

Hospitalizations among Members of the Active Component, U.S. Armed Forces, 2010

This report documents the frequencies, rates, trends, and distributions of hospitalizations of active component members of the U.S. Armed Forces during calendar year 2010. Summaries are based on standardized records of hospitalizations at U.S. military and non-military (reimbursed care) medical facilities worldwide. For this report, primary (first-listed) discharge diagnoses are considered indicative of the primary reasons for hospitalizations; summaries are based on the first three digits of ICD-9-CM codes used to report primary discharge diagnoses. Hospitalizations not routinely documented with standardized, automated records (e.g., during deployments, field training exercises, shipboard) are not centrally available for health surveillance purposes and thus not included in this report.

Frequencies, rates, and trends:

In 2010 there were 88,119 reports of hospitalizations of active component members of the U.S. Army, Navy, Air Force, Marine Corps, and Coast Guard; nearly one-third (32%) of the hospitalizations were in non-military facilities (Table 1, Figure 1). The hospitalization rate (all causes) was 60.4 per 1,000 service members per year. Annual hospitalization rates (all causes) were stable and slightly higher during the last four years compared to the earlier years of the decade (overall hospitalization rate, 2007-2010: 60.2 per 1,000 person-years [p-yrs]; 2001-2006: 55.3 per 1,000 p-yrs) (Figure 1).

Hospitalizations, by illness and injury categories:

As in recent prior years, in 2010 three diagnostic categories accounted for more than one-half (53.7%) of all hospitalizations of active component members: mental disorders (20.7%), pregnancy-related conditions and childbirth (20.6%), and injuries and poisonings (12.4%) (Table 1). In contrast to recent prior years, in 2010 there were more hospitalizations for mental disorders than for any other major category of illnesses or injuries (per the ICD-9-CM). From 2006 to 2010, numbers of hospitalizations increased in ten and decreased in seven major categories of illnesses and injuries. The largest percentage increases between 2006 and 2010 were for "other" or V-coded hospitalizations (primarily orthopedic aftercare and rehabilitation following a previous illness or injury) (difference in hospitalizations, 2010 versus 2006 [hosp diff, 2010-2006]: +1,440; +71.3%) and mental disorders (hosp diff, 2010-2006: +6,560; +56.1%). The largest percentage decreases during the same period were for hematologic disorders (hosp diff, 2010-2006: -157; -29.9%) and "endocrine, nutrition, immunity" (hosp diff, 2010-2006: -116; -11.5%) (Table 1).

Hospitalizations, by gender:

In 2010, the hospitalization rate (all causes) was more than three times higher among females than males (hospitalization rate, overall: females: 147.9 per 1,000 p-yrs; males: 45.7 per

Table 1. Hospitalizations, ICD-9-CM diagnostic categories, active component, U.S. Armed Forces, 2006, 2008, and 2010

Major diagnostic category (ICD-9-CM)	2006			2008			2010		
	No.	Rate ^a	Rank	No.	Rate ^a	Rank	No.	Rate ^a	Rank
Mental disorders (290 - 319)	11,690	8.34	(2)	15,893	11.19	(2)	18,250	12.51	(1)
Pregnancy and childbirth (630 - 679, relevant V codes) ^b	17,456	12.45 (86.28)	(1)	17,457	12.29 (86.66)	(1)	18,125	12.42 (86.75)	(2)
Injury and poisoning (800 - 999)	11,510	8.21	(3)	11,663	8.21	(3)	10,950	7.51	(3)
Digestive system (520 - 579)	7,056	5.04	(4)	7,562	5.33	(5)	7,867	5.39	(4)
Musculoskeletal system (710 - 739)	6,859	4.90	(5)	7,639	5.38	(4)	7,449	5.11	(5)
Ill-defined conditions (780 - 799)	4,571	3.26	(6)	4,400	3.10	(6)	4,444	3.05	(6)
Other (E80-E99 and V01-V89, except pregnancy-related)	2,020	1.44	(12)	2,504	1.76	(10)	3,460	2.37	(7)
Circulatory system (390 - 459)	2,703	1.93	(9)	2,750	1.94	(8)	2,831	1.94	(8)
Respiratory system (460 - 519)	2,875	2.05	(7)	3,043	2.14	(7)	2,701	1.85	(9)
Genitourinary system (580 - 629)	2,711	1.93	(8)	2,729	1.92	(9)	2,654	1.82	(10)
Neoplasms (140 - 239)	2,079	1.48	(11)	2,134	1.50	(12)	2,101	1.44	(11)
Nervous system (320 - 389)	1,406	1.00	(13)	1,919	1.35	(13)	2,085	1.43	(12)
Skin and subcutaneous tissue (680 - 709)	2,248	1.60	(10)	2,362	1.66	(11)	2,073	1.42	(13)
Infectious and parasitic diseases (001 - 139)	1,276	0.91	(14)	1,274	0.90	(14)	1,396	0.96	(14)
Endocrine, nutrition, immunity (240 - 279)	1,011	0.72	(15)	854	0.60	(15)	895	0.61	(15)
Congenital anomalies (740 - 759)	338	0.24	(17)	353	0.25	(16)	470	0.32	(16)
Hematologic disorders (280 - 289)	525	0.37	(16)	338	0.24	(17)	368	0.25	(17)
<i>Total</i>	<i>78,334</i>	<i>55.91</i>		<i>84,874</i>	<i>59.78</i>		<i>88,119</i>	<i>60.41</i>	

^aRates are expressed as hospitalizations per 1,000 person-years

^bRate of pregnancy and childbirth-related hospitalizations among females only (in parentheses)

1,000 p-yrs); however, pregnancy and childbirth accounted for 58.6 percent of all hospitalizations of females. The rate of hospitalizations for conditions not related to pregnancy and childbirth was one-third (33.9%) higher among females (61.2 per 1,000 per year) than males.

Hospitalization rates were higher among males than females for injuries and poisonings (male:female [m:f], rate ratio [RR]: 1.41; rate difference [RD]: 2.29 per 1,000 p-yrs), musculoskeletal/connective tissue disorders (m:f, RR: 1.17; RD: 0.75 per 1,000 p-yrs), and skin and subcutaneous tissue disorders (m:f, RR: 1.35; RD: 0.38 per 1,000 p-yrs). Hospitalization rates were similar among males and females for circulatory disorders (m:f, RR: 1.03; RD: 0.05 per 1,000 p-yrs) and respiratory diseases (m:f, RR: 1.03; RD: 0.06 per 1,000 p-yrs). Hospitalization rates were higher among females than males for the other 12 major disease-specific categories. Of these 12 categories, the largest absolute differences in hospitalization rates between females and males were for genitourinary disorders (RD: 5.85 per 1,000 p-yrs), mental disorders (RD: 3.48 per 1,000 p-yrs), and neoplasms (RD: 3.61 per 1,000 p-yrs).

Relationships between age and hospitalization rates significantly varied across illness and injury-specific categories (Figure 2). For example, among both males and females, hospitalization rates sharply increased with age for neoplasms, circulatory, genitourinary, and musculoskeletal/connective tissue disorders; rates decreased with age for mental disorders; and rates were generally stable across age groups for infectious and parasitic diseases, digestive disorders, and injuries (Figure 2).

Most frequent diagnoses:

In 2010, seven diagnoses (at the 3-digit level of the ICD-9-CM) accounted for more than 1,200 hospitalizations each

among males: adjustment reactions (n=4,524), episodic mood disorders (n=3,809), intervertebral disc disorders (n=2,269), alcohol dependence syndrome (1,850), acute appendicitis (n=1,844), symptoms involving the respiratory system (n=1,458), and other cellulitis and abscess (n=1,360). These seven diagnoses accounted for 30 percent of all hospitalizations of males in 2010 (Table 2).

In 2010, pregnancy and childbirth-related conditions accounted for nearly 60 percent of all hospitalizations of females (Table 3). Other than pregnancy and childbirth-related diagnoses, leading causes of hospitalizations of females were episodic mood disorders (n=1,142), adjustment reactions (n=965), uterine leiomyoma (n=507), intervertebral disc disorders (n=305), depressive disorder (n=285), and acute appendicitis (n=270). These six diagnoses accounted for 27 percent of all hospitalizations (not related to pregnancy/childbirth) of females (Table 3).

Mental health conditions:

In 2010 mental disorders accounted for more hospitalizations of U.S. service members than any other major category of diagnoses (Table 1). Adjustment reactions (including posttraumatic stress disorder) and episodic mood disorders caused more hospitalizations among active component members than any other specific conditions (at the 3-digit level); together, these two conditions accounted for 15 percent and 17 percent of all hospitalizations of males and females (excluding pregnancy and childbirth-related), respectively (Tables 2,3).

Injuries and poisonings:

As in the past, in 2010, injuries and poisonings were a leading cause of hospitalizations of U.S. military members (Table 1). Of all injuries and poisonings that resulted in

Figure 1. Rate of hospitalization (all causes), by calendar year, active component, U.S. Armed Forces, 2001-2010

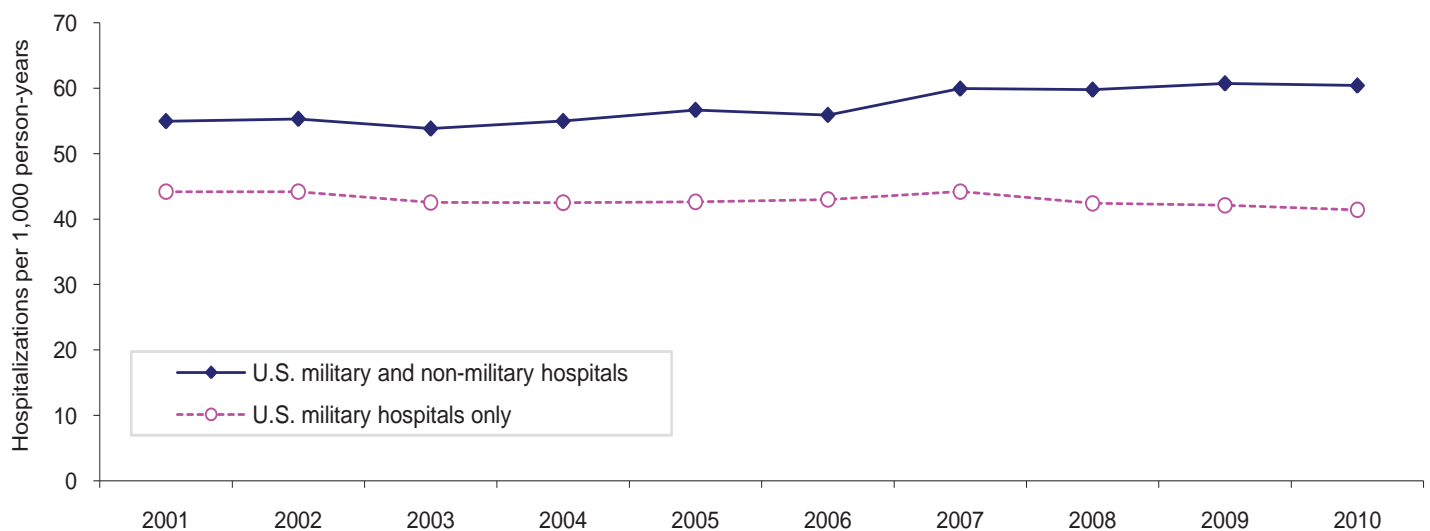
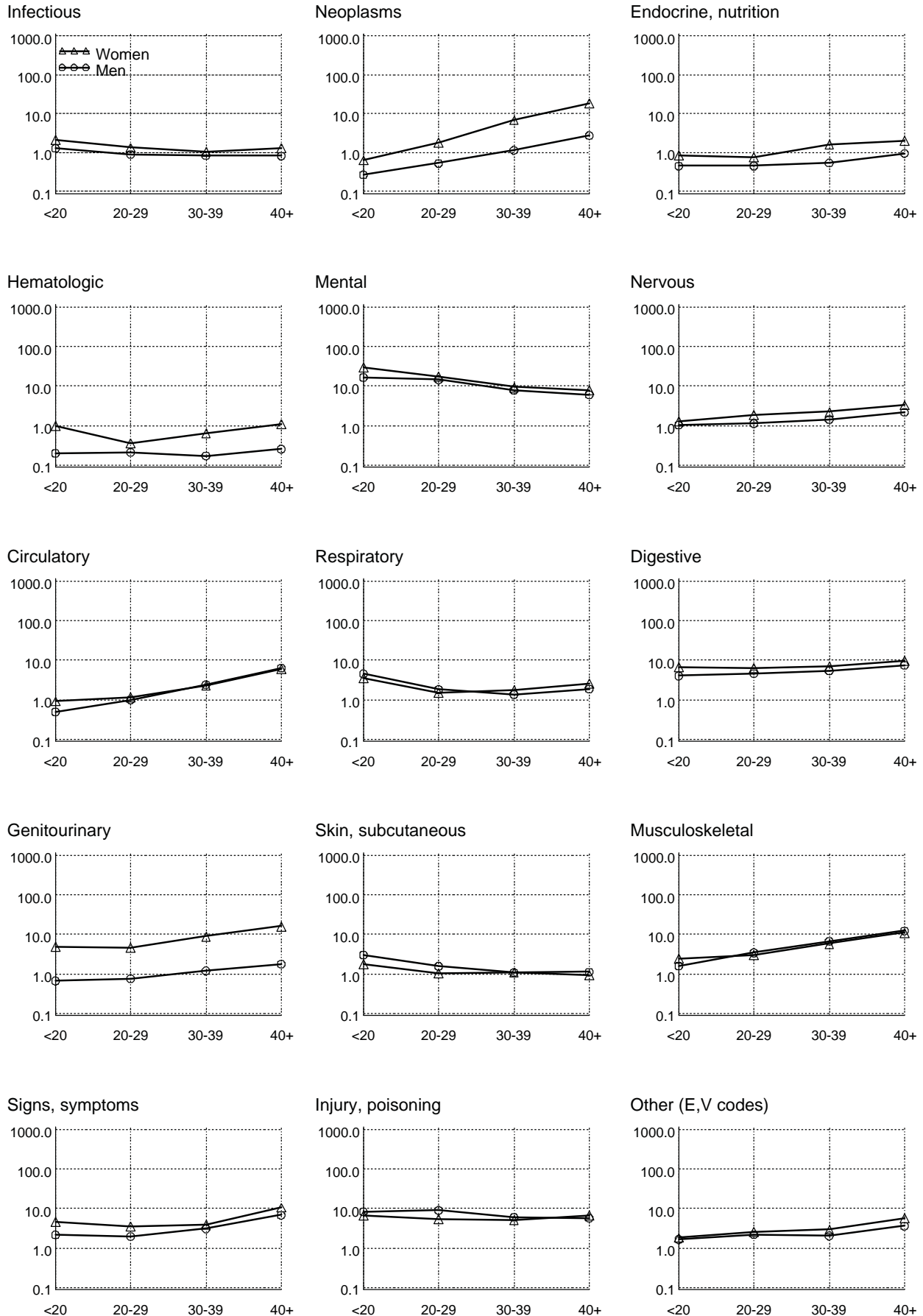


Figure 2. Rate^a of hospitalizations, by major diagnostic categories, by age and gender, active component, U.S. Armed Forces, 2010



^aRate expressed as hospitalizations per 1,000 person-years

Table 2. Most frequent diagnoses during hospitalization, by major diagnostic category, males, active component, U.S. Armed Forces, 2010

Diagnostic category (ICD-9-CM codes)	No.	%	Diagnostic category (ICD-9-CM codes)	No.	%
Infectious and parasitic diseases (001-139)	1,118		Digestive system (520-579)	6,417	
Meningitis due to enterovirus	196	17.5	Acute appendicitis	1,844	28.7
Septicemia	169	15.1	Dentofacial anomalies including malocclusion	444	6.9
Intestinal infections due to other organisms	163	14.6	Cholelithiasis	418	6.5
Ill-defined intestinal infections	99	8.9	Diseases of pancreas	377	5.9
Viral and chlamydial infection	68	6.1	Diseases of esophagus	366	5.7
Neoplasms (140-239)	1,154		Genitourinary system (580-629)	1,226	
Malignant neoplasm of prostate	89	7.7	Calculus of kidney and ureter	435	35.5
Malignant neoplasm of brain	72	6.2	Acute renal failure	215	17.5
Malignant neoplasm of thyroid gland	71	6.2	Other disorders of male genital organs	101	8.2
Malignant neoplasm of testis	64	5.5	Other disorders of kidney and ureter	81	6.6
Neoplasms of unspecified nature	46	4.0	Urethral stricture	70	5.7
Endocrine, nutrition, immunity (240-279)	666		Skin and subcutaneous tissue (680-709)	1,844	
Disorders of fluid electrolyte and acid-base balance	225	33.8	Other cellulitis and abscess	1,360	73.8
Diabetes mellitus	192	28.8	Pilonidal cyst	146	7.9
Nontoxic nodular goiter	38	5.7	Cellulitis and abscess of finger and toe	100	5.4
Thyrotoxicosis with or without goiter	37	5.6	Other disorders of skin and subcutaneous tissue	35	1.9
Overweight, obesity and other hyperalimentation	37	5.6	Other hypertrophic and atrophic conditions of skin	26	1.4
Hematologic disorders (280-289)	256		Musculoskeletal system (710-739)	6,516	
Diseases of white blood cells	69	27.0	Intervertebral disc disorders	2,269	34.8
Purpura and other hemorrhagic conditions	50	19.5	Spondylosis and allied disorders	505	7.8
Other diseases of blood and blood-forming organs	34	13.3	Internal derangement of knee	468	7.2
Aplastic anemia	29	11.3	Disorders of muscle ligament and fascia	436	6.7
Other and unspecified anemias	21	8.2	Osteoarthritis and allied disorders	392	6.0
Mental disorders (290-319)	15,012		Congenital anomalies (740-759)	391	
Adjustment reaction	4,524	30.1	Other congenital musculoskeletal anomalies	108	27.6
Episodic mood disorders	3,809	25.4	Bulbus cordis anomalies & anomalies of cardiac septal	41	10.5
Alcohol dependence syndrome	1,850	12.3	Congenital anomalies of urinary system	35	9.0
Depressive disorder not elsewhere classified	1,123	7.5	Certain congenital musculoskeletal deformities	33	8.4
Nondependent abuse of drugs	744	5.0	Other congenital anomalies of heart	30	7.7
Nervous system (320-389)	1,656		Signs, symptoms, and ill-defined conditions (780-799)	3,533	
Pain, not elsewhere classified	293	17.7	Symptoms involving respiratory system	1,458	41.3
Organic sleep disorders	259	15.6	General symptoms	1,061	30.0
Epilepsy	205	12.4	Other symptoms involving abdomen and pelvis	448	12.7
Migraine	133	8.0	Symptoms involving head and neck	132	3.7
Other conditions of brain	69	4.2	Symptoms involving digestive system	121	3.4
Circulatory system (390-459)	2,435		Injury and poisoning (800-999)	9,791	
Cardiac dysrhythmias	531	21.8	Other complications, procedures not elsewhere classified	845	8.6
Acute pulmonary heart disease	251	10.3	Fracture of ankle	514	5.2
Other forms of chronic ischemic heart disease	192	7.9	Fracture of face bones	471	4.8
Acute myocardial infarction	178	7.3	Complications peculiar to certain specified procedures	429	4.4
Other venous embolism and thrombosis	156	6.4	Fracture of tibia and fibula	424	4.3
Respiratory system (460-519)	2,324		Other (E81-E99 and V01-V82, except pregnancy-related)	2,854	
Pneumonia organism unspecified	705	30.3	Encounter for other and unspecified procedures	1,055	37.0
Pneumothorax	167	7.2	Care involving use of rehabilitation procedures	457	16.0
Deviated nasal septum	165	7.1	Other orthopedic aftercare	389	13.6
Other diseases of lung	150	6.5	Observation & evaluation, suspected conditions not found	332	11.6
Peritonsillar abscess	134	5.8	Other psychosocial circumstances	291	10.2

Table 3. Most frequent diagnoses during hospitalization, by major diagnostic category, females, active component, U.S. Armed Forces, 2010

Diagnostic category (ICD-9-CM codes)	♀	No.	%
Infectious and parasitic diseases (001-139)		278	
Meningitis due to enterovirus		52	18.7
Septicemia		44	15.8
Intestinal infections due to other organisms		43	15.5
Viral and chlamydial infection		21	7.6
Ill-defined intestinal infections		20	7.2
Neoplasms (140-239)		947	
Uterine leiomyoma		507	53.5
Benign neoplasm of ovary		62	6.5
Malignant neoplasm of thyroid gland		47	5.0
Malignant neoplasm of female breast		44	4.6
Benign neoplasm of other endocrine glands		19	2.0
Endocrine, nutrition, immunity (240-279)		229	
Disorders of fluid electrolyte and acid-base balance		56	24.5
Nontoxic nodular goiter		50	21.8
Overweight, obesity and other hyperalimentation		31	13.5
Thyrotoxicosis with or without goiter		27	11.8
Diabetes mellitus		16	7.0
Hematologic disorders (280-289)		112	
Iron deficiency anemias		38	33.9
Other and unspecified anemias		19	17.0
Purpura and other hemorrhagic conditions		14	12.5
Diseases of white blood cells		14	12.5
Other diseases of blood and blood-forming organs		13	11.6
Mental disorders (290-319)		3,238	
Episodic mood disorders		1,142	35.3
Adjustment reaction		965	29.8
Depressive disorder not elsewhere classified		285	8.8
Alcohol dependence syndrome		203	6.3
Anxiety, dissociative and somatoform disorders		188	5.8
Nervous system (320-389)		429	
Migraine		94	21.9
Pain, not elsewhere classified		84	19.6
Epilepsy		42	9.8
Other conditions of brain		29	6.8
Multiple sclerosis		17	4.0
Circulatory system (390-459)		396	
Cardiac dysrhythmias		84	21.2
Acute pulmonary heart disease		62	15.7
Other venous embolism and thrombosis		30	7.6
Essential hypertension		27	6.8
Hemorrhoids		19	4.8
Respiratory system (460-519)		377	
Pneumonia organism unspecified		81	21.5
Asthma		46	12.2
Chronic disease of tonsils and adenoids		36	9.5
Acute tonsillitis		29	7.7
Deviated nasal septum		19	5.0
Digestive system (520-579)		1,450	
Acute appendicitis		270	18.6
Cholelithiasis		223	15.4
Dentofacial anomalies including malocclusion		165	11.4
Diseases of pancreas		112	7.7
Intestinal obstruction without mention of hernia		71	4.9
Genitourinary system (580-629)		1,428	
Disorders of menstruation and other abnormal bleeding		241	16.9
Infections of kidney		176	12.3
Pain & other symptoms, female genital organs		171	12.0
Noninflammatory disorders of ovary fallopian tube		155	10.9
Inflammatory disease of ovary fallopian tube		119	8.3
Pregnancy and childbirth (630-679, relevant V codes)		18,125	
Trauma to perineum and vulva during delivery		4,640	25.6
Other indications for care, intervention related to labor		1,484	8.2
Other current conditions complicating pregnancy		1,398	7.7
Abnormality of organs and soft tissues of pelvis		1,219	6.7
Hypertension complicating pregnancy, childbirth		1,101	6.1
Skin and subcutaneous tissue (680-709)		229	
Other cellulitis and abscess		140	61.1
Cellulitis and abscess of finger and toe		15	6.6
Pilonidal cyst		14	6.1
Other hypertrophic and atrophic conditions of skin		12	5.2
Disorders of sweat glands		10	4.4
Musculoskeletal system (710-739)		933	
Intervertebral disc disorders		305	32.7
Other derangement of joint		75	8.0
Other disorders of bone and cartilage		74	7.9
Other and unspecified disorders of back		65	7.0
Internal derangement of knee		56	6.0
Signs, symptoms, and ill-defined conditions (780-799)		911	
Other symptoms involving abdomen and pelvis		244	26.8
General symptoms		237	26.0
Symptoms involving respiratory system		234	25.7
Symptoms involving head and neck		59	6.5
Symptoms involving digestive system		44	4.8
Injury and poisoning (800-999)		1,159	
Other complications of procedures not elsewhere classified		224	19.3
Poisoning by analgesics antipyretics & antirheumatics		86	7.4
Complications peculiar to certain specified procedures		68	5.9
Fracture of ankle		63	5.4
Poisoning by psychotropic agents		61	5.3
Other (E81-E99 and V01-V82, except pregnancy-related)		606	
Encounter for other and unspecified procedures		183	30.2
Observation & evaluation for suspected conditions		145	23.9
Other psychosocial circumstances		62	10.2
Other orthopedic aftercare		48	7.9
Care involving use of rehabilitation procedures		48	7.9

Figure 3. Length of hospital stay, by year, active component, U.S. Armed Forces, 2010

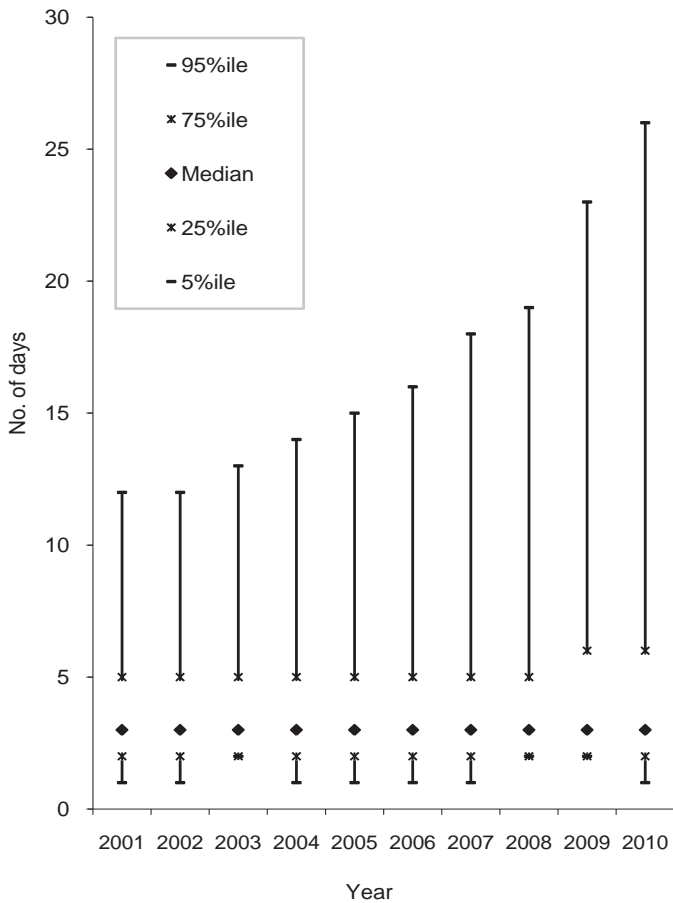
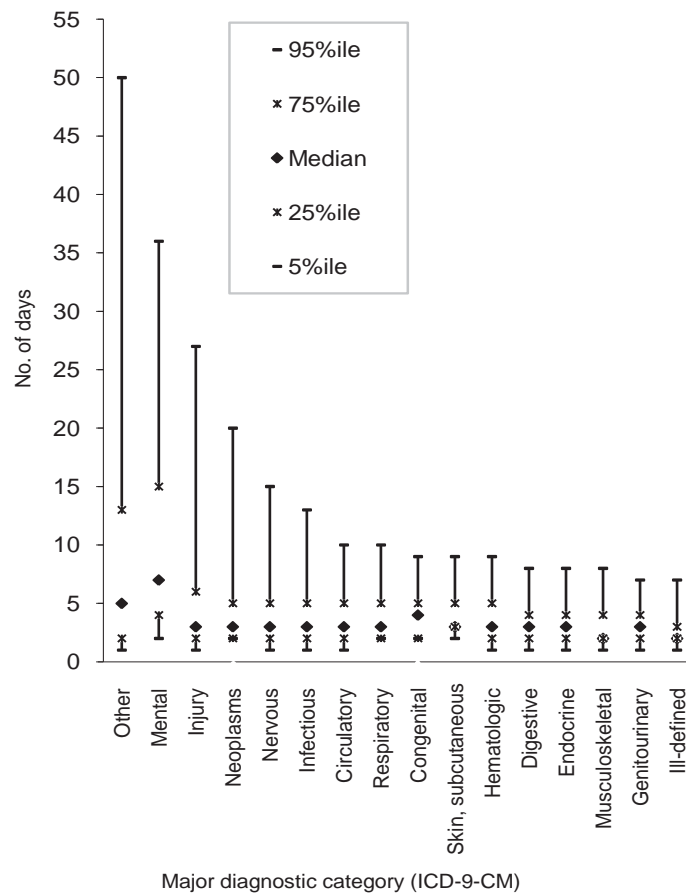


Figure 4. Length of hospital stay, by major diagnostic category, active component, U.S. Armed Forces, 2010



hospitalizations in U.S. military medical facilities (n=7,423), approximately one in six (n=1,212; 16.3%) were reported as “intentionally inflicted” (e.g., enemy weapons; suicide gestures/attempts; fights, assaults, legal interventions) of which nearly 70 percent (n=845; 69.7%) were reported as “battle casualties” (Table 4). Of all “unintentional” injuries and poisonings that resulted in hospitalizations in U.S. military facilities (n=6,185), approximately two-thirds (62.5%) were considered caused by “falls and miscellaneous” (n=1,764), complications of medical or surgical care (n=1,250), or “guns and explosives” (n=854) (Table 4).

Among males, injury and poisoning-related hospitalizations were most often related to complications of medical and surgical procedures and fractures of face, ankle, or leg bones (Table 2). Among females, injury and poisoning-related hospitalizations were most often related to complications of medical and surgical procedures, poisonings (analgesics, antipyretics, antirheumatics, psychotropic agents), and ankle fractures (Table 3).

Durations of hospitalizations:

Since 2001, the median durations of hospitalizations (all causes) have been stable (3 days), but the durations of the longest hospitalizations have sharply increased (Figure 3). In

2010 as in previous years, medians and ranges of durations of hospitalizations significantly varied across major diagnostic categories. For example, median lengths of hospitalizations varied from two days (musculoskeletal disorders; signs, symptoms, and ill-defined conditions) to seven days (mental disorders); and for most diagnostic categories, fewer than 5 percent of hospitalizations exceeded 15 days, but approximately 5 percent of mental disorder-related hospitalizations exceeded 36 days (Figure 4).

Hospitalizations by service:

Among members of the Navy, Air Force, and Coast Guard, pregnancy and childbirth-related conditions accounted for more hospitalizations than any other category of illnesses or injuries; however, among members of the Army and Marine Corps, mental disorders were the leading cause of hospitalizations. The crude hospitalization rate for mental disorders in the Army was approximately three-times higher than in the Coast Guard, twice as high as in the Navy and Air Force, and 67 percent higher than in the Marine Corps (Table 5).

Injuries and poisonings were the second leading cause of hospitalizations in the Marine Corps and the third leading cause in the Army, Navy and Coast Guard. The

Table 5. Hospitalizations, by service and ICD-9-CM diagnostic category, active component, U.S. Armed Forces, 2010

Major diagnostic category (ICD-9-CM)	Army		Navy		Air Force		Marine Corps		Coast Guard	
	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a	No.	Rate ^a
Mental disorders (290 - 319)	10,100	18.0	2,932	9.1	2,767	8.4	2,192	10.8	259	6.2
Pregnancy and childbirth (630 - 679, relevant V codes) ^b	6,472	11.6	4,652	14.4	5,129	15.5	1,481	7.3	391	9.3
Injury and poisoning (800 - 999)	5,746	10.3	1,647	5.1	1,388	4.2	2,001	9.9	168	4.0
Musculoskeletal system (710 - 739)	3,709	6.6	1,121	3.5	1,599	4.8	860	4.2	160	3.8
Digestive system (520 - 579)	3,398	6.1	1,587	4.9	1,757	5.3	935	4.6	190	4.5
Ill-defined conditions (780 - 799)	2,442	4.4	678	2.1	887	2.7	370	1.8	67	1.6
Other (E81-E99 and V01-V82, except pregnancy-related)	1,804	3.2	622	1.9	453	1.4	524	2.6	57	1.4
Respiratory system (460 - 519)	1,421	2.5	367	1.1	453	1.4	404	2.0	56	1.3
Circulatory system (390 - 459)	1,412	2.5	531	1.6	622	1.9	198	1.0	68	1.6
Genitourinary system (580 - 629)	1,204	2.2	485	1.5	694	2.1	216	1.1	55	1.3
Nervous system (320 - 389)	1,075	1.9	337	1.0	417	1.3	222	1.1	34	0.8
Skin and subcutaneous tissue (680 - 709)	956	1.7	383	1.2	315	1.0	381	1.9	38	0.9
Neoplasms (140 - 239)	914	1.6	464	1.4	518	1.6	168	0.8	37	0.9
Infectious and parasitic diseases (001 - 139)	600	1.1	286	0.9	273	0.8	200	1.0	37	0.9
Endocrine, nutrition, immunity (240 - 279)	438	0.8	164	0.5	179	0.5	105	0.5	9	0.2
Congenital anomalies (740 - 759)	212	0.4	72	0.2	101	0.3	76	0.4	9	0.2
Hematologic disorders (280 - 289)	166	0.3	84	0.3	68	0.2	38	0.2	12	0.3
Total	42,069	75.1	16,412	50.7	17,620	49.62	10,371	51.22	1,647	39.32

^aRate expressed as hospitalizations per 1,000 person-years of service

^bRates of pregnancy and childbirth-related hospitalizations among females in the Army, Navy, Air Force, Marine Corps and Coast Guard were 85.9, 91.2, 80.5, 111.6, and 70.0, respectively.

hospitalization rate for injuries/poisonings was slightly higher among soldiers (10.3 per 1,000 p-yrs) than Marines (9.9 per 1,000 p-yrs) and approximately two times higher among soldiers than members of the other Services (Table 5).

Editorial comment:

In 2010, on average, one of every 16 active component members was hospitalized for any cause; and one of every 20 members was hospitalized for a condition not related to pregnancy or childbirth. Hospitalization rates for all causes among active component members have not significantly changed in the past decade. As in the past, in 2010, mental disorders, pregnancy/childbirth-related conditions, and injuries/poisonings accounted for more than one-half of all hospitalizations of active component members. Since 2006, hospitalizations for mental disorders increased by more than 50 percent; during the same period, hospitalizations for injuries and poisonings slightly decreased.

The recent sharp increase in hospitalizations for mental disorders likely reflects the effects of many factors including repeated deployments and prolonged exposures to combat stresses; increased awareness and concern regarding threats to mental health among unit commanders and other front line supervisors, service members and their families, and medical care providers; increased screening for and detection of mental disorders after combat-related service and other traumatizing experiences; and decreasing stigmas and

removal of barriers to seeking and receiving mental disorder diagnoses and care.

There are limitations to this summary that should be considered when interpreting the results. For example, the scope of this report is limited to members of the active components of the Services. Many reserve component

Table 4. Injury hospitalizations^a by casual agent,^b active component, U.S. Armed Forces, 2010

Cause	No.	%
Unintentional	6,185	83.3
Falls and miscellaneous	1,764	23.8
Complications of medical/surgical procedures	1,250	16.8
Land transport	854	11.5
Guns, explosives (includes accidents during war)	798	10.8
Poisons and fire	522	7.0
Athletics	352	4.7
Environmental	231	3.1
Machinery, tools	200	2.7
Air transport	183	2.5
Water transport	31	0.4
Intentional	1,212	16.3
Battle casualty	845	11.4
Self-inflicted	304	4.1
Non-battle, inflicted by other (e.g., assault)	63	0.8
Missing/invalid code	26	0.4

^aHospitalizations in U.S. military medical facilities only

^bCauses determined by codes specified in NATO Standardization Agreement (STANAG) No.2050

members were hospitalized for illnesses and injuries while serving on active duty in 2010; these hospitalizations are not accounted for in this report. Also, many injury and poisoning-related hospitalizations occur in non-military hospitals; in most cases, the “external causes” of such injuries and poisonings are not reported on standardized records. If there are significant differences in the causes of injuries and poisonings that resulted in hospitalizations in U.S. military and non-military hospitals, the summary of external causes of injuries requiring hospital treatment reported here (**Table 4**) could be misleading. Also, this summary is based on primary (first-listed) discharge diagnoses only; in many hospitalized cases, there are multiple underlying conditions. For example, military members who are wounded in combat or injured in motor vehicle accidents may have multiple injuries and complex medical and psychological complications. In such cases, only the first-listed discharge diagnosis would be

accounted for in this report. Even with these and other limitations, this report provides useful and informative insights regarding the natures, rates, and distributions of the most serious illnesses and injuries that affect active component military members.

In 2010, adjustment reactions (including posttraumatic stress disorder), mood disorders, and intervertebral disc disorders were among the leading causes of hospitalizations of both male and female service members. In recent years, attention at the highest levels of the U.S. military and significant resources have been focused on detecting, diagnosing, and treating mental disorders — especially those related to long and repeated deployments and combat stresses. In addition, the findings of this and other surveillance reports suggest that military medical research, force health protection, and clinical practice efforts should focus on improving the prevention, treatment, and rehabilitation of back disorders among U.S. military members.

Reportable medical events, active and reserve components, U.S. Armed Forces, 2010

Annual summaries of reportable medical events in CY 2010 will be published in a future *MSMR* issue.