

# **CHAPTER 4**

## **HOSPITAL INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS:**

### **2018 STATUS**

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- 4A. INPATIENT DISCHARGES FROM SHORT-STAY HOSPITALS BY FIRST-LISTED DIAGNOSIS AND PATIENT CHARACTERISTICS**
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#### 4A.

### **INPATIENT DISCHARGES FROM SHORT STAY HOSPITALS BY FIRST-LISTED DIAGNOSIS AND PATIENT CHARACTERISTICS**

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An inpatient discharge occurs when a person who was admitted to a hospital leaves that hospital. A person who has been hospitalized more than once in a given calendar year will be counted multiple times as a discharge; thus, the numbers in this report are for discharges, not persons. Federal, military, and Department of Veteran Affairs' hospitals are excluded. Beginning in 2010, the psychiatric hospitals also are required to report to the Arizona Department of Health Services. All discharges are for residents of Arizona. Discharges of out-of-state residents are not included in this report. Discharges of inpatients in this report exclude newborn infants.

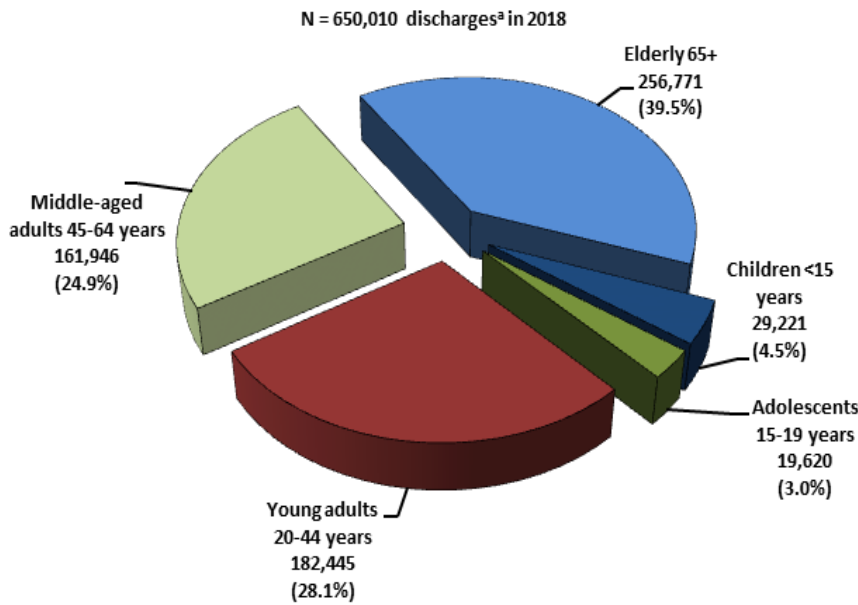
Beginning in 2016, diagnostic groupings and code numbers are based solely on the International Classification of Diseases and Related Problems, 10<sup>th</sup> Revision, Clinical Modification (ICD-10-CM). ICD-10-CM incorporates greater details about medical diagnosis and represents a substantial increase in number of diagnostic codes, with more than 69,000 codes compared with about 14,000 under ICD-9-CM. Due to fundamental changes in the coding system caution should be exercised in comparing current inpatient data to that of years prior 2016. For further explanation of this new coding system, please refer to "The Implementation of the International Classification of Disease, Tenth Revision," Introduction page ix.

The change in the Arizona reporting requirements increased the number of diagnoses that are coded for each discharge from nine to twenty five. In this section, discharges are presented by principal diagnosis, which is the first one listed on the discharge summary of the medical record. The number of first-listed diagnoses is the same as the number of discharges. For comparability with the national data\*, the discharge rates are presented per 10,000 population. The groupings of ICD-9-CM and ICD-10-CM codes used to identify specific diagnostic categories can be accessed at:  
<http://pub.azdhs.gov/health-stats/hip/cat/icd9-10primary.xlsx>.

\*Findings of the National Hospital Discharge Survey are available in bound reports of the National Center for Health Statistics and online at <http://www.cdc.gov/nchs/nhds.htm>

4A. INPATIENT DISCHARGES FROM SHORT-STAY HOSPITALS BY FIRST-LISTED DIAGNOSIS AND PATIENT CHARACTERISTICS

**Figure 4A-1**  
Hospital Inpatient Discharges<sup>a</sup> by Age Group, Arizona Residents, 2018

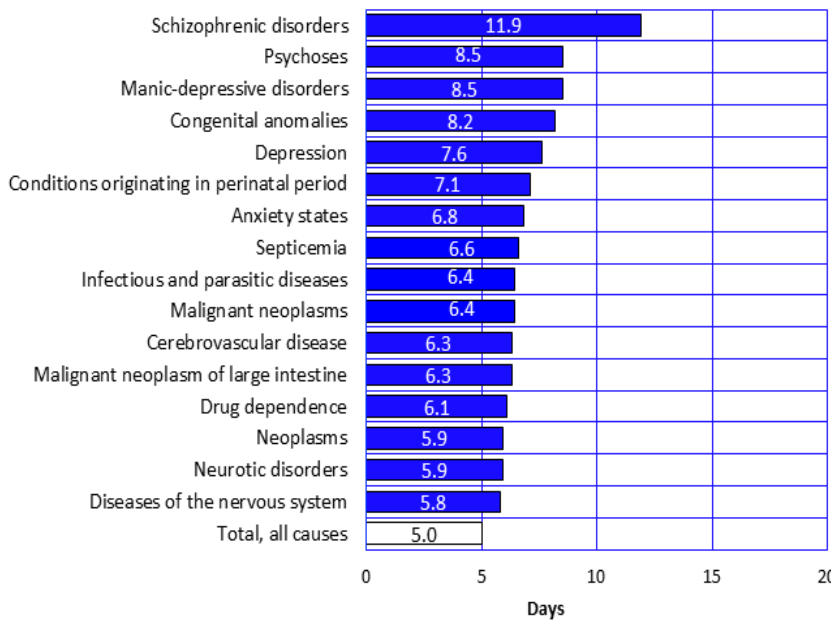


Note: <sup>a</sup>Excluding newborn infants.

In 2018, there were 650,010 inpatients discharged, excluding newborn infants, from non-Federal short stay hospitals in Arizona (Table 4A-1). Patients who were elderly (65 years or older) accounted for 39.5 percent of hospital discharges (Figure 4A-1), followed by young adults (20-44 years old) who comprised 28.1 percent of discharges, and middle-aged adults (45-64 years old) with 24.9 percent of all inpatient discharges.

*Diseases of the circulatory system* were the most common diagnoses (13.9 percent of all discharges), followed by *mental disorders* (10.1 percent), and *injury and poisoning* diagnoses (9.8 percent; percentages based on data in Table 4A-1).

**Figure 4A-2**  
Average Length of Hospital Stay for Discharges with Selected First-listed Diagnosis, Arizona Residents, 2018



Based on the data from the National Hospital Discharge Survey, the longest continuously running nationally representative survey of hospital utilization, the length of stay for inpatients has changed dramatically from 1970 through 2010. In 1970, the average length of stay was 7.8 days, with one-third of patients hospitalized for 8 days or more. In 2010, the average length of stay nationally was 4.8 days.

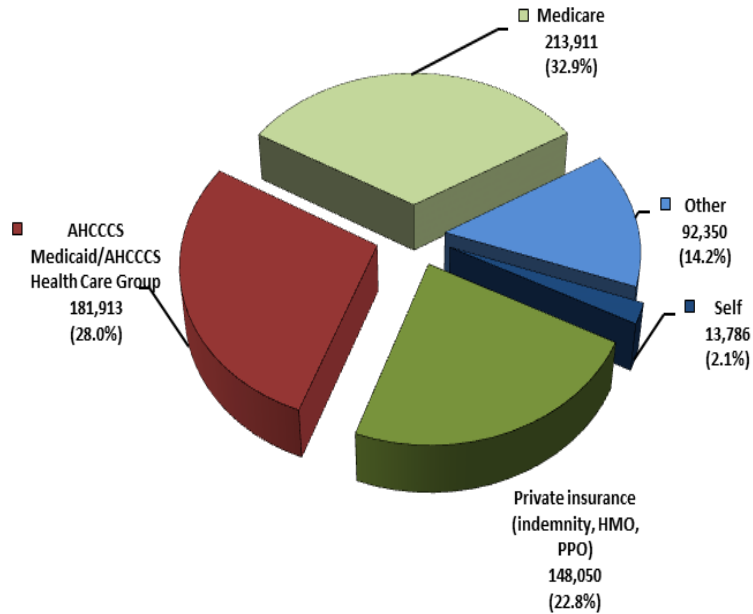
In 2018, the average length of hospital stay for Arizona inpatients was 5.0 days (Figure 4A-2, Table 4A-5). The percent of patients hospitalized for three days or less was 54.94 percent, with 17.0 percent of inpatients staying eight days or more.

The top five conditions with the longest length of inpatient stay was: *Schizophrenic disorders* (11.9 days), *psychoses* (8.5 days), *manic-depressive disorders* (8.5 days), *congenital anomalies* (8.2 days), and *depression* (7.6 days).

4A. INPATIENT DISCHARGES FROM SHORT-STAY HOSPITALS BY FIRST-LISTED DIAGNOSIS AND PATIENT CHARACTERISTICS

**Figure 4A-3**  
Hospital Inpatient Discharges by Payer, Arizona Residents, 2018

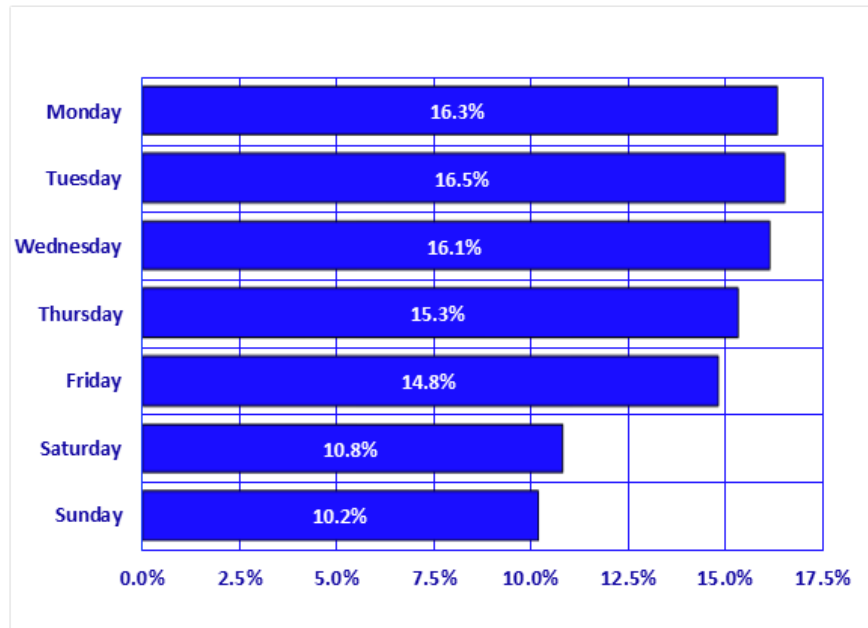
Medicare paid for 32.9 percent of all discharges (**Figure 4A-3**) and 70.2 percent of inpatient discharges of persons aged 65 years or older (**Table 4A-4**). The Arizona Health Care Cost Containment System (AHCCCS; the State's Medicaid Program) was the second most frequently recorded expected source of payment, accounting for 28.0 percent of inpatient discharges. Private insurance accounted for 22.8 percent of hospital inpatient discharges.



Note: The Arizona Health Care Cost Containment System is the State's Medicaid Program.

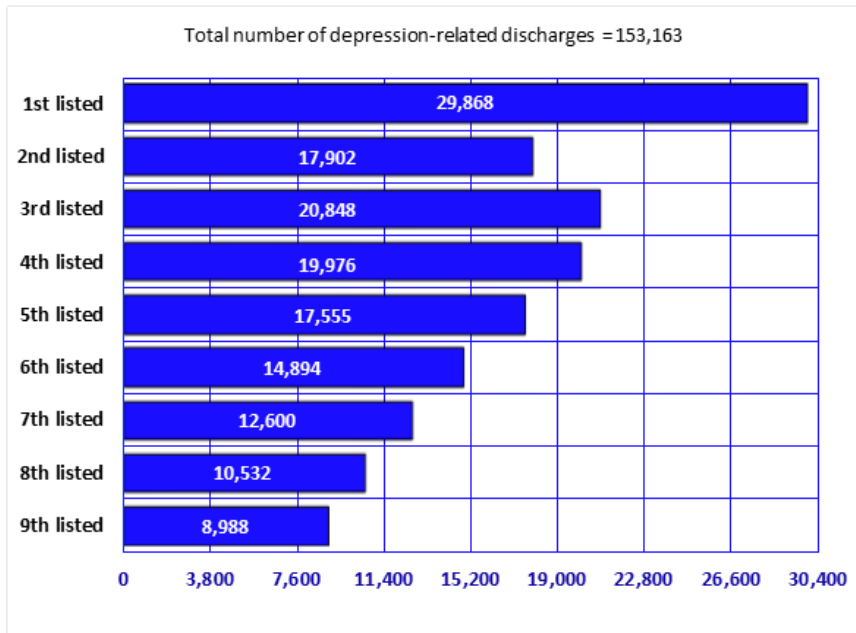
**Figure 4A-4**  
Percent of Hospital Inpatient Admissions by Day of the Week, Arizona Residents, 2018

The rhythm of hospital births by day of the week (see **Figure 1B-14**) reveals that the daily average of resident live births in 2018 was substantially lower on weekends than on weekdays. The same pattern applies to hospital inpatient admissions excluding newborn infants (**Figure 4A-4**).



4A. INPATIENT DISCHARGES FROM SHORT-STAY HOSPITALS BY FIRST-LISTED DIAGNOSIS AND PATIENT CHARACTERISTICS

**Figure 4A-5**  
**Number of Depression-Related Inpatient Discharges and Emergency Room Visits of Arizona Residents, 2018**

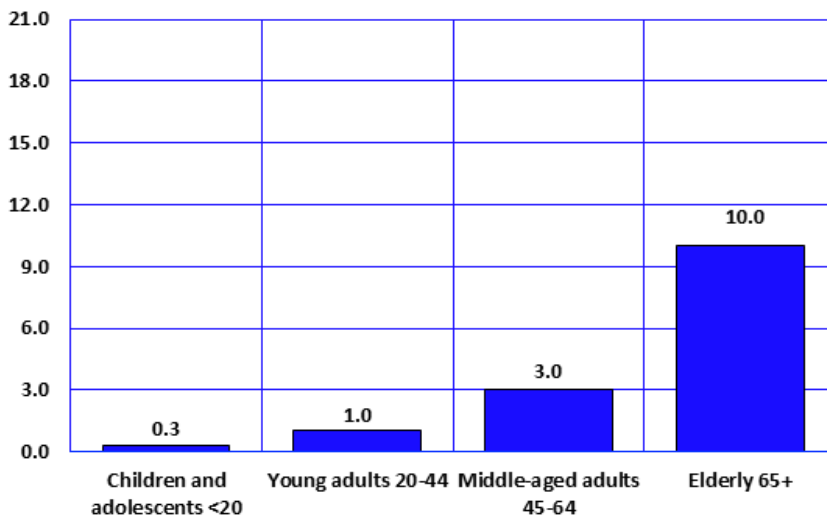


In 2018, *depression* accounted for 23,282 inpatient discharges and 6,586 emergency room visits as the first-listed diagnosis (for a total of 29,868 hospital encounters; **Figure 4A-5**, **Table 4A-1**, **Table 7C-1**).

The extent to which the first-listed diagnosis is the principal reason for hospitalization ought not to be overestimated. More often than not, the first-listed diagnosis is the immediate, but not necessarily the underlying cause of hospitalization.

However, when we count all entries of this code within the nine diagnostic fields, depression was mentioned on 153,163 inpatient discharges and emergency room records (**Figure 4A-5**). When hospital data are used to estimate the prevalence of depression, it makes sense to include all mentions of this disorder in all diagnostic fields, not just the first one.

**Figure 4A-6**  
**Inpatient Hospitalization Rates for Enterocolitis due to *Clostridium difficile* By Age Group, Arizona Residents, 2018**



Note: Number of visits per 10,000 population

In 2018, 2,010 Arizonans were hospitalized with the diagnosis of enterocolitis due to *Clostridium difficile*, a bacterial inflammation of the intestines (**Table 4A-1**). The disease is of growing public health concern because it is often acquired in hospitals and other health care institutions with long-term patients as residents.

The hospitalization rates associated with enterocolitis due to *Clostridium difficile* tend to increase with age. The rate for the elderly 65 years or older (10.0/10,000) was the highest of all age groups (**Figure 4A-6**).

In 2018, 119 Arizonans died from enterocolitis due to *Clostridium difficile*. Elderly 65 years or older accounted for 84.0 percent of these deaths (**Table 2C-27**).

**TABLE 4A-1  
NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2018**

Category of first-listed diagnosis	Total	Age group					Unknown
		Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	
All categories	650,010	29,221	19,620	182,445	161,946	256,771	7
Infectious and parasitic diseases	55,372	1,323	569	9,590	16,585	27,305	0
Septicemia	47,992	458	381	8,111	14,629	24,413	0
Enterocolitis due to <i>Clostridium difficile</i>	2,010	31	15	236	515	1,213	0
Neoplasms	21,989	408	174	2,439	7,864	11,104	0
Malignant neoplasms	17,911	313	108	1,478	6,322	9,690	0
Large intestine	2,375	0	0	157	870	1,348	0
Prostate	1,021	0	0	9	510	502	0
Trachea bronchus and lung	2,230†	*	*	86	625	1,508	0
Breast	830†	0	*	199	385	247	0
Benign neoplasms	3,312	72	50	871	1,316	1,003	0
Endocrine nutritional metabolic and immunity diseases	26,456	1,186	636	6,970	9,358	8,306	0
Diabetes mellitus	12,736	445	405	3,590	4,889	3,407	0
Volume depletion	1,445	398	28	122	218	679	0
Morbid obesity	3,555	0	17	1,744	1,515	279	0
Diseases of the blood and blood forming organs	5,710	633	219	1,173	1,258	2,427	0
Mental disorders	65,492	4,447	7,480	31,495	17,096	4,974	0
Psychoses	39,580	2,056	3,776	19,213	11,198	3,337	0
Alcoholic psychoses	5,033	0	7	2,153	2,395	478	0
Drug psychoses	770†	*	57	518	172	25	0
Schizophrenic disorders	7,949	22	239	4,758	2,633	297	0
Manic-depressive disorders	38,721	3,855	6,237	17,631	8,668	2,330	0
Neurotic disorders	14,582	857	1,259	6,311	4,895	1,260	0
Anxiety states	661	59	104	236	157	105	0
Depression	23,282	2,175	3,830	10,560	5,175	1,542	0
Drug dependence	2,510†	*	131	1,765	505	107	0
Nondependent abuse of drugs	226	0	10	128	74	14	0
Alcohol dependence	6,943	0	16	3,036	3,230	661	0
Diseases of the nervous system	16,612	1,333	511	3,263	4,233	7,271	*
Diseases of the eye and adnexa	553	82	13	126	179	153	0
Diseases of the ear and mastoid process	581	125	25	78	111	242	0
Diseases of the circulatory system	90,620	294	246	5,628	24,840	59,612	0
Heart disease	60,185	136	131	3,351	16,202	40,365	0
Acute myocardial infarction	12,170†	0	*	503	4,195	7,471	0
Coronary arteriosclerosis	5,170†	*	*	115	1,682	3,369	0

**TABLE 4A-1 (continued)**  
**NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2018**

Category of first-listed diagnosis	Total	Age group					Unknown
		Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	
Other ischemic heart disease	439	0	0	38	177	224	0
Cardiac dysrhythmias	13,093	42	42	592	2,891	9,526	0
Cardiac arrest	290†	*	7	37	91	154	0
Congestive heart failure	2,449	27	7	287	669	1,459	0
Cerebrovascular diseases	20,124	58	38	898	5,242	13,888	0
Diseases of the respiratory system	50,103	7,345	581	4,364	11,839	25,974	0
Acute bronchitis and bronchiolitis	3,069	2,385	6	77	188	413	0
Pneumonia	13,387	1,094	98	1,029	3,085	8,081	0
Chronic bronchitis	7,040†	*	*	97	2,351	4,578	0
Asthma	3,158	1,295	115	784	566	398	0
Diseases of the digestive system	59,374	2,007	874	12,136	19,641	24,716	0
Appendicitis	2,871	759	240	791	629	452	0
Noninfectious enteritis and colitis	4,900	192	124	1,143	1,323	2,118	0
Diverticula of intestine	5,110†	*	*	663	1,767	2,677	0
Cholelithiasis	3,573	23	53	1,105	1,113	1,279	0
Diseases of the genitourinary system	26,684	958	351	4,504	7,306	13,565	0
Calculus of kidney and ureter	477	8	6	138	155	170	0
Diseases of the skin and subcutaneous tissue	13,767	793	195	3,830	4,665	4,284	0
Cellulitis and abscess	8,858	407	92	2,141	3,085	3,133	0
Diseases of the musculoskeletal system	46,395	628	330	3,207	15,154	27,076	0
Osteoarthritis and allied disorders	24,480†	*	*	355	7,958	16,161	0
Invertebral disc disorders	3,050†	*	*	513	1,277	1,257	0
Congenital anomalies	2,102	1,241	138	249	279	195	0
Conditions originating in perinatal period	2,140†	2,137	0	*	0	0	0
Symptoms signs and ill-defined conditions	12,174	1,228	243	1,635	3,118	5,950	0
Injury and poisoning	63,873	2,227	1,875	12,314	16,488	30,963	6
Fractures, all sites	20,411	476	411	2,933	3,837	12,753	*
Fracture of neck of femur	6,974	14	12	150	783	6,015	0
Poisonings	5,135	277	543	2,102	1,423	789	*

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; <sup>a</sup> Excluding newborn infants.



**TABLE 4A-2  
NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND GENDER, ARIZONA, 2018**

Category of first-listed diagnosis	Total	Patient's gender		
		Male	Female	Unknown
All categories	650,010	288,175	361,811	24
Infectious and parasitic diseases	55,372	27,907	27,464	*
Septicemia	47,992	24,478	23,513	*
Enterocolitis due to <i>Clostridium difficile</i>	2,010	762	1,248	0
Neoplasms	21,989	10,936	11,053	0
Malignant neoplasms	17,911	9,652	8,259	0
Large intestine	2,375	1,260	1,115	0
Prostate	1,021	1,021	0	0
Trachea bronchus and lung	2,228	1,086	1,142	0
Breast	833	47	786	0
Benign neoplasms	3,312	925	2,387	0
Endocrine nutritional metabolic and immunity diseases	26,456	12,474	13,981	*
Diabetes mellitus	12,736	7,502	5,233	*
Volume depletion	1,445	683	762	0
Morbid obesity	3,555	699	2,856	0
Diseases of the blood and blood forming organs	5,710	2,648	3,062	0
Mental disorders	65,492	35,419	30,069	*
Psychoses	39,580	22,255	17,325	0
Alcoholic psychoses	5,033	3,630	1,403	0
Drug psychoses	774	525	249	0
Schizophrenic disorders	7,949	4,978	2,971	0
Manic-depressive disorders	38,721	18,517	20,200	*
Neurotic disorders	14,582	8,735	5,847	0
Anxiety states	661	316	345	0
Depression	23,282	11,013	12,265	*
Drug dependence	2,509	1,605	904	0
Nondependent abuse of drugs	226	140	86	0
Alcohol dependence	6,943	4,932	2,011	0
Diseases of the nervous system	16,612	8,284	8,328	0
Diseases of the eye and adnexa	553	268	285	0
Diseases of the ear and mastoid process	581	277	304	0
Diseases of the circulatory system	90,620	51,628	38,989	*
Heart disease	60,185	35,196	24,986	*
Acute myocardial infarction	12,173	7,838	4,333	*
Coronary atherosclerosis	5,168	3,741	1,427	0

**TABLE 4A-2 (continued)  
NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND GENDER, ARIZONA, 2018**

Category of first-listed diagnosis	Total	Patient's gender		
		Male	Female	Unknown
Other ischemic heart disease	439	239	200	0
Cardiac dysrhythmias	13,093	7,041	6,052	0
Cardiac arrest	293	168	125	0
Congestive heart failure	2,449	1,443	1,006	0
Cerebrovascular diseases	20,124	10,478	9,646	0
Diseases of the respiratory system	50,103	24,108	25,995	0
Acute bronchitis and bronchiolitis	3,069	1,589	1,480	0
Pneumonia	13,387	6,325	7,062	0
Chronic bronchitis	7,036	2,963	4,073	0
Asthma	3,158	1,438	1,720	0
Diseases of the digestive system	59,374	28,236	31,137	*
Appendicitis	2,871	1,580	1,291	0
Noninfectious enteritis and colitis	4,900	1,837	3,063	0
Diverticula of intestine	5,112	2,363	2,749	0
Cholelithiasis	3,573	1,462	2,111	0
Diseases of the genitourinary system	26,684	12,076	14,608	0
Calculus of kidney and ureter	477	215	262	0
Diseases of the skin and subcutaneous tissue	13,767	7,665	6,102	0
Cellulitis and abscess	8,858	4,876	3,982	0
Diseases of the musculoskeletal system	46,395	21,377	25,014	*
Osteoarthritis and allied disorders	24,477	10,414	14,061	*
Invertebral disc disorders	3,053	1,621	1,432	0
Congenital anomalies	2,102	1,142	960	0
Conditions originating in perinatal period	2,141	1,221	920	0
Symptoms signs and ill-defined conditions	12,174	6,014	6,160	0
Injury and poisoning	63,873	33,013	30,853	7
Fractures, all sites	20,411	9,106	11,305	0
Fracture of neck of femur	6,974	2,517	4,457	0
Poisonings	5,135	2,472	2,663	0

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; <sup>a</sup> Excluding newborn infants.

**TABLE 4A-3  
NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND RACE/ETHNICITY, ARIZONA, 2018**

Category of first-listed diagnosis	Total	Race/ethnicity					
		White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Refused /Unknown
<b>Total</b>	650,010	438,112	129,446	35,753	27,546	13,512	5,641
<b>Infectious and parasitic diseases</b>	55,372	37,385	11,082	2,540	2,880	1,085	400
Septicemia	47,992	32,576	9,589	2,076	2,499	913	339
Enterocolitis due to <i>Clostridium difficile</i>	2,010	1,539	281	74	90	16	10
<b>Neoplasms</b>	21,989	15,869	3,739	1,069	554	541	217
Malignant neoplasms	17,911	13,281	2,875	740	419	426	170
Large intestine	2,375	1,783	371	91	44	64	22
Prostate	1,021	798	119	66	6	17	15
Trachea bronchus and lung	2,228	1,810	221	97	23	63	14
Breast	833	609	144	36	13	23	8
Benign neoplasms	3,312	2,013	751	301	113	101	33
<b>Endocrine nutritional metabolic and immunity diseases</b>	26,456	15,969	6,306	1,894	1,622	480	185
Diabetes mellitus	12,736	7,094	3,380	934	1,060	185	83
Volume depletion	1,445	999	281	75	54	23	13
Morbid obesity	3,555	2,143	950	352	35	52	23
<b>Diseases of the blood and blood forming organs</b>	5,710	3,324	1,104	902	189	156	35
<b>Mental disorders</b>	65,492	44,746	11,180	4,853	3,216	1,106	391
Psychoses	39,580	27,151	6,626	2,891	2,004	654	254
Alcoholic psychoses	5,033	3,695	616	146	508	40	28
Drug psychoses	774	503	161	65	36	7	*
<b>Schizophrenic disorders</b>	7,949	4,899	1,556	1,018	267	175	34
<b>Manic-depressive disorders</b>	38,721	26,931	6,580	2,670	1,629	680	231
<b>Neurotic disorders</b>	14,582	10,231	2,150	657	1,254	197	93
Anxiety states	661	486	119	27	13	14	*
<b>Depression</b>	23,282	16,022	4,083	1,390	1,249	402	136
<b>Drug dependence</b>	2,509	1,818	520	90	51	19	11
<b>Nondependent abuse of drugs</b>	230†	163	38	*	16	*	*
<b>Alcohol dependence</b>	6,943	5,024	804	193	825	60	37
<b>Diseases of the nervous system</b>	16,612	11,892	2,687	967	656	244	166
<b>Diseases of the eye and adnexa</b>	553	327	147	37	22	11	9
<b>Diseases of the ear and mastoid process</b>	581	368	138	28	25	14	8
<b>Diseases of the circulatory system</b>	90,620	68,283	12,531	4,819	2,438	1,704	845
Heart disease	60,185	46,142	8,029	2,888	1,565	1,089	472
Acute myocardial infarction	12,173	9,137	1,832	484	315	246	159
Coronary atherosclerosis	5,168	4,065	700	126	114	113	50

**TABLE 4A-3 (continued)**  
**NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND RACE/ETHNICITY, ARIZONA, 2018**

Category of first-listed diagnosis	Total	Race/ethnicity						Refused /Unknown
		White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander		
Other ischemic heart disease	440 <sup>†</sup>	339	59	22	10	*	*	
Cardiac dysrhythmias	13,093	10,725	1,357	436	281	212	82	
Cardiac arrest	290 <sup>†</sup>	198	53	20	13	*	*	
Congestive heart failure	2,449	1,850	335	116	107	28	13	
Cerebrovascular diseases	20,124	15,065	2,834	1,052	471	428	274	
Diseases of the respiratory system	50,103	35,339	8,594	2,755	2,238	845	332	
Acute bronchitis and bronchiolitis	3,069	1,517	1,042	211	214	70	15	
Pneumonia	13,387	9,729	2,057	539	745	250	67	
Chronic bronchitis	7,036	5,952	586	302	83	71	42	
Asthma	3,158	1,463	1,016	443	162	61	13	
Diseases of the digestive system	59,374	40,205	12,000	2,552	3,041	1,155	421	
Appendicitis	2,871	1,611	939	79	126	76	40	
Noninfectious enteritis and colitis	4,900	3,739	696	256	107	73	29	
Diverticula of intestine	5,112	3,874	867	176	104	59	32	
Cholelithiasis	3,573	2,053	1,091	110	213	70	36	
Diseases of the genitourinary system	26,684	17,834	5,574	1,472	1,089	524	191	
Calculus of kidney and ureter	477	346	86	16	12	8	9	
Diseases of the skin and subcutaneous tissue	13,767	9,382	2,567	666	912	159	81	
Cellulitis and abscess	8,858	6,279	1,523	331	595	86	44	
Diseases of the musculoskeletal system	46,395	37,607	4,970	1,554	1,048	812	404	
Osteoarthritis and allied disorders	24,477	20,864	1,974	670	279	501	189	
Invertebral disc disorders	3,053	2,483	321	120	64	33	32	
Congenital anomalies	2,102	1,176	647	96	120	38	25	
Conditions originating in perinatal period	2,141	990	770	126	141	71	43	
Symptoms signs and ill-defined conditions	12,174	8,548	2,082	682	533	211	118	
Injury and poisoning	63,873	45,753	10,401	2,726	3,289	1,007	697	
Fractures, all sites	20,411	15,821	2,766	540	836	233	215	
Fracture of neck of femur	6,974	6,011	642	76	136	62	47	
Poisonings	5,135	3,472	971	320	249	56	67	

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; <sup>a</sup> Excluding newborn infants.

**TABLE 4A-4  
NUMBER OF DISCHARGES<sup>a</sup> BY PRIMARY PAYER, GENDER, AGE GROUP, RACE/ETHNICITY,  
AND MARITAL STATUS, ARIZONA, 2018**

Selected characteristics		Total	Self-pay	Private insurance (indemnity, HMO, PPO)	AHCCCS/Medicaid	Medicare	Other
<b>Total</b>		650,010	13,786	148,050	181,913	213,911	92,350
<b>Gender</b>	<b>Male</b>	288,175	6,651	57,099	75,058	104,625	44,742
	<b>Female</b>	361,811	7,134	90,940	106,848	109,282	47,607
	<b>Unknown</b>	20†	*	11	7	*	*
<b>Age group</b>	<b>Children &lt;15 years</b>	29,221	556	9,203	17,953	45	1,464
	<b>Adolescents 15-19 years</b>	19,620	518	6,537	11,481	73	1,011
	<b>Young adults 20-44 years</b>	182,445	6,852	63,938	93,689	7,382	10,584
	<b>Middle-aged adults 45-64 years</b>	161,946	5,008	55,298	54,996	26,258	20,386
	<b>Elderly 65+ years</b>	256,771	845	13,074	3,794	180,153	58,905
	<b>Unknown</b>	7	7	0	0	0	0
<b>Race/ethnicity</b>	<b>White non-Hispanic</b>	438,112	7,356	106,075	83,215	172,654	68,812
	<b>Hispanic or Latino</b>	129,446	4,708	25,397	62,908	21,585	14,848
	<b>Black or African American</b>	35,753	848	7,233	15,427	8,036	4,209
	<b>American Indian or Alaska Native</b>	27,546	340	3,127	14,993	6,959	2,127
	<b>Asian or Pacific Islander</b>	13,512	320	4,721	3,661	3,218	1,592
	<b>Refused/Unknown</b>	5,641	214	1,497	1,709	1,459	762
<b>Patient's marital status</b>	<b>Single</b>	252,496	6,964	54,620	125,186	41,114	24,612
	<b>Married</b>	264,752	5,251	80,829	34,645	103,311	40,716
	<b>Separated</b>	5,327	163	856	2,259	1,303	746
	<b>Divorced</b>	55,371	822	7,902	14,343	21,649	10,655
	<b>Widowed</b>	67,341	331	3,036	3,657	45,264	15,053
	<b>Not Applicable</b>	130†	*	22	88	9	6
	<b>Unknown</b>	4,596	253	785	1,735	1,261	562

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; <sup>a</sup> Excluding newborn infants.

**TABLE 4A-5  
AVERAGE LENGTH OF STAY FOR DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2018**

Category of first-listed diagnosis	All ages	Patient's age group					Unknown
		Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	
<b>All conditions</b>	5.0	5.7	6.2	4.1	5.3	5.2	0.3
<b>Infectious and parasitic diseases</b>	6.4	5.9	4.9	5.8	6.9	6.4	0.0
Septicemia	6.6	10.5	4.7	6.0	7.2	6.5	0.0
Enterocolitis due to <i>Clostridium difficile</i>	5.5	6.5	3.1	4.6	5.2	5.7	0.0
<b>Neoplasms</b>	5.9	10.6	6.8	5.6	5.7	6.0	0.0
Malignant neoplasms	6.4	12.6	8.8	7.4	6.1	6.2	0.0
Large intestine	6.3	0.0	0.0	6.6	5.9	6.5	0.0
Prostate	2.1	0.0	0.0	2.0	1.9	2.3	0.0
Trachea bronchus and lung	5.8	4.3	9.0	6.6	5.7	5.7	0.0
Breast	4.5	0.0	2.5	4.3	4.4	4.8	0.0
Benign neoplasms	3.6	4.0	3.3	2.7	3.4	4.6	0.0
<b>Endocrine nutritional metabolic and immunity diseases</b>	4.0	3.7	3.9	3.1	4.2	4.6	0.0
Diabetes mellitus	4.8	2.8	2.5	3.6	5.3	5.8	0.0
Volume depletion	3.1	2.7	2.1	2.2	3.1	3.5	0.0
Morbid obesity	1.6	0.0	1.5	1.5	1.6	1.7	0.0
<b>Diseases of the blood and blood forming organs</b>	4.4	4.4	6.0	4.3	4.4	4.3	0.0
<b>Mental disorders</b>	8.5	11.0	10.2	7.4	8.4	11.2	0.0
Psychoses	8.5	11.7	10.5	7.5	8.3	11.4	0.0
Alcoholic psychoses	5.0	0.0	4.0	4.3	5.2	6.5	0.0
Drug psychoses	5.1	1.0	7.0	4.9	5.2	5.5	0.0
Schizophrenic disorders	11.9	9.6	12.7	11.0	12.6	19.0	0.0
Manic-depressive disorders	8.5	10.8	10.0	7.1	8.3	11.8	0.0
<b>Neurotic disorders</b>	5.9	9.5	9.2	4.9	5.5	6.9	0.0
Anxiety states	6.8	7.5	13.2	4.8	5.4	6.7	0.0
Depression	7.6	9.4	8.6	6.4	7.8	10.5	0.0
<b>Drug dependence</b>	6.1	152.0	12.8	5.2	6.9	6.9	0.0
<b>Nondependent abuse of drugs</b>	4.0	0.0	3.9	3.8	4.1	4.6	0.0
Alcohol dependence	5.1	0.0	6.4	4.4	5.3	6.9	0.0
<b>Diseases of the nervous system</b>	5.8	3.7	4.7	4.5	5.7	6.9	0.0
Diseases of the eye and adnexa	4.2	8.1	2.2	3.5	3.7	3.5	0.0
Diseases of the ear and mastoid process	2.9	2.3	2.1	2.8	3.2	3.1	0.0
Diseases of the circulatory system	4.9	13.0	5.8	4.8	5.0	4.8	0.0
Heart disease	4.4	17.6	5.0	4.3	4.4	4.4	0.0
Acute myocardial infarction	4.1	0.0	4.0	3.3	3.8	4.3	0.0
Coronary atherosclerosis	4.8	4.0	2.0	4.8	4.4	5.0	0.0

**TABLE 4A-5 (continued)**  
**AVERAGE LENGTH OF STAY FOR DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2018**

Category of first-listed diagnosis	All ages	Patient's age group					Unknown
		Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	
Other ischemic heart disease	2.4	0.0	0.0	2.2	2.2	2.5	0.0
Cardiac dysrhythmias	3.2	8.0	2.4	2.8	3.3	3.2	0.0
Cardiac arrest	3.1	1.3	3.3	3.4	3.1	3.2	0.0
Congestive heart failure	5.7	54.4	19.6	5.5	5.3	5.0	0.0
Cerebrovascular diseases	6.3	14.2	11.8	7.2	6.9	6.0	0.0
Diseases of the respiratory system	5.2	3.4	4.4	4.9	5.7	5.5	0.0
Acute bronchitis and bronchiolitis	3.2	3.2	2.8	3.0	2.9	3.4	0.0
Pneumonia	4.6	3.1	4.4	4.3	4.7	4.8	0.0
Chronic bronchitis	4.2	2.4	5.8	3.4	3.9	4.4	0.0
Asthma	2.7	1.9	2.4	3.0	3.6	3.7	0.0
Diseases of the digestive system	4.3	4.4	3.8	3.8	4.3	4.6	0.0
Appendicitis	3.3	4.0	3.2	2.4	3.2	3.9	0.0
Noninfectious enteritis and colitis	4.3	6.1	5.8	3.8	4.1	4.4	0.0
Diverticula of intestine	4.2	2.0	1.7	4.0	4.1	4.4	0.0
Cholelithiasis	3.2	2.6	2.1	2.4	3.1	4.2	0.0
Diseases of the genitourinary system	3.8	2.9	3.1	3.0	3.7	4.2	0.0
Calculus of kidney and ureter	2.5	1.4	1.0	2.6	2.1	2.8	0.0
Diseases of the skin and subcutaneous tissue	4.2	2.7	3.8	3.6	4.4	4.7	0.0
Cellulitis and abscess	3.7	2.4	2.9	3.1	3.9	4.1	0.0
Diseases of the musculoskeletal system	2.9	4.0	4.0	3.7	2.8	2.9	0.0
Osteoarthritis and allied disorders	1.8	1.0	2.0	1.6	1.7	1.8	0.0
Invertebral disc disorders	3.4	3.3	1.3	2.8	3.0	4.1	0.0
Congenital anomalies	8.2	10.6	4.2	4.4	5.1	5.2	0.0
Conditions originating in perinatal period	7.1	7.1	0.0	1.3	0.0	0.0	0.0
Symptoms signs and ill-defined conditions	3.6	2.8	3.0	3.2	3.1	4.1	0.0
Injury and poisoning	5.6	4.8	4.5	5.1	5.7	5.8	0.3
Fractures, all sites	5.3	2.7	3.6	4.2	5.0	5.7	0.0
Fracture of neck of femur	4.7	1.9	3.8	4.6	4.7	4.7	0.0
Poisonings	3.6	2.0	2.6	3.3	4.1	4.4	0.0

Note: <sup>a</sup> Excluding newborn infants.







**4B.**

### **INPATIENT DISCHARGES FROM SHORT-STAY HOSPITALS BY ALL-LISTED PROCEDURES AND PATIENT CHARACTERISTICS**

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The data on the number of procedures in this section are for inpatients only. Procedures include surgical and non-surgical operations, diagnostic procedures, and special treatments reported on the medical record. Up to six procedures were included for each discharge. These all-listed procedures include all occurrences of the procedure regardless of the order on the medical record. For comparability with the national data\*, the rates of all-listed procedures are presented per 10,000 population.

Beginning in 2008, Arizona hospitals may report up to 12 surgical and non-surgical procedures per record, doubling the previously required number. However, not all hospitals have been able to meet the revised requirements. This is one reason why, in our 2008-2015 reports, we only analyzed the top six procedures. Another reason is comparability with the previously published data for 2000-2007. Starting with the 2016 report, all the 12 listed procedures in the database are being taken into account in our analysis.

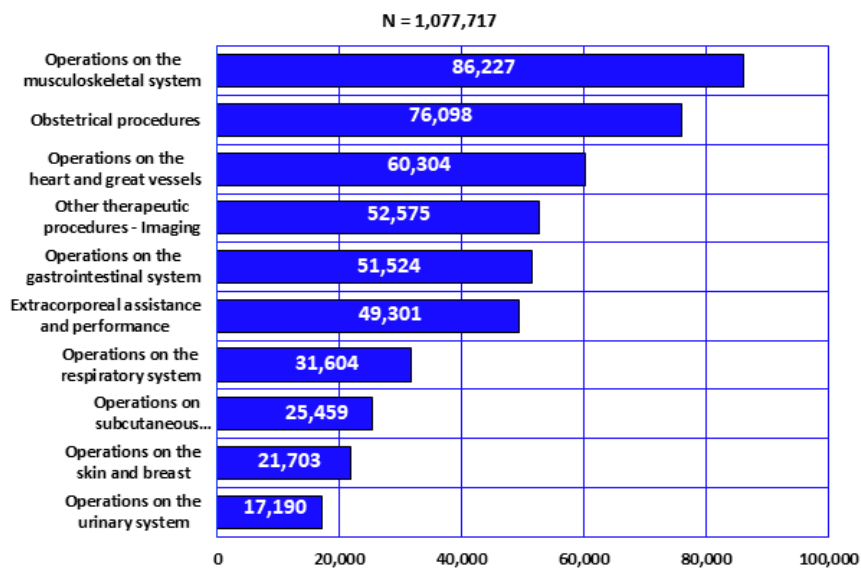
During 2015, all Arizona Hospitals transitioned to the International Classification of Diseases, 10th Revision, and Procedure Coding System (ICD-10-PCS) for coding inpatient procedures. ICD-10-PCS was implemented on October 1, 2015 in replacement of the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM).

In the current report, procedure groupings and codes are based on ICD-10-PCS. ICD-10-PCS is structurally different and far more detailed with about 72,000 procedure codes than ICD-9-CM, which includes only 3,824 procedure codes. Due to the fundamental differences in coding systems, caution should be exercised in comparing 2017 hospital discharge data with data from years prior 2016. For further explanation of ICD-10-CM transition, please refer to "The Implementation of the International Classification of Disease, Tenth Revision," Introduction page ix.

\*Findings of the National Hospital Discharge Survey, including estimates of the number of specific procedure categories, are available in bound reports of the National Center for Health Statistics and online at <http://www.cdc.gov/nchs/nhds.htm>. The survey collects the data on up to four surgical and non-surgical procedures.

4B. INPATIENT DISCHARGES FROM SHORT-STAY HOSPITALS BY ALL-LISTED PROCEDURES AND PATIENT CHARACTERISTICS

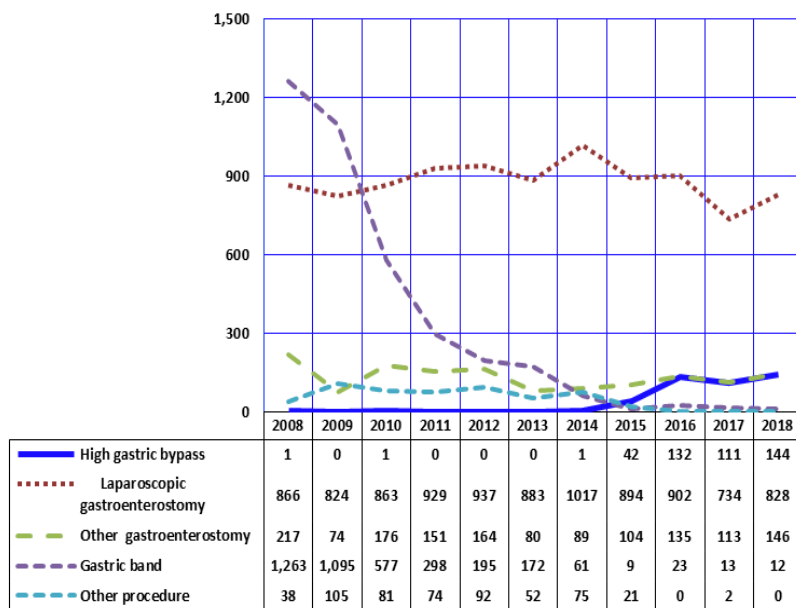
**Figure 4B-1**  
**Ten Leading Categories of All-listed Inpatient Procedures,**  
**Arizona Residents, 2018**



During 2018, 1,077,717 procedures were performed among the 650,010 total inpatient discharges to Arizona residents. The 2018 rate of procedures was 1,523.0 per 10,000 population, representing an increase from the 2017 rate of 1479.2 per 10,000.

No specific procedure was recorded for 40.3 percent of all inpatient discharges. Only 1.8 percent of inpatients had six procedures reported while 0.8 of inpatients had 12 procedures recorded. Among the inpatient discharges which had one or more specific procedures recorded, the most frequent were *operations on the musculoskeletal system*, followed by *obstetrical procedures*, and *operations on the heart and great vessels* (**Figure 4B-1, Table 4B1**).

**Figure 4B-2**  
**Trends in Types of Inpatient Procedures Performed in Treatment of Morbid Obesity, Arizona Residents, 2008-2018**



Bariatrics is a branch of medicine that deals with the surgical treatment of obesity. Bariatric surgery has seen a rather dramatic increase in its popularity. A typical candidate for gastrointestinal surgery has a body mass index (BMI) of 40 or more – about 100 pounds overweight for men and 80 pounds for women. Bariatric surgery may also be considered for someone whose BMI is between 35 and 39.9 and who has a serious obesity-related health problem (such as type 2-diabetes, heart disease, or severe sleep apnea).

In 2018, *morbid obesity* was the principal diagnosis for 3,555 inpatient hospitalizations (**Table 4A-1**). The number of *gastric bypass* surgeries, once the most common bariatric procedure, declined from a recent high of 2,123 in 2003 to fewer than 10 gastric bypass surgeries being completed collectively between 2007-2014. Since 2015, the number of *gastric bypass procedures* has seen a dramatic increase (**Figure 4B-2**). As in any years since 2010, *laparoscopic gastroenterostomy* remained the most popular procedure, with 828 surgeries performed in 2018.

Note: The frequency counts in Figure 4B-2 are based on the principal procedure. The tabulated data use all twelve listed procedures.

**TABLE 4B-1  
NUMBER OF PROCEDURES BY CATEGORY AND AGE GROUP, ARIZONA, 2018**

Procedures by category	Total	Age group					Un- known
		Children <15 years	Adoles- cents 15-19 years	Young adults 20-44 years	Middle- aged adults 45-64 years	Elderly 65+ years	
All procedures	1,077,717	55,281	23,218	297,302	288,127	413,759	30
Operations on the central nervous system	16,411	2,490	513	4,182	4,192	5,034	0
Spinal tap	6,930	1,892	203	1,444	1,694	1,697	0
Operations on the peripheral nervous system	4,272	69	78	718	1,441	1,966	0
Operations on the heart and great vessels	60,304	2,447	503	6,677	19,086	31,591	0
Heart transplant	70†	14	*	12	27	11	0
Coronary artery bypass graft	3,575	0	0	78	1,154	2,343	0
Cardiac catheterization	19,463	104	27	1,052	6,963	11,317	0
Insertion, replacement, removal, of pacemaker leads	4,650†	35	*	145	766	3,695	0
Operations on the upper arteries	13,245	402	132	1,592	4,055	7,063	*
Operations on the lower arteries	7,263	338	48	605	1,975	4,296	*
Operations on the upper veins	10,242	278	61	1,759	3,388	4,755	*
Operations on the lower veins	9,915	1,148	69	929	3,232	4,536	*
Operations on the lymphatic and hemic systems	8,663	373	131	982	2,994	4,183	0
Operations on the eye	478	75	21	147	134	101	0
Operations on the ear, nose, sinus	1,006	176	48	237	275	270	0
Operations on the respiratory system	31,604	2,266	458	4,993	10,106	13,776	*
Bronchoscopy with or without biopsy	3,331	211	42	427	1,057	1,594	0
Operations on the mouth and throat	3,249	853	104	719	820	753	0
Operations on the gastrointestinal system	51,524	2,274	817	10,513	16,099	21,821	0
Implantation of gastric band	10†	0	0	*	6	*	0
Endoscopy of small intestine with or without biopsy	12,256	196	151	2,234	3,934	5,741	0
Endoscopy of large intestine with or without biopsy	8,346	125	98	1,192	2,459	4,472	0
Appendectomy, excluding incidental	3,760	813	268	1,049	924	706	0
Operations on the hepatobiliary system and pancreas	13,999	182	189	3,262	4,433	5,933	0
Cholecystectomy	7,706	61	141	2,346	2,341	2,817	0
Operations on the endocrine system	1,078	32	31	233	391	391	0
Operations on the skin and breast	21,703	420	1,185	12,989	3,685	3,423	*
Breast surgery	830†	0	*	199	385	247	0

**TABLE 4B-1 (continued)  
NUMBER OF PROCEDURES BY CATEGORY AND AGE GROUP, ARIZONA, 2018**

Procedures by category	Total	Age group					Un- known
		Children <15 years	Adoles- cents 15-19 years	Young adults 20-44 years	Middle- aged adults 45-64 years	Elderly 65+ years	
Operations on the subcutaneous tissue and fascia	25,459	750	380	5,368	8,601	10,359	*
Operations on the musculoskeletal system	86,227	1,302	1,922	21,570	22,719	38,714	0
Open reduction of fracture with or without internal fixation	7,167	272	189	1,245	1,655	3,806	0
Total hip replacement	10,010†	*	6	299	3,349	6,352	0
Total knee replacement	14,480†	*	*	164	4,893	9,418	0
Operations on the urinary system	17,190	380	166	3,108	5,440	8,096	0
Kidney transplant	280†	*	*	74	137	60	0
Operations on the male reproductive system	7,761	5,487	20	242	846	1,166	0
Prostatectomy	1,587	0	0	15	606	966	0
Operations on the female reproductive system	14,891	72	744	11,518	1,694	863	0
Oophorectomy and salpingo-oophorectomy	3,207	9	23	1,343	1,261	571	0
Hysterectomy	2,840†	*	*	1,153	1,217	464	0
Obstetrical procedures	76,098	30	4,329	71,575	164	0	0
Episiotomy with or without forceps or vacuum extraction	2,770†	*	265	2,496	7	0	0
Artificial rupture of membranes	19,871	7	1,260	18,572	32	0	0
Cesarean section	21,470†	*	723	20,664	77	0	0
Other therapeutic procedures - Imaging	52,575	1,513	331	5,591	17,066	28,074	0
Computerized tomography (CT Scan)	771	110	9	92	239	321	0
Magnetic resonance imaging (MRI)	1,402	688	66	118	243	287	0
Other therapeutic procedures - Nuclear medicine	158	54	6	20	40	38	0
Other therapeutic procedures - Radiation therapy	175	14	8	18	71	64	0
Extracorporeal assistance and performance	49,301	3,299	501	6,459	15,683	23,355	*
Hemodialysis	12,070	30	33	1,731	4,667	5,609	0

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6.

**TABLE 4B-2  
NUMBER OF PROCEDURES BY CATEGORY AND GENDER, ARIZONA, 2018**

Procedures by category	Total	Patient's gender		
		Male	Female	Unknown
All procedures	1,077,717	495,036	582,593	88
Operations on the central nervous system	16,411	7,995	8,414	*
Spinal tap	6,930	3,699	3,231	0
Operations on the peripheral nervous system	4,272	2,481	1,791	0
Operations on the heart and great vessels	60,304	35,094	25,205	*
Heart transplant	67	44	23	0
Coronary artery bypass graft	3,575	2,745	830	0
Cardiac catheterization	19,463	12,415	7,046	*
Insertion, replacement, removal, of pacemaker leads	4,645	2,621	2,024	0
Operations on the upper arteries	13,245	7,474	5,769	*
Operations on the lower arteries	7,263	4,346	2,917	0
Operations on the upper veins	10,242	5,091	5,151	0
Operations on the lower veins	9,915	6,372	3,542	*
Operations on the lymphatic and hemic systems	8,663	4,560	4,103	0
Operations on the eye	478	311	167	0
Operations on the ear, nose, sinus	1,006	595	411	0
Operations on the respiratory system	31,604	17,463	14,136	*
Bronchoscopy with or without biopsy	3,331	1,872	1,458	*
Operations on the mouth and throat	3,249	2,000	1,249	0
Operations on the gastrointestinal system	51,524	23,601	27,921	*
Implantation of gastric band	10†	*	9	0
Endoscopy of small intestine with or without biopsy	12,256	5,903	6,352	*
Endoscopy of large intestine with or without biopsy	8,346	4,007	4,339	0
Appendectomy, excluding incidental	3,760	1,921	1,838	*
Operations on the hepatobiliary system and pancreas	13,999	6,285	7,714	0
Cholecystectomy	7,706	3,068	4,638	0
Operations on the endocrine system	1,078	465	613	0
Operations on the skin and breast	21,703	6,272	15,429	*
Breast surgery	833	47	786	0

**TABLE 4B-2 (continued)  
NUMBER OF PROCEDURES BY CATEGORY AND GENDER, ARIZONA, 2018**

Procedures by category	Total	Patient's gender		
		Male	Female	Unknown
Operations on the subcutaneous tissue and fascia	25,459	14,335	11,121	*
Operations on the musculoskeletal system	86,227	34,519	51,703	*
Open reduction of fracture with or without internal fixation	7,167	2,965	4,202	0
Total hip replacement	10,009	4,369	5,639	*
Total knee replacement	14,479	5,848	8,629	*
Operations on the urinary system	17,190	8,940	8,250	0
Kidney transplant	276	169	107	0
Operations on the male reproductive system	7,761	7,726	31	*
Prostatectomy	1,587	1,587	0	0
Operations on the female reproductive system	14,891	7	14,884	0
Oophorectomy and salpingo-oophorectomy	3,210†	*	3,204	0
Hysterectomy	2,840†	*	2,835	0
Obstetrical procedures	76,100†	*	76,093	*
Episiotomy with or without forceps or vacuum extraction	2,773	0	2,773	0
Artificial rupture of membranes	19,870†	*	19,870	0
Cesarean section	21,466	0	21,466	0
Other therapeutic procedures - Imaging	52,575	30,079	22,493	*
Computerized tomography (CT Scan)	771	409	362	0
Magnetic resonance imaging (MRI)	1,402	739	663	0
Other therapeutic procedures - Nuclear medicine	158	66	92	0
Other therapeutic procedures - Radiation therapy	175	87	88	0
Extracorporeal assistance and performance	49,301	28,931	20,363	7
Hemodialysis	12,070	6,899	5,171	0

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6.

**TABLE 4B-3  
NUMBER OF PROCEDURES BY CATEGORY AND RACE/ETHNICITY, ARIZONA, 2018**

Procedures by category	Total	Race/ethnicity					
		White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Refused /Unknown
All procedures	1,077,717	712,075	226,975	54,754	47,690	24,670	11,553
Operations on the central nervous system	16,411	10,330	3,811	963	737	332	238
Spinal tap	6,930	4,119	1,731	512	324	157	87
Operations on the peripheral nervous system	4,272	3,294	591	142	148	41	56
Operations on the heart and great vessels	60,304	43,190	9,918	2,823	2,660	1,185	528
Heart transplant	70†	43	12	9	0	*	*
Coronary artery bypass graft	3,575	2,797	480	78	88	84	48
Cardiac catheterization	19,463	14,534	2,891	908	529	373	228
Insertion, replacement, removal, of pacemaker leads	4,645	3,749	510	140	143	69	34
Operations on the upper arteries	13,245	9,169	2,316	721	605	265	169
Operations on the lower arteries	7,263	5,243	1,189	350	270	131	80
Operations on the upper veins	10,242	6,689	2,011	632	634	185	91
Operations on the lower veins	9,915	6,682	1,904	466	518	220	125
Operations on the lymphatic and hemic systems	8,663	6,338	1,431	424	177	214	79
Operations on the eye	478	261	123	24	45	10	15
Operations on the ear, nose, sinus	1,006	643	218	58	51	23	13
Operations on the respiratory system	31,604	21,675	5,589	1,831	1,417	679	413
Bronchoscopy with or without biopsy	3,331	2,343	593	184	110	69	32
Operations on the mouth and throat	3,249	2,032	733	212	163	77	32
Operations on the gastrointestinal system	51,524	35,080	10,103	2,655	2,091	1,152	443
Implantation of gastric band	10†	9	*	0	*	0	0
Endoscopy of small intestine with or without biopsy	12,256	8,440	2,167	648	630	268	103
Endoscopy of large intestine with or without biopsy	8,346	5,960	1,410	406	356	168	46
Appendectomy, excluding incidental	3,760	2,211	1,112	134	151	98	54
Operations on the hepatobiliary system and pancreas	13,999	8,781	3,523	494	772	309	120
Cholecystectomy	7,706	4,574	2,221	238	443	157	73
Operations on the endocrine system	1,078	710	216	79	31	32	10
Operations on the skin and breast	21,703	12,259	6,451	1,155	1,082	489	267
Breast surgery	833	609	144	36	13	23	8

**TABLE 4B-3 (continued)  
NUMBER OF PROCEDURES BY CATEGORY AND RACE/ETHNICITY, ARIZONA, 2018**

Procedures by category	Total	Race/ethnicity					
		White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Refused /Unknown
Operations on the subcutaneous tissue and fascia	25,459	16,813	4,973	1,387	1,636	464	186
Operations on the musculoskeletal system	86,227	63,299	14,087	3,077	2,818	2,078	868
Open reduction of fracture with or without internal fixation	7,167	5,258	1,177	228	359	69	76
Total hip replacement	10,009	8,864	524	293	90	168	70
Total knee replacement	14,479	11,852	1,496	443	221	355	112
Operations on the urinary system	17,190	12,047	3,279	778	551	377	158
Kidney transplant	276	129	84	22	23	13	*
Operations on the male reproductive system	7,761	5,482	1,320	496	100	302	61
Prostatectomy	1,587	1,269	174	89	11	27	17
Operations on the female reproductive system	14,891	7,108	5,499	1,070	596	473	145
Oophorectomy and salpingo-oophorectomy	3,207	1,798	925	242	109	102	31
Hysterectomy	2,839	1,545	811	265	84	97	37
Obstetrical procedures	76,098	35,616	28,627	5,028	2,818	3,041	968
Episiotomy with or without forceps or vacuum extraction	2,773	1,379	961	161	68	156	48
Artificial rupture of membranes	19,871	9,543	7,332	1,204	825	724	243
Cesarean section	21,466	9,962	7,796	1,670	799	941	298
Other therapeutic procedures - Imaging	52,575	37,588	8,624	2,440	2,301	1,027	595
Computerized tomography (CT Scan)	771	508	139	52	45	12	15
Magnetic resonance imaging (MRI)	1,402	791	357	117	98	16	23
Other therapeutic procedures - Nuclear medicine	160†	89	37	15	12	*	*
Other therapeutic procedures - Radiation therapy	180†	131	23	11	7	*	*
Extracorporeal assistance and performance	49,301	31,702	9,380	3,081	3,432	1,041	665
Hemodialysis	12,070	5,583	3,204	1,193	1,653	340	97

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6.



**TABLE 4B-4  
NUMBER OF PROCEDURES BY CATEGORY AND EXPECTED SOURCE OF PAYMENT, ARIZONA, 2018**

Procedures by category	Total	Self-pay	Private insurance (indemnity, HMO, PPO)	AHCCCS/Medicaid	Medicare	Other
All procedures	1,077,717	20,868	273,650	287,870	340,094	155,235
Operations on the central nervous system	16,411	244	4,558	5,194	4,225	2,190
Spinal tap	6,930	123	1,818	2,631	1,496	862
Operations on the peripheral nervous system	4,272	67	1,111	760	1,600	734
Operations on the heart and great vessels	60,304	862	10,659	12,393	26,503	9,887
Heart transplant	70+	0	26	18	20	*
Coronary artery bypass graft	3,575	49	730	388	1,721	687
Cardiac catheterization	19,463	477	3,932	2,825	8,718	3,511
Insertion, replacement, removal, of pacemaker leads	4,645	30	502	379	2,793	941
Operations on the upper arteries	13,245	190	2,080	2,845	6,077	2,053
Operations on the lower arteries	7,263	90	1,102	1,293	3,472	1,306
Operations on the upper veins	10,242	111	1,410	2,691	3,846	2,184
Operations on the lower veins	9,915	173	2,005	2,526	3,635	1,576
Operations on the lymphatic and hemic systems	8,663	88	2,479	1,442	3,253	1,401
Operations on the eye	478	26	100	197	99	56
Operations on the ear, nose, sinus	1,006	22	330	299	237	118
Operations on the respiratory system	31,604	617	5,799	8,471	11,803	4,914
Bronchoscopy with or without biopsy	3,331	36	609	779	1,323	584
Operations on the mouth and throat	3,249	92	912	1,206	711	328
Operations on the gastrointestinal system	51,524	961	13,197	11,802	17,649	7,915
Implantation of gastric band	10+	0	*	*	*	*
Endoscopy of small intestine with or without biopsy	12,256	214	2,433	2,843	4,797	1,969
Endoscopy of large intestine with or without biopsy	8,346	138	1,717	1,540	3,514	1,437
Appendectomy, excluding incidental	3,760	180	1,451	1,252	567	310
Operations on the hepatobiliary system and pancreas	13,999	404	3,633	3,366	4,607	1,989
Cholecystectomy	7,706	290	2,196	2,057	2,161	1,002
Operations on the endocrine system	1,078	16	370	220	333	139
Operations on the skin and breast	21,703	745	7,030	8,785	3,034	2,109
Breast surgery	833	16	351	164	198	104

**TABLE 4B-4 (continued)  
NUMBER OF PROCEDURES BY CATEGORY AND EXPECTED SOURCE OF PAYMENT, ARIZONA, 2018**

Procedures by category	Total	Self-pay	Private insurance (indemnity, HMO, PPO)	AHCCCS/Medicaid	Medicare	Other
Operations on the subcutaneous tissue and fascia	25,459	542	4,627	7,159	9,300	3,831
Operations on the musculoskeletal system	86,227	1,477	24,313	16,508	29,961	13,968
Open reduction of fracture with or without internal fixation	7,167	144	1,254	1,456	2,927	1,386
Total hip replacement	10,009	69	2,714	674	4,693	1,859
Total knee replacement	14,479	49	3,945	932	6,640	2,913
Operations on the urinary system	17,190	347	4,085	3,385	6,930	2,443
Kidney transplant	276	0	115	13	139	9
Operations on the male reproductive system	7,761	204	4,456	1,532	816	753
Prostatectomy	1,587	13	549	97	636	292
Operations on the female reproductive system	14,891	396	5,981	6,902	795	817
Oophorectomy and salpingo-oophorectomy	3,207	102	1,369	987	487	262
Hysterectomy	2,839	102	1,285	827	397	228
Obstetrical procedures	76,098	2,269	32,957	37,256	268	3,348
Episiotomy with or without forceps or vacuum extraction	2,773	98	1,211	1,291	12	161
Artificial rupture of membranes	19,871	518	8,563	9,813	57	920
Cesarean section	21,466	600	9,765	10,031	108	962
Other therapeutic procedures - Imaging	52,575	1,097	10,344	9,743	21,899	9,492
Computerized tomography (CT Scan)	771	20	187	208	229	127
Magnetic resonance imaging (MRI)	1,402	27	418	569	205	183
Other therapeutic procedures - Nuclear medicine	160†	*	41	67	25	22
Other therapeutic procedures - Radiation therapy	175	0	76	24	53	22
Extracorporeal assistance and performance	49,301	820	7,695	11,661	20,862	8,263
Hemodialysis	12,070	95	1,121	2,157	6,326	2,371

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6.



#### **4C.**

### **CHARACTERISTICS OF EMERGENCY ROOM VISITS BY DISEASE CATEGORY, DIAGNOSIS GROUP, AND AGE GROUP**

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This section focuses on ambulatory care visits to emergency rooms of non-Federal, short-stay hospitals. The emergency room (ER) and the inpatient hospitalization data are mutually exclusive. The ER data include only those who were not admitted as inpatients.

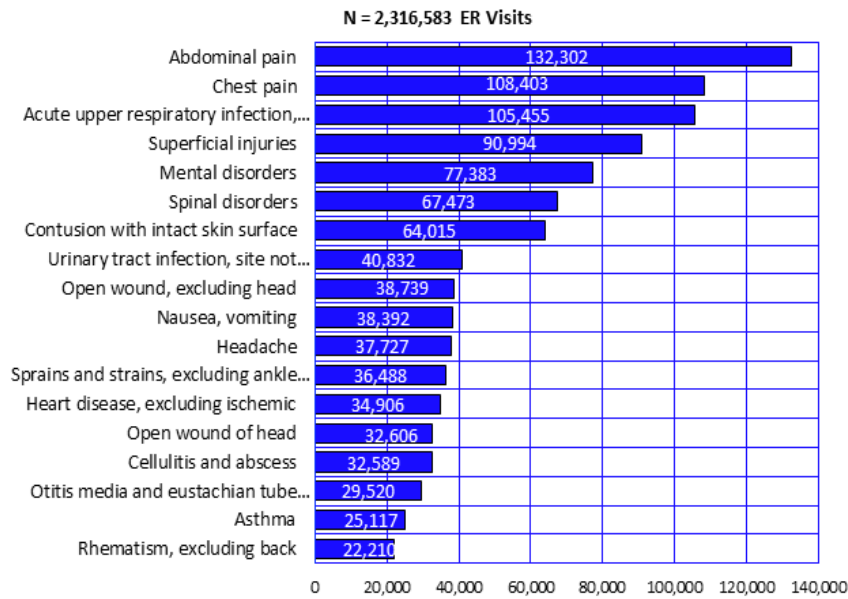
All emergency room visits are those of the residents of Arizona. Ambulatory care visits to hospital emergency rooms of out-of-state residents are not included in this report. In the current report, diagnostic groupings and code numbers are solely based on the International Classification of Diseases and Related Problems, 10th Revision, Clinical Modification ICD-10-CM. Prior to 2015, the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) was used to classify diseases and related health problems. On October 1, 2015, the US healthcare system transitioned from ICD-9-CM to ICD-10-CM, thus both ICD-9-CM and ICD-10-CM were used in the 2015 report of ER visits.

Please refer to "The Implementation of the International Classification of Disease, Tenth Revision," Introduction page ix, for further explanation of ICD-10-CM transition.

\*Findings of the National Hospital Ambulatory Medical Care Survey, including data on trends in ER utilization, are available in bound reports of the National Center for Health Statistics and online at <http://www.cdc.gov/nchs/ahcd.htm>

4C. CHARACTERISTICS OF EMERGENCY ROOM VISITS BY DISEASE CATEGORY, DIAGNOSIS GROUP, AND AGE GROUP

**Figure 4C-1**  
**Number of Emergency Room Visits by the Leading Diagnostic Groupings, Arizona Residents, 2018**



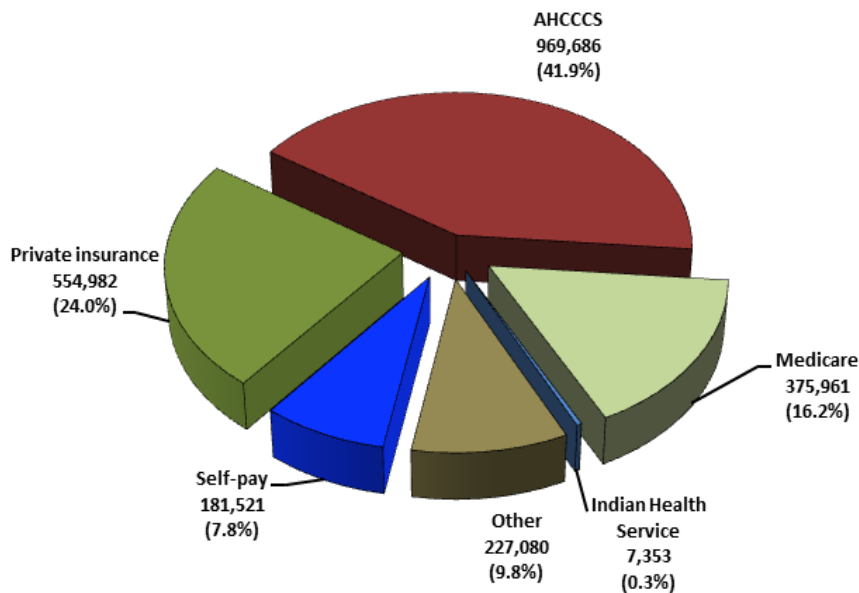
During 2018, approximately 2.3 million visits were made by Arizona residents to hospital emergency rooms (ER), which translate to 32.7 visits per 100 persons. The utilization rates vary by geographic region, with the Western United States having the lowest ER visit rate.

In 2018, *abdominal pain, chest pain, acute upper respiratory infection, superficial injuries, mental disorders, spinal disorders, and contusion with intact skin surface*, were the leading diagnostic categories, accounting for 27.9 percent of all visits (**Figure 4C-1, Table 4C-2**).

[\\*www.cdc.gov/nchs/data/nhsr/nhsr007.pdf](http://www.cdc.gov/nchs/data/nhsr/nhsr007.pdf)

Note: Based on first-listed diagnosis; See Table 4C-2.

**Figure 4C-2**  
**Emergency Room Visits by Payer, Arizona Residents, 2018**



The Arizona Health Care Cost Containment System (AHCCCS, the State's Medicaid program) was the most frequently recorded expected source of payment, accounting for 41.9 percent of ER visits (**Figure 4C-3**). Private insurance was the second most frequent payer (24.0 percent of ER visits), followed by Medicare (16.2 percent).

Notes: Number of visits per 100 persons; The actual number of ER visits for each group is provided below the bars.

**TABLE 4C-1  
NUMBER OF EMERGENCY ROOM VISITIS<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2018**

Category of first-listed diagnosis	All Ages	Age group					Unknown
		Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	
<b>Total, all causes</b>	2,316,583	406,327	133,363	824,769	517,869	434,186	69
<b>Infectious and parasitic diseases</b>	52,326	23,229	3,037	14,089	6,967	5,002	*
<b>Neoplasms</b>	5,731	196	94	1,444	1,914	2,083	0
<b>Endocrine nutritional metabolic and immunity diseases</b>	57,706	2,582	1,983	19,871	18,779	14,490	*
<b>Diabetes mellitus</b>	17,095	634	457	4,990	6,752	4,262	0
<b>Mental disorders</b>	77,383	3,543	6,040	39,265	21,377	7,149	9
<b>Psychoses</b>	50,254	1,259	3,552	26,031	15,148	4,256	8
<b>Alcoholic psychoses</b>	3,917	12	88	2,182	1,424	211	0
<b>Drug psychoses</b>	1,750	29	167	1,155	332	66	*
<b>Schizophrenic disorders</b>	760†	*	18	466	236	33	0
<b>Manic-depressive disorders</b>	8,564	978	1,482	3,381	1,989	733	*
<b>Neurotic disorders</b>	66,970	3,281	5,386	33,914	18,962	5,421	6
<b>Anxiety states</b>	18,776	543	1,444	10,050	4,537	2,202	0
<b>Depression</b>	6,586	783	1,277	2,521	1,411	594	0
<b>Drug dependence</b>	3,280†	*	153	1,992	861	270	0
<b>Nondependent abuse of drugs</b>	8,697	104	703	5,600	2,061	227	*
<b>Alcohol dependence</b>	7,160†	*	23	3,573	3,140	419	0
<b>Diseases of the nervous system</b>	65,120	3,401	3,344	27,682	19,235	11,453	*
<b>Diseases of the eye and adnexa<sup>b</sup></b>	22,912	6,127	1,072	7,416	4,914	3,381	*
<b>Diseases of the ear and mastoid process<sup>b</sup></b>	46,717	25,831	2,157	10,022	5,117	3,587	*
<b>Diseases of the circulatory system</b>	74,844	1,303	751	10,827	23,750	38,204	9
<b>Diseases of the respiratory system</b>	248,591	99,369	13,637	65,167	38,761	31,651	6
<b>Acute bronchitis and bronchiolitis</b>	27,773	10,244	869	7,375	5,233	4,051	*
<b>Pneumonia</b>	20,193	4,975	628	4,522	4,822	5,245	*
<b>Chronic bronchitis</b>	12,527	14	7	495	5,180	6,831	0
<b>Asthma</b>	25,117	8,909	1,707	8,677	4,340	1,484	0
<b>Diseases of the digestive system</b>	162,136	21,893	7,658	64,443	39,235	28,907	0
<b>Diseases of the genitourinary system</b>	142,177	11,018	9,421	63,782	30,479	27,477	0
<b>Diseases of the skin and subcutaneous tissue</b>	85,168	15,279	4,856	33,671	19,772	11,590	0
<b>Diseases of the musculoskeletal system</b>	167,004	8,857	6,609	59,507	53,291	38,740	0
<b>Symptoms signs and ill-defined conditions</b>	541,210	72,509	28,779	185,981	137,038	116,889	14
<b>Injury and poisoning</b>	458,959	99,088	34,749	149,521	89,858	85,728	15
<b>Fractures, all sites</b>	65,916	14,370	4,100	17,293	14,230	15,922	*
<b>Sprains</b>	47,920	7,572	5,342	19,320	10,062	5,622	*
<b>Intracranial</b>	12,418	2,745	1,830	3,764	1,975	2,103	*
<b>Open wounds</b>	89,876	22,465	5,857	29,191	15,083	17,274	6
<b>Superficial injuries</b>	90,994	20,730	6,385	28,025	17,516	18,337	*
<b>Contusions with intact skin surface</b>	64,015	12,473	4,530	19,543	12,787	14,682	0
<b>Foreign bodies</b>	10,171	4,155	402	2,570	1,695	1,349	0
<b>Burns and corrosions</b>	7,362	2,042	567	2,754	1,425	574	0
<b>Trauma complications and unspecified injuries</b>	27,116	9,247	1,850	6,168	3,758	6,092	*
<b>Poisonings</b>	12,628	1,803	1,874	5,451	2,283	1,215	*
<b>Surgical and medical complications</b>	14,642	909	326	3,037	4,237	6,133	0

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6.

**TABLE 4C-2  
NUMBER OF EMERGENCY ROOM VISITS FOR THE LEADING DIAGNOSIS GROUPS<sup>a</sup> AND AGE GROUP, ARIZONA, 2018**

Primary diagnosis group	All Ages	Age group					Unknown
		Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	
<b>Total, all causes</b>	2,316,583	406,327	133,363	824,769	517,869	434,186	69
<b>Abdominal pain</b>	132,302	15,970	9,678	59,347	30,665	16,639	*
<b>Chest pain</b>	108,403	2,475	3,571	35,860	39,682	26,815	0
<b>Acute upper respiratory infection, excluding pharyngitis</b>	105,455	57,459	4,326	23,684	12,072	7,912	*
<b>Superficial injuries</b>	90,994	20,730	6,385	28,025	17,516	18,337	*
<b>Mental disorders</b>	77,383	3,543	6,040	39,265	21,377	7,149	9
<b>Spinal disorders</b>	67,473	1,562	2,191	26,165	22,395	15,160	0
<b>Contusion with intact skin surface</b>	64,015	12,473	4,530	19,543	12,787	14,682	0
<b>Urinary tract infection, site not specified</b>	40,832	5,384	2,368	12,887	7,937	12,256	0
<b>Open wound, excluding head</b>	38,739	4,151	3,035	17,043	7,822	6,685	*
<b>Nausea, vomiting</b>	38,392	12,656	2,464	13,464	5,699	4,109	0
<b>Headache</b>	37,727	2,892	2,681	17,572	9,973	4,608	*
<b>Sprains and strains, excluding ankle and back</b>	36,488	5,057	3,425	14,570	8,396	5,039	*
<b>Heart disease, excluding ischemic</b>	34,906	287	247	4,120	10,708	19,536	8
<b>Open wound of head</b>	32,606	11,494	2,176	7,406	4,394	7,134	*
<b>Cellulitis and abscess</b>	32,589	3,582	1,144	12,164	9,285	6,414	0
<b>Otitis media and eustachian tube disorders</b>	29,520	22,197	1,151	4,320	1,351	500	*
<b>Asthma</b>	25,117	8,909	1,707	8,677	4,340	1,484	0
<b>Rheumatism, excluding back</b>	22,210	956	807	8,185	7,172	5,090	0
<b>Gastroenteritis and colitis</b>	21,870	5,005	1,280	7,895	4,387	3,303	0
<b>Chronic and unspecified bronchitis</b>	21,260	494	351	3,743	7,782	8,890	0
<b>Pneumonia</b>	20,193	4,975	628	4,522	4,822	5,245	*
<b>Acute pharyngitis</b>	19,633	6,751	2,541	7,755	1,796	789	*
<b>Fever</b>	16,678	12,861	454	1,498	927	938	0
<b>Migraine</b>	16,247	747	1,326	8,977	4,402	793	*
<b>Sprains and strains of neck and back</b>	3,995	208	317	2,112	1,016	341	*
<b>Unspecified viral and chlamydial infection</b>	180 <sup>†</sup>	30	41	97	8	*	0

Notes: \* Cell suppressed due to non-zero count less than 6; <sup>†</sup> Based on first-listed diagnosis.



#### 4D. INJURY-RELATED INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS BY INTENT AND MECHANISM OF INJURY

Prior to 2009, injury hospitalizations and injury-related emergency room visits were defined here through the range of ICD-9-CM codes 800-999 used as the first-listed diagnosis. In addition, the supplementary classification of external causes of injury and poisoning (ICD-9-CM codes E800–E999) is used to permit the classification of environmental events, circumstances, and conditions as the cause of injury, poisoning, and other adverse effects. The “E” code classification is used to describe both the *mechanism* of external cause of injury (e.g., motor vehicle traffic, fall, poisoning), but also the manner or *intent* of the injury (e.g., suicide, assault, accident).

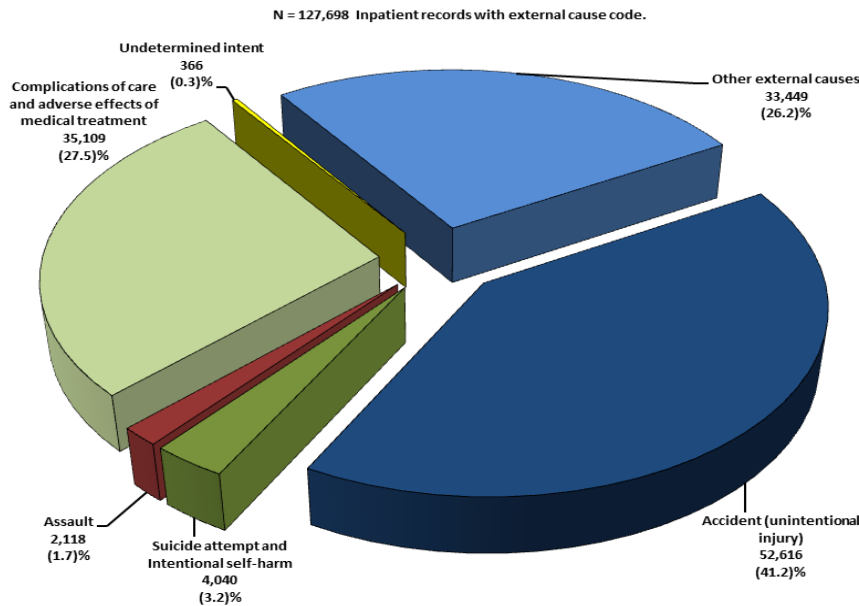
In 2009, the reporting requirements for hospitals were revised and the non-injury first-listed diagnoses may also have an external cause of injury code (E-code). Beginning with the 2009 edition of this report, the reader is advised that the number of suicides, accidents, etc. shown in **Table 4D-1** and **Table 4D-2** no longer reflect only those where the principal diagnosis was an injury. To continue to do so would only mean undercounting the external causes of injury. As an example, in 2009 forward, among the suicide attempt-related ER visits, *injury and poisoning, mental disorders, chronic disease, infectious disease, or ill-defined conditions* were identified as the first-listed diagnosis.

In 2015, injury hospitalizations and injury-related emergency room visits data were recorded and classified using ICD-9-CM in the first three quarters of the year and ICD-10-CM in the last quarter. Under ICD-10-CM, external causes of morbidity capture how and where the injury or health condition occurred, the intent or mechanism (accidental or intentional), the activity of the patient at the time of the event and the patient’s status (for example civilian, student). For further explanation of ICD-10-CM transition, please refer to “The Implementation of the International Classification of Disease, Tenth Revision,” Introduction page ix.

Beginning 2016, injury hospitalizations and injury-related emergency room visits are coded exclusively based on ICD-10-CM, external causes of morbidity. Readers are advised to avoid comparison of current year data to years prior 2015 due to a changeover in coding from ICD-9-CM and ICD-10-CM.

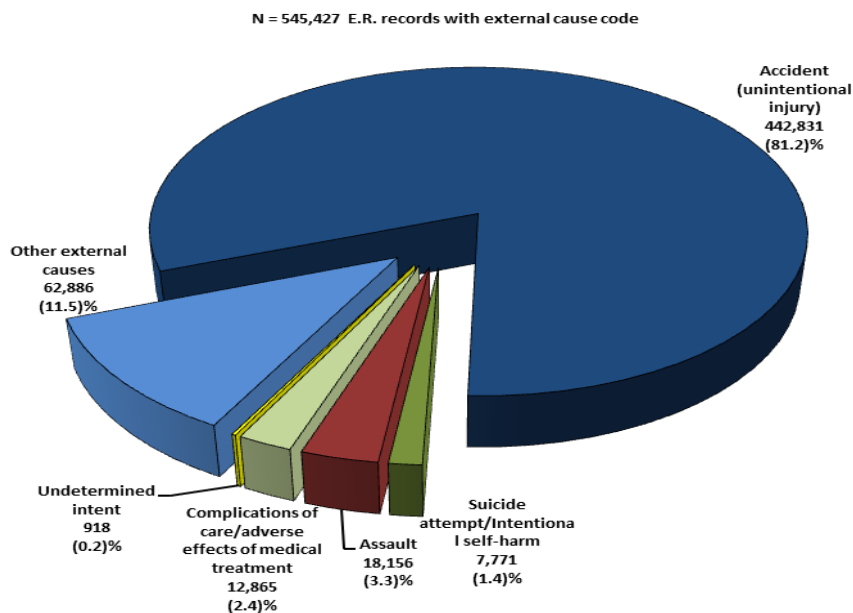
4D. INJURY-RELATED INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS BY INTENT AND MECHANISM OF INJURY

**Figure 4D-1**  
**Percent Distribution of Inpatient Discharges by Intent of Injury,**  
**Arizona Residents, 2018**



In 2018, injury and poisoning as a joint category was indicated as the principal diagnosis on 63,873 inpatient discharge records (**Table 4A-1**). *Unintentional injuries or accidents* accounted for the absolute majority of inpatient hospitalizations by the intent of injury (41.2 percent) and *complications of medical care and adverse effects of medical treatment* accounted for 27.5 percent of all inpatient discharges by intent of injury. *Assault* accounted for 2,118 inpatient hospitalizations (1.7 percent of all hospital discharges with known intent of injury). *Intentional self-inflicted injuries* including *suicide attempt* resulted in 4040 inpatient hospitalizations (3.2 percent).

**Figure 4D-2**  
**Percent Distribution of Emergency Room Visits by Intent of Injury,**  
**Arizona Residents, 2018**



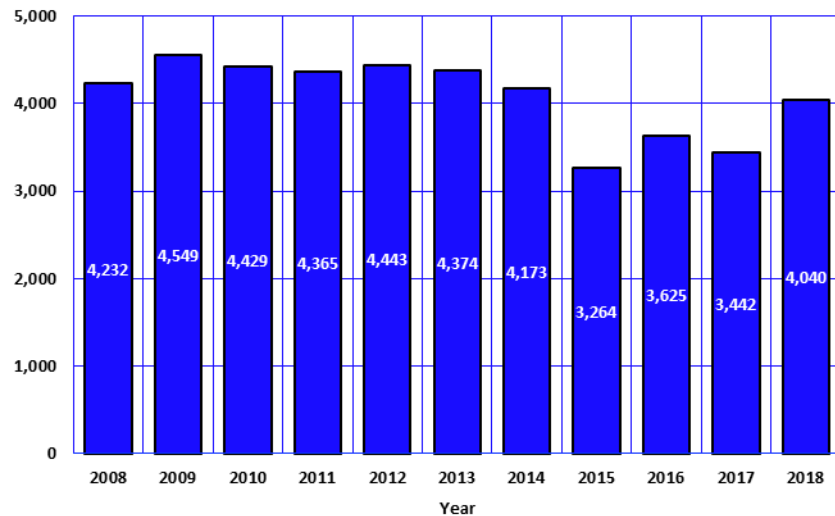
In 2018 *Unintentional injuries or accidents* accounted for eight out of ten (442,831 or 81.2 percent) of all injury-related emergency room visits (**Figure 4D-3, Table 4D-2**). The external cause of injury was classified as *assault* for 18,156 emergency room visits: these were the injuries purposely inflicted by another person. *Complications of medical/surgical care* accounted for a greater number of emergency room visits than *intentional self-inflicted injuries* (2.4 percent vs. 1.4 percent, respectively; **Figure 4D-3, Table 4D-2**).



4D. INJURY-RELATED INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS BY INTENT AND MECHANISM OF INJURY

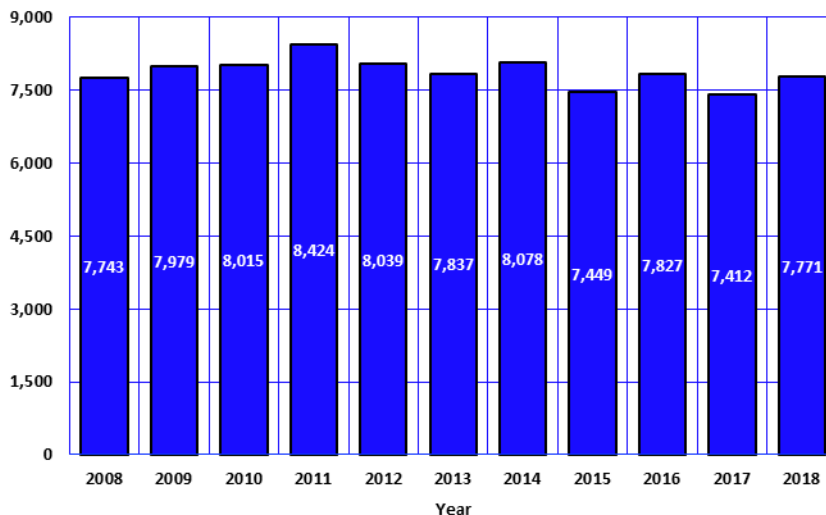
Self-inflicted injuries result from actions of individuals trying to deliberately harm themselves (i.e. behavior with no suicide intent) or kill themselves (i.e. suicide attempt). Beginning in 2008, there was a substantial increase in the number of *intentional self-inflicted injuries* related inpatient discharges and emergency room visits (**Figure 4D-3** and **Table 4D-2**), partly due to the change in the reporting requirements for hospitals. In 2018 there were 4,040 inpatient discharges attributed to intentional self-inflicted injuries. *Mental disorders* were identified as the principal diagnosis on 1,205 intentional self-inflicted injury/ suicide attempt-related records. *Injury or poisoning* was the principal diagnosis on 2,741 inpatient discharge records related to self-inflicted injuries.

**Figure 4D-3**  
Intentional self-inflicted injury Inpatient Discharges by Year, Arizona Residents, 2008–2018



**Figure 4D-4**  
Intentional self-inflicted injury Emergency Room Visits by Year, Arizona Residents, 2008–2018

In 2018, self-inflicted injuries resulting in ER visits accounted for 7,771, an increase of 4.8 percent from 2017. Of all the ER visits related to *intentional self-inflicted injuries*, *mental disorders* were identified as the principal diagnosis on 422 ER discharges. *Injury or poisoning* was recorded as the principal diagnosis on 6,889 (88.7 percent) ER discharges related to self-inflicted injury.



**TABLE 4D-1  
INPATIENT DISCHARGES BY INTENT AND MECHANISM FOR SELECTED EXTERNAL CAUSES BY GENDER, AGE GROUP, AND  
RACE/ETHNICITY, ARIZONA, 2018**

	Total <sup>a</sup>	Gender		Age group						Race/ethnicity						
		Male	Female	Unknown	Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	Unknown	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Refused/Unknown
<b>UNINTENTIONAL INJURY OR ACCIDENT</b>	52,616	26,370	26,240	6	1,613	1,161	8,023	11,667	30,148	*	39,628	7,553	1,699	2,463	727	546
<b>Falls</b>	32,782	14,075	18,706	*	487	143	1,888	5,742	24,522	0	26,541	3,696	680	1,165	439	261
<b>Transport accidents</b>	8,474	5,542	2,928	*	377	599	3,178	2,437	1,881	*	5,533	1,634	410	583	139	175
<b>Natural and environmental factors</b>	5,650	3,189	2,461	0	273	144	1,165	1,732	2,336	0	3,982	930	281	335	72	50
<b>Exposure to excessive natural heat</b>	520 <sup>†</sup>	402	122	0	*	12	159	195	155	0	315	118	53	20	6	12
<b>Fire and flames</b>	370 <sup>†</sup>	249	119	0	52	21	113	119	63	0	202	95	22	41	*	*
<b>Machinery</b>	190 <sup>†</sup>	172	15	0	*	6	75	73	31	0	92	77	7	6	*	*
<b>SUICIDE ATTEMPT AND INTENTIONAL SELF-HARM</b>	4,040	1,769	2,270	*	364	772	1,838	796	269	*	2,661	779	169	301	67	63
<b>ASSAULT</b>	2,118	1,675	443	0	46	153	1,324	503	92	0	854	525	254	408	17	60
<b>INJURIES OF UNDETERMINED INTENT</b>	366	220	146	0	111	23	113	68	50	*	204	91	29	30	6	6
<b>COMPLICATIONS OF CARE AND ADVERSE EFFECTS OF MEDICAL TREATMENT</b>	35,109	18,618	16,490	*	710	291	5,123	11,769	17,216	0	24,786	6,066	1,745	1,530	739	243
<b>Misadventures to patients</b>	370 <sup>†</sup>	169	196	0	*	*	49	100	211	0	270	57	11	21	*	*
<b>Surgical and medical procedures as the cause of adverse reaction</b>	30,831	16,358	14,472	*	624	271	4,594	10,395	14,947	0	21,685	5,389	1,533	1,347	652	225

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; <sup>a</sup> the total may include records with unknown gender and/or age group.

**TABLE 4D-2  
EMERGENCY ROOM VISITS BY INTENT AND MECHANISM FOR SELECTED EXTERNAL CAUSES BY GENDER, AGE GROUP, AND  
RACE/ETHNICITY, ARIZONA, 2018**

	Total <sup>a</sup>	Gender		Age group						Race/ethnicity						
		Male	Female	Unknown	Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	Unknown	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Refused/Unknown
<b>UNINTENTIONAL INJURY OR ACCIDENT</b>	442,831	220,724	222,088	19	94,095	31,597	140,254	88,273	88,592	20	261,659	121,219	30,367	17,806	7,478	4,302
<b>Falls</b>	160,158	70,114	90,039	*	38,816	5,688	27,335	31,033	57,284	*	104,942	37,676	7,644	6,153	2,428	1,315
<b>Transport accidents</b>	70,710	35,063	35,637	10	8,366	7,920	33,244	15,082	6,088	10	38,466	20,619	6,648	2,487	1,518	972
<b>Struck against or struck accidentally by objects or persons</b>	54,711	31,393	23,317	*	17,175	6,166	17,287	8,354	5,728	*	30,138	16,588	4,158	2,370	874	583
<b>Overexertion</b>	35,374	17,667	17,707	0	4,946	3,697	14,995	7,754	3,981	*	19,678	10,363	2,903	1,584	545	301
<b>Cutting or piercing instruments or objects</b>	23,855	15,385	8,470	0	3,209	1,728	10,728	5,230	2,959	*	14,314	6,705	1,243	965	378	250
<b>Natural and environmental factors</b>	57,899	29,369	28,530	0	10,384	3,363	21,469	13,107	9,574	*	32,404	16,690	4,821	2,458	1,044	482
<b>Exposure to excessive natural heat</b>	1,663	1,160	503	0	86	119	758	471	229	0	957	482	138	55	21	10
<b>Fire and flames</b>	2,459	1,394	1,065	0	557	186	959	536	221	0	1,310	751	219	113	53	13
<b>Machinery</b>	2,042	1,772	270	0	74	90	906	638	334	0	1,173	689	89	54	19	18
<b>Pedal cycle, nontraffic and other</b>	6,045	4,410	1,633	*	1,704	489	1,855	1,438	559	0	3,991	1,384	259	238	97	76
<b>Motor vehicle, nontraffic</b>	852	571	281	0	169	88	356	171	68	0	553	188	49	42	6	14
<b>Firearm missile</b>	922	777	145	0	103	146	475	147	48	*	419	322	112	44	11	14
<b>Drowning/submersion</b>	140 <sup>†</sup>	71	66	0	118	7	*	*	*	0	77	40	11	*	6	0
<b>SUICIDE ATTEMPT AND INTENTIONAL SELF-HARM</b>	7,771	3,019	4,752	0	890	1,906	3,685	1,070	220	0	4,737	1,864	549	427	132	62
<b>ASSAULT</b>	18,156	10,754	7,402	0	910	1,801	11,365	3,579	498	*	7,856	5,282	2,103	2,429	260	226
<b>INJURIES OF UNDETERMINED INTENT</b>	918	495	423	0	290	96	354	132	46	0	501	275	64	55	14	9
<b>COMPLICATIONS OF CARE AND ADVERSE EFFECTS OF MEDICAL TREATMENT</b>	12,865	6,850	6,015	0	588	262	2,930	3,843	5,242	0	8,655	2,714	766	452	216	62
<b>Misadventures to patients</b>	110 <sup>†</sup>	53	55	0	13	*	30	30	31	0	57	34	7	7	*	*
<b>Surgical and medical procedures as the cause of adverse reaction</b>	10,990	5,814	5,176	0	505	232	2,540	3,282	4,431	0	7,464	2,279	641	366	188	52

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; <sup>a</sup> the total may include records with unknown gender and/or age group.