

CHAPTER 4

HOSPITAL INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS:

2008 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

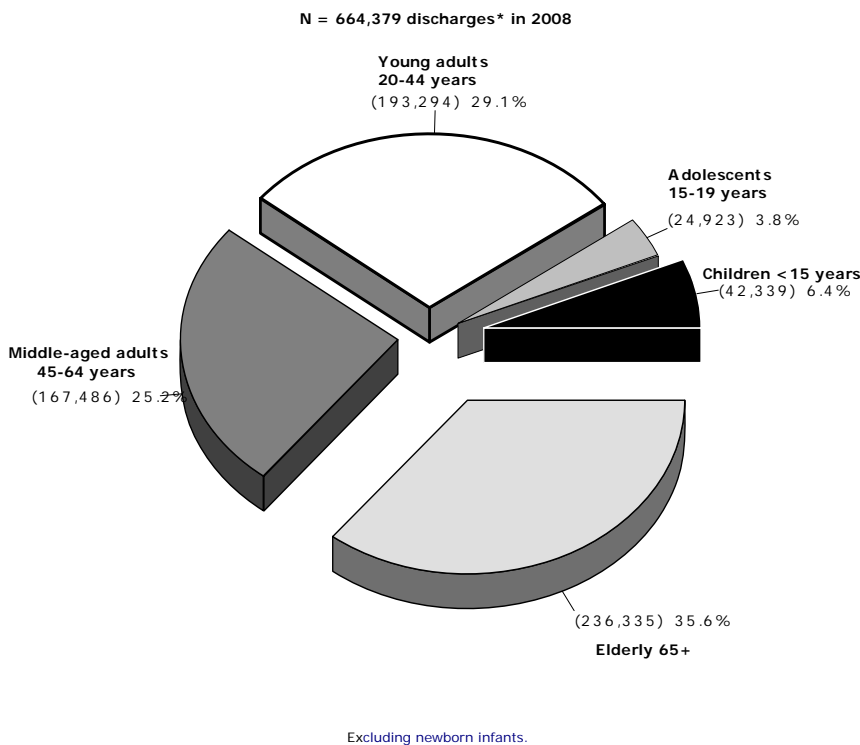
An inpatient discharge occurs when a person who was admitted to a hospital leaves that hospital. A person who has been hospitalized more than once in a given calendar year will be counted multiple times as a discharge; thus, the numbers in this report are for discharges, not persons. Federal, military 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, 2008

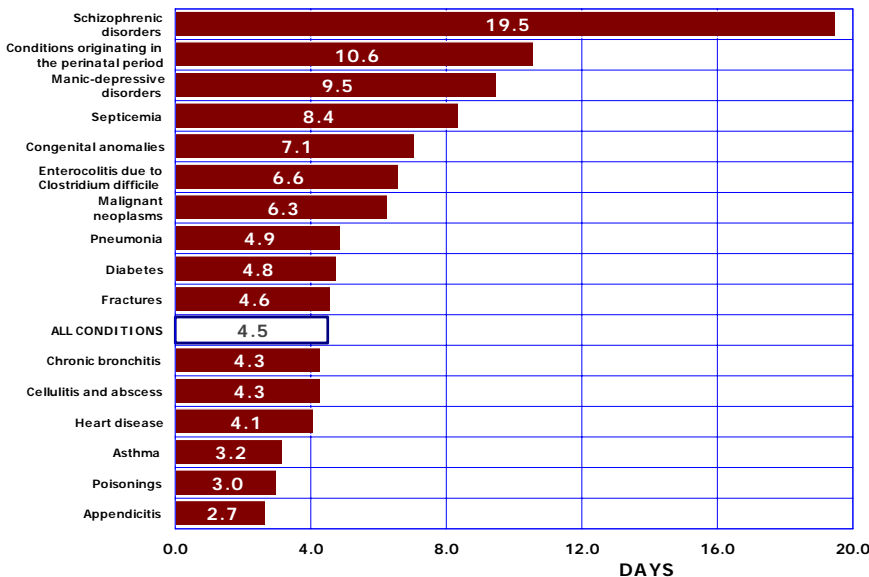


In 2008, there were 664,379 inpatients discharged, excluding newborn infants, from non-Federal short stay hospitals in Arizona (Table 4A-1). Patients who were elderly (65 years or older) accounted for 35.6 percent of hospital discharges (Figure 4A-1), followed by young adults (20-44 years old) who comprised 29.1 percent of discharges, and middle-aged adults 45-64 year olds (25.2 percent of all inpatient discharges)

The discharge rate for all ages was 1016.7 per 10,000 resident population, 0.3 percent lower than the 2007 rate. The discharge rate of 1218.3 for females was 1.5 times greater than the rate of 815.7 for males

Diseases of the circulatory system were the most common diagnoses (15.3 percent of all discharges), followed by *digestive system* diagnoses (10.4 percent), and *injury* diagnoses (9.4 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, 2008



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 2008, 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 61.7 percent, with only 13.5 percent of inpatients staying 8 days or more.

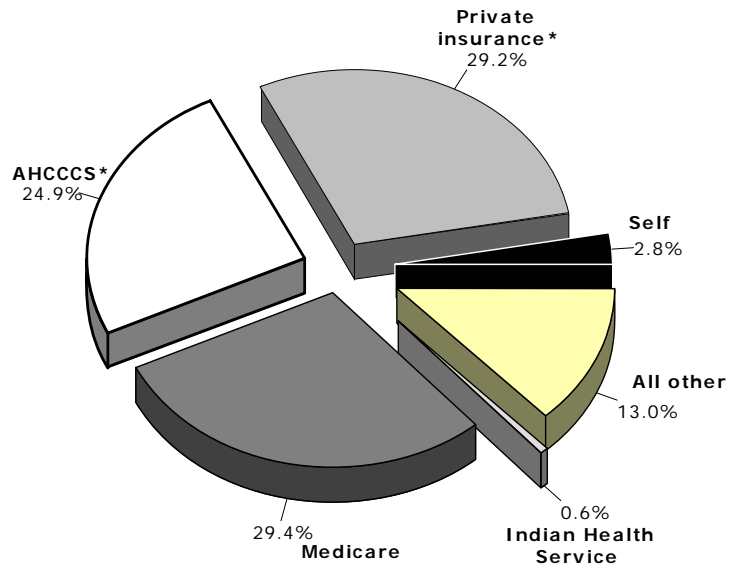
The average length of stay was 4.1 days for heart disease, 4.8 days for diabetes, 6.3 days for cancer, and 19.5 days for schizophrenic disorders.

* <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, 2008

Medicare paid for 69.1 percent of inpatient discharges of persons aged 65 years or older (Table 4A-4) and 29.4 percent of all discharges (Figure 4A-3). Private insurance was the second most frequently recorded expected source of payment, accounting for 29.2 percent of inpatient discharges. The Arizona Health Care Cost Containment System (the State's Medicaid Program) accounted for 24.9 percent.



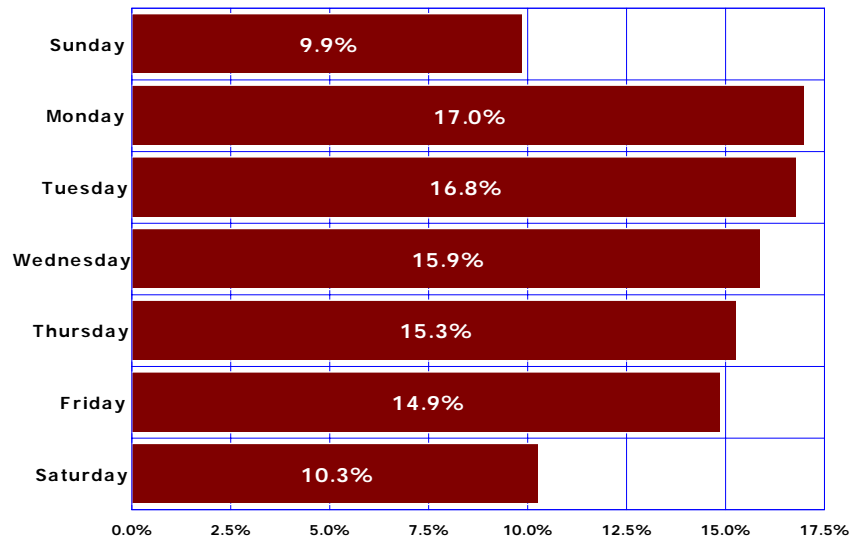
*Excluding newborn infants.

*Indemnity, HMO, PPO.

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

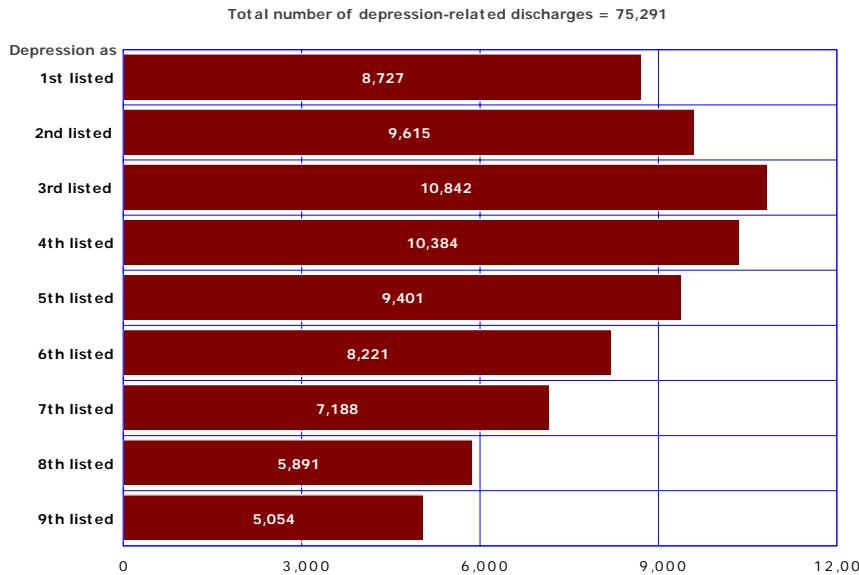
Figure 4A-4
Percent of Hospital Inpatient Admissions by Day of the Week, Arizona Residents, 2008

The rhythm of hospital births by day of the week (see Figure 1B-14) reveals that the daily average of resident live births in 2008 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, 2008



ICD-9C M diagnostic codes 300.4 and 311.

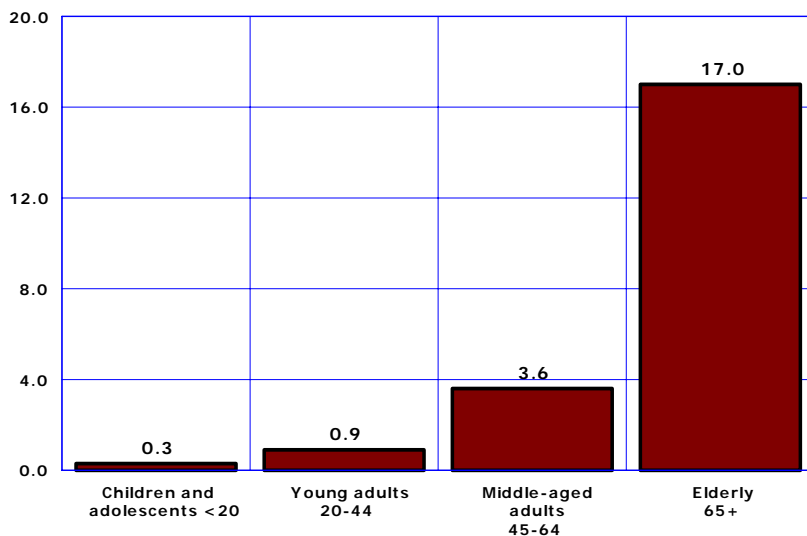
In 2008, the ICD-9-CM diagnostic codes 300.4 and 311 for depression were used on 878 inpatient discharge and 7,849 emergency room records as the first-listed diagnosis (for a total of 8,727 hospital encounters; **Figure 4A-5, Table 4A-1, Table 7C-1**).

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 75,291 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.

Figure 4A-6
Inpatient Hospitalization Rates* for Enterocolitis due to *Clostridium difficile* By Age Group, Arizona Residents, 2008



In 2008, 2,270 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 (17.0/10,000) was 56.7 times greater than the rate for children and adolescents (**Figure 4A-6**).

The disparity in enterocolitis-related hospitalization rates was 1.8 times as high for females (4.4 inpatient discharges per 10,000) females as for males (2.5/10,000).

In 2008, 139 Arizonans died from enterocolitis due to *Clostridium difficile*. Elderly 65 years or older accounted for 89.2 percent of these deaths.

TABLE 4A-1
 NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2008

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	664,379	42,339	24,923	193,294	167,486	236,335	2
Infectious and parasitic diseases	23,530	1,996	450	4,074	6,649	10,361	0
Septicemia	12,495	174	111	1,467	3,753	6,990	0
Enterocolitis due to Clostridium difficile	2,270	54	6	216	548	1,446	0
Neoplasms	28,518	474	198	4,321	10,878	12,647	0
Malignant neoplasms	21,327	319	117	2,051	7,822	11,018	0
Large intestine	2,453	1	0	139	773	1,540	0
Prostate	1,821	0	0	14	919	888	0
Trachea bronchus and lung	2,681	4	6	93	852	1,726	0
Breast	1,432	0	1	183	562	686	0
Benign neoplasms	6,300	120	61	2,122	2,787	1,210	0
Endocrine nutritional metabolic and immunity diseases	24,937	2,418	690	5,893	7,904	8,032	0
Diabetes mellitus	9,883	404	464	3,046	3,436	2,533	0
Volume depletion	108	0	0	7	28	73	0
Diseases of the blood and blood forming organs	5,988	607	194	1,291	1,483	2,413	0
Mental disorders	17,563	447	771	8,064	5,922	2,359	0
Psychoses	13,742	250	479	6,329	4,819	1,865	0
Alcoholic psychoses	2,013	0	6	810	1,025	172	0
Drug psychoses	998	2	45	419	320	212	0
Schizophrenic disorders	2,812	1	65	1,582	1,046	118	0
Manic-depressive disorders	6,519	227	304	3,114	2,158	716	0
Neurotic disorders	3,817	197	292	1,734	1,101	493	0
Anxiety states	362	18	19	101	118	106	0
Depression	878	29	55	435	235	124	0
Drug dependence	155	1	8	88	51	7	0
Nondependent abuse of drugs**	168	0	13	109	43	3	0
Alcohol dependence syndrome	556	1	6	236	244	69	0
Diseases of the nervous system	14,113	1,661	464	3,572	3,793	4,623	0
Diseases of the circulatory system	101,521	397	254	6,789	30,653	63,428	0
Heart disease	67,307	211	133	3,959	20,741	42,263	0
Acute myocardial infarction	10,191	0	3	552	3,729	5,907	0
Coronary atherosclerosis	17,843	0	0	510	6,970	10,363	0

TABLE 4A-1 (continued)
 NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2008

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	1,317	1	1	101	564	650	0
Cardiac dysrhythmias	14,907	69	57	997	3,654	10,130	0
Congestive heart failure	6,404	37	5	318	1,486	4,558	0
Cerebrovascular disease	16,715	50	35	805	4,555	11,270	0
Diseases of the respiratory system	59,402	11,630	828	5,927	14,329	26,688	0
Acute bronchitis and bronchiolitis	4,496	3,470	5	190	316	515	0
Pneumonia	18,039	3,102	200	1,866	3,990	8,881	0
Chronic bronchitis	8,803	6	2	139	2,775	5,881	0
Asthma	7,506	2,704	175	1,289	1,863	1,475	0
Diseases of the digestive system	69,422	4,028	2,238	18,248	21,975	22,933	0
Appendicitis	8,037	1,872	1,029	3,136	1,436	564	0
Noninfectious enteritis and colitis	5,593	467	196	1,476	1,520	1,934	0
Diverticula of intestine	5,535	0	3	870	1,928	2,734	0
Cholelithiasis	9,185	64	348	3,776	2,658	2,339	0
Diseases of the genitourinary system	37,165	1,790	721	9,092	10,193	15,369	0
Calculus of kidney and ureter	3,404	36	70	1,309	1,250	739	0
Diseases of the skin and subcutaneous tissue	14,892	1,768	466	4,364	4,765	3,528	1
Cellulitis and abscess	12,709	1,527	372	3,858	4,100	2,851	1
Diseases of the musculoskeletal system	38,484	718	385	4,567	14,357	18,457	0
Osteoarthritis and allied disorders	17,067	1	1	367	6,471	10,227	0
Invertebral disc disorders	5,121	2	28	1,521	2,241	1,329	0
Congenital anomalies	3,047	1,904	134	405	369	235	0
Conditions originating in perinatal period	4,143	4,140	0	3	0	0	0
Symptoms signs and ill-defined conditions	34,948	2,815	631	6,472	12,304	12,726	0
Injury and poisoning	62,499	4,285	2,838	15,228	17,230	22,917	1
Fractures, all sites	21,255	1,563	941	4,321	4,331	10,098	1
Fracture of neck of femur	5,715	27	18	97	606	4,967	0
Poisonings	6,704	389	588	2,830	2,192	705	0

*Excluding newborn infants. **Excluding alcohol and tobacco.

TABLE 4A-2
NUMBER OF DISCHARGES * BY FIRST-LISTED DIAGNOSIS AND GENDER, ARIZONA, 2008

Category of first-listed diagnosis	Total	Patient's gender	
		Female	Male
All categories	664,379	397,403	266,959
Infectious and parasitic diseases	23,530	12,217	11,312
Septicemia	12,495	6,314	6,181
Enterocolitis due to Clostridium difficile	2,270	1,451	819
Neoplasms	28,518	16,427	12,090
Malignant neoplasms	21,327	10,715	10,611
Large intestine	2,453	1,162	1,291
Prostate	1,821	0	1,821
Trachea bronchus and lung	2,681	1,287	1,394
Breast	1,432	1,415	17
Benign neoplasms	6,300	5,237	1,063
Endocrine nutritional metabolic and immunity diseases	24,937	14,004	10,931
Diabetes mellitus	9,883	4,591	5,292
Volume depletion	108	59	49
Diseases of the blood and blood forming organs	5,988	3,531	2,457
Mental disorders	17,563	8,180	9,383
Psychoses	13,742	6,296	7,446
Alcoholic psychoses	2,013	497	1,516
Drug psychoses	998	440	558
Schizophrenic disorders	2,812	1,069	1,743
Manic-depressive disorders	6,519	3,619	2,900
Neurotic disorders	3,817	1,882	1,935
Anxiety states	362	238	124
Depression	878	443	435
Drug dependence	155	70	85
Nondependent abuse of drugs**	168	68	100
Alcohol dependence syndrome	556	172	384
Diseases of the nervous system	14,113	7,863	6,250
Diseases of the circulatory system	101,521	45,701	55,819
Heart disease	67,307	28,648	38,659
Acute myocardial infarction	10,191	3,910	6,281
Coronary arteriosclerosis	17,843	6,202	11,641

TABLE 4A-2 (continued)
 NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND GENDER, ARIZONA, 2008

Category of first-listed diagnosis	Total	Patient's gender	
		Female	Male
Other ischemic heart disease	1,317	561	756
Cardiac dysrhythmias	14,907	7,238	7,669
Congestive heart failure	6,404	2,824	3,580
Cerebrovascular disease	16,715	8,594	8,120
Diseases of the respiratory system	59,402	30,203	29,197
Acute bronchitis and bronchiolitis	4,496	2,054	2,442
Pneumonia	18,039	9,077	8,961
Chronic bronchitis	8,803	4,867	3,936
Asthma	7,506	4,416	3,090
Diseases of the digestive system	69,422	37,995	31,427
Appendicitis	8,037	3,511	4,526
Noninfectious enteritis and colitis	5,593	3,537	2,056
Diverticula of intestine	5,535	3,057	2,478
Cholelithiasis	9,185	6,222	2,963
Diseases of the genitourinary system	37,165	23,926	13,239
Calculus of kidney and ureter	3,404	1,650	1,754
Diseases of the skin and subcutaneous tissue	14,892	6,870	8,022
Cellulitis and abscess	12,709	5,805	6,904
Diseases of the musculoskeletal system	38,484	21,229	17,255
Osteoarthritis and allied disorders	17,067	10,003	7,064
Invertebral disc disorders	5,121	2,536	2,585
Congenital anomalies	3,047	1,376	1,671
Conditions originating in perinatal period	4,143	1,811	2,330
Symptoms signs and ill-defined conditions	34,948	19,852	15,095
Injury and poisoning	62,499	30,634	31,859
Fractures, all sites	21,255	11,269	9,982
Fracture of neck of femur	5,715	3,897	1,818
Poisonings	6,704	3,777	2,927

*Excluding newborn infants. **Excluding alcohol and tobacco.

TABLE 4A-3
 NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND RACE/ETHNICITY, ARIZONA, 2008

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				
Total	664,379	23,229	9,153	27,479	135,893	456,938	66	11,621		
Infectious and parasitic diseases	23,530	1,117	345	1,011	4,531	16,136	0	390		
Septicemia	12,495	774	150	417	2,081	8,887	0	186		
Enterocolitis due to Clostridium difficile	2,270	36	19	58	279	1,863	0	15		
Neoplasms	28,518	491	458	1,187	3,905	21,935	3	539		
Malignant neoplasms	21,327	380	330	623	2,564	17,053	2	375		
Large intestine	2,453	33	38	71	244	2,034	0	33		
Prostate	1,821	14	11	66	173	1,520	0	37		
Trachea bronchus and lung	2,681	25	44	92	199	2,287	0	34		
Breast	1,432	23	19	41	191	1,137	1	20		
Benign neoplasms	6,300	95	121	523	1,223	4,193	1	144		
Endocrine nutritional metabolic and immunity diseases	24,937	1,288	285	1,315	5,014	16,665	2	368		
Diabetes mellitus	9,883	791	76	681	2,503	5,692	1	139		
Volume depletion	108	5	1	1	16	84	0	1		
Diseases of the blood and blood forming organs	5,988	186	109	807	1,052	3,747	0	87		
Mental disorders	17,563	783	213	1,048	2,416	12,802	2	299		
Psychoses	13,742	501	174	867	1,802	10,162	1	235		
Alcoholic psychoses	2,013	175	2	53	226	1,534	1	22		
Drug psychoses	998	16	6	38	102	826	0	10		
Schizophrenic disorders	2,812	103	50	352	477	1,792	0	38		
Manic-depressive disorders	6,519	172	92	325	770	5,026	0	134		
Neurotic disorders	3,817	281	39	181	612	2,639	1	64		
Anxiety states	362	11	3	16	67	261	0	4		
Depression	878	47	9	47	136	628	0	11		
Drug dependence	155	3	0	3	22	124	0	3		
Nondependent abuse of drugs **	168	9	1	18	34	104	0	2		
Alcohol dependence syndrome	556	93	4	7	57	384	0	11		
Diseases of the nervous system	14,113	470	148	700	2,446	10,012	2	335		
Diseases of the circulatory system	101,521	1,863	1,071	3,948	12,129	80,920	6	1,584		
Heart disease	67,307	1,169	711	2,354	7,708	54,360	4	1,001		
Acute myocardial infarction	10,191	218	122	275	1,340	8,056	1	179		
Coronary arteriosclerosis	17,843	228	215	440	2,056	14,612	1	291		

TABLE 4A-3 (continued)
 NUMBER OF DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND RACE/ETHNICITY, ARIZONA, 2008

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	
Other ischemic heart disease	1,317	27	13	56	202	999	0	20	
Cardiac dysrhythmias	14,907	201	120	355	1,225	12,809	0	197	
Congestive heart failure	6,404	151	71	308	903	4,882	0	89	
Cerebrovascular disease	16,715	286	164	610	2,017	13,307	2	329	
Diseases of the respiratory system	59,402	2,573	690	2,664	10,725	41,660	5	1,085	
Acute bronchitis and bronchiolitis	4,496	359	69	186	1,703	2,076	0	103	
Pneumonia	18,039	1,029	242	704	3,291	12,540	0	233	
Chronic bronchitis	8,803	47	45	214	580	7,867	0	50	
Asthma	7,506	258	93	733	1,856	4,411	3	152	
Diseases of the digestive system	69,422	2,645	835	2,326	14,541	48,090	7	978	
Appendicitis	8,037	198	153	204	2,685	4,637	1	159	
Noninfectious enteritis and colitis	5,593	127	56	194	915	4,215	1	85	
Diverticula of intestine	5,535	80	36	151	787	4,442	0	39	
Cholelithiasis	9,185	458	119	233	2,792	5,462	1	120	
Diseases of the genitourinary system	37,165	990	432	1,333	7,071	26,831	4	504	
Calculus of kidney and ureter	3,404	42	34	60	587	2,628	0	53	
Diseases of the skin and subcutaneous tissue	14,892	870	127	587	2,970	10,110	0	228	
Cellulitis and abscess	12,709	747	99	460	2,594	8,633	0	176	
Diseases of the musculoskeletal system	38,484	770	274	1,109	3,975	31,692	5	659	
Osteoarthritis and allied disorders	17,067	202	82	366	1,308	14,841	3	265	
Invertebral disc disorders	5,121	68	36	123	517	4,278	0	99	
Congenital anomalies	3,047	204	34	88	864	1,723	0	134	
Conditions originating in perinatal period	4,143	283	69	197	1,593	1,838	0	163	
Symptoms signs and ill-defined conditions	34,948	1,107	368	1,929	6,170	24,830	5	539	
Injury and poisoning	62,499	3,303	577	2,248	9,990	45,272	3	1,106	
Fractures, all sites	21,255	1,039	184	463	3,116	16,092	1	360	
Fracture of neck of femur	5,715	116	55	57	457	4,959	1	70	
Poisonings	6,704	288	68	284	1,025	4,932	0	107	

*Excluding newborn infants. **Excluding alcohol and tobacco.

**TABLE 4A-4
NUMBER OF DISCHARGES* BY PRIMARY PAYER, GENDER, AGE GROUP, RACE/ETHNICITY
AND MARITAL STATUS, ARIZONA, 2008**

Selected characteristics		Total	Self	Private insurance (indemnity, HMO, PPO)	AHCCCS/Medicaid	Medicare	Other
Total		664,379	18,552	193,800	165,739	195,585	90,703
Gender	Female	397,403	9,389	122,180	111,266	104,832	49,736
	Male	266,959	9,162	71,614	54,468	90,751	40,964
	Unknown	17	1	6	5	2	3
Age group	Children <15 years	42,339	1,343	14,324	23,632	43	2,997
	Adolescents 15-19 years	24,923	985	6,662	15,657	61	1,558
	Young adults 20-44 years	193,294	9,803	79,045	83,157	7,278	14,011
	Middle-aged adults 45-64 years	167,486	5,670	78,181	39,906	24,870	18,859
	Elderly 65+ years	236,335	751	15,586	3,387	163,333	53,278
	Unknown	2	0	2	0	0	0
Race/ethnicity	American Indian or Alaska Native	23,229	906	3,445	9,441	4,886	4,551
	Asian or Pacific Islander	9,153	370	4,125	2,036	1,618	1,004
	Black or African American	27,479	899	7,090	10,379	5,729	3,382
	Hispanic or Latino	135,893	6,415	30,352	68,096	17,366	13,664
	White non-Hispanic	456,938	9,598	144,646	72,547	163,670	66,477
	Other	66	1	19	18	26	2
	Refused	11,621	363	4,123	3,222	2,290	1,623
Patient's marital status	Single	225,252	10,022	56,860	107,798	27,304	23,268
	Married	302,200	6,205	118,313	38,320	98,276	41,086
	Life Partner						
	Separated	5,735	269	1,267	2,366	1,189	644
	Divorced	48,319	1,311	11,005	12,201	16,021	7,781
	Widowed	78,400	475	5,511	3,406	51,740	17,268
	Unknown	4,193	270	823	1,389	1,055	656
	Not Applicable	280	0	21	259	0	0

*Excluding newborn infants.

TABLE 4A-5
 AVERAGE LENGTH OF STAY FOR DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2008

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	4.7	3.2	3.6	4.9	5.1
Infectious and parasitic diseases	7.0	3.9	4.4	6.7	7.9	7.3
Septicemia	8.4	9.1	6.6	8.5	9.5	7.8
Enterocolitis due to Clostridium difficile	6.6	7.0	5.2	5.9	6.1	6.8
Neoplasms	5.6	10.5	8.7	4.8	5.2	6.1
Malignant neoplasms	6.3	13.2	11.9	6.9	5.9	6.2
Large intestine	8.1	1.0	0.0	9.0	7.4	8.3
Prostate	2.2	0.0	0.0	2.4	2.1	2.4
Trachea bronchus and lung	6.7	6.5	9.8	6.7	6.8	6.6
Breast	2.0	0.0	1.0	2.3	2.1	1.8
Benign neoplasms	3.4	4.5	3.5	2.7	3.0	5.2
Endocrine nutritional metabolic and immunity diseases	3.8	2.9	3.5	3.3	4.1	4.2
Diabetes mellitus	4.8	2.9	3.0	3.8	5.6	5.6
Volume depletion	2.3	0.0	0.0	1.6	2.6	2.3
Diseases of the blood and blood forming organs	4.3	4.9	4.8	4.5	4.4	4.1
Mental disorders	9.3	8.7	7.7	9.3	9.3	9.7
Psychoses	10.6	11.2	9.2	10.6	10.5	10.8
Alcoholic psychoses	4.6	0.0	2.2	4.0	4.7	6.3
Drug psychoses	4.1	15.5	5.7	3.9	4.1	4.2
Schizophrenic disorders	19.5	1.0	18.3	18.9	19.6	27.9
Manic-depressive disorders	9.5	11.7	7.7	8.8	9.4	12.7
Neurotic disorders	4.6	5.7	5.1	4.4	4.0	5.6
Anxiety states	3.1	5.1	3.5	2.7	2.7	3.7
Depression	6.1	7.9	5.3	5.6	5.6	8.7
Drug dependence	4.7	30.0	3.8	4.2	4.7	10.0
Nondependent abuse of drugs**	2.7	0.0	2.8	2.6	2.9	2.3
Alcohol dependence syndrome	3.5	4.0	2.7	3.2	3.4	5.2
Diseases of the nervous system	4.4	4.0	4.1	3.8	4.4	5.1
Diseases of the circulatory system	4.1	6.5	5.5	4.1	4.1	4.1
Heart disease	4.1	6.7	4.2	3.9	4.0	4.2

TABLE 4A-5 (continued)
 AVERAGE LENGTH OF STAY FOR DISCHARGES* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2008

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
Acute myocardial infarction	4.8	0.0	5.3	3.6	4.5	5.0
Coronary atherosclerosis	3.3	0.0	0.0	2.8	3.1	3.5
Other ischemic heart disease	2.4	4.0	2.0	2.1	2.6	2.2
Cardiac dysrhythmias	3.1	3.1	3.7	2.4	2.9	3.2
Congestive heart failure	4.4	10.4	6.2	4.6	4.7	4.3
Cerebrovascular disease	4.1	7.6	9.4	5.4	4.6	3.8
Diseases of the respiratory system	5.4	3.4	4.3	5.3	6.0	6.0
Acute bronchitis and bronchiolitis	3.4	3.5	3.2	2.5	2.9	3.1
Pneumonia	4.9	3.8	5.5	5.0	5.0	5.2
Chronic bronchitis	4.3	3.0	4.0	3.9	4.1	4.4
Asthma	3.2	2.3	2.4	3.0	3.7	4.4
Diseases of the digestive system	4.3	3.8	2.9	3.5	4.5	5.0
Appendicitis	2.7	3.2	2.0	2.1	3.2	4.5
Noninfectious enteritis and colitis	4.6	3.4	4.8	4.1	4.8	5.1
Diverticula of intestine	4.7	0.0	3.0	4.5	4.6	4.8
Cholelithiasis	3.4	2.9	2.5	2.7	3.4	4.7
Diseases of the genitourinary system	3.6	3.5	2.9	2.8	3.5	4.1
Calculus of kidney and ureter	2.3	2.4	2.2	2.2	2.3	2.7
Diseases of the skin and subcutaneous tissue	4.7	2.9	3.8	4.3	5.2	5.5
Cellulitis and abscess	4.3	2.9	3.6	4.0	4.8	4.8
Diseases of the musculoskeletal system	3.5	4.3	4.2	3.5	3.4	3.6
Osteoarthritis and allied disorders	3.1	11.0	2.0	2.9	3.0	3.2
Invertebral disc disorders	2.8	11.0	1.6	2.3	2.7	3.5
Congenital anomalies	7.1	8.8	4.2	4.0	4.3	4.4
Conditions originating in perinatal period	10.6	10.6	0.0	1.0	0.0	0.0
Symptoms signs and ill-defined conditions	2.5	3.1	2.7	2.4	2.4	2.7
Injury and poisoning	4.9	3.8	3.5	4.4	5.3	5.4
Fractures, all sites	4.6	2.2	3.7	4.3	4.7	5.1
Fracture of neck of femur	5.7	3.8	7.6	5.7	5.7	5.7
Poisonings	3.0	1.8	2.2	2.8	3.7	3.7

*Excluding newborn infants. **Excluding alcohol and tobacco.



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).

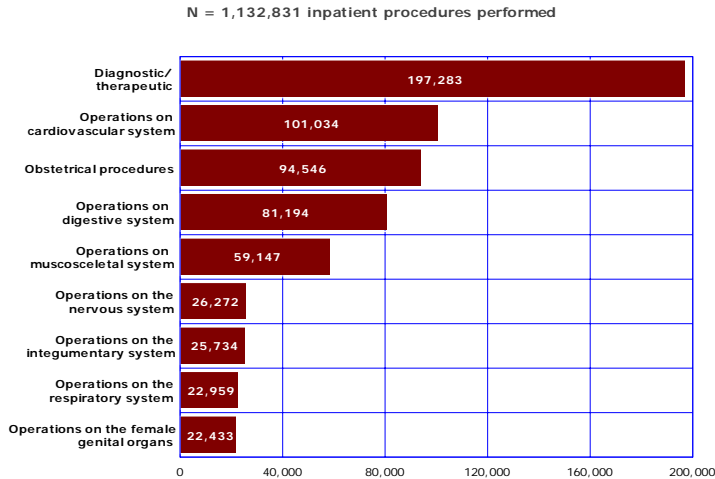
For comparability with the national data*, the rates of all-listed procedures are presented per 10,000 population. The groupings of ICD-9-CM codes used to identify specific procedure categories can be accessed at <http://www.azdhs.gov/plan/hip/cat/icd9procedure.xls>

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 report, 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, 2008

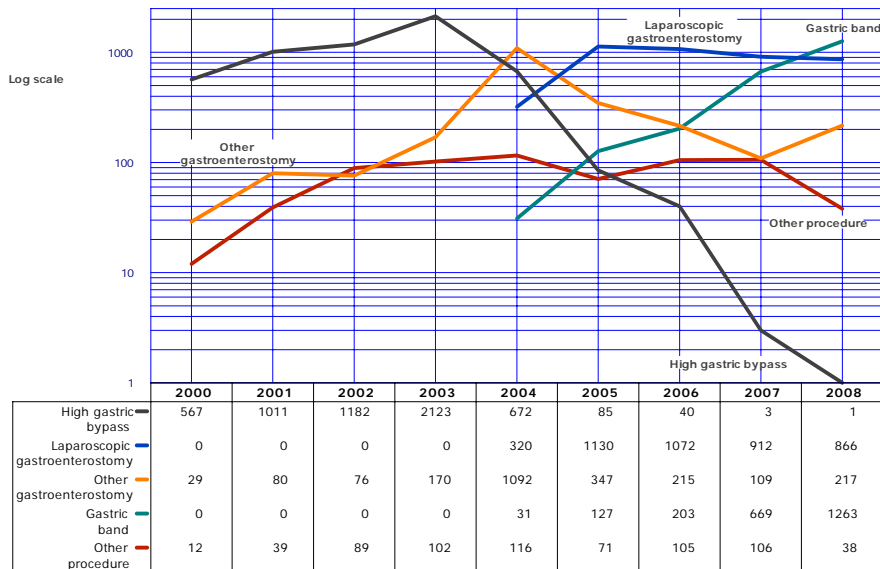


During 2008, 1,132,831 procedures were performed on hospital inpatients in Arizona. The rate of procedures was 1733.5 per 10,000 population. Nationally, according to the 2006 *National Hospital Discharge Survey* (the latest available), the rate of procedures was 1541.3 per 10,000 population.

For Arizona males, this rate was 1479.5/10,000, and for Arizona females it was 1988.3/10,000.

No specific procedure was recorded for approximately 37.7 percent of all inpatient discharges. Only 6.4 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), 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 - 2008



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 2008, **morbid obesity** (ICD-9-CM code 278.01) was the principal diagnosis for 2,398 inpatient hospitalizations. 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 (Figure 4B-2). Not a single *gastric restrictive (gastric band)* procedure was reported in Arizona prior to 2004. In 2008, there were 1,301 *gastric band* procedures performed (Table 4B-1). In 1,263 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). In 2008, among the 2,398 who were admitted as inpatients, only 13 had no specific procedure reported on their discharge record. 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, 2008

Procedures by category	Total	Age group				
		Children <15 years	Adolescents 15-19 years	Young adults 20-44 years	Middle-aged adults 45-64 years	Elderly 65+ years
All procedures	1,132,831	83,606	37,982	312,545	305,361	393,337
Operations on the nervous system	26,272	4,332	1,563	8,781	5,768	5,828
Spinal tap	8,998	3,360	247	2,129	1,850	1,412
Operations on the endocrine system	2,532	41	33	638	1,048	772
Operations on the eye	901	125	66	296	217	197
Operations on the ear	520	214	29	112	85	80
Operations on the nose, mouth, and pharynx	4,014	867	273	1,045	947	882
Operations on the respiratory system	22,959	1,093	396	3,130	7,184	11,156
Bronchoscopy with or without biopsy	1,532	17	9	229	549	728
Operations on the cardiovascular system	101,034	4,187	742	11,168	34,403	50,534
Removal of coronary artery obstruction	15,319	2	0	615	6,247	8,455
Coronary artery bypass graft	5,427	0	1	118	2,019	3,289
Cardiac catheterization	31,292	191	20	2,010	12,974	16,097
Insertion, replacement, removal, of pacemaker leads	5,544	49	7	200	865	4,423
Hemodialysis	15,160	34	59	2,072	5,830	7,165
Operations on the hemic and lymphatic system	7,385	323	120	1,070	2,801	3,071
Operations on the digestive system	81,194	4,114	2,388	21,531	25,905	27,256
Gastric band	1,301	0	13	561	648	79
Endoscopy of small intestine with or without biopsy	19,673	448	295	3,698	6,388	8,844
Endoscopy of large intestine with or without biopsy	9,777	176	144	1,714	2,890	4,853
Partial excision of large intestine	4,581	54	30	541	1,579	2,377
Appendectomy, excluding incidental	8,609	1,869	1,080	3,445	1,577	638
Cholecystectomy	12,322	95	490	5,025	3,638	3,074
Lysis of peritoneal adhesions	7,992	121	91	2,719	2,796	2,265
Operations on the urinary system	16,745	467	206	3,648	5,531	6,893
Cystoscopy with or without biopsy	4,179	206	43	836	1,311	1,783
Operations on the male genital organs	14,509	10,314	26	233	1,479	2,457
Prostatectomy	3,411	1	0	26	1,232	2,152

TABLE 4B-1 (continued)
 NUMBER OF PROCEDURES BY CATEGORY AND AGE GROUP, ARIZONA, 2008

Procedures by category	Total	Age group				
		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	22,433	163	407	13,964	5,740	2,159
Oophorectomy and salpingo-oophorectomy	6,594	30	41	2,274	3,312	937
Bilateral destruction/occlusion of fallopian tubes	5,600	0	2	5,576	22	0
Hysterectomy	9,551	2	3	4,441	4,196	909
Obstetrical procedures	94,546	154	11,561	82,719	112	0
Episiotomy with or w/o forceps or vacuum extraction	9,763	30	1,777	7,952	4	0
Artificial rupture of membranes	26,222	33	3,529	22,630	30	0
Cesarean section	27,182	25	2,243	24,853	61	0
Repair of current obstetric laceration	30,252	57	4,427	25,743	25	0
Operations on the musculoskeletal system	59,147	2,096	1,358	9,243	19,802	26,648
Partial excision of bone	6,385	210	147	1,345	2,687	1,996
Reduction of fracture	11,830	985	527	2,604	2,855	4,859
Open reduction of fracture with internal fixation	8,656	373	394	2,175	2,347	3,367
Excision or destruction of intervertebral disc	5,343	9	41	1,435	2,484	1,374
Total hip replacement	5,108	2	6	221	1,924	2,955
Total knee replacement	11,680	1	4	189	4,528	6,958
Operations on the integumentary system	25,734	1,978	955	7,317	8,546	6,938
Debridement of wound, infection, or burn	6,516	356	221	1,838	2,383	1,718
Miscellaneous diagnostic and therapeutic procedures	197,283	34,826	3,274	32,657	51,023	75,503
Computerized axial tomography	5,306	116	72	899	1,538	2,681
Arterio- & angiocardiology using contrast material	43,737	202	128	3,315	16,628	23,464
Diagnostic ultrasound	9,348	353	124	1,358	2,991	4,522
Respiratory therapy	25,618	3,966	417	3,680	7,490	10,065
Insertion of endotracheal tube	15,704	2,743	227	2,378	4,498	5,858
Injection/infusion of cancer chemotherapy substance	3,536	784	165	676	1,134	777

**TABLE 4B-2
NUMBER OF PROCEURES BY CATEGORY AND GENDER, ARIZONA, 2008**

Procedures by category	Total	Patient's gender		
		Female	Male	Unknown
All procedures	1,132,831	648,585	484,212	34
Operations on the nervous system	26,272	15,436	10,835	1
Spinal tap	8,998	4,532	4,465	1
Operations on the endocrine system	2,532	1,782	750	0
Operations on the eye	901	305	594	2
Operations on the ear	520	179	341	0
Operations on the nose, mouth, and pharynx	4,014	1,563	2,449	2
Operations on the respiratory system	22,959	10,482	12,476	1
Bronchoscopy with or without biopsy	1,532	692	840	0
Operations on the cardiovascular system	101,034	45,672	55,361	1
Removal of coronary artery obstruction	15,319	5,333	9,986	0
Coronary artery bypass graft	5,427	1,534	3,893	0
Cardiac catheterization	31,292	12,603	18,689	0
Insertion, replacement, removal, of pacemaker leads	5,544	2,488	3,056	0
Hemodialysis	15,160	7,193	7,967	0
Operations on the hemic and lymphatic system	7,385	3,796	3,588	1
Operations on the digestive system	81,194	45,836	35,356	2
Gastric band	1,301	989	311	1
Endoscopy of small intestine with or without biopsy	19,673	10,577	9,096	0
Endoscopy of large intestine with or without biopsy	9,777	5,684	4,093	0
Partial excision of large intestine	4,581	2,398	2,182	1
Appendectomy, excluding incidental	8,609	3,989	4,620	0
Cholecystectomy	12,322	8,328	3,994	0
Lysis of peritoneal adhesions	7,992	5,959	2,032	1
Operations on the urinary system	16,745	9,101	7,644	0
Cystoscopy with or without biopsy	4,179	2,304	1,875	0
Operations on the male genital organs	14,509	0	14,508	0
Prostatectomy	3,411	0	3,411	0

TABLE 4B-2 (continued)
 NUMBER OF PROCEDURES BY CATEGORY AND GENDER, ARIZONA, 2008

Procedures by category	Total	Patient's gender		
		Female	Male	Unknown
Operations on the female genital organs	22,433	22,433	0	0
Oophorectomy and salpingo-oophorectomy	6,594	6,594	0	0
Bilateral destruction/occlusion of fallopian tubes	5,600	5,600	0	0
Hysterectomy	9,551	9,551	0	0
Obstetrical procedures	94,546	94,546	0	0
Episiotomy with or w/o forceps or vacuum extraction	9,763	9,763	0	0
Artificial rupture of membranes	26,222	26,222	0	0
Cesarean section	27,182	27,182	0	0
Repair of current obstetric laceration	30,252	30,252	0	0
Operations on the musculoskeletal system	59,147	30,634	28,512	1
Partial excision of bone	6,385	2,933	3,452	0
Reduction of fracture	11,830	6,272	5,558	0
Open reduction of fracture with internal fixation	8,656	4,571	4,085	0
Excision or destruction of intervertebral disc	5,343	2,673	2,670	0
Total hip replacement	5,108	2,878	2,230	0
Total knee replacement	11,680	7,016	4,664	0
Operations on the integumentary system	25,734	12,641	13,092	1
Debridement of wound, infection, or burn	6,516	2,601	3,915	0
Miscellaneous diagnostic and therapeutic procedures	197,283	102,639	94,635	9
Computerized axial tomography	5,306	3,020	2,286	0
Arterio- & angiocardiology using contrast material	43,737	18,837	24,900	0
Diagnostic ultrasound	9,348	4,470	4,877	1
Respiratory therapy	25,618	11,484	14,131	3
Insertion of endotracheal tube	15,704	7,030	8,673	1
Injection/infusion of cancer chemotherapy substance	3,536	1,642	1,894	0

TABLE 4B-3
NUMBER OF PROCEDURES BY CATEGORY AND RACE/ETHNICITY, ARIZONA, 2008

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	1,132,831	39,361	17,422	42,354	232,565	779,533	85	21,511
Operations on the nervous system	26,272	989	365	1,085	6,874	16,304	4	651
Spinal tap	8,998	390	146	514	2,733	4,989	0	226
Operations on the endocrine system	2,532	49	58	115	310	1,930	0	70
Operations on the eye	901	80	11	32	175	583	0	20
Operations on the ear	520	55	6	11	119	312	0	17
Operations on the nose, mouth, and pharynx	4,014	188	60	204	827	2,641	1	93
Operations on the respiratory system	22,959	880	327	918	3,194	17,130	1	509
Bronchoscopy with or without biopsy	1,532	51	16	88	214	1,113	0	50
Operations on the cardiovascular system	101,034	3,437	1,023	4,095	14,466	76,168	8	1,837
Removal of coronary artery obstruction	15,319	224	166	369	1,881	12,414	0	265
Coronary artery bypass graft	5,427	88	87	116	618	4,404	0	114
Cardiac catheterization	31,292	626	363	1,116	4,106	24,573	4	504
Insertion, replacement, removal, of pacemaker leads	5,544	91	38	107	480	4,750	1	77
Hemodialysis	15,160	1,840	241	1,247	4,352	7,221	0	259
Operations on the hemic and lymphatic system	7,385	139	97	232	942	5,825	1	149
Operations on the digestive system	81,194	2,913	1,086	2,923	16,625	56,385	6	1,256
Gastric band	1,301	10	4	51	170	1,047	0	19
Endoscopy of small intestine with or without biopsy	19,673	826	259	886	3,344	14,100	2	256
Endoscopy of large intestine with or without biopsy	9,777	308	117	373	1,447	7,399	0	133
Partial excision of large intestine	4,581	68	42	126	513	3,777	2	53
Appendectomy, excluding incidental	8,609	219	162	217	2,790	5,055	1	165
Cholecystectomy	12,322	595	160	305	3,552	7,544	1	165
Lysis of peritoneal adhesions	7,992	179	128	364	1,590	5,628	0	103
Operations on the urinary system	16,745	440	178	447	2,636	12,760	2	282
Cystoscopy with or without biopsy	4,179	74	39	119	615	3,259	1	72
Operations on the male genital organs	14,509	171	427	477	1,910	11,257	1	266
Prostatectomy	3,411	24	29	84	348	2,852	0	74

TABLE 4B-3 (continued)
 NUMBER OF PROCEDURES BY CATEGORY AND RACE/ETHNICITY, ARIZONA, 2008

Procedures by category	Total	Race/ethnicity							Other	Refused
		American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	White non-Hispanic				
Operations on the female genital organs	22,433	564	441	1,065	6,419	13,580		3	361	
Oophorectomy and salpingo-oophorectomy	6,594	107	123	309	1,174	4,779		2	100	
Bilateral destruction/occlusion of fallopian tubes	5,600	233	124	213	2,516	2,410		1	103	
Hysterectomy	9,551	124	169	503	2,033	6,584		2	136	
Obstetrical procedures	94,546	3,278	2,637	3,682	39,534	43,288		8	2,119	
Episiotomy with or w/o forceps or vacuum extraction	9,763	194	408	227	3,019	5,695		2	218	
Artificial rupture of membranes	26,222	897	694	1,010	10,153	12,934		3	531	
Cesarean section	27,182	971	867	1,192	10,558	13,017		2	575	
Repair of current obstetric laceration	30,252	905	989	831	12,533	14,362		2	630	
Operations on the musculoskeletal system	59,147	2,030	423	1,663	7,379	46,644		4	1,004	
Partial excision of bone	6,385	290	48	193	808	4,939		0	107	
Reduction of fracture	11,830	540	108	258	1,849	8,893		0	182	
Open reduction of fracture with internal fixation	8,656	405	79	188	1,299	6,546		0	139	
Excision or destruction of intervertebral disc	5,343	104	39	105	541	4,455		1	98	
Total hip replacement	5,108	55	21	106	217	4,623		1	85	
Total knee replacement	11,680	160	63	262	1,110	9,905		2	178	
Operations on the integumentary system	25,734	1,588	262	1,152	5,087	17,210		1	434	
Debridement of wound, infection, or burn	6,516	531	50	286	1,369	4,179		0	101	
Miscellaneous diagnostic and therapeutic procedures	197,283	7,299	3,369	7,850	39,972	135,197		18	3,578	
Computerized axial tomography	5,306	82	108	156	759	4,120		0	81	
Arterio- & angiocardiology using contrast material	43,737	948	475	1,574	5,550	34,384		4	802	
Diagnostic ultrasound	9,348	256	140	351	1,452	6,985		1	163	
Respiratory therapy	25,618	1,457	350	1,130	4,392	17,464		4	821	
Insertion of endotracheal tube	15,704	803	221	686	2,956	10,631		1	406	
Injection/infusion of cancer chemotherapy substance	3,536	89	78	139	769	2,378		0	83	

TABLE 4B-4
NUMBER OF PROCEDURES BY CATEGORY AND EXPECTED SOURCE OF PAYMENT, ARIZONA, 2008

Procedures by category	Total	Self	Private insurance (indemnity, HMO, PPO)	AHCCCS/Medicaid	Medicare	Other
All procedures	1,132,831	25,635	359,341	270,465	322,354	155,036
Operations on the nervous system	26,272	665	8,275	9,074	4,886	3,372
Spinal tap	8,998	298	2,786	3,665	1,403	846
Operations on the endocrine system	2,532	24	1,258	316	603	331
Operations on the eye	901	87	225	259	181	149
Operations on the ear	520	27	166	179	67	81
Operations on the nose, mouth, and pharynx	4,014	224	1,401	1,050	724	615
Operations on the respiratory system	22,959	468	5,474	4,121	9,097	3,799
Bronchoscopy with or without biopsy	1,532	19	355	286	597	275
Operations on the cardiovascular system	101,034	1,763	24,991	16,304	40,997	16,979
Removal of coronary artery obstruction	15,319	259	4,494	1,540	6,441	2,585
Coronary artery bypass graft	5,427	49	1,553	499	2,449	877
Cardiac catheterization	31,292	633	9,028	3,974	12,417	5,240
Insertion, replacement, removal, of pacemaker leads	5,544	38	806	294	3,304	1,102
Hemodialysis	15,160	85	1,678	2,202	8,969	2,226
Operations on the hemic and lymphatic system	7,385	105	2,805	1,051	2,420	1,004
Operations on the digestive system	81,194	2,921	27,343	17,361	22,522	11,047
Gastric band	1,301	199	903	16	90	93
Endoscopy of small intestine with or without biopsy	19,673	513	4,597	4,011	7,235	3,317
Endoscopy of large intestine with or without biopsy	9,777	197	2,463	1,599	3,774	1,744
Partial excision of large intestine	4,581	62	1,477	507	1,803	732
Appendectomy, excluding incidental	8,609	603	4,268	2,534	518	686
Cholecystectomy	12,322	674	4,487	3,334	2,470	1,357
Lysis of peritoneal adhesions	7,992	162	3,296	1,655	1,906	973
Operations on the urinary system	16,745	366	5,786	2,608	5,439	2,546
Cystoscopy with or without biopsy	4,179	77	1,518	625	1,295	664
Operations on the male genital organs	14,509	304	9,377	1,735	1,779	1,314
Prostatectomy	3,411	24	1,201	106	1,517	563

TABLE 4B-4 (continued)
 NUMBER OF PROCEDURES BY CATEGORY AND EXPECTED SOURCE OF PAYMENT, ARIZONA, 2008

Procedures by category	Total	Self	Private insurance (indemnity, HMO, PPO)	AHCCCS/Medicaid	Medicare	Other
Operations on the female genital organs	22,433	459	11,475	6,978	1,772	1,749
Oophorectomy and salpingo-oophorectomy	6,594	102	3,951	1,125	764	652
Bilateral destruction/occlusion of fallopian tubes	5,600	86	2,128	3,127	29	230
Hysterectomy	9,551	113	6,088	1,751	774	825
Obstetrical procedures	94,546	2,342	37,634	50,367	238	3,965
Episiotomy with or w/o forceps or vacuum extraction	9,763	255	4,800	4,339	12	357
Artificial rupture of membranes	26,222	594	11,053	13,381	66	1,128
Cesarean section	27,182	552	12,004	13,342	88	1,196
Repair of current obstetric laceration	30,252	834	13,438	14,655	51	1,274
Operations on the musculoskeletal system	59,147	1,403	17,642	7,745	21,269	11,088
Partial excision of bone	6,385	105	2,236	983	1,827	1,234
Reduction of fracture	11,830	600	3,180	2,102	3,761	2,187
Open reduction of fracture with internal fixation	8,656	454	2,449	1,496	2,625	1,632
Excision or destruction of intervertebral disc	5,343	59	2,584	565	1,254	881
Total hip replacement	5,108	17	1,670	286	2,261	874
Total knee replacement	11,680	20	3,649	596	5,201	2,214
Operations on the integumentary system	25,734	1,342	7,260	6,720	6,483	3,929
Debridement of wound, infection, or burn	6,516	356	1,624	1,783	1,707	1,046
Miscellaneous diagnostic and therapeutic procedures	197,283	4,155	55,793	47,783	61,703	27,849
Computerized axial tomography	5,306	91	1,197	847	2,122	1,049
Arterio- & angiocardiology using contrast material	43,737	806	12,049	5,379	18,285	7,218
Diagnostic ultrasound	9,348	159	2,528	1,629	3,454	1,578
Respiratory therapy	25,618	677	5,666	6,658	8,585	4,032
Insertion of endotracheal tube	15,704	506	3,441	4,362	5,021	2,374
Injection/infusion of cancer chemotherapy substance	3,536	43	1,381	926	683	503



4C.

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

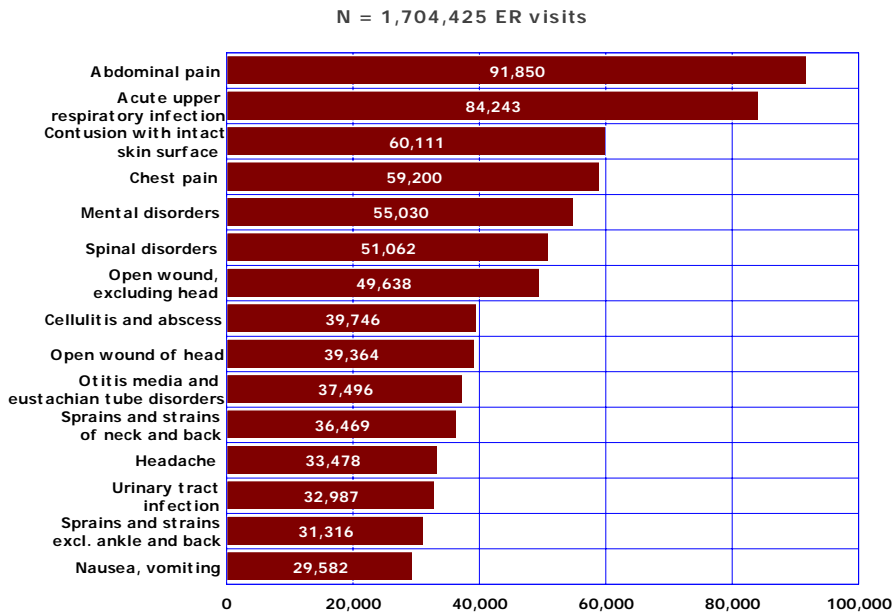
The data in this section are focused on ambulatory care visits to emergency rooms of non-Federal, short-stay hospitals. The emergency room (ER) and the inpatient hospitalization data are mutually exclusive. The ER data include only those who were not admitted as inpatients.

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, 2008



During 2008, more than 1.7 million visits were made by Arizona residents to hospital emergency rooms (ER), about 26 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 one percent from 1,680,473 in 2007.

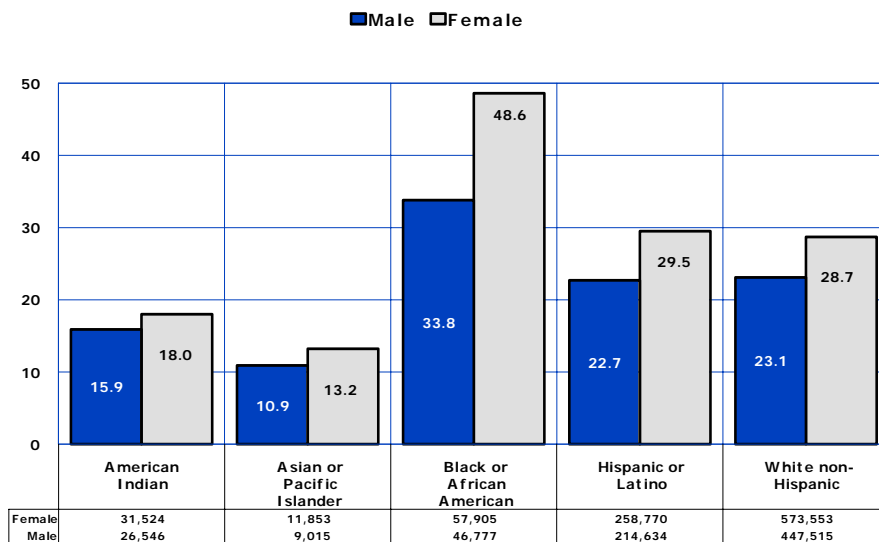
In 2008, *abdominal pain, acute upper respiratory infection, contusion with intact skin surface, chest pain, mental disorders, and spinal disorders* were the leading diagnostic categories, accounting for approximately one-fourth (23.6 percent) of all visits (**Figure 4C-1, Table 4C-2**).

Both *headache* (33,478 visits) and *urinary tract infection* (32,987) 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, 2008



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

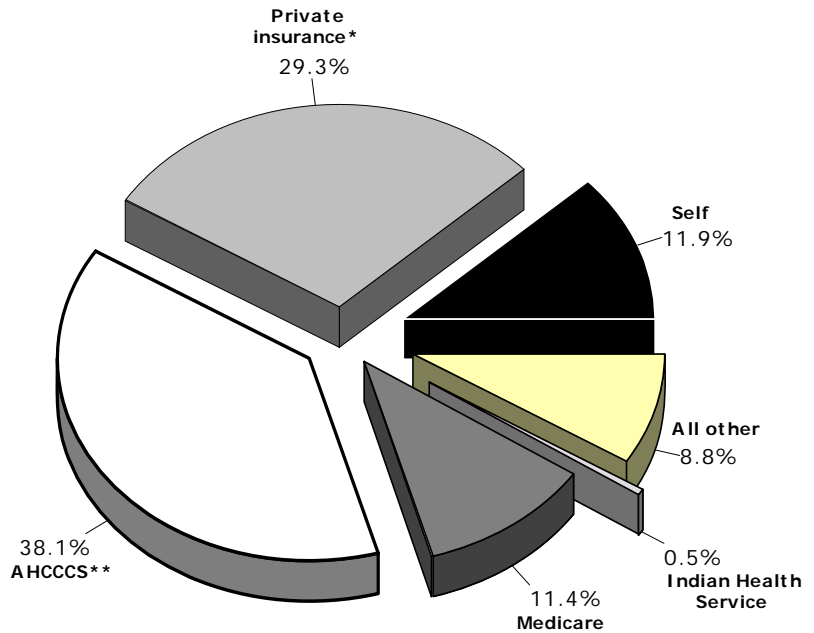
In 2008, the ER utilization rates (the number of ER visits per 100 persons) for Black or African American females and males were the highest rates among the race-by-gender groups (**Figure 4C-2**).

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.

Figure 4C-3
Emergency Room Visits by Payer, Arizona Residents, 2008

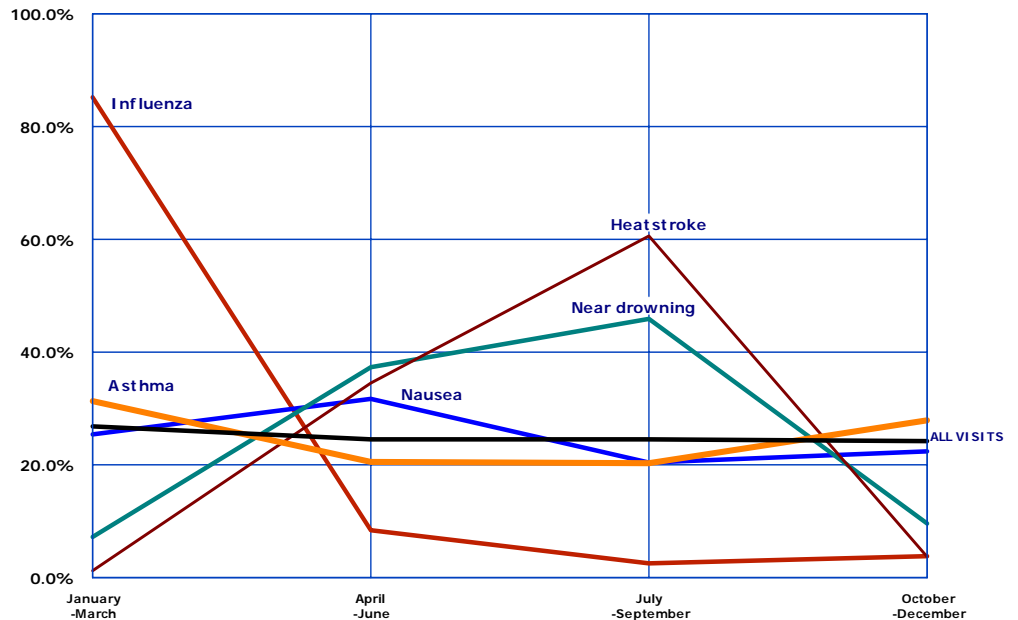
The Arizona Health Care Cost Containment System (AHCCCS, the State's Medicaid program) was the most frequently recorded expected source of payment, accounting for 38.1 percent of ER visits (**Figure 4C-3**). Private insurance was the second most frequent payer (29.3 percent of ER visits), followed by self-pay patients (11.9 percent), and Medicare (11.4 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, 2008

Unlike hospital births (**Figure 1B-14**) and hospital inpatient admissions excluding newborn infants (**Figure 4A-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* (60.6 percent of all visits were made in the 3rd quarter), *near drowning* (2nd and 3rd quarter accounted for 83.2 percent of annual visits), *asthma* (visits were lowest in the 3rd quarter), *nausea* (the volume of visits was highest in the second and fourth quarter), and *influenza* (visits were highest in the first quarter; **Figure 4C-4**).



Note: Percent distribution of visits to the emergency room during 2008 by calendar quarter.

TABLE 4C-1
 NUMBER OF EMERGENCY ROOM VISITS BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2008

Category of first-listed diagnosis	All Ages	Age group						Unknown
		<15	15-19	20-44	45-64	65+		
Total	1,704,425	393,046	126,101	664,498	318,956	201,810	14	
Infectious and parasitic diseases	40,363	20,827	3,170	10,846	3,476	2,044	0	
Neoplasms	1,936	108	48	569	667	544	0	
Endocrine nutritional metabolic and immunity diseases	25,983	3,414	1,151	8,487	7,189	5,742	0	
Diabetes	8,983	292	285	3,004	3,213	2,189	0	
Mental disorders	55,030	2,031	5,333	28,692	15,471	3,499	4	
Psychoses	11,614	323	800	5,951	3,505	1,035	0	
Alcoholic psychoses	1,474	1	5	812	617	39	0	
Drug psychoses	1,985	11	111	1,096	657	110	0	
Schizophrenic disorders	1,649	8	57	1,057	490	37	0	
Manic-depressive disorders	3,930	220	476	2,015	1,094	125	0	
Neurotic disorders	43,397	1,708	4,530	22,730	11,962	2,463	4	
Anxiety states	10,989	267	871	6,198	2,577	1,076	0	
Depression	7,849	297	917	3,966	2,207	462	0	
Drug dependence	739	2	81	476	174	6	0	
Nondependent abuse of drugs	13,365	243	1,654	7,200	3,903	361	4	
Alcohol dependence syndrome	3,649	6	76	1,647	1,800	120	0	
Diseases of the nervous system	108,397	41,923	4,983	37,474	17,773	6,244	0	
Diseases of the circulatory system	36,794	455	474	7,214	11,917	16,733	1	
Diseases of the respiratory system	190,231	82,584	12,170	56,179	24,761	14,537	0	
Acute bronchitis and bronchiolitis	25,360	8,912	1,087	8,511	4,391	2,459	0	
Pneumonia	19,146	8,967	616	4,062	2,995	2,506	0	
Chronic bronchitis	4,375	11	10	291	1,850	2,213	0	
Asthma	24,670	10,959	1,787	7,631	3,233	1,060	0	
Diseases of the digestive system	97,839	19,035	5,646	43,420	18,494	11,244	0	
Diseases of the genitourinary system	101,357	9,928	9,940	51,744	17,788	11,957	0	
Diseases of the skin and subcutaneous tissue	67,701	15,713	5,374	28,622	12,228	5,764	0	
Diseases of the musculoskeletal system	109,894	6,151	4,988	49,410	31,990	17,355	0	
Symptoms signs and ill-defined conditions	372,867	76,194	22,855	141,362	77,952	54,501	3	
Injury and poisoning	400,389	101,233	38,024	144,959	69,987	46,180	6	
Fractures, all sites	53,511	14,385	4,739	15,228	10,411	8,748	0	
Sprains	82,058	9,308	8,704	41,118	16,896	6,032	0	
Intracranial	8,565	1,981	1,337	2,905	1,352	990	0	
Open wounds	89,002	28,732	7,825	30,067	12,728	9,647	3	
Superficial	18,684	6,334	1,611	6,131	2,878	1,729	1	
Contusions	60,111	13,946	6,113	20,799	10,560	8,692	1	
Foreign bodies	8,544	3,837	380	2,269	1,342	716	0	
Burns	2,945	870	282	1,213	452	128	0	
Trauma complications and unspecified injuries	28,223	11,024	2,587	7,550	3,817	3,245	0	
Poisonings	16,328	3,832	2,033	6,552	2,989	922	0	
Surgical and medical complications	9,721	810	306	2,565	2,667	3,373	0	

**TABLE 4C-2
NUMBER OF EMERGENCY ROOM VISITS FOR THE LEADING DIAGNOSIS GROUPS * AND AGE GROUP, ARIZONA, 2008**

Primary diagnosis group	ICD-9-CM code(s)	All Ages	Age group					
			<15	15-19	20-44	45-64	65+	Unknown
Total, all visits		1,704,425	393,046	126,101	664,498	318,956	201,810	14
Abdominal pain	789.0	91,850	11,624	8,576	46,439	17,664	7,547	0
Acute upper respiratory infection, excluding pharyngitis	460-461, 463-466	84,243	46,623	4,164	21,064	8,302	4,090	0
Contusion with intact skin surface	920-924	60,111	13,946	6,113	20,799	10,560	8,692	1
Chest pain	786.5	59,200	1,847	2,988	26,187	18,761	9,417	0
Mental disorders	290-319	55,030	2,031	5,333	28,692	15,471	3,499	4
Spinal disorders	720-724	51,062	1,258	1,963	25,912	15,134	6,795	0
Open wound, excluding head	874-897	49,638	9,610	5,059	20,876	8,746	5,347	0
Cellulitis and abscess	681-682	39,746	6,204	2,895	18,775	8,218	3,654	0
Open wound of head	870-873	39,364	19,122	2,766	9,191	3,982	4,300	3
Otitis media and eustachian tube disorders	381-382	37,496	30,726	1,128	4,327	1,022	293	0
Sprains and strains of neck and back	846, 847	36,469	1,714	2,956	20,630	8,522	2,647	0
Headache	784.0	33,478	2,898	2,406	18,012	7,587	2,575	0
Urinary tract infection, site not specified	599.0	32,987	5,652	3,098	12,634	5,318	6,285	0
Sprains and strains, excluding ankle and back	840-844, 845.1, 848	31,316	5,205	3,319	13,757	6,347	2,688	0
Nausea, vomiting	787.0	29,582	12,035	1,661	9,113	3,794	2,979	0
Rheumatism, excluding back	725-729	29,192	2,556	1,277	11,676	8,552	5,131	0
Fever	780.6	28,682	24,073	670	2,260	954	725	0
Asthma	493	24,670	10,959	1,787	7,631	3,233	1,060	0
Acute pharyngitis	462.0	23,496	8,680	3,420	9,297	1,555	544	0
Pneumonia	480-486	19,146	8,967	616	4,062	2,995	2,506	0
Gastroenteritis and colitis	558.0	19,071	7,770	1,133	6,126	2,559	1,483	0
Chronic and unspecified bronchitis	490-491	18,831	2,589	770	6,450	5,094	3,928	0
Superficial injuries	910-919	18,684	6,334	1,611	6,131	2,878	1,729	1
Migraine	346	15,617	410	704	10,182	3,999	322	0
Unspecified viral and chlamydial infection	79.9	11,965	7,169	695	2,901	867	333	0
Heart disease, excluding ischemic	391-392.0, 393-398, 402, 404, 415-416, 420-429	11,454	268	194	1,752	3,217	6,022	1

*Based on first-listed diagnosis



4D.

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

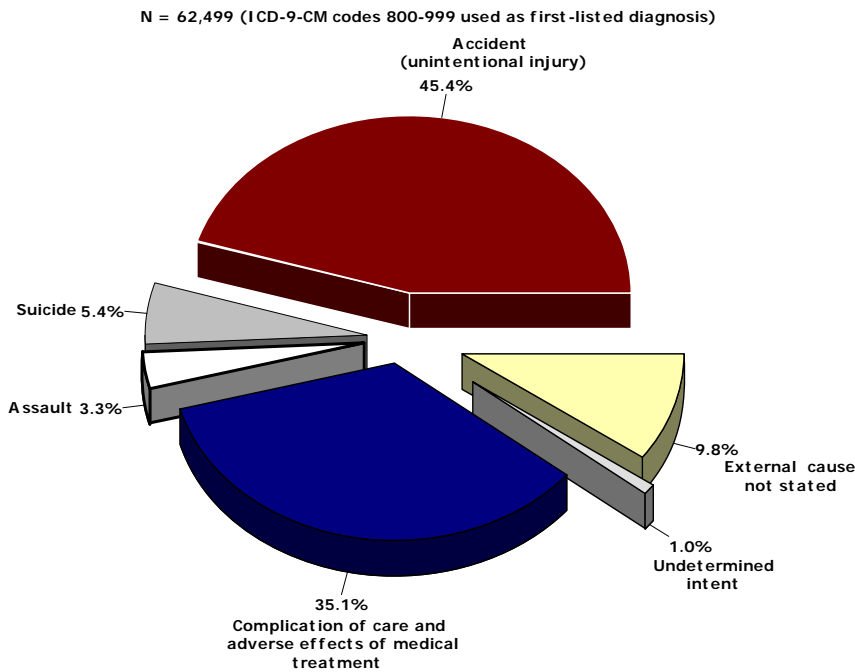
Injury hospitalizations and injury-related emergency room visits are defined here through the range of ICD-9-CM codes 800-999 used as the first-listed diagnosis. In addition, the supplementary classification of external causes of injury and poisoning (ICD-9-CM codes E800-E999) is used to permit the classification 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, approximately one in ten inpatient hospitalizations for injury (and one in forty emergency room visits) did not have an external cause code listed in the first position on the discharge record (following the revised requirements up to 6 "E" codes can now be reported by hospitals). On the other hand, some of the non-injury first-listed diagnoses may also have an external cause of injury code. The reader is advised that the number of suicides, accidents, etc. shown **Table 4D-1** and **Table 4D-2** only reflects those where the principal diagnosis was injury-related.

Note: comparative U.S. data can be found in the publications of the National Center for Health Statistics, such as National Trends in Injury Hospitalizations 1979 – 2001: <http://www.cdc.gov/nchs/products/pubs/pubd/other/miscpub/miscpub.htm#Injury> or Emergency Department Visit Injury Data: http://www.cdc.gov/nchs/about/otheract/injury/injury_emergency.htm

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, 2008

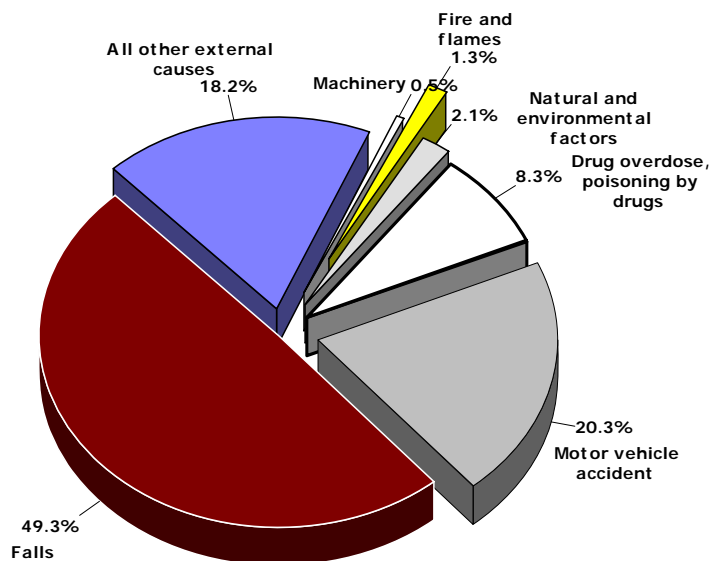


In 2008, there were 62,499 inpatient hospitalizations with injury as the principal diagnosis. *Unintentional injuries in accidents* accounted for 45.4 percent of all inpatient discharges with injury diagnosis (**Figure 4D-1, Table 4D-1**). Approximately 22,000 inpatient hospitalizations were for *complications of medical care and adverse effects of medical treatment* (including adverse drug reactions and complications from surgical and medical procedures) and represented 35.1 percent of all injury- or poisoning-related inpatient hospitalizations. *Self-inflicted injuries in suicide* resulted in 3,379 inpatient hospitalizations (5.4 percent). *Assault* accounted for 2,050 inpatient hospitalizations (3.3 percent of all hospital discharges for injury).

The first-listed external cause was not provided for 9.8 percent of inpatient discharges for injury.

Figure 4D-2
Percent Distribution of Inpatient Discharges by Mechanism of Unintentional Injury,
Arizona Residents, 2008

N = 28,338 (First-listed external cause codes E800-E869, E880 - E929)



Accidental falls (49.3 percent, **Figure 4D-2, Table 4D-1**), *motor vehicle accidents* (20.3 percent), and *drug overdoses* (8.3 percent) accounted for the largest proportions of inpatient hospitalizations for unintentional injury in 2008.

Among the natural and environmental factors as external causes of inpatient hospitalization for unintentional injury, the three most frequent were *poisoning and toxic reaction caused by venomous animals* (318 inpatient discharges), *other injury causes by animals* (754 inpatient discharges), and *exposure to excessive natural heat* (272 inpatient discharges). *Exposure to excessive natural cold* accounted for 7.8 percent (46 out of 593) of inpatient hospitalizations for 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, 2008

In 2008, there were 400,389 injury-related emergency room visits among Arizona residents, 6.4 times as many as inpatient hospitalizations for injury. *Unintentional injuries or accidents* accounted for nine out of ten (351,557 or 87.8 percent) of all injury-related emergency room visits (**Figure 4D-3, Table 4D-2**). The external cause of injury was classified as *assault* for 18,107 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 (3.1 percent vs. 1.5 percent, respectively, **Figure 4D-3, Table 4D-2**).

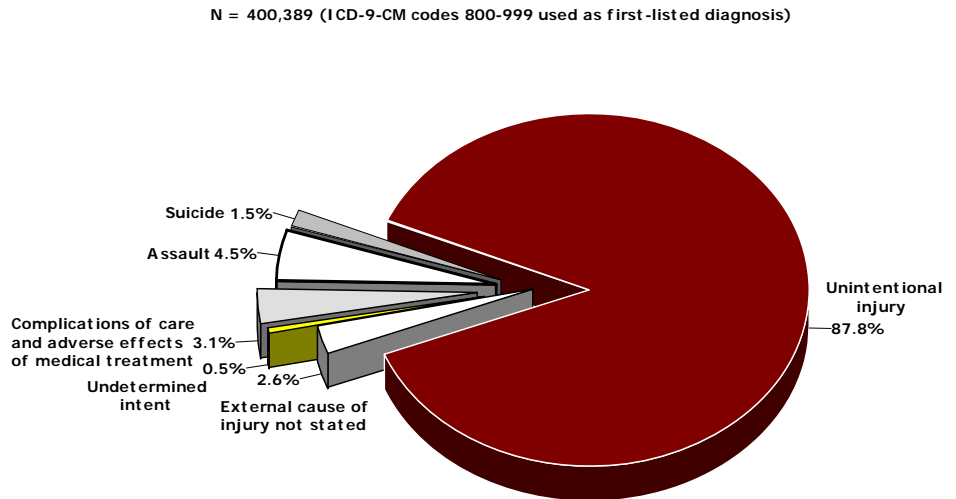
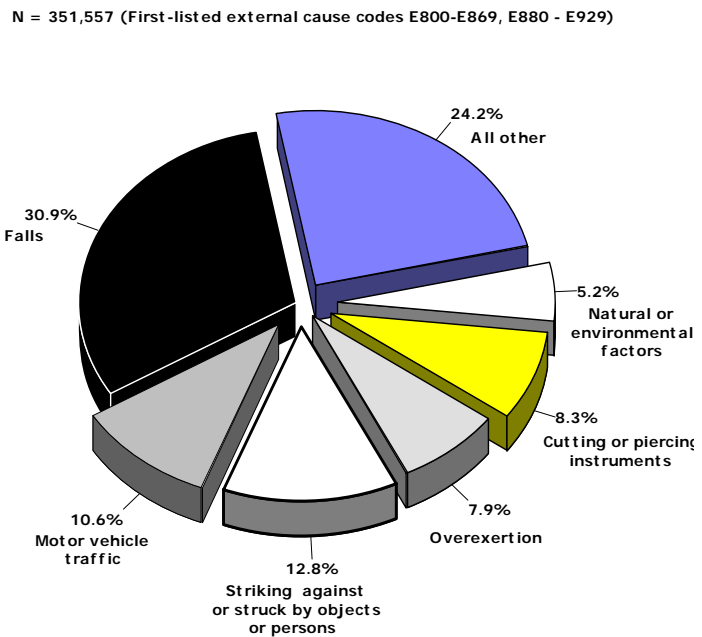


Figure 4D-4
Percent Distribution of Injury-related Emergency Room Visits by Mechanism of Unintentional Injury, Arizona Residents, 2008

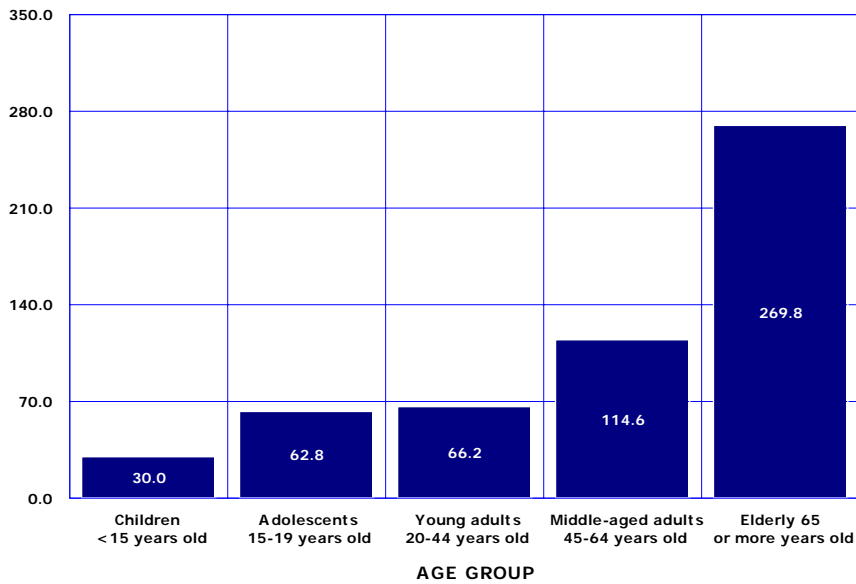
Accidental falls (108,645 ER visits, **Table 4D-2**), *striking against or struck by objects or persons* (44,807), and *motor vehicle traffic accidents* (37,365) were the three most frequent mechanisms of unintentional injuries treated in emergency rooms (**Figure 4D-4, Table 4D-2**).

Overexertion (27,899 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* (8,739), and *natural and environmental factors* (18,332 **Table 4D-2**).



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

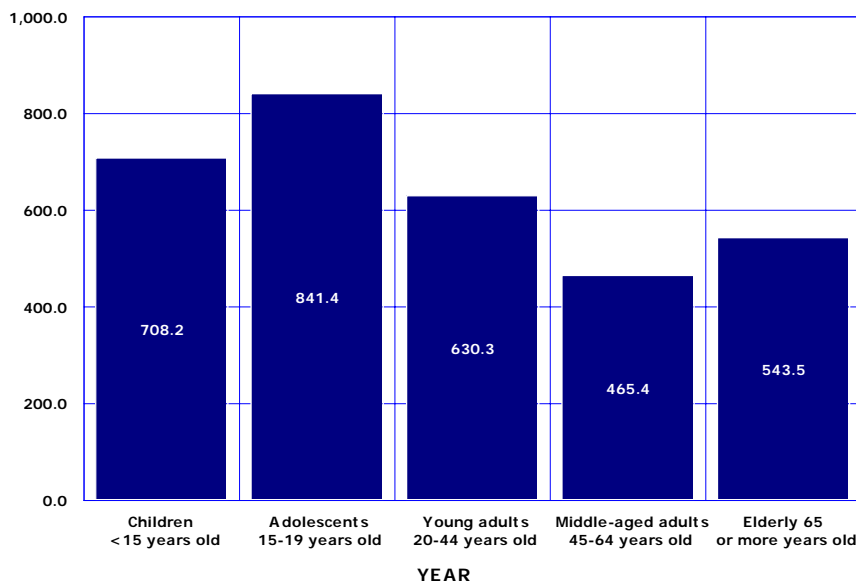
Figure 4D-5
Rates* for Injury-related Inpatient Discharges by Age Group,
Arizona Residents, 2008



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 269.8 per 10,000 elderly Arizonans 65+ was 9 times greater than the rate of 30.0/10,000 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, 2008



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 841.4 ER visits per 10,000 adolescents 15-19 years old was 1.8 times greater than the rate of 465.4 /10,000 among middle-aged Arizonans 45-64 years old.

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

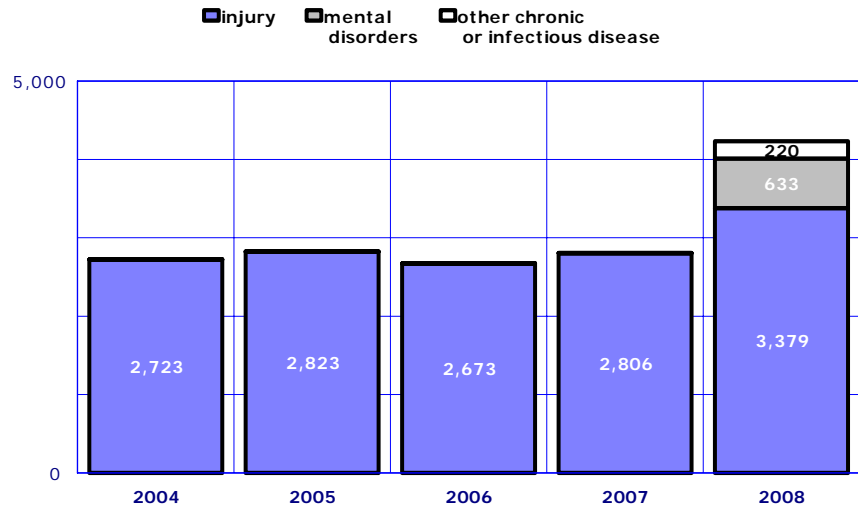
4D. INJURY-RELATED INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS BY INTENT AND MECHANISM OF INJURY

In 2008, 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. *Injury or poisoning* was the principal diagnosis on 3,379 inpatient discharge records, which also included the E codes for suicide (E950-E959). *Mental disorders* were identified as the principal diagnosis on the additional 633 suicide-related records. For the additional 220 inpatient discharges mentioning suicide attempt, the principal diagnosis was classified as either *chronic or infectious disease*.

From 2007 to 2008 there was a 20.4 percent increase in suicide-related inpatient discharges where the principal diagnosis was an injury.

From among the 4,232 inpatient discharges related to a suicide attempt in 2008, 1,639 or 38.7 percent were transferred to a psychiatric facility.

Figure 4D-7
Suicide-related Inpatient Discharges by Principal Diagnosis and Year, Arizona Residents, 2008

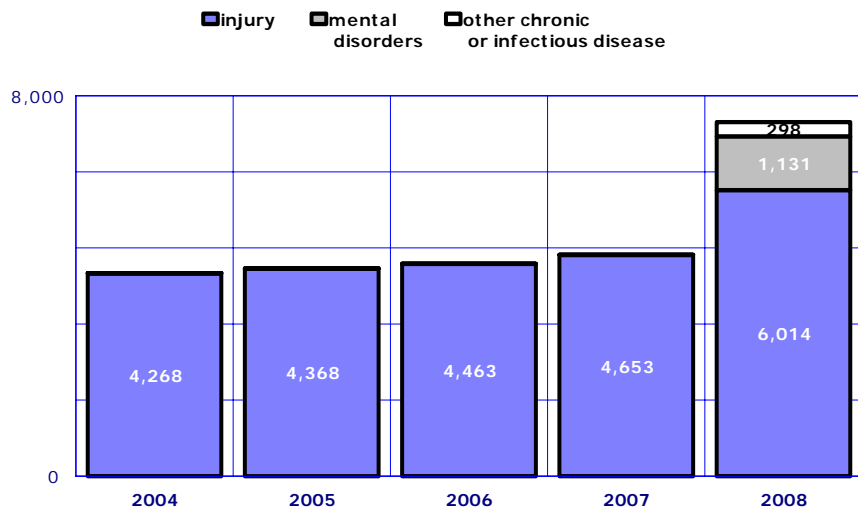


Injury or poisoning was the principal diagnosis on 6,014 ER discharge records, which also included the E codes for suicide (E950-E959). *Mental disorders* were identified as the principal diagnosis on the additional 1,131 suicide-related records. For the additional 298 ER discharges mentioning suicide attempt, the principal diagnosis was classified as either *chronic or infectious disease*.

From 2007 to 2008 there was a 29.2 percent increase in suicide-related emergency room visits where the principal diagnosis was an injury.

From among 7,444 suicide attempt-related ER visits in 2008, 1,854 or 24.9 percent of the patients were transferred to a psychiatric facility.

Figure 4D-8
Suicide-related Emergency Room Visits by Principal Diagnosis and Year, Arizona Residents, 2008



**TABLE 4D-1
NUMBER OF INJURY-RELATED INPATIENT DISCHARGES BY INTENT AND MECHANISM FOR SELECTED EXTERNAL CAUSES
BY GENDER, AGE GROUP AND RACE/ETHNICITY, ARIZONA, 2008**

	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
HOSPITAL DISCHARGES FOR INJURY¹	62,499	30,634	31,859	4,285	2,838	15,228	17,230	22,917	3,303	577	2,248	9,990	45,272	3	1,106
EXTERNAL CAUSE OF INJURY STATED AS:²	56,357	28,217	28,136	3,333	2,325	13,594	15,845	21,259	2,650	521	2,074	8,892	41,289	3	928
UNINTENTIONAL INJURY OR ACCIDENT³	28,338	14,572	13,765	2,308	1,297	6,202	6,466	12,064	1,150	274	763	4,505	21,184	1	461
Fall	13,958	8,886	5,072	766	165	1,159	2,463	9,405	379	135	215	1,698	11,341	1	189
Motor vehicle accident	5,745	2,095	3,649	465	669	2,511	1,423	676	373	69	202	1,045	3,909	0	147
Accidental poisoning by drugs, medicinal substances gases and vapors	2,363	1,268	1,095	152	96	715	925	475	82	21	115	348	1,773	0	24
Natural and environmental factors	593	223	370	125	17	165	188	98	32	5	24	150	375	0	7
Fire and flames	382	113	269	98	26	136	86	36	30	12	29	117	193	0	1
Machinery	151	8	143	2	6	79	50	14	6	3	2	56	80	0	4
SUICIDE⁴	3,379	1,950	1,428	60	387	1,842	965	125	147	36	139	529	2,463	0	65
ASSAULT⁵	2,050	296	1,752	96	275	1,272	359	48	371	21	218	587	803	0	50
INJURIES OF UNDETERMINED INTENT⁶	603	286	317	45	40	248	213	57	27	6	23	103	430	0	14
COMPLICATIONS OF CARE AND ADVERSE EFFECTS OF MEDICAL TREATMENT⁷	21,943	11,112	10,831	824	318	4,009	7,829	8,963	951	184	929	3,157	16,383	2	337
Misadventures to patients	275	174	101	7	0	55	86	127	8	6	8	39	211	1	2
Surgical and medical procedures as the cause of adverse reaction	20,338	10,192	10,146	778	303	3,774	7,376	8,107	906	161	867	2,959	15,132	1	312
Drugs causing adverse effects	1,330	746	584	39	15	180	367	729	37	17	54	159	1,040	0	23
External cause of injury not stated⁸	6,141	2,416	3,723	952	513	1,634	1,384	1,658	653	56	174	1,098	3,982	0	178

¹First-listed diagnosis uses ICD-9-CM codes 800-999.

²First-listed external cause codes E800-E999.

³First-listed external cause codes E800-E869, E880-E929.

⁴First-listed external cause codes E950-E959.

⁵First-listed external cause codes E960-E969.

⁶First-listed external cause codes E890-E989.

⁷First-listed external cause codes E870-E879, E930-E949.

⁸Injury hospitalization did not have an external cause code in the 1st E-code field.

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

**TABLE 4D-2
NUMBER OF INJURY-RELATED EMERGENCY ROOM VISITS BY INTENT AND MECHANISM FOR SELECTED EXTERNAL CAUSES
BY GENDER, AGE GROUP AND RACE/ETHNICITY, ARIZONA, 2008**

	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 or Alaska Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	White non-Hispanic	Other	Refused
EMERGENCY ROOM VISITS FOR INJURY ¹	400,389	185,540	214,844	101,233	38,024	144,959	69,987	46,180	14,296	4,819	19,596	98,970	256,297	155	6,256
EXTERNAL CAUSE OF INJURY STATED AS: ²	390,798	181,015	209,778	99,625	37,310	140,921	68,001	44,937	13,798	4,690	18,989	96,612	250,413	153	6,143
UNINTENTIONAL INJURY OR ACCIDENT ³	351,557	164,179	187,373	96,543	32,046	121,269	60,577	41,119	11,023	4,300	16,451	87,025	227,065	140	5,553
Fall	108,645	57,987	50,657	36,975	5,562	22,865	19,080	24,163	3,522	1,166	3,769	25,390	73,110	44	1,644
Motor vehicle accident	37,365	19,468	17,896	3,229	5,439	18,799	7,573	2,324	1,272	694	2,506	9,063	23,041	19	770
Struck against or struck accidentally by objects or persons	44,807	16,384	28,423	17,539	6,331	14,049	4,610	2,278	1,318	571	2,475	11,724	27,956	19	744
Overexertion	27,899	13,558	14,341	3,746	2,832	13,882	5,484	1,955	870	260	1,561	6,157	18,656	15	380
Cutting or piercing instruments or objects	29,243	10,373	18,870	5,629	2,875	13,276	5,369	2,094	827	377	1,237	8,041	18,299	12	450
Natural and environmental factors	18,332	9,177	9,153	6,312	1,354	5,925	3,317	1,422	641	268	762	5,345	11,027	10	279
Accidental poisoning by drugs, medicinal substances gases and vapors	5,910	3,001	2,909	2,146	579	1,758	1,025	402	209	55	272	1,353	3,928	1	92
Fire and flames	2,895	1,324	1,571	806	286	1,248	435	120	95	68	184	983	1,512	1	52
Machinery	1,458	235	1,223	60	85	739	400	174	39	10	36	436	922	0	15
Pedal cycle, nontraffic and other	6,984	1,620	5,364	3,039	827	1,897	975	246	152	55	234	1,571	4,875	1	96
Motor vehicle, nontraffic	2,005	594	1,411	352	376	943	266	68	61	12	57	356	1,486	1	32
Foreign body accidentally entering eye or other office	8,739	3,405	5,334	3,799	395	2,447	1,394	704	234	114	466	2,512	5,285	2	126
Suffocation	155	71	84	73	4	22	25	31	5	2	6	43	96	0	3
Firearm missile	692	77	615	146	165	293	70	18	28	3	41	246	366	0	8
Drowning/submersion	183	75	108	133	8	25	11	6	4	3	14	46	109	0	7
SUICIDE ⁴	6,014	3,532	2,482	295	1,208	3,448	979	84	272	55	297	1,158	4,153	1	78
ASSAULT ⁵	18,107	5,868	12,239	1,060	3,157	10,941	2,732	216	1,988	157	1,479	5,086	9,086	8	303
INJURIES OF UNDETERMINED INTENT ⁶	1,972	990	982	254	315	965	353	85	101	22	101	438	1,274	1	35
COMPLICATIONS OF CARE AND ADVERSE EFFECTS OF MEDICAL TREATMENT ⁷	12,399	6,341	6,058	1,467	505	3,756	3,246	3,425	363	150	579	2,669	8,469	3	166
EXTERNAL CAUSE OF INJURY NOT STATED ⁸	10,340	4,630	5,710	1,614	793	4,580	2,100	1,251	549	135	689	2,594	6,250	2	121

¹First-listed diagnosis uses ICD-9-CM codes 800-999.

²First-listed external cause codes E800-E999.

³First-listed external cause codes E800-E869, E880-E929.

⁴First-listed external cause codes E950-E959.

⁵First-listed external cause codes E960-E969.

⁶First-listed external cause codes E890-E989.

⁷First-listed external cause codes E870-E879, E930-E949.

⁸Injury hospitalization did not have an external cause code in the 1st E-code field.

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