



Non-Fatal Drug Overdose in Tennessee, 2012-2016

**Tennessee Department of Health
Office of Informatics and Analytics**

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Introduction and purpose

The purpose of this report is to describe nonfatal drug overdoses in the State of Tennessee from 2012 to 2016, with an emphasis on providing useful data to stakeholders of TDH at the regional and county levels. Data presented here derive from the Tennessee Hospital Discharge Data System (HDDS). The HDDS contains billing codes from discharges at hospitals statewide that includes information on inpatient hospitalizations and outpatient visits. These billing codes are based on the International Classification of Diseases, Ninth and Tenth Revisions, Clinical Modification (ICD-9-CM and ICD-10-CM) and provide a standardized method for identification of drug overdoses.

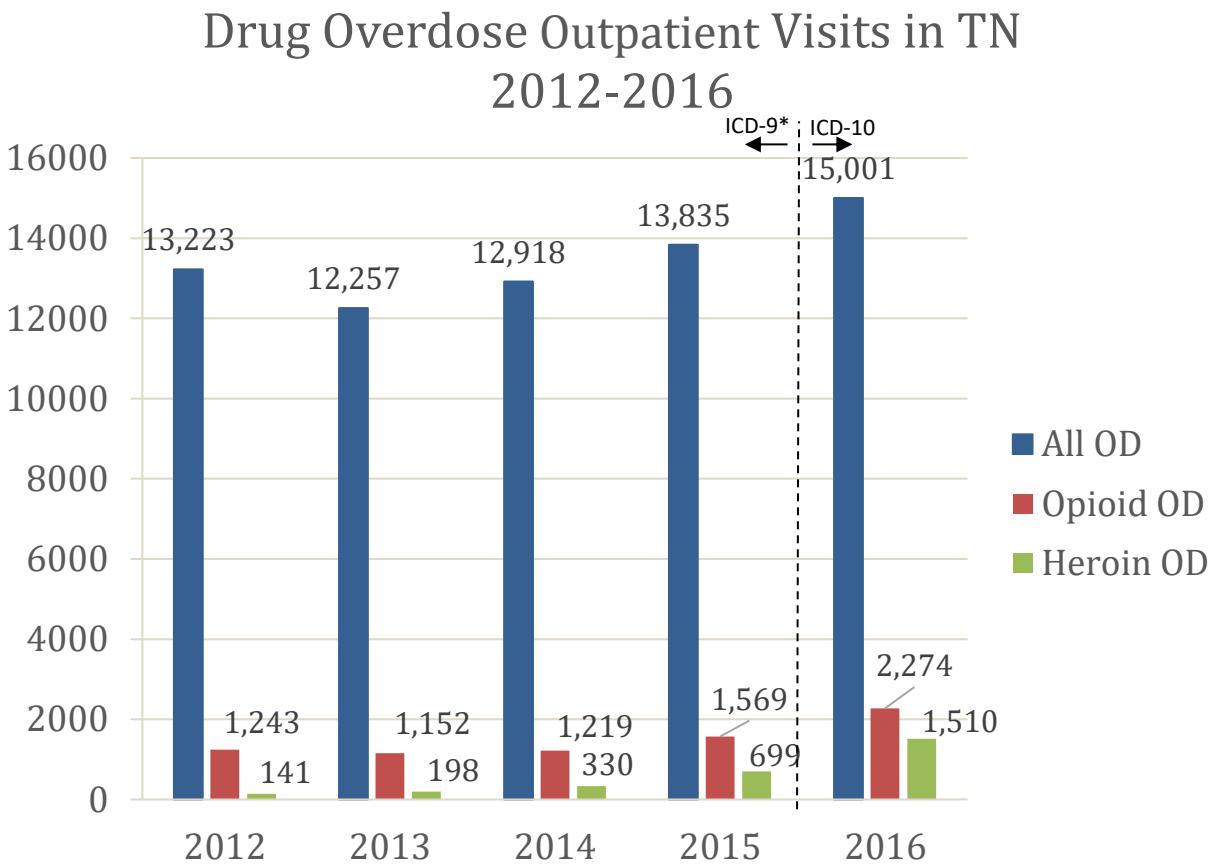
The updated version of this report includes indicators using the latest guidance from CDC and counts of non-fatal overdoses will differ from previous versions. This version fully replaces the non-fatal overdose report released on 3/9/2018.

Definitions

- Drug overdose (fatal and nonfatal)
 - A drug overdose is classified medically as a “drug poisoning.” An overdose may be fatal or nonfatal, and in Tennessee in 2016, approximately 11 nonfatal overdose hospital visits occurred for every identified fatal overdose.
- Principal diagnosis
 - To be classified as a drug overdose, the principal diagnosis on a discharge record may be designated as a drug poisoning. The principal diagnosis is defined as the condition responsible for the admission of the patient for care.
- External cause of injury
 - External cause of injury codes (or e-codes) describe the environmental events, circumstances, and conditions as the cause of injury, poisoning, or other adverse effects. When the principal diagnosis does not indicate drug poisoning, but the e-codes suggest a poisoning, a discharge record will be classified as a drug overdose. Note that e-codes are no longer used as of October 1st, 2015.
- ICD-9-CM and ICD-10-CM
 - The International Classification of Diseases (ICD) is a widely used method for reporting and classifying and reporting diseases and other health conditions. The National Center for Health Statistics creates a clinical modification for reporting morbidity statistics. From 2012 through the third quarter of 2015, the TN HDDS used the ninth revision of these codes (ICD-9-CM). Beginning October 1, 2015, hospitals began reporting using the tenth revision (ICD-10-CM). Classifying drug poisonings using ICD-9-CM codes requires standard diagnosis codes and external cause of injury codes (e-codes). ICD-10-CM codes no longer require e-codes. **The switch from ICD-9-CM to ICD-10-CM involved substantial changes to the way overdoses are defined and counted. Therefore, apparent trends from data gathered before and after the coding change should be interpreted with caution.**
 - It is important to note that ICD codes contain limited information on the particular drug that caused the poisoning. Poisoning by certain drugs like heroin is distinguished by unique codes while poisoning from other drugs like fentanyl cannot be determined. Because of this limitation, drug overdose categories for opioids are typically limited to two categories: overdose involving opioids excluding heroin and overdose involving heroin.
- All drug overdose, opioid overdose, and heroin overdose
 - In this report, all drug overdose or “All OD” refers to all drug poisonings, regardless of type of drug involved. Opioid overdose or “Opioid OD” refers to all poisonings caused by opioid drugs *excluding* heroin. Heroin overdose or “Heroin OD” refers to all poisonings involving heroin.
- Inpatient Hospitalization and Outpatient Visits
 - Hospital discharge data are often classified according to type of hospital stay, regardless of how the patient was admitted to the hospital. Inpatient hospitalizations make up less than 20% of all discharges and over half of these stays involved a trip to the ER. Among outpatient visits, over 70% involved a trip to the ER.

State-level overview 2012 – 2016

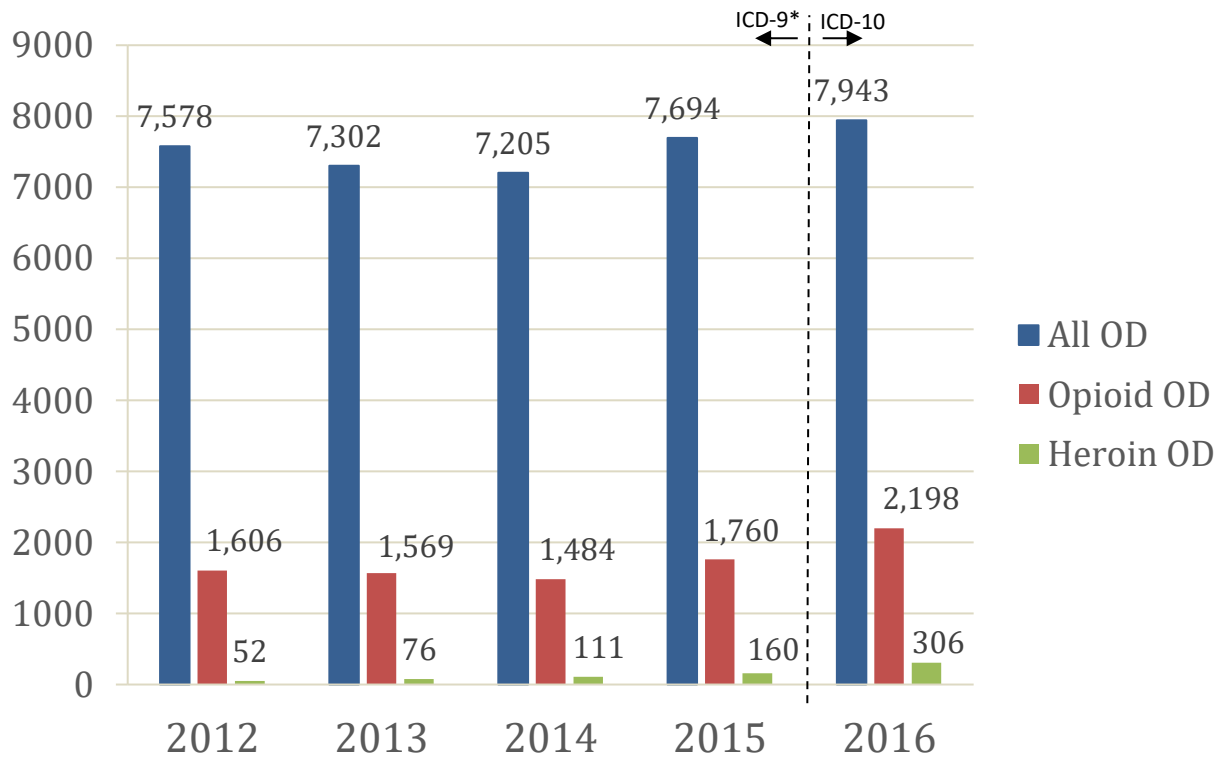
Outpatient visits involving drug overdose caused by any drug type decreased between 2012 and 2013, then increased to 15,001 visits in 2016. Opioid overdose outpatient visits followed the same trend, reaching a high of 2,274 in 2016. Heroin overdose has consistently increased from 2012 through 2016, reaching a high of 1,510 in 2016. If current trends hold, heroin outpatient visits are likely to outnumber other opioid outpatient visits in 2017.



* Visits prior to October 1, 2015 are coded as ICD-9. October 1, 2015 and later are coded ICD-10.

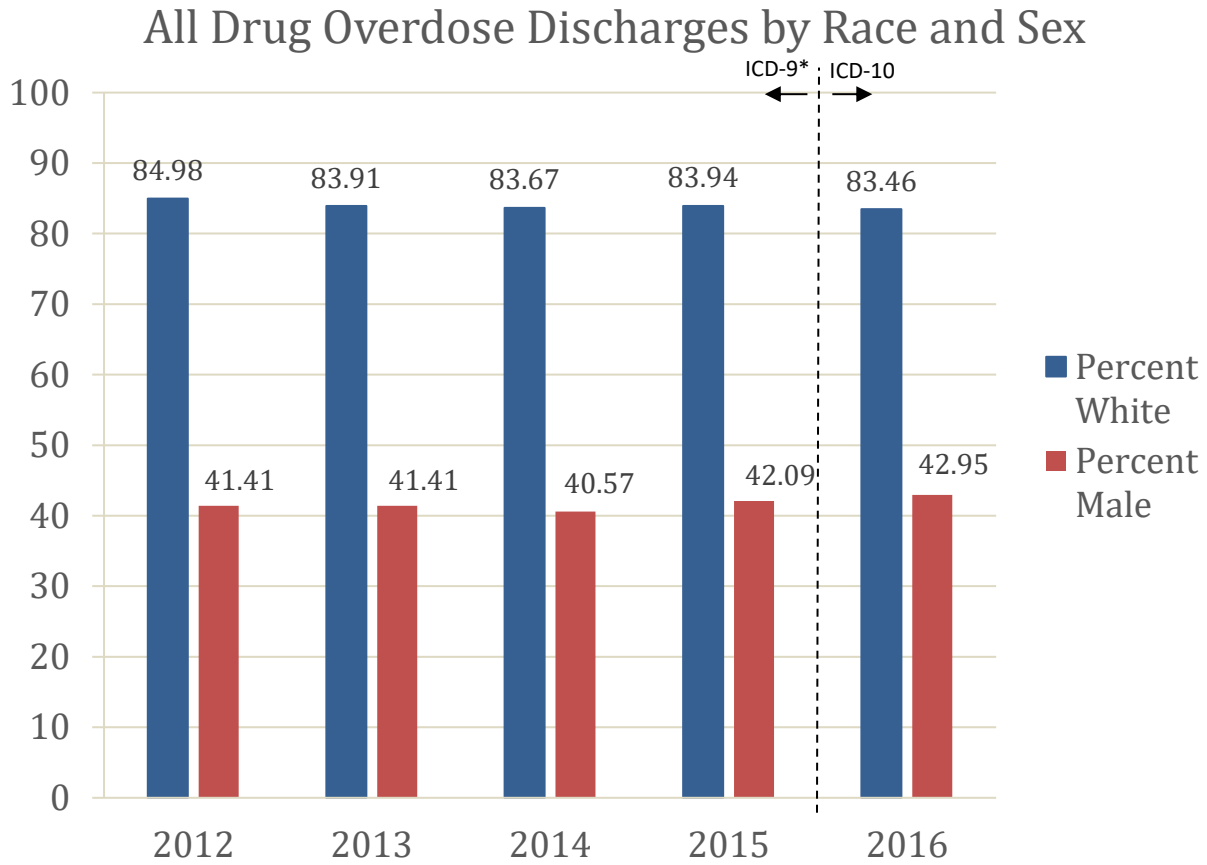
Inpatient hospitalizations resulting from all drug overdoses have generally declined from 2012 to 2014, and then increased to levels in 2016 that were higher than those in 2012. Inpatient stays involving opioid overdose have followed the same trend. Inpatient stays due to heroin overdose increased steadily during this time period, reaching a high of 306 in 2016.

Drug Overdose Inpatient Stays in TN 2012-2016



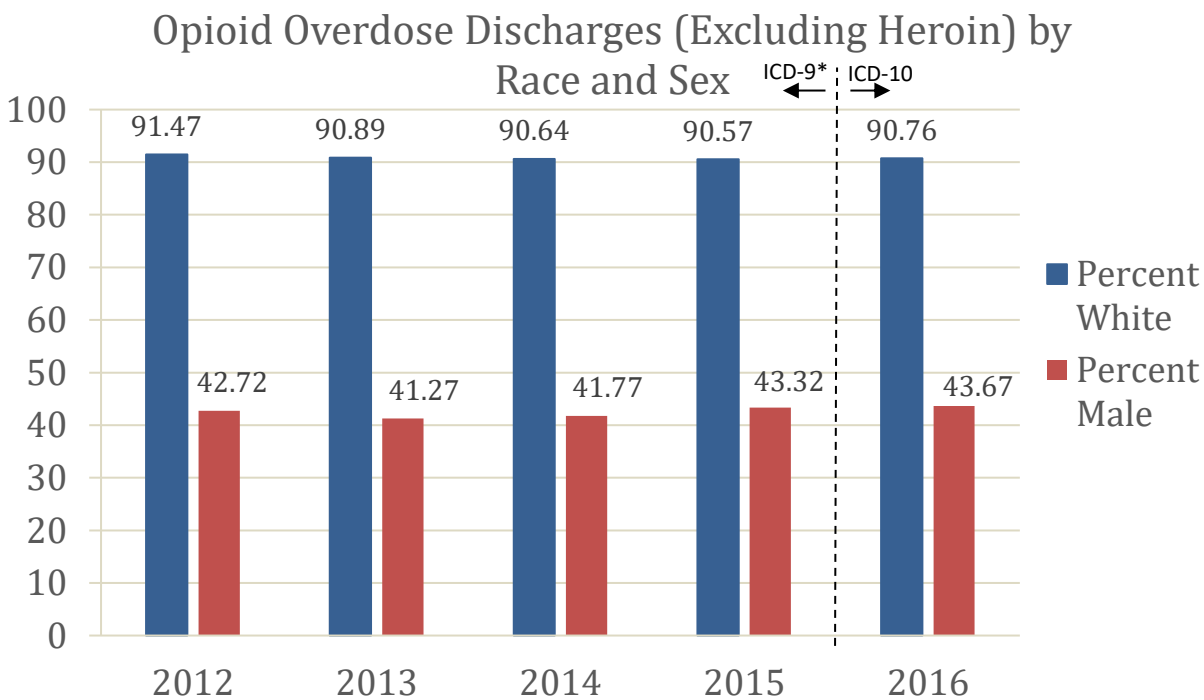
* Visits prior to October 1, 2015 are coded as ICD-9. October 1, 2015 and later are coded ICD-10.

The following three figures provide breakdowns of *all hospital discharges* (inpatient and outpatient) by race and sex for each category of drug overdose. Tennesseans who go to the hospital as a result of any drug overdose are most likely to be white and female.



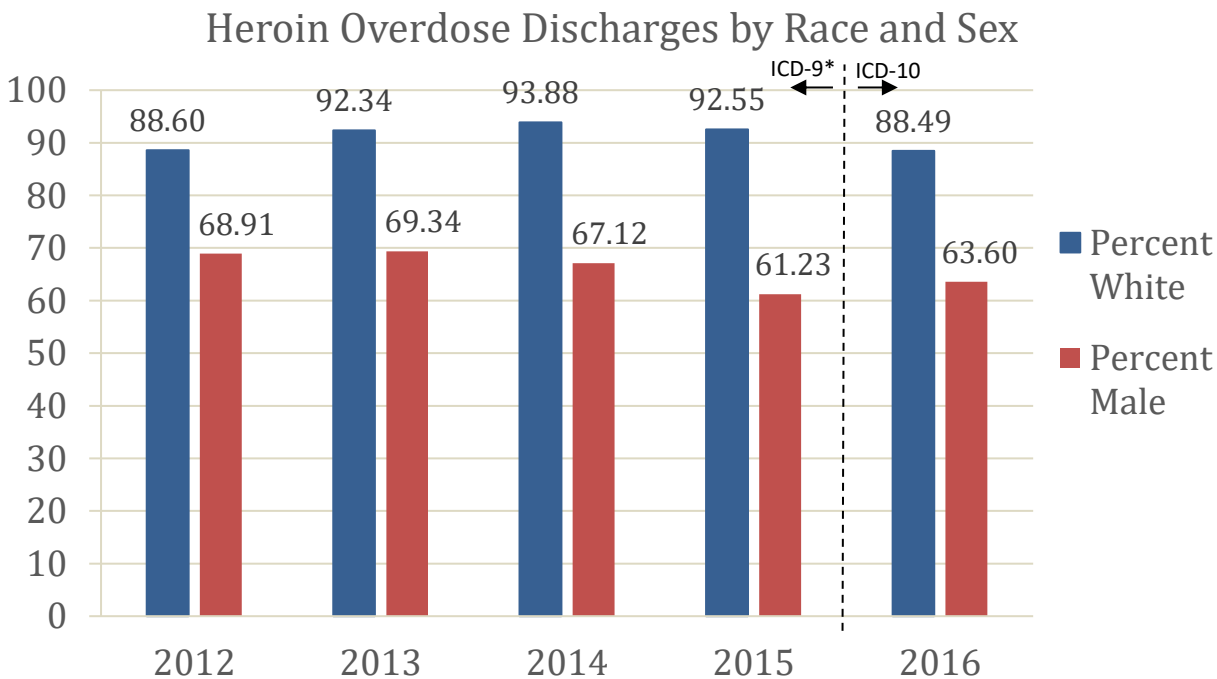
* Visits prior to October 1, 2015 are coded as ICD-9. October 1, 2015 and later are coded ICD-10.

Tennesseans who go to the hospital as a result of opioid overdoses (excluding heroin) are more likely to be white and female.



* Visits prior to October 1, 2015 are coded as ICD-9. October 1, 2015 and later are coded ICD-10.

Tennesseans who go to the hospital as a result of heroin overdose are much more likely to be white and to be male.



* Visits prior to October 1, 2015 are coded as ICD-9. October 1, 2015 and later are coded ICD-10.

County Level Data 2012 - 2016

The following pages include count data on outpatient visits and inpatient hospitalizations due to drug overdose for the years 2012 to 2016 by a subset of drug types.

Categories of drug overdose are designated by the CDC for the Prevention for States program as follows:

Primary Inclusion/Exclusion Criteria:	<p><u>Criteria</u> Only Tennessee Residents. Excludes patients discharged as dead/deceased. Limited to non-federal acute care-affiliated facilities. Excludes VA and other federal hospitals, rehabilitation centers, and psychiatric hospitals.</p>
Outpatient Visit Inclusion Criteria:	Flagged as an outpatient record.
Inpatient Hospitalization Inclusion Criteria:	Flagged as an inpatient record.
All Drug Overdose Inclusion Criteria:	<p><i>2012 - Q3 2015:</i> Principal Diagnosis ICD-9-CM code falls in the range 960-979 (Poisoning by drugs, medicinal and biological substances)</p> <p>OR other diagnostic code or e-code fields contain an e-code in the following ranges: E850-E858 (Accidental poisoning by drugs, medicinal substances, and biologicals); E950.0-E950.5 (Suicide and self-inflicted poisoning by solid or liquid substances); E962.0 (Assault by drugs and medicinal substances); E980.0-E980.5 (Poisoning by solid or liquid substances undetermined whether accidentally or purposefully inflicted)</p> <p><i>Q4 2015 and after:</i> First 3 characters of ANY diagnosis ICD-10-CM code falls in the range T36-T50 (Poisoning by drugs, medicaments, and biological substances)</p> <p>AND the intent is accidental/unintentional, intentional self-harm, assault, or undetermined intent, <i>not</i> an adverse effect or underdosing (5th or 6th character is 1, 2, 3, or 4)</p> <p>AND it is the initial encounter (7th character is A or blank)</p>

	<u>Criteria</u>
Opioid Overdose Inclusion Criteria:	<p><i>2012 - Q3 2015:</i> Principal Diagnosis ICD-9-CM code is 965.00 (Poisoning by opium) or 965.02 (Poisoning by methadone) or 965.09 (Poisoning by other opiates and related narcotics)</p> <p>OR other diagnostic code or e-code fields contain e-code E850.1 (Accidental poisoning by methadone) or E850.2 (Accidental poisoning by other opiates and related narcotics)</p> <p>AND it is NOT a heroin poisoning (see heroin criteria below)</p> <p><i>Q4 2015 and after:</i> First 5 characters of ANY diagnosis ICD-10-CM code are either: T40.0X (Poisoning by opium), T40.2X (Poisoning by other opioids), T40.3X (Poisoning by methadone), T40.4X (Poisoning by synthetic narcotics), T40.60 (Poisoning by unspecified narcotics), or T40.69 (Poisoning by other narcotics)</p> <p>AND the intent is accidental/unintentional, intentional self-harm, assault, or undetermined intent, <i>not</i> an adverse effect or underdosing (6th character is 1, 2, 3, or 4)</p> <p>AND it is the initial encounter (7th character is A or blank)</p> <p>AND it is NOT a heroin poisoning (see heroin criteria below)</p>
Heroin Overdose Inclusion Criteria:	<p><i>2012 - Q3 2015:</i> Principal Diagnosis ICD-9-CM code is 965.01 (Poisoning by heroin)</p> <p>OR other diagnostic code or e-code fields contain e-code E850.0 (Accidental poisoning by heroin)</p> <p><i>Q4 2015 and after:</i> First 5 characters of ANY diagnosis ICD-10-CM code is T40.1X (Poisoning by heroin)</p> <p>AND the intent is accidental/unintentional, intentional self-harm, assault, or undetermined intent, <i>not</i> an adverse effect or underdosing (6th character is 1, 2, 3, or 4)</p> <p>AND it is the initial encounter (7th character is A or blank)</p>

2012 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	103	25	0	163	11	0
Bedford	63	4	0	77	9	0
Benton	22	11	0	58	6	0
Bledsoe	9	0	0	25	6	0
Blount	119	33	0	228	31	1
Bradley	173	33	0	278	33	0
Campbell	76	32	0	108	7	1
Cannon	30	6	0	47	10	1
Carroll	30	8	0	82	6	0
Carter	100	18	0	130	8	0
Cheatham	55	11	1	91	10	3
Chester	17	2	0	21	2	0
Claiborne	47	18	0	103	20	1
Clay	18	7	0	11	1	0
Cocke	60	20	0	107	17	0
Coffee	94	21	0	171	23	0
Crockett	10	1	0	26	1	0
Cumberland	63	17	0	152	17	0
Davidson	811	159	13	1149	94	31
Decatur	16	2	0	38	3	0
DeKalb	45	8	0	77	9	2
Dickson	67	12	0	118	12	1
Dyer	68	9	0	104	8	1
Fayette	38	9	0	54	3	0
Fentress	45	17	0	77	8	0
Franklin	63	13	0	81	11	0
Gibson	39	9	0	127	12	0
Giles	62	15	0	88	12	0
Grainger	31	10	0	41	5	0
Greene	107	38	0	143	14	0
Grundy	34	8	0	34	15	0
Hamblen	103	29	0	161	25	1
Hamilton	400	75	0	516	35	1
Hancock	15	3	0	22	4	0
Hardeman	23	4	1	57	4	1
Hardin	33	9	0	87	9	0

Hawkins	110	26	0	146	13	0
Haywood	15	2	0	42	0	0
Henderson	29	6	0	86	7	0
Henry	33	10	0	77	4	0
Hickman	50	13	0	81	14	1
Houston	10	2	0	28	1	0
Humphreys	20	2	0	41	2	0
Jackson	33	13	0	35	6	0
Jefferson	77	21	0	85	11	0
Johnson	17	3	0	42	4	0
Knox	474	121	2	918	97	14
Lake	1	0	0	10	0	1
Lauderdale	17	4	1	96	7	1
Lawrence	60	16	0	131	15	0
Lewis	14	4	0	33	3	0
Lincoln	15	2	0	74	6	0
Loudon	50	14	0	95	13	0
McMinn	55	10	0	184	18	0
McNairy	33	9	1	102	15	0
Macon	46	14	0	71	5	0
Madison	119	29	1	182	19	3
Marion	41	8	0	57	7	0
Marshall	30	4	0	80	7	0
Maury	81	10	0	227	16	2
Meigs	16	6	0	32	2	0
Monroe	45	11	1	129	13	0
Montgomery	172	23	0	360	29	1
Moore	5	0	0	6	0	0
Morgan	37	8	0	70	10	0
Obion	24	4	0	58	8	0
Overton	50	19	0	67	8	0
Perry	14	3	0	26	0	0
Pickett	5	3	0	7	1	0
Polk	28	11	0	41	3	0
Putnam	101	29	0	178	15	0
Rhea	23	5	0	70	5	2
Roane	125	40	0	163	25	3
Robertson	62	21	0	182	22	1
Rutherford	245	42	1	553	38	1
Scott	33	10	0	44	4	0
Sequatchie	18	8	0	32	3	0
Sevier	119	25	0	211	21	0
Shelby	685	64	22	1191	76	47
Smith	25	6	0	40	2	0

Stewart	18	1	1	22	3	1
Sullivan	250	37	1	390	30	1
Sumner	246	51	2	345	28	6
Tipton	50	8	0	151	17	2
Trousdale	7	1	0	23	2	0
Unicoi	35	5	0	45	2	0
Union	22	6	0	52	12	0
Van Buren	8	1	0	18	1	0
Warren	78	17	0	114	10	0
Washington	179	36	0	171	10	2
Wayne	16	3	0	55	7	0
Weakley	32	5	0	62	4	0
White	33	9	0	51	5	0
Williamson	111	20	3	304	22	5
Wilson	142	29	1	182	14	2
Unknown	0	0	0	3	0	0
Tennessee	7578	1606	52	13223	1243	141

2013 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	108	33	0	172	18	0
Bedford	68	11	1	111	6	0
Benton	28	8	0	56	10	0
Bledsoe	14	6	0	42	1	0
Blount	115	31	0	235	20	1
Bradley	159	29	1	235	21	0
Campbell	68	19	0	90	11	0
Cannon	16	6	0	41	9	0
Carroll	21	4	0	80	7	0
Carter	101	12	0	138	8	0
Cheatham	64	15	0	117	19	5
Chester	16	5	0	29	2	0
Claiborne	60	28	0	97	20	0
Clay	17	5	0	5	1	0
Cocke	57	20	0	85	14	0
Coffee	95	17	0	138	19	0
Crockett	15	3	0	34	2	0
Cumberland	63	15	0	104	19	0
Davidson	809	138	16	1121	113	36
Decatur	9	3	0	25	2	0
DeKalb	45	10	0	63	7	0
Dickson	87	26	0	116	13	0
Dyer	54	9	0	101	7	0
Fayette	31	6	1	49	1	3
Fentress	48	18	0	49	7	0
Franklin	66	16	0	92	12	0
Gibson	34	8	0	111	8	0
Giles	50	23	0	59	10	0
Grainger	34	9	0	27	5	0
Greene	113	26	1	158	14	0
Grundy	35	12	0	35	5	0
Hamblen	78	34	1	132	16	0
Hamilton	375	73	6	500	39	3
Hancock	10	2	1	23	3	1
Hardeman	19	4	0	74	8	1
Hardin	19	6	0	76	11	0

Hawkins	99	25	0	125	20	0
Haywood	14	1	0	32	2	0
Henderson	23	8	0	85	16	0
Henry	36	8	0	77	6	0
Hickman	28	2	0	63	8	1
Houston	12	3	0	20	0	0
Humphreys	14	7	0	21	6	0
Jackson	26	15	0	40	6	0
Jefferson	71	23	0	89	11	0
Johnson	14	1	0	34	3	0
Knox	430	107	3	856	66	15
Lake	12	2	0	8	0	0
Lauderdale	19	7	1	56	9	0
Lawrence	36	7	0	120	14	0
Lewis	19	2	0	25	4	0
Lincoln	18	4	0	56	4	0
Loudon	46	8	0	74	6	0
McMinn	61	13	0	143	11	0
McNairy	19	7	0	69	2	0
Macon	43	13	0	52	7	0
Madison	89	9	0	169	15	1
Marion	37	7	0	47	8	0
Marshall	35	5	0	104	11	0
Maury	79	16	0	179	11	2
Meigs	15	6	0	23	3	0
Monroe	47	10	0	111	4	0
Montgomery	168	32	0	311	19	3
Moore	4	0	0	7	0	0
Morgan	45	12	0	52	8	0
Obion	18	7	0	61	6	0
Overton	44	12	0	55	10	0
Perry	22	7	0	23	1	0
Pickett	2	0	0	11	2	0
Polk	24	3	0	38	6	0
Putnam	95	23	0	175	24	0
Rhea	40	15	0	70	5	1
Roane	99	33	0	140	22	0
Robertson	68	12	0	154	16	3
Rutherford	230	37	0	506	31	5
Scott	31	13	0	45	5	0
Sequatchie	30	10	0	24	4	0
Sevier	79	15	0	167	18	0
Shelby	765	89	33	1287	74	92
Smith	23	5	0	58	7	1

Stewart	15	2	0	27	3	0
Sullivan	220	36	1	330	19	0
Sumner	231	56	1	303	22	7
Tipton	74	13	2	121	6	4
Trousdale	23	5	0	20	1	0
Unicoi	15	4	0	33	5	0
Union	19	7	0	39	4	0
Van Buren	13	2	0	16	1	0
Warren	75	21	0	74	8	0
Washington	177	33	1	184	16	1
Wayne	18	3	0	52	7	0
Weakley	35	7	0	70	12	0
White	31	8	0	56	12	0
Williamson	102	20	4	263	14	7
Wilson	121	20	2	185	23	4
Unknown	3	1	0	2	0	1
Tennessee	7302	1569	76	12257	1152	198

2014 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	121	27	2	190	20	3
Bedford	61	10	0	102	17	0
Benton	32	13	0	79	5	0
Bledsoe	9	1	0	25	1	0
Blount	133	39	1	233	19	2
Bradley	134	32	0	240	29	3
Campbell	84	22	0	91	12	0
Cannon	27	7	0	32	4	0
Carroll	26	3	0	78	6	0
Carter	100	23	0	111	11	0
Cheatham	55	12	0	90	12	5
Chester	7	3	0	29	4	0
Claiborne	48	15	0	79	16	0
Clay	15	1	0	18	4	0
Cocke	55	24	0	101	15	0
Coffee	98	18	0	146	9	0
Crockett	10	2	0	44	5	0
Cumberland	90	16	0	133	15	0
Davidson	802	137	30	1283	114	97
Decatur	16	6	0	29	7	0
DeKalb	32	7	1	65	7	0
Dickson	91	16	2	111	8	5
Dyer	53	7	0	139	11	0
Fayette	30	6	5	54	3	3
Fentress	32	10	0	51	4	0
Franklin	69	8	0	72	6	0
Gibson	40	7	0	117	11	0
Giles	48	21	0	53	9	1
Grainger	36	9	0	50	1	0
Greene	91	23	1	188	20	1
Grundy	25	7	0	41	5	0
Hamblen	84	22	0	118	15	0
Hamilton	368	86	9	538	44	29
Hancock	13	3	0	24	6	0
Hardeman	14	1	0	59	8	1
Hardin	16	5	0	86	12	0

Hawkins	68	20	0	127	10	0
Haywood	8	1	0	24	2	0
Henderson	31	5	0	81	6	0
Henry	39	8	0	75	8	0
Hickman	47	16	0	85	11	1
Houston	3	0	0	23	3	0
Humphreys	20	4	0	36	3	0
Jackson	27	3	0	29	2	0
Jefferson	79	18	0	94	7	1
Johnson	22	4	0	37	0	0
Knox	424	110	6	912	78	20
Lake	7	4	0	21	4	0
Lauderdale	17	2	0	72	11	0
Lawrence	68	12	0	113	7	0
Lewis	22	4	0	31	2	0
Lincoln	13	2	0	61	9	0
Loudon	55	15	0	95	16	1
McMinn	49	8	0	183	18	1
McNairy	10	3	0	76	6	0
Macon	29	5	0	66	8	1
Madison	81	12	6	178	11	5
Marion	29	6	0	70	8	0
Marshall	34	6	0	78	9	0
Maury	110	18	1	202	12	3
Meigs	11	2	0	29	4	0
Monroe	51	13	1	88	11	0
Montgomery	179	25	2	357	30	0
Moore	4	2	0	9	0	0
Morgan	41	12	0	39	7	0
Obion	17	4	0	82	9	0
Overton	37	10	0	36	6	0
Perry	20	4	0	34	0	0
Pickett	1	0	0	6	1	0
Polk	26	6	0	39	5	0
Putnam	92	16	0	167	24	0
Rhea	33	15	0	60	9	0
Roane	81	31	1	132	13	2
Robertson	55	18	1	151	12	3
Rutherford	318	60	4	541	59	10
Scott	32	5	0	96	6	0
Sequatchie	28	3	0	23	2	0
Sevier	105	21	1	163	12	4
Shelby	737	86	26	1314	89	96
Smith	27	7	0	39	7	1

Stewart	7	3	0	34	5	1
Sullivan	212	46	0	312	33	0
Sumner	209	43	4	333	26	9
Tipton	45	12	4	136	12	7
Trousdale	10	4	0	21	0	0
Unicoi	29	9	0	24	1	0
Union	15	3	0	30	3	0
Van Buren	9	1	0	11	5	0
Warren	57	14	1	97	11	0
Washington	172	23	0	161	15	0
Wayne	17	5	0	59	4	0
Weakley	35	8	0	86	11	0
White	26	5	0	67	6	0
Williamson	109	10	1	270	21	7
Wilson	96	21	1	200	14	7
Unknown	5	2	0	4	0	0
Tennessee	7205	1484	111	12918	1219	330

2015 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	105	32	3	199	32	20
Bedford	63	13	2	104	9	1
Benton	31	6	0	64	8	0
Bledsoe	18	3	0	14	1	0
Blount	153	43	2	273	24	18
Bradley	154	22	0	232	33	4
Campbell	80	26	0	85	8	0
Cannon	28	8	0	45	15	2
Carroll	35	8	1	95	9	0
Carter	87	22	0	131	13	0
Cheatham	55	13	2	129	27	13
Chester	16	2	0	35	3	0
Claiborne	38	14	0	76	14	0
Clay	8	1	0	10	0	0
Cocke	55	22	1	101	13	0
Coffee	92	28	1	154	13	3
Crockett	19	4	0	30	2	0
Cumberland	85	16	0	111	17	0
Davidson	807	151	37	1349	155	144
Decatur	14	2	0	35	0	0
DeKalb	44	13	0	70	19	1
Dickson	95	34	1	136	17	8
Dyer	60	10	0	101	6	0
Fayette	31	3	3	61	4	4
Fentress	24	6	0	41	6	0
Franklin	93	17	0	88	11	2
Gibson	53	10	0	132	7	2
Giles	44	13	0	72	7	1
Grainger	21	5	0	34	6	0
Greene	115	30	0	155	19	0
Grundy	58	20	0	52	17	0
Hamblen	79	18	0	125	21	0
Hamilton	384	95	5	562	59	39
Hancock	16	4	0	20	4	0
Hardeman	25	5	0	49	4	2
Hardin	22	7	0	92	10	1

Hawkins	74	23	0	133	16	1
Haywood	9	4	0	19	2	0
Henderson	30	9	0	92	19	0
Henry	38	4	0	93	17	0
Hickman	52	17	0	65	5	2
Houston	9	4	0	20	3	0
Humphreys	23	7	0	58	9	0
Jackson	22	10	0	36	6	0
Jefferson	61	12	1	101	14	3
Johnson	20	1	1	23	1	0
Knox	466	127	11	1000	112	90
Lake	10	4	0	21	4	1
Lauderdale	24	4	1	71	10	0
Lawrence	37	17	0	123	11	0
Lewis	9	1	0	15	2	0
Lincoln	21	3	0	43	7	0
Loudon	61	14	1	100	19	5
McMinn	50	10	0	133	9	0
McNairy	26	7	0	80	11	0
Macon	46	9	0	59	7	1
Madison	92	18	1	200	25	3
Marion	38	9	1	52	9	0
Marshall	40	10	0	84	12	1
Maury	107	33	4	206	24	7
Meigs	21	3	0	21	1	0
Monroe	46	14	1	116	13	2
Montgomery	195	39	3	299	25	5
Moore	6	3	0	9	0	0
Morgan	36	13	0	49	11	0
Obion	35	6	0	82	5	0
Overton	38	12	0	58	9	0
Perry	17	3	0	31	0	1
Pickett	2	1	0	9	0	0
Polk	23	7	0	27	3	0
Putnam	104	26	1	173	20	0
Rhea	34	9	0	68	12	0
Roane	105	29	2	139	15	2
Robertson	61	14	0	171	22	8
Rutherford	343	78	10	659	71	22
Scott	26	7	0	77	4	1
Sequatchie	26	7	0	17	2	0
Sevier	103	28	1	193	21	8
Shelby	740	103	43	1578	130	188
Smith	19	8	0	49	10	0

Stewart	19	8	0	39	8	0
Sullivan	204	35	2	391	36	3
Sumner	255	61	7	400	43	29
Tipton	64	10	5	191	24	20
Trousdale	16	5	0	20	1	0
Unicoi	34	9	0	36	4	0
Union	22	10	0	44	8	0
Van Buren	13	5	0	11	1	0
Warren	70	25	0	89	15	0
Washington	201	31	0	170	17	2
Wayne	20	5	0	57	13	1
Weakley	26	4	0	63	4	0
White	38	10	0	59	9	0
Williamson	125	17	4	277	13	11
Wilson	133	32	2	271	32	17
Unknown	2	0	0	3	0	0
Tennessee	7694	1760	160	13835	1569	699

2016 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	144	67	2	219	32	26
Bedford	57	11	3	87	27	2
Benton	31	11	0	80	13	1
Bledsoe	20	5	0	22	3	0
Blount	168	67	5	309	62	31
Bradley	171	44	4	243	52	8
Campbell	68	18	0	105	15	4
Cannon	30	9	0	57	17	0
Carroll	53	8	0	93	6	1
Carter	102	29	1	146	22	1
Cheatham	71	26	2	111	28	16
Chester	16	2	0	31	2	1
Claiborne	50	18	0	63	15	4
Clay	11	4	0	21	3	0
Cocke	50	13	0	95	12	4
Coffee	98	31	4	131	27	4
Crockett	22	3	1	32	3	2
Cumberland	83	22	2	100	18	3
Davidson	890	214	70	1556	228	285
Decatur	15	6	0	33	1	0
DeKalb	29	10	1	65	21	3
Dickson	78	19	3	129	22	21
Dyer	46	12	1	125	5	2
Fayette	34	5	0	63	10	10
Fentress	27	8	0	61	11	2
Franklin	66	19	1	87	17	0
Gibson	68	9	0	119	15	2
Giles	26	5	1	59	9	1
Grainger	28	11	0	38	6	0
Greene	126	36	6	193	34	5
Grundy	25	10	1	27	4	0
Hamblen	74	29	2	135	28	4
Hamilton	371	101	15	607	111	63
Hancock	18	5	0	20	3	0
Hardeman	26	7	2	58	3	0
Hardin	29	9	0	93	16	1

Hawkins	84	25	0	133	21	2
Haywood	15	2	0	31	2	1
Henderson	31	2	0	71	15	0
Henry	36	15	0	97	11	0
Hickman	56	21	2	59	8	1
Houston	16	6	0	41	7	1
Humphreys	18	2	0	33	3	3
Jackson	22	12	0	26	4	1
Jefferson	55	15	0	121	26	7
Johnson	32	5	2	43	6	2
Knox	517	160	29	1120	184	253
Lake	6	1	0	14	2	0
Lauderdale	20	5	0	92	12	0
Lawrence	63	17	1	108	14	0
Lewis	13	5	0	34	3	2
Lincoln	23	8	0	51	3	0
Loudon	53	17	1	101	17	11
McMinn	57	16	0	186	30	0
McNairy	24	5	1	57	4	0
Macon	51	17	0	68	8	0
Madison	110	28	2	198	20	11
Marion	31	14	0	63	13	0
Marshall	44	19	0	101	11	6
Maury	94	27	4	226	41	15
Meigs	13	2	0	39	7	1
Monroe	45	14	1	123	10	8
Montgomery	195	50	5	383	70	6
Moore	4	1	0	6	1	0
Morgan	39	20	0	45	7	2
Obion	29	5	0	99	10	0
Overton	38	16	0	69	17	0
Perry	8	3	0	18	1	3
Pickett	7	3	0	13	0	0
Polk	25	5	0	38	6	0
Putnam	78	23	0	188	29	3
Rhea	49	25	0	80	22	0
Roane	98	36	1	181	36	17
Robertson	83	22	2	177	30	13
Rutherford	327	86	12	672	118	72
Scott	24	5	0	48	6	3
Sequatchie	26	7	1	12	2	0
Sevier	128	38	10	181	21	26
Shelby	775	147	62	1893	174	381
Smith	24	9	0	56	14	4

Stewart	15	3	0	20	6	0
Sullivan	223	46	3	346	49	6
Sumner	253	89	13	399	75	44
Tipton	77	17	12	199	20	28
Trousdale	17	10	0	21	2	0
Unicoi	28	4	0	40	4	0
Union	25	14	0	44	4	5
Van Buren	8	4	0	18	4	0
Warren	58	15	0	135	26	0
Washington	209	41	8	175	29	6
Wayne	17	9	0	67	13	1
Weakley	23	6	0	103	12	1
White	27	12	0	82	14	0
Williamson	130	24	3	294	39	20
Wilson	126	40	4	248	30	36
Unknown	0	0	0	2	0	1
Tennessee	7943	2198	306	15001	2274	1510