

# *Nevada Opioid Surveillance*

*2010 - 2017*



*Office of Analytics  
Department of Health and Human Services*

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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 are preliminary and are subject to changes.*

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.*

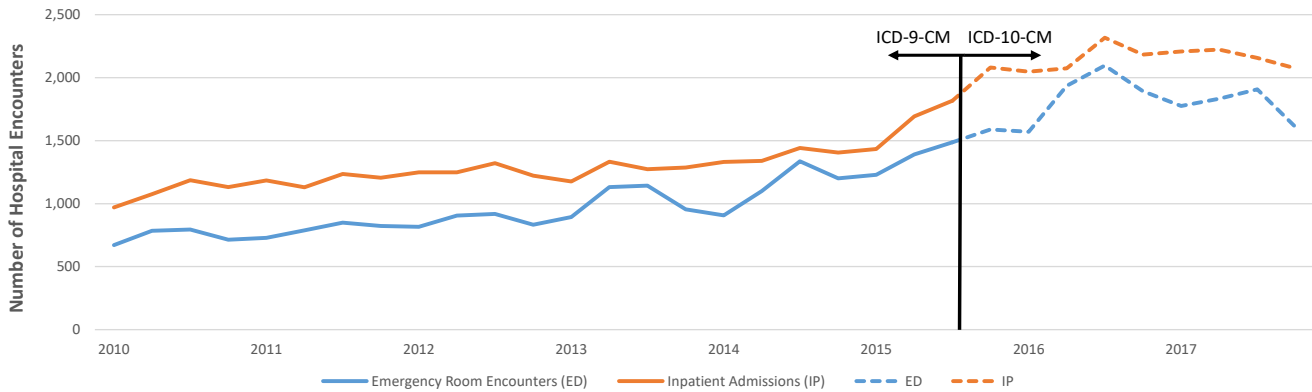
### Opioid-Related Hospital Data, Nevada Residents, 2010-2017

*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.*

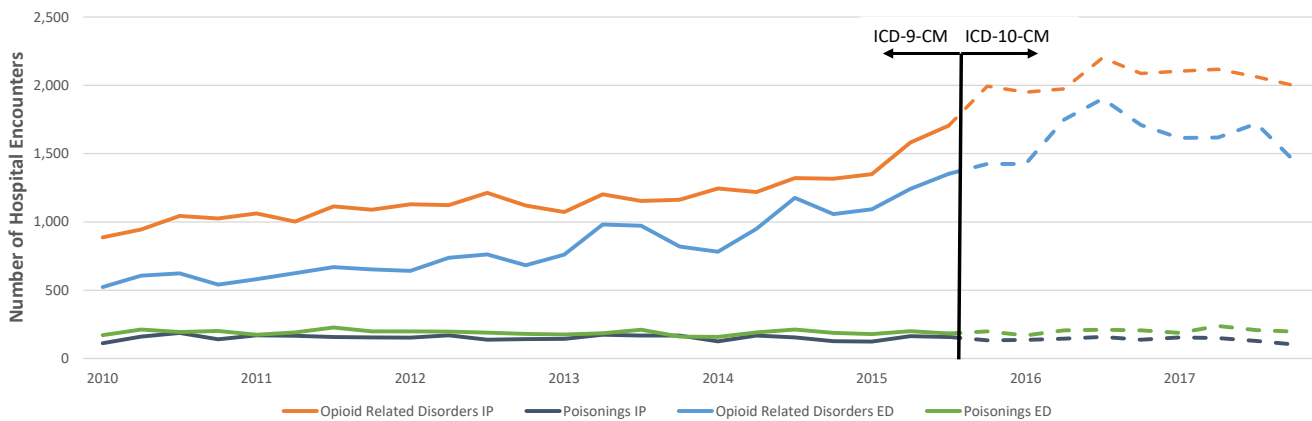
Year	Emergency Room Encounters (ED)	Emergency Room Crude Rates	Percent Change	Inpatient Admissions (IP)	Inpatient Crude Rates	Percent Change
2010	2,963	109.5		4,362	161.2	
2011	3,188	117.1	7%	4,755	174.7	8%
2012	3,473	126.3	8%	5,042	183.3	5%
2013	4,122	147.2	17%	5,067	180.9	-1%
2014	4,543	159.8	9%	5,517	194.0	7%
2015	5,695	196.5	23%	7,022	242.3	25%
2016	7,495	253.8	29%	8,621	291.9	20%
2017	7,125	238.7	-6%	8,661	290.1	-1%
Percent Change 2010-2017			118%			80%

Rates are per 100,000 Nevada Population.

Opioid-Related Hospitalizations by Quarter, Nevada Residents, 2010-2017



Opioid-Related Hospitalizations by Quarter, ICD Group and Year, Nevada Residents, 2010-2017



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

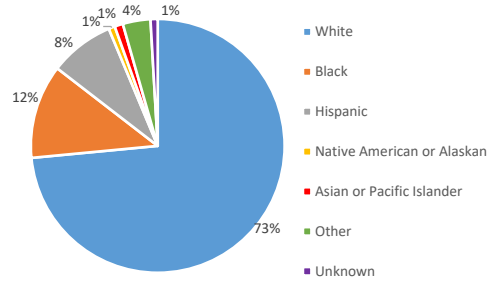
#### Opioid-Related Hospitalization (Inpatient) Visits by Length of Stay (Days), Nevada Residents, 2010-2017

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	880	2,771	2,196	592	245	117	221
2016	985	3,209	2,916	721	312	169	309
2017	1,104	3,357	2,725	705	322	182	266

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 Race/Ethnicity, Nevada Residents, 2017**

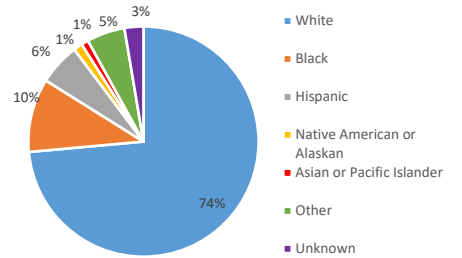
	%	Crude Rates
White	73%	339.4
Black	12%	329.0
Hispanic	8%	67.7
Native American or Alaskan	1%	164.9
Asian or Pacific Islander	1%	26.9
Other	4%	
Unknown	1%	



Rates are per 100,000 Nevada population.

**Opioid-Related Inpatient Admissions by Race/Ethnicity, Nevada Residents, 2017**

	%	Crude Rates
White	74%	413.0
Black	10%	345.6
Hispanic	6%	58.4
Native American or Alaskan	1%	312.4
Asian or Pacific Islander	1%	30.8
Other	5%	
Unknown	3%	

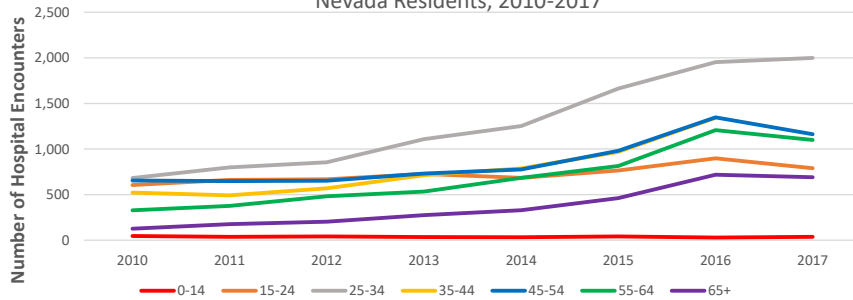


Rates are per 100,000 Nevada population.

**Opioid-Related Emergency Department Encounters by Age Group, Nevada Residents, 2010-2017**

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	37	790	1,999	1,347	1,162	1,099	691

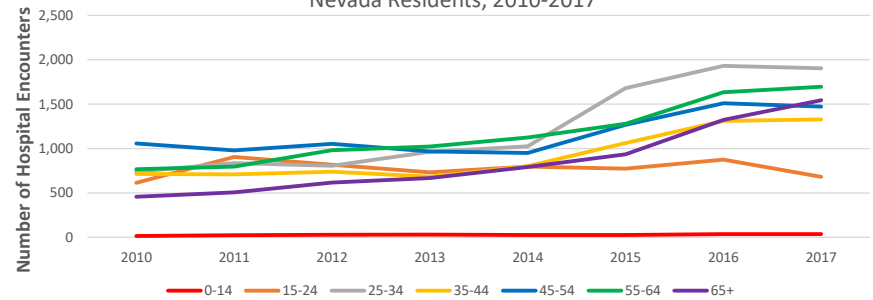
Opioid-Related Emergency Department Encounters by Age Group, Nevada Residents, 2010-2017



**Opioid-Related Inpatient Admissions by Age Group, Nevada Residents, 2010-2017**

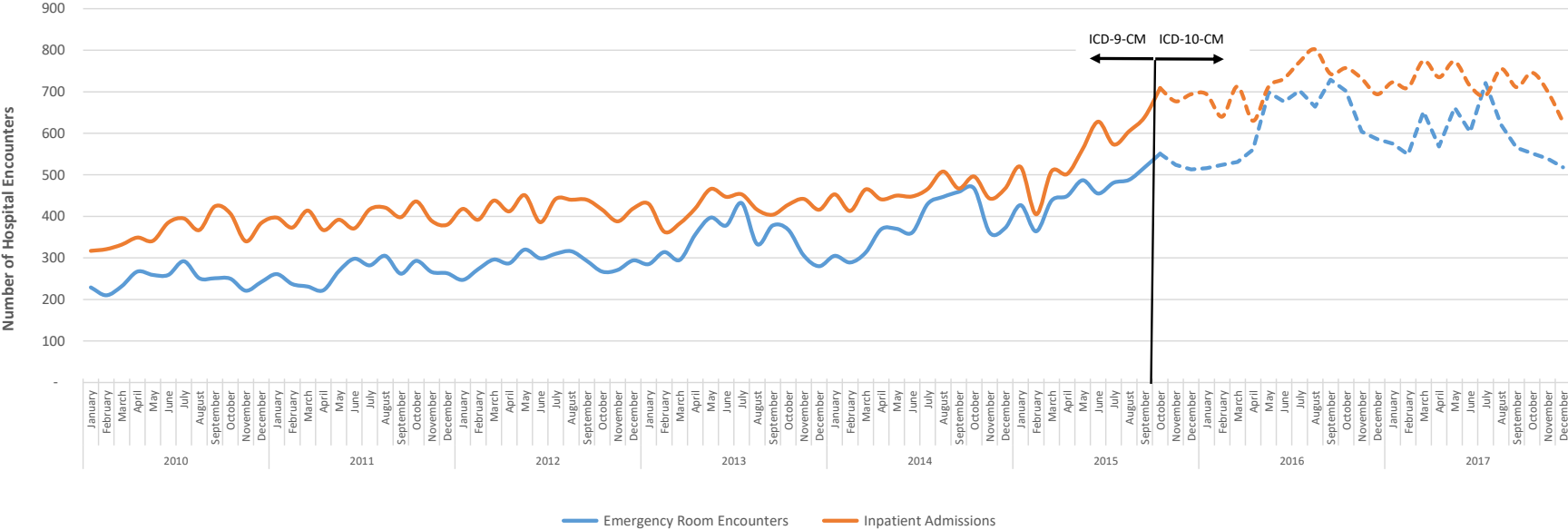
Year	0-14	15-24	25-34	35-44	45-54	55-64	65+
2010	15	614	739	713	1,057	767	457
2011	25	905	837	708	979	796	505
2012	29	818	806	740	1,052	981	616
2013	31	733	963	684	967	1,022	667
2014	26	796	1,025	802	950	1,125	793
2015	26	773	1,681	1,061	1,268	1,279	934
2016	36	876	1,931	1,310	1,510	1,635	1,323
2017	36	682	1,903	1,328	1,472	1,696	1,544

Opioid-Related Inpatient Admissions by Age Group, Nevada Residents, 2010-2017



### Opioid-Related Hospital Data by Month, Nevada Residents, 2010-2017

*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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**Opioid-Related Emergency Department Encounters by Payer, Nevada Residents, 2010-2017**

Number of Encounters by Payer									Percent of Encounters by Payer								
	2010	2011	2012	2013	2014	2015	2016	2017		2010	2011	2012	2013	2014	2015	2016	2017
Medicaid	400	435	462	597	1,631	2,544	3,592	3,433	Medicaid	13%	14%	13%	14%	36%	45%	48%	48%
Self Pay	1,126	1,094	1,216	1,445	850	701	669	601	Self Pay	38%	34%	35%	35%	19%	12%	9%	8%
Medicare	405	480	597	744	844	1,081	1,633	1,487	Medicare	14%	15%	17%	18%	19%	19%	22%	21%
HMO	376	433	462	456	343	354	404	397	HMO	13%	14%	13%	11%	8%	6%	5%	6%
Commercial Insurer	95	99	120	173	369	510	612	605	Commercial Insurer	3%	3%	3%	4%	8%	9%	8%	8%
Negotiated Discounts (PPO)	159	189	224	228	221	241	276	339	Negotiated Discounts (PPO)	5%	6%	6%	6%	5%	4%	4%	5%
Charity	160	166	176	125	87	58	127	89	Charity	5%	5%	5%	3%	2%	1%	2%	1%
Miscellaneous	48	43	39	169	133	118	77	66	Miscellaneous	2%	1%	1%	4%	3%	2%	1%	1%
County Indigent Referral	157	165	66	57	5	7	10	7	County Indigent Referral	5%	5%	2%	1%	0%	0%	0%	0%
CHAMPUS OR CHAMPVA	31	26	39	51	47	74	74	78	CHAMPUS OR CHAMPVA	1%	1%	1%	1%	1%	1%	1%	1%
All Workers Compensation	5	8	8	9	9	2	15	15	All Workers Compensation	0%	0%	0%	0%	0%	0%	0%	0%
Missing	1	43	52	34	3	5	4	8	Missing	0%	1%	1%	1%	0%	0%	0%	0%
Unknown	-	7	12	34	1	-	2	-	Unknown	0%	0%	0%	1%	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>7,125</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>

**Opioid-Related Inpatient Hospital Admissions by Payer, Nevada Residents, 2010-2017**

Number of Admission by Payer									Percent of Admission by Payer								
	2010	2011	2012	2013	2014	2015	2016	2017		2010	2011	2012	2013	2014	2015	2016	2017
Medicare	1,303	1,353	1,631	1,760	1,816	2,077	2,618	2,921	Medicare	30%	28%	32%	35%	33%	30%	30%	34%
Medicaid	681	718	814	812	1,554	2,703	3,301	3,278	Medicaid	16%	15%	16%	16%	28%	38%	38%	38%
HMO	575	593	801	812	774	743	659	587	HMO	13%	12%	16%	16%	14%	11%	8%	7%
Commercial Insurer	327	697	361	171	345	375	546	490	Commercial Insurer	7%	15%	7%	3%	6%	5%	6%	6%
Self Pay	448	446	515	621	352	210	189	174	Self Pay	10%	9%	10%	12%	6%	3%	2%	2%
Negotiated Discounts (PPO)	296	297	433	338	263	221	277	365	Negotiated Discounts (PPO)	7%	6%	9%	7%	5%	3%	3%	4%
CHAMPUS OR CHAMPVA	83	112	194	223	319	480	650	535	CHAMPUS OR CHAMPVA	2%	2%	4%	4%	6%	7%	8%	6%
County Indigent Referral	312	237	217	174	3	1	0	0	County Indigent Referral	7%	5%	4%	3%	0%	0%	0%	0%
Miscellaneous	76	82	37	58	48	97	320	238	Miscellaneous	2%	2%	1%	1%	1%	1%	4%	3%
Charity	31	62	15	39	21	16	21	11	Charity	1%	1%	0%	1%	0%	0%	0%	0%
All Workers Compensation	12	5	11	12	6	17	12	17	All Workers Compensation	0%	0%	0%	0%	0%	0%	0%	0%
Other Blue Cross/Blue Shield	1	-	-	-	-	-	0	0	Other Blue Cross/Blue Shield	0%	0%	0%	0%	0%	0%	0%	0%
Missing	217	153	9	38	16	82	28	45	Missing	5%	3%	0%	1%	0%	1%	0%	1%
Unknown	-	-	4	9	-	-	0	0	Unknown	0%	0%	0%	0%	0%	0%	0%	0%
<b>Total</b>	<b>4,362</b>	<b>4,755</b>	<b>5,042</b>	<b>5,067</b>	<b>5,517</b>	<b>7,022</b>	<b>8,621</b>	<b>8,661</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>

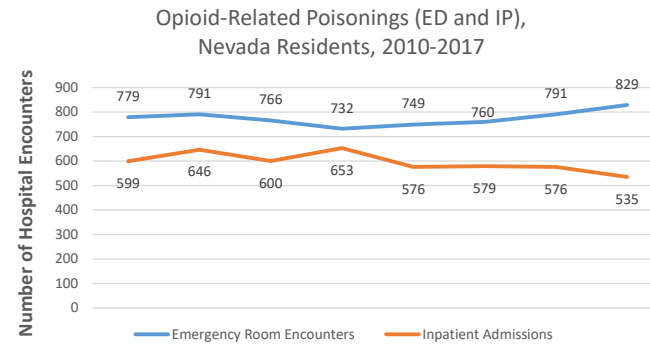
**Opioid-Related Poisonings - Emergency Department Encounters and Inpatient Hospital Admissions, Nevada Residents, 2010-2016**

*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 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%	579	20.0	-1%
2016	791	26.8	2%	576	19.5	-2%
2017	829	27.8	4%	535	17.9	-8%
Percent Change 2010-2017			-4%	-19%		

*Rates are per 100,000 Nevada population*



**Opioid-Related Poisonings - Emergency Department Encounters, Nevada Residents, 2010-2017**

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	482

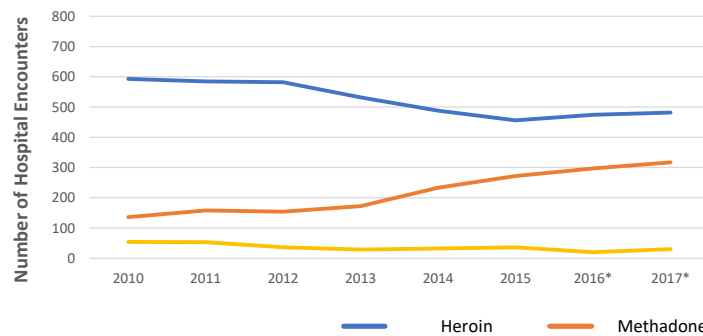
*A person can be included in more than one drug group, and therefore the counts above are not mutually exclusive.*

*For 2016 and 2017, the use of E-Codes was eliminated and counts will be mutually exclusive.*

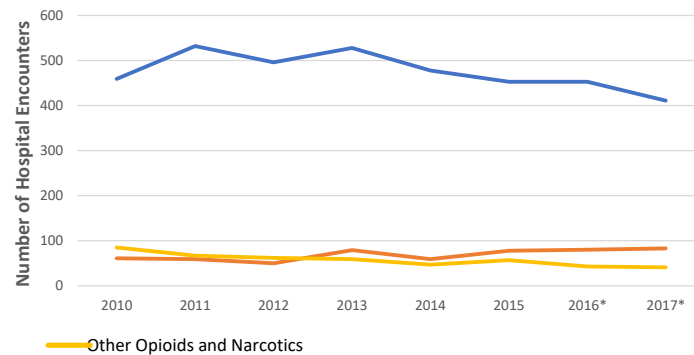
**Opioid-Related Poisonings - Inpatient Admissions, Nevada Residents, 2010-2017**

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	57	453
2016*	80	43	453
2017*	83	41	411

**Opioid-Related Poisonings - Emergency Department Encounters, Nevada Residents, 2010-2017**



**Opioid-Related Poisonings - Inpatient Admissions, Nevada Residents, 2010-2017**





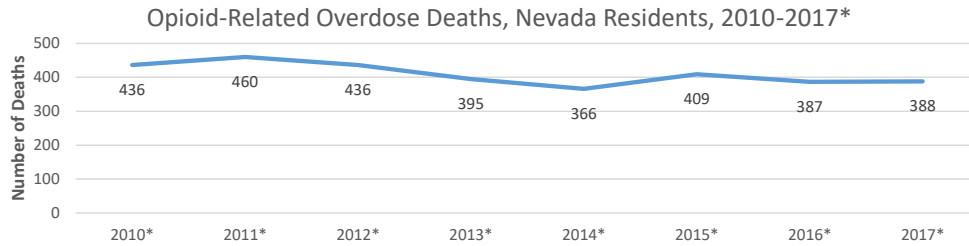
**Opioid-Related Overdose Deaths, Nevada Residents, 2010-2017\***

Year	Opioid-Related Overdose Deaths	Crude Rates	Percent Change	Benzodiazepine Related Overdose Deaths	Opioid and Benzodiazepine Related Overdose Deaths
2010*	436	16.1		161	139
2011*	460	16.9	5%	165	143
2012*	436	15.9	-6%	162	140
2013*	395	14.1	-11%	126	106
2014*	366	12.9	-9%	125	109
2015*	409	14.1	10%	129	117
2016*	387	13.1	-7%	155	126
2017*	388	13.0	-1%	118	101
Percent Change 2010-2017			-19.3%		

Rates are per 100,000 Nevada Population.

Each year:

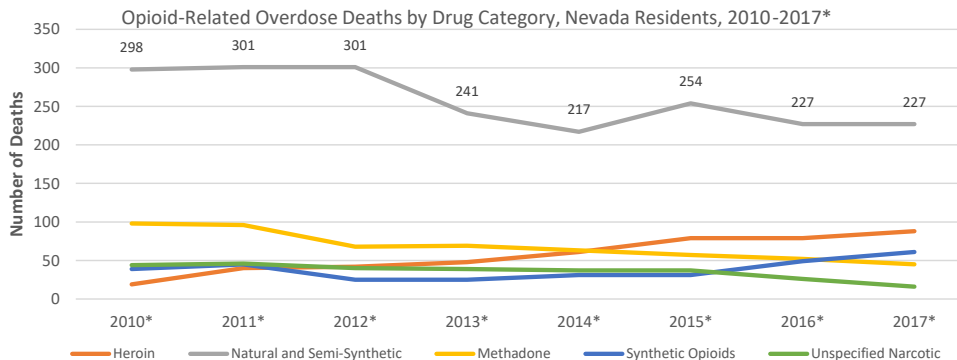
- Roughly 85% of all benzodiazepine-related overdose deaths also involve opioids.
- Roughly 30% of all opioid-related overdose deaths also involve benzodiazepines.



**Opioid-Related Overdose Deaths by Drug Category, Nevada Residents, 2010-2017\***

Year	Heroin	Natural and Semi-Synthetic	Metadone	Synthetic Opioids	Unspecified Narcotic
2010*	19	298	98	39	44
2011*	40	301	96	45	46
2012*	42	301	68	25	40
2013*	48	241	69	25	39
2014*	61	217	63	31	37
2015*	79	254	57	31	37
2016*	79	227	52	49	26
2017*	88	227	45	61	16

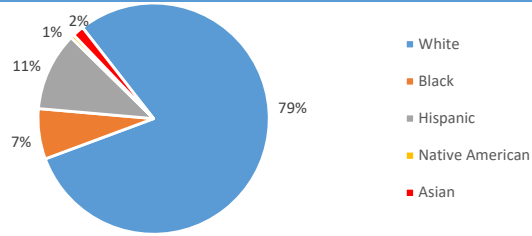
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**Opioid-Related Deaths by Race/Ethnicity, Nevada Residents, 2017\***

Race/Ethnicity	%	Crude Rates
White	79%	19.8
Black	7%	10.4
Hispanic	11%	4.8
Native American	1%	5.8
Asian	2%	2.1
Unknown	1%	

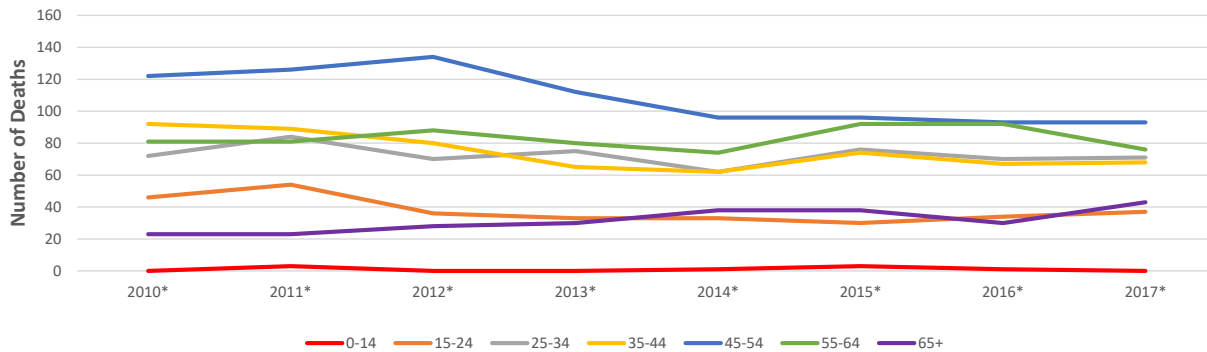


Rates are per 100,000 Nevada Population.

**Opioid-Related Deaths by Age Group, Nevada Residents, 2010-2017\***

Year	0-14	15-24	25-34	35-44	45-54	55-64	65+
2010*	0	46	72	92	122	81	23
2011*	3	54	84	89	126	81	23
2012*	0	36	70	80	134	88	28
2013*	0	33	75	65	112	80	30
2014*	1	33	62	62	96	74	38
2015*	3	30	76	74	96	92	38
2016*	1	34	70	67	93	92	30
2017*	0	37	71	68	93	76	43

**Opioid-Related Deaths by Age Group, Nevada Residents, 2010-2017\***



**Opioid-Related Deaths by Intent, Nevada Residents, 2010-2017\***

Cause of Death	N	%	Crude Rates
Accident	2,760	84%	12.2
Suicide	433	13%	1.9
Assault/Homicide	5	0%	0.0
Events of Undetermined Intent	79	2%	0.3
Total (2010-2017)	3,277	100%	14.5

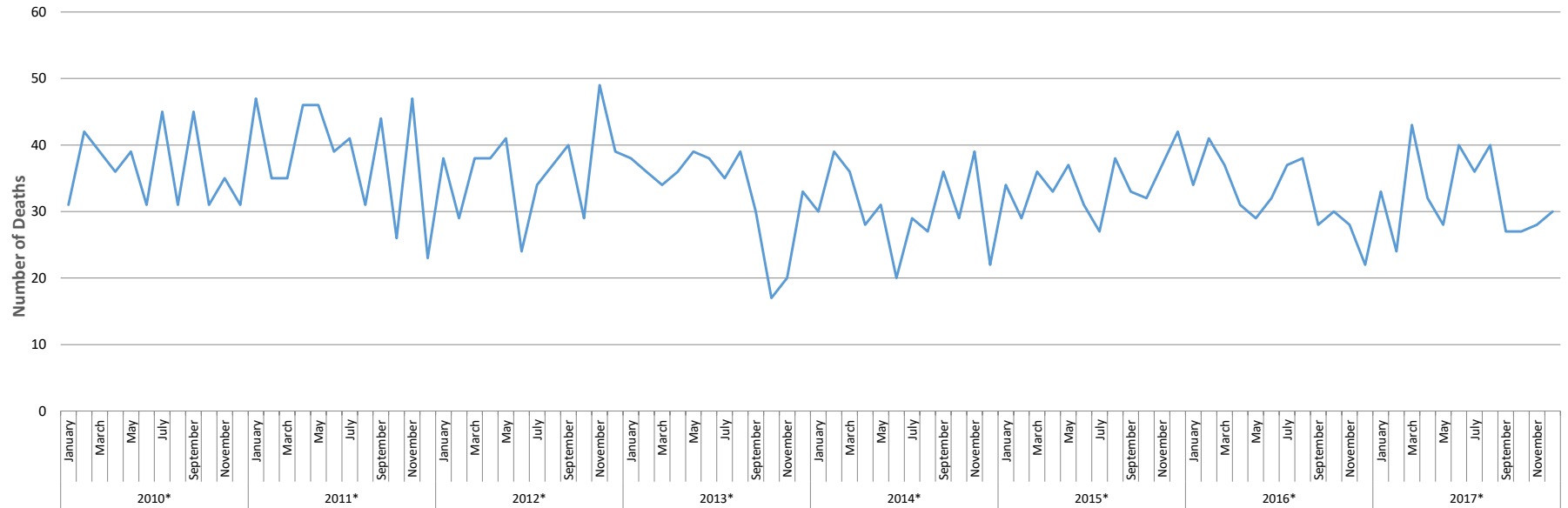
**Opioid-Related Deaths by Sex, Nevada Residents, 2010-2017\***

Year	Male	Crude Rates	Female	Crude Rates
2010*	239	17.5	197	14.7
2011*	278	20.2	182	13.5
2012*	226	16.3	210	15.4
2013*	214	15.2	181	13.0
2014*	196	13.7	170	12.0
2015*	220	15.1	189	13.1
2016*	212	14.3	175	11.9
2017*	212	14.2	176	11.8

Rates are per 100,000 Nevada Population.

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Opioid-Related Deaths by Month, Nevada Residents, 2010-2017\*



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