

# **CHAPTER 4**

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

### **2021 STATUS**

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- 4A. INPATIENT DISCHARGES FROM SHORT-STAY HOSPITALS BY FIRST-LISTED DIAGNOSIS AND PATIENT CHARACTERISTICS**
- 4B. INPATIENT DISCHARGES FROM SHORT-STAY HOSPITALS BY ALL-LISTED PROCEDURES AND PATIENT CHARACTERISTICS**
- 4C. CHARACTERISTICS OF EMERGENCY ROOM VISITS BY DISEASE CATEGORY, DIAGNOSIS GROUP, AND AGE GROUP**
- 4D. INJURY-RELATED INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS BY INTENT AND MECHANISM OF INJURY**





#### **4A.**

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

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

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

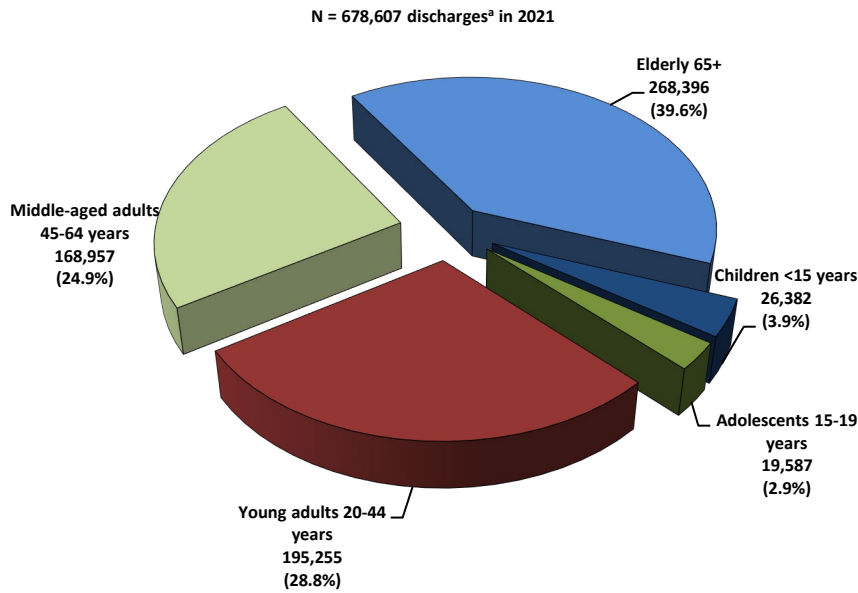
The change in the Arizona reporting requirements increased the number of diagnoses that are coded for each discharge from nine to twenty-five. In this section, discharges are presented by principal diagnosis, which is the first one listed on the discharge summary of the medical record. The number of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

<http://pub.azdhs.gov/health-stats/hip/cat/icd9-10primary.xlsx>.

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

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

**Figure 4A-1**  
Hospital Inpatient Discharges<sup>a</sup> by Age Group, Arizona Residents, 2021

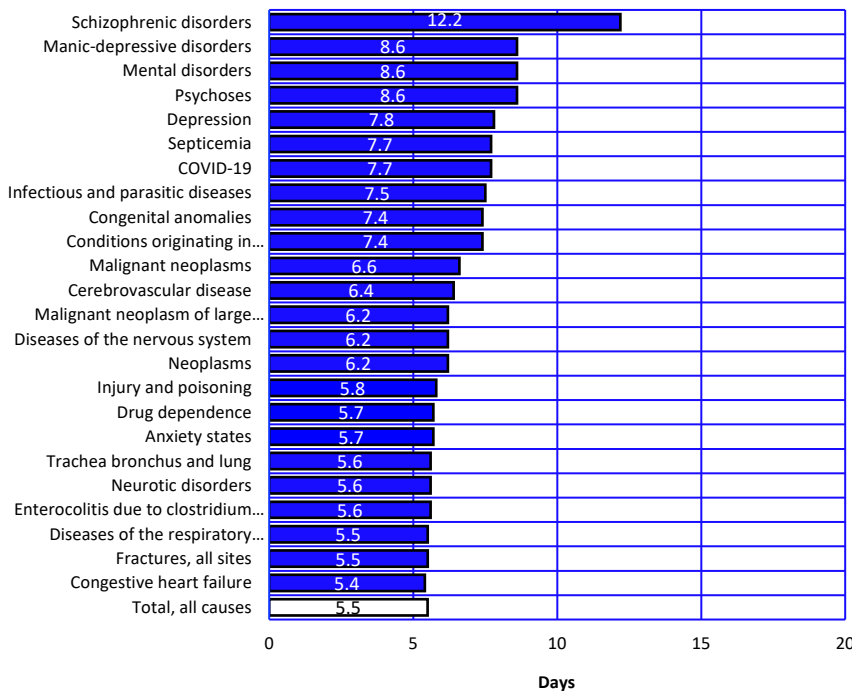


Note: <sup>a</sup> Excluding newborn infants.

In 2021, there were 678,607 inpatients discharged, excluding newborn infants, from non-Federal short stay hospitals in Arizona (**Table 4A-1**). Patients who were elderly (65 years or older) accounted for 39.6 percent of hospital discharges (**Figure 4A-1**), followed by young adults (20-44 years old) who comprised 28.8 percent of discharges, and middle-aged adults (45-64 years old) with 24.9 percent of all inpatient discharges.

*Diseases of the circulatory system* were the most common diagnoses (14.0 percent of all discharges), followed by *mental disorders* (11.0 percent), and *infectious and parasitic disease* diagnoses (10.4 percent; percentages based on data in **Table 4A-1**).

**Figure 4A-2**  
Average Length of Hospital Stay for Discharges<sup>a</sup> with Selected First-listed Diagnosis, Arizona Residents, 2021



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

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 2011. In 1970, the average length of stay was 7.8 days, with one-third of patients hospitalized for 8 days or more. In 2010, the average length of stay nationally was 4.8 days.

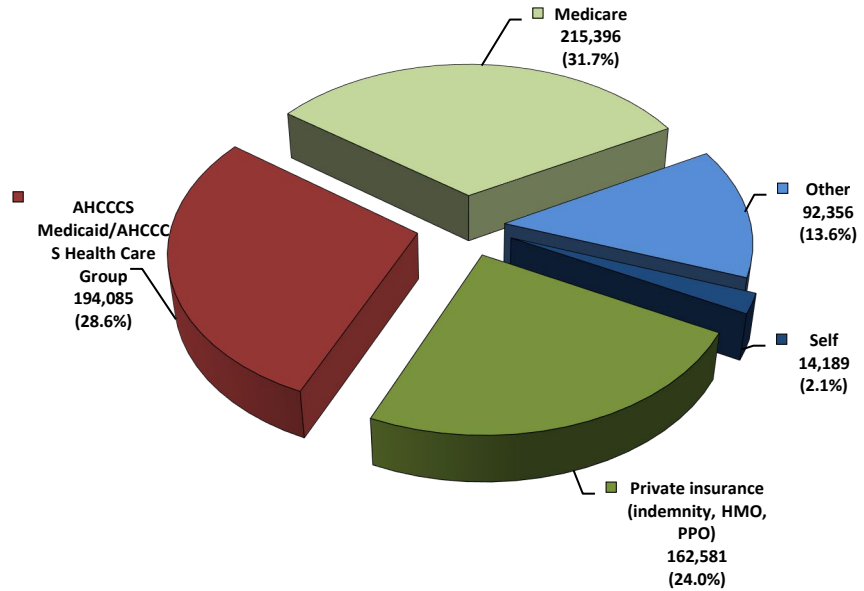
In 2021, the average length of hospital stay for Arizona inpatients was 5.5 days (**Figure 4A-2, Table 4A-5**).

The top five conditions with the longest length of inpatient stay was: *Schizophrenic disorders* (12.2 days), *manic-depressive disorders* (8.6 days), *mental disorders* (8.6 days), *psychoses* (8.6 days), and *depression* (7.8 days).

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

**Figure 4A-3**  
Hospital Inpatient Discharges by Payer, Arizona Residents, 2021

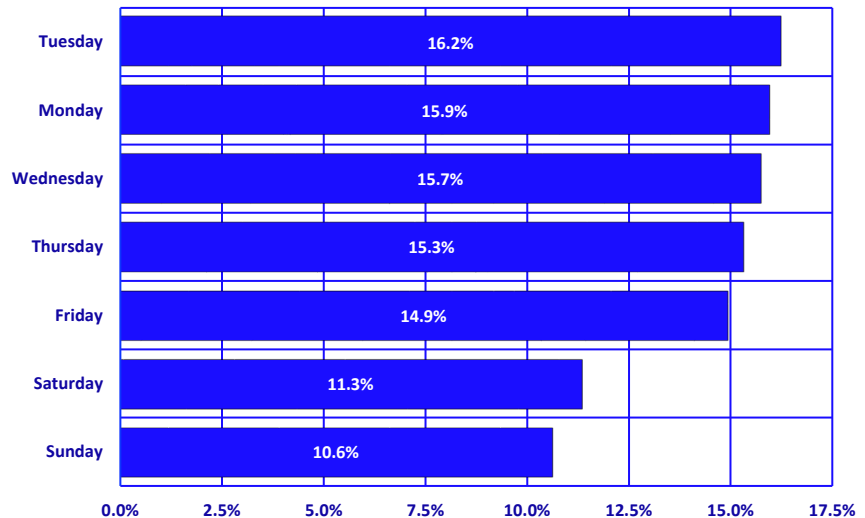
Medicare paid for 31.7 percent of all discharges (**Figure 4A-3**) and 69.0 percent of inpatient discharges of persons aged 65 years or older (**Table 4A-4**). The Arizona Health Care Cost Containment System (AHCCCS; the State’s Medicaid Program) was the second most frequently recorded expected source of payment, accounting for 28.6 percent of inpatient discharges. Private insurance accounted for 24.0 percent of hospital inpatient discharges.



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

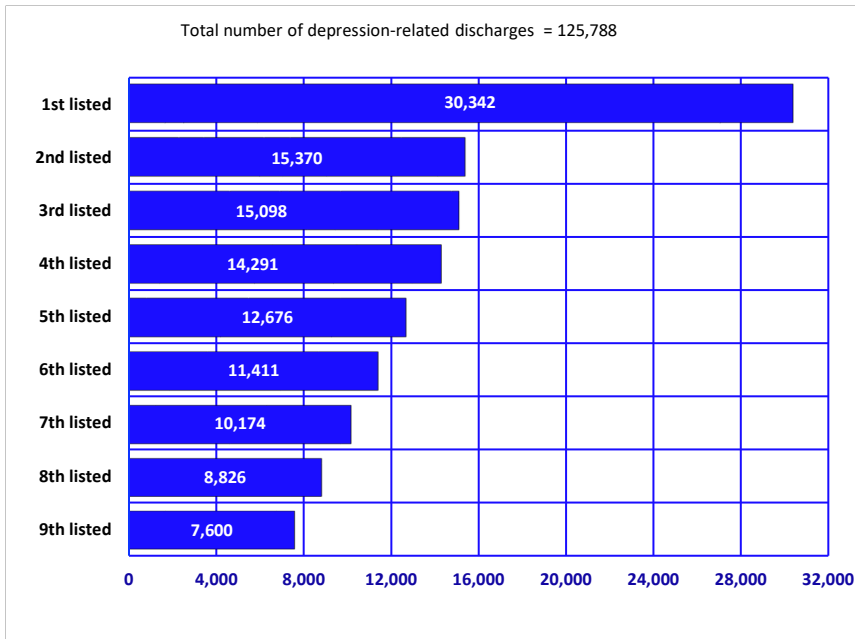
**Figure 4A-4**  
Percent of Hospital Inpatient Admissions by Day of the Week, Arizona Residents, 2021

The rhythm of hospital births by day of the week (see **Figure 1B-14**) reveals that the daily average of resident live births in 2021 was substantially lower on weekends than on weekdays. The same pattern applies to hospital inpatient admissions excluding newborn infants (**Figure 4A-4**).



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

**Figure 4A-5**  
**Number of Depression-Related Inpatient Discharges and Emergency Room Visits of Arizona Residents, 2021**

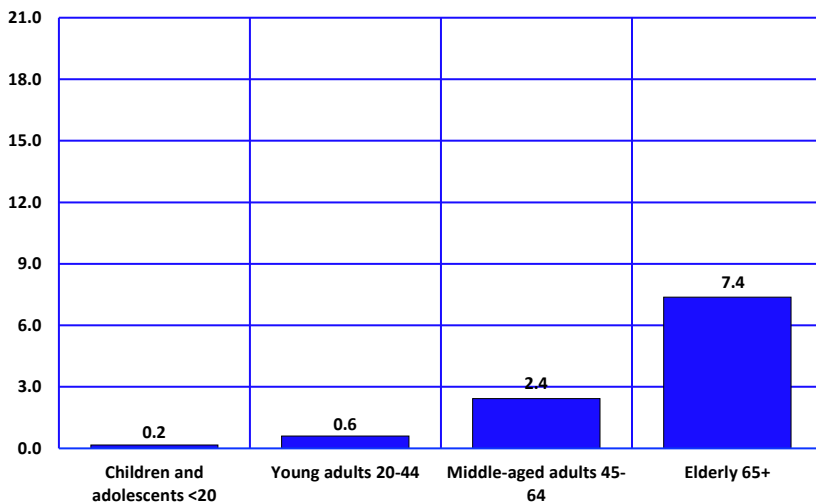


In 2021, *depression* accounted for 25,532 inpatient discharges and 4,809 emergency room visits as the first-listed diagnosis (for a total of 30,341 hospital encounters; **Figure 4A-5, Table 4A-1, Table 7C-1**).

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 first nine diagnostic fields, depression was mentioned on 125,788 inpatient discharges and emergency room records (**Figure 4A-5**).

**Figure 4A-6**  
**Inpatient Hospitalization Rates for Enterocolitis due to *Clostridium difficile* By Age Group, Arizona Residents, 2021**



Note: Number of visits per 10,000 population

In 2021, 1,584 Arizonans were hospitalized with the diagnosis of enterocolitis due to *Clostridium difficile*, a bacterial inflammation of the intestines (**Table 4A-1**). The disease is of growing public health concern because it is often acquired in hospitals and other health care institutions with long-term patients as residents.

The hospitalization rates associated with enterocolitis due to *Clostridium difficile* tend to increase with age. The rate for the elderly 65 years or older (7.4/10,000) was the highest of all age groups (**Figure 4A-6**).

In 2021, 151 Arizonans died from enterocolitis due to *Clostridium difficile*. Elderly 65 years or older accounted for 76.8 percent of these deaths (**Table 2C-27**).

**TABLE 4A-1  
NUMBER OF DISCHARGES\* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2021**

| 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 |         |
| <b>All categories</b>  | 678,607 | 26,382             | 19,587                  | 195,255                  | 168,957                        | 268,396           | 30      |
| <b>Infectious and parasitic diseases</b>                     | 70,465  | 1,149              | 609                     | 12,556                   | 22,513                         | 33,637            | *       |
| Septicemia   | 63,859  | 484                | 447                     | 11,408                   | 20,725                         | 30,794            | *       |
| Enterocolitis due to <i>Clostridium difficile</i>            | 1,584   | 24                 | 6                       | 143                      | 418                            | 993               | 0       |
| <b>Neoplasms</b>   | 21,629  | 342                | 194                     | 2,270                    | 7,308                          | 11,515            | 0       |
| Malignant neoplasms  | 18,069  | 276                | 138                     | 1,453                    | 5,970                          | 10,232            | 0       |
| Large intestine  | 2,493   | 0                  | 0                       | 155                      | 889                            | 1,449             | 0       |
| Prostate   | 620†    | 0                  | 0                       | *                        | 260                            | 359               | 0       |
| Trachea bronchus and lung                                    | 2,200†  | *                  | *                       | 61                       | 650                            | 1,483             | 0       |
| Breast   | 860†    | 0                  | *                       | 204                      | 387                            | 266               | 0       |
| Benign neoplasms   | 2,753   | 44                 | 42                      | 717                      | 1,106                          | 844               | 0       |
| <b>Endocrine nutritional metabolic and immunity diseases</b> | 29,061  | 1,319              | 565                     | 7,375                    | 10,170                         | 9,632             | 0       |
| Diabetes mellitus  | 14,234  | 544                | 368                     | 3,835                    | 5,443                          | 4,044             | 0       |
| Volume depletion   | 1,290   | 323                | 32                      | 110                      | 213                            | 612               | 0       |
| Morbid obesity   | 3,790†  | *                  | 22                      | 2,106                    | 1,436                          | 227               | 0       |
| <b>Diseases of the blood and blood forming organs</b>        | 5,689   | 545                | 198                     | 1,117                    | 1,227                          | 2,602             | 0       |
| <b>Mental disorders</b>                                      | 74,628  | 5,074              | 8,312                   | 38,704                   | 17,251                         | 5,282             | *       |
| Psychoses  | 45,119  | 1,727              | 3,708                   | 24,369                   | 11,758                         | 3,554             | *       |
| Alcoholic psychoses  | 6,194   | 0                  | 16                      | 3,037                    | 2,527                          | 614               | 0       |
| Drug psychoses   | 950†    | *                  | 74                      | 606                      | 219                            | 42                | 0       |
| Schizophrenic disorders                                      | 9,867   | 13                 | 234                     | 6,333                    | 2,977                          | 309               | *       |
| Manic-depressive disorders                                   | 41,564  | 4,496              | 6,748                   | 20,256                   | 7,813                          | 2,250             | *       |
| Neurotic disorders   | 17,029  | 978                | 1,409                   | 7,841                    | 5,197                          | 1,603             | *       |
| Anxiety states   | 813     | 66                 | 151                     | 328                      | 172                            | 96                | 0       |
| Depression   | 25,532  | 2,805              | 4,303                   | 12,340                   | 4,618                          | 1,465             | *       |
| Drug dependence  | 3,070†  | *                  | 253                     | 2,266                    | 426                            | 119               | 0       |
| Nondependent abuse of drugs                                  | 310†    | *                  | 20                      | 171                      | 95                             | 24                | 0       |
| Alcohol dependence   | 8,280   | 0                  | 26                      | 4,130                    | 3,336                          | 788               | 0       |
| <b>Diseases of the nervous system</b>                        | 16,535  | 1,119              | 413                     | 3,159                    | 4,168                          | 7,673             | *       |
| <b>Diseases of the eye and adnexa</b>                        | 581     | 58                 | 15                      | 122                      | 176                            | 210               | 0       |
| <b>Diseases of the ear and mastoid process</b>               | 539     | 87                 | 10                      | 83                       | 126                            | 233               | 0       |
| <b>Diseases of the circulatory system</b>                    | 94,949  | 254                | 232                     | 5,748                    | 25,891                         | 62,824            | 0       |
| Heart disease  | 63,402  | 123                | 125                     | 3,439                    | 17,105                         | 42,610            | 0       |
| Acute myocardial infarction                                  | 11,880† | 0                  | *                       | 536                      | 4,167                          | 7,178             | 0       |
| Coronary arteriosclerosis                                    | 4,830†  | *                  | 0                       | 98                       | 1,522                          | 3,211             | 0       |

**TABLE 4A-1 (continued)  
NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2021**

| 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                 | 348    | 0                  | 0                       | 28                       | 127                            | 193               | 0       |
| Cardiac dysrhythmias                         | 13,262 | 48                 | 34                      | 547                      | 2,696                          | 9,937             | 0       |
| Cardiac arrest                               | 290†   | *                  | *                       | 57                       | 91                             | 138               | 0       |
| Congestive heart failure                     | 2,095  | 16                 | 6                       | 301                      | 651                            | 1,121             | 0       |
| Cerebrovascular diseases                     | 21,148 | 67                 | 28                      | 1,080                    | 5,477                          | 14,496            | 0       |
| Diseases of the respiratory system           | 34,434 | 5,245              | 464                     | 3,313                    | 8,346                          | 17,066            | 0       |
| Acute bronchitis and bronchiolitis           | 1,890† | 1,663              | *                       | 34                       | 57                             | 136               | 0       |
| Pneumonia                                    | 8,944  | 391                | 51                      | 781                      | 2,151                          | 5,570             | 0       |
| Chronic bronchitis                           | 3,825  | 0                  | 0                       | 63                       | 1,389                          | 2,373             | 0       |
| Asthma                                       | 1,891  | 742                | 64                      | 494                      | 385                            | 206               | 0       |
| <b>COVID-19</b>                              | 38,827 | 495                | 282                     | 6,097                    | 13,569                         | 18,383            | *       |
| Diseases of the digestive system             | 58,620 | 1,761              | 885                     | 12,104                   | 18,585                         | 25,285            | 0       |
| Appendicitis                                 | 2,440  | 567                | 181                     | 627                      | 561                            | 504               | 0       |
| Noninfectious enteritis and colitis          | 4,663  | 187                | 169                     | 1,043                    | 1,198                          | 2,066             | 0       |
| Diverticula of intestine                     | 4,950† | *                  | 7                       | 676                      | 1,583                          | 2,685             | 0       |
| Cholelithiasis                               | 2,867  | 17                 | 61                      | 726                      | 852                            | 1,211             | 0       |
| Diseases of the genitourinary system         | 24,645 | 807                | 366                     | 3,640                    | 6,392                          | 13,440            | 0       |
| Calculus of kidney and ureter                | 349    | 6                  | 7                       | 66                       | 125                            | 145               | 0       |
| Diseases of the skin and subcutaneous tissue | 10,899 | 517                | 150                     | 2,738                    | 3,675                          | 3,819             | 0       |
| Cellulitis and abscess                       | 7,349  | 228                | 65                      | 1,701                    | 2,530                          | 2,825             | 0       |
| Diseases of the musculoskeletal system       | 26,169 | 674                | 361                     | 2,623                    | 7,796                          | 14,714            | *       |
| Osteoarthritis and allied disorders          | 6,470† | 0                  | *                       | 74                       | 1,679                          | 4,718             | 0       |
| Invertebral disc disorders                   | 2,158  | 0                  | 8                       | 398                      | 852                            | 900               | 0       |
| Congenital anomalies                         | 2,221  | 1,224              | 168                     | 346                      | 271                            | 212               | 0       |
| Conditions originating in perinatal period   | 1,940† | 1,938              | *                       | *                        | 0                              | 0                 | 0       |
| Symptoms signs and ill-defined conditions    | 10,957 | 832                | 221                     | 1,485                    | 2,748                          | 5,671             | 0       |
| Injury and poisoning                         | 67,084 | 2,168              | 2,040                   | 13,372                   | 16,540                         | 32,945            | 19      |
| Fractures, all sites                         | 22,068 | 383                | 464                     | 3,397                    | 3,875                          | 13,948            | *       |
| Fracture of neck of femur                    | 7,630  | 19                 | 19                      | 174                      | 819                            | 6,599             | 0       |
| Poisonings                                   | 4,920  | 412                | 560                     | 1,912                    | 1,255                          | 779               | *       |

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



**TABLE 4A-2  
NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND GENDER, ARIZONA, 2021**

| Category of first-listed diagnosis                    | Total   | Patient's gender |         |         |
|---|---------|------------------|---------|---------|
|   |         | Male             | Female  | Unknown |
| All categories  | 678,607 | 315,085          | 363,466 | 56      |
| Infectious and parasitic diseases                     | 70,465  | 37,570           | 32,895  | 0       |
| Septicemia  | 63,859  | 34,327           | 29,532  | 0       |
| Enterocolitis due to <i>Clostridium difficile</i>     | 1,584   | 620              | 964     | 0       |
| Neoplasms   | 21,629  | 10,999           | 10,999  | *       |
| Malignant neoplasms                                   | 18,069  | 9,469            | 8,599   | *       |
| Large intestine                                       | 2,493   | 1,307            | 1,186   | 0       |
| Prostate  | 623     | 623              | 0       | 0       |
| Trachea bronchus and lung                             | 2,200   | 1,004            | 1,196   | 0       |
| Breast  | 858     | 25               | 833     | 0       |
| Benign neoplasms                                      | 2,753   | 761              | 1,992   | 0       |
| Endocrine nutritional metabolic and immunity diseases | 29,061  | 14,226           | 14,833  | *       |
| Diabetes mellitus                                     | 14,234  | 8,592            | 5,641   | *       |
| Volume depletion                                      | 1,290   | 655              | 635     | 0       |
| Morbid obesity  | 3,793   | 661              | 3,132   | 0       |
| Diseases of the blood and blood forming organs        | 5,689   | 2,613            | 3,076   | 0       |
| Mental disorders                                      | 74,628  | 42,030           | 32,587  | 11      |
| Psychoses   | 45,119  | 26,628           | 18,485  | 6       |
| Alcoholic psychoses                                   | 6,194   | 4,554            | 1,640   | 0       |
| Drug psychoses  | 946     | 628              | 318     | 0       |
| Schizophrenic disorders                               | 9,867   | 6,576            | 3,290   | *       |
| Manic-depressive disorders                            | 41,564  | 20,254           | 21,301  | 9       |
| Neurotic disorders                                    | 17,029  | 10,461           | 6,567   | *       |
| Anxiety states  | 813     | 326              | 487     | 0       |
| Depression  | 25,532  | 12,598           | 12,929  | *       |
| Drug dependence                                       | 3,069   | 2,190            | 879     | 0       |
| Nondependent abuse of drugs                           | 311     | 214              | 97      | 0       |
| Alcohol dependence                                    | 8,280   | 6,023            | 2,257   | 0       |
| Diseases of the nervous system                        | 16,535  | 8,337            | 8,198   | 0       |
| Diseases of the eye and adnexa                        | 581     | 270              | 311     | 0       |
| Diseases of the ear and mastoid process               | 539     | 254              | 285     | 0       |
| Diseases of the circulatory system                    | 94,949  | 54,412           | 40,531  | 6       |
| Heart disease   | 63,402  | 37,604           | 25,796  | *       |
| Acute myocardial infarction                           | 11,883  | 7,827            | 4,056   | 0       |
| Coronary arteriosclerosis                             | 4,832   | 3,500            | 1,331   | *       |

**TABLE 4A-2 (continued)  
NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND GENDER, ARIZONA, 2021**

| Category of first-listed diagnosis           | Total  | Patient's gender |        |         |
|--|--------|------------------|--------|---------|
|  |        | Male             | Female | Unknown |
| Other ischemic heart disease                 | 348    | 180              | 168    | 0       |
| Cardiac dysrhythmias                         | 13,262 | 7,387            | 5,874  | *       |
| Cardiac arrest                               | 293    | 178              | 114    | *       |
| Congestive heart failure                     | 2,095  | 1,233            | 862    | 0       |
| Cerebrovascular diseases                     | 21,148 | 11,065           | 10,081 | *       |
| Diseases of the respiratory system           | 34,434 | 17,727           | 16,706 | *       |
| Acute bronchitis and bronchiolitis           | 1,892  | 1,036            | 856    | 0       |
| Pneumonia                                    | 8,944  | 4,547            | 4,397  | 0       |
| Chronic bronchitis                           | 3,825  | 1,680            | 2,145  | 0       |
| Asthma                                       | 1,891  | 866              | 1,025  | 0       |
| COVID-19                                     | 38,827 | 20,923           | 17,904 | 0       |
| Diseases of the digestive system             | 58,620 | 28,580           | 30,037 | *       |
| Appendicitis                                 | 2,440  | 1,315            | 1,125  | 0       |
| Noninfectious enteritis and colitis          | 4,663  | 1,939            | 2,724  | 0       |
| Diverticula of intestine                     | 4,952  | 2,274            | 2,678  | 0       |
| Cholelithiasis                               | 2,867  | 1,250            | 1,617  | 0       |
| Diseases of the genitourinary system         | 24,645 | 11,624           | 13,021 | 0       |
| Calculus of kidney and ureter                | 349    | 173              | 176    | 0       |
| Diseases of the skin and subcutaneous tissue | 10,899 | 6,091            | 4,808  | 0       |
| Cellulitis and abscess                       | 7,349  | 4,159            | 3,190  | 0       |
| Diseases of the musculoskeletal system       | 26,169 | 12,582           | 13,586 | *       |
| Osteoarthritis and allied disorders          | 6,472  | 2,646            | 3,826  | 0       |
| Invertebral disc disorders                   | 2,158  | 1,115            | 1,043  | 0       |
| Congenital anomalies                         | 2,221  | 1,282            | 939    | 0       |
| Conditions originating in perinatal period   | 1,941  | 1,128            | 813    | 0       |
| Symptoms signs and ill-defined conditions    | 10,957 | 5,569            | 5,388  | 0       |
| Injury and poisoning                         | 67,084 | 35,220           | 31,836 | 28      |
| Fractures, all sites                         | 22,068 | 9,841            | 12,218 | 9       |
| Fracture of neck of femur                    | 7,630  | 2,751            | 4,879  | 0       |
| Poisonings                                   | 4,920  | 2,375            | 2,544  | *       |

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

**TABLE 4A-3  
NUMBER OF DISCHARGES\* BY FIRST-LISTED DIAGNOSIS AND RACE/ETHNICITY, ARIZONA, 2021**

| Category of first-listed diagnosis                           | Total   | Race/ethnicity     |                    |                           |                                  |                           |                  |
|--|---------|--------------------|--------------------|---------------------------|----------------------------------|---------------------------|------------------|
|  |         | White non-Hispanic | Hispanic or Latino | Black or African American | American Indian or Alaska Native | Asian or Pacific Islander | Refused /Unknown |
| <b>Total</b>   | 678,607 | 455,417            | 130,123            | 40,206                    | 31,199                           | 14,236                    | 7,426            |
| <b>Infectious and parasitic diseases</b>                     | 70,465  | 46,831             | 14,080             | 3,719                     | 3,590                            | 1,472                     | 773              |
| <b>Septicemia</b>  | 63,859  | 42,421             | 12,811             | 3,292                     | 3,314                            | 1,306                     | 715              |
| <b>Enterocolitis due to <i>Clostridium difficile</i></b>     | 1,584   | 1,226              | 199                | 71                        | 64                               | 15                        | 9                |
| <b>Neoplasms</b>   | 21,629  | 15,725             | 3,445              | 1,051                     | 526                              | 651                       | 231              |
| <b>Malignant neoplasms</b>                                   | 18,069  | 13,459             | 2,717              | 751                       | 416                              | 535                       | 191              |
| <b>Large intestine</b>                                       | 2,493   | 1,863              | 388                | 81                        | 57                               | 73                        | 31               |
| <b>Prostate</b>  | 620†    | 473                | 70                 | 48                        | *                                | 17                        | 12               |
| <b>Trachea bronchus and lung</b>                             | 2,200   | 1,786              | 202                | 89                        | 22                               | 74                        | 27               |
| <b>Breast</b>  | 858     | 636                | 127                | 53                        | 15                               | 19                        | 8                |
| <b>Benign neoplasms</b>                                      | 2,753   | 1,684              | 585                | 271                       | 79                               | 99                        | 35               |
| <b>Endocrine nutritional metabolic and immunity diseases</b> | 29,061  | 17,594             | 6,457              | 2,159                     | 2,012                            | 527                       | 312              |
| <b>Diabetes mellitus</b>                                     | 14,234  | 8,155              | 3,324              | 1,123                     | 1,294                            | 188                       | 150              |
| <b>Volume depletion</b>                                      | 1,290   | 910                | 221                | 79                        | 46                               | 21                        | 13               |
| <b>Morbid obesity</b>  | 3,793   | 2,129              | 1,089              | 402                       | 53                               | 77                        | 43               |
| <b>Diseases of the blood and blood forming organs</b>        | 5,689   | 3,400              | 958                | 965                       | 181                              | 137                       | 48               |
| <b>Mental disorders</b>                                      | 74,628  | 49,161             | 12,480             | 6,123                     | 4,991                            | 1,208                     | 665              |
| <b>Psychoses</b>   | 45,119  | 29,695             | 7,663              | 3,810                     | 2,933                            | 664                       | 354              |
| <b>Alcoholic psychoses</b>                                   | 6,194   | 4,339              | 734                | 262                       | 777                              | 51                        | 31               |
| <b>Drug psychoses</b>  | 950†    | 572                | 226                | 91                        | 45                               | *                         | 9                |
| <b>Schizophrenic disorders</b>                               | 9,867   | 5,969              | 1,850              | 1,358                     | 453                              | 177                       | 60               |
| <b>Manic-depressive disorders</b>                            | 41,564  | 28,089             | 6,637              | 3,114                     | 2,594                            | 712                       | 418              |
| <b>Neurotic disorders</b>                                    | 17,029  | 11,453             | 2,553              | 907                       | 1,717                            | 246                       | 153              |
| <b>Anxiety states</b>  | 813     | 579                | 138                | 50                        | 24                               | 18                        | *                |
| <b>Depression</b>  | 25,532  | 16,904             | 4,177              | 1,680                     | 1,990                            | 489                       | 292              |
| <b>Drug dependence</b>                                       | 3,069   | 1,815              | 853                | 234                       | 126                              | 27                        | 14               |
| <b>Nondependent abuse of drugs</b>                           | 310†    | 215                | 42                 | 12                        | 37                               | *                         | *                |
| <b>Alcohol dependence</b>                                    | 8,280   | 5,799              | 971                | 334                       | 1,053                            | 81                        | 42               |
| <b>Diseases of the nervous system</b>                        | 16,535  | 12,029             | 2,430              | 977                       | 650                              | 271                       | 178              |
| <b>Diseases of the eye and adnexa</b>                        | 581     | 381                | 118                | 30                        | 25                               | 14                        | 13               |
| <b>Diseases of the ear and mastoid process</b>               | 539     | 371                | 95                 | 20                        | 34                               | 11                        | 8                |
| <b>Diseases of the circulatory system</b>                    | 94,949  | 72,249             | 12,013             | 5,261                     | 2,661                            | 1,729                     | 1,036            |
| <b>Heart disease</b>   | 63,402  | 48,911             | 7,720              | 3,255                     | 1,720                            | 1,093                     | 703              |
| <b>Acute myocardial infarction</b>                           | 11,883  | 9,013              | 1,632              | 436                       | 325                              | 247                       | 230              |
| <b>Coronary arteriosclerosis</b>                             | 4,832   | 3,802              | 593                | 154                       | 106                              | 111                       | 66               |

**TABLE 4A-3 (continued)  
NUMBER OF DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND RACE/ETHNICITY, ARIZONA, 2021**

| Category of first-listed diagnosis           | Total  | Race/ethnicity     |                    |                           |                                  |                           |                  |
|--|--------|--------------------|--------------------|---------------------------|----------------------------------|---------------------------|------------------|
|  |        | White non-Hispanic | Hispanic or Latino | Black or African American | American Indian or Alaska Native | Asian or Pacific Islander | Refused /Unknown |
| Other ischemic heart disease                 | 348    | 256                | 50                 | 22                        | 10                               | 7                         | *                |
| Cardiac dysrhythmias                         | 13,262 | 11,153             | 1,144              | 392                       | 270                              | 190                       | 113              |
| Cardiac arrest                               | 293    | 184                | 62                 | 16                        | 14                               | 8                         | 9                |
| Congestive heart failure                     | 2,095  | 1,591              | 247                | 107                       | 89                               | 38                        | 23               |
| Cerebrovascular diseases                     | 21,148 | 16,106             | 2,665              | 1,146                     | 534                              | 452                       | 245              |
| Diseases of the respiratory system           | 34,434 | 24,798             | 5,423              | 2,054                     | 1,292                            | 586                       | 281              |
| Acute bronchitis and bronchiolitis           | 1,892  | 1,134              | 458                | 118                       | 125                              | 46                        | 11               |
| Pneumonia                                    | 8,944  | 6,759              | 1,242              | 419                       | 307                              | 157                       | 60               |
| Chronic bronchitis                           | 3,825  | 3,230              | 288                | 205                       | 38                               | 39                        | 25               |
| Asthma                                       | 1,891  | 929                | 519                | 281                       | 104                              | 39                        | 19               |
| COVID-19                                     | 38,827 | 25,214             | 8,582              | 1,831                     | 1,761                            | 859                       | 580              |
| Diseases of the digestive system             | 58,620 | 39,925             | 10,834             | 2,675                     | 3,567                            | 1,057                     | 562              |
| Appendicitis                                 | 2,440  | 1,495              | 680                | 69                        | 101                              | 59                        | 36               |
| Noninfectious enteritis and colitis          | 4,663  | 3,585              | 642                | 224                       | 82                               | 89                        | 41               |
| Diverticula of intestine                     | 4,952  | 3,798              | 752                | 190                       | 108                              | 55                        | 49               |
| Cholelithiasis                               | 2,867  | 1,794              | 701                | 88                        | 200                              | 58                        | 26               |
| Diseases of the genitourinary system         | 24,645 | 17,296             | 4,367              | 1,349                     | 941                              | 456                       | 236              |
| Calculus of kidney and ureter                | 350†   | 272                | 52                 | *                         | 10                               | *                         | 6                |
| Diseases of the skin and subcutaneous tissue | 10,899 | 7,536              | 1,854              | 561                       | 748                              | 112                       | 88               |
| Cellulitis and abscess                       | 7,349  | 5,350              | 1,096              | 317                       | 451                              | 76                        | 59               |
| Diseases of the musculoskeletal system       | 26,169 | 20,556             | 2,765              | 1,165                     | 804                              | 588                       | 291              |
| Osteoarthritis and allied disorders          | 6,472  | 5,559              | 327                | 192                       | 100                              | 225                       | 69               |
| Invertebral disc disorders                   | 2,158  | 1,731              | 235                | 87                        | 44                               | 35                        | 26               |
| Congenital anomalies                         | 2,221  | 1,337              | 625                | 109                       | 74                               | 56                        | 20               |
| Conditions originating in perinatal period   | 1,941  | 966                | 627                | 111                       | 119                              | 68                        | 50               |
| Symptoms signs and ill-defined conditions    | 10,957 | 7,937              | 1,610              | 647                       | 441                              | 201                       | 121              |
| Injury and poisoning                         | 67,084 | 47,925             | 10,548             | 3,255                     | 3,281                            | 1,097                     | 978              |
| Fractures, all sites                         | 22,068 | 17,337             | 2,704              | 631                       | 799                              | 273                       | 324              |
| Fracture of neck of femur                    | 7,630  | 6,573              | 641                | 107                       | 132                              | 102                       | 75               |
| Poisonings                                   | 4,920  | 3,128              | 973                | 381                       | 269                              | 77                        | 92               |

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

**TABLE 4A-4  
NUMBER OF DISCHARGES<sup>a</sup> BY PRIMARY PAYER, GENDER, AGE GROUP, RACE/ETHNICITY,  
AND MARITAL STATUS, ARIZONA, 2021**

| Selected characteristics        |   | Total   | Self-pay | Private insurance (indemnity, HMO, PPO) | AHCCCS/Medicaid | Medicare | Other  |
|---------------------------------|---|---------|----------|---|-----------------|----------|--------|
| <b>Total</b>                    |   | 678,607 | 14,189   | 162,581                                 | 194,085         | 215,396  | 92,356 |
| <b>Gender</b>                   | <b>Male</b>                             | 315,085 | 7,283    | 65,890                                  | 87,430          | 107,372  | 47,110 |
|                                 | <b>Female</b>                           | 363,466 | 6,898    | 96,680                                  | 106,635         | 108,016  | 45,237 |
|                                 | <b>Unknown</b>                          | 56      | 8        | 11                                      | 20              | 8        | 9      |
| <b>Age group</b>                | <b>Children &lt;15 years</b>            | 26,382  | 497      | 9,018                                   | 15,954          | 38       | 875    |
|                                 | <b>Adolescents 15-19 years</b>          | 19,587  | 459      | 6,712                                   | 11,673          | 64       | 679    |
|                                 | <b>Young adults 20-44 years</b>         | 195,255 | 7,304    | 70,788                                  | 100,298         | 6,570    | 10,295 |
|                                 | <b>Middle-aged adults 45-64 years</b>   | 168,957 | 5,165    | 59,374                                  | 61,680          | 23,577   | 19,161 |
|                                 | <b>Elderly 65+ years</b>                | 268,396 | 740      | 16,689                                  | 4,476           | 185,145  | 61,346 |
|                                 | <b>Unknown</b>                          | 30†     | 24       | 0                                       | *               | *        | 0      |
| <b>Race/ethnicity</b>           | <b>White non-Hispanic</b>               | 455,417 | 7,938    | 114,518                                 | 89,742          | 173,464  | 69,755 |
|                                 | <b>Hispanic or Latino</b>               | 130,123 | 4,264    | 28,539                                  | 62,808          | 21,641   | 12,871 |
|                                 | <b>Black or African American</b>        | 40,206  | 1,004    | 8,469                                   | 18,106          | 7,958    | 4,669  |
|                                 | <b>American Indian or Alaska Native</b> | 31,199  | 432      | 3,761                                   | 17,781          | 6,911    | 2,314  |
|                                 | <b>Asian or Pacific Islander</b>        | 14,236  | 263      | 5,198                                   | 3,514           | 3,603    | 1,658  |
|                                 | <b>Refused/Unknown</b>                  | 7,426   | 288      | 2,096                                   | 2,134           | 1,819    | 1,089  |
| <b>Patient's marital status</b> | <b>Single</b>                           | 280,544 | 7,419    | 63,174                                  | 138,007         | 44,990   | 26,954 |
|                                 | <b>Married</b>                          | 268,591 | 5,388    | 85,094                                  | 34,556          | 103,732  | 39,821 |
|                                 | <b>Separated</b>                        | 4,978   | 99       | 890                                     | 2,173           | 1,146    | 670    |
|                                 | <b>Divorced</b>                         | 52,572  | 639      | 8,243                                   | 12,919          | 20,830   | 9,941  |
|                                 | <b>Widowed</b>                          | 64,207  | 259      | 3,602                                   | 3,744           | 42,854   | 13,748 |
|                                 | <b>Not Applicable</b>                   | 20†     | 0        | *                                       | 20              | 0        | *      |
|                                 | <b>Unknown</b>                          | 7,692   | 385      | 1,577                                   | 2,666           | 1,844    | 1,220  |

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

**TABLE 4A-5  
AVERAGE LENGTH OF STAY FOR DISCHARGES\* BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2021**

| 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 | Unknown |
| <b>All conditions</b>  | 5.5      | 6.0                 | 6.4                     | 4.5                      | 6.1                            | 5.7               | 2.7     |
| <b>Infectious and parasitic diseases</b>                     | 7.5      | 4.8                 | 5.4                     | 6.6                      | 8.3                            | 7.4               | 9.0     |
| <b>Septicemia</b>  | 7.7      | 6.6                 | 5.1                     | 6.8                      | 8.5                            | 7.5               | 9.0     |
| <b>Enterocolitis due to <i>Clostridium difficile</i></b>     | 5.6      | 6.0                 | 2.8                     | 4.7                      | 5.0                            | 6.0               | 0.0     |
| <b>Neoplasms</b>   | 6.2      | 12.0                | 8.2                     | 5.6                      | 5.9                            | 6.2               | 0.0     |
| <b>Malignant neoplasms</b>                                   | 6.6      | 13.8                | 9.9                     | 7.1                      | 6.4                            | 6.3               | 0.0     |
| <b>Large intestine</b>                                       | 6.2      | 0.0                 | 0.0                     | 5.8                      | 5.7                            | 6.5               | 0.0     |
| <b>Prostate</b>  | 2.5      | 0.0                 | 0.0                     | 2.0                      | 2.0                            | 2.8               | 0.0     |
| <b>Trachea bronchus and lung</b>                             | 5.6      | 20.7                | 7.0                     | 5.8                      | 5.5                            | 5.6               | 0.0     |
| <b>Breast</b>  | 3.9      | 0.0                 | 1.0                     | 3.8                      | 3.8                            | 4.0               | 0.0     |
| <b>Benign neoplasms</b>                                      | 3.6      | 3.1                 | 4.3                     | 2.7                      | 3.4                            | 4.7               | 0.0     |
| <b>Endocrine nutritional metabolic and immunity diseases</b> | 4.1      | 4.0                 | 3.4                     | 2.9                      | 4.4                            | 4.9               | 0.0     |
| <b>Diabetes mellitus</b>                                     | 4.8      | 2.7                 | 2.6                     | 3.4                      | 5.3                            | 6.0               | 0.0     |
| <b>Volume depletion</b>                                      | 3.3      | 3.5                 | 3.3                     | 2.3                      | 3.2                            | 3.4               | 0.0     |
| <b>Morbid obesity</b>  | 1.5      | 4.5                 | 1.2                     | 1.4                      | 1.5                            | 1.8               | 0.0     |
| <b>Diseases of the blood and blood forming organs</b>        | 4.6      | 4.3                 | 4.8                     | 5.1                      | 4.3                            | 4.6               | 0.0     |
| <b>Mental disorders</b>                                      | 8.6      | 11.6                | 9.7                     | 7.7                      | 8.5                            | 11.2              | 5.8     |
| <b>Psychoses</b>   | 8.6      | 12.2                | 10.0                    | 7.8                      | 8.4                            | 11.2              | 5.0     |
| <b>Alcoholic psychoses</b>                                   | 5.1      | 0.0                 | 6.6                     | 4.6                      | 5.3                            | 7.1               | 0.0     |
| <b>Drug psychoses</b>  | 4.8      | 13.2                | 6.8                     | 4.5                      | 4.6                            | 5.8               | 0.0     |
| <b>Schizophrenic disorders</b>                               | 12.2     | 18.5                | 13.7                    | 11.7                     | 12.6                           | 16.8              | 6.0     |
| <b>Manic-depressive disorders</b>                            | 8.6      | 11.4                | 9.6                     | 7.3                      | 8.7                            | 11.8              | 8.0     |
| <b>Neurotic disorders</b>                                    | 5.6      | 9.2                 | 7.5                     | 4.7                      | 5.3                            | 7.0               | 0.0     |
| <b>Anxiety states</b>  | 5.7      | 7.1                 | 5.8                     | 4.8                      | 5.8                            | 7.3               | 0.0     |
| <b>Depression</b>  | 7.8      | 10.4                | 8.4                     | 6.7                      | 7.8                            | 11.1              | 8.0     |
| <b>Drug dependence</b>                                       | 5.7      | 11.6                | 7.0                     | 5.5                      | 6.1                            | 6.1               | 0.0     |
| <b>Nondependent abuse of drugs</b>                           | 4.0      | 8.0                 | 5.6                     | 3.7                      | 4.1                            | 4.0               | 0.0     |
| <b>Alcohol dependence</b>                                    | 5.1      | 0.0                 | 5.7                     | 4.6                      | 5.2                            | 7.1               | 0.0     |
| <b>Diseases of the nervous system</b>                        | 6.2      | 3.8                 | 4.1                     | 5.0                      | 6.3                            | 7.0               | 1.7     |
| <b>Diseases of the eye and adnexa</b>                        | 4.4      | 9.2                 | 1.9                     | 3.9                      | 4.2                            | 3.6               | 0.0     |
| <b>Diseases of the ear and mastoid process</b>               | 2.8      | 2.6                 | 2.7                     | 2.6                      | 2.9                            | 3.0               | 0.0     |
| <b>Diseases of the circulatory system</b>                    | 4.9      | 9.1                 | 6.4                     | 4.8                      | 5.0                            | 4.8               | 0.0     |
| <b>Heart disease</b>   | 4.4      | 11.8                | 5.2                     | 4.2                      | 4.5                            | 4.4               | 0.0     |
| <b>Acute myocardial infarction</b>                           | 4.1      | 0.0                 | 0.5                     | 3.4                      | 3.8                            | 4.3               | 0.0     |
| <b>Coronary arteriosclerosis</b>                             | 4.7      | 2.0                 | 0.0                     | 4.5                      | 4.4                            | 4.9               | 0.0     |

**TABLE 4A-5 (continued)**  
**AVERAGE LENGTH OF STAY FOR DISCHARGES<sup>a</sup> BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2021**

| Category of first-listed diagnosis           | All ages | Patient's age group |                         |                          |                                |                   | Unknown |
|--|----------|---------------------|-------------------------|--------------------------|--------------------------------|-------------------|---------|
|  |          | Children <15 years  | Adolescents 15-19 years | Young adults 20-44 years | Middle-aged adults 45-64 years | Elderly 65+ years |         |
| Other ischemic heart disease                 | 2.3      | 0.0                 | 0.0                     | 2.3                      | 1.9                            | 2.5               | 0.0     |
| Cardiac dysrhythmias                         | 3.1      | 4.3                 | 3.4                     | 2.9                      | 3.4                            | 3.1               | 0.0     |
| Cardiac arrest                               | 3.3      | 13.4                | 1.5                     | 3.5                      | 4.4                            | 2.2               | 0.0     |
| Congestive heart failure                     | 5.4      | 41.3                | 7.0                     | 5.1                      | 5.3                            | 5.1               | 0.0     |
| Cerebrovascular diseases                     | 6.4      | 6.3                 | 17.7                    | 7.3                      | 7.0                            | 6.0               | 0.0     |
| Diseases of the respiratory system           | 5.5      | 3.2                 | 5.0                     | 5.5                      | 6.3                            | 5.9               | 0.0     |
| Acute bronchitis and bronchiolitis           | 2.8      | 2.7                 | 2.5                     | 3.2                      | 3.3                            | 3.6               | 0.0     |
| Pneumonia                                    | 4.7      | 2.7                 | 4.4                     | 4.0                      | 4.8                            | 5.0               | 0.0     |
| Chronic bronchitis                           | 4.1      | 0.0                 | 0.0                     | 3.0                      | 4.0                            | 4.2               | 0.0     |
| Asthma                                       | 2.5      | 1.6                 | 2.8                     | 2.8                      | 3.3                            | 3.3               | 0.0     |
| COVID-19                                     | 7.7      | 3.8                 | 6.5                     | 6.5                      | 8.3                            | 7.7               | 0.0     |
| Diseases of the digestive system             | 4.6      | 4.4                 | 4.2                     | 4.1                      | 4.6                            | 4.8               | 0.0     |
| Appendicitis                                 | 3.5      | 3.8                 | 3.3                     | 2.7                      | 3.5                            | 4.1               | 0.0     |
| Noninfectious enteritis and colitis          | 4.5      | 4.9                 | 6.0                     | 4.0                      | 4.4                            | 4.6               | 0.0     |
| Diverticula of intestine                     | 4.4      | 9.0                 | 3.7                     | 4.0                      | 4.2                            | 4.7               | 0.0     |
| Cholelithiasis                               | 3.3      | 1.6                 | 2.2                     | 2.6                      | 3.1                            | 3.8               | 0.0     |
| Diseases of the genitourinary system         | 4.1      | 3.2                 | 3.2                     | 3.0                      | 4.2                            | 4.5               | 0.0     |
| Calculus of kidney and ureter                | 2.5      | 2.0                 | 1.7                     | 2.1                      | 2.3                            | 3.0               | 0.0     |
| Diseases of the skin and subcutaneous tissue | 4.2      | 2.5                 | 3.6                     | 3.6                      | 4.4                            | 4.8               | 0.0     |
| Cellulitis and abscess                       | 3.9      | 2.2                 | 2.7                     | 3.1                      | 3.8                            | 4.4               | 0.0     |
| Diseases of the musculoskeletal system       | 3.8      | 4.2                 | 4.3                     | 4.0                      | 3.7                            | 3.8               | 4.0     |
| Osteoarthritis and allied disorders          | 1.8      | 0.0                 | 2.0                     | 1.9                      | 1.7                            | 1.9               | 0.0     |
| Invertebral disc disorders                   | 3.8      | 0.0                 | 2.8                     | 2.6                      | 3.5                            | 4.5               | 0.0     |
| Congenital anomalies                         | 7.4      | 9.7                 | 2.9                     | 3.9                      | 5.4                            | 6.0               | 0.0     |
| Conditions originating in perinatal period   | 7.4      | 7.4                 | 2.0                     | 6.5                      | 0.0                            | 0.0               | 0.0     |
| Symptoms signs and ill-defined conditions    | 4.1      | 2.8                 | 2.9                     | 3.7                      | 3.9                            | 4.5               | 0.0     |
| Injury and poisoning                         | 5.8      | 4.2                 | 5.1                     | 5.5                      | 6.1                            | 5.9               | 1.7     |
| Fractures, all sites                         | 5.5      | 2.6                 | 4.0                     | 4.6                      | 5.3                            | 5.9               | 1.0     |
| Fracture of neck of femur                    | 4.9      | 1.9                 | 2.8                     | 4.7                      | 4.9                            | 4.9               | 0.0     |
| Poisonings                                   | 4.0      | 2.6                 | 3.2                     | 3.7                      | 4.6                            | 5.3               | 1.5     |

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







**4B.**

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

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

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

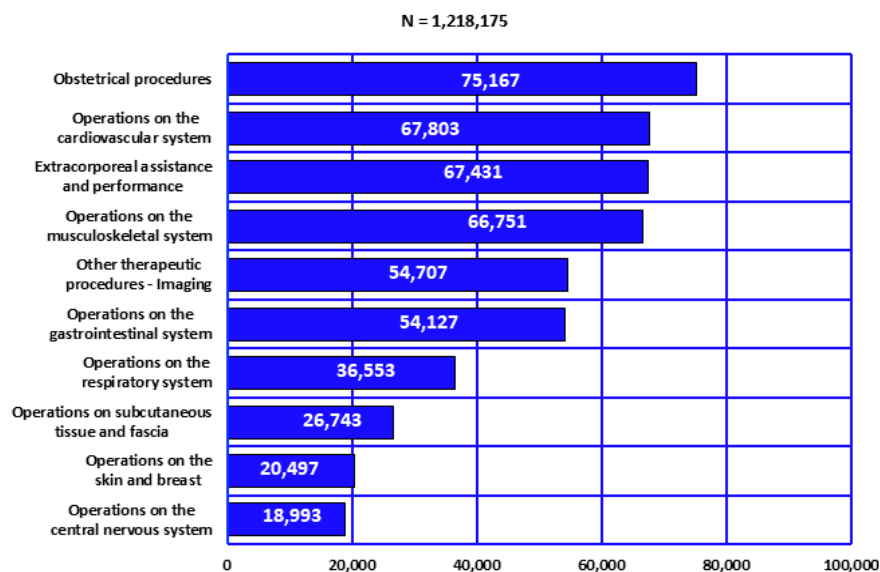
During 2015, all Arizona Hospitals transitioned to the International Classification of Diseases, 10th Revision, and Procedure Coding System (ICD-10-PCS) for coding inpatient procedures. ICD-10-PCS was implemented on October 1, 2015 in replacement of the International Classification of Diseases, Ninth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

In the current report, procedure groupings and codes are based on ICD-10-PCS. ICD-10-PCS is structurally different and far more detailed with about 72,000 procedure codes than ICD-9-CM, which includes only 3,824 procedure codes. Due to the fundamental differences in coding systems, caution should be exercised in comparing 2019 hospital discharge data with data from years prior 2016. For further explanation of ICD-10-CM transition, please refer to "[The Implementation of the International Classification of Disease, Tenth Revision](#)".

\*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, 2021**

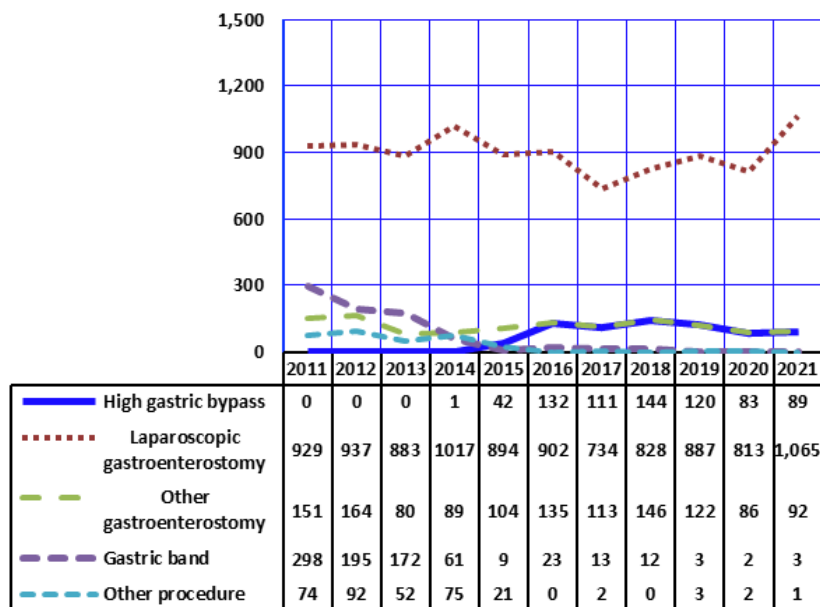


Note: Excludes newborn infants.

During 2021, 1,218,175 procedures were performed among the 678,607 (Table 4A-1) total inpatient discharges to Arizona residents. The 2021 rate of procedures was 1672.1 per 10,000 population, representing an increase from the 2020 rate of 1556.2 per 10,000.

No specific procedure was recorded for 37.5 percent of all inpatient discharges. Only 2.1 percent of inpatients had six procedures reported while 1.0 of inpatients had 12 procedures recorded. Among the inpatient discharges which had one or more specific procedures recorded, the most frequent were *obstetrical procedures*, followed by *operations on the cardiovascular system*, and *extracorporeal assistance and performance* (Figure 4B-1, Table 4B-1).

**Figure 4B-2**  
**Trends in Types of Inpatient Procedures Performed in Treatment of Morbid Obesity, Arizona Residents, 2011-2021**



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

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 2021, *morbid obesity* was the principal diagnosis for 3,793 inpatient hospitalizations (Table 4A-1). The number of *gastric bypass* surgeries, once the most common bariatric procedure, declined from a recent high of 2,123 in 2003 to fewer than 10 gastric bypass surgeries being completed collectively between 2007-2014. Since 2015, the number of *gastric bypass procedures* has seen a dramatic increase (Figure 4B-2). As in any years since 2011, *laparoscopic gastroenterostomy* remained the most popular procedure, with 1,065 surgeries performed in 2021.

**TABLE 4B-1  
NUMBER OF PROCEDURES BY CATEGORY AND AGE GROUP, ARIZONA, 2021**

| Procedures by category                              | Total     | Age group             |                                    |                                   |   |                      | Un-<br>known |
|---|-----------|-----------------------|------------------------------------|-----------------------------------|---|----------------------|--------------|
|   |           | Children<br><15 years | Adoles-<br>cents<br>15-19<br>years | Young<br>adults<br>20-44<br>years | Middle-<br>aged<br>adults<br>45-64<br>years | Elderly<br>65+ years |              |
| All procedures                                      | 1,218,175 | 54,582                | 23,693                             | 340,703                           | 326,307                                     | 472,793              | 97           |
| Operations on the central nervous system            | 18,993    | 1,790                 | 534                                | 5,096                             | 4,838                                       | 6,732                | *            |
| Spinal tap  | 7,282     | 1,294                 | 169                                | 1,333                             | 1,878                                       | 2,605                | *            |
| Operations on the peripheral nervous system         | 6,864     | 61                    | 115                                | 1,036                             | 2,390                                       | 3,262                | 0            |
| Operations on the heart and great vessels           | 67,803    | 2,322                 | 552                                | 7,458                             | 21,241                                      | 36,225               | *            |
| Heart transplant                                    | 60†       | 6                     | *                                  | 11                                | 25  | 11                   | 0            |
| Coronary artery bypass graft                        | 3,406     | 0                     | 0                                  | 65                                | 1,118                                       | 2,223                | 0            |
| Cardiac catheterization                             | 18,605    | 119                   | 26                                 | 1,005                             | 6,515                                       | 10,940               | 0            |
| Insertion, replacement, removal, of pacemaker leads | 4,840     | 32                    | 13                                 | 120                               | 826   | 3,849                | 0            |
| Operations on the upper arteries                    | 17,263    | 242                   | 153                                | 2,336                             | 5,586                                       | 8,942                | *            |
| Operations on the lower arteries                    | 7,754     | 348                   | 64                                 | 784                               | 2,045                                       | 4,508                | *            |
| Operations on the upper veins                       | 18,936    | 181                   | 134                                | 3,003                             | 6,158                                       | 9,459                | *            |
| Operations on the lower veins                       | 10,706    | 1,174                 | 83                                 | 1,257                             | 3,464                                       | 4,722                | 6            |
| Operations on the lymphatic and hemic systems       | 8,337     | 261                   | 132                                | 937                               | 2,620                                       | 4,386                | *            |
| Operations on the eye                               | 508       | 63                    | 31                                 | 154                               | 125   | 135                  | 0            |
| Operations on the ear, nose, sinus                  | 1,027     | 155                   | 43                                 | 252                               | 266   | 311                  | 0            |
| Operations on the respiratory system                | 36,553    | 1,971                 | 461                                | 6,291                             | 12,314                                      | 15,501               | 15           |
| Bronchoscopy with or without biopsy                 | 3,221     | 206                   | 48                                 | 490                               | 1,093                                       | 1,384                | 0            |
| Operations on the mouth and throat                  | 3,200     | 912                   | 113                                | 606                               | 733   | 836                  | 0            |
| Operations on the gastrointestinal system           | 54,127    | 2,167                 | 808                                | 10,959                            | 16,503                                      | 23,689               | *            |
| Implantation of gastric band                        | 0†        | 0                     | 0                                  | *                                 | *   | *                    | 0            |
| Endoscopy of small intestine with or without biopsy | 13,757    | 278                   | 209                                | 2,593                             | 4,131                                       | 6,546                | 0            |
| Endoscopy of large intestine with or without biopsy | 8,747     | 154                   | 121                                | 1,114                             | 2,626                                       | 4,732                | 0            |
| Appendectomy, excluding incidental                  | 3,373     | 638                   | 209                                | 881                               | 886   | 759                  | 0            |
| Operations on the hepatobiliary system and pancreas | 14,057    | 136                   | 251                                | 2,879                             | 4,385                                       | 6,404                | *            |
| Cholecystectomy                                     | 6,927     | 47                    | 171                                | 1,919                             | 2,072                                       | 2,718                | 0            |
| Operations on the endocrine system                  | 970       | 22                    | 22                                 | 185                               | 365   | 376                  | 0            |
| Operations on the skin and breast                   | 20,497    | 374                   | 1,017                              | 12,412                            | 3,306                                       | 3,386                | *            |
| Breast surgery                                      | 860†      | 0                     | *                                  | 204                               | 387   | 266                  | 0            |

**TABLE 4B-1 (continued)  
NUMBER OF PROCEDURES BY CATEGORY AND AGE GROUP, ARIZONA, 2021**

| Procedures by category                                       | Total   | Age group             |                                    |                                   |   |                      | Un-<br>known |
|--|---------|-----------------------|------------------------------------|-----------------------------------|---|----------------------|--------------|
|  |         | Children<br><15 years | Adoles-<br>cents<br>15-19<br>years | Young<br>adults<br>20-44<br>years | Middle-<br>aged<br>adults<br>45-64<br>years | Elderly<br>65+ years |              |
| Operations on the subcutaneous tissue and fascia             | 26,743  | 710                   | 444                                | 5,269                             | 9,235                                       | 11,083               | *            |
| Operations on the musculoskeletal system                     | 66,751  | 1,356                 | 1,768                              | 20,931                            | 15,190                                      | 27,504               | *            |
| Open reduction of fracture with or without internal fixation | 8,021   | 272                   | 225                                | 1,602                             | 1,649                                       | 4,272                | *            |
| Total hip replacement  | 3,350†  | *                     | *                                  | 88                                | 853   | 2,397                | 0            |
| Total knee replacement                                       | 4,170†  | *                     | *                                  | 40                                | 1,198                                       | 2,921                | 0            |
| Operations on the urinary system                             | 16,966  | 304                   | 179                                | 2,882                             | 5,211                                       | 8,389                | *            |
| Kidney transplant  | 180†    | *                     | *                                  | 55                                | 95  | 30                   | 0            |
| Operations on the male reproductive system                   | 6,554   | 4,685                 | 26                                 | 273                               | 609   | 961                  | 0            |
| Prostatectomy  | 1,123   | 0                     | 0                                  | 8                                 | 359   | 756                  | 0            |
| Operations on the female reproductive system                 | 15,836  | 82                    | 749                                | 12,852                            | 1,303                                       | 850                  | 0            |
| Oophorectomy and salpingo-oophorectomy                       | 2,537   | 7                     | 18                                 | 1,057                             | 908   | 547                  | 0            |
| Hysterectomy   | 2,100†  | 0                     | *                                  | 791                               | 861   | 441                  | 0            |
| Obstetrical procedures                                       | 75,167  | 43                    | 3,452                              | 71,523                            | 149   | 0                    | 0            |
| Episiotomy with or without forceps or vacuum extraction      | 2,504   | 7                     | 191                                | 2,300                             | 6   | 0                    | 0            |
| Artificial rupture of membranes                              | 22,426  | 19                    | 1,152                              | 21,218                            | 37  | 0                    | 0            |
| Cesarean section   | 21,780† | *                     | 525                                | 21,170                            | 83  | 0                    | 0            |
| Other therapeutic procedures - Imaging                       | 54,707  | 1,270                 | 389                                | 5,574                             | 17,159                                      | 30,314               | *            |
| Computerized tomography (CT Scan)                            | 2,446   | 106                   | 34                                 | 388                               | 767   | 1,151                | 0            |
| Magnetic resonance imaging (MRI)                             | 1,175   | 570                   | 80                                 | 76                                | 188   | 261                  | 0            |
| Other therapeutic procedures - Nuclear medicine              | 120†    | 26                    | 7                                  | *                                 | 30  | 49                   | 0            |
| Other therapeutic procedures - Radiation therapy             | 161     | 10                    | 6                                  | 23                                | 56  | 66                   | 0            |
| Extracorporeal assistance and performance                    | 67,431  | 4,037                 | 576                                | 9,498                             | 22,667                                      | 30,637               | 16           |
| Hemodialysis   | 20,723  | 22                    | 41                                 | 2,895                             | 8,435                                       | 9,330                | 0            |

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

**TABLE 4B-2  
NUMBER OF PROCEDURES BY CATEGORY AND GENDER, ARIZONA, 2021**

| Procedures by category                              | Total     | Patient's gender |         |         |
|---|-----------|------------------|---------|---------|
|   |           | Male             | Female  | Unknown |
| All procedures                                      | 1,218,175 | 575,766          | 642,278 | 131     |
| Operations on the central nervous system            | 18,993    | 8,847            | 10,145  | *       |
| Spinal tap  | 7,282     | 3,829            | 3,453   | 0       |
| Operations on the peripheral nervous system         | 6,864     | 3,696            | 3,167   | *       |
| Operations on the heart and great vessels           | 67,803    | 40,376           | 27,425  | *       |
| Heart transplant                                    | 55        | 46               | 9       | 0       |
| Coronary artery bypass graft                        | 3,406     | 2,670            | 736     | 0       |
| Cardiac catheterization                             | 18,605    | 11,774           | 6,831   | 0       |
| Insertion, replacement, removal, of pacemaker leads | 4,840     | 2,874            | 1,966   | 0       |
| Operations on the upper arteries                    | 17,263    | 9,942            | 7,320   | *       |
| Operations on the lower arteries                    | 7,754     | 4,772            | 2,976   | 6       |
| Operations on the upper veins                       | 18,936    | 9,026            | 9,908   | *       |
| Operations on the lower veins                       | 10,706    | 6,938            | 3,764   | *       |
| Operations on the lymphatic and hemic systems       | 8,337     | 4,454            | 3,883   | 0       |
| Operations on the eye                               | 508       | 329              | 179     | 0       |
| Operations on the ear, nose, sinus                  | 1,027     | 615              | 411     | *       |
| Operations on the respiratory system                | 36,553    | 20,888           | 15,656  | 9       |
| Bronchoscopy with or without biopsy                 | 3,221     | 1,885            | 1,336   | 0       |
| Operations on the mouth and throat                  | 3,200     | 1,985            | 1,213   | *       |
| Operations on the gastrointestinal system           | 54,127    | 25,330           | 28,796  | *       |
| Implantation of gastric band                        | 0†        | *                | *       | 0       |
| Endoscopy of small intestine with or without biopsy | 13,757    | 6,683            | 7,074   | 0       |
| Endoscopy of large intestine with or without biopsy | 8,747     | 4,210            | 4,537   | 0       |
| Appendectomy, excluding incidental                  | 3,373     | 1,684            | 1,689   | 0       |
| Operations on the hepatobiliary system and pancreas | 14,057    | 6,715            | 7,341   | *       |
| Cholecystectomy                                     | 6,927     | 2,996            | 3,931   | 0       |
| Operations on the endocrine system                  | 970       | 440              | 530     | 0       |
| Operations on the skin and breast                   | 20,497    | 5,826            | 14,668  | *       |
| Breast surgery                                      | 858       | 25               | 833     | 0       |

**TABLE 4B-2 (continued)  
NUMBER OF PROCEDURES BY CATEGORY AND GENDER, ARIZONA, 2021**

| Procedures by category                                       | Total   | Patient's gender |        |         |
|--|---------|------------------|--------|---------|
|  |         | Male             | Female | Unknown |
| Operations on the subcutaneous tissue and fascia             | 26,743  | 15,205           | 11,532 | 6       |
| Operations on the musculoskeletal system                     | 66,751  | 26,535           | 40,206 | 10      |
| Open reduction of fracture with or without internal fixation | 8,021   | 3,444            | 4,574  | *       |
| Total hip replacement  | 3,346   | 1,328            | 2,018  | 0       |
| Total knee replacement                                       | 4,165   | 1,685            | 2,480  | 0       |
| Operations on the urinary system                             | 16,966  | 9,007            | 7,958  | *       |
| Kidney transplant  | 182     | 112              | 70     | 0       |
| Operations on the male reproductive system                   | 6,554   | 6,480            | 73     | *       |
| Prostatectomy  | 1,123   | 1,123            | 0      | 0       |
| Operations on the female reproductive system                 | 15,836  | 12               | 15,824 | 0       |
| Oophorectomy and salpingo-oophorectomy                       | 2,537   | 8                | 2,529  | 0       |
| Hysterectomy   | 2,096   | 7                | 2,089  | 0       |
| Obstetrical procedures                                       | 75,170† | *                | 75,166 | 0       |
| Episiotomy with or without forceps or vacuum extraction      | 2,504   | 0                | 2,504  | 0       |
| Artificial rupture of membranes                              | 22,426  | 0                | 22,426 | 0       |
| Cesarean section   | 21,782  | 0                | 21,782 | 0       |
| Other therapeutic procedures - Imaging                       | 54,707  | 31,727           | 22,978 | *       |
| Computerized tomography (CT Scan)                            | 2,446   | 1,314            | 1,132  | 0       |
| Magnetic resonance imaging (MRI)                             | 1,175   | 628              | 547    | 0       |
| Other therapeutic procedures - Nuclear medicine              | 117     | 56               | 61     | 0       |
| Other therapeutic procedures - Radiation therapy             | 161     | 83               | 78     | 0       |
| Extracorporeal assistance and performance                    | 67,431  | 39,933           | 27,487 | 11      |
| Hemodialysis   | 20,723  | 11,775           | 8,948  | 0       |

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

**TABLE 4B-3  
NUMBER OF PROCEDURES BY CATEGORY AND RACE/ETHNICITY, ARIZONA, 2021**

| Procedures by category                              | Total     | Race/ethnicity     |                    |                           |                                  |                           |                  |
|---|-----------|--------------------|--------------------|---------------------------|----------------------------------|---------------------------|------------------|
|   |           | White non-Hispanic | Hispanic or Latino | Black or African American | American Indian or Alaska Native | Asian or Pacific Islander | Refused /Unknown |
| All procedures                                      | 1,218,175 | 799,420            | 250,963            | 66,065                    | 57,812                           | 27,771                    | 16,144           |
| Operations on the central nervous system            | 18,993    | 12,731             | 3,821              | 1,115                     | 629                              | 430                       | 267              |
| Spinal tap  | 7,282     | 4,729              | 1,468              | 505                       | 292                              | 178                       | 110              |
| Operations on the peripheral nervous system         | 6,864     | 5,357              | 866                | 257                       | 167                              | 117                       | 100              |
| Operations on the heart and great vessels           | 67,803    | 47,662             | 11,094             | 3,448                     | 3,255                            | 1,392                     | 952              |
| Heart transplant                                    | 60†       | 34                 | 13                 | *                         | *                                | *                         | 0                |
| Coronary artery bypass graft                        | 3,406     | 2,612              | 478                | 80                        | 89                               | 92                        | 55               |
| Cardiac catheterization                             | 18,605    | 14,172             | 2,454              | 824                       | 534                              | 338                       | 283              |
| Insertion, replacement, removal, of pacemaker leads | 4,840     | 3,904              | 520                | 123                       | 125                              | 97                        | 71               |
| Operations on the upper arteries                    | 17,263    | 11,602             | 3,261              | 938                       | 881                              | 330                       | 251              |
| Operations on the lower arteries                    | 7,754     | 5,540              | 1,275              | 398                       | 302                              | 129                       | 110              |
| Operations on the upper veins                       | 18,936    | 13,489             | 2,709              | 1,268                     | 959                              | 275                       | 236              |
| Operations on the lower veins                       | 10,706    | 7,036              | 2,108              | 571                       | 608                              | 213                       | 170              |
| Operations on the lymphatic and hemic systems       | 8,337     | 6,127              | 1,312              | 381                       | 189                              | 240                       | 88               |
| Operations on the eye                               | 508       | 292                | 118                | 39                        | 41                               | 9                         | 9                |
| Operations on the ear, nose, sinus                  | 1,027     | 630                | 237                | 51                        | 58                               | 27                        | 24               |
| Operations on the respiratory system                | 36,553    | 24,011             | 7,092              | 2,267                     | 1,811                            | 754                       | 618              |
| Bronchoscopy with or without biopsy                 | 3,221     | 2,148              | 626                | 180                       | 143                              | 67                        | 57               |
| Operations on the mouth and throat                  | 3,200     | 1,959              | 716                | 251                       | 139                              | 87                        | 48               |
| Operations on the gastrointestinal system           | 54,127    | 36,754             | 10,271             | 2,838                     | 2,396                            | 1,236                     | 632              |
| Implantation of gastric band                        | 0†        | *                  | 0                  | 0                         | 0                                | 0                         | 0                |
| Endoscopy of small intestine with or without biopsy | 13,757    | 9,317              | 2,471              | 714                       | 813                              | 275                       | 167              |
| Endoscopy of large intestine with or without biopsy | 8,747     | 6,244              | 1,419              | 442                       | 372                              | 178                       | 92               |
| Appendectomy, excluding incidental                  | 3,373     | 2,127              | 881                | 98                        | 139                              | 80                        | 48               |
| Operations on the hepatobiliary system and pancreas | 14,057    | 9,037              | 3,223              | 553                       | 766                              | 314                       | 164              |
| Cholecystectomy                                     | 6,927     | 4,291              | 1,802              | 231                       | 402                              | 125                       | 76               |
| Operations on the endocrine system                  | 970       | 620                | 209                | 65                        | 37                               | 31                        | 8                |
| Operations on the skin and breast                   | 20,497    | 11,939             | 5,620              | 1,108                     | 1,035                            | 502                       | 293              |
| Breast surgery                                      | 858       | 636                | 127                | 53                        | 15                               | 19                        | 8                |

**TABLE 4B-3 (continued)  
NUMBER OF PROCEDURES BY CATEGORY AND RACE/ETHNICITY, ARIZONA, 2021**

| Procedures by category                                       | Total  | Race/ethnicity     |                    |                           |                                  |                           | Refused /Unknown |
|--|--------|--------------------|--------------------|---------------------------|----------------------------------|---------------------------|------------------|
|  |        | White non-Hispanic | Hispanic or Latino | Black or African American | American Indian or Alaska Native | Asian or Pacific Islander |                  |
| Operations on the subcutaneous tissue and fascia             | 26,743 | 17,150             | 5,197              | 1,661                     | 1,885                            | 516                       | 334              |
| Operations on the musculoskeletal system                     | 66,751 | 47,289             | 11,559             | 2,745                     | 2,507                            | 1,796                     | 855              |
| Open reduction of fracture with or without internal fixation | 8,021  | 5,902              | 1,231              | 300                       | 347                              | 111                       | 130              |
| Total hip replacement  | 3,346  | 2,947              | 149                | 87                        | 45                               | 86                        | 32               |
| Total knee replacement                                       | 4,165  | 3,455              | 262                | 147                       | 89                               | 167                       | 45               |
| Operations on the urinary system                             | 16,966 | 12,129             | 2,982              | 721                       | 553                              | 406                       | 175              |
| Kidney transplant  | 182    | 87                 | 56                 | 21                        | 8                                | 8                         | *                |
| Operations on the male reproductive system                   | 6,554  | 4,645              | 981                | 452                       | 125                              | 275                       | 76               |
| Prostatectomy  | 1,120† | 891                | 131                | 55                        | *                                | 27                        | 14               |
| Operations on the female reproductive system                 | 15,836 | 7,482              | 5,884              | 1,136                     | 661                              | 505                       | 168              |
| Oophorectomy and salpingo-oophorectomy                       | 2,537  | 1,494              | 634                | 195                       | 76                               | 91                        | 47               |
| Hysterectomy   | 2,096  | 1,204              | 515                | 197                       | 57                               | 84                        | 39               |
| Obstetrical procedures                                       | 75,167 | 36,255             | 27,251             | 5,105                     | 2,901                            | 2,808                     | 847              |
| Episiotomy with or without forceps or vacuum extraction      | 2,504  | 1,345              | 784                | 152                       | 72                               | 114                       | 37               |
| Artificial rupture of membranes                              | 22,426 | 11,076             | 8,047              | 1,414                     | 916                              | 760                       | 213              |
| Cesarean section   | 21,782 | 10,649             | 7,443              | 1,682                     | 828                              | 913                       | 267              |
| Other therapeutic procedures - Imaging                       | 54,707 | 39,688             | 8,442              | 2,524                     | 2,390                            | 964                       | 699              |
| Computerized tomography (CT Scan)                            | 2,446  | 1,593              | 528                | 164                       | 89                               | 52                        | 20               |
| Magnetic resonance imaging (MRI)                             | 1,175  | 658                | 303                | 106                       | 71                               | 26                        | 11               |
| Other therapeutic procedures - Nuclear medicine              | 120†   | 76                 | 21                 | 6                         | 9                                | *                         | *                |
| Other therapeutic procedures - Radiation therapy             | 160†   | 112                | 31                 | 6                         | 7                                | *                         | 0                |
| Extracorporeal assistance and performance                    | 67,431 | 41,541             | 13,836             | 4,547                     | 5,013                            | 1,449                     | 1,045            |
| Hemodialysis   | 20,723 | 9,931              | 5,396              | 2,009                     | 2,655                            | 559                       | 173              |

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



**TABLE 4B-4  
NUMBER OF PROCEDURES BY CATEGORY AND EXPECTED SOURCE OF PAYMENT, ARIZONA, 2021**

| Procedures by category                              | Total     | Self-pay | Private insurance (indemnity, HMO, PPO) | AHCCCS/ Medicaid | Medicare | Other   |
|---|-----------|----------|---|------------------|----------|---------|
| All procedures                                      | 1,218,175 | 25,954   | 322,789                                 | 326,794          | 370,954  | 171,684 |
| Operations on the central nervous system            | 18,993    | 419      | 5,453                                   | 5,340            | 5,282    | 2,499   |
| Spinal tap  | 7,282     | 134      | 1,881                                   | 2,277            | 2,113    | 877     |
| Operations on the peripheral nervous system         | 6,864     | 85       | 1,991                                   | 1,034            | 2,433    | 1,321   |
| Operations on the heart and great vessels           | 67,803    | 967      | 13,062                                  | 13,893           | 29,261   | 10,620  |
| Heart transplant                                    | 60†       | *        | 27                                      | 8                | 12       | *       |
| Coronary artery bypass graft                        | 3,406     | 43       | 784                                     | 341              | 1,583    | 655     |
| Cardiac catheterization                             | 18,605    | 471      | 4,008                                   | 2,668            | 8,098    | 3,360   |
| Insertion, replacement, removal, of pacemaker leads | 4,840     | 27       | 702                                     | 334              | 2,865    | 912     |
| Operations on the upper arteries                    | 17,263    | 308      | 2,909                                   | 4,052            | 7,387    | 2,607   |
| Operations on the lower arteries                    | 7,754     | 118      | 1,344                                   | 1,462            | 3,430    | 1,400   |
| Operations on the upper veins                       | 18,936    | 324      | 2,956                                   | 4,582            | 6,901    | 4,173   |
| Operations on the lower veins                       | 10,706    | 207      | 2,302                                   | 2,936            | 3,645    | 1,616   |
| Operations on the lymphatic and hemic systems       | 8,337     | 107      | 2,242                                   | 1,284            | 3,427    | 1,277   |
| Operations on the eye                               | 508       | 20       | 101                                     | 227              | 96       | 64      |
| Operations on the ear, nose, sinus                  | 1,027     | 21       | 328                                     | 294              | 257      | 127     |
| Operations on the respiratory system                | 36,553    | 800      | 7,700                                   | 10,227           | 12,749   | 5,077   |
| Bronchoscopy with or without biopsy                 | 3,221     | 45       | 737                                     | 831              | 1,148    | 460     |
| Operations on the mouth and throat                  | 3,200     | 86       | 922                                     | 1,133            | 740      | 319     |
| Operations on the gastrointestinal system           | 54,127    | 991      | 13,714                                  | 12,896           | 18,662   | 7,864   |
| Implantation of gastric band                        | 0†        | 0        | *                                       | *                | *        | 0       |
| Endoscopy of small intestine with or without biopsy | 13,757    | 218      | 2,764                                   | 3,469            | 5,234    | 2,072   |
| Endoscopy of large intestine with or without biopsy | 8,747     | 151      | 1,922                                   | 1,606            | 3,645    | 1,423   |
| Appendectomy, excluding incidental                  | 3,373     | 159      | 1,276                                   | 1,027            | 595      | 316     |
| Operations on the hepatobiliary system and pancreas | 14,057    | 333      | 3,627                                   | 3,290            | 4,966    | 1,841   |
| Cholecystectomy                                     | 6,927     | 205      | 1,906                                   | 1,877            | 2,084    | 855     |
| Operations on the endocrine system                  | 970       | 12       | 330                                     | 195              | 308      | 125     |
| Operations on the skin and breast                   | 20,497    | 749      | 7,048                                   | 7,973            | 2,847    | 1,880   |
| Breast surgery                                      | 858       | 34       | 419                                     | 112              | 217      | 76      |

**TABLE 4B-4 (continued)**  
**NUMBER OF PROCEDURES BY CATEGORY AND EXPECTED SOURCE OF PAYMENT, ARIZONA, 2021**

| Procedures by category                                       | Total  | Self-pay | Private insurance (indemnity, HMO, PPO) | AHCCCS/Medicaid | Medicare | Other  |
|--|--------|----------|---|-----------------|----------|--------|
| Operations on the subcutaneous tissue and fascia             | 26,743 | 506      | 5,122                                   | 7,501           | 9,817    | 3,797  |
| Operations on the musculoskeletal system                     | 66,751 | 1,330    | 19,257                                  | 14,761          | 20,853   | 10,550 |
| Open reduction of fracture with or without internal fixation | 8,021  | 212      | 1,388                                   | 1,737           | 3,238    | 1,446  |
| Total hip replacement  | 3,346  | 26       | 635                                     | 231             | 1,679    | 775    |
| Total knee replacement                                       | 4,165  | 16       | 970                                     | 207             | 2,122    | 850    |
| Operations on the urinary system                             | 16,966 | 326      | 4,250                                   | 3,164           | 6,781    | 2,445  |
| Kidney transplant  | 182    | 0        | 80                                      | 8               | 77       | 17     |
| Operations on the male reproductive system                   | 6,554  | 258      | 3,560                                   | 1,525           | 692      | 519    |
| Prostatectomy  | 1,123  | 16       | 328                                     | 63              | 523      | 193    |
| Operations on the female reproductive system                 | 15,836 | 455      | 6,723                                   | 7,144           | 720      | 794    |
| Oophorectomy and salpingo-oophorectomy                       | 2,537  | 124      | 1,075                                   | 685             | 425      | 228    |
| Hysterectomy   | 2,096  | 98       | 949                                     | 521             | 343      | 185    |
| Obstetrical procedures                                       | 75,167 | 2,489    | 34,564                                  | 34,729          | 190      | 3,195  |
| Episiotomy with or without forceps or vacuum extraction      | 2,504  | 137      | 1,184                                   | 1,061           | 14       | 108    |
| Artificial rupture of membranes                              | 22,426 | 754      | 10,066                                  | 10,592          | 35       | 979    |
| Cesarean section   | 21,782 | 642      | 10,571                                  | 9,591           | 75       | 903    |
| Other therapeutic procedures - Imaging                       | 54,707 | 1,093    | 11,051                                  | 10,252          | 21,768   | 10,543 |
| Computerized tomography (CT Scan)                            | 2,446  | 57       | 508                                     | 617             | 723      | 541    |
| Magnetic resonance imaging (MRI)                             | 1,175  | 32       | 337                                     | 488             | 151      | 167    |
| Other therapeutic procedures - Nuclear medicine              | 120†   | *        | 29                                      | 35              | 41       | 11     |
| Other therapeutic procedures - Radiation therapy             | 160†   | *        | 60                                      | 28              | 48       | 22     |
| Extracorporeal assistance and performance                    | 67,431 | 1,131    | 11,985                                  | 16,971          | 26,890   | 10,454 |
| Hemodialysis   | 20,723 | 91       | 2,249                                   | 4,371           | 10,680   | 3,332  |

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



#### 4C.

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

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

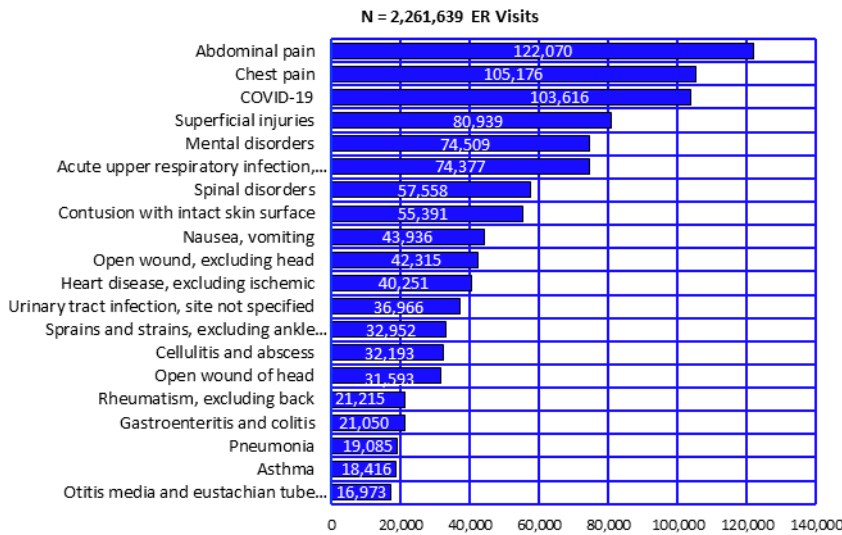
All emergency room visits are those of the residents of Arizona. Ambulatory care visits to hospital emergency rooms of out-of-state residents are not included in this report. In the current report, diagnostic groupings and code numbers are solely based on the International Classification of Diseases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

Please refer to "[The Implementation of the International Classification of Disease, Tenth Revision,](#)" for further explanation of ICD-10-CM transition.

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

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

**Figure 4C-1**  
**Number of Emergency Room Visits by the Leading Diagnostic Groupings,**  
**Arizona Residents, 2021**



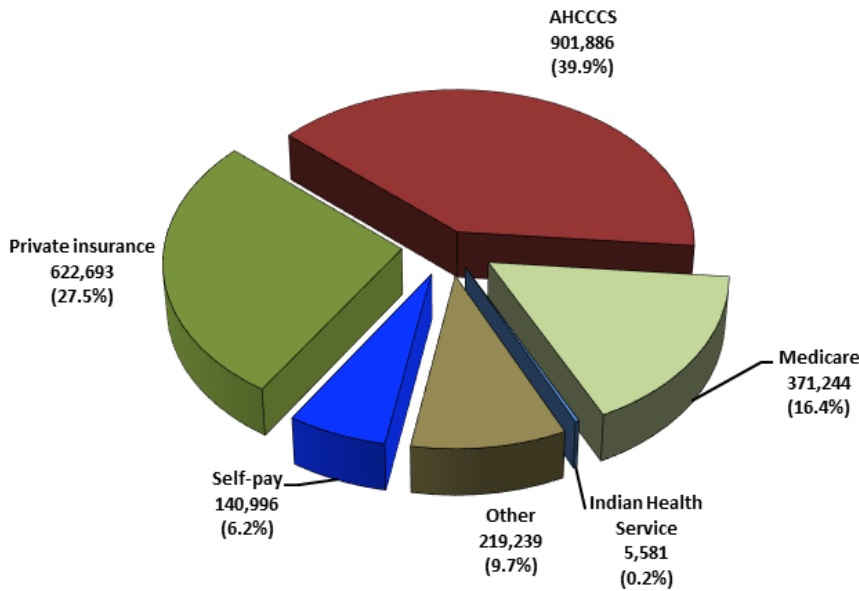
During 2021, approximately 2.2 million visits were made by Arizona residents to hospital emergency rooms (ER), which translate to 31.0 visits per 100 persons.

In 2021, *abdominal pain, chest pain, COVID-19, superficial injuries, mental disorders, acute upper respiratory infection, spinal disorders, and contusion with intact skin surface*, were the leading diagnostic categories, accounting for 29.8 percent of all visits (**Figure 4C-1, Table 4C-2**).

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

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

**Figure 4C-2**  
**Emergency Room Visits by Payer, Arizona Residents, 2021**



The Arizona Health Care Cost Containment System (AHCCCS, the State’s Medicaid program) was the most frequently recorded expected source of payment, accounting for 39.9 percent of ER visits (**Figure 4C-3**). Private insurance was the second most frequent payer (27.5 percent of ER visits), followed by Medicare (16.4 percent).

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

**TABLE 4C-1  
NUMBER OF EMERGENCY ROOM VISITS BY FIRST-LISTED DIAGNOSIS AND AGE GROUP, ARIZONA, 2021**

| Category of first-listed diagnosis                           | All Ages  | Age group          |                         |                          |                                |                   | Unknown |
|--|-----------|--------------------|-------------------------|--------------------------|--------------------------------|-------------------|---------|
|  |           | Children <15 years | Adolescents 15-19 years | Young adults 20-44 years | Middle-aged adults 45-64 years | Elderly 65+ years |         |
| <b>Total, all causes</b>                                     | 2,261,639 | 320,975            | 126,423                 | 818,225                  | 531,665                        | 464,109           | 242     |
| <b>Infectious and parasitic diseases</b>                     | 50,032    | 18,099             | 3,223                   | 15,550                   | 7,689                          | 5,471             | 0       |
| <b>Neoplasms</b>   | 6,410     | 167                | 90                      | 1,445                    | 2,128                          | 2,580             | 0       |
| <b>Endocrine nutritional metabolic and immunity diseases</b> | 55,089    | 2,180              | 1,808                   | 18,360                   | 18,311                         | 14,425            | *       |
| <b>Diabetes mellitus</b>                                     | 16,465    | 570                | 394                     | 4,572                    | 6,744                          | 4,184             | *       |
| <b>Mental disorders</b>                                      | 74,509    | 3,063              | 5,448                   | 39,484                   | 19,525                         | 6,941             | 48      |
| <b>Psychoses</b>   | 49,095    | 1,116              | 3,051                   | 26,761                   | 13,879                         | 4,246             | 42      |
| <b>Alcoholic psychoses</b>                                   | 5,478     | 22                 | 176                     | 3,180                    | 1,788                          | 310               | *       |
| <b>Drug psychoses</b>  | 2,208     | 61                 | 242                     | 1,441                    | 375                            | 88                | *       |
| <b>Schizophrenic disorders</b>                               | 790†      | *                  | 16                      | 454                      | 278                            | 36                | 0       |
| <b>Manic-depressive disorders</b>                            | 6,630     | 890                | 1,213                   | 2,565                    | 1,356                          | 606               | 0       |
| <b>Neurotic disorders</b>                                    | 62,718    | 2,722              | 4,526                   | 33,147                   | 17,051                         | 5,231             | 41      |
| <b>Anxiety states</b>  | 17,283    | 489                | 1,319                   | 9,500                    | 3,964                          | 2,010             | *       |
| <b>Depression</b>  | 4,809     | 744                | 1,028                   | 1,724                    | 870                            | 443               | 0       |
| <b>Drug dependence</b>                                       | 2,716     | 6                  | 155                     | 1,768                    | 581                            | 206               | 0       |
| <b>Nondependent abuse of drugs</b>                           | 8,977     | 101                | 585                     | 5,822                    | 2,138                          | 319               | 12      |
| <b>Alcohol dependence</b>                                    | 6,605     | 0                  | 18                      | 3,544                    | 2,615                          | 427               | *       |
| <b>Diseases of the nervous system</b>                        | 53,852    | 2,456              | 2,511                   | 21,880                   | 15,744                         | 11,253            | 8       |
| <b>Diseases of the eye and adnexa</b>                        | 17,399    | 3,014              | 803                     | 5,751                    | 4,523                          | 3,308             | 0       |
| <b>Diseases of the ear and mastoid process</b>               | 32,281    | 14,373             | 1,624                   | 8,468                    | 4,500                          | 3,316             | 0       |
| <b>Diseases of the circulatory system</b>                    | 82,268    | 1,038              | 725                     | 11,740                   | 26,664                         | 42,054            | 47      |
| <b>Diseases of the respiratory system</b>                    | 170,475   | 66,242             | 10,473                  | 46,343                   | 25,875                         | 21,540            | *       |
| <b>Acute bronchitis and bronchiolitis</b>                    | 14,964    | 7,898              | 385                     | 3,208                    | 2,143                          | 1,330             | 0       |
| <b>Pneumonia</b>   | 19,085    | 2,903              | 594                     | 5,010                    | 5,139                          | 5,439             | 0       |
| <b>COVID-19</b>  | 103,616   | 7,432              | 4,017                   | 39,080                   | 32,048                         | 21,039            | 0       |
| <b>Chronic bronchitis</b>                                    | 8,910†    | 14                 | *                       | 310                      | 3,542                          | 5,036             | 0       |
| <b>Asthma</b>  | 18,416    | 5,870              | 1,306                   | 7,001                    | 3,105                          | 1,134             | 0       |
| <b>Diseases of the digestive system</b>                      | 154,488   | 15,830             | 6,816                   | 60,004                   | 40,156                         | 31,680            | *       |
| <b>Diseases of the genitourinary system</b>                  | 135,691   | 8,890              | 8,203                   | 56,789                   | 31,174                         | 30,634            | 0       |
| <b>Diseases of the skin and subcutaneous tissue</b>          | 74,358    | 9,759              | 3,976                   | 30,012                   | 18,724                         | 11,887            | *       |
| <b>Diseases of the musculoskeletal system</b>                | 151,752   | 7,279              | 5,832                   | 51,833                   | 48,518                         | 38,285            | *       |
| <b>Symptoms signs and ill-defined conditions</b>             | 533,323   | 64,917             | 28,593                  | 188,361                  | 135,104                        | 116,294           | 54      |
| <b>Injury and poisoning</b>                                  | 450,908   | 84,722             | 33,841                  | 148,887                  | 90,243                         | 93,163            | 52      |
| <b>Fractures, all sites</b>                                  | 70,905    | 14,011             | 4,399                   | 18,458                   | 15,575                         | 18,458            | *       |
| <b>Sprains</b>   | 42,274    | 5,848              | 4,759                   | 16,856                   | 9,392                          | 5,419             | 0       |
| <b>Intracranial</b>  | 14,517    | 2,389              | 1,858                   | 4,982                    | 2,429                          | 2,858             | *       |
| <b>Open wounds</b>   | 95,659    | 20,533             | 6,403                   | 32,773                   | 16,658                         | 19,271            | 21      |
| <b>Superficial injuries</b>                                  | 80,939    | 15,315             | 5,617                   | 25,295                   | 16,102                         | 18,603            | 7       |
| <b>Cuts/lacerations with intact skin surface</b>             | 55,391    | 9,095              | 3,708                   | 16,749                   | 11,355                         | 14,479            | *       |
| <b>Foreign bodies</b>  | 10,734    | 4,194              | 456                     | 2,883                    | 1,714                          | 1,487             | 0       |
| <b>Burns and corrosions</b>                                  | 6,917     | 1,682              | 527                     | 2,730                    | 1,397                          | 579               | *       |
| <b>Trauma complications and unspecified injuries</b>         | 26,178    | 7,079              | 1,643                   | 6,311                    | 4,016                          | 7,126             | *       |
| <b>Poisonings</b>  | 13,171    | 1,827              | 2,094                   | 6,234                    | 2,042                          | 972               | *       |
| <b>Surgical and medical complications</b>                    | 15,664    | 717                | 285                     | 3,250                    | 4,470                          | 6,942             | 0       |

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

**TABLE 4C-2  
NUMBER OF EMERGENCY ROOM VISITS FOR THE LEADING DIAGNOSIS GROUPS<sup>a</sup> AND AGE GROUP, ARIZONA, 2021**

| Primary diagnosis group   | All Ages  | Age group          |                         |                          |                                |                   | Unknown |
|---|-----------|--------------------|-------------------------|--------------------------|--------------------------------|-------------------|---------|
|   |           | Children <15 years | Adolescents 15-19 years | Young adults 20-44 years | Middle-aged adults 45-64 years | Elderly 65+ years |         |
| <b>Total, all causes</b>  | 2,261,639 | 320,975            | 126,423                 | 818,225                  | 531,665                        | 464,109           | 242     |
| <b>Abdominal pain</b>   | 122,070   | 12,438             | 8,423                   | 53,875                   | 30,076                         | 17,258            | 0       |
| <b>Chest pain</b>   | 105,176   | 2,237              | 3,715                   | 38,132                   | 36,623                         | 24,467            | *       |
| <b>COVID-19</b>   | 103,616   | 7,432              | 4,017                   | 39,080                   | 32,048                         | 21,039            | 0       |
| <b>Superficial injuries</b>                                     | 80,939    | 15,315             | 5,617                   | 25,295                   | 16,102                         | 18,603            | 7       |
| <b>Mental disorders</b>   | 74,509    | 3,063              | 5,448                   | 39,484                   | 19,525                         | 6,941             | 48      |
| <b>Acute upper respiratory infection, excluding pharyngitis</b> | 74,377    | 44,699             | 3,459                   | 15,889                   | 6,814                          | 3,516             | 0       |
| <b>Spinal disorders</b>   | 57,558    | 1,192              | 1,718                   | 20,890                   | 19,212                         | 14,545            | *       |
| <b>Contusion with intact skin surface</b>                       | 55,391    | 9,095              | 3,708                   | 16,749                   | 11,355                         | 14,479            | *       |
| <b>Nausea, vomiting</b>   | 43,936    | 12,884             | 3,343                   | 17,095                   | 6,336                          | 4,277             | *       |
| <b>Open wound, excluding head</b>                               | 42,315    | 4,017              | 3,476                   | 18,891                   | 8,793                          | 7,126             | 12      |
| <b>Heart disease, excluding ischemic</b>                        | 40,251    | 298                | 274                     | 4,810                    | 12,699                         | 22,126            | 44      |
| <b>Urinary tract infection, site not specified</b>              | 36,966    | 3,881              | 1,821                   | 10,846                   | 7,417                          | 13,000            | *       |
| <b>Sprains and strains, excluding ankle and back</b>            | 32,952    | 4,018              | 3,177                   | 12,825                   | 8,037                          | 4,895             | 0       |
| <b>Cellulitis and abscess</b>                                   | 32,193    | 2,464              | 1,020                   | 12,487                   | 9,516                          | 6,706             | 0       |
| <b>Open wound of head</b>                                       | 31,593    | 8,984              | 2,005                   | 7,622                    | 4,637                          | 8,341             | *       |
| <b>Rheumatism, excluding back</b>                               | 21,215    | 732                | 758                     | 7,612                    | 6,950                          | 5,162             | *       |
| <b>Gastroenteritis and colitis</b>                              | 21,050    | 3,600              | 1,179                   | 7,978                    | 4,800                          | 3,493             | 0       |
| <b>Pneumonia</b>  | 19,085    | 2,903              | 594                     | 5,010                    | 5,139                          | 5,439             | 0       |
| <b>Asthma</b>   | 18,416    | 5,870              | 1,306                   | 7,001                    | 3,105                          | 1,134             | 0       |
| <b>Otitis media and eustachian tube disorders</b>               | 16,973    | 11,752             | 687                     | 3,041                    | 1,038                          | 455               | 0       |
| <b>Fever</b>  | 16,342    | 11,699             | 474                     | 1,901                    | 1,208                          | 1,060             | 0       |
| <b>Acute pharyngitis</b>  | 13,905    | 3,634              | 1,940                   | 6,117                    | 1,523                          | 691               | 0       |
| <b>Chronic and unspecified bronchitis</b>                       | 12,373    | 265                | 148                     | 1,690                    | 4,518                          | 5,752             | 0       |
| <b>Migraine</b>   | 12,136    | 428                | 888                     | 6,593                    | 3,476                          | 751               | 0       |
| <b>Sprains and strains of neck and back</b>                     | 3,225     | 134                | 285                     | 1,618                    | 844                            | 344               | 0       |
| <b>Unspecified viral and chlamydial infection</b>               | 180†      | 15                 | 37                      | 122                      | *                              | 0                 | 0       |
| <b>Headache</b>   | 40†       | *                  | *                       | 25                       | 6                              | *                 | 0       |

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



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

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

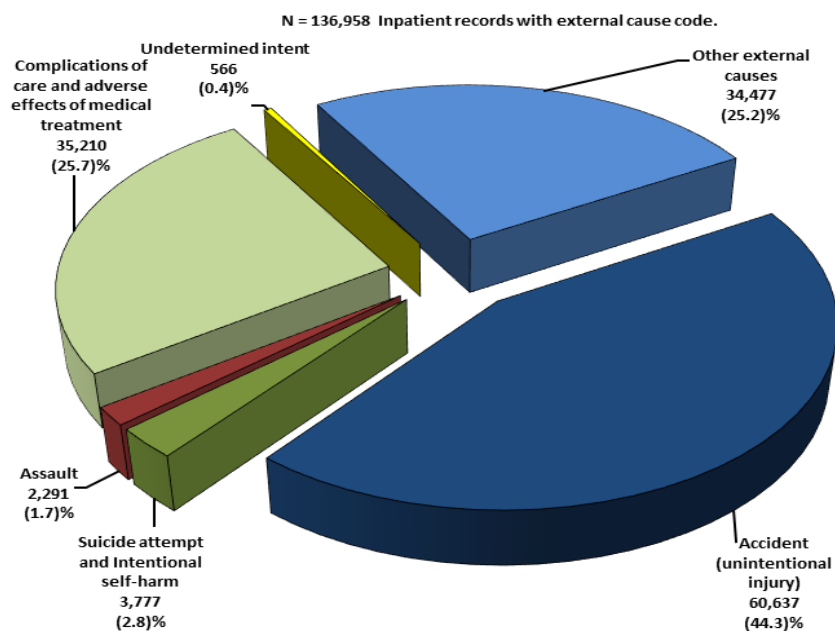
In 2009, the reporting requirements for hospitals were revised and the non-injury first-listed diagnoses may also have an external cause of injury code (E-code). Beginning with the 2009 edition of this report, the reader is advised that the number of suicides, accidents, etc. shown in **Table 4D-1**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

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

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

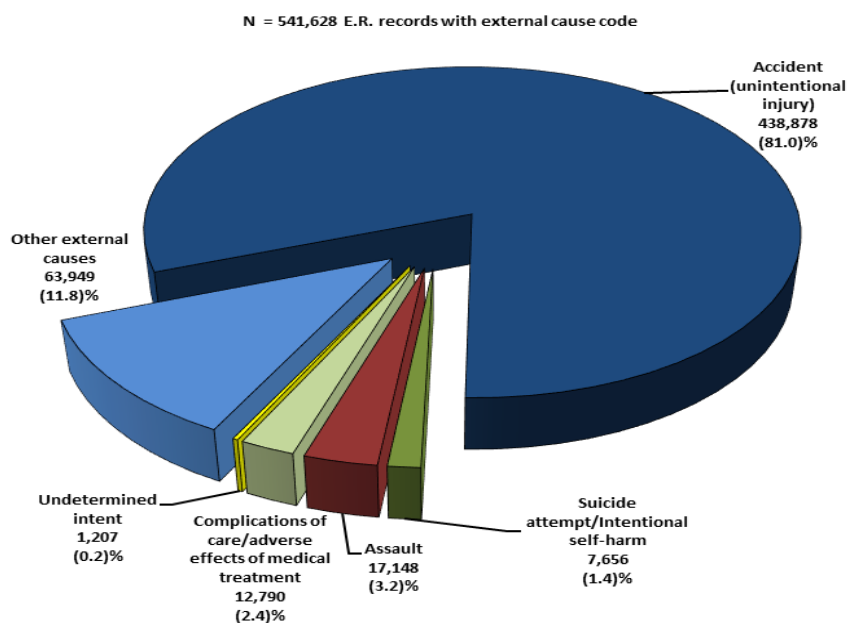
4D. INJURY-RELATED INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS BY INTENT AND MECHANISM OF INJURY

**Figure 4D-1**  
Percent Distribution of Inpatient Discharges by Intent of Injury, Arizona Residents, 2021



In 2021, injury and poisoning as a joint category was indicated as the principal diagnosis on 67,084 inpatient discharge records (**Table 4A-1**). *Unintentional injuries or accidents* accounted for the absolute majority of inpatient hospitalizations by the intent of injury (44.3 percent) and *complications of medical care and adverse effects of medical treatment* accounted for 25.7 percent of all inpatient discharges by intent of injury. *Assault* accounted for 2,291 inpatient hospitalizations (1.7 percent of all hospital discharges with known intent of injury). *Intentional self-inflicted injuries* including *suicide attempt* resulted in 3,777 inpatient hospitalizations (2.8 percent).

**Figure 4D-2**  
Percent Distribution of Emergency Room Visits by Intent of Injury, Arizona Residents, 2021



In 2021, *Unintentional injuries or accidents* accounted for eight out of ten (438,878 or 81.0 percent) of all injury-related emergency room visits (**Figure 4D-3, Table 4D-2**). The external cause of injury was classified as *assault* for 17,148 emergency room visits: these were the injuries purposely inflicted by another person. *Complications of medical/surgical care* accounted for a greater number of emergency room visits than *intentional self-inflicted injuries* (2.4 percent vs. 1.4 percent, respectively; **Figure 4D-3, Table 4D-2**).

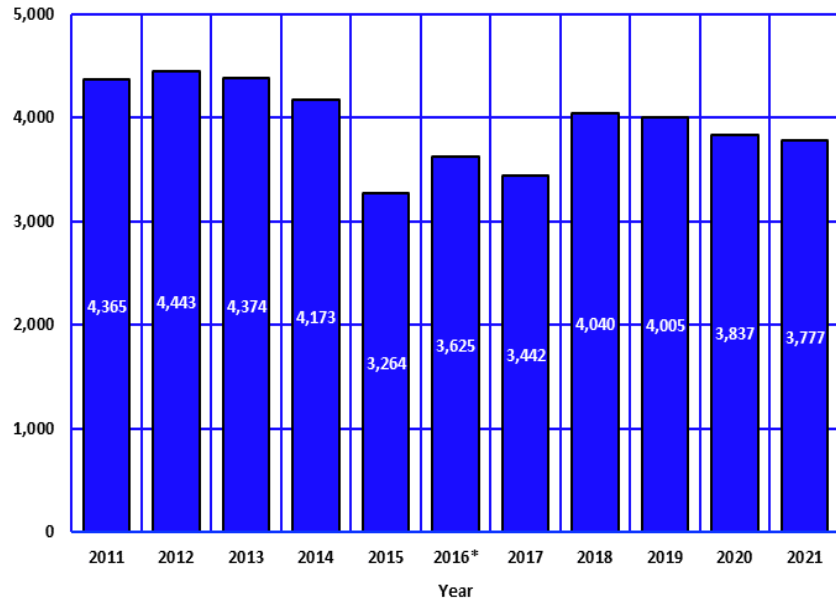


4D. INJURY-RELATED INPATIENT DISCHARGES AND EMERGENCY ROOM VISITS BY INTENT AND MECHANISM OF INJURY

**Figure 4D-3**  
**Intentional self-inflicted injury Inpatient Discharges by Year,**  
**Arizona Residents, 2011–2021**

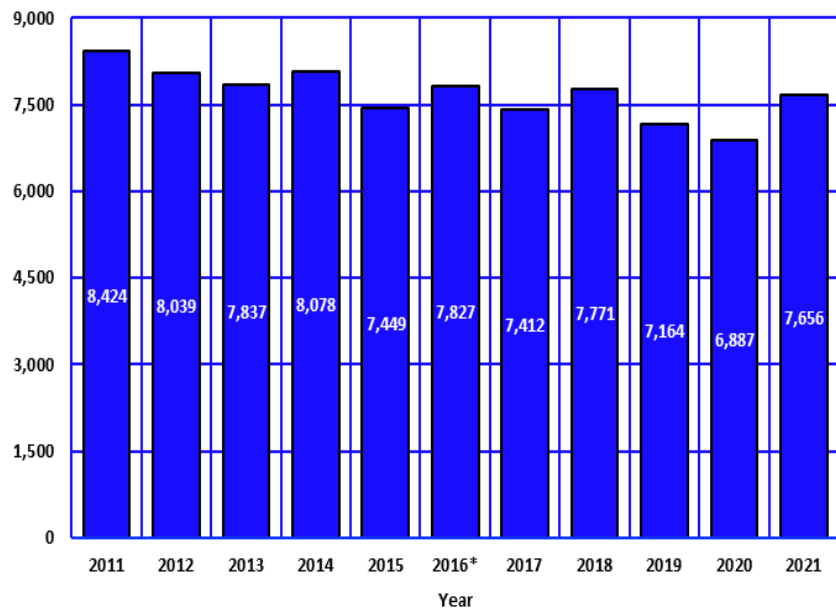
Self-inflicted injuries result from actions of individuals trying to deliberately harm themselves (i.e. behavior with no suicide intent) or kill themselves (i.e. suicide attempt). Beginning in 2008, there was a substantial increase in the number of *intentional self-inflicted injuries* related inpatient discharges and emergency room visits (**Figure 4D-3** and **Table 4D-2**), partly due to the change in the reporting requirements for hospitals.

In 2021, there were 3,777 inpatient discharges attributed to intentional self-inflicted injuries. *Mental disorders* were identified as the principal diagnosis on 1,323 intentional self-inflicted injury/suicide attempt-related records. *Injury or poisoning* was the principal diagnosis on 2,373 inpatient discharge records related to self-inflicted injuries.



**Figure 4D-4**  
**Intentional self-inflicted injury Emergency Room Visits by Year,**  
**Arizona Residents, 2011–2021**

In 2021, self-inflicted injuries resulting in ER visits accounted for 7,656, an increase of 11.2 percent from 2020. Of all the ER visits related to *intentional self-inflicted injuries*, *mental disorders* were identified as the principal diagnosis on 376 ER discharges. *Injury or poisoning* was recorded as the principal diagnosis on 6,655 (86.9 percent) ER discharges related to self-inflicted injury.



**TABLE 4D-1  
INPATIENT DISCHARGES BY INTENT AND MECHANISM FOR SELECTED EXTERNAL CAUSES BY GENDER, AGE GROUP, AND  
RACE/ETHNICITY, ARIZONA, 2021**

|   | Gender             |        |        | Age group |                    |                         |                          |                                |                   | Race/ethnicity |                    |                    |                           |                                  |                           |                 |
|---|--------------------|--------|--------|-----------|--------------------|-------------------------|--------------------------|--------------------------------|-------------------|----------------|--------------------|--------------------|---------------------------|----------------------------------|---------------------------|-----------------|
|   | Total <sup>a</sup> | Male   | Female | Unknown   | Children <15 years | Adolescents 15-19 years | Young adults 20-44 years | Middle-aged adults 45-64 years | Elderly 65+ years | Unknown        | White non-Hispanic | Hispanic or Latino | Black or African American | American Indian or Alaska Native | Asian or Pacific Islander | Refused/Unknown |
| <b>UNINTENTIONAL INJURY OR ACCIDENT</b>                                 | 60,637             | 31,097 | 29,522 | 18        | 1,564              | 1,483                   | 10,349                   | 13,044                         | 34,187            | 10             | 45,843             | 8,189              | 2,228                     | 2,659                            | 828                       | 890             |
| <b>Falls</b>  | 36,771             | 16,206 | 20,561 | *         | 360                | 155                     | 2,193                    | 6,301                          | 27,761            | *              | 30,103             | 3,651              | 904                       | 1,175                            | 509                       | 429             |
| <b>Transport accidents</b>  | 9,929              | 6,444  | 3,472  | 13        | 375                | 675                     | 3,947                    | 2,702                          | 2,228             | *              | 6,517              | 1,946              | 502                       | 557                              | 146                       | 261             |
| <b>Natural and environmental factors</b>                                | 7,985              | 4,664  | 3,321  | 0         | 392                | 354                     | 2,185                    | 2,294                          | 2,755             | *              | 5,495              | 1,336              | 443                       | 522                              | 99                        | 90              |
| <b>Exposure to excessive natural heat</b>                               | 747                | 569    | 178    | 0         | 7                  | 14                      | 238                      | 258                            | 226               | *              | 459                | 174                | 66                        | 30                               | 8                         | 10              |
| <b>Fire and flames</b>  | 460†               | 313    | 144    | 0         | 40                 | 13                      | 160                      | 158                            | 86                | 0              | 274                | 99                 | 27                        | 39                               | *                         | 14              |
| <b>Machinery</b>  | 170†               | 151    | 17     | 0         | *                  | 9                       | 71                       | 57                             | 27                | 0              | 95                 | 59                 | *                         | *                                | *                         | *               |
| <b>SUICIDE ATTEMPT AND INTENTIONAL SELF-HARM</b>                        | 3,777              | 1,567  | 2,209  | *         | 486                | 832                     | 1,614                    | 587                            | 258               | 0              | 2,393              | 722                | 204                       | 300                              | 81                        | 77              |
| <b>ASSAULT</b>  | 2,291              | 1,793  | 493    | *         | 63                 | 177                     | 1,388                    | 527                            | 133               | *              | 1,040              | 542                | 316                       | 322                              | 15                        | 56              |
| <b>INJURIES OF UNDETERMINED INTENT</b>                                  | 566                | 337    | 227    | *         | 111                | 31                      | 159                      | 139                            | 125               | *              | 315                | 123                | 63                        | 39                               | 12                        | 14              |
| <b>COMPLICATIONS OF CARE AND ADVERSE EFFECTS OF MEDICAL TREATMENT</b>   | 35,210             | 19,251 | 15,958 | *         | 638                | 305                     | 5,003                    | 11,621                         | 17,643            | 0              | 24,289             | 6,249              | 1,978                     | 1,617                            | 770                       | 307             |
| <b>Misadventures to patients</b>  | 360†               | 162    | 194    | 0         | 8                  | *                       | 49                       | 95                             | 200               | 0              | 254                | 55                 | 12                        | 21                               | 8                         | 6               |
| <b>Surgical and medical procedures as the cause of adverse reaction</b> | 30,623             | 16,766 | 13,856 | *         | 531                | 253                     | 4,408                    | 10,244                         | 15,187            | 0              | 21,128             | 5,488              | 1,701                     | 1,380                            | 667                       | 259             |

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

**TABLE 4D-2  
EMERGENCY ROOM VISITS BY INTENT AND MECHANISM FOR SELECTED EXTERNAL CAUSES BY GENDER, AGE GROUP, AND RACE/ETHNICITY, ARIZONA, 2021**

|   | Total <sup>a</sup> | Gender  |         | Age group |                    |                         |                          |                                |                   | Race/ethnicity |                    |                    |                           |                                  |                           |                 |
|---|--------------------|---------|---------|-----------|--------------------|-------------------------|--------------------------|--------------------------------|-------------------|----------------|--------------------|--------------------|---------------------------|----------------------------------|---------------------------|-----------------|
|   |                    | Male    | Female  | Unknown   | Children <15 years | Adolescents 15-19 years | Young adults 20-44 years | Middle-aged adults 45-64 years | Elderly 65+ years | Unknown        | White non-Hispanic | Hispanic or Latino | Black or African American | American Indian or Alaska Native | Asian or Pacific Islander | Refused/Unknown |
| <b>UNINTENTIONAL INJURY OR ACCIDENT</b>                                 | 438,878            | 221,676 | 217,149 | 53        | 80,010             | 30,974                  | 140,351                  | 89,805                         | 97,683            | 55             | 270,818            | 108,798            | 31,185                    | 15,764                           | 7,637                     | 4,676           |
| <b>Falls</b>  | 155,052            | 67,708  | 87,337  | 7         | 31,638             | 4,909                   | 25,175                   | 30,888                         | 62,438            | *              | 107,436            | 31,258             | 7,318                     | 5,100                            | 2,439                     | 1,501           |
| <b>Transport accidents</b>  | 70,985             | 37,042  | 33,912  | 31        | 8,351              | 8,371                   | 33,283                   | 14,519                         | 6,441             | 20             | 39,116             | 19,864             | 7,024                     | 2,375                            | 1,566                     | 1,040           |
| <b>Struck against or struck accidentally by objects or persons</b>      | 49,315             | 28,268  | 21,046  | *         | 13,676             | 5,309                   | 16,325                   | 7,838                          | 6,167             | 0              | 28,858             | 13,582             | 3,748                     | 1,762                            | 805                       | 560             |
| <b>Overexertion</b>   | 33,795             | 17,040  | 16,755  | 0         | 4,473              | 3,471                   | 13,993                   | 7,714                          | 4,144             | 0              | 19,470             | 9,261              | 2,925                     | 1,268                            | 574                       | 297             |
| <b>Cutting or piercing instruments or objects</b>                       | 25,785             | 16,776  | 9,007   | *         | 3,167              | 2,017                   | 11,496                   | 5,747                          | 3,355             | *              | 15,715             | 6,903              | 1,434                     | 988                              | 450                       | 295             |
| <b>Natural and environmental factors</b>                                | 64,881             | 33,350  | 31,528  | *         | 9,592              | 3,911                   | 24,166                   | 15,223                         | 11,974            | 15             | 37,884             | 16,953             | 5,846                     | 2,499                            | 1,142                     | 557             |
| <b>Exposure to excessive natural heat</b>                               | 2,001              | 1,392   | 609     | 0         | 83                 | 107                     | 886                      | 571                            | 354               | 0              | 1,192              | 517                | 157                       | 81                               | 21                        | 33              |
| <b>Fire and flames</b>  | 2,341              | 1,372   | 969     | 0         | 427                | 166                     | 1,010                    | 537                            | 200               | *              | 1,302              | 662                | 173                       | 115                              | 56                        | 33              |
| <b>Machinery</b>  | 2,159              | 1,870   | 289     | 0         | 77                 | 99                      | 932                      | 629                            | 421               | *              | 1,348              | 670                | 46                        | 40                               | 29                        | 26              |
| <b>Pedal cycle, nontraffic and other</b>                                | 5,878              | 4,251   | 1,626   | *         | 1,505              | 389                     | 1,637                    | 1,488                          | 858               | *              | 4,184              | 1,127              | 224                       | 165                              | 105                       | 73              |
| <b>Motor vehicle, nontraffic</b>  | 738                | 470     | 268     | 0         | 111                | 81                      | 302                      | 162                            | 82                | 0              | 452                | 184                | 51                        | 32                               | 14                        | *               |
| <b>Firearm missile</b>  | 1,331              | 1,138   | 190     | *         | 104                | 190                     | 796                      | 180                            | 55                | 6              | 577                | 425                | 221                       | 67                               | 15                        | 26              |
| <b>Drowning/submersion</b>  | 140 <sup>†</sup>   | 86      | 48      | *         | 109                | *                       | 11                       | *                              | 8                 | 0              | 69                 | 41                 | 14                        | *                                | *                         | *               |
| <b>SUICIDE ATTEMPT AND INTENTIONAL SELF-HARM</b>                        | 7,656              | 2,794   | 4,859   | *         | 1,188              | 2,114                   | 3,306                    | 820                            | 225               | *              | 4,694              | 1,738              | 581                       | 416                              | 112                       | 115             |
| <b>ASSAULT</b>  | 17,148             | 10,333  | 6,808   | 7         | 763                | 1,581                   | 10,894                   | 3,338                          | 562               | 10             | 7,798              | 4,729              | 2,174                     | 1,978                            | 191                       | 278             |
| <b>INJURIES OF UNDETERMINED INTENT</b>                                  | 1,207              | 677     | 528     | *         | 297                | 124                     | 502                      | 171                            | 111               | *              | 677                | 311                | 105                       | 71                               | 10                        | 33              |
| <b>COMPLICATIONS OF CARE AND ADVERSE EFFECTS OF MEDICAL TREATMENT</b>   | 12,790             | 7,049   | 5,741   | 0         | 430                | 203                     | 2,821                    | 3,883                          | 5,453             | 0              | 8,524              | 2,650              | 795                       | 467                              | 266                       | 88              |
| <b>Misadventures to patients</b>  | 110 <sup>†</sup>   | 41      | 65      | 0         | *                  | 7                       | 22                       | 36                             | 37                | 0              | 64                 | 29                 | 8                         | *                                | *                         | 0               |
| <b>Surgical and medical procedures as the cause of adverse reaction</b> | 9,439              | 5,099   | 4,340   | 0         | 333                | 153                     | 2,224                    | 2,899                          | 3,830             | 0              | 6,318              | 1,943              | 576                       | 329                              | 198                       | 75              |

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