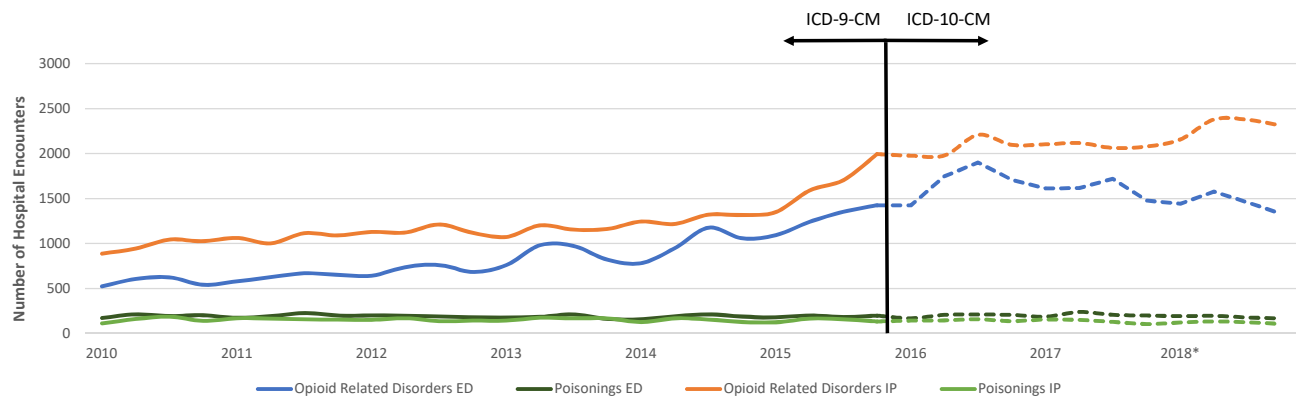
Year	Emergency Room Encounters (ED)	Emergency Room Crude Rates	Percent Change	Inpatient Admissions (IP)	Inpatient Crude Rates	Percent Change
2010	2,963	109.5		4,362	161.2	
2011	3,188	117.1	7%	4,755	174.7	8%
2012	3,473	126.3	8%	5,042	183.3	5%
2013	4,122	147.2	17%	5,067	180.9	-1%
2014	4,543	159.8	9%	5,517	194.0	7%
2015	5,695	196.5	23%	7,032	242.7	25%
2016	7,495	253.8	29%	8,675	293.7	21%
2017	7,165	239.9	-5%	8,744	292.8	0%
2018*	6,434	212.2	-12%	9,526	314.2	7%
Percent Change 2010-2018*			94%			95%

Rates are per 100,000 State of Nevada Population.

**Opioid-Related Hospitalizations by Quarter, State of Nevada Resident, 2010-2018\***



**Opioid-Related Hospital Data, State of Nevada, 2010-2018\***



A person can be included in more than one drug group, and therefore the counts above are not mutually exclusive.

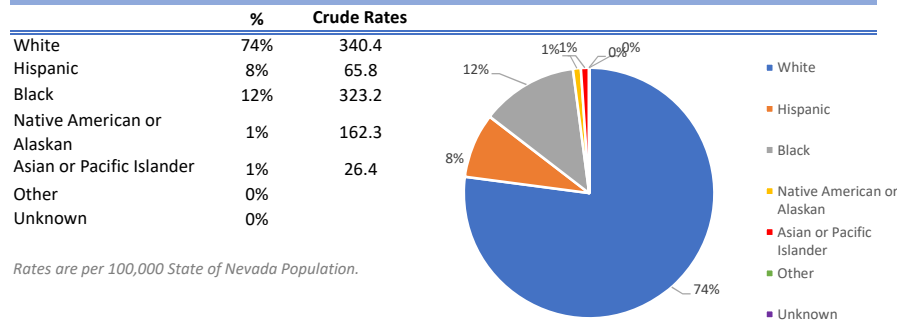
**Opioid-Related Hospitalization (Inpatient) Visits by Length of Stay (Days), State of Nevada Residents, 2010-2018\***

Year	0-1	2-4	5-9	10-14	15-19	20-24	25+
2010	648	1,833	1,158	380	132	97	114
2011	691	1,977	1,339	403	132	74	139
2012	670	1,953	1,531	467	160	102	159
2013	754	1,952	1,483	411	192	111	164
2014	740	2,124	1,604	505	215	111	218
2015	882	2,771	2,201	591	247	119	221
2016	988	3,216	2,934	726	315	175	321
2017	1,117	3,385	2,761	708	322	184	267
2018*	1333	3871	2822	759	329	184	228

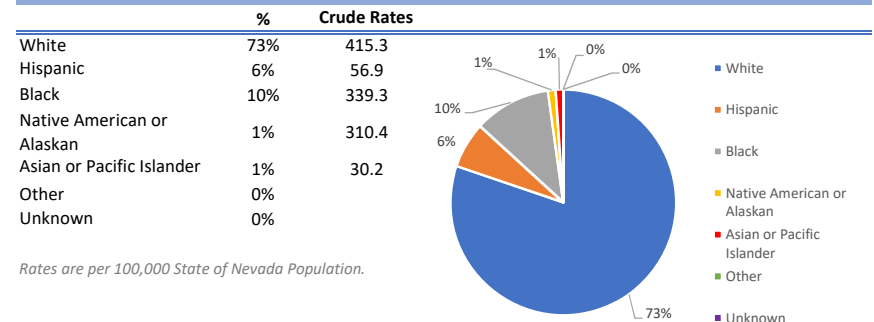
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Opioid-Related Emergency Department Encounters by Race/Ethnicity, State of Nevada Residents, 2018\*



Opioid-Related Inpatient Admissions by Race/Ethnicity, State of Nevada Residents, 2018\*



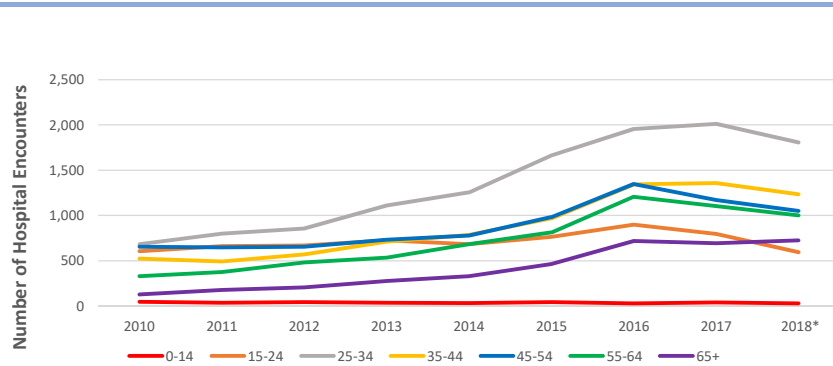
Opioid-Related Emergency Department Encounters by Age Group, State of Nevada Residents, 2010-2018\*

Year	0-14	15-24	25-34	35-44	45-54	55-64	65+
2010	46	605	682	522	654	328	126
2011	37	661	798	492	648	375	177
2012	42	669	855	569	653	481	204
2013	35	726	1,109	712	731	534	275
2014	33	683	1,253	786	776	683	329
2015	41	765	1,664	968	981	814	462
2016	29	898	1,953	1,343	1,347	1,207	718
2017	38	794	2,012	1,357	1,169	1,102	693
2018*	29	593	1,806	1,234	1,048	1,000	724

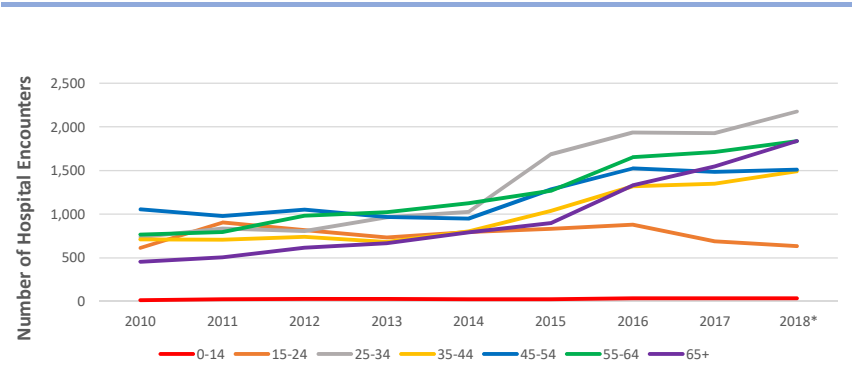
Opioid-Related Inpatient Admissions by Age Group, State of Nevada Residents, 2010-2018\*

Year	0-14	15-24	25-34	35-44	45-54	55-64	65+
2010	15	614	739	713	1,057	767	457
2011	25	905	837	708	979	796	505
2012	29	818	806	740	1,052	981	616
2013	31	733	963	684	967	1,022	667
2014	26	796	1,025	802	950	1,125	793
2015	28	833	1,685	1,036	1,285	1,268	897
2016	36	880	1,936	1,318	1,524	1,652	1,329
2017	36	691	1,927	1,348	1,483	1,712	1,547
2018*	36	636	2,176	1,492	1,511	1,837	1,838

Opioid-Related Emergency Department Encounters by Age Group, State of Nevada Residents, 2010-2018\*



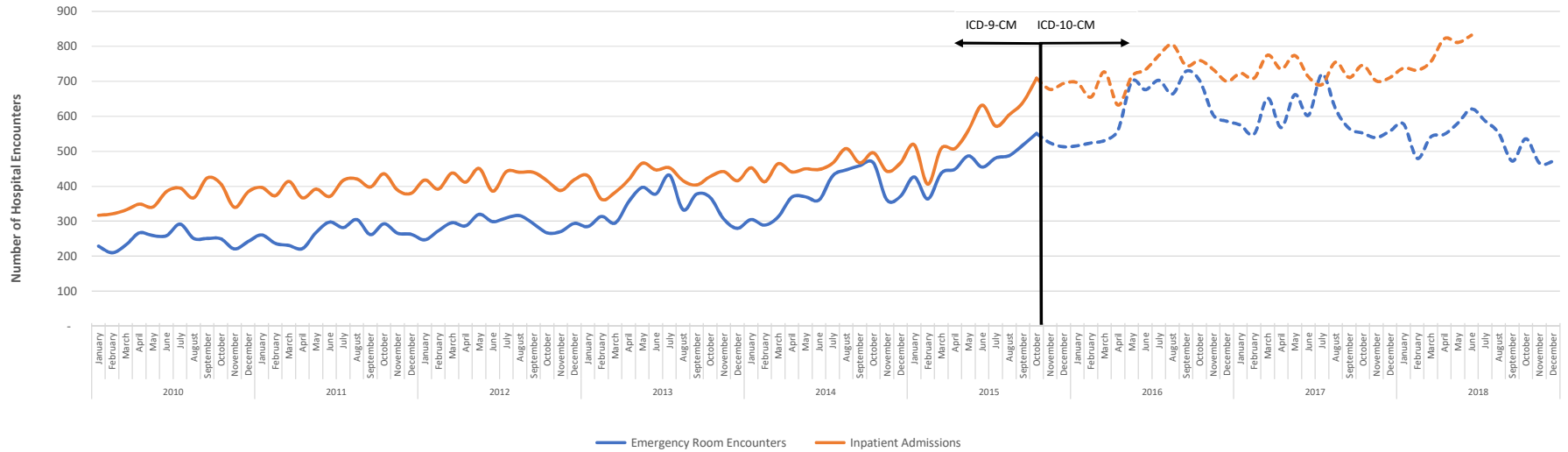
Opioid-Related Inpatient Admissions by Age Group, State of Nevada Residents, 2010-2018\*



\*Data for 2018 are preliminary.

Opioid-Related Hospital Data by Month, State of Nevada Residents, 2010-2018\*

In October 2015, ICD-10-CM codes were implemented. Previous to October 2015, ICD-9-CM codes were used for medical billing. Therefore, 2015 data consists of two distinct coding schemes, ICD-9-CM and ICD-10-CM respectively. Due to this change in coding schemes, hospital billing data from October 2015 forward may not be directly comparable to previous data.



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In October 2015, ICD-10-CM codes were implemented. Previous to October 2015, ICD-9-CM codes were used for medical billing. Therefore, 2015 data consists of two distinct coding schemes, ICD-9-CM and ICD-10-CM respectively. Due to this change in coding schemes, hospital billing data from October 2015 forward may not be directly comparable to previous data.

**Opioid-Related Emergency Department Encounters by Payer, State of Nevada Residents, 2010-2018\***

	Number of Encounters by Payer										Percent of Encounters by Payer									
	2010	2011	2012	2013	2014	2015	2016	2017	2018*		2010	2011	2012	2013	2014	2015	2016	2017	2018*	
Medicaid	400	435	462	597	1,631	2,544	3,592	3,463	3,100	Medicaid	13%	14%	13%	14%	36%	45%	48%	48%	48%	
Medicare	405	480	597	744	844	1,081	1,633	1,490	1,368	Medicare	14%	15%	17%	18%	19%	19%	22%	21%	21%	
Self Pay	1,126	1,094	1,216	1,445	850	701	669	606	525	Self Pay	38%	34%	35%	35%	19%	12%	9%	8%	8%	
HMO	376	433	462	456	343	354	404	397	451	HMO	13%	14%	13%	11%	8%	6%	5%	6%	7%	
Commercial Insurer	95	99	120	173	369	510	612	605	394	Commercial Insurer	3%	3%	3%	4%	8%	9%	8%	8%	6%	
Negotiated Discounts e.g. PPO	159	189	224	228	221	241	276	339	284	Negotiated Discounts e.g. PPO	5%	6%	6%	6%	5%	4%	4%	5%	4%	
Charity	160	166	176	125	87	58	127	89	123	Charity	5%	5%	5%	3%	2%	1%	2%	1%	2%	
CHAMPUS or CHAMPVA	31	26	39	51	47	74	74	78	65	CHAMPUS or CHAMPVA	1%	1%	1%	1%	1%	1%	1%	1%	1%	
Missing	1	43	52	34	3	5	4	9	56	Missing	0%	1%	1%	1%	0%	0%	0%	0%	1%	
Miscellaneous	48	43	39	169	133	118	77	67	44	Miscellaneous	2%	1%	1%	4%	3%	2%	1%	1%	1%	
All Workers Compensation e.g.(SIIS)	5	8	8	9	9	2	15	15	13	All Workers Compensation e.g.(SIIS)	0%	0%	0%	0%	0%	0%	0%	0%	0%	
County Indigent Referral	157	165	66	57	5	7	10	7	11	County Indigent Referral	5%	5%	2%	1%	0%	0%	0%	0%	0%	
Unknown	0	7	12	34	1	0	2	0	0	Unknown	0%	0%	0%	1%	0%	0%	0%	0%	0%	
<b>Total</b>	<b>2,963</b>	<b>3,188</b>	<b>3,473</b>	<b>4,122</b>	<b>4,543</b>	<b>5,695</b>	<b>7,495</b>	<b>7,165</b>	<b>6,434</b>	<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	

**Opioid-Related Inpatient Hospital Admissions by Payer, State of Nevada Residents, 2010-2018\***

	Number of Admission by Payer										Percent of Admission by Payer									
	2010	2011	2012	2013	2014	2015	2016	2017	2018*		2010	2011	2012	2013	2014	2015	2016	2017	2018*	
Medicaid	681	718	814	812	1,554	2,709	3,495	3,416	3,802	Medicaid	16%	15%	16%	16%	28%	39%	40%	39%	40%	
Medicare	1,303	1,353	1,631	1,760	1,816	2,092	2,676	2,977	3,348	Medicare	30%	28%	32%	35%	33%	30%	31%	34%	35%	
HMO	575	593	801	812	774	740	663	609	627	HMO	13%	12%	16%	16%	14%	11%	8%	7%	7%	
CHAMPUS or CHAMPVA	83	112	194	223	319	480	658	541	555	CHAMPUS or CHAMPVA	2%	2%	4%	4%	6%	7%	8%	6%	6%	
Commercial Insurer	327	697	361	171	345	369	555	494	407	Commercial Insurer	7%	15%	7%	3%	6%	5%	6%	6%	4%	
Negotiated Discounts e.g. PPO	296	297	433	338	263	219	323	392	394	Negotiated Discounts e.g. PPO	7%	6%	9%	7%	5%	3%	4%	4%	4%	
Self Pay	448	446	515	621	352	209	194	176	233	Self Pay	10%	9%	10%	12%	6%	3%	2%	2%	2%	
Miscellaneous	76	82	37	58	48	101	60	66	73	Miscellaneous	2%	2%	1%	1%	1%	1%	1%	1%	1%	
Missing	217	153	9	38	16	78	18	45	56	Missing	5%	3%	0%	1%	0%	1%	0%	1%	1%	
Charity	31	62	15	39	21	17	21	11	18	Charity	1%	1%	0%	1%	0%	0%	0%	0%	0%	
All Workers Compensation e.g.(SIIS)	12	5	11	12	6	17	12	17	11	All Workers Compensation e.g.(SIIS)	0%	0%	0%	0%	0%	0%	0%	0%	0%	
County Indigent Referral	312	237	217	174	3	1	0	0	2	County Indigent Referral	7%	5%	4%	3%	0%	0%	0%	0%	0%	
Other Blue Cross/Blue Shield	1	0	0	0	0	0	0	0	0	Other Blue Cross/Blue Shield	0%	0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total</b>	<b>4,362</b>	<b>4,755</b>	<b>5,038</b>	<b>5,058</b>	<b>5,517</b>	<b>7,032</b>	<b>8,675</b>	<b>8,744</b>	<b>9,526</b>	<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	

\*Data for 2018 are preliminary.



**Opioid-Related Poisonings - Emergency Department Encounters and Inpatient Hospital Admissions, State of Nevada Residents, 2010-2018\***

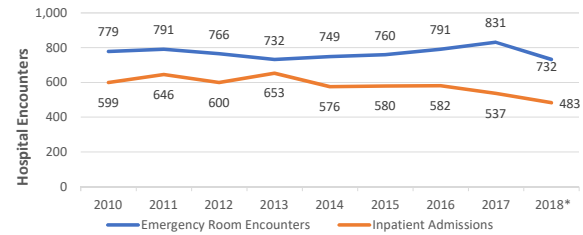
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*Opioid-related poisoning is a subset of the opioid-related hospitalization data. The following ICD-9-CM/ICD-10-CM for poisoning include the principal diagnosis: 965.0 ICD-9, T40.0-T40.4, and T40.6 ICD-10, and all E-code diagnosis: E850.0-E850.2 ICD-9.*

Year	Emergency Room Encounters	Emergency Room Crude Rates	Percent Change	Inpatient Admissions	Inpatient Crude Rates	Percent Change
2010	779	28.8		599	22.1	
2011	791	29.1	1%	646	23.7	7%
2012	766	27.9	-4%	600	21.8	-8%
2013	732	26.1	-6%	653	23.3	7%
2014	749	26.3	1%	576	20.3	-13%
2015	760	26.2	0%	580	20.0	-1%
2016	791	26.8	2%	582	19.7	-2%
2017	831	27.8	4%	537	18.0	-9%
2018*	732	24.1	-13%	483	15.9	-11%
Percent Change 2010-2018*			-16%			-28%

*Rates are per 100,000 State of Nevada population.*

**Opioid-Related Poisonings (ED and IP), State of Nevada Residents, 2010-2018\***



**Opioid-Related Poisonings - Emergency Department Encounters, State of Nevada Residents, 2010-2018\***

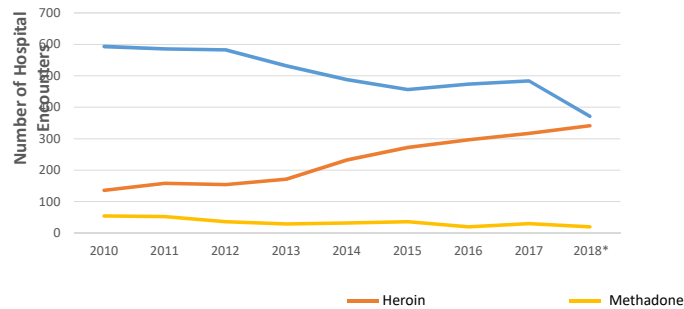
Year	Heroin	Methadone	Other Opioids and Narcotics
2010	136	54	593
2011	158	53	585
2012	154	36	582
2013	172	29	532
2014	233	32	488
2015	272	36	456
2016	297	20	474
2017	317	30	484
2018*	341	20	371

**Opioid-Related Poisonings - Inpatient Admissions, State of Nevada Residents, 2010-2018\***

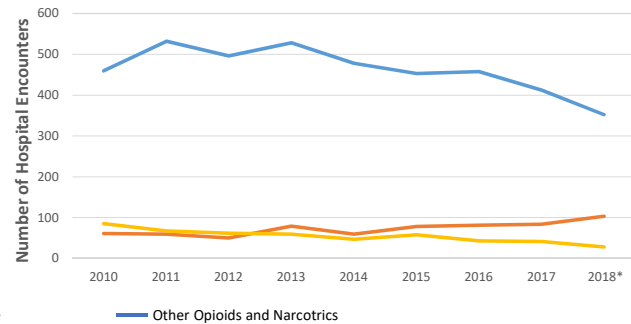
Year	Heroin	Methadone	Other Opioids and Narcotics
2010	61	85	459
2011	59	67	532
2012	50	62	496
2013	79	59	528
2014	59	47	478
2015	78	58	453
2016	81	43	458
2017	84	41	412
2018*	103	28	352

*A person can be included in more than one drug group, and therefore the counts above are not mutually exclusive. In 2016, the use of E-Codes was eliminated and counts will be mutually exclusive.*

**Emergency Department Encounters, State of Nevada Residents, 2010-2018\***



**Inpatient Admissions, State of Nevada Residents, 2010-2018\***



*\*Data for 2018 are preliminary.*

**Opioid-Related Overdose Deaths, State of Nevada Residents, 2010-2018\***

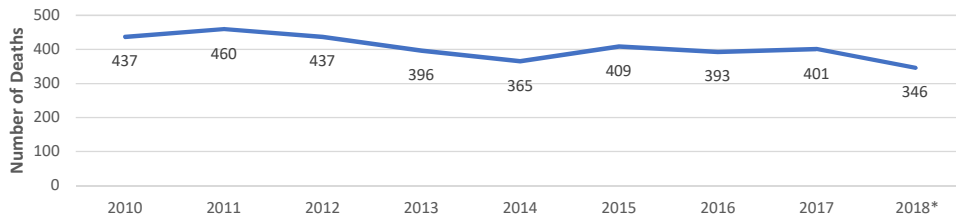
Year	Opioid-Related Overdose Deaths	Crude Rates	Percent Change	Benzodiazepine Related Overdose Deaths	Opioid and Benzodiazepine Related Overdose Deaths
2010	437	16.2		161	139
2011	460	16.9	5%	166	143
2012	437	15.9	-6%	162	140
2013	396	14.1	-11%	126	106
2014	365	12.8	-9%	125	109
2015	409	14.1	10%	130	117
2016	393	13.3	-6%	155	126
2017	401	13.4	1%	123	106
2018*	346	11.4	-15%	137	110
Percent Change 2010-2018*			-29%		

Rates are per 100,000 State of Nevada Population.

Each year:

- Roughly 85% of all benzodiazepine-related overdose deaths also involve opioids.
- Roughly 30% of all opioid-related overdose deaths also involve benzodiazepines.

**Opioid-Related Overdose Deaths, State of Nevada Residents, 2010-2018\***

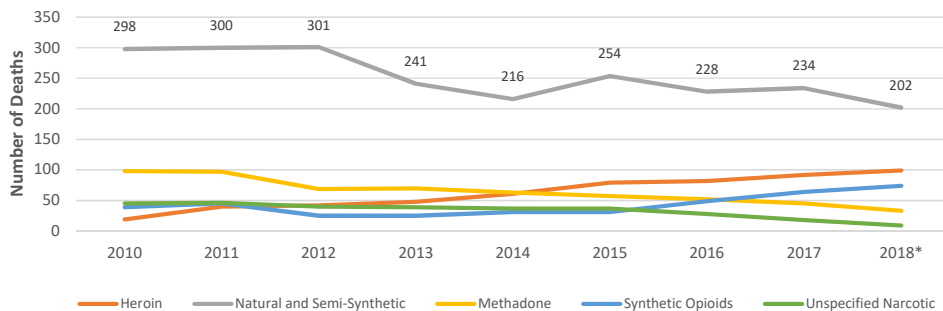


**Opioid-Related Overdose Deaths by Drug Category, State of Nevada Residents, 2010-2018\***

Year	Heroin	Natural and Semi-Synthetic	Methadone	Synthetic Opioids	Unspecified Narcotic
2010	19	298	98	39	45
2011	40	300	97	45	46
2012	42	301	69	25	40
2013	48	241	70	25	39
2014	61	216	63	31	37
2015	79	254	57	31	37
2016	82	228	52	49	28
2017	92	234	45	64	18
2018*	99	202	33	74	9

A person can be included in more than one drug group, and therefore the counts above are not mutually exclusive.

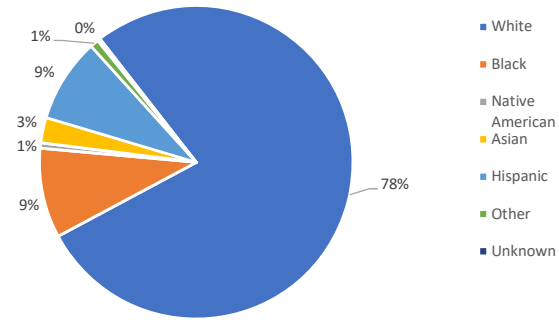
**Opioid-Related Overdose Deaths by Drug Category, State of Nevada Residents, 2010-2018\***



\*Data for 2018 are preliminary.

**Opioid-Related Deaths by Race/Ethnicity, State of Nevada Residents, 2018\***

Race/Ethnicity	%	Crude Rates
White	78%	17.4
Black	9%	12.0
Native American	1%	5.7
Asian	3%	3.1
Hispanic	9%	3.4
Other	1%	
Unknown	0%	

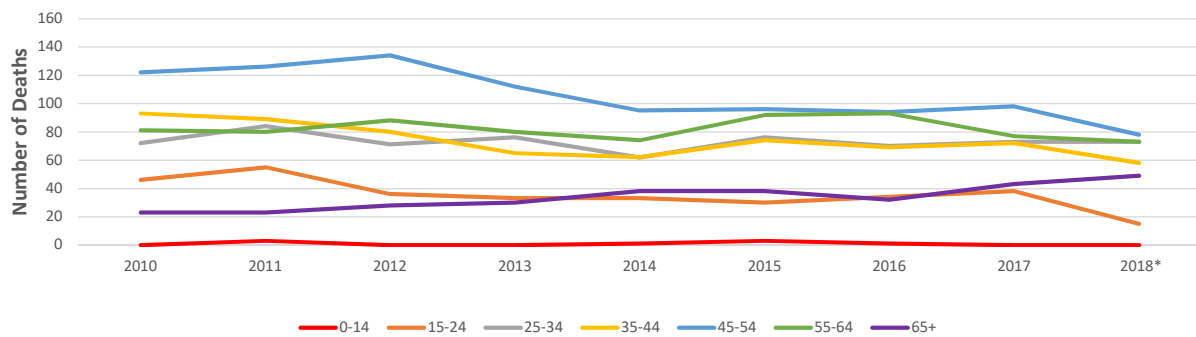


Rates are per 100,000 State of Nevada Population.

**Opioid-Related Deaths by Age Group, State of Nevada Residents, 2010-2018\***

Year	0-14	15-24	25-34	35-44	45-54	55-64	65+
2010	0	46	72	93	122	81	23
2011	3	55	84	89	126	80	23
2012	0	36	71	80	134	88	28
2013	0	33	76	65	112	80	30
2014	1	33	62	62	95	74	38
2015	3	30	76	74	96	92	38
2016	1	34	70	69	94	93	32
2017	0	38	73	72	98	77	43
2018*	0	15	73	58	78	73	49

**Opioid-Related Deaths by Age Group, State of Nevada Residents, 2010-2018\***



**Opioid-Related Deaths by Intent, State of Nevada Residents, 2010-2018\***

Cause of Death	N	%	Crude Rates
Accident	3,071	84%	12.0
Suicide	481	13%	1.9
Assault/Homicide	5	0%	0.0
Events of Undetermined Intent	87	2%	0.3
Total (2010-2018*)	3,644	100%	14.2

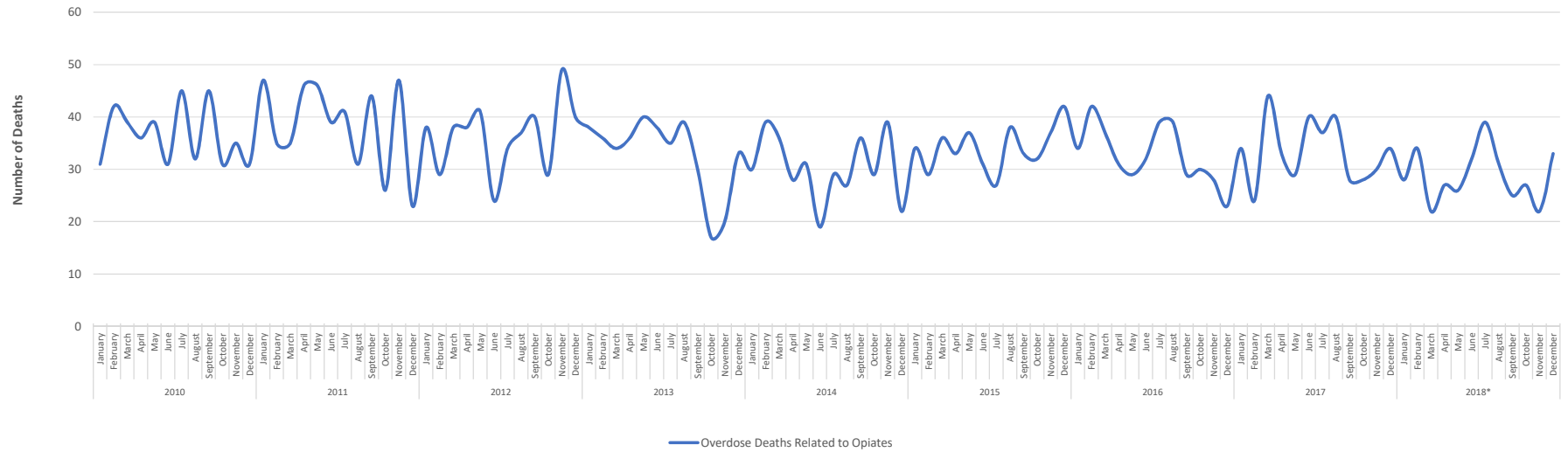
**Opioid-Related Deaths by Sex, State of Nevada Residents, 2010-2018\***

Year	Male	Crude Rates	Female	Crude Rates
2010	239	17.5	198	14.8
2011	279	20.3	181	13.4
2012	227	16.4	210	15.4
2013	215	15.2	181	13.0
2014	196	13.7	169	12.0
2015	220	15.1	189	13.1
2016	217	14.6	176	12.0
2017	222	14.8	179	12.0
2018*	214	14.1	132	8.7

Rates are per 100,000 State of Nevada Population.

\*Data for 2018 are preliminary.

Opioid-Related Deaths by Month, State of Nevada Residents, 2010-2018\*



\*Data for 2018 are preliminary.