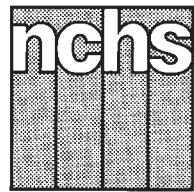


# Advance Data



From Vital and Health Statistics of the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics

## 1997 Summary: National Hospital Discharge Survey

by Linda Lawrence and Margaret J. Hall, Division of Health Care Statistics

### Abstract

**Objectives**— This report presents national estimates of the use of non-Federal short-stay hospitals in the United States during 1997. Numbers and rates of discharges, diagnoses, and procedures are shown by age and sex. Discharges are also shown by geographic region of the hospital. Average lengths of stay are presented for all discharges and for selected diagnostic categories by age and by sex.

**Methods**— The estimates are based on medical abstract data collected through the National Hospital Discharge Survey for 1997. The survey has been conducted annually by the National Center for Health Statistics since 1965. Diagnoses and procedures presented are coded according to the *International Classification of Diseases, 9th Revision, Clinical Modification*, or ICD-9-CM.

**Keywords:** inpatients, diagnoses, procedures, ICD-9-CM

### Introduction

This report presents data from the 1997 National Hospital Discharge Survey (NHDS). The survey has been conducted continuously by the National Center for Health Statistics (NCHS) since 1965. National estimates of hospital use derived from the NHDS are published for each calendar year by

NCHS. This report provides an overview of the 1997 data, including the number and rate of discharges and average lengths of stay by the age and sex of patients and by geographic region of the hospital ([table 1](#)). Average lengths of stay are also presented for selected diagnostic categories. Estimates for the number and rate of selected procedures

performed on hospital inpatients are shown by age and sex. More detailed data from NHDS are published in Series 13 of *Vital and Health Statistics*, which includes two reports on trends in hospital use (1,2).

NHDS is the principal source for national data on the characteristics of patients discharged from non-Federal short-stay hospitals. Data from NHDS are used to examine important topics of interest in public health (3–7) and for a variety of activities by governmental, scientific, academic, and commercial institutions.

Estimates of the number of procedures shown in this report are for inpatients only. Data on ambulatory surgery are available from the National Survey of Ambulatory Surgery (NSAS), which is also conducted by NCHS. NSAS was conducted from 1994 through 1996 and covers hospital-based and freestanding ambulatory surgery centers. Data from this survey are available (8–13).

### Acknowledgments

This report was prepared in the Division of Health Care Statistics. Elaine Wood of the Hospital Care Statistics Branch verified the data. Rong Cai, of the OAO Corporation, was contracted to produce estimated parameters for relative standard error equations; she also performed the computer programming for the report. Maria Owings and Lola Jean Kozak redesigned the tables. This report was edited by Klaudia Cox and typeset by Annette F. Holman of the Publications Branch, Division of Data Services.



**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**  
Centers for Disease Control and Prevention  
National Center for Health Statistics

**CDC**  
CENTERS FOR DISEASE CONTROL  
AND PREVENTION

Information on ambulatory procedures is also collected in two other NCHS surveys. The National Ambulatory Medical Care Survey obtains information on procedures ordered or performed during visits to physicians' offices (14). The National Hospital Ambulatory Medical Care Survey collects data on procedures ordered or performed during visits to hospital outpatient and emergency departments (15,16).

## Methods

### Data source

The National Hospital Discharge Survey (NHDS) collects data from a sample of inpatient records acquired from a national sample of hospitals. Because persons with multiple discharges during the year may be sampled more than once, estimates are for discharges, not persons. Only hospitals with an average length of stay of fewer than 30 days for all patients, general hospitals, or children's general hospitals are included in the survey. Federal, military, and Department of Veterans Affairs hospitals, as well as hospital units of institutions (such as prison hospitals), and hospitals with fewer than six beds staffed for patient use are excluded.

Prior to 1988, NHDS utilized a two-stage design, but in 1988 the survey was redesigned (17). Beginning in 1988, the largest hospitals were included in the sample with certainty, while the remaining sample of hospitals was based on a stratified three-stage design. The first stage consisted of a selection of 112 primary sampling units (PSU's) that comprised a probability sample of PSU's used in the 1985–94 National Health Interview Survey (18). The second stage consisted of a selection of noncertainty hospitals from the sampled PSU's. At the third stage, a sample of discharges within hospitals was selected by a systematic random sampling technique. The sampling frame for hospitals drawn under the new design has been the SMG Hospital Market Database (19).

For 1997, the sample consisted of 513 hospitals, 12 of which were found

to be out of scope (ineligible) because they had gone out of business or otherwise failed to meet the criteria for the NHDS universe. Of the 501 in-scope (eligible) hospitals, 474 (94.6 percent) responded to the survey. Data were collected for approximately 300,000 discharges from the 474 responding hospitals.

Two data collection procedures were used in the survey. One was a manual system in which sample selection and medical transcription from the hospital records to abstract forms were performed by the hospital's staff or by staff of the U.S. Bureau of the Census on behalf of NCHS. Completed forms were sent to NCHS for coding, editing, and estimation.

The other data collection procedure was an automated system in which NCHS purchased machine-readable medical record data from commercial organizations, State data systems, hospitals, or hospital associations. Records from these sources were systematically sampled by NCHS. In 1997, approximately 40 percent of respondent hospitals provided data through the automated system.

The medical abstract form and the automated data contain items that relate to the personal characteristics of the patient. These items include birth date (or age), sex, race, ethnicity, marital status, ZIP Code, and expected sources of payment. Administrative items such as admission and discharge dates, discharge status, and medical record number were also included. The medical information about patients includes up to seven diagnoses, as many as four surgical and nonsurgical operations and procedures, and dates of surgery. (The medical record number, date of birth, and ZIP Code are confidential information not available to the public.) Medical data are coded according to the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM)(20). Definitions of the terms used in this report are in the National Hospital Discharge Survey Annual Summary for 1993 (21).

For the manual data collection, an ongoing quality control program was undertaken on the coding and entering of data from abstracts to machine

readable form. Approximately 10 percent of the abstracts are independently recoded by an NHDS coder, with discrepancies resolved by the chief coder. The overall error rate for records manually coded for the 1997 data year was 0.9 percent for medical (ICD-9-CM) coding and keying and 0.2 percent for demographic coding and keying.

### Estimation

Because of the complex multistage design of NHDS, the survey data must be inflated or weighted to produce national estimates. The estimation procedure produces essentially unbiased national estimates and has three basic components: (a) inflation by reciprocals of the probabilities of sample selection, (b) adjustment for nonresponse, and (c) population weighting ratio adjustments. These three components of the final weight are described in more detail in earlier reports (1,2).

The standard error is primarily a measure of sampling variability that occurs by chance because only a sample rather than the entire universe is surveyed. Estimates of the sampling variability for this report were calculated with SUDAAN software, which takes into account the complex sample design. A description of the software and the approach it uses has been published (22). The standard errors of statistics for the 1997 NHDS Advance Data are included in each of the tables.

### Use of tables

Discharges are shown by first-listed diagnosis ([tables 2–7](#)). This is the principal diagnosis if it is specified on the medical record. If the principal diagnosis is not specified, the diagnosis listed first on the face sheet or discharge summary of the medical record is used. Estimates of procedures, including surgical or nonsurgical operations, diagnostic procedures, and special treatments reported on the medical record, are also published ([tables 8–11](#)). Up to four procedures were coded for each discharge. All-listed procedures include all occurrences of the procedure coded regardless of the order on the medical record.

The diagnoses and procedures appear in separate tables of this report, presented by ICD-9-CM chapter. Within these chapters, subcategories of diagnoses or procedures are shown. These specific categories were selected primarily because of their large estimates or because they are of special interest. Although diagnoses assigned ICD-9-CM codes E800–E999 (Supplementary classification of external causes of injury and poisoning) were included in NHDS, these diagnoses were excluded from this report. Data for newborn infants, defined as patients admitted to a hospital by birth, were also excluded.

Because of low reliability, estimates with a relative standard error of more than 30 percent or based on a sample of fewer than 30 records are replaced by asterisks(\*). Estimates based on 30–59 patient records are preceded by an asterisk to indicate that they also have low reliability.

Estimates have been rounded to the nearest thousand. Therefore, figures within tables do not always add to the totals. Rates and average lengths of stay were calculated from unrounded figures and may not precisely agree with rates or average lengths of stay calculated from rounded data.

The population estimates used in computing rates are based on U.S. Bureau of the Census estimates of the civilian population of the United States as of July 1, 1997. Figures are consistent with national population estimates in PPL-91R (U.S. Population Estimates by Age, Sex, Race and Hispanic Origin: 1990–1997) and have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.

Facilities are classified by location in one of the four geographic regions of the United States that correspond to those used by the U.S. Bureau of the Census.

#### *Region                      States included*

Northeast Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania

Midwest	Michigan, Ohio, Illinois, Indiana, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas
South	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, and Alaska

and diseases of the digestive system ([table 2](#)).

- Seven diagnostic categories each accounted for more than a million discharges. These were heart disease (4.2 million), delivery (3.8 million), malignant neoplasms (1.3 million), pneumonia (1.3 million), psychoses (1.2 million), cerebrovascular disease (1.0 million), and fractures (1.0 million).
- For persons 65 years of age and over, there were 802.2 discharges per 10,000 population with a first-listed diagnosis of heart disease ([table 3](#)).
- The average length of stay was 5.1 days for heart disease, 2.4 days for delivery, 7.0 days for malignant neoplasms, 9.1 days for psychoses, and 6.4 days for pneumonia ([table 4](#)).

## Results

### Patient and hospital characteristics

- In 1997, there were an estimated 30.9 million discharges of inpatients, excluding newborn infants, from short-stay non-Federal hospitals in the United States ([table 1](#)).
- The discharge rate was 1,143.1 per 10,000 population and the average length of stay was 5.1 days in 1997 ([table 1](#)).
- The discharge rate per 10,000 population was 927.0 for males and 1,350.2 for females. Males had an average length of stay of 5.5 days compared with 4.8 days for females.
- Persons 65 years of age and over accounted for 39 percent of all discharges.
- The discharge rate per 10,000 population ranged from 1,285.2 in the Northeast region to 920.5 in the West. The average length of stay ranged from 5.9 days in the Northeast region to 4.4 days in the West.

### Diagnoses

- Over half of all first-listed diagnoses were in four ICD-9-CM chapters: diseases of the circulatory system, supplementary classifications (including females with deliveries), diseases of the respiratory system,

### Procedures

- During 1997, 40.5 million procedures were performed on hospital inpatients ([table 8](#)).
- About three-fourths of all procedures were in four ICD-9-CM chapters: miscellaneous diagnostic and therapeutic procedures, obstetrical procedures, operations on the cardiovascular system, and operations on the digestive system.
- Frequent procedures for males were arteriography and angiography, cardiac catheterization, respiratory therapy, diagnostic ultrasound, computerized axial tomography, and removal of coronary artery obstruction and insertion of stent(s).
- Frequent procedures for females were episiotomy, repair of current obstetric laceration, arteriography and angiography using contrast material, cesarean section, artificial rupture of membranes, and diagnostic ultrasound.

### References

1. Pokras R, Kozak LJ, McCarthy E, Graves EJ. Trends in hospital utilization: United States, 1965–86. National Center for Health Statistics. Vital Health Stat 13(101). 1989.

2. Gillum BS, Graves EJ, Kozak LJ. Trends in hospital utilization: United States, 1988–92. National Center for Health Statistics. Vital Health Stat 13(124). 1996.
3. Bennett TA, Kotelchuck M, Cox CE, et al. Pregnancy-associated hospitalizations in the United States in 1991 and 1992; a comprehensive view of maternal morbidity. Am J Obstet Gynecol 178(2): 346–54. 1998.
4. Parashar UD, Holman RC, Clarke MJ, et al. Hospitalizations associated with rotavirus diarrhea in the United States, 1993 through 1995: surveillance based on the new ICD-9-CM rotavirus-specific diagnostic code. J Infect Dis 177(1): 13–17. 1998.
5. Haldeman GA, Croft JB, Giles WH, Rashidee A. Hospitalization of patients with heart failure: National Hospital Discharge Survey, 1985 to 1995. Am Heart J 137(2): 352–60. 1999.
6. Pappas G, Hadden WC, Kozak LJ, Fisher G. Potentially avoidable hospitalizations: inequalities between US socioeconomic groups. Am J Public Health 87(5): 811–16. 1997.
7. Antal P, Gauderer M, Koshy M, Berman B. Is the incidence of appendicitis reduced in patients with sickle cell disease? Pediatrics 101(1): E7. 1998.
8. Kozak LJ, Hall MJ, Pokras R, Lawrence L. Ambulatory surgery in the United States, 1994. Advance data from vital and health statistics; no 283. Hyattsville, Maryland: National Center for Health Statistics. 1997.
9. Hall MJ, Lawrence L. Ambulatory surgery in the United States, 1995. Advance data from vital and health statistics; no 296. Hyattsville, Maryland: National Center for Health Statistics. 1997.
10. Hall MJ, Lawrence L. Ambulatory surgery in the United States, 1996. Advance data from vital and health statistics; no 300. Hyattsville, Maryland: National Center for Health Statistics. 1998.
11. Pokras R, Kozak LJ, McCarthy E. Ambulatory and inpatient procedures in the United States, 1994. National Center for Health Statistics. Vital Health Stat 13(132). 1997.
12. Kozak LJ, Owings MF. Ambulatory and inpatient procedures in the United States, 1995. National Center for Health Statistics. Vital Health Stat 13(135). 1998.
13. Owings MF, Kozak LJ. Ambulatory and inpatient procedures in the United States, 1996. National Center for Health Statistics. Vital Health Stat 13(139). 1998.
14. Woodwell DA. National Ambulatory Medical Care Survey: 1996 summary. Advance Data from vital and health statistics; no 295. Hyattsville, Maryland: National Center for Health Statistics. 1997.
15. McCaig LF. National Hospital Ambulatory Medical Care Survey: 1996 outpatient department summary. Advance data from vital and health statistics; no 294. Hyattsville, Maryland: National Center for Health Statistics. 1997.
16. Nourjah P. National Hospital Ambulatory Medical Care Survey: 1997 emergency department summary. Advance data from vital and health statistics; no 304. Hyattsville, Maryland: National Center for Health Statistics. 1999.
17. Haupt BJ, Kozak LJ. Estimates from two survey designs: National Hospital Discharge Survey. National Center for Health Statistics. Vital Health Stat 13(111). 1992.
18. Massey JT, Moore TF, Parsons VL, Tadros W. Design and estimation for the National Health Interview Survey, 1985–94. National Center for Health Statistics. Vital Health Stat 2(110). 1989.
19. SMG Marketing Group, Inc. Hospital Market Database. Chicago: Healthcare Information Specialists. 1987, April 1991, April 1994, April 1997.
20. Public Health Service and Health Care Financing Administration. International Classification of Diseases, 9th Revision, Clinical Modification. Washington: Public Health Service. 4th ed. 1991.
21. Graves EJ. National Hospital Discharge Survey: Annual Summary, 1993. National Center for Health Statistics. Vital Health Stat 13(121). 1995.
22. Shah BV, Barnwell BG, Bieler GS. SUDAAN User's Manual: Software for Analysis of Correlated Data, Release 6.40. Research Triangle Park, NC: Research Triangle Institute. 1995.

**Table 1. Number, rate, and average length of stay for discharges from short-stay hospitals by age, region, and sex: United States, 1997**  
 [Discharges of inpatients from non-Federal hospitals. Excludes newborn infants]

Selected characteristic	Both sexes		Male		Female	
	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>
Number in thousands						
Total.....	30,914	888	12,268	412	18,647	508
Rate per 10,000 population						
Total.....	1,143.1	32.8	927.0	31.1	1,350.2	36.8
Average length of stay in days						
Total.....	5.1	0.1	5.5	0.1	4.8	0.1
Age						
Under 15 years.....	386.9	41.8	430.2	46.7	341.4	37.2
15–44 years.....	824.5	24.1	440.7	17.9	1,210.6	36.2
45–64 years.....	1,153.9	36.9	1,179.2	42.3	1,130.2	35.1
65 years and over.....	3,610.9	122.5	3,660.6	130.7	3,576.1	123.8
Region						
Northeast.....	1,285.2	62.0	1,113.9	61.6	1,446.4	66.2
Midwest.....	1,152.2	78.5	949.9	76.3	1,345.7	83.7
South.....	1,200.7	62.0	948.8	57.1	1,438.4	71.4
West.....	920.5	50.3	714.3	48.2	1,126.6	59.3

<sup>1</sup>SE is standard error.

**Table 2. Number of discharges from short-stay hospitals by first-listed diagnosis and age: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Diagnostic groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Category of first-listed diagnosis and ICD-9-CM code	All ages		Under 15 years		15–44 years		45–64 years		65 years and over		
	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	
Number in thousands											
All conditions . . . . .	30,914	888	2,312	250	10,030	293	6,377	204	12,196	414	
Infectious and parasitic diseases . . . . .	001–139	853	35	179	19	199	11	139	7	337	17
Septicemia . . . . .	038	352	19	21	3	38	7	62	4	231	14
Neoplasms . . . . .	140–239	1,749	59	47	12	279	12	585	27	838	32
Malignant neoplasms . . . . .	140–208,230–234	1,336	47	37	11	122	8	420	20	756	29
Malignant neoplasm of large intestine and rectum . . . . .	153–154,197.5	149	7	*	*	* <sup>5</sup>	* <sup>1</sup>	38	3	106	6
Malignant neoplasm of trachea, bronchus, and lung . . . . .	162,176.4,197.0,197.3	193	11	*	*	8	2	59	6	124	8
Malignant neoplasm of breast . . . . .	174–175,198.81	112	6	*	*	15	2	42	4	54	4
Benign neoplasms . . . . .	210–229	370	17	7	1	150	7	152	9	61	6
Endocrine, nutritional and metabolic diseases, and immunity disorders . . . . .	240–279	1,299	45	127	15	244	14	333	15	593	22
Diabetes mellitus . . . . .	250	507	20	15	3	120	9	173	9	199	10
Volume depletion . . . . .	276.5	420	22	91	11	52	5	54	5	223	13
Diseases of the blood and blood-forming organs . . . . .	280–289	373	17	64	9	96	7	67	5	145	10
Mental disorders . . . . .	290–319	1,964	209	91	16	1,120	136	440	48	313	25
Psychoses . . . . .	290–299	1,221	129	43	11	648	77	283	33	247	22
Alcohol dependence syndrome . . . . .	303	192	33	*	*	118	21	60	13	13	3
Diseases of the nervous system and sense organs . . . . .	320–389	554	35	90	14	131	10	115	9	218	17
Diseases of the circulatory system . . . . .	390–459	6,097	209	32	6	413	18	1,666	64	3,986	141
Heart disease . . . . .	391–392,0,393–398,402,404,410–416,420–429	4,188	152	21	4	249	14	1,209	52	2,709	99
Acute myocardial infarction . . . . .	410	756	36	*	*	44	5	260	17	451	22
Coronary atherosclerosis . . . . .	414.0	1,009	61	*	*	44	4	387	26	577	36
Other ischemic heart disease . . . . .	411–413,414.1–414.9	325	21	*	*	28	3	127	9	169	14
Cardiac dysrhythmias . . . . .	427	635	22	9	2	45	4	140	8	441	19
Congestive heart failure . . . . .	428.0	957	37	*	*	28	3	173	13	754	30
Cerebrovascular disease . . . . .	430–438	1,018	39	*	*	40	4	201	11	772	30
Diseases of the respiratory system . . . . .	460–519	3,475	133	732	82	423	17	603	28	1,716	74
Acute bronchitis and bronchiolitis . . . . .	466	271	30	190	26	17	3	18	4	46	5
Pneumonia . . . . .	480–486	1,304	58	201	20	130	8	185	9	787	44
Chronic bronchitis . . . . .	491	448	25	*	*	19	3	126	13	301	18
Asthma . . . . .	493	484	37	214	32	117	7	88	9	65	6
Diseases of the digestive system . . . . .	520–579	2,998	90	224	22	765	27	777	27	1,231	48
Appendicitis . . . . .	540–543	232	13	63	7	126	7	29	3	14	2
Noninfectious enteritis and colitis . . . . .	555–558	281	14	67	8	84	7	47	4	83	7
Diverticula of intestine . . . . .	562	233	13	*	*	20	2	69	6	144	10
Cholelithiasis . . . . .	574	393	16	*	*	132	6	108	7	150	10
Diseases of the genitourinary system . . . . .	580–629	1,694	58	71	8	573	25	393	17	657	28
Calculus of kidney and ureter . . . . .	592	166	10	*	*	81	7	54	5	30	3
Complications of pregnancy, childbirth, and the puerperium <sup>2</sup> . . . . .	630–677	500	24	*	*	497	24	*	*	...	...
Diseases of the skin and subcutaneous tissue . . . . .	680–709	454	21	38	6	117	9	116	8	182	10
Cellulitis and abscess . . . . .	681–682	323	17	25	4	90	8	89	7	118	8
Diseases of the musculoskeletal system and connective tissue . . . . .	710–739	1,500	83	38	6	342	21	452	27	668	44
Osteoarthritis and allied disorders . . . . .	715	410	30	*	*	12	2	113	9	284	23
Intervertebral disc disorders . . . . .	722	311	22	*	*	143	11	121	10	46	6
Congenital anomalies . . . . .	740–759	155	21	110	20	24	3	15	2	* <sup>7</sup>	* <sup>2</sup>
Certain conditions originating in the perinatal period . . . . .	760–779	138	19	135	19	*	*	*	*	*	*
Symptoms, signs, and ill-defined conditions . . . . .	780–799	274	20	53	8	99	6	65	6	57	9
Injury and poisoning . . . . .	800–999	2,520	94	213	25	821	38	490	20	996	41
Fractures, all sites <sup>3</sup> . . . . .	800–829	1,008	48	72	9	268	16	141	8	527	29
Fracture of neck of femur <sup>3</sup> . . . . .	820	326	19	*	*	* <sup>7</sup>	* <sup>2</sup>	18	2	297	18
Poisonings . . . . .	960–989	197	9	22	3	119	7	33	3	22	2
Supplementary classifications . . . . .	V01–V82	4,318	153	63	9	3,884	145	120	11	250	35
Females with deliveries . . . . .	.V27	3,808	145	12	3	3,791	145	* <sup>4</sup>	* <sup>1</sup>	...	...

\* Figure does not meet standard of reliability or precision.

... Category not applicable.

<sup>1</sup>SE is standard error.

<sup>2</sup>First-listed diagnosis for females with deliveries is coded V27, shown under "Supplementary classifications."

<sup>3</sup>Excludes fractures coded as 733.1, pathologic fracture.

**Table 3. Rate of discharges from short-stay hospitals by age and first-listed diagnosis: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Diagnostic groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Category of first-listed diagnosis and ICD-9-CM code	All ages		Under 15 years		15–44 years		45–64 years		65 years and over		
	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	
Rate per 10,000 population											
All conditions . . . . .	1,143.1	32.8	386.9	41.8	824.5	24.1	1,153.9	36.9	3,610.9	122.5	
Infectious and parasitic diseases . . . . .	001–139	31.6	1.3	30.0	3.2	16.3	0.9	25.1	1.3	99.7	5.1
Septicemia . . . . .	.038	13.0	0.7	3.5	0.5	3.1	0.6	11.2	0.8	68.5	4.1
Neoplasms . . . . .	140–239	64.7	2.2	7.9	2.0	22.9	1.0	105.8	4.8	248.1	9.6
Malignant neoplasms . . . . .	140–208,230–234	49.4	1.7	6.3	1.9	10.0	0.7	76.1	3.6	223.8	8.7
Malignant neoplasm of large intestine and rectum . . . . .	153–154,197.5	5.5	0.3	* * *	* 0.4	* 0.1	6.9	0.6	31.4	1.9	
Malignant neoplasm of trachea, bronchus, and lung . . . . .	162,176.4,197.0,197.3	7.1	0.4	* * *	0.7	0.2	10.7	1.0	36.6	2.4	
Malignant neoplasm of breast . . . . .	174–175,198.81	4.1	0.2	* * *	1.3	0.2	7.6	0.7	16.1	1.3	
Benign neoplasms . . . . .	210–229	13.7	0.6	1.1	0.2	12.3	0.6	27.5	1.7	18.1	1.7
Endocrine, nutritional and metabolic diseases, and immunity disorders . . . . .	240–279	48.0	1.7	21.3	2.6	20.1	1.2	60.3	2.7	175.7	6.5
Diabetes mellitus . . . . .	.250	18.8	0.7	2.6	0.5	9.8	0.7	31.3	1.7	59.0	3.0
Volume depletion . . . . .	276.5	15.5	0.8	15.2	1.8	4.3	0.4	9.8	0.8	66.0	3.9
Diseases of the blood and blood-forming organs . . . . .	280–289	13.8	0.6	10.7	1.5	7.9	0.6	12.1	0.9	43.0	2.9
Mental disorders . . . . .	290–319	72.6	7.7	15.2	2.7	92.1	11.2	79.5	8.6	92.8	7.5
Psychoses . . . . .	290–299	45.1	4.8	7.1	1.8	53.3	6.3	51.2	6.0	73.0	6.5
Alcohol dependence syndrome . . . . .	.303	7.1	1.2	* * *	9.7	1.7	10.8	2.3	3.9	0.8	
Diseases of the nervous system and sense organs . . . . .	320–389	20.5	1.3	15.1	2.4	10.8	0.8	20.8	1.6	64.5	5.0
Diseases of the circulatory system . . . . .	390–459	225.5	7.7	5.4	0.9	34.0	1.5	301.4	11.6	1,180.2	41.8
Heart disease . . . . .	391–392.0,393–398,402,404,410–416,420–429	154.9	5.6	3.5	0.7	20.4	1.1	218.7	9.4	802.2	29.4
Acute myocardial infarction . . . . .	.410	28.0	1.3	* * *	3.6	0.4	47.1	3.0	133.5	6.5	
Coronary atherosclerosis . . . . .	414.0	37.3	2.2	* * *	3.7	0.3	70.1	4.6	170.8	10.6	
Other ischemic heart disease . . . . .	411–413,414.1–414.9	12.0	0.8	* * *	2.3	0.3	22.9	1.6	50.1	4.1	
Cardiac dysrhythmias . . . . .	.427	23.5	0.8	1.4	0.4	3.7	0.3	25.4	1.4	130.6	5.6
Congestive heart failure . . . . .	428.0	35.4	1.4	* * *	2.3	0.3	31.3	2.4	223.2	9.0	
Cerebrovascular disease . . . . .	430–438	37.6	1.4	* * *	3.3	0.3	36.5	2.0	228.6	8.9	
Diseases of the respiratory system . . . . .	460–519	128.5	4.9	122.6	13.7	34.8	1.4	109.1	5.1	508.1	22.0
Acute bronchitis and bronchiolitis . . . . .	.466	10.0	1.1	31.7	4.3	1.4	0.2	3.3	0.7	13.7	1.5
Pneumonia . . . . .	480–486	48.2	2.1	33.7	3.4	10.7	0.7	33.4	1.6	233.1	13.1
Chronic bronchitis . . . . .	.491	16.6	0.9	* * *	1.5	0.2	22.7	2.3	89.1	5.3	
Asthma . . . . .	.493	17.9	1.4	35.8	5.4	9.6	0.6	15.9	1.7	19.2	1.8
Diseases of the digestive system . . . . .	520–579	110.9	3.3	37.5	3.6	62.9	2.2	140.6	4.9	364.6	14.3
Appendicitis . . . . .	540–543	8.6	0.5	10.5	1.2	10.4	0.6	5.3	0.5	4.3	0.7
Noninfectious enteritis and colitis . . . . .	555–558	10.4	0.5	11.2	1.3	6.9	0.6	8.5	0.6	24.7	2.1
Diverticula of intestine . . . . .	.562	8.6	0.5	* * *	1.6	0.2	12.5	1.1	42.5	2.9	
Cholelithiasis . . . . .	.574	14.5	0.6	* * *	10.8	0.5	19.5	1.2	44.5	2.9	
Diseases of the genitourinary system . . . . .	580–629	62.6	2.1	11.9	1.4	47.1	2.0	71.1	3.0	194.6	8.2
Calculus of kidney and ureter . . . . .	.592	6.1	0.4	* * *	6.6	0.6	9.8	0.8	9.0	0.9	
Complications of pregnancy, childbirth, and the puerperium <sup>2</sup> . . . . .	630–677	18.5	0.9	* * *	40.9	2.0	* * *	* * *	...	...	
Diseases of the skin and subcutaneous tissue . . . . .	680–709	16.8	0.8	6.4	1.0	9.6	0.7	21.1	1.5	53.8	3.0
Cellulitis and abscess . . . . .	681–682	12.0	0.6	4.2	0.7	7.4	0.6	16.1	1.3	35.1	2.3
Diseases of the musculoskeletal system and connective tissue . . . . .	710–739	55.5	3.1	6.3	1.1	28.1	1.7	81.8	4.9	197.7	13.0
Osteoarthritis and allied disorders . . . . .	.715	15.2	1.1	* * *	1.0	0.2	20.5	1.6	84.1	6.8	
Intervertebral disc disorders . . . . .	.722	11.5	0.8	* * *	11.7	0.9	21.9	1.9	13.7	1.7	
Congenital anomalies . . . . .	740–759	5.7	0.8	18.4	3.3	1.9	0.2	2.6	0.4	* 2.1	* 0.5
Certain conditions originating in the perinatal period . . . . .	760–779	5.1	0.7	22.7	3.2	* * *	* * *	* * *	* * *	...	...
Symptoms, signs, and ill-defined conditions . . . . .	780–799	10.1	0.7	8.9	1.4	8.1	0.5	11.8	1.1	16.8	2.6
Injury and poisoning . . . . .	800–999	93.2	3.5	35.7	4.2	67.5	3.2	88.7	3.7	294.8	12.3
Fractures, all sites <sup>3</sup> . . . . .	800–829	37.3	1.8	12.0	1.5	22.0	1.3	25.6	1.5	156.1	8.6
Fracture of neck of femur <sup>3</sup> . . . . .	.820	12.0	0.7	* * *	* 0.6	* 0.1	3.3	0.4	87.9	5.3	
Poisonings . . . . .	960–989	7.3	0.3	3.7	0.5	9.8	0.6	6.0	0.6	6.6	0.7
Supplementary classifications . . . . .	V01–V82	159.7	5.6	10.6	1.6	319.3	12.0	21.7	2.0	74.1	10.4
Females with deliveries . . . . .	V27	140.8	5.4	2.0	0.5	311.7	11.9	* 0.8	* 0.2	...	...

\* Figure does not meet standard of reliability or precision.

... Category not applicable.

<sup>1</sup>SE is standard error of rate.

<sup>2</sup>First-listed diagnosis for females with deliveries is coded V27, shown under "Supplementary classifications."

<sup>3</sup>Excludes fractures coded as 733.1, pathologic fracture.

**Table 4. Average length of stay for discharges from short-stay hospitals by age and first-listed diagnosis: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Diagnostic groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Category of first-listed diagnosis and ICD-9-CM code	All ages		Under 15 years		15–44 years		45–64 years		65 years and over		
	ALOS <sup>1</sup>	SE <sup>2</sup>	ALOS <sup>1</sup>	SE <sup>2</sup>	ALOS <sup>1</sup>	SE <sup>2</sup>	ALOS <sup>1</sup>	SE <sup>2</sup>	ALOS <sup>1</sup>	SE <sup>2</sup>	
All conditions . . . . .	5.1	0.1	4.3	0.2	3.7	0.1	5.2	0.1	6.3	0.1	
Infectious and parasitic diseases . . . . .	001–139	6.6	0.2	3.3	0.2	6.3	0.3	7.9	0.4	7.9	0.2
Septicemia . . . . .	.038	8.1	0.2	5.2	0.6	7.5	1.1	8.6	0.5	8.3	0.3
Neoplasms . . . . .	140–239	6.2	0.1	6.4	0.8	4.5	0.2	5.7	0.2	7.2	0.2
Malignant neoplasms . . . . .	140–208,230–234	7.0	0.1	6.8	1.0	6.3	0.5	6.6	0.2	7.4	0.2
Malignant neoplasm of large intestine and rectum . . . . .	153–154,197.5	9.3	0.2	*	*	*8.1	*0.6	8.6	0.4	9.7	0.3
Malignant neoplasm of trachea, bronchus, and lung . . . . .	162,176.4,197.0,197.3	7.7	0.3	*	*	5.5	1.1	7.8	0.6	7.7	0.4
Malignant neoplasm of breast . . . . .	174–175,198.81	3.0	0.2	*	*	3.0	0.4	3.5	0.3	2.7	0.2
Benign neoplasms . . . . .	210–229	3.5	0.1	4.9	1.0	2.9	0.1	3.2	0.1	5.3	0.4
Endocrine, nutritional and metabolic diseases, and immunity disorders . . . . .	240–279	5.1	0.1	3.0	0.2	4.1	0.4	4.8	0.2	6.1	0.2
Diabetes mellitus . . . . .	.250	5.8	0.2	4.0	0.6	3.7	0.2	5.7	0.4	7.2	0.4
Volume depletion . . . . .	276.5	4.4	0.1	2.3	0.1	3.3	0.6	4.5	0.3	5.5	0.2
Diseases of the blood and blood-forming organs . . . . .	280–289	5.2	0.3	3.7	0.3	5.8	0.4	4.5	0.3	5.7	0.5
Mental disorders . . . . .	290–319	8.0	0.3	10.8	2.0	6.8	0.2	8.5	0.5	10.4	0.4
Psychoses . . . . .	290–299	9.1	0.3	10.2	1.2	7.8	0.3	9.9	0.5	11.3	0.5
Alcohol dependence syndrome . . . . .	.303	6.6	0.6	*	*	5.8	0.6	7.8	1.1	8.7	1.1
Diseases of the nervous system and sense organs . . . . .	320–389	5.7	0.3	3.7	0.2	4.8	0.4	5.6	0.4	7.0	0.5
Diseases of the circulatory system . . . . .	390–459	5.3	0.1	4.4	0.4	4.6	0.3	4.7	0.1	5.7	0.1
Heart disease . . . . .	391–392,0,393–398,402,404,410–416,420–429	5.1	0.1	4.5	0.6	4.5	0.4	4.5	0.1	5.5	0.1
Acute myocardial infarction . . . . .	.410	6.0	0.2	*	*	4.1	0.4	5.4	0.2	6.6	0.3
Coronary atherosclerosis . . . . .	414.0	4.5	0.2	*	*	3.2	0.2	3.9	0.2	5.1	0.4
Other ischemic heart disease . . . . .	411–413,414.1–414.9	3.1	0.2	*	*	2.2	0.2	2.6	0.1	3.7	0.3
Cardiac dysrhythmias . . . . .	.427	4.2	0.2	3.4	0.7	2.9	0.2	3.9	0.3	4.4	0.2
Congestive heart failure . . . . .	.428.0	5.8	0.2	*	*	5.8	0.8	5.4	0.3	5.9	0.2
Cerebrovascular disease . . . . .	430–438	5.8	0.1	*4.4	*0.6	6.5	0.6	5.6	0.3	5.8	0.2
Diseases of the respiratory system . . . . .	460–519	5.6	0.1	3.1	0.1	4.3	0.2	5.8	0.2	7.0	0.1
Acute bronchitis and bronchiolitis . . . . .	.466	3.5	0.1	3.2	0.1	2.8	0.2	3.9	0.4	4.7	0.3
Pneumonia . . . . .	480–486	6.4	0.2	3.7	0.2	5.7	0.4	6.1	0.2	7.2	0.2
Chronic bronchitis . . . . .	.491	5.4	0.2	*	*	4.6	0.7	4.9	0.2	5.7	0.2
Asthma . . . . .	.493	3.4	0.1	2.4	0.1	3.1	0.1	4.7	0.4	5.2	0.2
Diseases of the digestive system . . . . .	520–579	4.9	0.1	3.3	0.2	4.1	0.2	4.8	0.1	5.7	0.1
Appendicitis . . . . .	540–543	3.8	0.2	3.6	0.2	2.9	0.1	4.7	0.6	9.7	2.0
Noninfectious enteritis and colitis . . . . .	555–558	4.3	0.2	2.3	0.1	4.0	0.2	5.1	0.4	5.8	0.3
Diverticula of intestine . . . . .	.562	5.6	0.2	*	*	5.2	0.4	5.2	0.3	5.9	0.2
Cholelithiasis . . . . .	.574	4.0	0.1	*	*	3.2	0.3	3.3	0.1	5.2	0.2
Diseases of the genitourinary system . . . . .	580–629	4.0	0.1	3.7	0.2	2.9	0.1	3.6	0.1	5.2	0.2
Calculus of kidney and ureter . . . . .	.592	2.2	0.1	*	*	2.0	0.1	2.2	0.1	2.8	0.2
Complications of pregnancy, childbirth, and the puerperium <sup>3</sup> . . . . .	630–677	2.5	0.1	*	*	2.5	0.1	*	*	...	...
Diseases of the skin and subcutaneous tissue . . . . .	680–709	5.8	0.2	3.6	0.2	4.2	0.3	5.6	0.3	7.5	0.4
Cellulitis and abscess . . . . .	681–682	5.3	0.2	3.6	0.3	4.1	0.3	5.2	0.3	6.7	0.4
Diseases of the musculoskeletal system and connective tissue . . . . .	710–739	4.5	0.2	4.1	0.2	3.3	0.4	3.9	0.1	5.6	0.4
Osteoarthritis and allied disorders . . . . .	.715	5.2	0.4	*	*	3.0	0.3	4.9	0.5	5.5	0.6
Intervertebral disc disorders . . . . .	.722	2.8	0.1	*	*	2.4	0.1	2.6	0.1	4.7	0.4
Congenital anomalies . . . . .	740–759	5.7	0.5	6.1	0.6	3.5	0.3	5.3	0.5	*6.0	*1.1
Certain conditions originating in the perinatal period . . . . .	760–779	9.7	0.9	9.8	0.9	*	*	*	*	*	*
Symptoms, signs, and ill-defined conditions . . . . .	780–799	2.7	0.2	2.2	0.2	2.2	0.2	2.8	0.4	4.0	0.6
Injury and poisoning . . . . .	800–999	5.2	0.1	4.0	0.2	4.2	0.2	5.3	0.2	6.3	0.1
Fractures, all sites <sup>4</sup> . . . . .	800–829	5.7	0.2	4.4	0.6	4.5	0.2	5.2	0.4	6.7	0.2
Fracture of neck of femur <sup>4</sup> . . . . .	.820	7.3	0.3	*	*	*6.2	*0.9	7.2	0.5	7.4	0.3
Poisonings . . . . .	960–989	2.8	0.2	1.8	0.1	2.4	0.2	3.9	0.6	4.4	0.5
Supplementary classifications . . . . .	V01–V82	3.1	0.1	5.1	0.9	2.5	0.0	6.6	0.6	10.5	0.5
Females with deliveries . . . . .	V27	2.4	0.0	*	*	2.4	0.0	*	*	...	...

\* Figure does not meet standard of reliability or precision.

... Category not applicable.

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>ALOS is average length of stay.

<sup>2</sup>SE is standard error of average length of stay.

<sup>3</sup>First-listed diagnosis for females with deliveries is coded V27, shown under "Supplementary classifications."

<sup>4</sup>Excludes fractures coded as 733.1, pathologic fracture.

**Table 5. Number of discharges from short-stay hospitals by sex and first-listed diagnosis: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Diagnostic groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Category of first-listed diagnosis and ICD-9-CM code	Both sexes		Male		Female	
	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>
Number in thousands						
All conditions . . . . .	30,914	888	12,268	412	18,647	508
Infectious and parasitic diseases . . . . .	001–139	853	408	20	445	19
Septicemia . . . . .	038	352	154	11	198	11
Neoplasms . . . . .	140–239	1,749	685	28	1,063	39
Malignant neoplasms . . . . .	140–208,230–234	1,336	620	27	715	29
Malignant neoplasm of large intestine and rectum . . . . .	153–154,197.5	149	71	5	78	5
Malignant neoplasm of trachea, bronchus, and lung . . . . .	162,176.4,197.0,197.3	193	11	8	78	7
Malignant neoplasm of breast . . . . .	174–175,198.81	112	6	* <sup>2</sup>	111	6
Benign neoplasms . . . . .	210–229	370	44	5	325	15
Endocrine, nutritional and metabolic diseases, and immunity disorders . . . . .	240–279	1,299	551	24	748	27
Diabetes mellitus . . . . .	250	507	243	13	264	13
Volume depletion . . . . .	276.5	420	177	13	243	12
Diseases of the blood and blood-forming organs . . . . .	280–289	373	155	10	218	12
Mental disorders . . . . .	290–319	1,964	981	110	983	103
Psychoses . . . . .	290–299	1,221	552	61	668	71
Alcohol dependence syndrome . . . . .	303	192	137	24	54	10
Diseases of the nervous system and sense organs . . . . .	320–389	554	255	16	299	21
Diseases of the circulatory system . . . . .	390–459	6,097	3,091	118	3,006	102
Heart disease . . . . .	391–392,0,393–398,402,404,410–416,420–429	4,188	152	2,212	90	1,976
Acute myocardial infarction . . . . .	410	756	456	24	300	16
Coronary atherosclerosis . . . . .	414.0	1,009	61	625	39	384
Other ischemic heart disease . . . . .	411–413,414.1–414.9	325	21	168	14	157
Cardiac dysrhythmias . . . . .	427	635	22	306	13	328
Congestive heart failure . . . . .	428.0	957	37	431	18	526
Cerebrovascular disease . . . . .	430–438	1,018	39	462	19	556
Diseases of the respiratory system . . . . .	460–519	3,475	133	1,664	71	1,811
Acute bronchitis and bronchiolitis . . . . .	466	271	30	148	19	123
Pneumonia . . . . .	480–486	1,304	58	638	30	666
Chronic bronchitis . . . . .	491	448	25	181	12	266
Asthma . . . . .	493	484	37	204	22	279
Diseases of the digestive system . . . . .	520–579	2,998	90	1,306	42	1,692
Appendicitis . . . . .	540–543	232	13	136	8	96
Noninfectious enteritis and colitis . . . . .	555–558	281	14	110	8	171
Diverticula of intestine . . . . .	562	233	13	96	7	136
Cholelithiasis . . . . .	574	393	16	117	7	276
Diseases of the genitourinary system . . . . .	580–629	1,694	58	540	22	1,154
Calculus of kidney and ureter . . . . .	592	166	10	97	7	69
Complications of pregnancy, childbirth, and the puerperium <sup>2</sup> . . . . .	630–677	500	24	...	...	500
Diseases of the skin and subcutaneous tissue . . . . .	680–709	454	21	230	14	224
Cellulitis and abscess . . . . .	681–682	323	17	170	12	154
Diseases of the musculoskeletal system and connective tissue . . . . .	710–739	1,500	83	655	37	845
Osteoarthritis and allied disorders . . . . .	715	410	30	147	11	263
Intervertebral disc disorders . . . . .	722	311	22	167	11	143
Congenital anomalies . . . . .	740–759	155	21	81	13	74
Certain conditions originating in the perinatal period . . . . .	760–779	138	19	81	12	57
Symptoms, signs, and ill-defined conditions . . . . .	780–799	274	20	131	9	144
Injury and poisoning . . . . .	800–999	2,520	94	1,233	51	1,287
Fractures, all sites <sup>3</sup> . . . . .	800–829	1,008	48	434	23	574
Fracture of neck of femur <sup>3</sup> . . . . .	820	326	19	86	7	240
Poisonings . . . . .	960–989	197	9	79	5	117
Supplementary classifications . . . . .	V01–V82	4,318	153	222	22	4,096
Females with deliveries . . . . .	V27	3,808	145	...	...	3,808

\* Figure does not meet standard of reliability or precision.

... Category not applicable.

<sup>1</sup>SE is standard error.

<sup>2</sup>First-listed diagnosis for females with deliveries is coded V27, shown under "Supplementary classifications."

<sup>3</sup>Excludes fractures coded as 733.1, pathologic fracture.

**Table 6. Rate of discharges from short-stay hospitals by sex and first-listed diagnosis: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Diagnostic groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Category of first-listed diagnosis and ICD-9-CM code	Both sexes		Male		Female	
	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>
Rate per 10,000 population						
All conditions . . . . .	1,143.1	32.8	927.0	31.1	1,350.2	36.8
Infectious and parasitic diseases . . . . .	001–139	31.6	1.3	30.9	1.5	32.2
Septicemia . . . . .	038	13.0	0.7	11.7	0.8	14.3
Neoplasms . . . . .	140–239	64.7	2.2	51.8	2.1	77.0
Malignant neoplasms . . . . .	140–208,230–234	49.4	1.7	46.9	2.0	51.8
Malignant neoplasm of large intestine and rectum . . . . .	153–154,197.5	5.5	0.3	5.4	0.4	5.6
Malignant neoplasm of trachea, bronchus, and lung . . . . .	162,176.4,197.0,197.3	7.1	0.4	8.7	0.6	5.6
Malignant neoplasm of breast . . . . .	174–175,198.81	4.1	0.2	* *	8.0	0.4
Benign neoplasms . . . . .	210–229	13.7	0.6	3.4	0.4	23.5
Endocrine, nutritional and metabolic diseases, and immunity disorders . . . . .	240–279	48.0	1.7	41.6	1.8	54.2
Diabetes mellitus . . . . .	250	18.8	0.7	18.4	1.0	19.1
Volume depletion . . . . .	276.5	15.5	0.8	13.4	1.0	17.6
Diseases of the blood and blood-forming organs . . . . .	280–289	13.8	0.6	11.7	0.7	15.8
Mental disorders . . . . .	290–319	72.6	7.7	74.1	8.3	71.2
Psychoses . . . . .	290–299	45.1	4.8	41.7	4.6	48.4
Alcohol dependence syndrome . . . . .	303	7.1	1.2	10.4	1.8	3.9
Diseases of the nervous system and sense organs . . . . .	320–389	20.5	1.3	19.3	1.2	21.6
Diseases of the circulatory system . . . . .	390–459	225.5	7.7	233.6	8.9	217.7
Heart disease . . . . .	391–392,0,393–398,402,404,410–416,420–429	154.9	5.6	167.1	6.8	143.1
Acute myocardial infarction . . . . .	410	28.0	1.3	34.5	1.8	21.7
Coronary atherosclerosis . . . . .	414.0	37.3	2.2	47.3	3.0	27.8
Other ischemic heart disease . . . . .	411–413,414.1–414.9	12.0	0.8	12.7	1.0	11.4
Cardiac dysrhythmias . . . . .	427	23.5	0.8	23.1	1.0	23.8
Congestive heart failure . . . . .	428.0	35.4	1.4	32.6	1.4	38.1
Cerebrovascular disease . . . . .	430–438	37.6	1.4	34.9	1.4	40.3
Diseases of the respiratory system . . . . .	460–519	128.5	4.9	125.7	5.4	131.1
Acute bronchitis and bronchiolitis . . . . .	466	10.0	1.1	11.2	1.5	8.9
Pneumonia . . . . .	480–486	48.2	2.1	48.2	2.3	48.2
Chronic bronchitis . . . . .	491	16.6	0.9	13.7	0.9	19.3
Asthma . . . . .	493	17.9	1.4	15.4	1.6	20.2
Diseases of the digestive system . . . . .	520–579	110.9	3.3	98.7	3.2	122.5
Appendicitis . . . . .	540–543	8.6	0.5	10.3	0.6	7.0
Noninfectious enteritis and colitis . . . . .	555–558	10.4	0.5	8.3	0.6	12.4
Diverticula of intestine . . . . .	562	8.6	0.5	7.3	0.5	9.9
Cholelithiasis . . . . .	574	14.5	0.6	8.9	0.5	20.0
Diseases of the genitourinary system . . . . .	580–629	62.6	2.1	40.8	1.7	83.6
Calculus of kidney and ureter . . . . .	592	6.1	0.4	7.3	0.6	5.0
Complications of pregnancy, childbirth, and the puerperium <sup>2</sup> . . . . .	630–677	18.5	0.9	...	...	36.2
Diseases of the skin and subcutaneous tissue . . . . .	680–709	16.8	0.8	17.4	1.1	16.2
Cellulitis and abscess . . . . .	681–682	12.0	0.6	12.8	0.9	11.1
Diseases of the musculoskeletal system and connective tissue . . . . .	710–739	55.5	3.1	49.5	2.8	61.2
Osteoarthritis and allied disorders . . . . .	715	15.2	1.1	11.1	0.8	19.0
Intervertebral disc disorders . . . . .	722	11.5	0.8	12.6	0.8	10.4
Congenital anomalies . . . . .	740–759	5.7	0.8	6.1	0.9	5.4
Certain conditions originating in the perinatal period . . . . .	760–779	5.1	0.7	6.1	0.9	4.1
Symptoms, signs, and ill-defined conditions . . . . .	780–799	10.1	0.7	9.9	0.7	10.4
Injury and poisoning . . . . .	800–999	93.2	3.5	93.2	3.9	93.2
Fractures, all sites <sup>3</sup> . . . . .	800–829	37.3	1.8	32.8	1.7	41.6
Fracture of neck of femur <sup>3</sup> . . . . .	820	12.0	0.7	6.5	0.5	17.4
Poisonings . . . . .	960–989	7.3	0.3	6.0	0.4	8.5
Supplementary classifications . . . . .	V01–V82	159.7	5.6	16.7	1.7	296.6
Females with deliveries . . . . .	V27	140.8	5.4	...	...	275.7
						10.5

\* Figure does not meet standard of reliability or precision.

... Category not applicable.

<sup>1</sup>SE is standard error of rate.

<sup>2</sup>First-listed diagnosis for females with deliveries is coded V27, shown under "Supplementary classifications."

<sup>3</sup>Excludes fractures coded as 733.1, pathologic fracture.

**Table 7. Average length of stay for discharges from short-stay hospitals by sex and first-listed diagnosis: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Diagnostic groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Category of first-listed diagnosis and ICD-9-CM code	Both sexes		Male		Female		
	ALOS <sup>1</sup>	SE <sup>2</sup>	ALOS <sup>1</sup>	SE <sup>2</sup>	ALOS <sup>1</sup>	SE <sup>2</sup>	
All conditions . . . . .	5.1	0.1	5.5	0.1	4.8	0.1	
Infectious and parasitic diseases . . . . .	001–139	6.6	0.2	6.6	0.2	6.6	0.2
Septicemia . . . . .	038	8.1	0.2	7.8	0.3	8.2	0.3
Neoplasms . . . . .	140–239	6.2	0.1	6.8	0.2	5.8	0.2
Malignant neoplasms . . . . .	140–208,230–234	7.0	0.1	7.0	0.2	7.0	0.2
Malignant neoplasm of large intestine and rectum . . . . .	153–154,197.5	9.3	0.2	9.5	0.4	9.2	0.3
Malignant neoplasm of trachea, bronchus, and lung . . . . .	162,176.4,197.0,197.3	7.7	0.3	7.5	0.5	7.9	0.4
Malignant neoplasm of breast . . . . .	174–175,198.81	3.0	0.2	* <sup>3</sup>	* <sup>3</sup>	3.0	0.2
Benign neoplasms . . . . .	210–229	3.5	0.1	5.1	0.4	3.2	0.1
Endocrine, nutritional and metabolic diseases, and immunity disorders . . . . .	240–279	5.1	0.1	5.3	0.2	4.9	0.1
Diabetes mellitus . . . . .	250	5.8	0.2	5.9	0.3	5.7	0.3
Volume depletion . . . . .	276.5	4.4	0.1	4.2	0.2	4.5	0.2
Diseases of the blood and blood-forming organs . . . . .	280–289	5.2	0.3	4.8	0.3	5.4	0.4
Mental disorders . . . . .	290–319	8.0	0.3	7.6	0.3	8.3	0.2
Psychoses . . . . .	290–299	9.1	0.3	8.8	0.4	9.3	0.3
Alcohol dependence syndrome . . . . .	303	6.6	0.6	6.3	0.5	7.6	1.5
Diseases of the nervous system and sense organs . . . . .	320–389	5.7	0.3	5.8	0.3	5.6	0.4
Diseases of the circulatory system . . . . .	390–459	5.3	0.1	5.1	0.1	5.6	0.1
Heart disease . . . . .	391–392,0,393–398,402,404,410–416,420–429	5.1	0.1	4.9	0.1	5.5	0.2
Acute myocardial infarction . . . . .	410	6.0	0.2	5.6	0.2	6.6	0.4
Coronary atherosclerosis . . . . .	414.0	4.5	0.2	4.2	0.1	5.0	0.5
Other ischemic heart disease . . . . .	411–413,414.1–414.9	3.1	0.2	2.9	0.1	3.4	0.3
Cardiac dysrhythmias . . . . .	427	4.2	0.2	4.1	0.2	4.3	0.3
Congestive heart failure . . . . .	428.0	5.8	0.2	5.7	0.2	5.9	0.2
Cerebrovascular disease . . . . .	430–438	5.8	0.1	5.5	0.2	6.0	0.2
Diseases of the respiratory system . . . . .	460–519	5.6	0.1	5.5	0.1	5.8	0.1
Acute bronchitis and bronchiolitis . . . . .	466	3.5	0.1	3.2	0.1	3.8	0.2
Pneumonia . . . . .	480–486	6.4	0.2	6.2	0.2	6.5	0.2
Chronic bronchitis . . . . .	491	5.4	0.2	5.4	0.3	5.4	0.1
Asthma . . . . .	493	3.4	0.1	3.0	0.2	3.7	0.1
Diseases of the digestive system . . . . .	520–579	4.9	0.1	5.0	0.1	4.8	0.1
Appendicitis . . . . .	540–543	3.8	0.2	3.8	0.3	3.7	0.2
Noninfectious enteritis and colitis . . . . .	555–558	4.3	0.2	4.2	0.3	4.4	0.2
Diverticula of intestine . . . . .	562	5.6	0.2	5.4	0.3	5.8	0.3
Cholelithiasis . . . . .	574	4.0	0.1	4.9	0.4	3.6	0.1
Diseases of the genitourinary system . . . . .	580–629	4.0	0.1	4.3	0.1	3.8	0.1
Calculus of kidney and ureter . . . . .	592	2.2	0.1	2.2	0.1	2.3	0.1
Complications of pregnancy, childbirth, and the puerperium <sup>3</sup> . . . . .	630–677	2.5	0.1	...	...	2.5	0.1
Diseases of the skin and subcutaneous tissue . . . . .	680–709	5.8	0.2	5.7	0.3	5.9	0.3
Cellulitis and abscess . . . . .	681–682	5.3	0.2	5.2	0.3	5.5	0.3
Diseases of the musculoskeletal system and connective tissue . . . . .	710–739	4.5	0.2	4.0	0.1	4.9	0.3
Osteoarthritis and allied disorders . . . . .	715	5.2	0.4	4.4	0.1	5.7	0.7
Intervertebral disc disorders . . . . .	722	2.8	0.1	2.6	0.1	3.0	0.1
Congenital anomalies . . . . .	740–759	5.7	0.5	5.2	0.3	6.1	0.7
Certain conditions originating in the perinatal period . . . . .	760–779	9.7	0.9	9.6	1.1	9.8	0.9
Symptoms, signs, and ill-defined conditions . . . . .	780–799	2.7	0.2	2.5	0.2	3.0	0.3
Injury and poisoning . . . . .	800–999	5.2	0.1	5.0	0.1	5.5	0.1
Fractures, all sites <sup>4</sup> . . . . .	800–829	5.7	0.2	5.2	0.2	6.1	0.2
Fracture of neck of femur <sup>4</sup> . . . . .	820	7.3	0.3	7.8	0.5	7.2	0.3
Poisonings . . . . .	960–989	2.8	0.2	3.2	0.3	2.5	0.2
Supplementary classifications . . . . .	V01–V82	3.1	0.1	8.6	0.7	2.8	0.1
Females with deliveries . . . . .	V27	2.4	0.0	...	...	2.4	0.0

\* Figure does not meet standard of reliability or precision.

... Category not applicable.

.0 Quantity more than zero but less than 0.05.

<sup>1</sup>ALOS is average length of stay.

<sup>2</sup>SE is standard error of average length of stay.

<sup>3</sup>First-listed diagnosis for females with deliveries is coded V27, shown under "Supplementary classifications."

<sup>4</sup>Excludes fractures coded as 733.1, pathologic fracture.

**Table 8. Number of all-listed procedures for discharges from short-stay hospitals by procedure category and age: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Procedure groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Procedure category and ICD-9-CM code	All ages		Under 15 years		15–44 years		45–64 years		65 years and over		
	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	
Number in thousands											
All procedures . . . . .	40,509	1,600	1,888	265	14,383	529	9,223	409	15,015	715	
Operations on the nervous system . . . . .	01–05	1,043	66	207	36	349	32	213	13	273	17
Spinal tap . . . . .	03.31	311	27	136	23	77	5	40	4	59	6
Operations on the endocrine system . . . . .	06–07	104	8	*2	*1	26	3	49	5	27	3
Operations on the eye . . . . .	08–16	135	22	13	3	30	6	31	6	61	14
Operations on the ear . . . . .	18–20	47	5	20	3	14	3	*	*	*6	*2
Operations on the nose, mouth, and pharynx . . . . .	21–29	311	27	63	11	110	9	72	12	67	9
Operations on the respiratory system . . . . .	30–34	1,016	44	57	12	175	10	272	15	511	28
Bronchoscopy with or without biopsy . . . . .	33.21–33.24,33.27	284	16	19	4	41	4	75	6	149	11
Operations on the cardiovascular system . . . . .	35–39	5,382	287	144	29	509	32	1,822	108	2,907	160
Removal of coronary artery obstruction and insertion of stent(s) . . . . .	36.0	686	56	*	*	41	6	305	25	340	31
Coronary artery bypass graft <sup>2</sup> . . . . .	36.1	607	50	*	*	25	5	243	22	339	29
Cardiac catheterization . . . . .	37.21–37.23	1,112	76	13	4	84	7	452	32	563	42
Insertion, replacement, removal, and revision of pacemaker leads or device . . . . .	37.7–37.8	317	21	*	*	*10	*2	45	7	258	16
Hemodialysis . . . . .	39.95	406	32	*	*	68	6	137	13	199	18
Operations on the hemic and lymphatic system . . . . .	40–41	342	16	22	4	62	7	114	7	145	8
Operations on the digestive system . . . . .	42–54	5,052	174	208	29	1,178	47	1,301	55	2,365	94
Endoscopy of small intestine with or without biopsy . . . . .	45.11–45.14,45.16	882	37	15	3	134	9	209	11	524	23
Endoscopy of large intestine with or without biopsy . . . . .	45.21–45.25	494	24	6	2	65	5	104	8	318	17
Partial excision of large intestine . . . . .	45.7	220	10	*	*	24	3	60	5	134	7
Appendectomy, excluding incidental . . . . .	47.0	263	14	66	7	145	8	35	3	17	2
Cholecystectomy . . . . .	51.2	442	18	*	*	143	7	131	7	164	11
Lysis of peritoneal adhesions . . . . .	54.5	310	14	4	1	133	9	83	6	90	6
Operations on the urinary system . . . . .	55–59	990	51	39	8	247	22	270	14	433	28
Cystoscopy with or without biopsy . . . . .	57.31–57.33	192	12	*	*	36	4	48	4	101	7
Operations on the male genital organs . . . . .	60–64	317	20	22	4	18	5	81	6	195	14
Prostatectomy . . . . .	60.2–60.6	223	14	*	*	*	*	62	5	161	12
Operations on the female genital organs . . . . .	65–71	2,068	82	7	2	1,211	53	587	30	262	17
Oophorectomy and salpingo-oophorectomy . . . . .	65.3–65.6	481	21	*	*	201	13	216	11	63	5
Bilateral destruction or occlusion of fallopian tubes . . . . .	66.2–66.3	325	21	*	*	324	21	*	*	*	*
Hysterectomy . . . . .	68.3–68.7,68.9	603	30	*	*	303	17	231	14	68	5
Obstetrical procedures . . . . .	72–75	6,682	274	21	6	6,653	273	*8	*2	...	...
Episiotomy with or without forceps or vacuum extraction . . . . .	72.1,72.21,72.31,72.71,73.6	1,183	58	*	*	1,176	58	*	*	...	...
Artificial rupture of membranes . . . . .	73.0	772	59	*	*	769	59	*	*	...	...
Cesarean section . . . . .	74.0–74.2,74.4,74.99	820	43	*	*	815	42	*	*	...	...
Repair of current obstetric laceration . . . . .	75.5–75.6	1,082	48	*	*	1,079	48	*	*	...	...
Operations on the musculoskeletal system . . . . .	76–84	3,172	158	156	24	935	54	873	52	1,209	66
Partial excision of bone . . . . .	76.2–76.3,77.6–77.8	213	14	10	2	81	7	80	7	42	4
Reduction of fracture . . . . .	76.7,79.0–79.3	642	34	47	7	225	16	106	8	263	18
Open reduction of fracture with internal fixation . . . . .	79.3	428	24	14	2	141	9	76	7	198	15
Excision or destruction of intervertebral disc . . . . .	80.5	293	24	*	*	125	11	124	13	43	4
Total hip replacement . . . . .	81.51	144	10	*	*	8	1	37	4	98	8
Total knee replacement . . . . .	81.54	259	22	*	*	*	*	77	7	177	17
Operations on the integumentary system . . . . .	85–86	1,220	46	75	12	378	21	347	16	419	17
Debridement of wound, infection, or burn . . . . .	86.22,86.28	312	16	18	3	88	7	85	6	120	9
Miscellaneous diagnostic and therapeutic procedures . . . . .	87–99	12,628	851	830	128	2,488	208	3,177	204	6,133	430
Computerized axial tomography . . . . .	87.03,87.41,87.71,88.01,88.38	963	90	41	9	201	26	214	23	506	47
Arteriography and angiography using contrast material . . . . .	88.4–88.5	1,900	127	18	4	172	12	738	52	972	71
Diagnostic ultrasound . . . . .	88.7	1,111	103	43	11	230	26	249	25	589	56
Respiratory therapy . . . . .	93.9,96.7	1,088	96	208	47	154	16	204	19	522	47
Insertion of endotracheal tube . . . . .	96.04	374	19	36	9	59	5	74	5	206	11
Injection or infusion of cancer chemotherapeutic substance . . . . .	99.25	276	25	41	11	44	7	97	13	95	9

\* Figure does not meet standard of reliability or precision.

... Category not applicable.

<sup>1</sup>SE is standard error.

<sup>2</sup>The number of discharges with a coronary artery bypass graft was 366,000.

**Table 9. Rate of all-listed procedures for discharges from short-stay hospitals by procedure category and age: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Procedure groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Procedure category and ICD-9-CM code	All ages		Under 15 years		15–44 years		45–64 years		65 years and over		
	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	
Rate per 10,000 population											
All procedures . . . . .	1,498.0	59.2	316.0	44.4	1,182.4	43.5	1,668.9	74.0	4,445.5	211.8	
Operations on the nervous system . . . . .	01–05	38.6	2.5	34.7	6.0	28.7	2.6	38.6	2.3	81.0	5.1
Spinal tap . . . . .	03.31	11.5	1.0	22.8	3.9	6.3	0.4	7.2	0.7	17.3	1.7
Operations on the endocrine system . . . . .	06–07	3.9	0.3	*0.4	*0.1	2.1	0.3	8.8	1.0	8.1	0.9
Operations on the eye . . . . .	08–16	5.0	0.8	2.2	0.4	2.5	0.5	5.6	1.0	18.1	4.2
Operations on the ear . . . . .	18–20	1.7	0.2	3.4	0.6	1.1	0.2	*	*	*1.8	*0.5
Operations on the nose, mouth, and pharynx . . . . .	21–29	11.5	1.0	10.6	1.9	9.0	0.8	12.9	2.3	19.7	2.6
Operations on the respiratory system . . . . .	30–34	37.6	1.6	9.6	2.0	14.4	0.8	49.3	2.8	151.3	8.2
Bronchoscopy with or without biopsy . . . . .	33.21–33.24,33.27	10.5	0.6	3.2	0.7	3.3	0.3	13.6	1.1	44.2	3.4
Operations on the cardiovascular system . . . . .	35–39	199.0	10.6	24.1	4.9	41.8	2.6	329.7	19.5	860.8	47.3
Removal of coronary artery obstruction and minsertion of stent(s) . . . . .	36.0	25.4	2.1	*	*	3.4	0.5	55.1	4.5	100.6	9.3
Coronary artery bypass graft <sup>2</sup> . . . . .	36.1	22.5	1.9	*	*	2.0	0.4	43.9	4.0	100.4	8.7
Cardiac catheterization . . . . .	37.21–37.23	41.1	2.8	2.2	0.6	6.9	0.6	81.8	5.8	166.7	12.3
Insertion, replacement, removal, and revision of pacemaker leads or device . . . . .	37.7–37.8	11.7	0.8	*	*	*0.8	*0.2	8.2	1.4	76.4	4.6
Hemodialysis . . . . .	39.95	15.0	1.2	*	*	5.6	0.5	24.7	2.4	58.9	5.3
Operations on the hemic and lymphatic system . . . . .	40–41	12.7	0.6	3.7	0.7	5.1	0.6	20.6	1.2	42.8	2.3
Operations on the digestive system . . . . .	42–54	186.8	6.4	34.9	4.8	96.9	3.8	235.4	10.0	700.2	27.8
Endoscopy of small intestine with or without biopsy . . . . .	45.11–45.14,45.16	32.6	1.4	2.4	0.6	11.0	0.8	37.8	2.0	155.3	6.8
Endoscopy of large intestine with or without biopsy . . . . .	45.21–45.25	18.3	0.9	1.0	0.3	5.4	0.4	18.9	1.4	94.2	4.9
Partial excision of large intestine . . . . .	45.7	8.1	0.4	*	*	1.9	0.2	10.9	0.8	39.6	2.2
Appendectomy, excluding incidental . . . . .	47.0	9.7	0.5	11.1	1.2	11.9	0.7	6.3	0.5	5.0	0.7
Cholecystectomy . . . . .	51.2	16.4	0.7	*	*	11.7	0.6	23.7	1.3	48.7	3.1
Lysis of peritoneal adhesions . . . . .	54.5	11.4	0.5	0.6	0.2	10.9	0.7	15.0	1.0	26.7	1.8
Operations on the urinary system . . . . .	55–59	36.6	1.9	6.6	1.3	20.3	1.8	48.8	2.6	128.3	8.2
Cystoscopy with or without biopsy . . . . .	57.31–57.33	7.1	0.4	*	*	2.9	0.3	8.7	0.8	30.0	2.1
Operations on the male genital organs . . . . .	60–64	11.7	0.7	3.6	0.6	1.5	0.4	14.7	1.1	57.9	4.3
Prostatectomy . . . . .	60.2–60.6	8.3	0.5	*	*	*	*	11.3	0.8	47.5	3.7
Operations on the female genital organs . . . . .	65–71	76.5	3.0	1.2	0.3	99.6	4.3	106.3	5.4	77.6	5.0
Oophorectomy and salpingo-oophorectomy . . . . .	65.3–65.6	17.8	0.8	*	*	16.6	1.1	39.1	2.0	18.5	1.5
Bilateral destruction or occlusion of fallopian tubes . . . . .	66.2–66.3	12.0	0.8	*	*	26.6	1.7	*	*	*	*
Hysterectomy . . . . .	68.3–68.7,68.9	22.3	1.1	*	*	24.9	1.4	41.9	2.5	20.2	1.6
Obstetrical procedures . . . . .	72–75	247.1	10.1	3.5	0.9	547.0	22.5	*1.4	*0.3	...	...
Episiotomy with or without forceps or vacuum extraction . . . . .	72.1,72.21,72.31,72.71,73.6	43.7	2.2	*	*	96.7	4.8	*	*	...	...
Artificial rupture of membranes . . . . .	73.0	28.6	2.2	*	*	63.2	4.8	*	*	...	...
Cesarean section . . . . .	74.0–74.2,74.4,74.99	30.3	1.6	*	*	67.0	3.5	*	*	...	...
Repair of current obstetric laceration . . . . .	75.5–75.6	40.0	1.8	*	*	88.7	3.9	*	*	...	...
Operations on the musculoskeletal system . . . . .	76–84	117.3	5.8	26.0	3.9	76.9	4.5	157.9	9.5	358.0	19.5
Partial excision of bone . . . . .	76.2–76.3,77.6–77.8	7.9	0.5	1.7	0.4	6.6	0.6	14.5	1.2	12.4	1.1
Reduction of fracture . . . . .	76.7,77.9,0–79.3	23.7	1.3	7.9	1.2	18.5	1.3	19.2	1.4	77.9	5.3
Open reduction of fracture with internal fixation . . . . .	79.3	15.8	0.9	2.3	0.4	11.6	0.7	13.7	1.2	58.6	4.6
Excision or destruction of intervertebral disc . . . . .	80.5	10.8	0.9	*	*	10.3	0.9	22.5	2.3	12.6	1.2
Total hip replacement . . . . .	81.51	5.3	0.4	*	*	0.7	0.1	6.7	0.8	29.1	2.3
Total knee replacement . . . . .	81.54	9.6	0.8	*	*	*	*	13.9	1.2	52.4	5.1
Operations on the integumentary system . . . . .	85–86	45.1	1.7	12.6	2.0	31.1	1.7	62.8	3.0	124.1	4.9
Debridement of wound, infection, or burn . . . . .	86.22,86.28	11.5	0.6	3.0	0.5	7.3	0.6	15.5	1.1	35.6	2.6
Miscellaneous diagnostic and therapeutic procedures . . . . .	87–99	467.0	31.5	138.9	21.5	204.5	17.1	574.9	36.9	1,816.0	127.2
Computerized axial tomography . . . . .	87.03,87.41,87.71,88.01,88.38	35.6	3.3	6.9	1.5	16.5	2.1	38.7	4.1	149.8	14.0
Arteriography and angiography using contrast material . . . . .	88.4–88.5	70.2	4.7	3.0	0.7	14.1	1.0	133.4	9.4	287.9	21.1
Diagnostic ultrasound . . . . .	88.7	41.1	3.8	7.1	1.8	18.9	2.1	45.1	4.6	174.4	16.7
Respiratory therapy . . . . .	93.9,96.7	40.2	3.6	34.9	7.9	12.7	1.3	36.9	3.5	154.4	13.8
Insertion of endotracheal tube . . . . .	96.04	13.8	0.7	6.0	1.5	4.8	0.4	13.4	0.9	60.9	3.2
Injection or infusion of cancer chemotherapeutic substance . . . . .	99.25	10.2	0.9	6.9	1.9	3.6	0.5	17.5	2.3	28.1	2.6

\* Figure does not meet standard of reliability or precision.

\*\* Category not applicable.

<sup>1</sup>SE is standard error of rate.<sup>2</sup>The rate per 10,000 population of discharges with a coronary artery bypass graft was 13.5.

**Table 10. Number of all-listed procedures for discharges from short-stay hospitals by procedure category and sex: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Procedure groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Procedure category and ICD-9-CM code	Both sexes		Male		Female	
	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>	Number	SE <sup>1</sup>
Number in thousands						
All procedures . . . . .	40,509	1,600	15,817	752	24,692	903
Operations on the nervous system . . . . .	01–05	1,043	66	488	31	554
Spinal tap . . . . .	03.31	311	27	163	15	148
Operations on the endocrine system . . . . .	06–07	104	8	26	3	78
Operations on the eye . . . . .	08–16	135	22	70	12	65
Operations on the ear . . . . .	18–20	47	5	31	4	17
Operations on the nose, mouth, and pharynx . . . . .	21–29	311	27	168	16	143
Operations on the respiratory system . . . . .	30–34	1,016	44	554	32	462
Bronchoscopy with or without biopsy . . . . .	33.21–33.24,33.27	284	16	154	12	130
Operations on the cardiovascular system . . . . .	35–39	5,382	287	3,116	181	2,266
Removal of coronary artery obstruction and insertion of stent(s) . . . . .	36.0	686	56	459	37	227
Coronary artery bypass graft <sup>2</sup> . . . . .	36.1	607	50	420	35	187
Cardiac catheterization . . . . .	37.21–37.23	1,112	76	664	47	448
Insertion, replacement, removal, and revision of pacemaker leads or device . . . . .	37.7–37.8	317	21	163	15	154
Hemodialysis . . . . .	39.95	406	32	195	17	211
Operations on the hemic and lymphatic system . . . . .	40–41	342	16	173	10	170
Operations on the digestive system . . . . .	42–54	5,052	174	2,126	82	2,926
Endoscopy of small intestine with or without biopsy . . . . .	45.11–45.14,45.16	882	37	403	18	479
Endoscopy of large intestine with or without biopsy . . . . .	45.21–45.25	494	24	196	11	298
Partial excision of large intestine . . . . .	45.7	220	10	104	6	116
Appendectomy, excluding incidental . . . . .	47.0	263	14	143	8	119
Cholecystectomy . . . . .	51.2	442	18	135	8	307
Lysis of peritoneal adhesions . . . . .	54.5	310	14	55	4	254
Operations on the urinary system . . . . .	55–59	990	51	494	29	496
Cystoscopy with or without biopsy . . . . .	57.31–57.33	192	12	119	9	73
Operations on the male genital organs . . . . .	60–64	317	20	317	20	...
Prostatectomy . . . . .	60.2–60.6	223	14	223	14	...
Operations on the female genital organs . . . . .	65–71	2,068	82	...	...	2,068
Oophorectomy and salpingo-oophorectomy . . . . .	65.3–65.6	481	21	...	...	481
Bilateral destruction or occlusion of fallopian tubes . . . . .	66.2–66.3	325	21	...	...	325
Hysterectomy . . . . .	68.3–68.7,68.9	603	30	...	...	603
Obstetrical procedures . . . . .	72–75	6,682	274	...	...	6,682
Episiotomy with or without forceps or vacuum extraction . . . . .	72.1,72.21,72.31,72.71,73.6	1,183	58	...	...	1,183
Artificial rupture of membranes . . . . .	73.0	772	59	...	...	772
Cesarean section . . . . .	74.0–74.2,74.4,74.99	820	43	...	...	820
Repair of current obstetric laceration . . . . .	75.5–75.6	1,082	48	...	...	1,082
Operations on the musculoskeletal system . . . . .	76–84	3,172	158	1,528	76	1,644
Partial excision of bone . . . . .	76.2–76.3,77.6–77.8	213	14	109	8	103
Reduction of fracture . . . . .	76.7,79.0–79.3	642	34	298	17	344
Open reduction of fracture with internal fixation . . . . .	79.3	428	24	187	11	241
Excision or destruction of intervertebral disc . . . . .	80.5	293	24	164	13	129
Total hip replacement . . . . .	81.51	144	10	57	5	87
Total knee replacement . . . . .	81.54	259	22	90	8	169
Operations on the integumentary system . . . . .	85–86	1,220	46	570	29	649
Debridement of wound, infection, or burn . . . . .	86.22,86.28	312	16	188	10	124
Miscellaneous diagnostic and therapeutic procedures . . . . .	87–99	12,628	851	6,156	414	6,472
Computerized axial tomography . . . . .	87.03,87.41,87.71,88.01,88.38	963	90	473	45	489
Arteriography and angiography using contrast material . . . . .	88.4–88.5	1,900	127	1,077	73	823
Diagnostic ultrasound . . . . .	88.7	1,111	103	483	47	628
Respiratory therapy . . . . .	93.9,96.7	1,088	96	561	50	527
Insertion of endotracheal tube . . . . .	96.04	374	19	195	12	179
Injection or infusion of cancer chemotherapeutic substance . . . . .	99.25	276	25	129	12	147

... Category not applicable.

<sup>1</sup>SE is standard error.

<sup>2</sup>The number of discharges with a coronary artery graft was 366,000.

**Table 11. Rate of all-listed procedures for discharges from short-stay hospitals by procedure category and sex: United States, 1997**

[Discharges of inpatients from non-Federal hospitals. Excludes newborn infants. Procedure groupings and code numbers are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Procedure category and ICD-9-CM code	Both sexes		Male		Female	
	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>	Rate	SE <sup>1</sup>
Rate per 10,000 population						
All procedures . . . . .	1,498.0	59.2	1,195.3	56.8	1,788.0	65.4
Operations on the nervous system . . . . .	01–05	38.6	2.5	36.9	2.3	40.1
Spinal tap . . . . .	03.31	11.5	1.0	12.3	1.2	10.7
Operations on the endocrine system . . . . .	06–07	3.9	0.3	2.0	0.2	5.6
Operations on the eye . . . . .	08–16	5.0	0.8	5.3	0.9	4.7
Operations on the ear . . . . .	18–20	1.7	0.2	2.3	0.3	1.2
Operations on the nose, mouth, and pharynx . . . . .	21–29	11.5	1.0	12.7	1.2	10.3
Operations on the respiratory system . . . . .	30–34	37.6	1.6	41.8	2.4	33.5
Bronchoscopy with or without biopsy . . . . .	33.21–33.24, 33.27	10.5	0.6	11.6	0.9	9.4
Operations on the cardiovascular system . . . . .	35–39	199.0	10.6	235.4	13.7	164.1
Removal of coronary artery obstruction and insertion of stent(s) . . . . .	36.0	25.4	2.1	34.7	2.8	16.5
Coronary artery bypass graft <sup>2</sup> . . . . .	36.1	22.5	1.9	31.8	2.6	13.5
Cardiac catheterization . . . . .	37.21–37.23	41.1	2.8	50.2	3.6	32.4
Insertion, replacement, removal, and revision of pacemaker leads or device . . . . .	37.7–37.8	11.7	0.8	12.3	1.1	11.2
Hemodialysis . . . . .	39.95	15.0	1.2	14.7	1.3	15.3
Operations on the hemic and lymphatic system . . . . .	40–41	12.7	0.6	13.0	0.7	12.3
Operations on the digestive system . . . . .	42–54	186.8	6.4	160.7	6.2	211.9
Endoscopy of small intestine with or without biopsy . . . . .	45.11–45.14, 45.16	32.6	1.4	30.4	1.4	34.7
Endoscopy of large intestine with or without biopsy . . . . .	45.21–45.25	18.3	0.9	14.8	0.8	21.6
Partial excision of large intestine . . . . .	45.7	8.1	0.4	7.8	0.5	8.4
Appendectomy, excluding incidental . . . . .	47.0	9.7	0.5	10.8	0.6	8.6
Cholecystectomy . . . . .	51.2	16.4	0.7	10.2	0.6	22.2
Lysis of peritoneal adhesions . . . . .	54.5	11.4	0.5	4.2	0.3	18.4
Operations on the urinary system . . . . .	55–59	36.6	1.9	37.3	2.2	35.9
Cystoscopy with or without biopsy . . . . .	57.31–57.33	7.1	0.4	9.0	0.7	5.3
Operations on the male genital organs . . . . .	60–64	11.7	0.7	23.9	1.5	...
Prostatectomy . . . . .	60.2–60.6	8.3	0.5	16.9	1.1	...
Operations on the female genital organs . . . . .	65–71	76.5	3.0	...	...	149.7
Oophorectomy and salpingo-oophorectomy . . . . .	65.3–65.6	17.8	0.8	...	...	34.8
Bilateral destruction or occlusion of fallopian tubes . . . . .	66.2–66.3	12.0	0.8	...	...	23.5
Hysterectomy . . . . .	68.3–68.7, 68.9	22.3	1.1	...	...	43.7
Obstetrical procedures . . . . .	72–75	247.1	10.1	...	...	483.9
Episiotomy with or without forceps or vacuum extraction . . . . .	72.1, 72.21, 72.31, 72.71, 73.6	43.7	2.2	...	...	85.7
Artificial rupture of membranes . . . . .	73.0	28.6	2.2	...	...	55.9
Cesarean section . . . . .	74.0–74.2, 74.4, 74.99	30.3	1.6	...	...	59.4
Repair of current obstetric laceration . . . . .	75.5–75.6	40.0	1.8	...	...	78.3
Operations on the musculoskeletal system . . . . .	76–84	117.3	5.8	115.5	5.8	119.1
Partial excision of bone . . . . .	76.2–76.3, 77.6–77.8	7.9	0.5	8.3	0.6	7.5
Reduction of fracture . . . . .	76.7, 79.0–79.3	23.7	1.3	22.5	1.3	24.9
Open reduction of fracture with internal fixation . . . . .	79.3	15.8	0.9	14.2	0.9	17.4
Excision or destruction of intervertebral disc . . . . .	80.5	10.8	0.9	12.4	1.0	9.3
Total hip replacement . . . . .	81.51	5.3	0.4	4.3	0.4	6.3
Total knee replacement . . . . .	81.54	9.6	0.8	6.8	0.6	12.3
Operations on the integumentary system . . . . .	85–86	45.1	1.7	43.1	2.2	47.0
Debridement of wound, infection, or burn . . . . .	86.22, 86.28	11.5	0.6	14.2	0.8	9.0
Miscellaneous diagnostic and therapeutic procedures . . . . .	87–99	467.0	31.5	465.2	31.3	468.6
Computerized axial tomography . . . . .	87.03, 87.41, 87.71, 88.01, 88.38	35.6	3.3	35.8	3.4	35.4
Arteriography and angiography using contrast material . . . . .	88.4–88.5	70.2	4.7	81.4	5.5	59.6
Diagnostic ultrasound . . . . .	88.7	41.1	3.8	36.5	3.5	45.5
Respiratory therapy . . . . .	93.9, 96.7	40.2	3.6	42.4	3.8	38.2
Insertion of endotracheal tube . . . . .	96.04	13.8	0.7	14.7	0.9	12.9
Injection or infusion of cancer chemotherapeutic substance . . . . .	99.25	10.2	0.9	9.8	0.9	10.7

... Category not applicable.

<sup>1</sup>SE is standard error of rate.

<sup>2</sup>The rate per 10,000 population of discharges with a coronary artery bypass graft was 13.5.

---

**Suggested citation**

Lawrence L, Hall MJ. 1997 summary: National Hospital Discharge Survey. Advance data from vital and health statistics; no. 308. Hyattsville, Maryland: National Center for Health Statistics. 1999.

---

**Copyright information**

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

---

**National Center for Health Statistics**

Director  
Edward J. Sondik, Ph.D.

Deputy Director  
Jack R. Anderson

---

**U.S. DEPARTMENT OF  
HEALTH & HUMAN SERVICES**

Centers for Disease Control and Prevention  
National Center for Health Statistics  
6525 Belcrest Road  
Hyattsville, Maryland 20782-2003

---

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

---

To receive this publication regularly, contact  
the National Center for Health Statistics by  
calling 301-436-8500  
E-mail: [nchsquery@cdc.gov](mailto:nchsquery@cdc.gov)  
Internet: [www.cdc.gov/nchswww/](http://www.cdc.gov/nchswww/)

---

DHHS Publication No. (PHS) 99-1250  
(9-0683) (8/99)

FIRST CLASS MAIL  
POSTAGE & FEES PAID  
CDC/NCHS  
PERMIT NO. G-284