

CHAPTER 4

HOSPITAL INPATIENT DISCHARGES AND EMERGENCY DEPARTMENT VISITS:

2009 STATUS

- 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

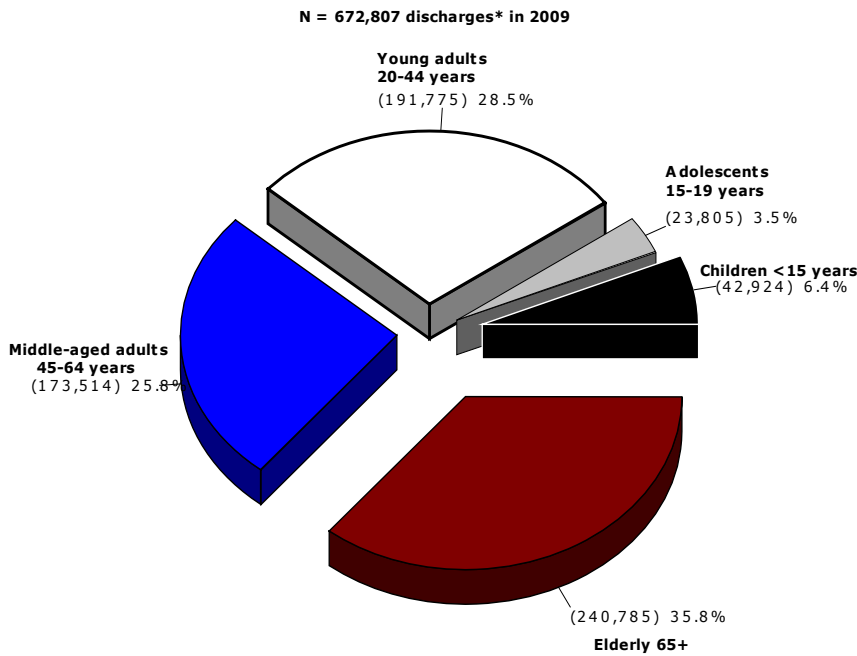
An inpatient discharge occurs when a person who was admitted to a hospital leaves that hospital. A person who has been hospitalized more than once in a given calendar year will be counted multiple times as a discharge; thus, the numbers in this report are for discharges, not persons. Federal, military and Department of Veteran Affairs' hospitals are excluded. All discharges are for residents of Arizona. Discharges of out-of-state residents are not included in this report. Discharges of inpatients exclude newborn infants. Diagnostic groupings and code numbers are based on the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM).

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 codes used to identify specific diagnostic categories can be accessed at <http://www.azdhs.gov/plan/hip/cat/icd9primary.xls>

*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 by Age Group, Arizona Residents, 2009



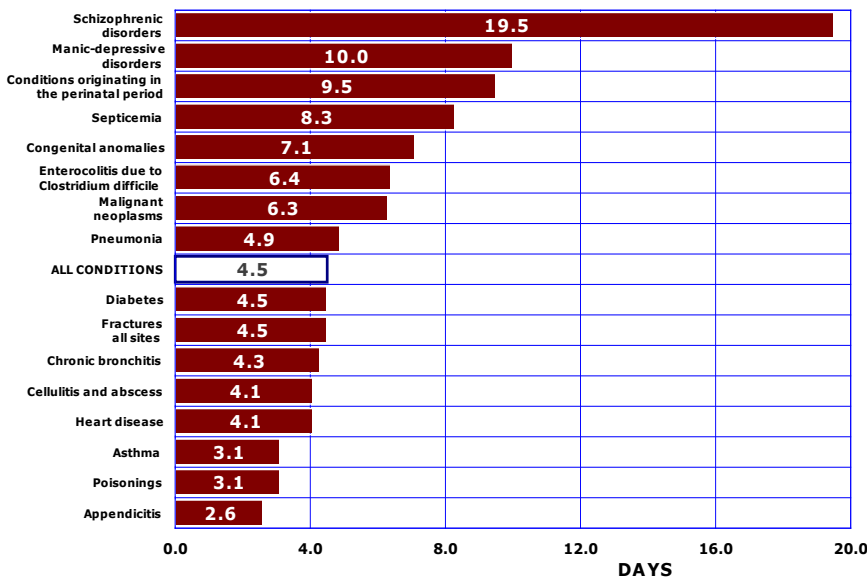
*Excluding newborn infants.

In 2009, there were 672,807 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 35.8 percent of hospital discharges (Figure 4A-1), followed by young adults (20-44 years old) who comprised 28.5 percent of discharges, and middle-aged adults 45-64 year olds (25.8 percent of all inpatient discharges)

The discharge rate for all ages was 1020.1 per 10,000 resident population, 0.3 percent greater than the 2008 rate. The discharge rate of 1212.2 for females was 1.5 times greater than the rate of 828.3 for males

Diseases of the circulatory system were the most common diagnoses (15.0 percent of all discharges), followed by digestive system diagnoses (10.8 percent), and injury diagnoses (9.6 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, 2009



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 2006. In 1970, the average length of stay was 7.8 days, with one-third of patients hospitalized for 8 days or more. In 2006, the average length of stay decreased nationally to 4.8 days, with 58 percent of inpatients staying 3 days or fewer.

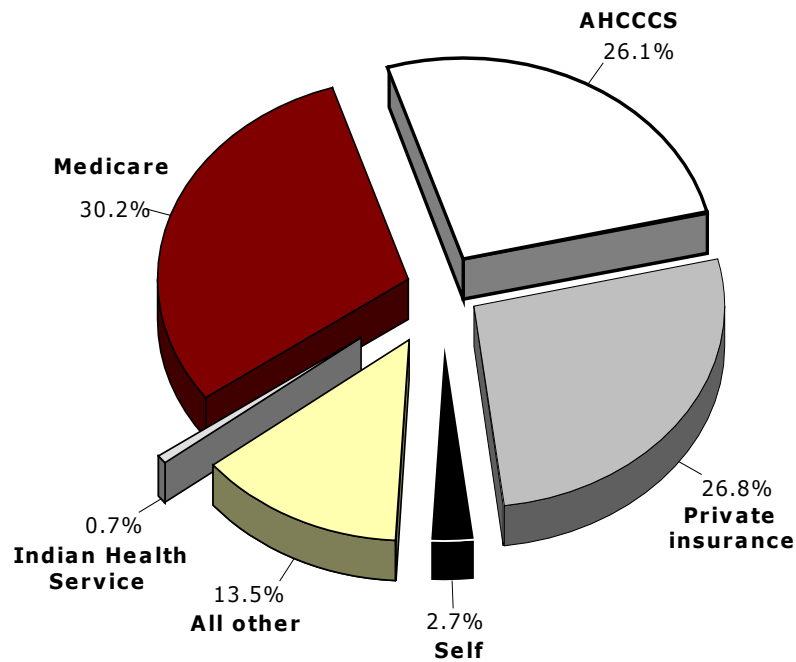
In 2009, the average length of hospital stay for Arizona inpatients was 4.5 days (Figure 4A-2, Table 4A-5). The percent of patients hospitalized for 3 days or less decreased to 61.9 percent, with only 13.3 percent of inpatients staying 8 days or more.

The average length of stay was 4.1 days for heart disease, 4.5 days for diabetes, 6.3 days for cancer, and 19.5 days for schizophrenic disorders.

* <http://www.cdc.gov/nchs/data/ad/ad385.pdf> and <http://www.cdc.gov/nchs/data/nhsr/nhsr005.pdf>

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

Figure 4A-3
Hospital Inpatient Discharges by Payer, Arizona Residents, 2009



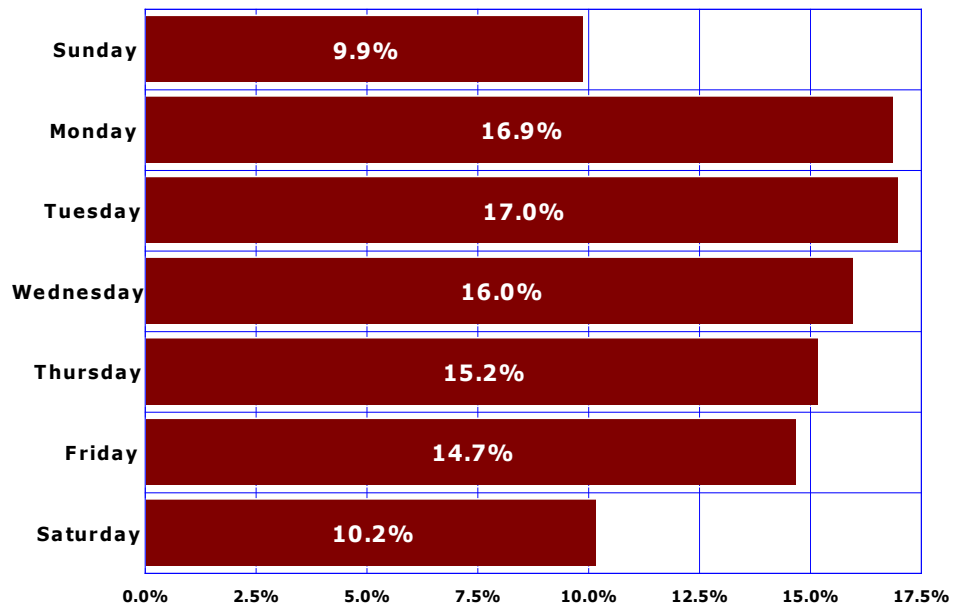
Medicare paid for 69.7 percent of inpatient discharges of persons aged 65 years or older (**Table 4A-4**) and 30.2 percent of all discharges (**Figure 4A-3**). Private insurance was the second most frequently recorded expected source of payment, accounting for 26.8 percent of inpatient discharges. The Arizona Health Care Cost Containment System (the State's Medicaid Program) accounted for 26.1 percent.

*Excluding newborn infants.

*Indemnity, HMO, PPO.

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

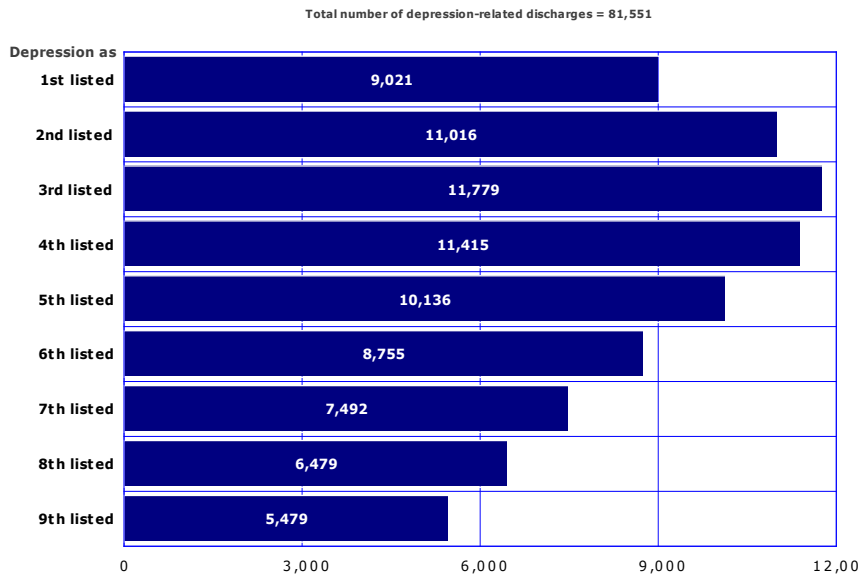
Figure 4A-4
Percent of Hospital Inpatient Admissions by Day of the Week, Arizona Residents, 2009



The rhythm of hospital births by day of the week (see **Figure 1B-14**) reveals that the daily average of resident live births in 2009 was substantially lower at 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, 2009



In 2009, the ICD-9-CM diagnostic codes 300.4 and 311 for depression were used on 884 inpatient discharge and 8,137 emergency room records as the first-listed diagnosis (for a total of 9,021 hospital encounters; **Figure 4A-5, Table 4A-1, Table 7C-1**).

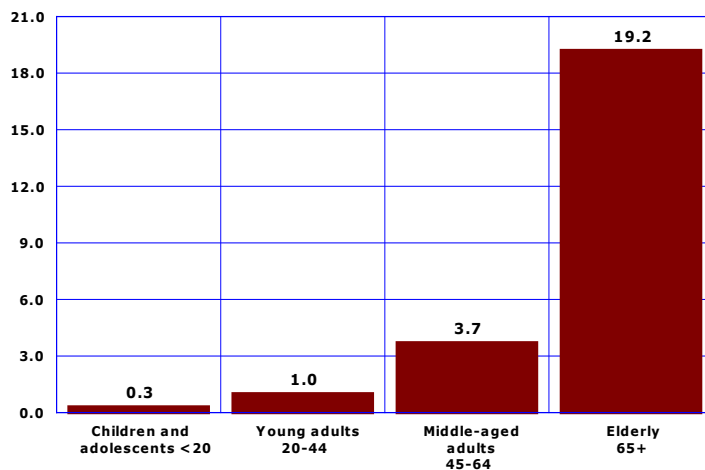
The extent, to which the first-listed diagnosis is the principal reason for hospitalization, ought not to be overestimated. More often than not, the first-listed diagnosis is the immediate, but not necessarily the underlying cause of hospitalization.

However, when we count all entries of this code within the nine diagnostic fields, depression was mentioned on 81,551 inpatient discharge and emergency room records. In fact, the depression diagnosis was substantially more frequently present as 2nd - 5th listed on the medical record than it was first-listed (**Figure 4A-5**).

When hospital data is 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.

ICD-9C M diagnostic codes 300.4 and 311.

Figure 4A-6
Inpatient Hospitalization Rates* for Enterocolitis due to *Clostridium difficile* By Age Group, Arizona Residents, 2009



In 2009, 2,496 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 inpatient hospitalization rates associated with enterocolitis due to *Clostridium difficile* tend to increase with age. The rate for the elderly 65 years or older (19.2/10,000) was 64 times greater than the rate for children and adolescents (**Figure 4A-6**).

The disparity in enterocolitis-related hospitalization rates was 1.7 times as high for females (4.8 inpatient discharges per 10,000) as for males (2.8/10,000).

In 2009, 161 Arizonans died from enterocolitis due to *Clostridium difficile* (**Table 2B-6**). Elderly 65 years or older accounted for 90.1 percent of these death (**Table 2C-28**).

**TABLE 4A-1
NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2009**

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	672,807	42,924	23,805	191,775	173,514	240,785	4
Infectious and parasitic diseases	25,214	1,883	505	4,362	7,357	11,107	0
Septicemia	13,639	186	125	1,772	4,105	7,451	0
Enterocolitis due to Clostridium difficile	2,496	45	20	226	556	1,649	0
Neoplasms	28,258	420	234	4,337	10,984	12,283	0
Malignant neoplasms	20,954	285	136	2,002	7,953	10,578	0
Large intestine	2,456	0	1	148	810	1,497	0
Prostate	1,850	0	1	20	964	865	0
Trachea bronchus and lung	2,693	6	5	88	839	1,755	0
Breast	1,407	0	0	184	628	595	0
Benign neoplasms	6,301	95	76	2,187	2,740	1,203	0
Endocrine nutritional metabolic and immunity diseases	25,718	2,356	706	6,067	8,544	8,045	0
Diabetes mellitus	10,568	489	461	3,242	3,858	2,518	0
Volume depletion	100	1	0	7	32	60	0
Morbid obesity	2,203	2	15	890	1,109	187	0
Diseases of the blood and blood forming organs	6,554	643	197	1,493	1,656	2,565	0
Mental disorders	17,969	417	693	8,324	6,206	2,329	0
Psychoses	13,839	232	441	6,431	4,873	1,862	0
Alcoholic psychoses	1,945	0	3	737	1,022	183	0
Drug psychoses	1,028	5	38	418	332	235	0
Schizophrenic disorders	2,962	1	72	1,687	1,074	128	0
Manic-depressive disorders	6,565	213	270	3,192	2,200	690	0
Neurotic disorders	4,127	184	251	1,893	1,332	467	0
Anxiety states	411	25	21	129	128	108	0
Depression	884	17	51	461	271	84	0
Drug dependence	193	0	9	119	57	8	0
Nondependent abuse of drugs	502	15	39	261	158	29	0
Alcohol dependence syndrome	756	1	10	298	351	96	0
Diseases of the nervous system	14,631	1,893	538	3,644	4,123	4,433	0
Diseases of the circulatory system	100,622	372	269	6,775	30,408	62,797	1
Heart disease	66,106	167	143	3,836	20,297	41,662	1
Acute myocardial infarction	9,906	1	2	491	3,628	5,784	0
Coronary arteriosclerosis	16,490	0	1	476	6,487	9,526	0

TABLE 4A-1 (continued)
NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2009

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	1,320	3	0	93	557	667	0
Cardiac dysrhythmias	15,155	69	56	958	3,790	10,281	1
Cardiac arrest	121	4	0	15	31	71	0
Congestive heart failure	4,786	34	1	229	1,061	3,461	0
Cerebrovascular disease	16,591	62	20	878	4,375	11,256	0
Diseases of the respiratory system	62,407	12,624	1,036	7,045	15,916	25,786	0
Acute bronchitis and bronchiolitis	4,128	3,042	9	221	336	520	0
Pneumonia	18,979	3,362	273	2,292	4,473	8,579	0
Chronic bronchitis	9,221	5	2	172	3,109	5,933	0
Asthma	8,287	2,998	194	1,518	2,086	1,491	0
Diseases of the digestive system	72,452	4,152	2,292	19,465	22,784	23,759	0
Appendicitis	8,154	1,898	970	3,236	1,459	591	0
Noninfectious enteritis and colitis	5,973	430	197	1,556	1,664	2,126	0
Diverticula of intestine	5,791	1	5	921	2,079	2,785	0
Cholelithiasis	9,857	78	411	4,019	2,804	2,545	0
Diseases of the genitourinary system	38,302	1,894	738	9,592	10,579	15,499	0
Calculus of kidney and ureter	3,757	31	74	1,393	1,437	822	0
Diseases of the skin and subcutaneous tissue	15,745	1,828	419	4,537	5,025	3,936	0
Cellulitis and abscess	13,464	1,584	350	4,001	4,306	3,223	0
Diseases of the musculoskeletal system	40,736	722	402	4,785	14,966	19,861	0
Osteoarthritis and allied disorders	18,591	2	4	392	6,858	11,335	0
Invertebral disc disorders	5,410	3	21	1,611	2,342	1,433	0
Congenital anomalies	2,960	1,815	125	391	384	245	0
Conditions originating in perinatal period	3,752	3,752	0	0	0	0	0
Symptoms signs and ill-defined conditions	33,394	2,860	615	6,030	11,672	12,216	1
Injury and poisoning	64,560	4,161	2,662	15,413	18,201	24,121	2
Fractures, all sites	21,900	1,526	847	4,371	4,510	10,646	0
Fracture of neck of femur	5,839	32	16	123	629	5,039	0
Poisonings	7,064	342	580	3,040	2,354	748	0

*Excluding newborn infants.

TABLE 4A-2
 NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND GENDER, ARIZONA, 2009

Category of first-listed diagnosis	Total	Patient's gender	
		Female	Male
All categories	672,807	399,317	273,477
Infectious and parasitic diseases	25,214	12,977	12,237
Septicemia	13,639	7,051	6,588
Enterocolitis due to Clostridium difficile	2,496	1,577	919
Neoplasms	28,258	16,322	11,936
Malignant neoplasms	20,954	10,494	10,460
Large intestine	2,456	1,195	1,261
Prostate	1,850	0	1,850
Trachea bronchus and lung	2,693	1,306	1,387
Breast	1,407	1,394	13
Benign neoplasms	6,301	5,272	1,029
Endocrine nutritional metabolic and immunity diseases	25,718	14,222	11,496
Diabetes mellitus	10,568	4,788	5,780
Volume depletion	100	60	40
Morbid obesity	2,203	1,633	570
Diseases of the blood and blood forming organs	6,554	3,833	2,721
Mental disorders	17,969	8,203	9,766
Psychoses	13,839	6,241	7,598
Alcoholic psychoses	1,945	474	1,471
Drug psychoses	1,028	489	539
Schizophrenic disorders	2,962	1,082	1,880
Manic-depressive disorders	6,565	3,541	3,024
Neurotic disorders	4,127	1,962	2,165
Anxiety states	411	248	163
Depression	884	449	435
Drug dependence	193	74	119
Nondependent abuse of drugs	502	187	315
Alcohol dependence syndrome	756	214	542
Diseases of the nervous system	14,631	8,155	6,476
Diseases of the circulatory system	100,622	45,571	55,051
Heart disease	66,106	28,347	37,759
Acute myocardial infarction	9,906	3,663	6,243
Coronary atherosclerosis	16,490	5,832	10,658

TABLE 4A-2 (continued)
 NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND GENDER, ARIZONA, 2009

Category of first-listed diagnosis	Total	Patient's gender	
		Female	Male
Other ischemic heart disease	1,320	546	774
Cardiac dysrhythmias	15,155	7,452	7,703
Cardiac arrest	121	55	66
Congestive heart failure	4,786	2,139	2,647
Cerebrovascular disease	16,591	8,529	8,062
Diseases of the respiratory system	62,407	31,803	30,604
Acute bronchitis and bronchiolitis	4,128	1,970	2,158
Pneumonia	18,979	9,646	9,333
Chronic bronchitis	9,221	5,038	4,183
Asthma	8,287	4,753	3,534
Diseases of the digestive system	72,452	39,964	32,488
Appendicitis	8,154	3,703	4,451
Noninfectious enteritis and colitis	5,973	3,819	2,154
Diverticula of intestine	5,791	3,212	2,579
Cholelithiasis	9,857	6,696	3,161
Diseases of the genitourinary system	38,302	24,773	13,529
Calculus of kidney and ureter	3,757	1,827	1,930
Diseases of the skin and subcutaneous tissue	15,745	7,396	8,349
Cellulitis and abscess	13,464	6,284	7,180
Diseases of the musculoskeletal system	40,736	22,212	18,522
Osteoarthritis and allied disorders	18,591	10,788	7,803
Invertebral disc disorders	5,410	2,664	2,745
Congenital anomalies	2,960	1,418	1,542
Conditions originating in perinatal period	3,752	1,638	2,114
Symptoms signs and ill-defined conditions	33,394	18,843	14,550
Injury and poisoning	64,560	31,637	32,913
Fractures, all sites	21,900	11,574	10,324
Fracture of neck of femur	5,839	3,978	1,861
Poisonings	7,064	3,844	3,220

*Excluding newborn infants.

**TABLE 4A-3
NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND RACE/ETHNICITY, ARIZONA, 2009**

Category of first-listed diagnosis	Total	Race/ethnicity						
		American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	White non-Hispanic	Other	Refused
Total	672,807	25,413	10,666	30,263	135,266	461,418	24	9,757
Infectious and parasitic diseases	25,214	1,379	404	1,172	4,904	17,011	0	344
Septicemia	13,639	936	192	506	2,286	9,583	0	136
Enterocolitis due to Clostridium difficile	2,496	52	34	70	263	2,064	0	13
Neoplasms	28,258	561	507	1,265	4,030	21,446	0	449
Malignant neoplasms	20,954	398	331	706	2,555	16,625	0	339
Large intestine	2,456	37	35	62	324	1,960	0	38
Prostate	1,850	12	21	88	151	1,546	0	32
Trachea bronchus and lung	2,693	30	45	99	194	2,299	0	26
Breast	1,407	18	23	46	182	1,121	0	17
Benign neoplasms	6,301	131	160	525	1,325	4,063	0	97
Endocrine nutritional metabolic and immunity diseases	25,718	1,472	332	1,493	5,296	16,842	0	283
Diabetes mellitus	10,568	892	97	755	2,668	6,063	0	93
Volume depletion	100	3	0	5	15	77	0	0
Morbid obesity	2,203	27	7	115	287	1,757	0	10
Diseases of the blood and blood forming organs	6,554	205	102	962	1,190	4,010	0	85
Mental disorders	17,969	703	284	1,051	2,649	12,939	0	343
Psychoses	13,839	441	239	849	2,006	10,040	0	264
Alcoholic psychoses	1,945	190	19	40	220	1,457	0	19
Drug psychoses	1,028	16	6	42	128	825	0	11
Schizophrenic disorders	2,962	74	83	361	527	1,856	0	61
Manic-depressive disorders	6,565	134	104	308	928	4,937	0	154
Neurotic disorders	4,127	261	45	202	642	2,898	0	79
Anxiety states	411	3	6	18	82	296	0	6
Depression	884	44	13	50	124	636	0	17
Drug dependence	193	4	1	6	14	166	0	2
Nondependent abuse of drugs	502	55	7	44	93	296	0	7
Alcohol dependence syndrome	756	100	2	22	80	541	0	11
Diseases of the nervous system	14,631	537	209	745	2,648	10,249	0	243
Diseases of the circulatory system	100,622	2,025	1,166	4,238	12,046	79,812	0	1,335
Heart disease	66,106	1,284	739	2,470	7,521	53,188	0	904
Acute myocardial infarction	9,906	230	114	271	1,282	7,861	0	148
Coronary arteriosclerosis	16,490	239	238	442	1,997	13,307	0	267

**TABLE 4A-3 (continued)
NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND RACE/ETHNICITY, ARIZONA, 2009**

Category of first-listed diagnosis	Total	Race/ethnicity							Other	Refused
		American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	White non-Hispanic				
Other ischemic heart disease	1,320	30	18	73	168	1,020	0	11		
Cardiac dysrhythmias	15,155	224	138	396	1,288	12,930	0	179		
Cardiac arrest	121	7	1	11	18	82	0	2		
Congestive heart failure	4,786	109	44	242	635	3,706	0	50		
Cerebrovascular disease	16,591	297	247	667	2,054	13,081	0	245		
Diseases of the respiratory system	62,407	2,971	877	3,205	11,764	42,587	2	1,001		
Acute bronchitis and bronchiolitis	4,128	347	62	213	1,510	1,910	0	86		
Pneumonia	18,979	1,183	289	814	3,602	12,863	0	228		
Chronic bronchitis	9,221	75	70	271	621	8,119	0	65		
Asthma	8,287	316	127	946	2,082	4,653	2	161		
Diseases of the digestive system	72,452	3,091	943	2,566	15,253	49,797	1	801		
Appendicitis	8,154	262	141	180	2,727	4,701	0	143		
Noninfectious enteritis and colitis	5,973	162	81	223	880	4,576	0	51		
Diverticula of intestine	5,791	101	57	157	820	4,611	0	45		
Cholelithiasis	9,857	514	123	248	3,162	5,711	0	99		
Diseases of the genitourinary system	38,302	1,212	492	1,551	7,636	26,937	2	472		
Calculus of kidney and ureter	3,757	43	46	74	692	2,843	0	59		
Diseases of the skin and subcutaneous tissue	15,745	958	168	614	3,082	10,714	1	208		
Cellulitis and abscess	13,464	815	143	481	2,661	9,201	1	162		
Diseases of the musculoskeletal system	40,736	870	361	1,283	4,268	33,468	1	485		
Osteoarthritis and allied disorders	18,591	240	128	412	1,447	16,174	0	190		
Invertebral disc disorders	5,410	77	51	150	588	4,473	0	71		
Congenital anomalies	2,960	170	75	112	888	1,617	0	98		
Conditions originating in perinatal period	3,752	307	80	163	1,361	1,684	0	157		
Symptoms signs and ill-defined conditions	33,394	1,129	402	1,960	6,034	23,410	1	458		
Injury and poisoning	64,560	3,480	815	2,434	10,173	46,683	3	972		
Fractures, all sites	21,900	1,125	276	498	3,070	16,591	3	337		
Fracture of neck of femur	5,839	141	45	66	455	5,069	2	61		
Poisonings	7,064	333	63	316	1,099	5,155	0	98		

*Excluding newborn infants.

**TABLE 4A-4
NUMBER OF DISCHARGES* BY PRIMARY PAYER, GENDER, AGE GROUP, RACE/ETHNICITY
AND MARITAL STATUS, ARIZONA, 2009**

Selected characteristics		Total	Self	Private insurance (indemnity, HMO, PPO)	AHCCCS/Medicaid	Medicare	Other
Total		672,807	18,159	180,331	175,768	203,040	95,509
Gender	Female	399,317	9,151	112,708	115,116	108,728	53,614
	Male	273,477	9,006	67,618	60,651	94,311	41,891
	Unknown	13	2	5	1	1	4
Age group	Children <15 years	42,924	1,163	13,416	24,984	32	3,329
	Adolescents 15-19 years	23,805	975	6,164	14,979	46	1,641
	Young adults 20-44 years	191,775	9,590	72,227	86,860	7,696	15,402
	Middle-aged adults 45-64 years	173,514	5,693	74,707	45,390	27,506	20,218
	Elderly 65+ years	240,785	737	13,817	3,555	167,757	54,919
	Unknown	4	1	0	0	3	0
Race/ethnicity	American Indian or Alaska Native	25,413	809	3,588	10,444	5,568	5,004
	Asian or Pacific Islander	10,666	422	4,286	2,777	1,761	1,420
	Black or African American	30,263	917	6,887	11,904	6,772	3,783
	Hispanic or Latino	135,266	6,465	27,610	68,966	18,421	13,804
	White non-Hispanic	461,418	9,208	134,717	78,659	168,464	70,370
	Other	24	0	6	7	9	2
	Refused	9,757	338	3,237	3,011	2,045	1,126
Patient's marital status	Single	232,165	9,957	54,296	113,689	29,956	24,267
	Married	300,647	5,941	109,076	41,070	100,574	43,986
	Separated	6,240	262	1,264	2,660	1,340	714
	Divorced	50,863	1,310	10,433	13,269	17,569	8,282
	Widowed	78,815	443	4,549	3,512	52,557	17,754
	Unknown	3,776	245	686	1,300	1,042	503
	Not Applicable	301	1	27	268	2	3

*Excluding newborn infants.

**TABLE 4A-5
AVERAGE LENGTH OF STAY FOR DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2009**

Category of first-listed diagnosis	All ages	Patient's age group				
		Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years
All conditions	4.5	4.3	3.4	3.5	4.8	5.1
Infectious and parasitic diseases	7.0	4.3	4.7	6.6	7.9	7.1
Septicemia	8.3	12.9	7.2	8.3	9.3	7.6
Enterocolitis due to Clostridium difficile	6.3	4.5	4.3	4.5	6.1	6.7
Neoplasms	5.5	11.9	8.0	4.5	5.0	6.0
Malignant neoplasms	6.2	15.2	10.6	6.4	5.7	6.2
Large intestine	8.3	0.0	17.0	8.4	7.3	8.8
Prostate	2.2	0.0	31.0	2.0	2.1	2.4
Trachea bronchus and lung	6.5	7.5	3.8	6.3	6.5	6.6
Breast	2.0	0.0	0.0	2.0	2.2	1.8
Benign neoplasms	3.3	3.8	3.9	2.7	3.0	4.7
Endocrine nutritional metabolic and immunity diseases	3.7	3.0	3.2	3.3	3.9	4.0
Diabetes mellitus	4.5	3.0	2.8	3.6	5.1	5.1
Volume depletion	3.0	2.0	0.0	3.0	2.4	3.3
Morbid obesity	1.8	2.5	1.1	1.6	2.0	2.4
Diseases of the blood and blood forming organs	4.1	4.2	4.5	4.2	4.2	4.0
Mental disorders	9.4	6.8	8.5	9.3	9.4	10.2
Psychoses	10.8	8.6	10.7	10.7	10.8	11.6
Alcoholic psychoses	4.7	0.0	1.0	3.8	4.9	7.1
Drug psychoses	4.3	3.4	3.9	4.1	4.4	4.6
Schizophrenic disorders	19.2	5.0	18.1	17.9	19.8	30.9
Manic-depressive disorders	10.0	9.0	8.8	9.2	10.0	14.2
Neurotic disorders	4.6	4.7	4.5	4.6	4.4	4.9
Anxiety states	3.2	6.2	2.9	3.6	2.3	2.9
Depression	6.2	4.8	6.4	5.8	6.2	7.7
Drug dependence	5.4	0.0	5.2	5.1	5.9	5.4
Nondependent abuse of drugs	2.1	2.1	1.8	1.9	2.5	1.9
Alcohol dependence syndrome	4.0	2.0	3.3	3.5	3.9	5.5
Diseases of the nervous system	4.3	4.0	4.0	3.6	4.2	5.0
Diseases of the circulatory system	4.0	6.6	4.9	4.0	4.0	4.0
Heart disease	4.1	7.4	4.7	3.8	3.9	4.2
Acute myocardial infarction	4.6	19.0	9.5	3.4	4.4	4.9
Coronary atherosclerosis	3.4	0.0	5.0	2.9	3.1	3.5

TABLE 4A-5 (continued)
AVERAGE LENGTH OF STAY FOR DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2009

Category of first-listed diagnosis	All ages	Patient's age group				
		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	2.2	1.0	0.0	2.2	2.3	2.1
Cardiac dysrhythmias	3.1	2.9	2.3	2.3	2.9	3.2
Cardiac arrest	1.8	0.8	0.0	3.9	2.0	1.4
Congestive heart failure	4.3	10.0	5.0	4.0	4.4	4.2
Cerebrovascular disease	3.9	6.9	7.4	4.7	4.4	3.7
Diseases of the respiratory system	5.3	3.3	4.6	5.2	6.0	6.0
Acute bronchitis and bronchiolitis	3.2	3.3	2.8	2.7	2.9	3.2
Pneumonia	4.9	3.7	5.2	5.1	5.1	5.1
Chronic bronchitis	4.3	6.0	2.5	3.9	4.1	4.4
Asthma	3.1	2.2	2.7	3.1	3.8	4.3
Diseases of the digestive system	4.2	3.6	3.1	3.4	4.3	4.9
Appendicitis	2.6	3.0	2.2	2.0	2.9	4.5
Noninfectious enteritis and colitis	4.5	3.0	5.1	3.9	4.6	4.9
Diverticula of intestine	4.5	1.0	3.6	4.3	4.5	4.7
Cholelithiasis	3.4	2.8	2.6	2.6	3.3	4.8
Diseases of the genitourinary system	3.4	3.5	2.8	2.7	3.4	3.9
Calculus of kidney and ureter	2.4	2.4	2.3	2.1	2.4	2.8
Diseases of the skin and subcutaneous tissue	4.5	2.8	3.4	4.0	5.1	5.4
Cellulitis and abscess	4.1	2.7	3.4	3.8	4.5	4.8
Diseases of the musculoskeletal system	3.5	4.0	4.2	3.5	3.4	3.5
Osteoarthritis and allied disorders	3.0	3.5	2.8	2.8	2.9	3.1
Invertebral disc disorders	2.8	3.7	1.5	2.3	2.7	3.4
Congenital anomalies	6.4	7.8	3.5	3.9	4.4	4.4
Conditions originating in perinatal period	9.5	9.5	0.0	0.0	0.0	0.0
Symptoms signs and ill-defined conditions	2.5	2.9	2.7	2.4	2.4	2.7
Injury and poisoning	4.7	3.3	3.7	4.2	5.2	5.1
Fractures, all sites	4.5	2.1	3.7	4.1	4.8	4.9
Fracture of neck of femur	5.5	2.6	3.9	6.3	5.7	5.5
Poisonings	3.1	1.5	2.2	3.0	3.6	3.7

*Excluding newborn infants.



4B.

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

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. Procedure groupings and code numbers are based on the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM).

For comparability with the national data*, the rates of all-listed procedures are presented per 10,000 population. The groupings of ICD-9-CM codes used to identify specific procedure categories can be accessed at <http://www.azdhs.gov/plan/hip/cat/icd9procedure.xls>

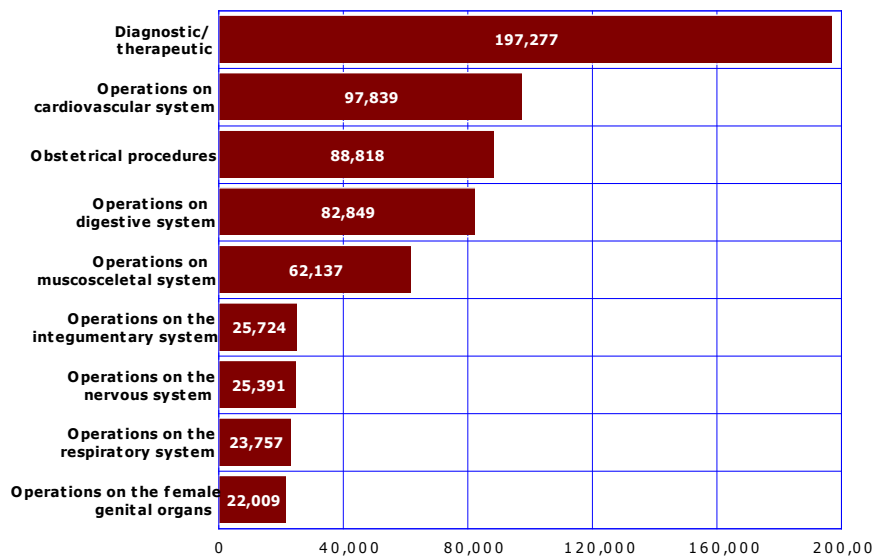
Beginning in 2008, Arizona hospitals may report up to 12 surgical and non-surgical procedures per record, doubling the previously required number. However, not all hospitals have been able to meet the revised requirements. This is one reason why, in our 2008 and 2009 reports, we continue to analyze the top six procedures. Another reason is comparability with the previously published data for 2000-2007.

*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, 2009

N = 1,115,788 inpatient procedures performed

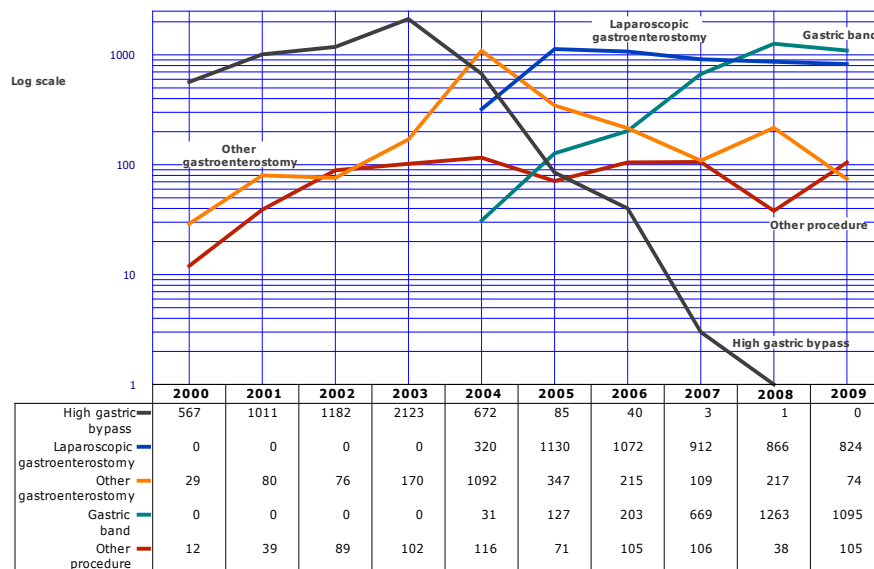


During 2009, 1,115,788 procedures were performed on hospital inpatients in Arizona. The rate of procedures was 1691.7 per 10,000 population. Nationally, according to the 2006 National Hospital Discharge Survey (the latest available), the rate of procedures was 1541.3 per 10,000 population.

For Arizona males, this rate was 1449.5/10,000, and for Arizona females it was 1934.3/10,000.

No specific procedure was recorded for approximately 37.8 percent of all inpatient discharges. Only 6.2 percent of inpatients had six procedures reported. Among the inpatient discharges which had one or more specific procedures recorded, the most frequent were diagnostic and therapeutic procedures (such as arteriography and angiocardiology or respiratory therapy), and followed by operations on the cardiovascular system, obstetrical procedures, and operations on digestive system (Figure 4B-1, Table 4B1).

Figure 4B-2
Trends in Types of Inpatient Procedures Performed in Treatment of Morbid Obesity, Arizona Residents, 2000-2009



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 2009, **morbid obesity** (ICD-9-CM code 278.01) was the principal diagnosis for 2,203 inpatient hospitalizations (Table 4 A-1). The number of *gastric bypass* surgeries, once the most common bariatric procedure, declined from a recent high of 2,123 in 2003 to only 1 in 2008 and none reported for 2009 (Figure 4B-2). Not a single *gastric restrictive (gastric band)* procedure was reported in Arizona prior to 2004. In 2009, there were 1,103 *gastric band* procedures performed (Table 4 B-1). In 1,095 cases *gastric band* was reported as the principal procedure (Figure 4B-2).

*Among Arizonans who were admitted as inpatients with first-listed diagnosis of morbid obesity (ICD-9-CM code 278.01). The frequency counts in Figure 4B-2 are based on the principal procedure. The tabulated data use all six listed procedures.

**TABLE 4B-1
NUMBER OF PROCEDURES BY CATEGORY AND AGE GROUP, ARIZONA, 2009**

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	1,115,788	83,310	35,909	305,707	305,554	385,298	10
Operations on the nervous system	25,391	4,067	1,472	7,968	5,859	6,025	0
Spinal tap	8,466	3,072	259	1,959	1,865	1,311	0
Operations on the endocrine system	2,490	41	35	686	1,009	719	0
Operations on the eye	893	113	56	338	205	181	0
Operations on the ear	565	235	28	134	96	72	0
Operations on the nose, mouth, and pharynx	4,325	900	251	1,174	1,020	980	0
Operations on the respiratory system	23,757	1,123	450	3,241	7,558	11,385	0
Bronchoscopy with or without biopsy	1,476	15	26	253	521	661	0
Operations on the cardiovascular system	97,839	4,106	775	10,834	33,624	48,498	2
Removal of coronary artery obstruction	13,787	1	0	532	5,692	7,562	0
Coronary artery bypass graft	5,068	2	2	115	1,885	3,064	0
Cardiac catheterization	29,801	175	34	1,932	12,508	15,152	0
Insertion, replacement, removal, of pacemaker leads	5,249	44	8	137	862	4,197	1
Hemodialysis	15,757	34	74	2,371	6,199	7,079	0
Operations on the hemic and lymphatic system	7,578	343	128	1,051	2,905	3,151	0
Operations on the digestive system	82,849	4,189	2,441	21,982	26,779	27,457	1
Gastric band	1,103	1	9	439	547	107	0
Endoscopy of small intestine with or without biopsy	20,070	473	306	3,950	6,638	8,703	0
Endoscopy of large intestine with or without biopsy	9,993	190	151	1,769	3,033	4,850	0
Partial excision of large intestine	3,447	56	23	427	1,157	1,784	0
Appendectomy, excluding incidental	8,705	1,902	1,013	3,541	1,564	685	0
Cholecystectomy	12,829	106	571	5,244	3,795	3,113	0
Lysis of peritoneal adhesions	7,908	145	93	2,677	2,640	2,353	0
Operations on the urinary system	17,307	486	227	3,846	5,655	7,093	0
Cystoscopy with or without biopsy	4,108	226	38	952	1,315	1,577	0
Operations on the male genital organs	13,418	9,301	36	263	1,520	2,298	0
Prostatectomy	3,296	0	1	26	1,263	2,006	0

**TABLE 4B-1 (continued)
NUMBER OF PROCEDURES BY CATEGORY AND AGE GROUP, ARIZONA, 2009**

Procedures by category	Total	Age group					Un-known
		Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	
Operations on the female genital organs	22,009	181	342	13,523	5,793	2,170	0
Oophorectomy and salpingo-oophorectomy	6,497	30	47	2,286	3,235	899	0
Bilateral destruction/occlusion of fallopian tubes	5,008	0	4	4,990	14	0	0
Hysterectomy	9,937	1	7	4,642	4,318	969	0
Obstetrical procedures	88,818	127	10,490	78,074	127	0	0
Episiotomy with or w/o forceps or vacuum extraction	8,627	24	1,572	7,028	3	0	0
Artificial rupture of membranes	23,422	34	2,928	20,439	21	0	0
Cesarean section	25,584	21	1,912	23,572	79	0	0
Repair of current obstetric laceration	28,339	61	4,206	24,055	17	0	0
Operations on the musculoskeletal system	62,137	1,938	1,262	9,444	20,850	28,643	0
Partial excision of bone	6,967	192	161	1,368	2,963	2,283	0
Reduction of fracture	11,709	827	461	2,495	2,838	5,088	0
Open reduction of fracture with internal fixation	8,605	311	354	2,062	2,343	3,535	0
Excision or destruction of intervertebral disc	5,256	7	24	1,429	2,389	1,407	0
Total hip replacement	5,737	1	9	255	2,099	3,373	0
Total knee replacement	12,525	3	3	207	4,709	7,603	0
Operations on the integumentary system	25,724	1,910	836	7,246	8,777	6,954	1
Debridement of wound, infection, or burn	6,250	302	171	1,756	2,349	1,672	0
Miscellaneous diagnostic and therapeutic procedures	197,277	35,445	3,427	33,675	50,944	73,784	2
Computerized axial tomography	4,432	129	61	755	1,295	2,192	0
Arterio- & angiocardiology using contrast material	38,651	223	105	2,813	15,149	20,361	0
Diagnostic ultrasound	9,104	367	136	1,284	2,810	4,507	0
Respiratory therapy	27,001	3,843	445	4,097	7,894	10,721	1
Insertion of endotracheal tube	15,921	2,667	250	2,557	4,671	5,775	1
Injection/infusion of cancer chemotherapy substance	3,611	713	217	616	1,241	824	0

**TABLE 4B-2
NUMBER OF PROCEURES BY CATEGORY AND GENDER, ARIZONA, 2009**

Procedures by category	Total	Patient's gender		
		Female	Male	Unknown
All procedures	1,115,788	637,198	478,556	34
Operations on the nervous system	25,391	14,620	10,768	3
Spinal tap	8,466	4,316	4,149	1
Operations on the endocrine system	2,490	1,787	703	0
Operations on the eye	893	286	606	1
Operations on the ear	565	218	347	0
Operations on the nose, mouth, and pharynx	4,325	1,703	2,622	0
Operations on the respiratory system	23,757	11,039	12,718	0
Bronchoscopy with or without biopsy	1,476	711	765	0
Operations on the cardiovascular system	97,839	44,288	53,548	3
Removal of coronary artery obstruction	13,787	4,820	8,967	0
Coronary artery bypass graft	5,068	1,377	3,691	0
Cardiac catheterization	29,801	11,973	17,828	0
Insertion, replacement, removal, of pacemaker leads	5,249	2,499	2,750	0
Hemodialysis	15,757	7,526	8,231	0
Operations on the hemic and lymphatic system	7,578	3,882	3,695	1
Operations on the digestive system	82,849	47,072	35,776	1
Gastric band	1,103	823	280	0
Endoscopy of small intestine with or without biopsy	20,070	10,815	9,255	0
Endoscopy of large intestine with or without biopsy	9,993	5,893	4,100	0
Partial excision of large intestine	3,447	1,829	1,618	0
Appendectomy, excluding incidental	8,705	4,121	4,584	0
Cholecystectomy	12,829	8,566	4,263	0
Lysis of peritoneal adhesions	7,908	5,789	2,119	0
Operations on the urinary system	17,307	9,363	7,944	0
Cystoscopy with or without biopsy	4,108	2,360	1,748	0
Operations on the male genital organs	13,418	0	13,418	0
Prostatectomy	3,296	0	3,296	0

**TABLE 4B-2 (continued)
NUMBER OF PROCEDURES BY CATEGORY AND GENDER, ARIZONA, 2009**

Procedures by category	Total	Patient's gender		
		Female	Male	Unknown
Operations on the female genital organs	22,009	22,009	0	0
Oophorectomy and salpingo-oophorectomy	6,497	6,497	0	0
Bilateral destruction/occlusion of fallopian tubes	5,008	5,008	0	0
Hysterectomy	9,937	9,937	0	0
Obstetrical procedures	88,818	88,818	0	0
Episiotomy with or w/o forceps or vacuum extraction	8,627	8,627	0	0
Artificial rupture of membranes	23,422	23,422	0	0
Cesarean section	25,584	25,584	0	0
Repair of current obstetric laceration	28,339	28,339	0	0
Operations on the musculoskeletal system	62,137	32,142	29,991	4
Partial excision of bone	6,967	3,196	3,771	0
Reduction of fracture	11,709	6,269	5,439	1
Open reduction of fracture with internal fixation	8,605	4,547	4,057	1
Excision or destruction of intervertebral disc	5,256	2,617	2,638	1
Total hip replacement	5,737	3,214	2,523	0
Total knee replacement	12,525	7,473	5,052	0
Operations on the integumentary system	25,724	12,674	13,048	2
Debridement of wound, infection, or burn	6,250	2,609	3,641	0
Miscellaneous diagnostic and therapeutic procedures	197,277	102,888	94,380	9
Computerized axial tomography	4,432	2,521	1,911	0
Arterio- & angiocardiography using contrast material	38,651	16,140	22,510	1
Diagnostic ultrasound	9,104	4,273	4,831	0
Respiratory therapy	27,001	12,293	14,706	2
Insertion of endotracheal tube	15,921	7,212	8,708	1
Injection/infusion of cancer chemotherapy substance	3,611	1,746	1,865	0

**TABLE 4B-3
NUMBER OF PROCEDURES BY CATEGORY AND RACE/ETHNICITY, ARIZONA, 2009**

Procedures by category	Total	Race/ethnicity						
		American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	White non-Hispanic	Other	Refused
All procedures	1,115,788	42,697	20,064	45,525	225,872	764,564	33	17,033
Operations on the nervous system	25,391	1,027	442	1,063	6,226	16,117	6	510
Spinal tap	8,466	394	155	499	2,466	4,744	0	208
Operations on the endocrine system	2,490	51	67	130	403	1,781	0	58
Operations on the eye	893	93	14	46	194	521	0	25
Operations on the ear	565	46	13	18	137	343	0	8
Operations on the nose, mouth, and pharynx	4,325	238	75	209	880	2,843	0	80
Operations on the respiratory system	23,757	915	399	940	3,423	17,692	0	388
Bronchoscopy with or without biopsy	1,476	39	24	81	209	1,086	0	37
Operations on the cardiovascular system	97,839	3,782	1,254	4,316	14,220	72,828	1	1,438
Removal of coronary artery obstruction	13,787	223	172	398	1,762	11,002	0	230
Coronary artery bypass graft	5,068	82	107	92	573	4,103	0	111
Cardiac catheterization	29,801	696	395	1,166	4,090	22,998	0	456
Insertion, replacement, removal, of pacemaker leads	5,249	128	54	128	446	4,422	0	71
Hemodialysis	15,757	2,069	260	1,406	4,408	7,384	0	230
Operations on the hemic and lymphatic system	7,578	149	132	273	961	5,946	0	117
Operations on the digestive system	82,849	3,318	1,195	3,110	17,353	56,862	1	1,010
Gastric band	1,103	13	5	68	146	866	0	5
Endoscopy of small intestine with or without biopsy	20,070	937	277	906	3,496	14,247	1	206
Endoscopy of large intestine with or without biopsy	9,993	365	143	421	1,502	7,467	0	95
Partial excision of large intestine	3,447	72	50	80	495	2,722	0	28
Appendectomy, excluding incidental	8,705	270	150	205	2,862	5,070	0	148
Cholecystectomy	12,829	652	149	344	3,874	7,674	0	136
Lysis of peritoneal adhesions	7,908	217	140	416	1,555	5,491	0	89
Operations on the urinary system	17,307	479	203	561	2,759	13,079	0	226
Cystoscopy with or without biopsy	4,108	93	56	144	665	3,081	0	69
Operations on the male genital organs	13,418	152	430	544	1,712	10,373	0	207
Prostatectomy	3,296	30	41	105	299	2,774	0	47

**TABLE 4B-3 (continued)
NUMBER OF PROCEDURES BY CATEGORY AND RACE/ETHNICITY, ARIZONA, 2009**

Procedures by category	Total	Race/ethnicity						
		American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	White non-Hispanic	Other	Refused
Operations on the female genital organs	22,009	561	487	1,148	6,280	13,234	0	299
Oophorectomy and salpingo-oophorectomy	6,497	124	139	309	1,190	4,655	0	80
Bilateral destruction/occlusion of fallopian tubes	5,008	208	124	209	2,221	2,177	0	69
Hysterectomy	9,937	154	190	534	2,157	6,778	0	124
Obstetrical procedures	88,818	3,255	2,913	3,895	35,612	41,496	8	1,639
Episiotomy with or w/o forceps or vacuum extraction	8,627	196	426	240	2,528	5,088	1	148
Artificial rupture of membranes	23,422	870	761	1,020	8,585	11,829	5	352
Cesarean section	25,584	891	941	1,255	9,433	12,590	2	472
Repair of current obstetric laceration	28,339	932	1,131	886	11,056	13,877	2	455
Operations on the musculoskeletal system	62,137	2,299	620	1,824	7,580	49,041	3	770
Partial excision of bone	6,967	309	72	260	838	5,391	0	97
Reduction of fracture	11,709	587	129	263	1,769	8,781	2	178
Open reduction of fracture with internal fixation	8,605	451	92	192	1,245	6,475	1	149
Excision or destruction of intervertebral disc	5,256	84	44	139	543	4,385	0	61
Total hip replacement	5,737	58	37	133	237	5,207	0	65
Total knee replacement	12,525	200	91	268	1,205	10,643	0	118
Operations on the integumentary system	25,724	1,596	379	1,232	4,977	17,155	2	383
Debridement of wound, infection, or burn	6,250	568	85	288	1,217	4,009	2	81
Miscellaneous diagnostic and therapeutic procedures	197,277	7,983	3,717	8,587	40,640	133,507	1	2,842
Computerized axial tomography	4,432	68	69	156	655	3,437	0	47
Arterio- & angiocardiography using contrast material	38,651	971	502	1,597	5,232	29,725	0	624
Diagnostic ultrasound	9,104	252	135	352	1,347	6,906	0	112
Respiratory therapy	27,001	1,663	448	1,302	4,520	18,423	0	645
Insertion of endotracheal tube	15,921	857	257	816	2,947	10,734	0	310
Injection/infusion of cancer chemotherapy substance	3,611	119	65	177	778	2,397	0	75

TABLE 4B-4
 NUMBER OF PROCEDURES BY CATEGORY AND EXPECTED SOURCE OF PAYMENT, ARIZONA, 2009

Procedures by category	Total	Self	Private insurance (Indemnity, HMO, PPO)	AHCCCS/Medicaid	Medicare	Other
All procedures	1,115,788	25,231	327,615	281,709	320,340	160,893
Operations on the nervous system	25,391	585	7,715	8,826	4,988	3,277
Spinal tap	8,466	258	2,519	3,566	1,288	835
Operations on the endocrine system	2,490	37	1,088	459	567	339
Operations on the eye	893	90	217	277	160	149
Operations on the ear	565	31	180	200	70	84
Operations on the nose, mouth, and pharynx	4,325	223	1,290	1,303	846	663
Operations on the respiratory system	23,757	488	5,165	4,677	9,404	4,023
Bronchoscopy with or without biopsy	1,476	29	356	287	573	231
Operations on the cardiovascular system	97,839	1,630	21,521	17,438	40,214	17,036
Removal of coronary artery obstruction	13,787	263	3,660	1,637	5,815	2,412
Coronary artery bypass graft	5,068	54	1,282	527	2,260	945
Cardiac catheterization	29,801	637	7,669	4,383	12,064	5,048
Insertion, replacement, removal, of pacemaker leads	5,249	33	659	332	3,153	1,072
Hemodialysis	15,757	117	1,632	2,392	9,481	2,135
Operations on the hemic and lymphatic system	7,578	98	2,731	1,120	2,540	1,089
Operations on the digestive system	82,849	2,839	25,754	19,537	23,288	11,431
Gastric band	1,103	85	643	19	134	222
Endoscopy of small intestine with or without biopsy	20,070	572	4,398	4,630	7,202	3,268
Endoscopy of large intestine with or without biopsy	9,993	233	2,392	1,799	3,852	1,717
Partial excision of large intestine	3,447	52	1,009	465	1,332	589
Appendectomy, excluding incidental	8,705	613	3,931	2,857	576	728
Cholecystectomy	12,829	683	4,261	3,842	2,569	1,474
Lysis of peritoneal adhesions	7,908	129	3,006	1,772	2,005	996
Operations on the urinary system	17,307	436	5,364	3,075	5,649	2,783
Cystoscopy with or without biopsy	4,108	89	1,430	764	1,193	632
Operations on the male genital organs	13,418	272	8,054	2,003	1,680	1,409
Prostatectomy	3,296	18	1,177	147	1,441	513

TABLE 4B-4 (continued)
 NUMBER OF PROCEDURES BY CATEGORY AND EXPECTED SOURCE OF PAYMENT, ARIZONA, 2009

Procedures by category	Total	Self	Private insurance (Indemnity, HMO, PPO)	AHCCCS/Medicaid	Medicare	Other
Operations on the female genital organs	22,009	433	10,501	7,263	1,903	1,909
Oophorectomy and salpingo-oophorectomy	6,497	101	3,568	1,340	801	687
Bilateral destruction/occlusion of fallopian tubes	5,008	65	1,798	2,844	31	270
Hysterectomy	9,937	113	5,795	2,227	893	909
Obstetrical procedures	88,818	2,232	33,793	47,742	236	4,815
Episiotomy with or w/o forceps or vacuum extraction	8,627	249	4,070	3,843	8	457
Artificial rupture of membranes	23,422	506	9,543	11,894	54	1,425
Cesarean section	25,584	514	11,032	12,506	94	1,438
Repair of current obstetric laceration	28,339	859	12,022	13,725	46	1,687
Operations on the musculoskeletal system	62,137	1,330	17,261	8,920	23,089	11,537
Partial excision of bone	6,967	114	2,277	1,155	2,147	1,274
Reduction of fracture	11,709	526	2,851	2,281	3,928	2,123
Open reduction of fracture with internal fixation	8,605	414	2,236	1,656	2,754	1,545
Excision or destruction of intervertebral disc	5,256	38	2,431	642	1,201	944
Total hip replacement	5,737	19	1,766	353	2,573	1,026
Total knee replacement	12,525	17	3,576	744	5,698	2,490
Operations on the integumentary system	25,724	1,197	6,843	7,218	6,724	3,742
Debridement of wound, infection, or burn	6,250	294	1,425	1,800	1,805	926
Miscellaneous diagnostic and therapeutic procedures	197,277	4,428	51,508	51,359	60,989	28,993
Computerized axial tomography	4,432	114	896	823	1,729	870
Arterio- & angiocardiology using contrast material	38,651	774	9,428	5,592	15,877	6,980
Diagnostic ultrasound	9,104	174	2,290	1,545	3,430	1,665
Respiratory therapy	27,001	703	5,621	7,108	9,288	4,281
Insertion of endotracheal tube	15,921	532	3,195	4,623	5,084	2,487
Injection/infusion of cancer chemotherapy substance	3,611	27	1,278	1,083	751	472



4C.

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

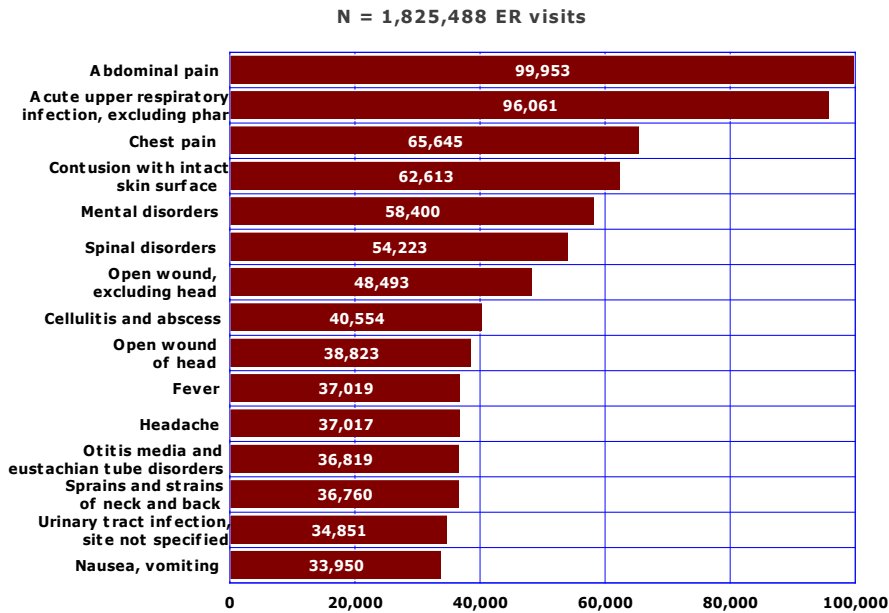
The data in this section are focused on ambulatory care visits to emergency rooms of non-Federal, short-stay hospitals. The emergency room (ER) and the inpatient hospitalization data are mutually exclusive. The ER data include only those who were not admitted as inpatients.

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. Diagnostic groupings and code numbers are based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).

*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 Fifteen Leading Diagnostic Groupings, Arizona Residents, 2009



During 2009, more than 1.8 million visits were made by Arizona residents to hospital emergency rooms (ER), about 28 visits per 100 persons. Nationally, the ER utilization rate was 40.5 visits per 100 persons. The utilization rates vary by geographic region, with the West having the lowest ER visit rate (29.4/100 in 2006).*

In Arizona, the number of ER visits increased by 8.6 percent from 1,680,473 in 2007.

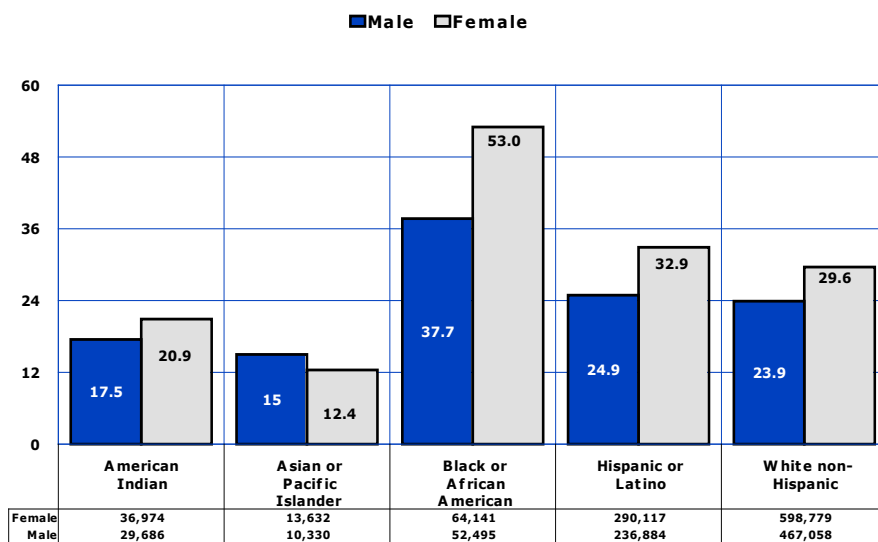
In 2009, *abdominal pain*, *acute upper respiratory infection*, *chest pain*, *contusion with intact skin surface*, *mental disorders*, and *spinal disorders* were the leading diagnostic categories, accounting for approximately one-fourth (23.9 percent) of all visits (**Figure 4 C-1**, **Table 4C-2**).

Both *headache* (37,017 visits) and *urinary tract infection* (34,851) were among the top fifteen complaints, symptoms, or reasons for a visit to the emergency room.

*www.cdc.gov/nchs/data/nhsr/nhsr007.pdf

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

Figure 4C-2
Rates* of Emergency Room Visits by Race/Ethnicity and Gender, Arizona, 2009



Prior to 2008, patient's race/ethnicity was available for hospital inpatients but not emergency room visits

In 2009, as in 2008, the ER utilization rates (the number of ER visits per 100 persons) for Black or African American females and males were the highest rates among the race-by-gender groups (**Figure 4 C-2**).

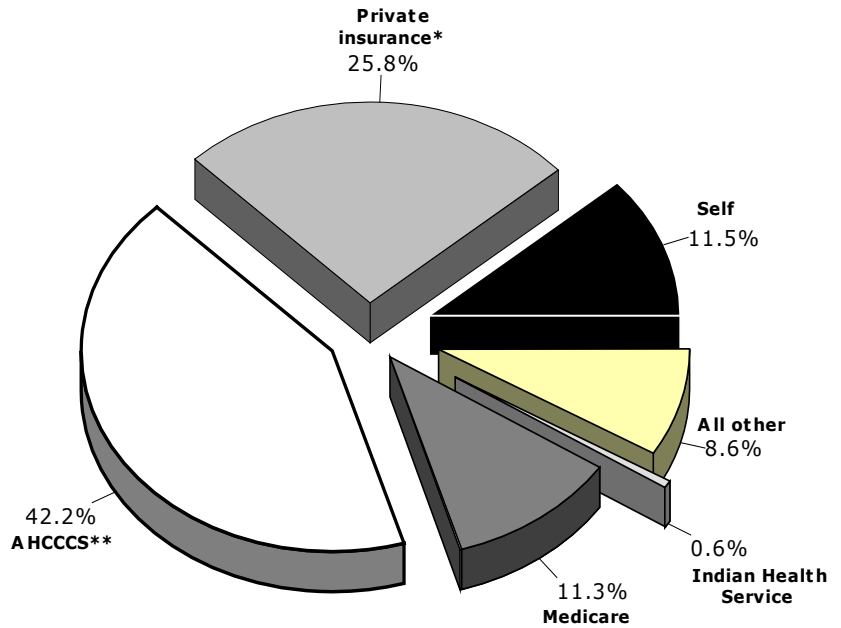
The ER utilization rates for American Indian females and males are likely to be underestimated, because the federal – Indian Health Service hospitals – are not included in the reporting system.

*Number of visits per 100 persons. The actual number of ER visits for each group is provided below the bars. The denominators are in Table 10C-1.

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

Figure 4C-3
Emergency Room Visits by Payer, Arizona Residents, 2009

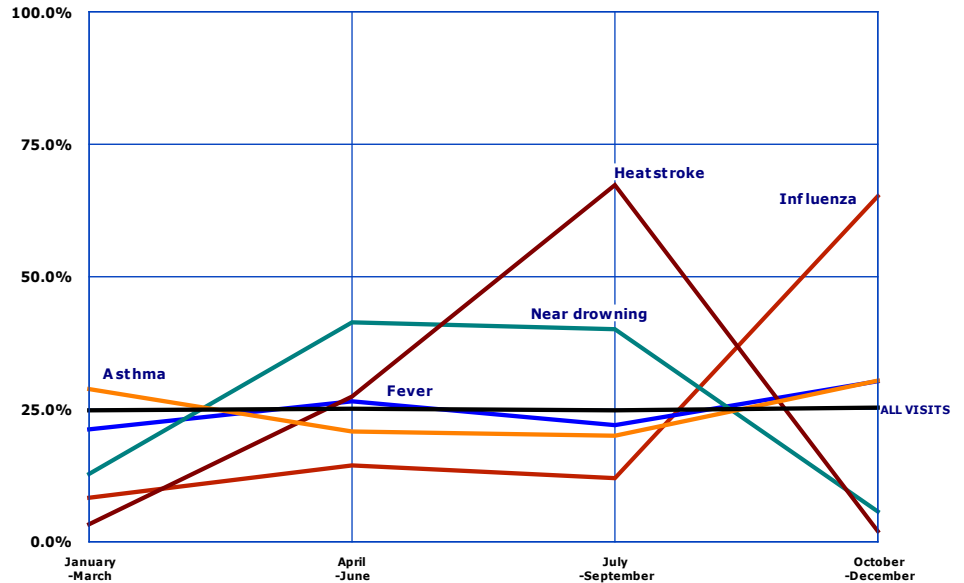
The Arizona Health Care Cost Containment System (AHCCCS, the State's Medicaid program) was the most frequently recorded expected source of payment, accounting for 42.2 percent of ER visits (**Figure 4 C-3**). Private insurance was the second most frequent payer (25.8 percent of ER visits), followed by self-pay patients (11.5 percent), and Medicare (11.3 percent).



* Indemnity, HMO, PPO.
**The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid Program.

Figure 4C-4
Seasonal Variation in Selected Reasons for Emergency Room Visits, Arizona Residents, 2009

Unlike hospital births (**Figure 1 B-14**) and hospital inpatient admissions excluding newborn infants (**Figure 4 A-4**), the temporal pattern of emergency room visits showed little variation by day of the week, month of the year or calendar quarter. However, seasonal variation was evident in the quarterly volume of visits due to certain patient complaints such as *heatstroke* (67.3 percent of all visits were made in the 3rd quarter), *near drowning* (2nd and 3rd quarter accounted for 82.5 percent of annual visits), *asthma* (visits were lowest in the 3rd quarter), and *influenza* (visits were highest in the first quarter; **Figure 4C-4**).



Note: Percent distribution of visits to the emergency room during 2009 by calendar quarter.

**TABLE 4C-1
NUMBER OF EMERGENCY ROOM VISITS* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2009**

Category of first-listed diagnosis	All Ages	Age group					
		<15	15-19	20-44	45-64	65+	Unknown
Total	1,825,488	430,009	137,691	706,667	340,475	210,626	20
Infectious and parasitic diseases	49,505	25,333	4,460	13,437	4,205	2,070	0
Neoplasms	2,073	145	72	652	661	543	0
Endocrine nutritional metabolic and immunity diseases	26,544	3,080	1,244	8,666	7,640	5,914	0
Diabetes	9,230	326	330	3,097	3,415	2,062	0
Mental disorders	58,400	2,015	5,441	30,581	16,586	3,772	5
Psychoses	13,050	284	843	6,747	3,985	1,190	1
Alcoholic psychoses	1,494	0	6	814	637	37	0
Drug psychoses	2,398	10	138	1,406	731	113	0
Schizophrenic disorders	1,937	10	85	1,184	620	38	0
Manic-depressive disorders	4,426	186	437	2,348	1,303	152	0
Neurotic disorders	45,327	1,728	4,593	23,823	12,597	2,582	4
Anxiety states	12,087	235	955	7,005	2,803	1,089	0
Depression	8,137	313	947	4,113	2,316	448	0
Drug dependence	878	2	76	572	211	17	0
Nondependent abuse of drugs	13,868	258	1,639	7,364	4,152	451	4
Alcohol dependence syndrome	3,413	9	50	1,480	1,702	172	0
Diseases of the nervous system	109,688	40,561	5,291	38,582	18,764	6,490	0
Diseases of the circulatory system	38,341	413	515	7,304	12,746	17,362	1
Diseases of the respiratory system	220,541	102,041	16,636	63,534	25,474	12,856	0
Acute bronchitis and bronchiolitis	25,007	9,120	1,445	8,594	3,954	1,894	0
Pneumonia	22,335	10,912	844	5,037	3,273	2,269	0
Chronic bronchitis	4,207	26	10	280	1,869	2,022	0
Asthma	25,893	11,711	1,941	7,902	3,355	984	0
Diseases of the digestive system	102,829	19,098	6,029	46,709	19,388	11,605	0
Diseases of the genitourinary system	107,370	10,556	10,420	55,006	18,634	12,753	1
Diseases of the skin and subcutaneous tissue	69,129	15,314	5,404	29,369	13,316	5,726	0
Diseases of the musculoskeletal system	118,272	6,751	5,429	52,310	35,137	18,645	0
Symptoms signs and ill-defined conditions	413,406	86,401	26,424	155,928	86,285	58,367	1
Injury and poisoning	408,819	104,657	37,867	146,564	71,159	48,562	10
Fractures, all sites	52,427	13,844	4,602	15,098	10,190	8,692	1
Sprains	82,083	9,280	8,870	41,197	16,791	5,945	0
Intracranial	9,065	2,161	1,369	3,099	1,306	1,129	1
Open wounds	87,316	28,510	7,136	28,895	12,656	10,113	6
Superficial	19,311	6,338	1,656	6,411	3,045	1,861	0
Contusions	62,613	14,860	5,941	21,544	10,927	9,339	2
Foreign bodies	8,734	3,874	366	2,353	1,331	810	0
Burns	2,934	924	206	1,181	502	121	0
Trauma complications and unspecified injuries	33,703	13,601	3,126	8,607	4,256	4,113	0
Poisonings	17,481	4,376	2,146	6,761	3,150	1,048	0
Surgical and medical complications	10,265	727	365	2,740	2,985	3,448	0

**TABLE 4C-2
NUMBER OF EMERGENCY ROOM VISITS FOR THE LEADING DIAGNOSIS GROUPS* AND AGE GROUP, ARIZONA, 2009**

Primary diagnosis group	ICD-9-CM code(s)	All Ages	Age group					Unknown
			<15	15-19	20-44	45-64	65+	
Total, all visits		1,825,488	430,009	137,691	706,667	340,475	210,626	20
Abdominal pain	789.0	99,953	11,741	9,366	50,661	19,753	8,432	0
Acute upper respiratory infection, excluding pharyngitis	460-461, 463-466	96,061	55,169	5,934	23,690	7,986	3,282	0
Chest pain	786.5	65,645	1,919	3,150	28,186	21,429	10,960	1
Contusion with intact skin surface	920-924	62,613	14,860	5,941	21,544	10,927	9,339	2
Mental disorders	290-319	58,400	2,015	5,441	30,581	16,586	3,772	5
Spinal disorders	720-724	54,223	1,385	2,030	27,218	16,335	7,255	0
Open wound, excluding head	874-897	48,493	9,429	4,561	20,085	8,741	5,674	3
Cellulitis and abscess	681-682	40,554	6,176	2,911	18,997	8,857	3,613	0
Open wound of head	870-873	38,823	19,081	2,575	8,810	3,915	4,439	3
Fever	780.6	37,019	30,581	1,305	3,185	1,204	744	0
Headache	784.0	37,017	2,962	2,936	20,118	8,332	2,669	0
Otitis media and eustachian tube disorders	381-382	36,819	30,020	1,161	4,336	1,045	257	0
Sprains and strains of neck and back	846, 847	36,760	1,892	2,992	20,705	8,492	2,679	0
Urinary tract infection, site not specified	599.0	34,851	6,140	3,262	13,363	5,592	6,494	0
Nausea, vomiting	787.0	33,950	13,767	2,162	10,722	4,242	3,057	0
Rheumatism, excluding back	725-729	31,815	2,803	1,442	12,535	9,565	5,470	0
Sprains and strains, excluding ankle and back	840-844, 845.1, 848	31,274	5,082	3,439	13,830	6,279	2,644	0
Asthma	493	25,893	11,711	1,941	7,902	3,355	984	0
Acute pharyngitis	462.0	23,484	8,656	3,785	9,091	1,440	512	0
Pneumonia	480-486	22,335	10,912	844	5,037	3,273	2,269	0
Chronic and unspecified bronchitis	490-491	20,970	3,790	1,144	7,224	5,266	3,546	0
Unspecified viral and chlamydial infection	79.9	20,721	12,132	1,788	5,093	1,372	336	0
Superficial injuries	910-919	19,311	6,338	1,656	6,411	3,045	1,861	0
Gastroenteritis and colitis	558.0	18,821	7,410	1,167	6,436	2,455	1,353	0
Migraine	346	15,823	491	893	10,141	3,936	362	0
Heart disease, excluding ischemic	391-392.0, 393-398, 402, 404, 415-416, 420-429	11,481	230	171	1,702	3,293	6,084	1

*Based on first-listed diagnosis



4D.

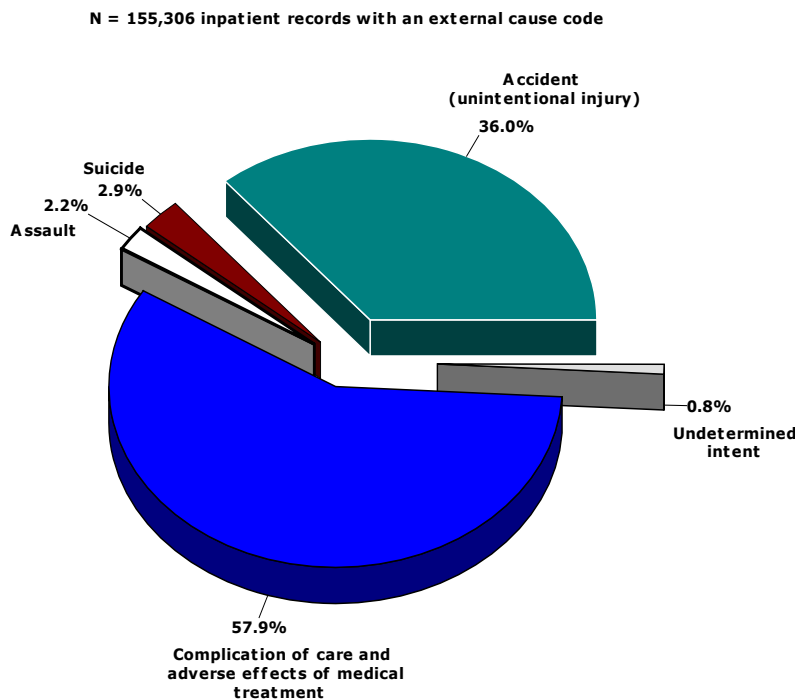
INJURY-RELATED INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS BY INTENT AND MECHANISM OF INJURY

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 2008, the reporting requirements for hospital were revised and the non-injury first-listed diagnoses may also have an external cause of injury 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 reflects 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, among 7,979 suicide attempt-related ER visits, *injury or poisoning* was the first-listed diagnosis on 6,260 ER discharge records, *mental disorders* were identified as first-listed diagnosis on the additional 1,255 suicide-related records, and the first-listed diagnosis for 455 ER discharges mentioning suicide attempt was classified as either *chronic* or *infectious* disease.

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

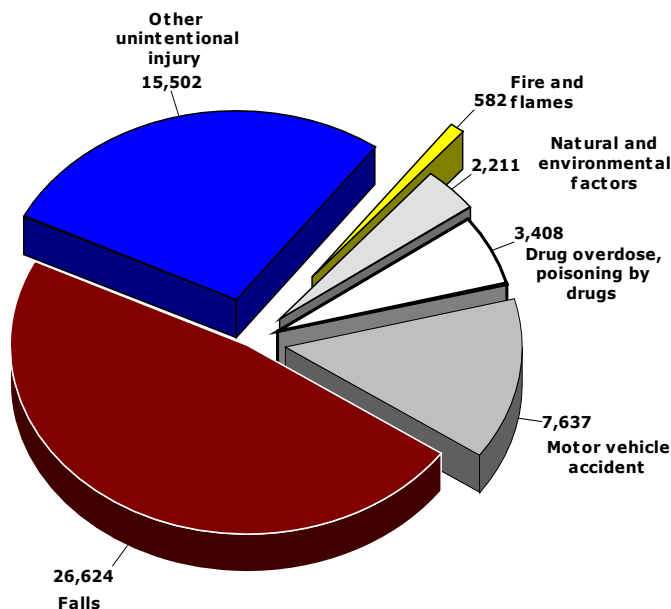
Figure 4D-1
Percent Distribution of Inpatient Discharges by Intent of Injury,
Arizona Residents, 2009



In 2009, injury was indicated as the principal diagnosis on 64,560 inpatient discharge records (**Table 4A-1**). However, the E-codes for external causes of injury were provided on a substantially greater number of 155,306 inpatient discharges (**Figure 4D-1, Table 4 D-1**). *Complications of medical care and adverse effects of medical treatment* (including adverse drug reactions and complications from surgical and medical procedures) accounted for the absolute majority of inpatient hospitalizations by the intent of injury (57.9 percent). *Unintentional injuries in accidents* accounted for 36.0 percent of all inpatient discharges by intent of injury. *Self-inflicted injuries in suicide* resulted in 4,549 inpatient hospitalizations (2.9 percent). *Assault* accounted for 3,489 inpatient hospitalizations (2.2 percent of all hospital discharges with known intent of injury).

Figure 4D-2
Percent Distribution of Inpatient Discharges by Mechanism of
Unintentional Injury, Arizona Residents, 2009

N = 55,964 (First-listed external cause of injury codes E800-E869, E880-E929)



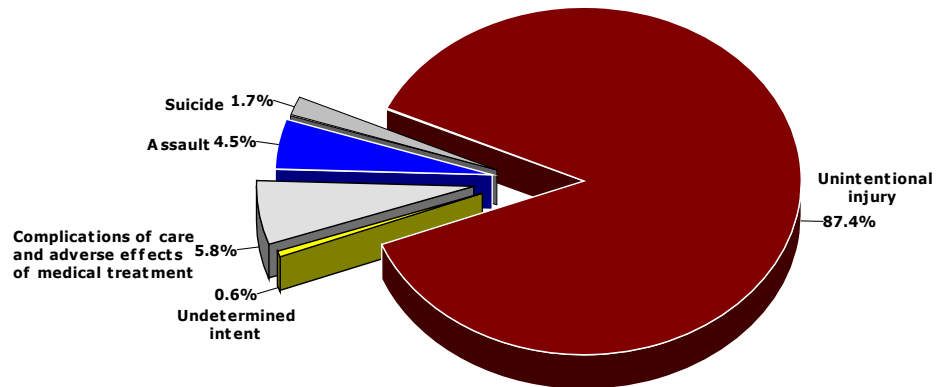
Accidental falls (47.6 percent, **Figure 4D-2, Table 4 D-1**), *motor vehicle accidents* (13.7 percent), and *drug overdoses* (6.1 percent) accounted for the largest proportions of inpatient hospitalizations with known mechanism of unintentional injury in 2009.

Among the natural and environmental factors as external causes of inpatient hospitalization due to unintentional injury, the three most frequent were *poisoning and toxic reaction caused by venomous animals and plants* (19.7 percent of inpatient discharges due to natural and environmental factors), *other injury causes by animals* (53.8 percent), *exposure to excessive natural heat* (338 inpatient discharges or 17.6 percent), and *exposure to excessive natural cold*, which accounted for 2.3 percent (51 out of 2,211) of inpatient discharges with injuries due to natural and environmental factors.

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

Figure 4D-3
Percent Distribution of Injury-related Emergency Room Visits
by Intent of Injury, Arizona Residents, 2009

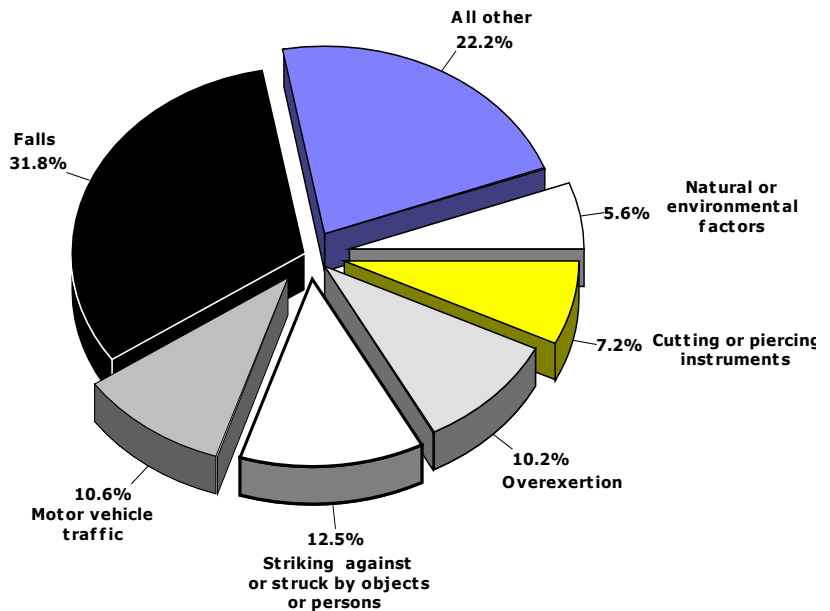
N = 466,136 ER records with an external cause code



In 2009, there were 466,136 emergency room visits with known intent of injury among Arizona residents, 8.3 times as many as inpatient discharges. *Unintentional injuries or accidents* accounted for nine out of ten (407,349 or 87.4 percent) of all injury-related emergency room visits (**Figure 4 D-3, Table 4 D-2**). The external cause of injury was classified as *assault* for 21,193 emergency room visits: these were the injuries purposely inflicted by another person. *Complications of care and adverse effects of medical treatment* accounted for a greater number of emergency room visits than *self-inflicted injuries in suicide* (5.8 percent vs. 1.7 percent, respectively, **Figure 4D-3, Table 4D-2**).

Figure 4D-4
Percent Distribution of Injury-related Emergency Room Visits by
Mechanism of Unintentional Injury, Arizona Residents, 2009

N = 407,349 (First-listed external cause codes E800-E869, E880 - E929)



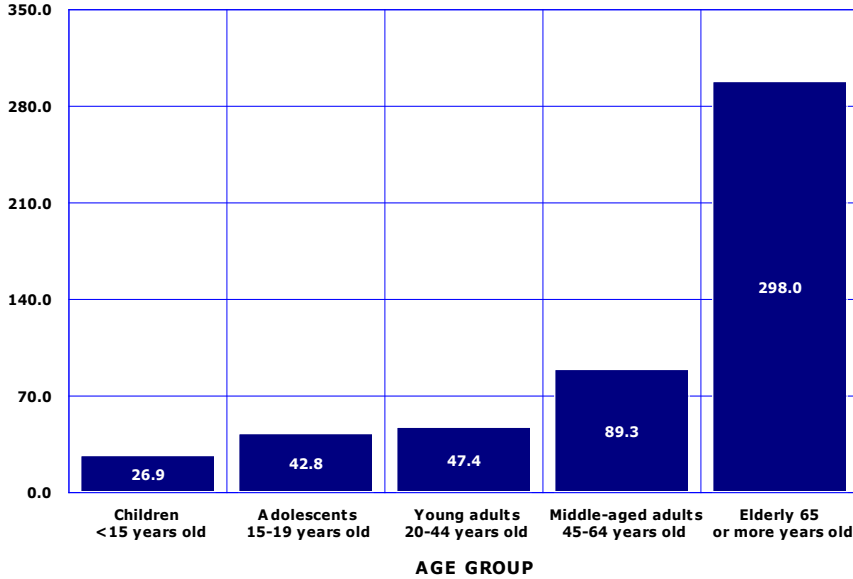
Accidental falls (129,343 ER visits, **Table 4D-2**), *striking against or struck by objects or persons* (50,892), and *motor vehicle traffic accidents* (43,269) were the three most frequent mechanisms of unintentional injuries treated in emergency rooms (**Figure 4D-4, Table 4D-2**).

Overexertion (41,622 visits) accounted for a greater number of emergency room visits than the following two categories of unintentional injury combined: *foreign body accidentally entering eye or other orifice* (9,733), and *natural and environmental factors* (122,805; **Table 4D-2**).

In 2009, more than 1,300 residents of Arizona who were *exposed to excessive natural heat* ended up in emergency rooms (1,319; **Table 4D-2**).

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

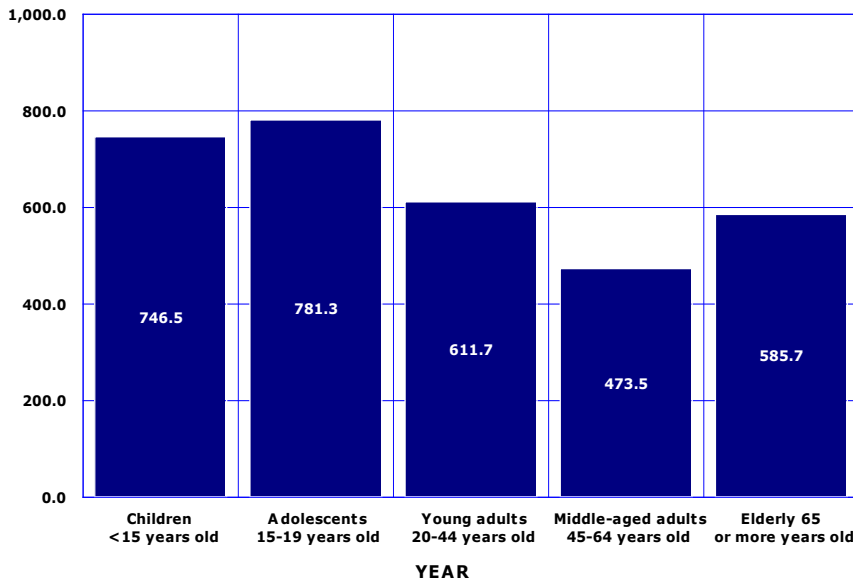
Figure 4D-5
Rates* for Injury-related Inpatient Discharges by Age Group,
Arizona Residents, 2009



The rates (i.e., the number of inpatient hospitalizations per 10,000 persons) for injury-related inpatient discharges clearly are associated with the age of the injured patient (**Figure 4D-5**). The older the injured person, the more likely it is to be admitted as inpatient. The rate of 298.0 per 10,000 elderly Arizonans 65+ was 11 times greater than the rate of 26.9 /10,000 for children under the age of 15 years.

*Inpatient discharges per 10,000 resident population in specified age group.

Figure 4D-6
Rates* for Injury-related Emergency Room Visits by Age Group,
Arizona Residents, 2009



The rates for injury-related emergency room visits (i.e., the number of ER visits per 10,000 persons; **Figure 4D-6**) reveal a different age-specific pattern. The rates are the highest among the younger patients, who are more likely to be released home rather than admitted as inpatients. The rate of 781.3 ER visits per 10,000 adolescents 15-19 years old was 1.8 times greater than the rate of 473.5/10,000 among middle-aged Arizonans 45-64 years old.

*Number of emergency room visits per 10,000 resident population in specified age group.

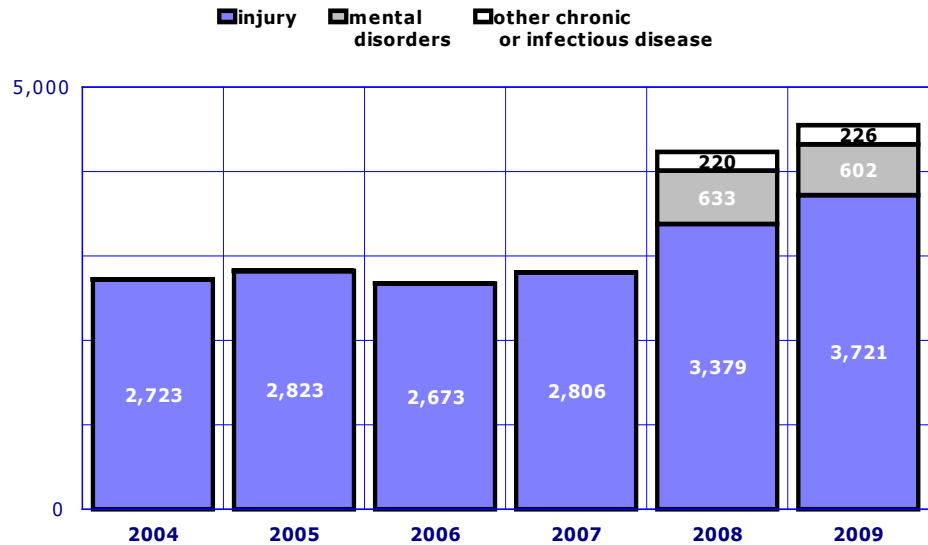
4D. INJURY-RELATED INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS BY INTENT AND MECHANISM OF INJURY

Both in 2008 and 2009, there was a substantial increase in the number of suicide-related inpatient discharges and emergency room visits (Figure 4D-7 and Figure 4D-8). It was only partly due to the change in the reporting requirements for hospitals. In 2009, *injury or poisoning* was the principal diagnosis on 3,721 inpatient discharge records, which also included the E codes for suicide (E950-E959). *Mental disorders* were identified as the principal diagnosis on the additional 602 suicide-related records. For the additional 226 inpatient discharges mentioning suicide attempt, the principal diagnosis was classified as either *chronic or infectious disease*.

From 2007 to 2009 there was a 32.6 percent increase in suicide-related inpatient discharges where the principal diagnosis was an injury.

From among the 4,549 inpatient discharges related to a suicide attempt in 2009, 2092 or 46.0 percent were transferred to a psychiatric facility.

Figure 4D-7
Suicide-related Inpatient Discharges by Principal Diagnosis and Year, Arizona Residents, 2009

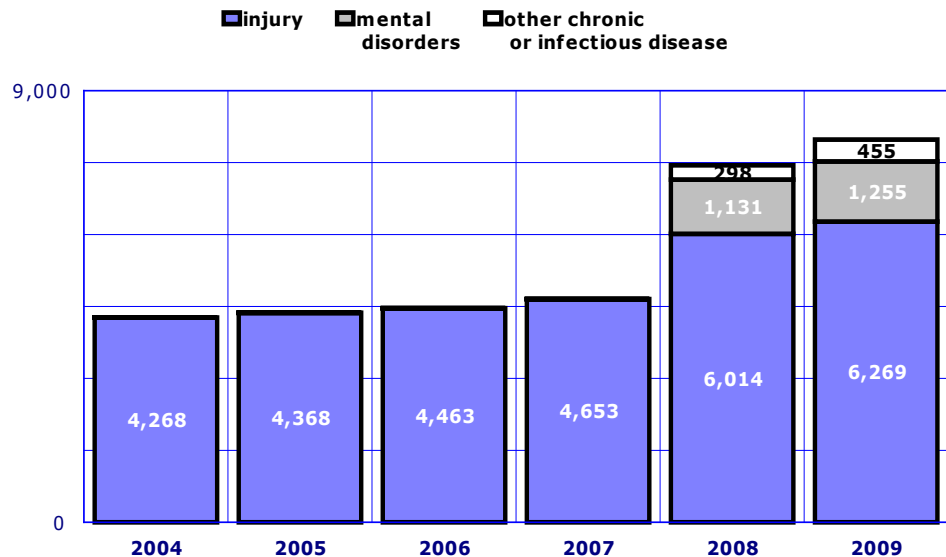


Injury or poisoning was the principal diagnosis on 6,269 ER discharge records, which also included the E codes for suicide (E950-E959). *Mental disorders* were identified as the principal diagnosis on the additional 1,255 suicide-related records. For the additional 455 ER discharges mentioning suicide attempt, the principal diagnosis was classified as either *chronic or infectious disease*.

From 2007 to 2009 there was a 34.7 percent increase in suicide-related emergency room visits where the principal diagnosis was an injury.

From among 7,979 suicide attempt-related ER visits in 2009, 2,290 or 28.3 percent of the patients were transferred to a psychiatric facility, and 50 expired in the emergency room.

Figure 4D-8
Suicide-related Emergency Room Visits by Principal Diagnosis and Year, Arizona Residents, 2009



**TABLE 4D-1
INPATIENT DISCHARGES BY INTENT AND MECHANISM FOR SELECTED EXTERNAL CAUSES BY GENDER, AGE GROUP, AND
RACE/ETHNICITY, ARIZONA, 2009**

	Total*	Gender		Age group					Race/ethnicity						
		Female	Male	Children < 15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	White non-Hispanic	Other	Refused
UNINTENTIONAL INJURY OR ACCIDENT¹	55,964	27,795	28,160	3,863	1,952	11,036	13,556	25,555	2,525	683	1,652	8,288	41,988	5	823
Fall	26,624	15,981	10,641	1,183	295	2,170	4,979	17,996	863	267	491	2,990	21,698	3	312
Motor vehicle accident	7,637	2,826	4,807	584	781	3,231	1,927	1,113	559	144	278	1,494	5,013	0	149
Accidental poisoning by drugs, medicinal substances gases and vapors	3,408	1,768	1,640	206	135	1,018	1,288	761	152	24	166	501	2,529	0	36
Natural and environmental factors	2,211	983	1,228	320	75	569	733	514	123	21	77	401	1,554	0	35
Exposure to excessive natural heat	338	77	261	8	13	99	113	105	11	3	22	91	204	0	7
Fire and flames	582	213	369	127	32	186	167	70	44	27	35	173	297	0	6
Machinery	193	23	169	5	4	87	78	19	5	1	5	60	114	0	8
SUICIDE²	4,549	2,533	2,016	91	474	2,501	1,308	175	224	44	197	712	3,291	0	81
ASSAULT³	3,489	667	2,822	199	388	2,125	680	97	654	63	313	905	1,467	0	87
INJURIES OF UNDETERMINED INTENT⁴	1,319	616	703	86	69	414	432	318	66	21	75	237	905	0	15
COMPLICATIONS OF CARE AND ADVERSE EFFECTS OF MEDICAL TREATMENT⁵	89,985	47,592	42,392	1,917	1,032	13,295	30,045	43,696	2,800	1,132	4,025	12,481	68,443	1	1,103
Misadventures to patients	2,233	1,383	850	48	18	419	739	1,009	57	31	90	316	1,710	0	29
Surgical and medical procedures as the cause of adverse reaction	48,516	24,078	24,437	1,409	612	7,599	17,007	21,889	1,875	609	2,089	7,057	36,222	0	664
Drugs causing adverse effects	39,236	22,131	17,105	460	402	5,277	12,299	20,798	868	492	1,846	5,108	30,511	1	410

¹First-listed external cause codes E800-E869, E880-E929.

²First-listed external cause codes E950-E959.

³First-listed external cause codes E960-E969.

⁴First-listed external cause codes E890-E989.

⁵First-listed external cause codes E870-E879, E930-E949.

*The total may include records with unknown gender and/or age group.

Note: External causes of injury and poisoning (E-codes) may be reported whether or not the principal diagnosis was an injury.

**TABLE 4D-2
EMERGENCY ROOM VISITS BY INTENT AND MECHANISM FOR SELECTED EXTERNAL CAUSES BY GENDER, AGE GROUP, AND
RACE/ETHNICITY, ARIZONA, 2009**

	Total*	Gender		Age group						Race / ethnicity						
		Female	Male	Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years	American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	White non-Hispanic	Other	Refused	
UNINTENTIONAL INJURY OR ACCIDENT¹	407,349	195,214	212,121	107,128	35,635	142,496	71,873	50,210	13,540	5,173	20,500	101,740	260,299	33	6,064	
Fall	129,343	69,966	59,375	41,059	6,639	28,533	23,181	29,930	4,268	1,497	4,948	30,230	86,592	7	1,801	
Motor vehicle accident	43,269	23,310	19,955	4,227	5,769	21,720	8,713	2,835	1,578	913	3,214	10,582	26,143	3	836	
Struck against or struck accidentally by objects or persons	50,892	19,066	31,826	19,330	7,177	16,297	5,467	2,621	1,562	597	2,947	13,758	31,226	2	800	
Overexertion	41,622	20,216	21,404	5,303	4,303	21,059	8,174	2,783	1,347	427	2,488	9,766	27,029	5	560	
Cutting or piercing instruments or objects	29,130	10,715	18,412	5,699	2,690	13,049	5,426	2,266	910	369	1,295	7,963	18,171	5	417	
Natural and environmental factors	22,805	11,530	11,274	7,420	1,687	7,548	4,291	1,859	842	322	1,002	6,587	13,716	3	333	
Exposure to excessive natural heat	1,319	423	896	107	116	649	325	122	31	14	73	364	821	0	16	
Accidental poisoning by drugs, medicinal substances gases and vapors	6,989	3,555	3,434	2,343	626	2,240	1,220	560	231	85	372	1,685	4,531	0	85	
Fire and flames	3,529	1,572	1,957	984	280	1,464	619	182	97	84	237	1,111	1,949	0	51	
Machinery	1,324	234	1,090	70	74	597	396	187	34	16	16	407	831	1	19	
Pedal cycle, nontraffic and other	7,898	1,974	5,923	3,211	936	2,258	1,211	282	210	86	246	1,679	5,562	0	115	
Motor vehicle, nontraffic	2,109	625	1,484	366	350	1,022	283	88	58	11	47	399	1,576	0	18	
Foreign body accidentally entering eye or other office	9,773	3,963	5,810	4,182	461	2,756	1,484	890	271	127	474	2,817	5,888	1	195	
Suffocation	164	73	91	72	4	20	26	42	11	3	6	44	98	0	2	
Firearm missile	689	94	595	147	148	284	78	32	36	3	45	219	378	0	8	
Drowning/submersion	227	85	142	163	14	31	14	5	3	4	13	60	139	0	8	
SUICIDE²	7,979	4,601	3,378	419	1,580	4,525	1,332	123	367	79	363	1,593	5,496	0	81	
ASSAULT³	21,193	7,615	13,575	1,145	3,276	13,346	3,192	229	2,313	246	1,795	5,964	10,575	2	298	
INJURIES OF UNDETERMINED INTENT⁴	2,565	1,272	1,291	274	396	1,236	512	147	122	21	126	540	1,714	0	42	
COMPLICATIONS OF CARE AND ADVERSE EFFECTS OF MEDICAL TREATMENT⁵	27,050	15,261	11,789	2,750	1,332	9,171	6,999	6,798	749	339	1,386	6,058	18,187	2	329	
Misadventures to patients	144	63	81	20	8	49	29	38	2	1	1	85	52	0	3	
Surgical and medical procedures as the cause of adverse reaction	13,244	6,435	6,809	938	510	4,094	3,746	3,956	421	146	625	2,678	9,259	0	115	
Drugs causing adverse effects	13,662	8,763	4,899	1,792	814	5,028	3,224	2,804	326	192	760	3,295	8,876	2	211	

¹First-listed external cause codes E800-E869, E880-E929.

²First-listed external cause codes E950-E959.

³First-listed external cause codes E960-E969.

⁴First-listed external cause codes E890-E989.

⁵First-listed external cause codes E870-E879, E930-E949.

*The total may include records with unknown gender and/or age group.

Note: External causes of injury and poisoning (E-codes) may be reported whether or not the principal diagnosis was an injury.