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13. ABSTRACT *(Maximum 200 words)*

This paper reports on disability rates, case distributions, and costs of disabilities for the Army, Navy/Marines, and Air Force. Between 1983 and 1994, Army disability cases increased 88%, to 15/1,000 personnel/year. Between 1985 and 1994, Navy disability cases increased 113% to 32/1,000 personnel/year. Between 1990 and 1994, Air Force disability cases increased 80% to 9/1,000 personnel/year. Musculoskeletal conditions were the leading cause of disability for all 3 services (Army FY94, 53.1%; Navy/Marines FY95, 63%; Air Force FY94, 22%). Mental disorders were the second leading cause of disability (Army FY94, 14.2%; Navy/Marines FY95, 10%; Air Force FY94, 21%). Most cases received separation with severance pay, a onetime cost to the services. The costliest disabilities were permanent disabilities, which in the Army account for only 15% of the disability cases in 1993, but have a projected lifetime cost of $407.4 million. These payments represent only 10% of the funds paid to disabled service members annually, as most are compensated through the VA system. VA disability costs are approximately $1 billion per month. Leading causes of disability in the VA system are musculoskeletal conditions (45%) and mental disorders (14%).

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CHAPTER 4

Disabilities Related to the Musculoskeletal System: Physical Evaluation Board Data

Paul J. Amoroso, MD, MPH, and Michelle L. Canham, MPH

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Section I. Description of Service Disability Agency Databases

4-1. Introduction

- The Army disability data are maintained on the Physical Disability Case Processing System (PDCAPS) at Walter Reed Army Medical Center, Forest Glenn Annex, Washington, D.C.
- The Navy and Marine Corps disability data are maintained on the Physical Evaluation Tracking System (PETS) at the Naval Council of Personnel Boards, Washington Navy Yard, Washington, D.C. In addition, Navy MEB data are maintained at the Navy Medical Information Management Center, Bethesda, Maryland.
- The Air Force disability tracking file is a subsystem maintained on the Headquarters Air Force Personnel Data System (PDS) at the Air Force Military Personnel Center, Randolph Air Force Base, Texas.

4-2. Mission

The mission of each service's disability agency is to:

- Maintain a fit and vital fighting force by discharging from active duty those personnel who can no longer perform their duties due to physical disability.
- Fairly compensate members whose military service produced or aggravated disability.

Data collection, case tracking, analysis, and archiving in the service databases support that mission.

4-3. Purpose of Disability Databases

- Army.
  - Document and track the progress of disability evaluations, cases, and disposition.
  - Retain summary statistics.

- Navy and Marine Corps.
  - Analyze PEB processing times, functionality, and process and outcome costs.
  - Track the status of individual cases.
  - Provide statistics—such as demographics, ICD-9 codes, VASRD codes, percentage ratings, and dispositions—in response to internal and external inquiries.
- Air Force.
  - Track case files through the disability evaluation process.
  - Record recommended final disposition of various disability evaluation boards.
  - Track personnel, schedule evaluations, and monitor personnel on Temporary Disability Retired Lists (TDRLs).*
  - Provide status and recommendations of other boards to officials involved with disability processing.

4-4. Authority

The authority for generating databases to support the disability agencies is derived from:

- Title 10, U.S. Code, Section 1201-1206.
- Title 38, CFR, Part 4, Schedule for Rating Disabilities.
- DoD Directive 1332.18—Separation or Retirement for Physical Disability.

Each service may have additional requirements as outlined in their own governing documents:

- Army—AR 635-40, Physical Evaluation for Retention Retirement or Separation.
- Navy and Marine Corps—SECNAVINST 1850.4c and 1770-3a, and NAVMED P-117.
- Air Force—AF Form 348, Line of Duty and Misconduct Status.

*The TDRL is used in the nature of a "pending list." It provides a safeguard for the government against permanently retiring a soldier who can later fully recover, or nearly recover, from the disability causing him/her to be unfit. Conversely, the TDRL safeguards the soldier from being permanently retired with a condition that may reasonably be expected to develop into a more serious permanent disability.

4-5. Comparison of Minimum Basic Data Set Variables and U.S. Military Disability Databases

Each service identified their database's disability variables for *unintentional injuries* using the questionnaire discussed in Chapter 1 (see pages 1-23 through 1-27). These variables were compared to the MBDS for unintentional injury surveillance recommended by Lund, Holder, and Smith.* A comparison is presented in Table 4-1.

The services were not asked to identify their database's injury variables for *intentional injuries*.† Additional data required to satisfy the MBDS for intentional injuries include circumstances or motive surrounding injury event, drugs or alcohol involved, weapon(s) involved, relationship and demographics of victim and perpetrator, and source of data.

* Lund J., Y. Holder, and R.J. Smith. Minimum Basic Data Set, Unintentional Injuries. *Proceedings of the International Collaborative Effort on Injury Statistics*, 1:34-1 to 34-4, 1994.

† Powell, K. and J. Kraus. Minimum Basic Data Set, Intentional Injuries. *Proceedings of the International Collaborative Effort on Injury Statistics*, 1:35-1 to 35-2, 1994.

Table 4-1. Comparison of the Recommended Elements for the Minimum Basic Data Set for Unintentional Injury Surveillance to the U.S. Military Disability Databases

Variables	Army Physical Disability Agency	Navy and Marine Corps Physical Evaluation Board	Air Force Physical Disability Division
Intent*	Y	Y	Y
Age of Injured*	Y	Y	N
Gender*	Y	Y	N
Race*	Y	Y	N
Place of Residence*	U	U	U
Date of Injury Event*	N	N	N
Place of Occurrence (e.g., home, work, etc.)*	N	N	N
Address of Place of Occurrence*	NS	NS	NS
Activity When Injury Occurred*	N	Y	N
Mechanism of Accident/ Event*	N	Y	N
Type of Injury/Body Location*	Y	Y	Y
Outcome of Injury			
Type of Treatment†	N	N	N
Dates of Treatment†	N	N	N
Date Admitted to Hospital†	N	N	N

Table 4-1.—*Continued*

Variables	Army Physical Disability Agency	Navy and Marine Corps Physical Evaluation Board	Air Force Physical Disability Division
Date Discharged from Hospital†	N	N	N
Nature of Disability†	N	Y	N
Degree of Disability (fit for duty, TDRL, etc.) †	Y	Y	Y
Severity of Injury†	N	Y	N
Days of Limited Duty†	N	N	N
Days in Hospital†	N	N	N
Costs of Treatment†	N	N	N

Y = available in database.
N = not in database.
U = unknown; response not provided on questionnaire.
NS = not solicited on questionnaire.
* Recommended variables for databases designed for unintentional injury surveillance (Lund J., Y. Holder, and R.J. Smith. Minimum Basic Data Set, Unintentional Injuries. *Proceedings of the International Collaborative Effort on Injury Statistics*, 1:34-1 to 34-4, 1994).
† Example of an outcome variable deemed appropriate for databases with potential for surveillance of unintentional injuries to U.S. active duty military and civilian personnel.

Section II. Disability Data

4-6. Army

The Army disability data are presented in five parts:

- The Army Summary. The Army disability data presented in this section are summarized in three tables.
  - The overall summary is presented in Table 4-2.
  - The data in figures 4-1 and 4-2 are summarized in Table 4-3.
  - The data in figures 4-7 and 4-8 are summarized in Table 4-4.
- Magnitude of the Injury Problem Relative to Other Causes of Disability.
  - The distribution of disabilities by groups of VASRD codes and individual VASRD codes for FY 1994 is displayed in figures 4-1 and 4-2.
  - The distribution of MEB findings for one infantry division for CY 1994 is displayed in figures 4-3 and 4-4.
- Trends of Army Injury-Related Disabilities Relative to Other Causes Over Time. The rates of physical disability evaluations for FY 1983-July 1994 are displayed in Figure 4-5.
- Case Distributions. The distribution of all disability dispositions for FY 1994 is displayed in Figure 4-6. The distribution of all disability dispositions for FY 1993 is displayed in Figure 4-7.
- Costs of Disabilities. The projected lifetime costs of disabilities by disability dispositions for FY 1993 are displayed in Figure 4-8.

The Army Summary.

Table 4-2. Overall Summary of Army Disability Data for Active Duty Personnel

Year	Total Army Population	Disability Cases		Rates and Trends of Disabilities			Conclusion
		Total	n/1,000 Personnel/Year	n/1,000 Personnel/Year		Trend, % Change (FY 1983-1994)	
FY83-FY94	—	—	—	8/FY83	15/FY94	Up 88%	Disability cases nearly doubled from FY 1983 to 1994.
FY93	572,423	9,903	17	—	—	—	
FY94	541,343	6,382	12	—	—	—	

Table 4-3. Summary of Army Disability Data by VASRD Codes,* FY 1994

Disabilities	Distribution (%) of Disabilities		Conclusions
	Groups of Two-Digit Codes	Individual Two-Digit Codes	
50-53: Musculoskeletal (Orthopedic)	53.1%	—	**Musculoskeletal (Orthopedic)** • As the leading cause of disabilities, musculoskeletal (orthopedic) conditions occur more than three times as often as mental disorders, the second leading cause. • In CY 1994, a study of one infantry division showed that 40% of the MEB findings were musculoskeletal (orthopedic)-related injuries (see Figure 4-3). **Other Impairment to Bones & Bone and Joint Diseases** • As contributors to the musculoskeletal (orthopedic) codes, codes 50 and 52 account for over half of all disabilities. **Mental Disorders & Neurological /Convulsive** • Mental disorders and neurological conditions/convulsive disorders are the second and third leading causes of disabilities, respectively.
52: Other Impairment to Bones	—	35.0%	
50: Bone and Joint Diseases	—	16.8%	
90-95: Mental Disorders	14.2%	—	
92: Psychotic Disorders	—	8.3%	
94: Psychoneurotic Disorders	—	4.3%	
93: Organic Brain Disorders	—	1.5%	
80-89: Neurological/Convulsive	12.1%	—	
80: Organic Disease of the Central Nervous System	—	5.3%	
85: Peripheral Nerves: Paralysis	—	2.4%	
89: Epilepsies	—	1.8%	
81: Neurological Conditions	—	1.8%	
63-68: Systemic/Respiratory	7.4%	—	
63: Systemic Diseases	—	4.1%	
66: Trachea and Bronchi	—	1.9%	
70-71: Cardiovascular	3.4%	—	
70: Heart	—	2.2%	
71: Arteries and Veins	—	1.2%	
77-79: Blood/Skin/Endocrine	3.3%	—	
77: Hemic and Lymphatic Systems	—	1.4%	
72-73: Digestive	2.9%	—	
73: Digestive System	—	2.9%	
60-62: Visual/Auditory	1.6%	—	
75-76: Genitourinary/Gynecological	1.4%	—	

* Codes as defined in 38 CFR 4.

Table 4- 4. Summary of Army Disability Dispositions and Costs, FY 1993

Disability Dispositions	Projected Lifetime Costs*			Conclusions
	Distribution (%) of Dispositions (n = 9903)	Total Disability Compensation		
		Distribution of Costs (%)	Estimated Costs (million)	
Permanent Disability • Unfit by virtue of a permanent and stable compensable physical disability, with at least 20 years service *or* minimum disability rating of 30% under the VASRD. • Individual receives payments for the rest of his/her life.	15%	84%	$407.4	**Permanent Disability** • Only 15% of the cases accounted for 84% ($407.4 million) of the total disability lifetime compensation costs for FY 1993. **Temporary Disability** • Only makes up a small portion of total costs because these cases do not accumulate over time as they do in categories such as permanent disability. **Separation with Severance Pay** • Accounts for 43% of all the disability dispositions in FY 1993, but only 12% ($58.2 million) of the total lifetime disability compensation costs because it's a one-time cost to the Army.
Temporary Disability • Condition not stable (VASRD rating could change over time). • 0-100% disability under the VASRD with over 20 years' service. • 30-100% disability under the VASRD with less than 20 years' service. • Reevaluate VASRD every 18 months, at a minimum. • Individual can be on temporary disability retirement no more than 5 years.	17%	4%	$19.4	
Separation with Severance Pay • Unfit by virtue of physical disability. • Less than 20 years' service and disability is rated at 0-30% under the VASRD. • Stability of medical condition is not a factor for this disposition. • Total lifetime disability compensation cost is represented by a one-time separation payment.	43%	12%	$58.2	
Separation with No Benefits • Unfit by virtue of a disability incurred as a result of intentional misconduct, willful neglect, or during unauthorized absence; *or* • Disability existed prior to service and not permanently aggravated by service.	4%	—	—	
Fit for Duty • Medical condition does not interfere with reasonable performance of duties of office, grade, rank, or rating.	21%	—	—	

*The Army estimates the lifetime cost of its FY 1993 disability cases to total $485 million.

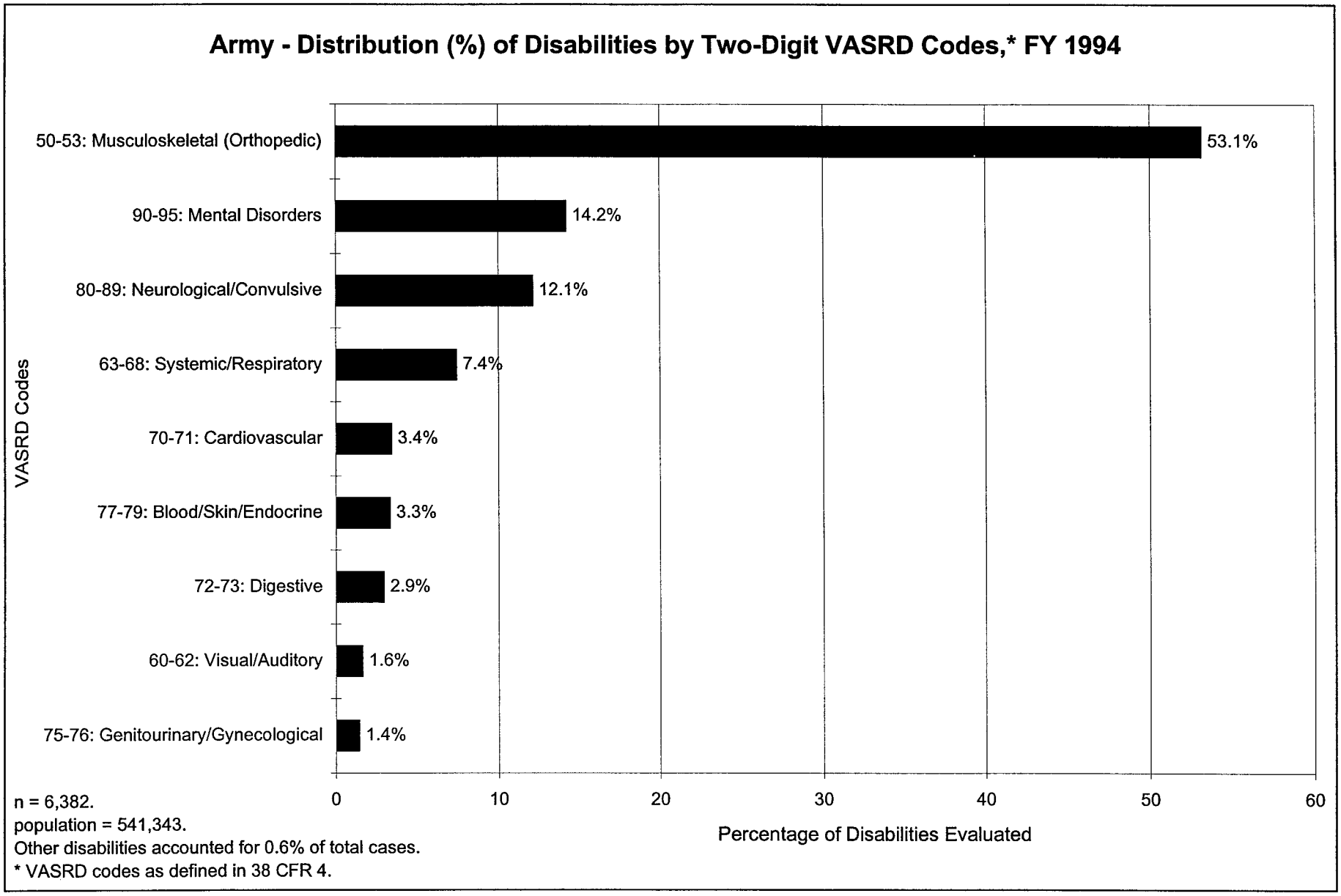
Magnitude of the Injury Problem Relative to the Other Causes of Disabilities.

Figure 4-1 illustrates the distribution of disabilities by two-digit VASRD codes for Army personnel for FY 1994. Cases represented here are only those that received a disability disposition. The top five codes were:

- Musculoskeletal (orthopedic)—53.1%.
- Mental disorders—14.2%.
- Neurological/convulsive—12.1%.
- Systemic/respiratory—7.4%.
- Cardiovascular—3.4%.

Disabilities due to musculoskeletal conditions are largely related to injuries and their sequelae. Musculoskeletal (orthopedic) conditions are the leading cause of disabilities and occur more than three times as often as mental disorders, the second leading cause of disabilities. The total number of disabilities for FY 1994 was 6,382, out of a population of 541,343, or about 12 disabilities per 1,000 personnel.

Some of the neurological conditions and mental disorders such as brain disease due to trauma (VASRD code 8045), paralysis (VASRD codes 8510-8530), and some brain disorders (VASRD code 9304) may be associated with brain trauma.



Source: U.S. Army Physical Disability Agency, Walter Reed Army Medical Center, Forest Glen Annex, Washington, DC, February 1996.

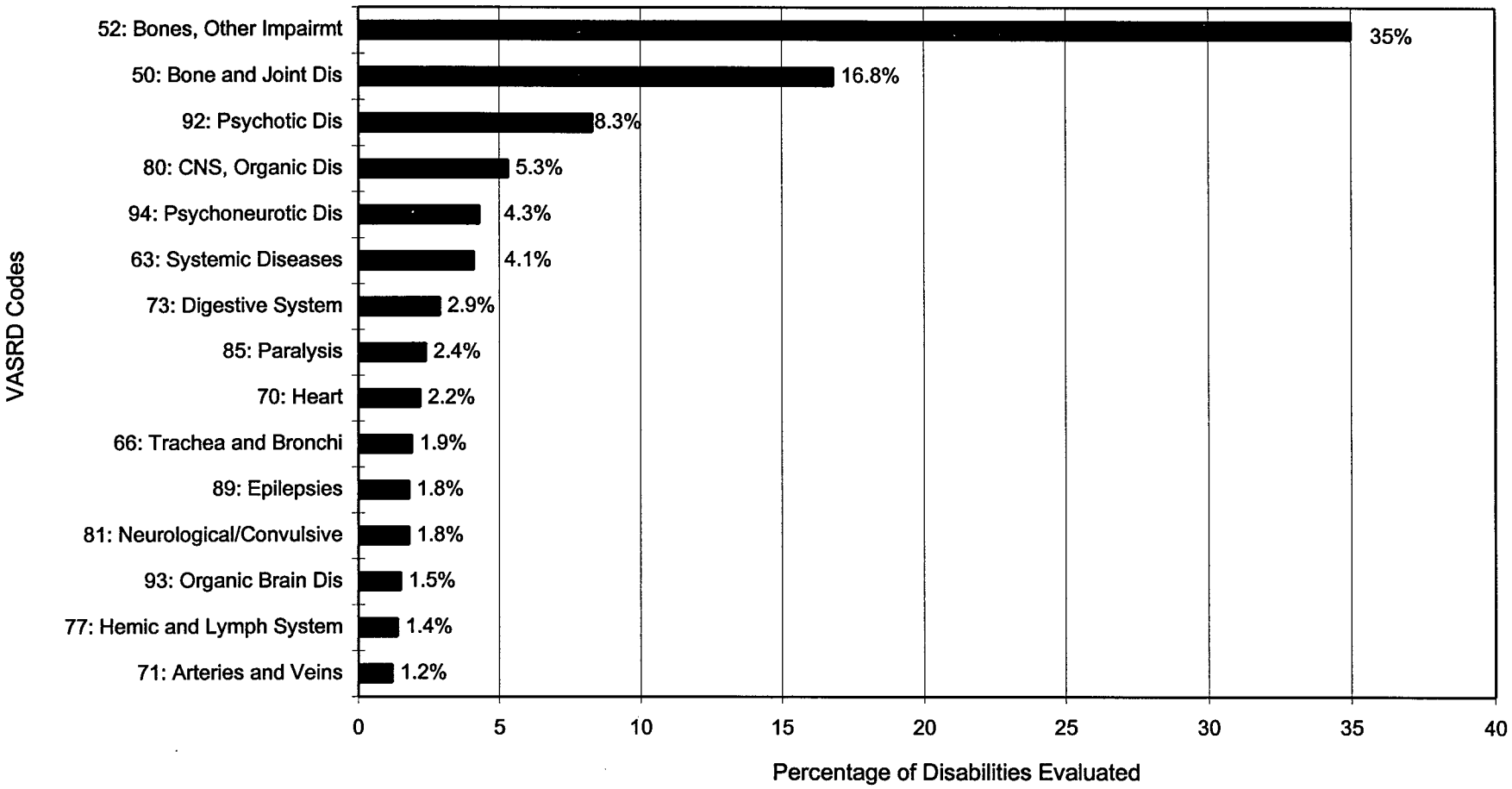
Figure 4-1

Figure 4-2 illustrates the distribution of the top 15 disabilities by two-digit VASRD codes for Army personnel for FY 1994. Cases represented here are only those that received a disability disposition. The top five codes were:

- Other impairment to bones—35%.
- Bone and joint diseases—16.8%.
- Psychotic disorders—8.3%.
- Organic disease of the central nervous system—5.3%.
- Psychoneurotic disorders—4.3%

Other impairment to the bones and bone and joint disease, which contribute to the musculoskeletal (orthopedic) code noted in Figure 4-1, account for over half of all disabilities.

Army - Distribution (%) of Top 15 Disabilities by Two-Digit VASRD Codes,* FY 1994



n = 6,382.

* VASRD codes as defined in 38 CFR 4.

Source: U.S. Army Physical Disability Agency, Walter Reed Army Medical Center, Forest Glen Annex, Washington, DC, February 1996.

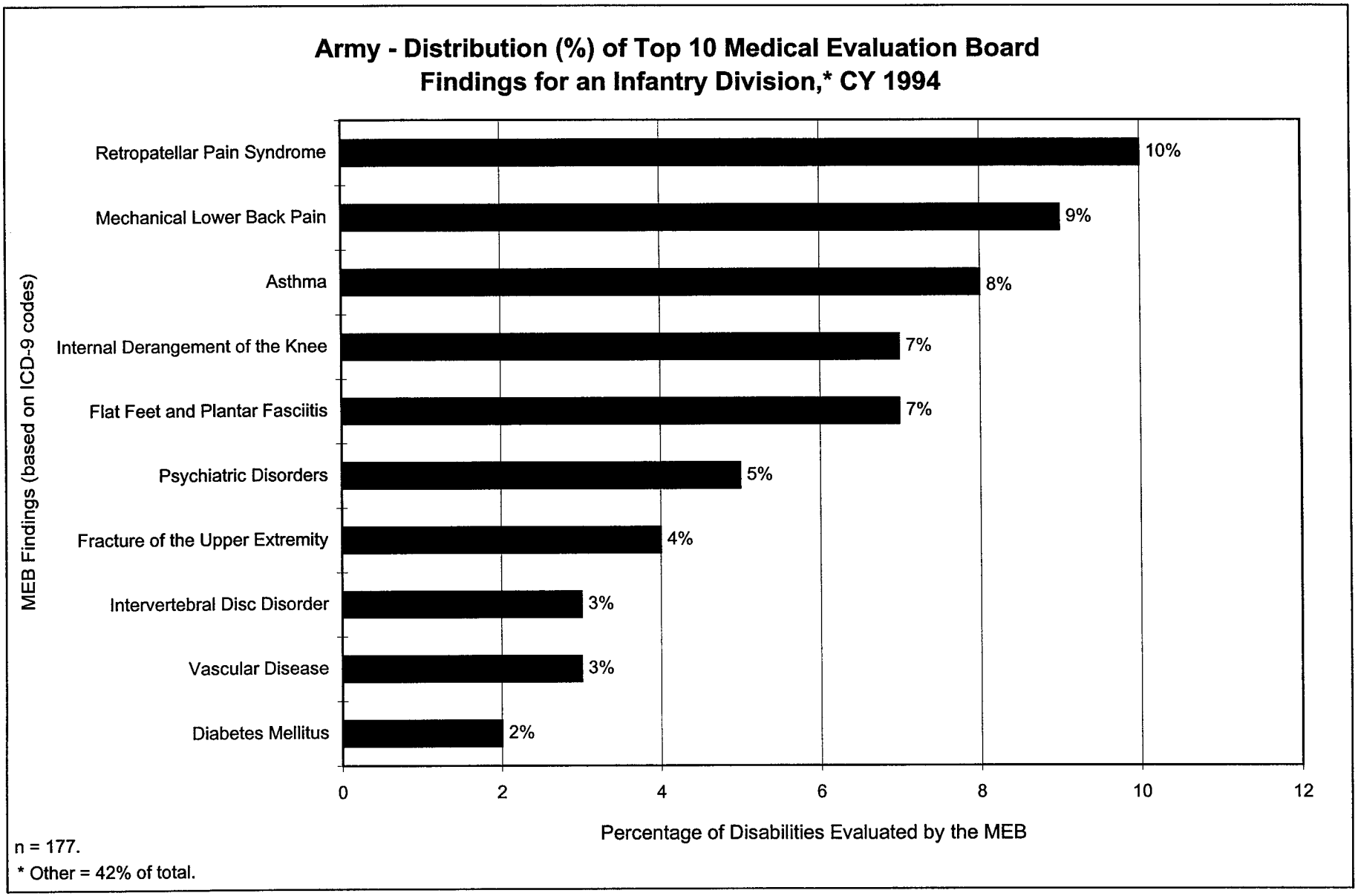
Figure 4-2

Medical Evaluation Board Data for an Army Infantry Division

Figure 4-3, a study of the distribution of the top 10 MEB findings for an infantry division in CY 1994, illustrates that 40% of the cases appear to be musculoskeletal (orthopedic)-related injuries:

- Retropatellar pain syndrome—10%.
- Mechanical lower back pain—9%.
- Internal derangement of the knee—7%.
- Flat feet and plantar fasciitis—7%.
- Fracture of the upper extremity—4%.
- Intervertebral disc disorder—3%.

These MEB findings for a single infantry division are consistent with the PEB findings in Figure 4-1 for the total Army. In both instances, musculoskeletal (orthopedic) conditions are the leading cause of disabilities.



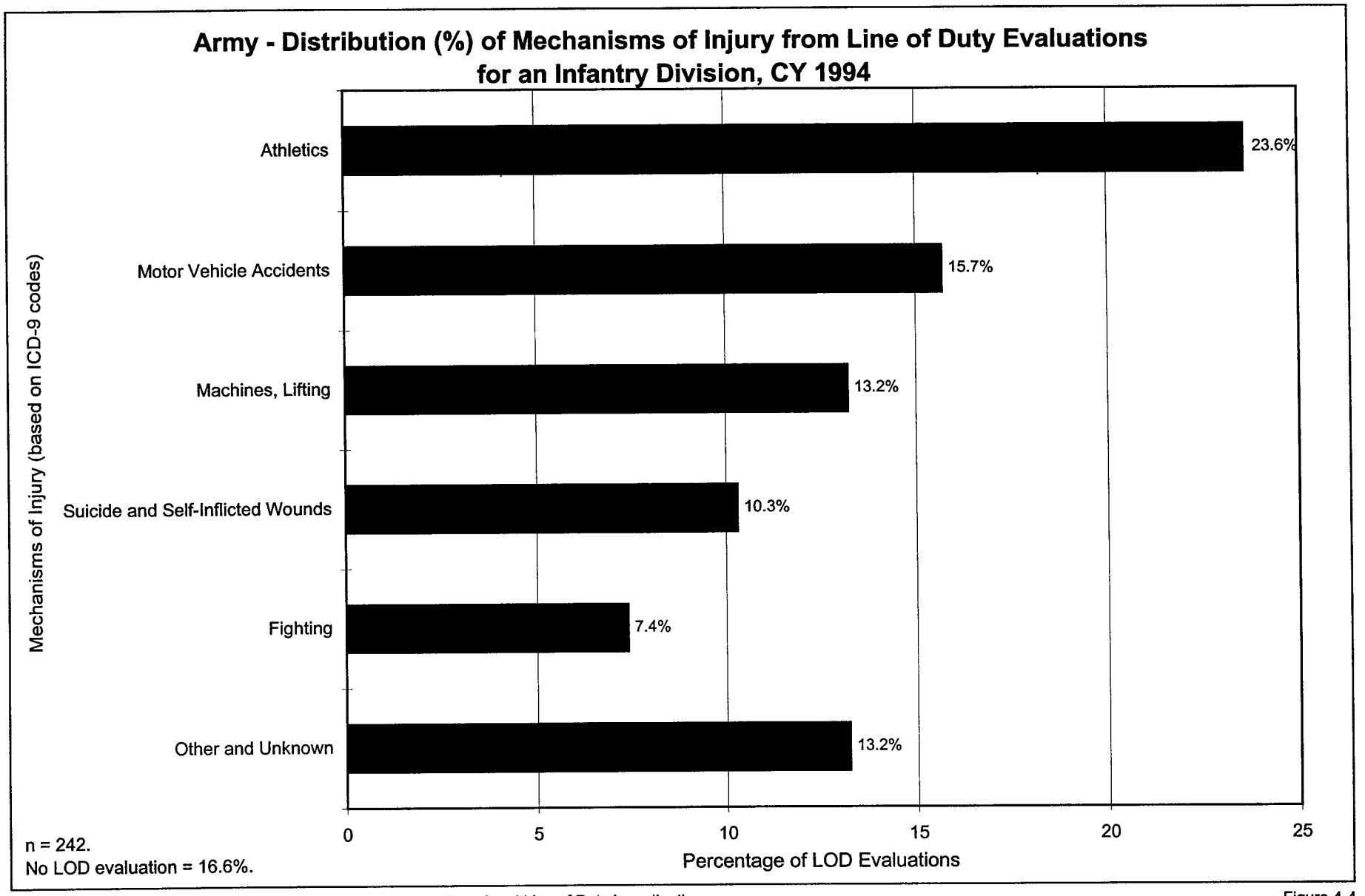
Source: "Army Injury Surveillance: The Medical Evaluation Board and Line of Duty Investigation as Potential Data Sources," briefing by Gregory L. Page, DO, MPH, 8 August 1995.

Figure 4-3

Line of Duty Evaluations for an Army Infantry Division

Figure 4-4 illustrates the distribution of mechanisms of injury from line of duty (LOD) evaluations for the same infantry division cited in Figure 4-3, also for CY 1994. The data show the following distribution of injuries:

- Athletics—23.6%
- Motor vehicle accidents—15.7%.
- Machines, lifting—13.2%.
- Suicide and self-inflicted wounds—10.3%.
- Fighting—7.4%.
- Other and unknown—13.2%.



Source: "Army Injury Surveillance: The Medical Evaluation Board and Line of Duty Investigation as Potential Data Sources," briefing by Gregory L. Page, DO, MPH, 8 August 1995.

Figure 4-4

Trends of Army Injury-Related Disabilities Relative to Other Causes Over Time.

Figure 4-5 illustrates the rates of physical disability cases in the Army Physical Disability Evaluation System during FY 1983-1994. These rates are typically used to measure the incoming workload. For various reasons, not all cases are evaluated and given a final disposition.

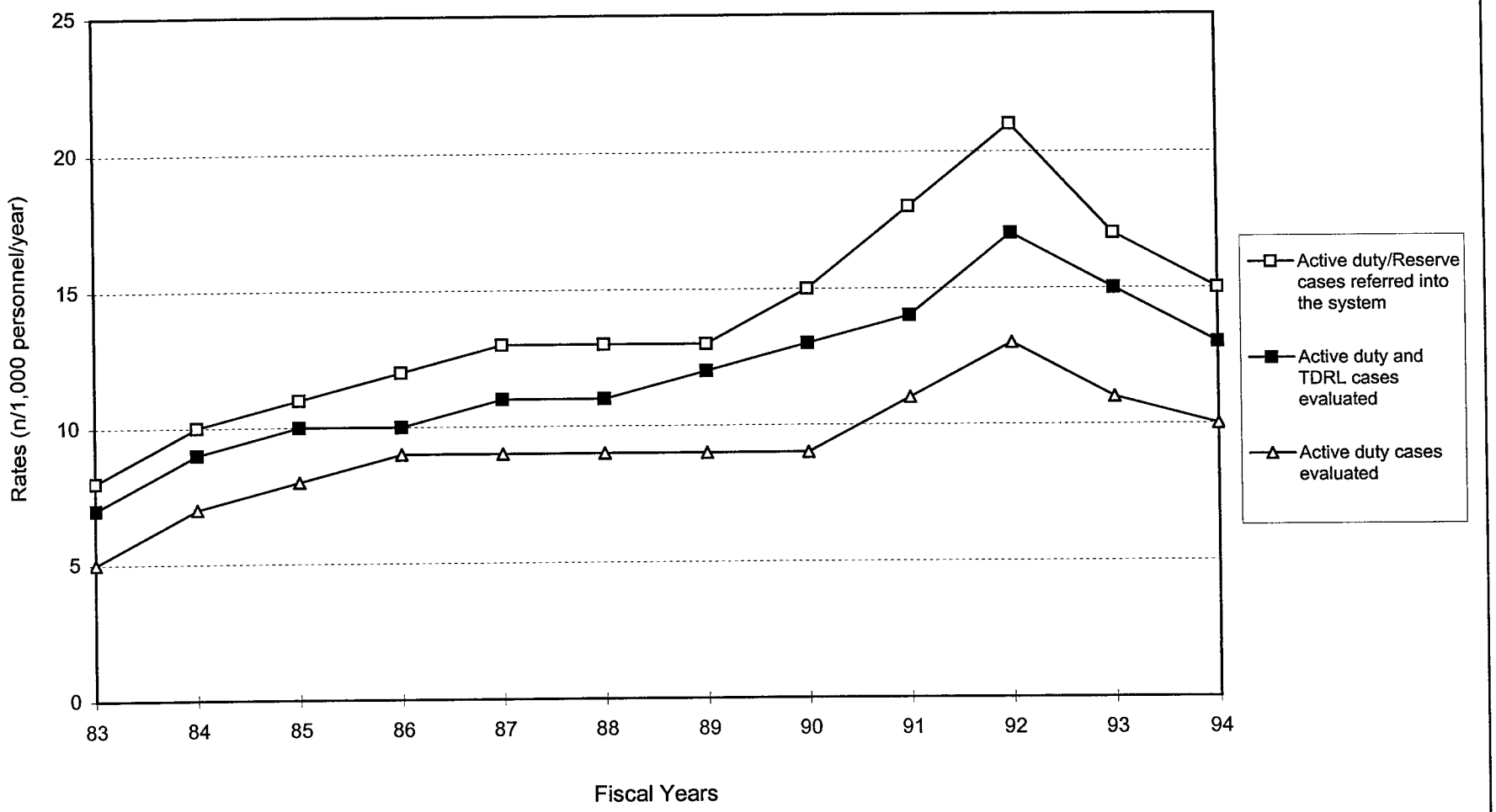
- Active duty/Reserve cases referred into the system:
  - Increased 163% from 8 cases per 1,000 active duty personnel in FY 1983 to a high of 21 cases per 1,000 active duty personnel in FY 1992.
  - Decreased 40% from 21 cases per 1,000 active duty personnel in FY 1992 to 15 cases per 1,000 active duty personnel in FY 1994.
- Active duty/TDRL cases evaluated:
  - Increased 143% from 7 cases per 1,000 active duty personnel in FY 1983 to a high of 17 cases per 1,000 active duty personnel in FY 1992.
  - Decreased 24% from 17 cases per 1,000 active duty personnel in FY 1992 to 13 cases per 1,000 active duty personnel in FY 1994.
- Active duty cases evaluated:
  - Increased 160% from 5 cases per 1,000 active duty personnel in FY 1983 to a high of 13 cases per 1,000 active duty personnel in FY 1992.
  - Decreased 23% from 13 cases per 1,000 active duty personnel in FY 1992 to 10 cases per 1,000 active duty personnel in FY 1994.

Worksheet Data for Figure 4-5

Physical Disability Cases	Army - Rates of Physical Disability Evaluations by Fiscal Year*											
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Active Duty/Reserve—Referred	8	10	11	12	13	13	13	15	18	21	17	15
Active Duty/TDRL—Evaluated	7	9	10	10	11	11	12	13	14	17	15	13
Active Duty—Evaluated	5	7	8	9	9	9	9	9	11	13	11	10

* Rates per 1,000 personnel calculated using denominator data in Table 1-7.

Army - Rates of Physical Disability Cases in the Army Physical Disability Evaluation System,* FY 1983-1994



* Reserve and National Guard cases may be included in the numerator while not adequately reflected in the denominator (rates could be overestimated).

Numerator Source: U.S. Army Physical Disability Agency, Walter Reed Army Medical Center, Forest Glen Annex, Washington, DC, February 1996.
Denominator Source: *DoD Worldwide U.S. Active Duty Military Personnel Casualties, Oct 79-Dec 95.* Prepared by DoD, Washington Headquarters Services, Directorate for Information Operations and Reports (DTIC# DIOR/M07-96/01).

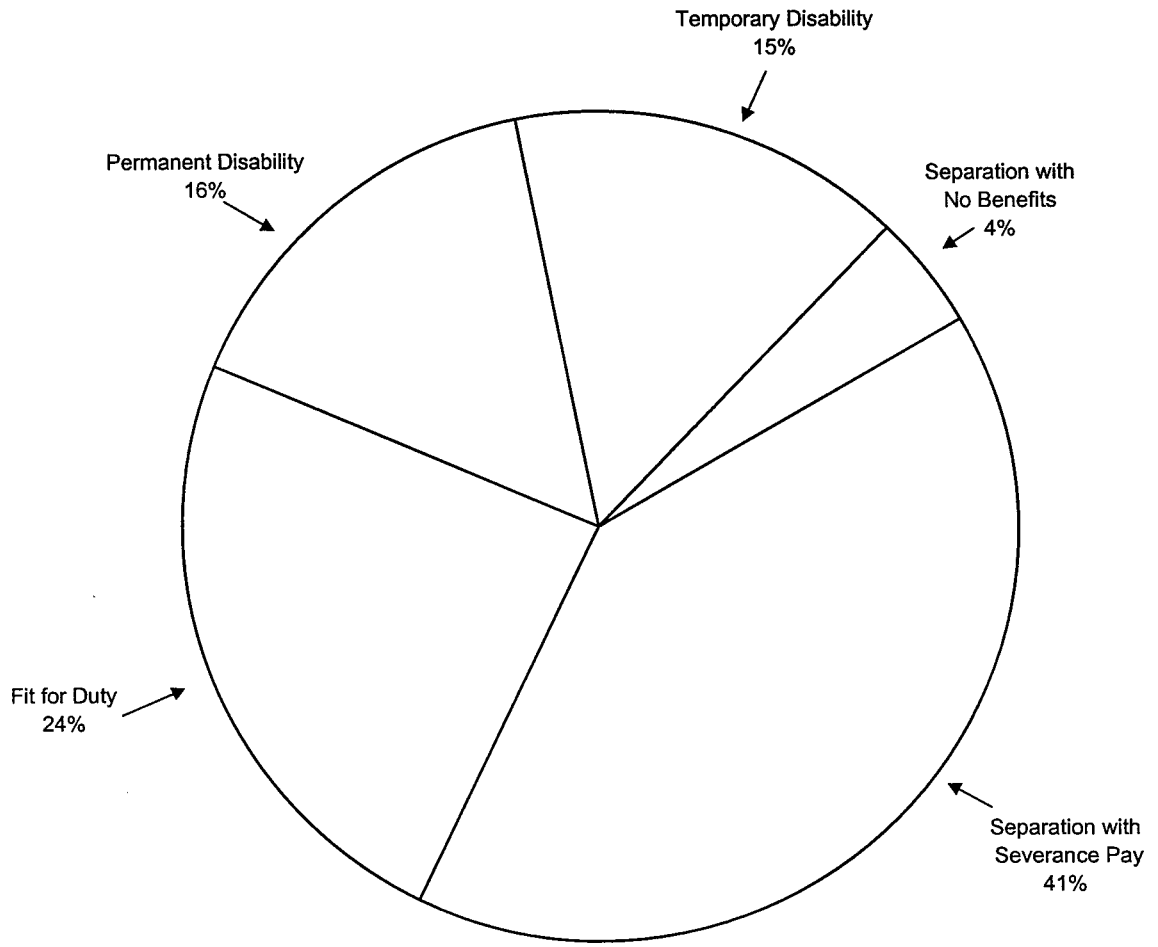
Figure 4-5

Case Distributions.

Figure 4-6 illustrates the distribution of 8,413 Army disability dispositions (cases reviewed) for FY 1994:

- Separation with severance pay—41%.
- Fit for duty—24%.
- Permanent disability—16%.
- Temporary disability—15%.
- Separation with no benefits—4%.

Army - Distribution (%) of Disability Dispositions (Cases Reviewed), FY 1994



n = 8,413.

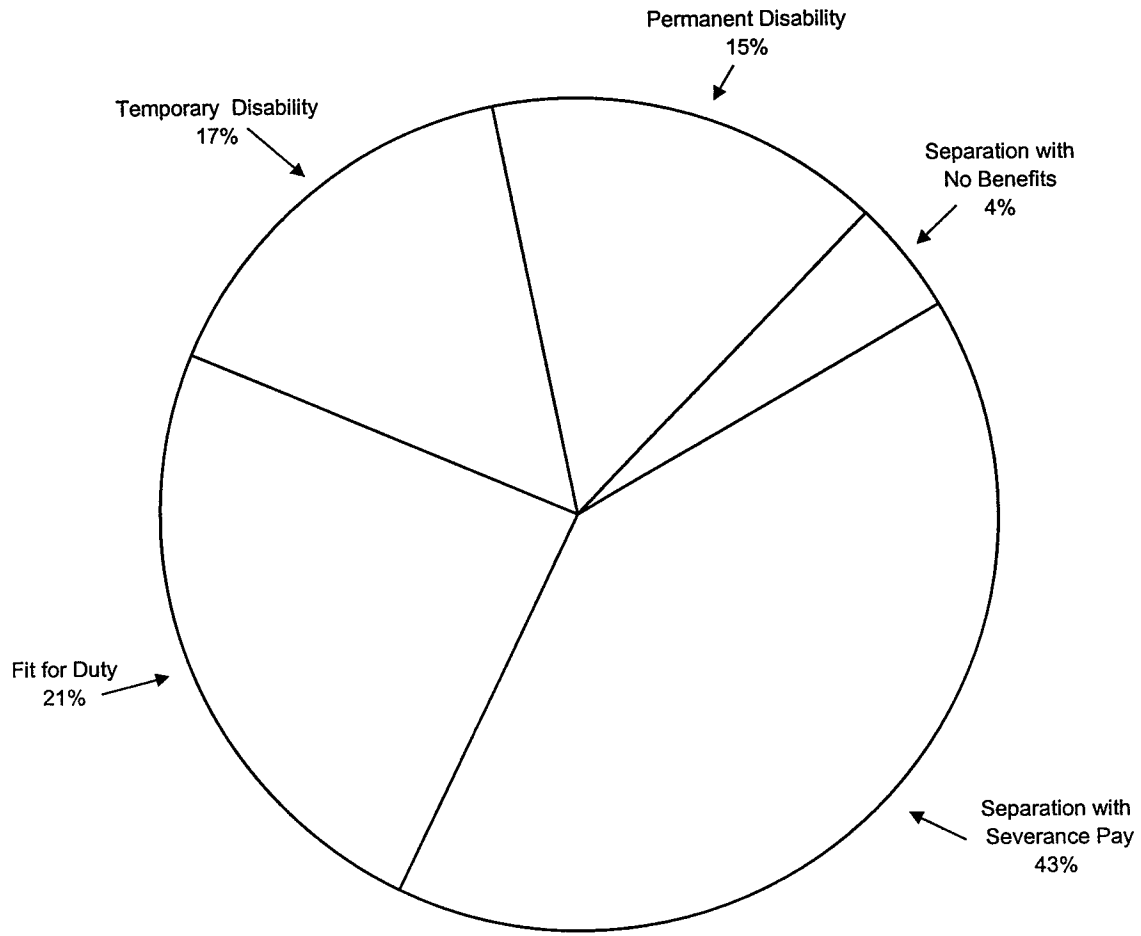
Source: U.S. Army Physical Disability Agency, Walter Reed Army Medical Center, Forest Glen Annex, Washington, DC, February 1996.

Figure 4-6

Figure 4-7 illustrates the distribution of 9,903 Army disability dispositions (cases reviewed) for FY 1993:

- Separation with severance pay—43%.
- Fit for duty—21%.
- Temporary disability—17%.
- Permanent disability—15%.
- Separation with no benefits—4%.

Army - Distribution (%) of Disability Dispositions (Cases Reviewed), FY 1993



n = 9,903.

Source: U.S. Army Physical Disability Agency, Walter Reed Army Medical Center, Forest Glen Annex, Washington, DC, February 1996.

Figure 4-7

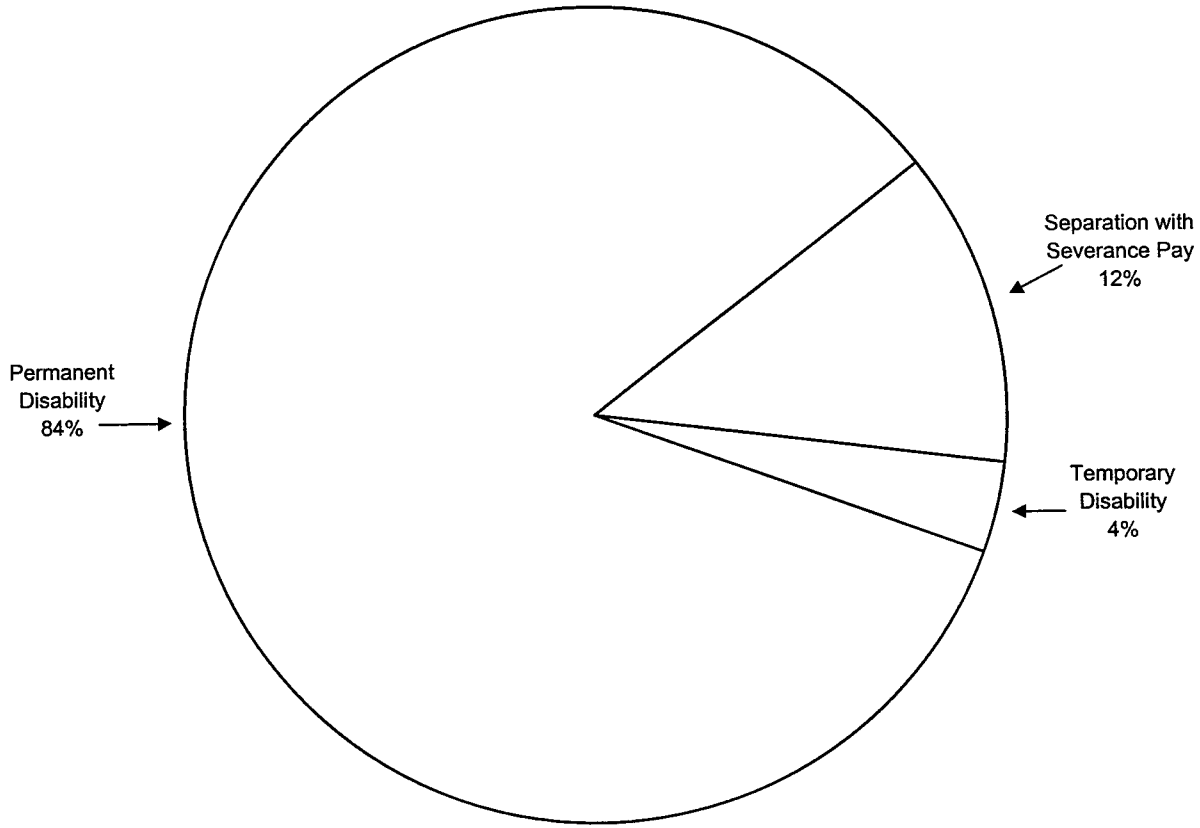
Costs of Disabilities.

Figure 4-8 illustrates the distribution of projected lifetime costs by disability dispositions (cases reviewed) for FY 1993:

- Permanent disability—84%.
- Separation with severance pay—12%.
- Temporary disability—4%.

The Army estimates the cost of its FY 1993 disability cases to be $485 million.

Army - Distribution (%) of Projected Lifetime Costs by Disability Dispositions (Cases Reviewed),* FY 1993



Total value = $485 million.
* Based on FY 1993 $ compensation per soldier.

Source: U.S. Army Physical Disability Agency, Walter Reed Army Medical Center, Forest Glen Annex, Washington, DC, February 1996.

Figure 4-8

4-7. Navy and Marine Corps

The Navy and Marine Corps disability data are presented in four parts:

- The Navy and Marine Corps Summary. The Navy and Marine Corps disability data presented in this section are summarized in two tables.
  - The overall summary is presented in Table 4-5.
  - The data in figures 4-9, 4-10, and 4-11 are summarized in Table 4-6.
- Magnitude of the Injury Problem Relative to Other Causes of Disability.
  - The distribution of Navy and Marine Corps disabilities evaluated by the PEB for the first 9 months of FY 1995 is displayed in figures 4-9, 4-10, and 4-11.
  - The distribution of disorders/injuries evaluated by the MEB for Navy personnel only for CY 1989-1993 is displayed in figures 4-12 and 4-13.
- Trends of Navy and Marine Corps Injury-Related Disabilities Relative to Other Causes Over Time. Rates of physical disability evaluations for FY 1985-1994 are displayed in Figure 4-14.
- Case Dispositions. The distribution of Navy and Marine Corps disability claim dispositions for FY 1994 is displayed in Figure 4-15.

The Navy and Marine Corps Summary.

Table 4-5. Overall Summary of Navy and Marine Corps Disability Data for Active Duty Personnel

Year	Total Navy and Marine Corps Population	Disabilities		Rates and Trends of Disabilities			Conclusion
		Total	n/1,000 Personnel/Year	n/1,000 Personnel/Year		Trend, % Change (FY 1985-1994)	
FY85-FY94	—	—	—	15/FY85	32/FY94	Up 113%	Overall disability rates increased more than twofold over a 10-year period.

Table 4-6. Summary of Navy and Marine Corps Disability Data by VASRD Codes

Disabilities*	Distribution (%) of Disabilities (FY 95 - first 9 months)		Conclusions
	Two-Digit Codes	Four-Digit Codes	
50-53: Musculoskeletal (Orthopedic)	63%	—	**Musculoskeletal (Orthopedic)** • Orthopedic injuries, the leading cause of disabilities, occur more than eight times as often as mental disorders. **Mental Disorders** • Mental disorders are the second leading cause of disabilities. **Musculoskeletal** • Degenerative arthritis, the leading cause of musculoskeletal disabilities, occur more than 3½ times as often as lumbosacral strain. • Lumbosacral strain is the second leading cause of musculoskeletal disabilities. **Distribution of Disabilities** • Musculoskeletal (orthopedic) injuries account for 63% of all disabilities.
5003, 5257, 5010: Degenerative Arthritis	—	31%	
5021: Myositis	—	2%	
5022: Periostitis	—	1%	
5024: Tenosynovitis	—	1%	
5295: Lumbosacral Strain	—	8%	
5262: Tibia and Fibula, Impairment of	—	2%	
5276: Flatfoot, acquired	—	1%	
5293: Intervertebral Disc Syndrome	—	5%	
5299: Orthopedic	—	53%	
60-62: Visual/Auditory	2%	—	
63-68: Systemic/Respiratory	6%	—	
6351/2: HIV-Related Illness	—	3%	
6602: Asthma, bronchial	—	5%	
70-71: Cardiovascular	4%	—	
72-73: Digestive	2%	—	
7323: Colitis, Ulcerative	—	1%	
75-76: Genitourinary/Gynecological	1%	—	
77-79: Blood/Skin/Endocrine	3%	—	
7913: Diabetes Mellitus	—	3%	
80-89: Neurological/Convulsive	9%	—	
8106: Chorea, Huntington's	—	4%	
8910: Epilepsy, grand mal	—	1%	
90-95: Mental Disorders	10%	—	
9209, 9411, 9405, 9206: Mental Disorders	—	6%	

* Codes as defined in 38 CFR 4.

Magnitude of the Injury Problem Relative to Other Causes of Disabilities.

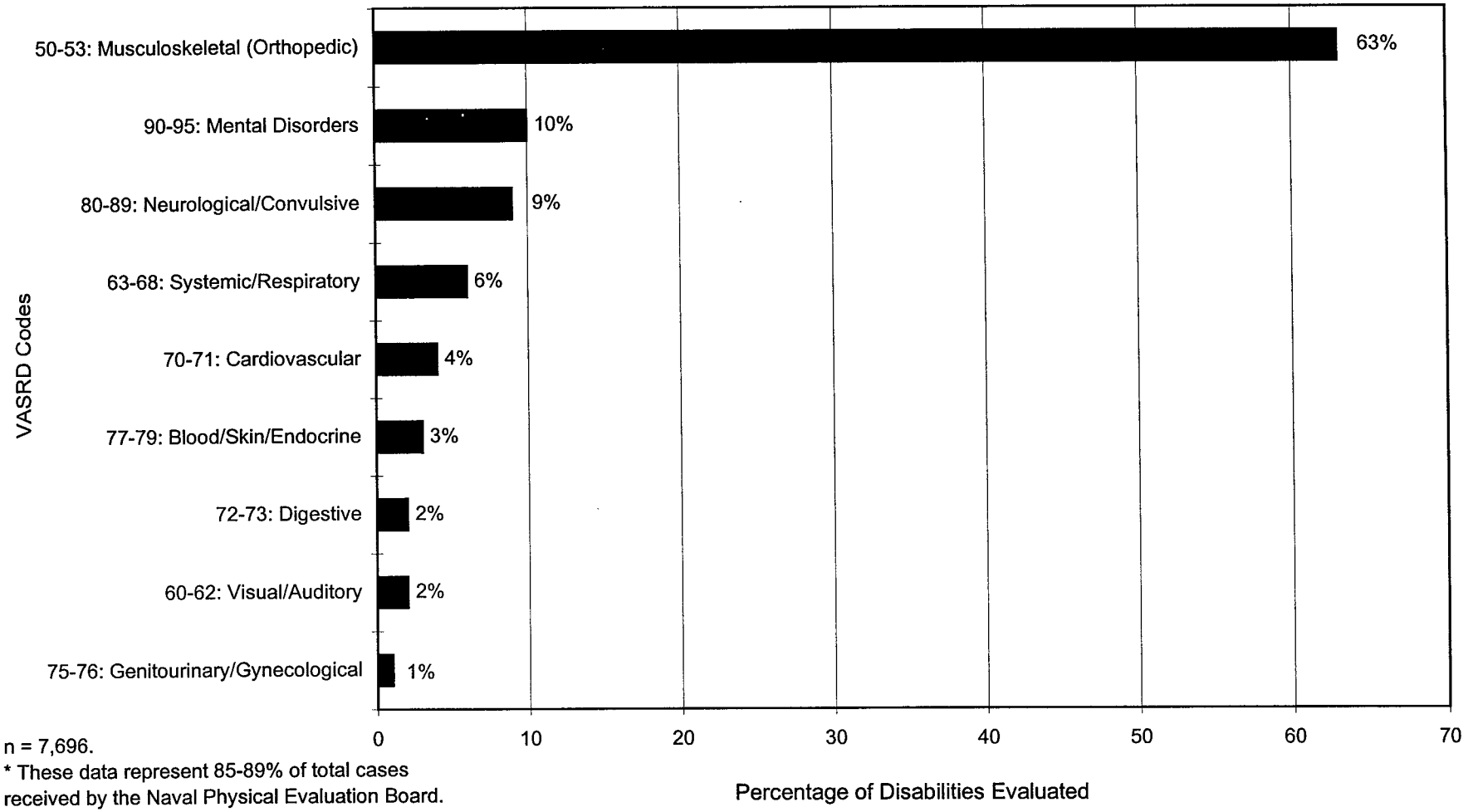
Figure 4-9 illustrates the distribution of disabilities by two-digit VASRD codes for Navy and Marine Corps personnel for the first 9 months of FY 1995 based on PEB findings. The top five codes were:

- Musculoskeletal (orthopedic)—63%.
- Mental disorders—10%.
- Neurological/convulsive—9%.
- Systemic/respiratory—6%.
- Cardiovascular—4%.

Disabilities due to musculoskeletal conditions are largely related to injuries and their sequelae. Musculoskeletal (orthopedic) conditions are the leading cause of disabilities and occur more than six times as often as mental disorders, the second leading cause of disabilities.

Some of the neurological conditions and mental disorders such as brain disease due to trauma (VASRD code 8045), paralysis (VASRD codes 8510-8530), and some brain disorders (VASRD code 9304) may be associated with brain trauma.

Navy and Marine Corps - Distribution (%) of Disabilities* by Two-Digit VASRD Codes,† FY 1995 (First 9 Months)



n = 7,696.
* These data represent 85-89% of total cases received by the Naval Physical Evaluation Board.
† VASRD codes as defined in 38 CFR 4.

Source: Naval Council of Personnel Boards, 1995.

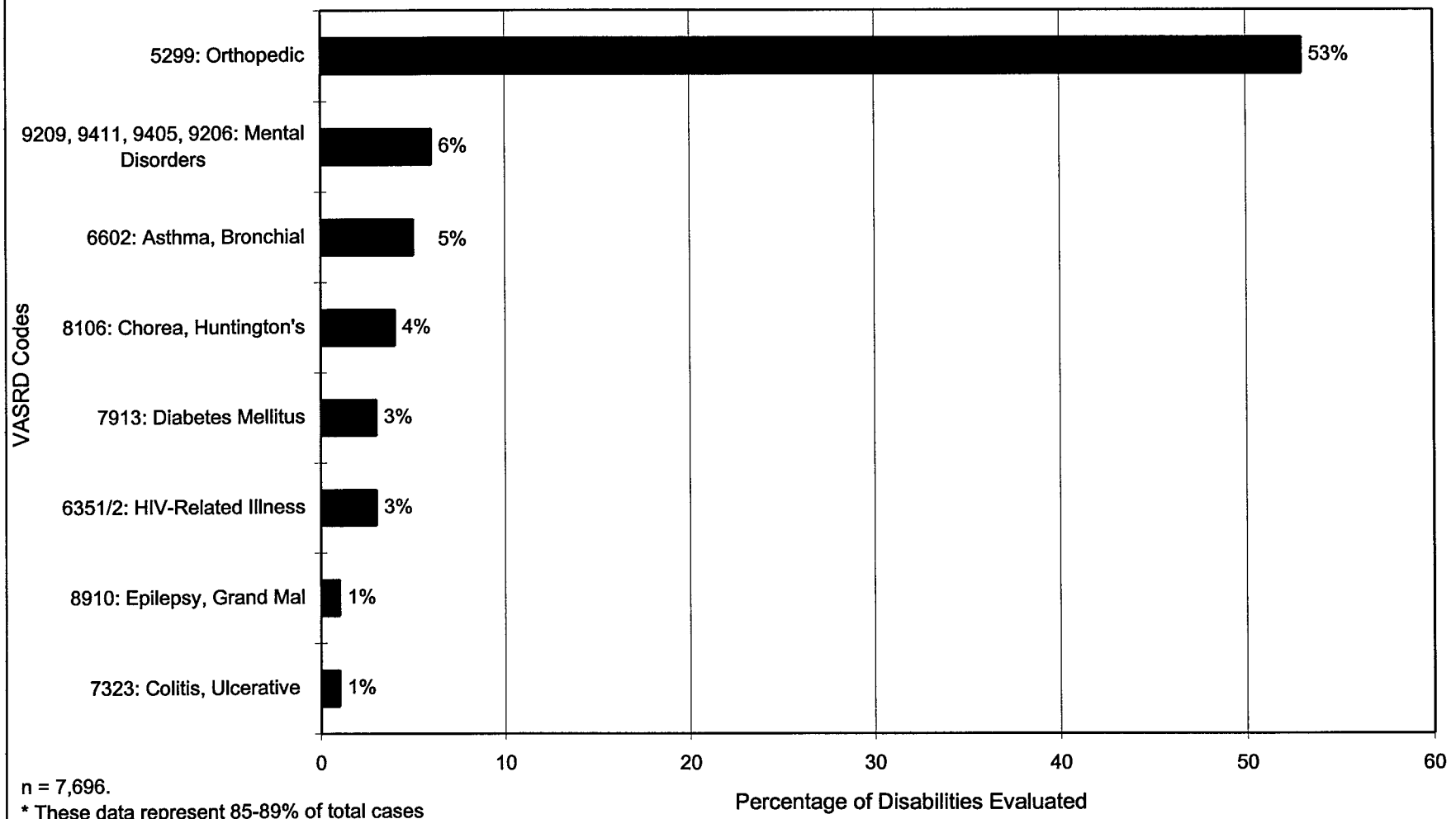
Figure 4-9

Figure 4-10 illustrates the distribution of disabilities by four-digit VASRD codes for Navy and Marine Corps personnel for the first 9 months of FY 1995 based on PEB findings. The top five codes were:

- Orthopedic—53%.
- Mental disorders—6%.
- Asthma, bronchial—5%.
- Chorea, Huntington's—4%.
- Diabetes mellitus/HIV-related illness—3% each.

Orthopedic conditions, the leading cause of disabilities, occur more than eight times as often as mental disorders, the second leading cause of disabilities.

Navy and Marine Corps - Distribution (%) of Disabilities* by Four-Digit VASRD Codes,† FY 1995 (First 9 Months)



n = 7,696.
* These data represent 85-89% of total cases received by the Naval Physical Evaluation Board.
† VASRD codes as defined in 38 CFR 4.

Source: Department of the Navy, Naval Council of Personnel Boards, Arlington, VA, 1995.

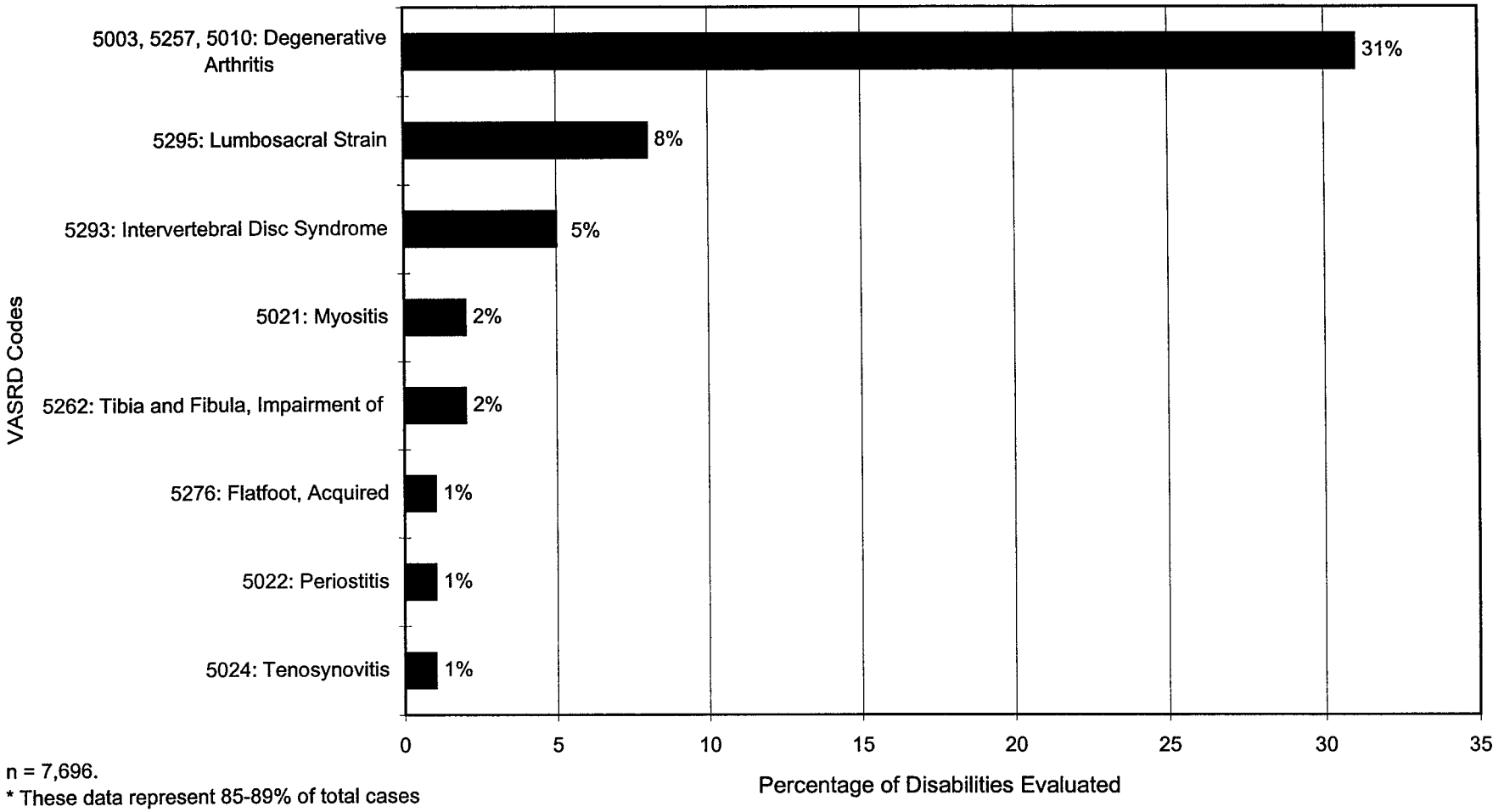
Figure 4-10

Figure 4-11 illustrates the distribution of the top musculoskeletal (orthopedic) disabilities by four-digit VASRD codes for Navy and Marine Corps personnel for the first 9 months of FY 1995. The top five musculoskeletal (orthopedic) codes were:

- Degenerative arthritis—31%.
- Lumbosacral strain—8%.
- Intervertebral disc syndrome—5%.
- Myositis—2%.
- Tibia and fibula, impairment of—2%.

Degenerative arthritis, the leading cause of musculoskeletal (orthopedic) disabilities, occurs more than three and a half times as often as lumbosacral strain, the second leading cause of musculoskeletal (orthopedic) disabilities.

Navy and Marine Corps - Distribution (%) of Top Musculoskeletal (Orthopedic) Disabilities by Four-Digit VASRD Codes,*† FY 1995 (First 9 Months)



n = 7,696.
* These data represent 85-89% of total cases received by the Naval Physical Evaluation Board.
† VASRD codes as defined in 38 CFR 4.

Source: Department of the Navy, Naval Council of Personnel Boards, Arlington, VA, 1995.

Figure 4-11

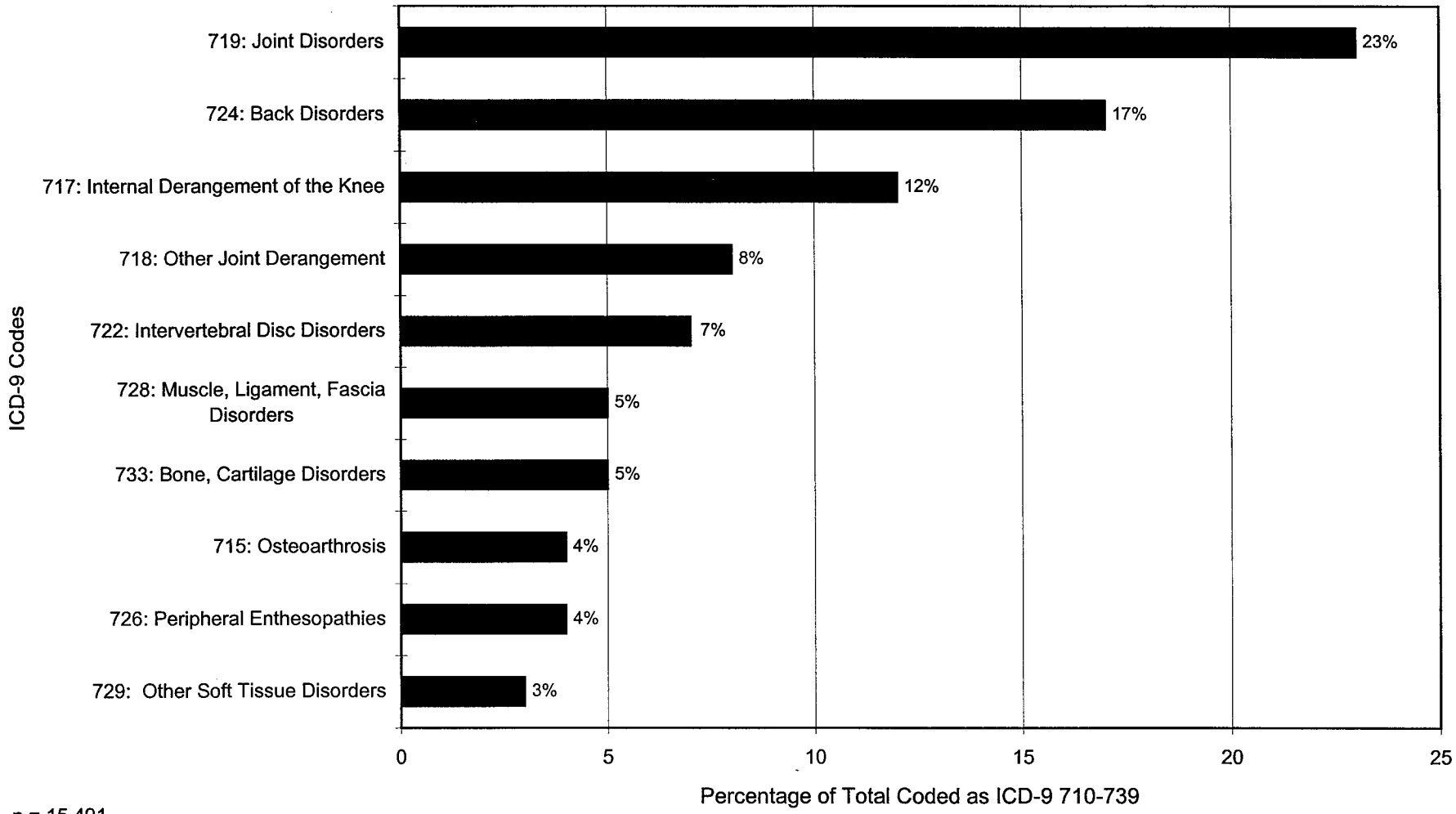
Navy Medical Evaluation Board Data for Musculoskeletal (Orthopedic) and Connective Tissue Disorders, CY 1989-1993

Figure 4-12 illustrates the distribution of top 10 diagnoses of musculoskeletal (orthopedic) and connective tissue disorders (ICD-9 codes 710-739) for Navy personnel for CY 1989-1993 based on MEB findings. The total number of cases evaluated by the Navy MEBs was 15,491, with the following top five contributors to musculoskeletal (orthopedic) and connective tissue disorders:

- Joint disorders—23%.
- Back disorders—17%.
- Internal derangement of the knee—12%.
- Other joint derangement—8%.
- Intervertebral disc disorders—7%.

These top five contributors to musculoskeletal (orthopedic) and connective tissue disorders accounted for 67% (10,317) of all MEB cases.

Navy - Distribution (%) of Top 10 Diagnoses of Musculoskeletal (Orthopedic) and Connective Tissue Disorders (ICD-9 Codes 710-739) Evaluated by Medical Evaluation Boards, CY 1989-1993



n = 15,491.
Other = 12%.

Source: U.S. Naval Medical Information Management System, 1994.

Figure 4-12

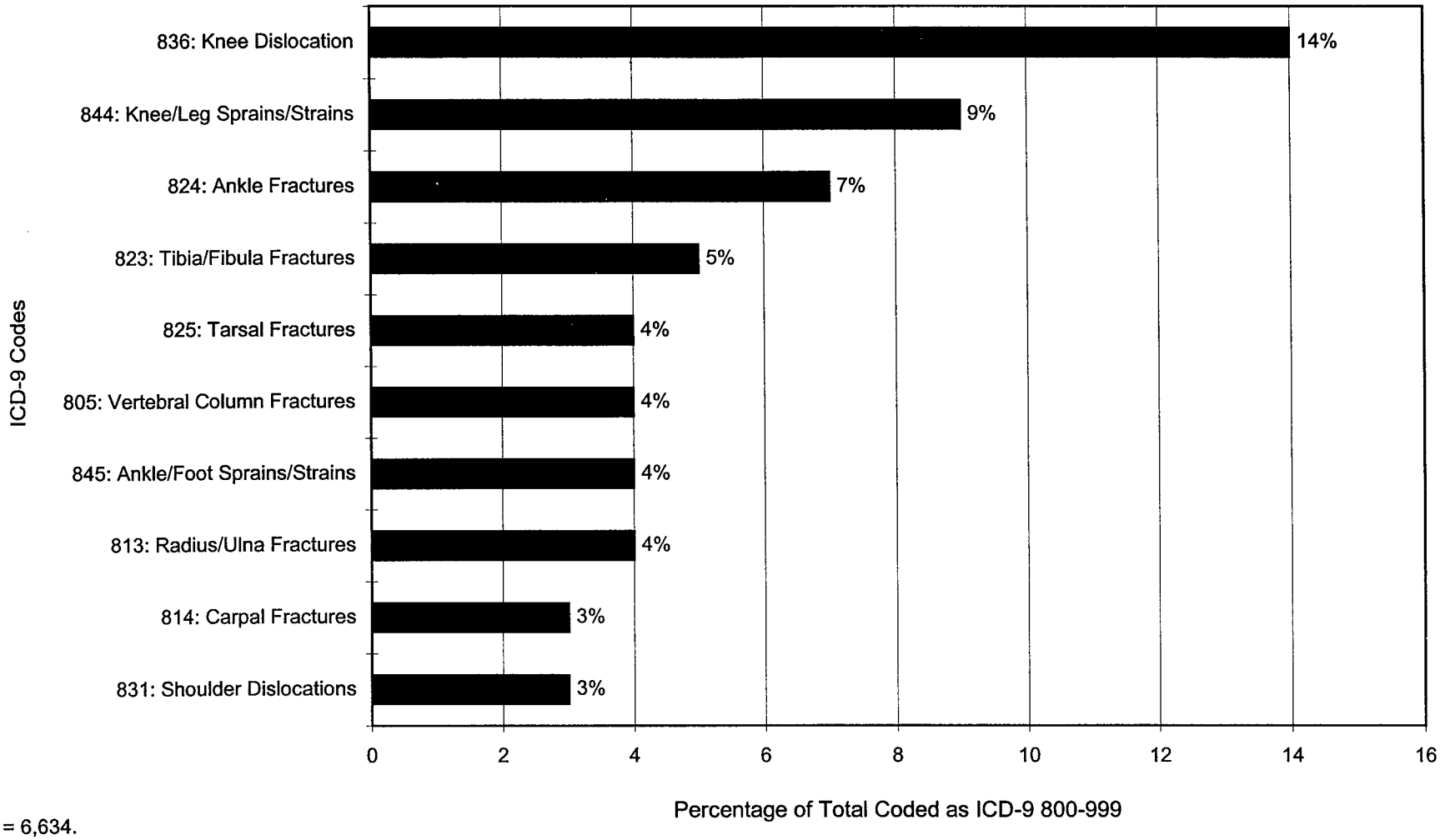
Navy Medical Evaluation Board Data for Injuries and Accidents, CY 1989-1993

Figure 4-13 illustrates the distribution of the top 10 diagnoses of injuries and accidents (ICD-9 codes 800-999) for Navy personnel for CY 1989-1993 based on MEB findings. The total number of cases evaluated by the Navy MEB was 6,634, with the following top five injury and accident diagnoses:

- Knee dislocation—14%.
- Knee/leg sprains/strains—9%.
- Ankle fractures—7%.
- Tibia/fibula fractures—5%.
- Tarsal fractures—4%.

These top five contributors to injuries and accidents accounted for 39% (2,587) of all MEB cases.

Navy - Distribution (%) of Top 10 Diagnoses of Injuries and Accidents (ICD-9 Codes 800-999) Evaluated by Medical Evaluation Boards, CY 1989-1993



n = 6,634.
Other = 44% (2,919).

Source: U.S. Naval Medical Information Management System, 1994.

Figure 4-13

Trends of Navy and Marine Corps Injury-Related Disabilities Relative to Other Causes Over Time.

Figure 4-14 illustrates the overall rates of active duty and Reserve disability cases for the Navy and Marine Corps for FY 1985-1994. These rates do not represent the cases that are subsequently evaluated and receive a disposition. In general, the rate of cases evaluated is lower than the rate of cases entering the system. Active duty personnel as well as members of the Naval Reserves are included in the rates seen here.

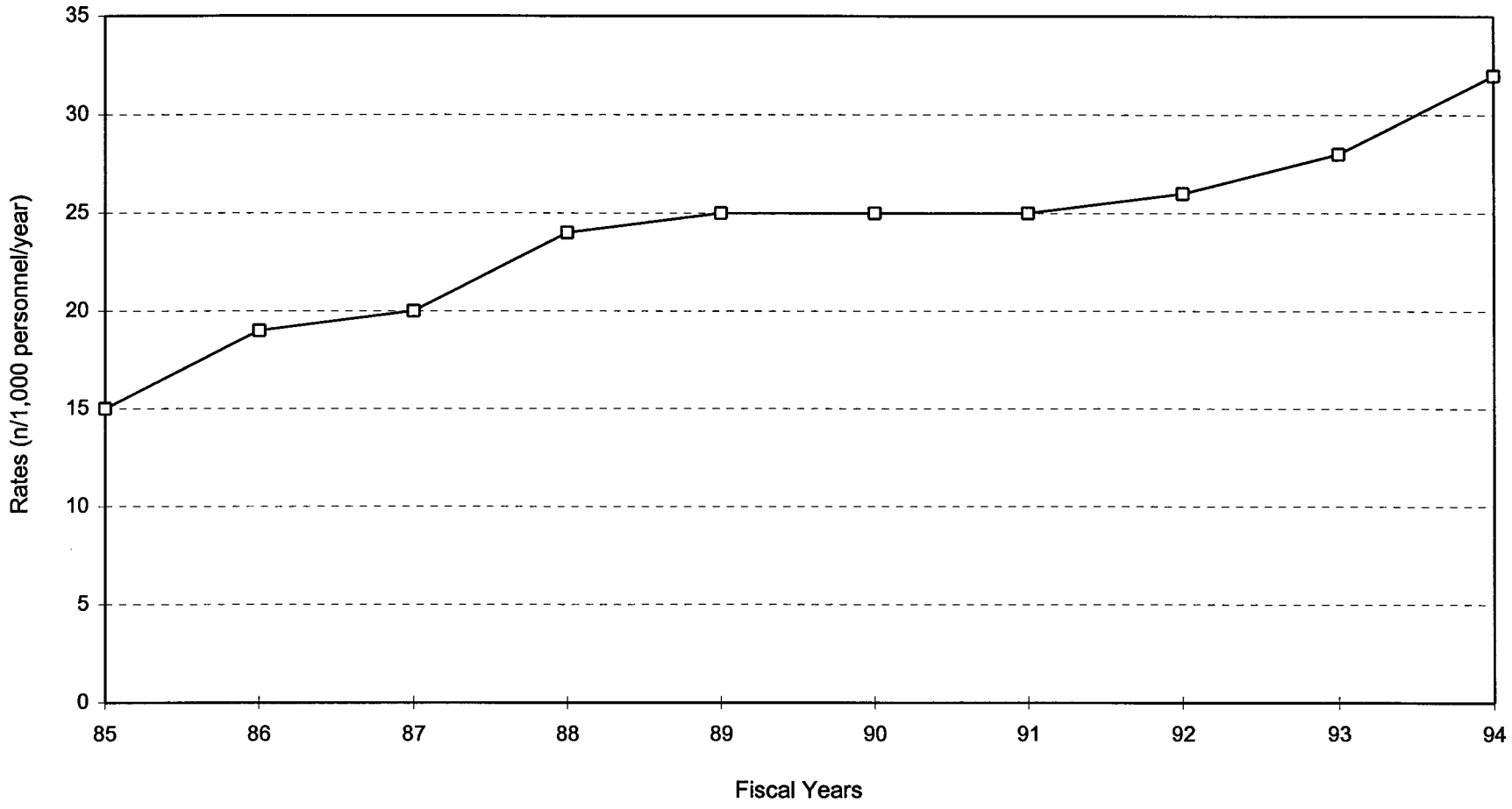
Disabilities increased 113% from 15 cases per 1,000 active duty personnel in FY 1985 to 32 cases per 1,000 active duty personnel in FY 1994.

Worksheet Data for Figure 4-14

Navy and Marine Corps - Rates of Total Disability Cases Received by Fiscal Year*									
1985	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**
15	19	20	24	25	25	25	26	28	32

* Rates per 1,000 personnel calculated using denominator data in Table 1-7.

Navy and Marine Corps - Overall Rates of Active Duty and Reserve Disability Cases, FY 1985-1994



Numerator Source: Department of the Navy, Naval Council of Personnel Boards, Arlington, VA, 1995.
Denominator Source: *DoD Worldwide U.S. Active Duty Military Personnel Casualties, Oct 79-Dec 95*. Prepared by DoD, Washington Headquarters Services, Directorate for Information Operations and Reports (DTIC# DIOR/M07-96/01).

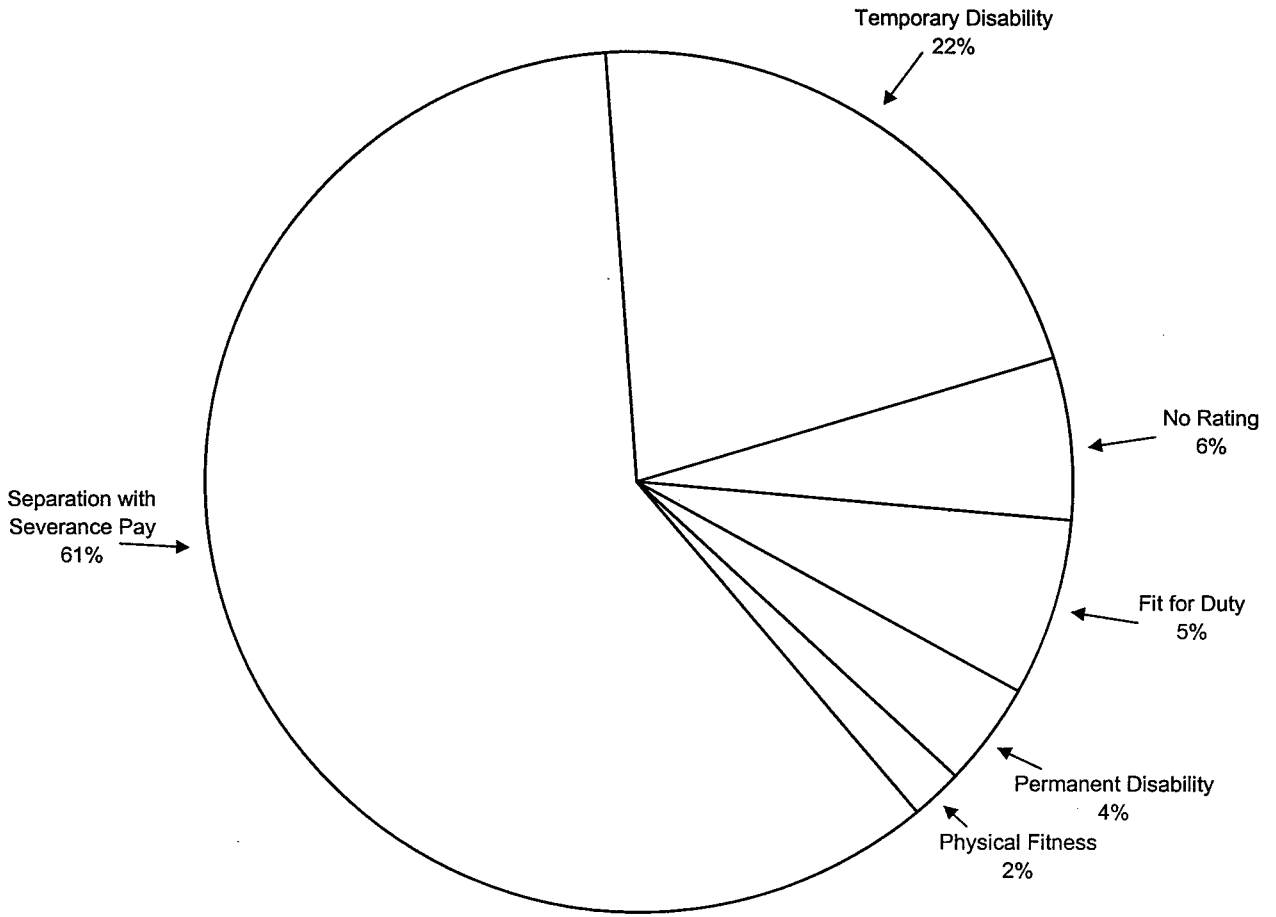
Figure 4-14

Case Dispositions.

Figure 4-15 illustrates the distribution of 10,786 disability dispositions (cases reviewed) for Navy and Marine Corps active duty and reserve personnel for FY 1994:

- Separation with severance pay—61%.
- Temporary disability—22%.
- No rating—6%.
- Fit for duty—5%.
- Permanent disability—4%.
- Physical fitness—2%.

Navy and Marine Corps - Distribution (%) of Active Duty/Reserve Disability Dispositions (Cases Reviewed), FY 1994



n = 10,786.

Source: Department of the Navy, Naval Council of Personnel Boards, Arlington, VA, 1995.

Figure 4-15

4-8. Air Force

The Air Force disability data are presented in four parts:

- The Air Force Summary. The Air Force disability data presented in this section are summarized in two tables.
  - The overall summary is presented in Table 4-7.
  - The data in figures 4-16, 4-17, 4-18, and 4-19 are summarized in Table 4-8.
- Magnitude of the Injury Problem Relative to Other Causes of Disability.
  - The distribution of disabilities by two-digit VASRD codes is displayed in Figure 4-16 for FY 1993 and in Figure 4-17 for FY 1994.
  - The distribution of disabilities by top 15 four-digit VASRD codes is displayed in Figure 4-18 for FY 1993 and Figure 4-19 for FY 1994.
- Trends of Air Force Injury-Related Disabilities Relative to Other Causes Over Time. The rates of total disability cases for FY 1990-September 1995 are displayed in Figure 4-20.
- Case Dispositions. The distribution of Air Force PEB disability claim dispositions is displayed in Figure 4-21 for FY 1993 and in Figure 4-22 for FY 1994.

The Air Force Summary.

Table 4-7. Overall Summary of Air Force Disability Data for Active Duty Personnel

Year	Total Air Force Population	Disabilities		Rates and Trends of Disabilities			Conclusion
		Total	n/1,000 Personnel/Year	n/1,000 Personnel/Year		Trend, % Change (FY 1990-1994)	
FY90-FY94	—	—	—	5/FY90	9/FY94	Up 80%	Disabilities increased nearly twofold from FY 1990 to FY 1994.
FY93	444,351	2,940	7	—	—	—	
FY94	426,327	3,687	9	—	—	—	

Table 4-8. Summary of Air Force Disability Data by VASRD Codes*

Disabilities		Distribution (%) of Disabilities				Conclusions
		Two-Digit Codes		Four-Digit Codes		
		FY93	FY94	FY93	FY94	
50-53:	**Musculoskeletal (Orthopedic)**	29%	22%	—	—	**Distribution of Disabilities** • Musculoskeletal conditions accounted for 29% of all disabilities in FY 1993 and 22% of all disabilities in FY 1994. • Asthma, the leading disability code, increased almost 129% from FY 1993 to FY 1994. • Diabetes mellitus, the second leading disability code, increased 1% from FY 1993 to FY 1994. **Musculoskeletal (Orthopedic)** • Although musculoskeletal (orthopedic) rates declined in FY 1994, they continued to be the leading cause of disabilities. **Mental Disorders** • Although mental disorders increased in FY 1994, they continued to be the second leading cause of disabilities.
5295:	Lumbosacral Strain	—	—	4%	4%	
5257:	Knee, Other Impairment of	—	—	6%	4%	
5262:	Tibia and Fibula, Impairment of	—	—	3%	2%	
5293:	Intervertebral Disc Syndrome	—	—	5%	4%	
5299:	Orthopedic	—	—	2%	0%	
60-62:	**Visual/Auditory**	2%	2%	—	—	
63-68:	**Systemic/Respiratory**	14%	14%	—	—	
6350:	Lupus Erythematosus, Systemic	—	—	2%	0%	
6351/2:	HIV-Related Illness	—	—	3%	2%	
6602:	Asthma, Bronchial	—	—	7%	16%	
70-71:	**Cardiovascular**	8%	6%	—	—	
7005:	Arteriosclerotic Heart Disease	—	—	3%	3%	
72-73:	**Digestive**	6%	5%	—	—	
7323:	Colitis, Ulcerative	—	—	3%	3%	
75-76:	**Genitourinary/Gynecological**	3%	4%	—	—	
7528:	New growths, malignant, any specified part of genitourinary system	—	—	0%	2%	
77-79:	**Blood/Skin/Endocrine**	11%	12%	—	—	
7913:	Diabetes Mellitus	—	—	6%	7%	
80-89:	**Neurological/Convulsive**	11%	13%	—	—	
8106:	Chorea, Huntington's	—	—	2%	2%	
8910:	Epilepsy, Grand Mal	—	—	2%	4%	
8914:	Epilepsy, Psychomotor	—	—	0%	2%	
90-95:	**Mental Disorders**	15%	21%	—	—	
9206:	Manic Depressive Reaction	—	—	2%	1%	
9405:	Depressive Reaction	—	—	4%	5%	

* Codes as defined in 38 CFR 4.

Magnitude of the Injury Problem Relative to Other Causes of Disabilities.

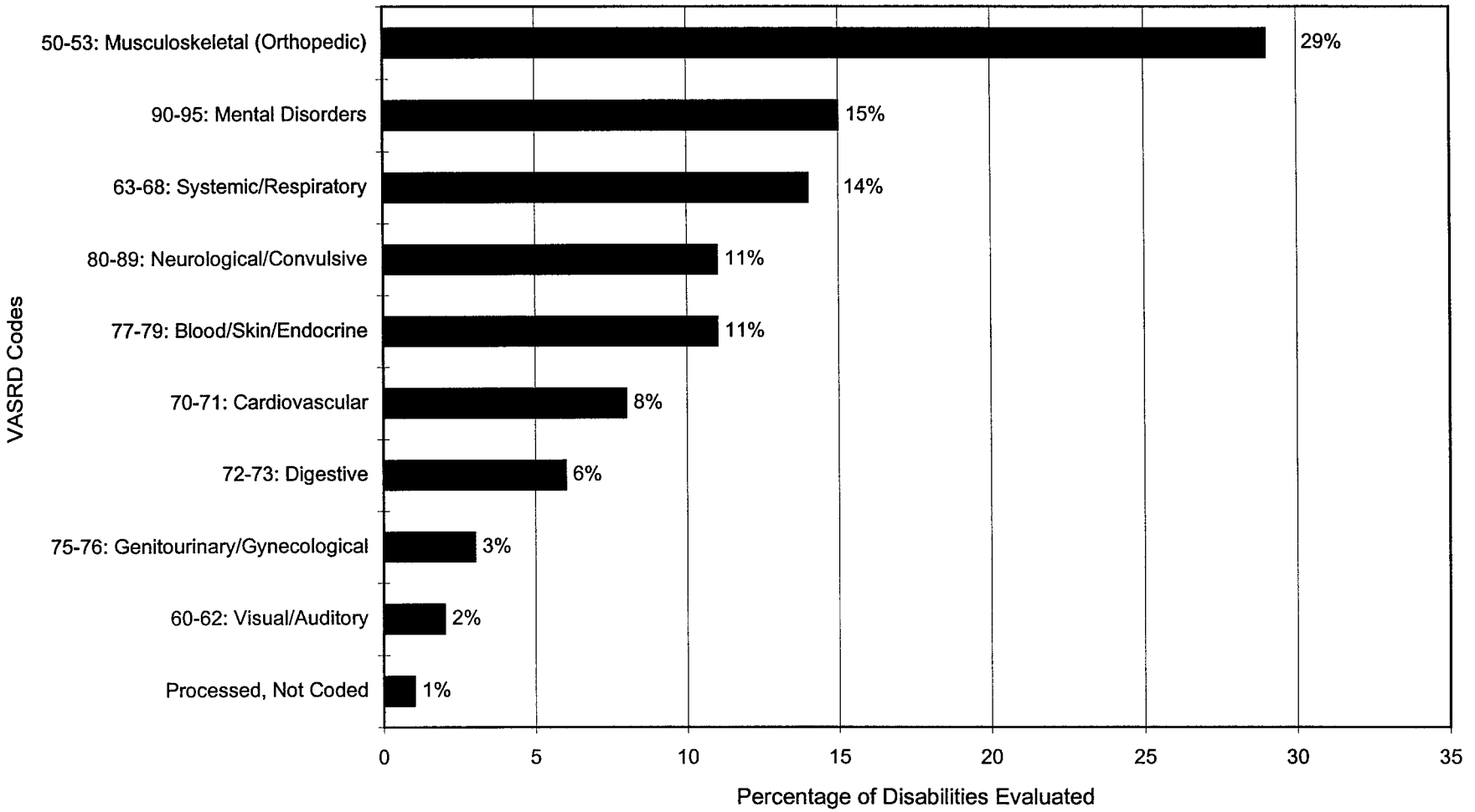
Figure 4-16 illustrates the distribution of 2,940 disabilities by two-digit VASRD codes for active duty Air Force personnel for FY 1993. The top five codes were:

- Musculoskeletal (orthopedic)—29%.
- Mental disorders—15%.
- Systemic/respiratory—14%.
- Neurological/convulsive—11%
- Blood/skin/endocrine—11%

Musculoskeletal (orthopedic) conditions are the leading cause of disabilities and occur almost twice as often as mental disorders, the second leading cause of disabilities.

Disabilities due to musculoskeletal conditions are largely related to injuries and their sequelae. In addition, some of the neurological conditions and mental disorders such as brain disease due to trauma (VASRD code 8045), paralysis (VASRD codes 8510-8530), and some brain disorders (VASRD code 9304) may be associated with brain trauma.

Air Force - Distribution (%) of Disabilities by Two-Digit VASRD Codes,* FY 1993



n = 2,940 (active duty only).
* VASRD codes as defined in 38 CFR 4.

Source: Department of the Air Force, HQ Air Force Personnel Center, Randolph AFB, TX, 1995.

Figure 4-16

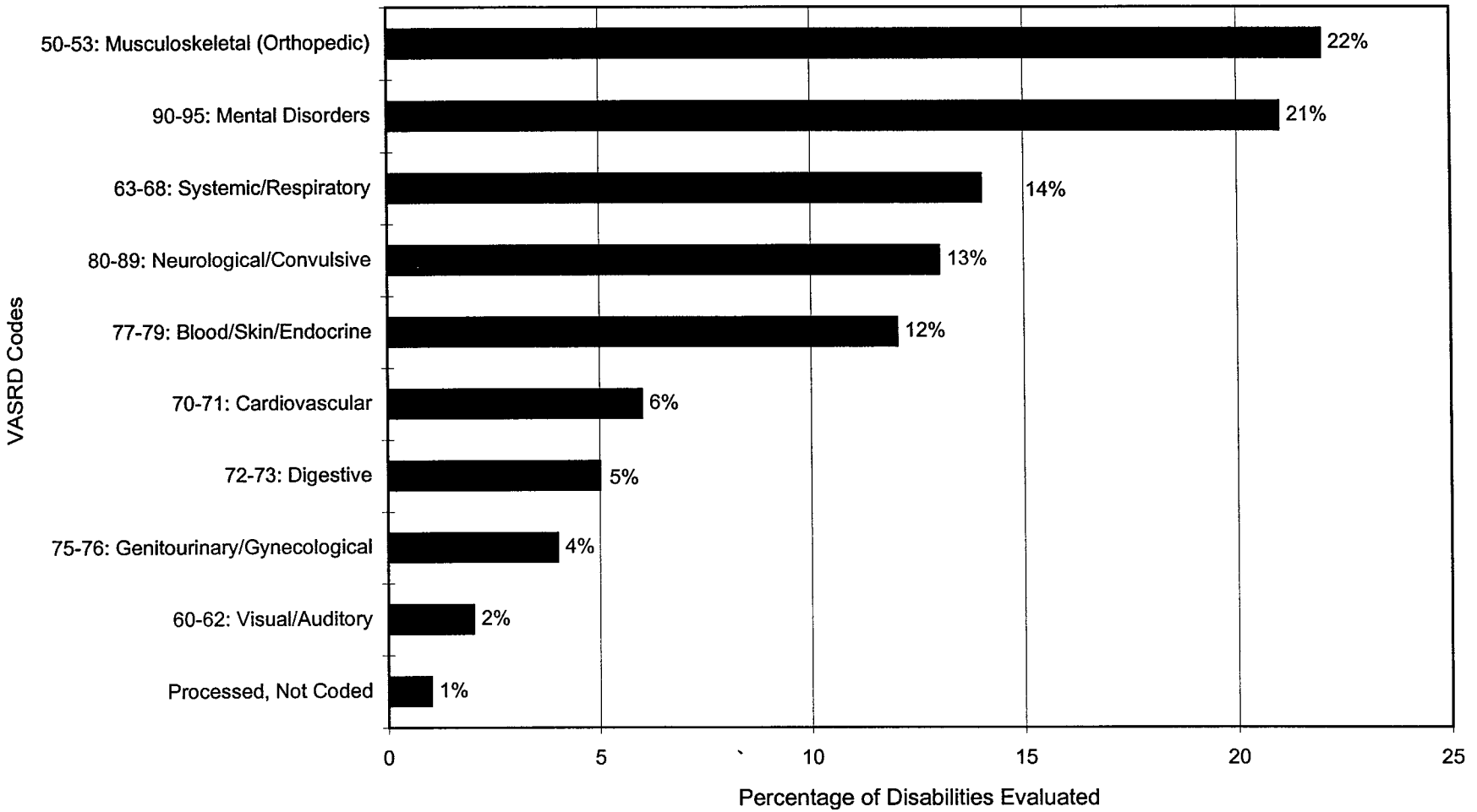
Figure 4-17 illustrates the distribution of 3,687 disabilities by two-digit VASRD codes for active duty Air Force personnel for FY 1994. The top five codes were:

- Musculoskeletal (orthopedic)—22%.
- Mental disorders—21%.
- Systemic/respiratory—14%.
- Neurological/convulsive—13%.
- Blood/skin/endocrine—12%.

Musculoskeletal (orthopedic) conditions, the leading cause of disabilities, and mental disorders, the second leading cause of disabilities, occur at nearly the same frequency.

Disabilities due to musculoskeletal conditions are largely related to injuries and their sequelae. In addition, some of the neurological conditions and mental disorders such as brain disease due to trauma (VASRD code 8045), paralysis (VASRD codes 8510-8530), and some brain disorders (VASRD code 9304) may be associated with brain trauma.

Air Force - Distribution (%) of Disabilities by Two-Digit VASRD Codes,* FY 1994



n = 3,687 (active duty only).
* VASRD codes as defined in 38 CFR 4.

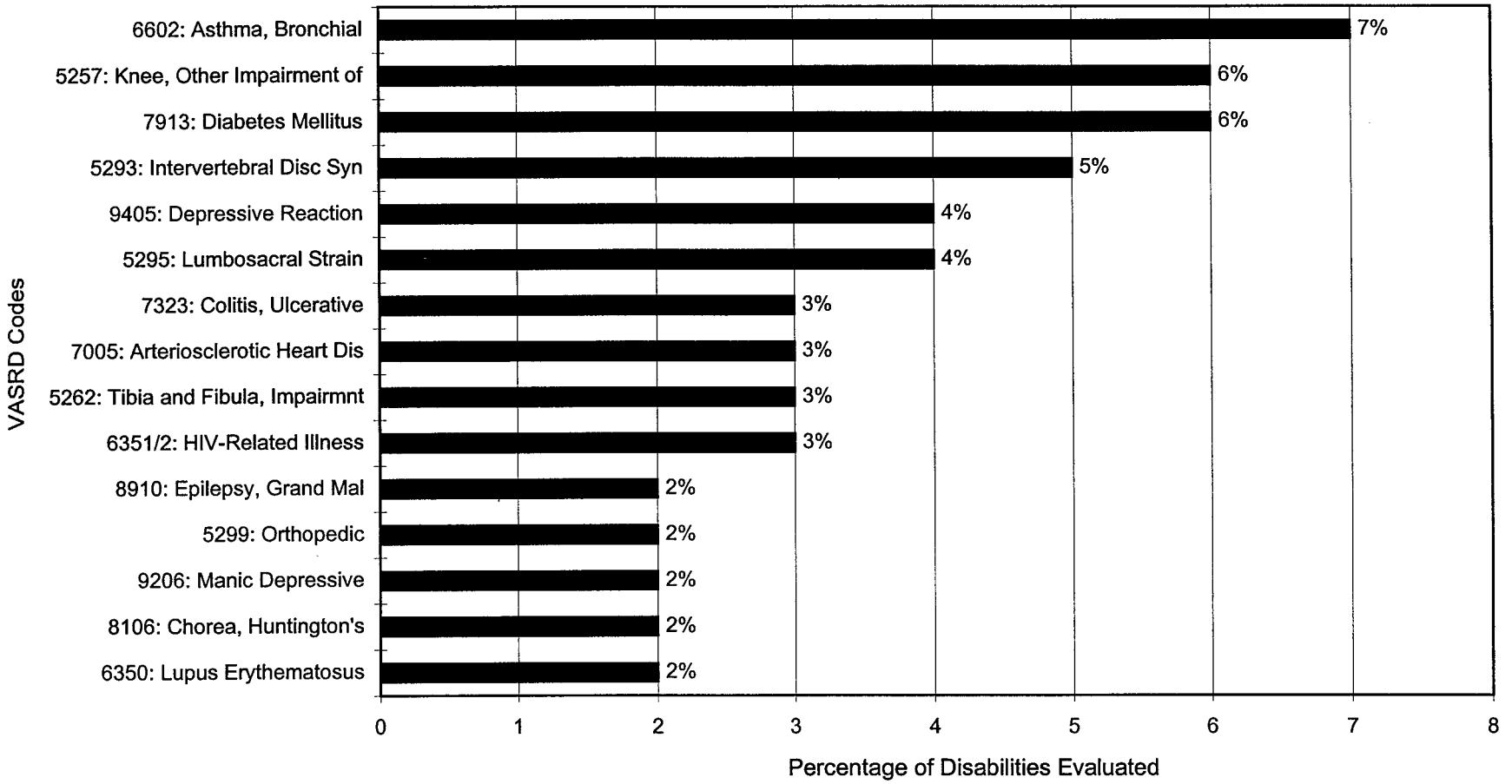
Source: Department of the Air Force, HQ Air Force Personnel Center, Randolph AFB, TX, 1995.

Figure 4-17

Figure 4-18 illustrates the distribution of the top 15 disabilities by four-digit VASRD codes for active duty Air Force personnel for FY 1993. Five of the top 15 disability codes are musculoskeletal (orthopedic) conditions:

- Knee, other impairment of—6%.
- Intervertebral disc syndrome—5%.
- Lumbosacral strain—4%.
- Tibia and fibula, impairment of—3%.
- Orthopedic—2%.

Air Force - Distribution (%) of Top 15 Disabilities by Four-Digit VASRD Codes,* FY 1993



n = 2,940 (active duty only).
* VASRD codes as defined in 38 CFR 4.

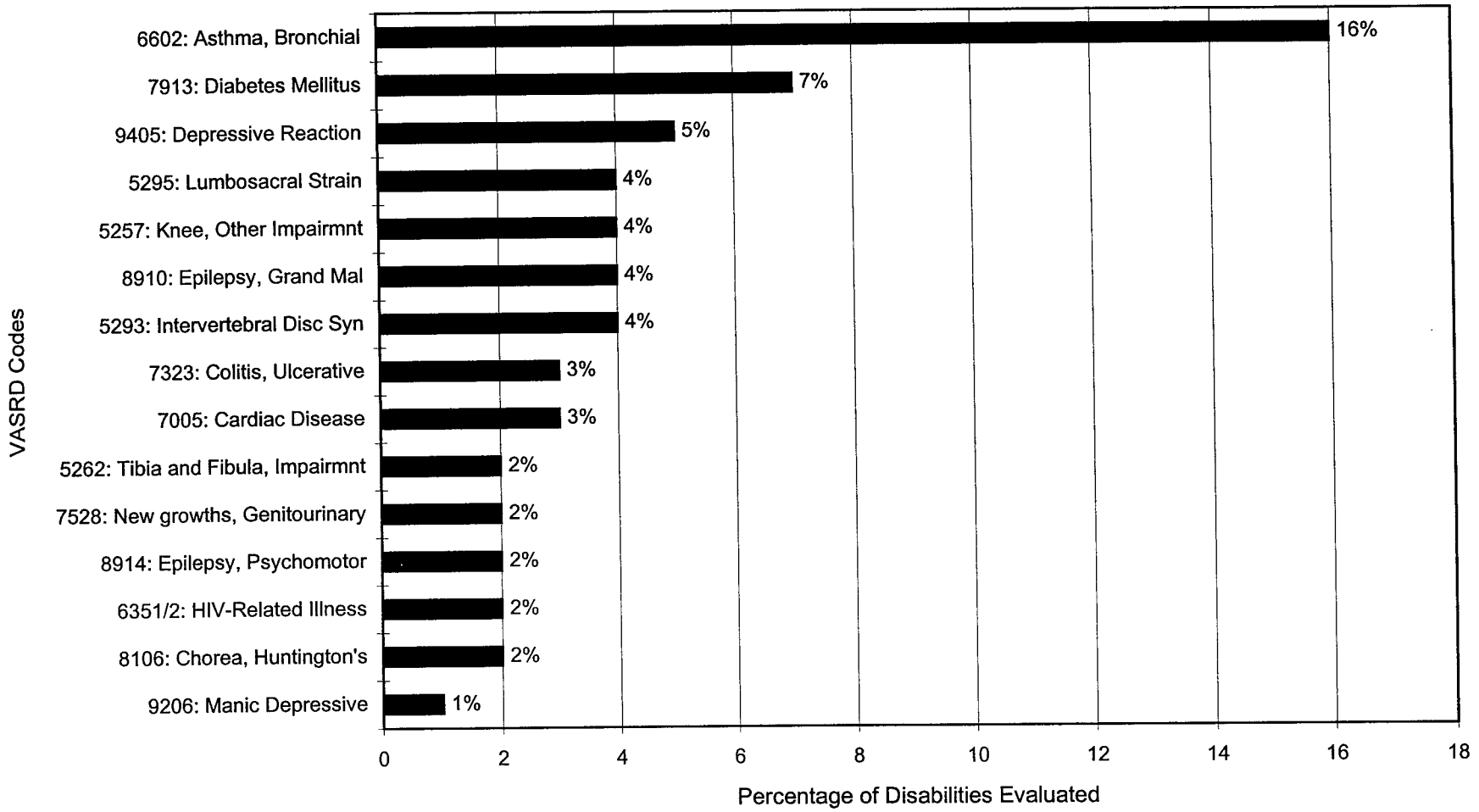
Source: Department of the Air Force, HQ Air Force Personnel Center, Randolph AFB, TX, 1995.

Figure 4-18

Figure 4-19 illustrates the distribution of the top 15 disabilities by four-digit VASRD codes for active duty Air Force personnel for FY 1994. Four of the top 15 disability codes are musculoskeletal (orthopedic) conditions:

- Lumbosacral strain—4%.
- Knee, other impairment of—4%.
- Intervertebral disc syndrome—4%.
- Tibia and fibula, impairment of—2%.

Air Force - Distribution (%) of Top 15 Disabilities by Four-Digit VASRD Codes,* FY 1994



n = 3,687 (active duty only).
* VASRD codes as defined in 38 CFR 4.

Source: Department of the Air Force, HQ Air Force Personnel Center, Randolph AFB, TX, 1995.

Figure 4-19

Trends of Air Force Injury-Related Disabilities Relative to Other Causes Over Time.

Figure 4-20 illustrates the rates of Air Force disability cases evaluated for FY 1990-September 1995. These rates represent the active duty disability cases that were evaluated by the PEB and received a disposition, as well as the reevaluations of disability cases on the TDRL.

- Active duty and TDRL cases evaluated:
  - Increased 86% from 7 cases per 1,000 active duty personnel in FY 1990 to 13 cases per 1,000 active duty personnel in FY 1994.
  - Decreased 23% from 13 cases per 1,000 active duty personnel in FY 1994 to 10 cases per 1,000 active duty personnel through September 1995.
- Active duty cases evaluated:
  - Increased 80% from 5 cases per 1,000 active duty personnel in FY 1990 to 9 cases per 1,000 active duty personnel in FY 1994.
  - Decreased 9% from 9 cases per 1,000 active duty personnel in FY 1994 to 8 cases per 1,000 active duty personnel through September 1995.

Worksheet Data for Figure 4-20

Disability Cases Evaluated	Air Force - Rates of Total Disability Cases by Fiscal Year*					
	1990	1991	1992	1993	1994	Sep 1995
Active Duty and TDRL	7	8	10	10	13	10
Active Duty	5	5	6	7	9	8

* Rates per 1,000 personnel calculated using denominator data in Table 1-7.

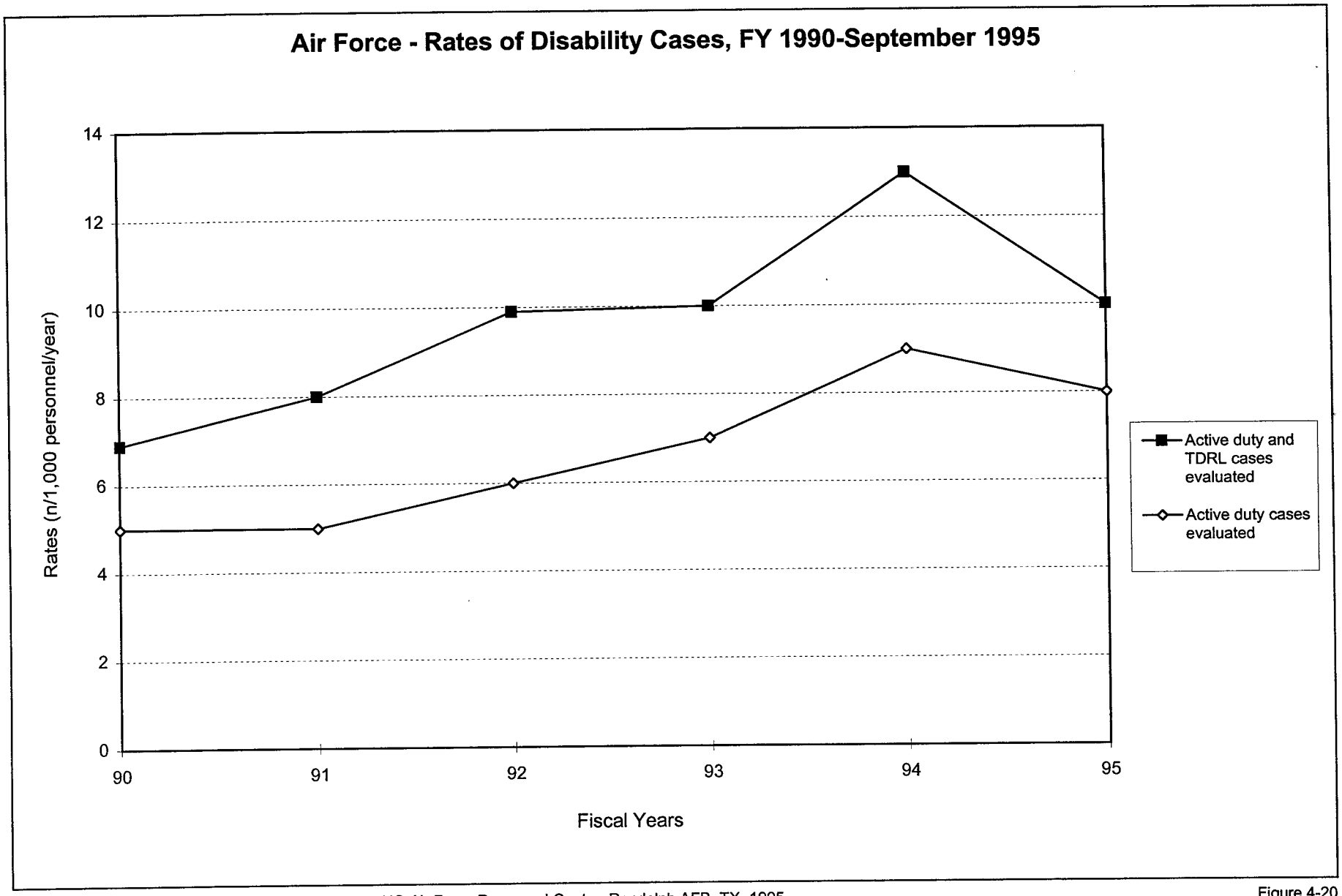


Figure 4-20

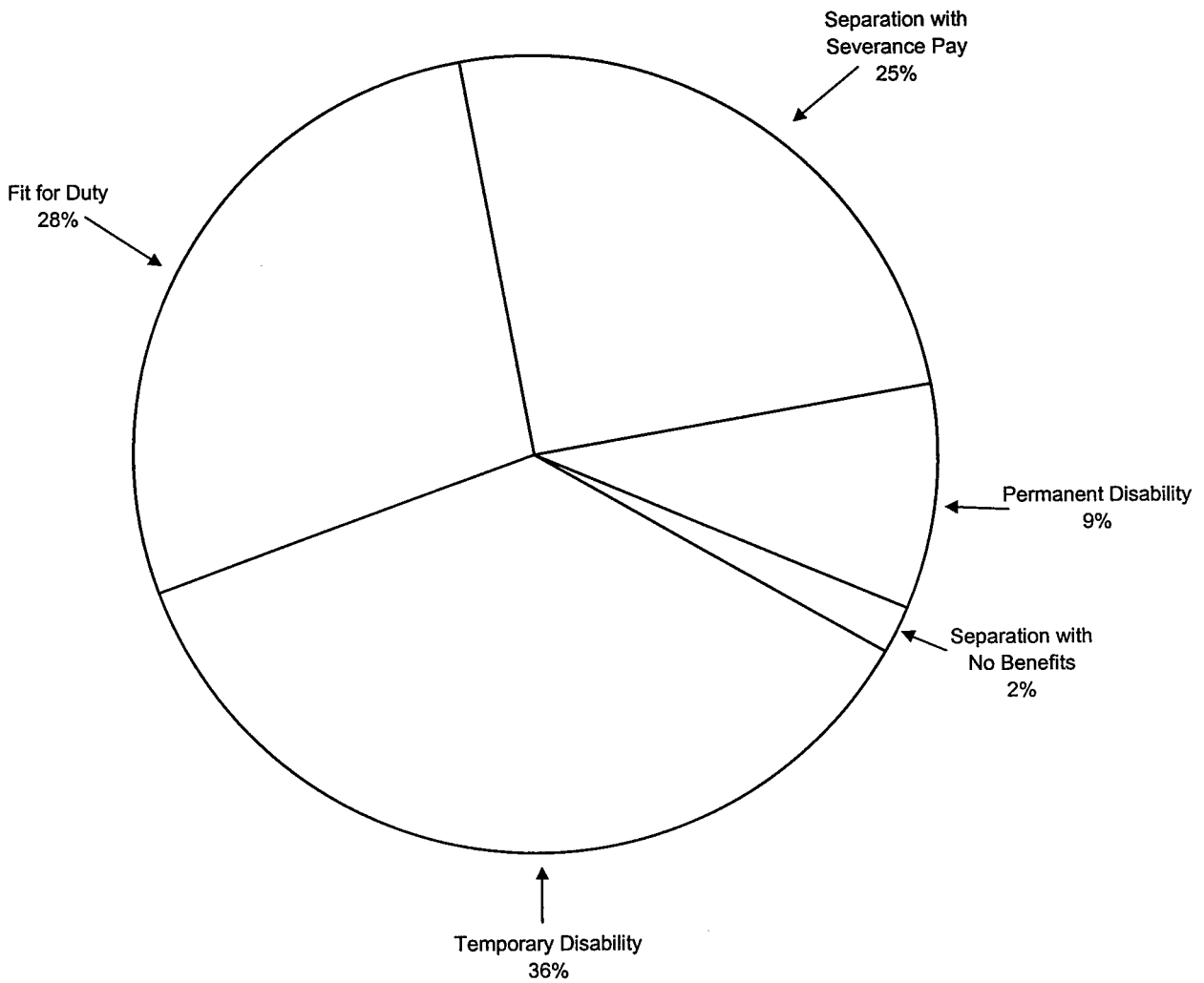
Sources: Numerator: Department of the Air Force, HQ Air Force Personnel Center, Randolph AFB, TX, 1995.
Denominator: *DoD Worldwide U.S. Active Duty Military Personnel Casualties, Oct 79-Dec 95.* Prepared by DoD, Washington Headquarters Services, Directorate for Information Operations and Reports (DTIC# DIOR/M07-96/01).

Case Dispositions.

Figure 4-21 illustrates the distribution of 2,940 PEB disability claim dispositions for active duty Air Force personnel for FY 1993:

- Temporary disability—36%.
- Fit for duty—28%.
- Separation with severance pay—25%.
- Permanent disability—9%.
- Separation with no benefits—2%.

Air Force - Distribution (%) of Disability Claim Dispositions, FY 1993



n = 2,940 (active duty only).

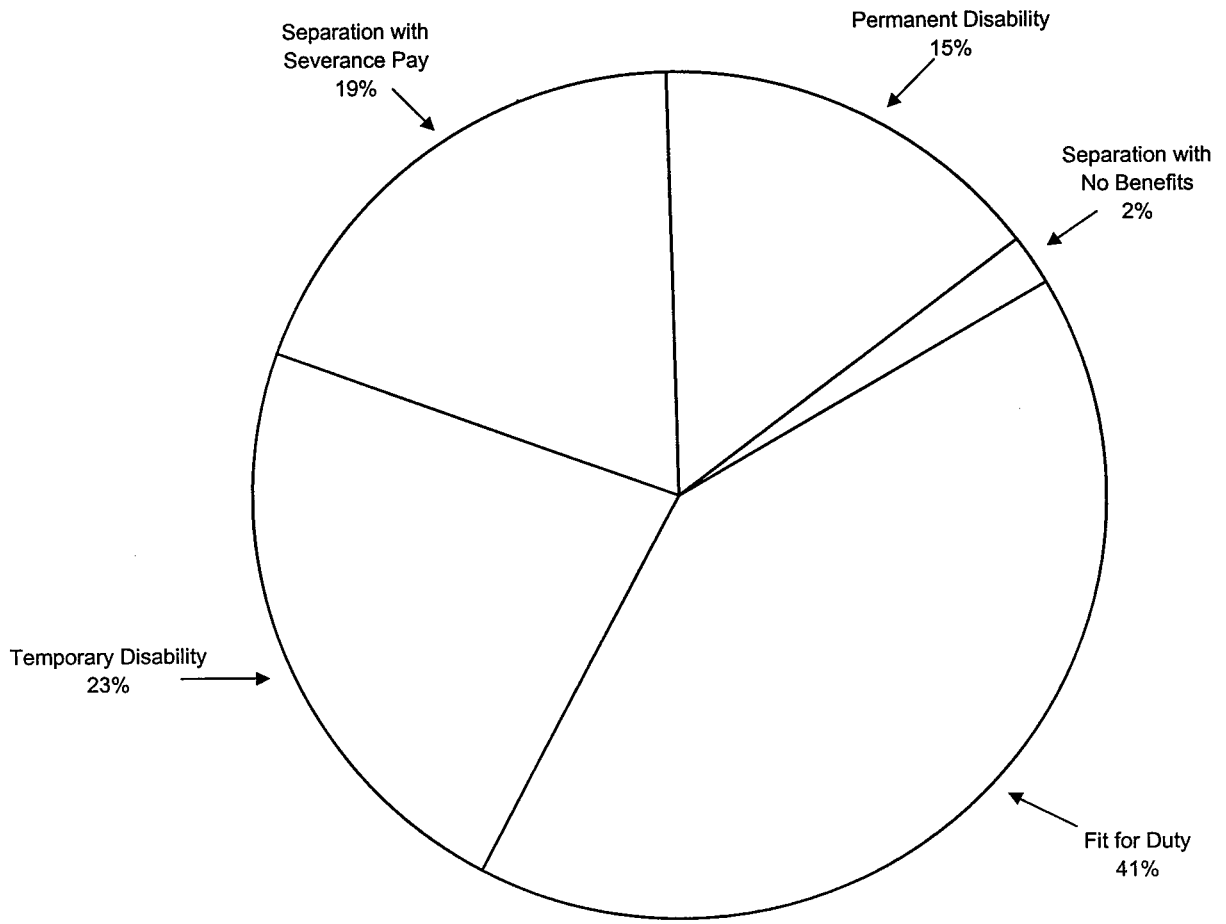
Source: Department of the Air Force, HQ Air Force Personnel Center, Randolph AFB, TX, 1995.

Figure 4-21

Figure 4-22 illustrates the distribution of 3,687 PEB disability claim dispositions for active duty Air Force personnel for FY 1994:

- Fit for duty—41%.
- Temporary disability—23%.
- Separation with severance pay—19%.
- Permanent disability—15%.
- Separation with no benefits—2%.

Air Force - Distribution (%) of Disability Claim Dispositions, FY 1994



n = 3,687 (active duty only).

Source: Department of the Air Force, HQ Air Force Personnel Center, Randolph AFB, TX, 1995.

Figure 4-22

4-9. Comparison of All Services

The military disability data for each service, presented in paragraphs 4-6 through 4-8, are compared and presented in three tables:

- Each service's distribution of disabilities by VASRD codes is compared in Table 4-9.
- Each service's FY 1994 distribution of dispositions (cases reviewed) is compared in Table 4-10.

Table 4-9. Distribution of Disabilities by Two-Digit VASRD Codes for Active Duty Personnel—A Comparison of All Services

Disabilities*	Distribution (%) of Disabilities			Conclusions
	Army FY 1994	Navy and Marine Corps FY 1995 (first 9 months)	Air Force FY 1994	
50-53: Musculoskeletal (Orthopedic)	53%	63%	22%	**Musculoskeletal (Orthopedic)** • Musculoskeletal (orthopedic) conditions are the leading cause of disability for all three services. • Musculoskeletal (orthopedic) conditions were a less important cause of disability in the Air Force. **Mental Disorders** • Mental disorders were the second leading cause of disability for all services.
90-95: Mental Disorders	14%	10%	21%	
80-89: Neurological/Convulsive	12%	9%	13%	
63-68: Systemic/Respiratory	7%	6%	14%	
70-71: Cardiovascular	3%	4%	6%	
77-79: Blood/Skin/Endocrine	3%	3%	12%	
72-73: Digestive	3%	2%	5%	
60-62: Visual/Auditory	2%	2%	2%	
75-76: Genitourinary/Gynecological	1%	1%	4%	

* Codes as defined in 38 CFR 4.

Table 4-10. Distribution of Dispositions (Cases Reviewed) for Active Duty Personnel for FY 1994—A Comparison of All Services

Disability Dispositions	Distribution (%) of Dispositions			Conclusions
	Army	Navy and Marine Corps	Air Force	
Separation with Severance Pay	43%	61%	19%	**Separation with Severance Pay** • The greatest percentage of cases evaluated by the Army, Navy, and Marine Corps received severance pay. Cases receiving separation with severance pay represent a one-time cost to the services. **Fit for Duty** • For the Air Force, the majority of disability cases evaluated were deemed fit for duty. **Temporary Disability** • Temporary disabilities accounted for 17% to 23% of all disability cases evaluated in the services. Upon reevaluation, these cases are reclassified as either fit for duty or permanent in nature. **Permanent Disability** • Permanent disabilities accounted for 4% to 15% of disability cases evaluated. The Navy and Marine Corps had the lowest percentage of permanent disabilities. The number of permanent disability cases accumulates over time and represents a continuous cost to the services.
Temporary Disability	17%	22%	23%	
Permanent Disability	15%	4%	15%	
Separation with No Benefits	4%	—	2%	
No Rating	—	6%	—	
Physical Fitness	—	2%	—	
Fit for Duty	21%	5%	41%	

4-10. Department of Defense

In 1990, 143,441 former service members received disability compensation payments. The average compensation for officers was $19,186, while the average compensation for enlisted service members was $7,133. Officers represented only 30% of the disabled population yet accounted for 54% of the total payments in 1990.

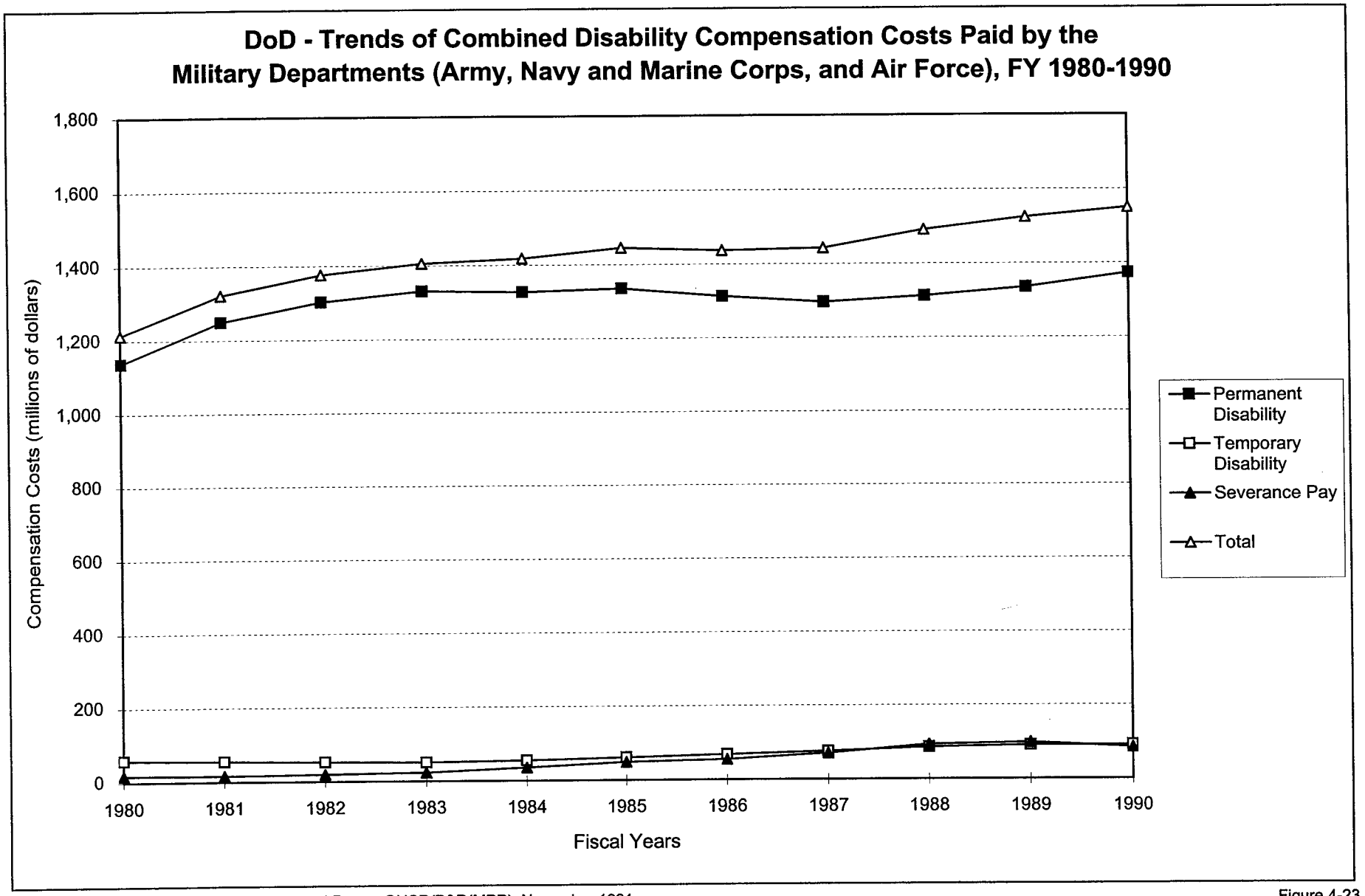
Figure 4-23 illustrates the trends of combined disability compensation costs paid by the military departments (Army, Navy and Marine Corps, and Air Force) for FY 1980-1990. Individuals with permanent disabilities are compensated for life. Individuals with temporary disabilities are compensated for a maximum of 5 years, though most ultimately receive permanent disability retirements. Severance pay is a one-time lump-sum payment. Costs displayed reflect only direct payments to individuals and are based on percent disability, base pay, and length of service.

Disability compensation costs paid directly by the services represent only about 10% of all such payments. Most disabled service members are, in fact, compensated by the VA and are not included in the data presented in Figure 4-23. In addition to the direct annual payments to individuals displayed here, the DoD Actuary estimates that the annual obligation for *future* disability payments is close to 1.5 billion dollars per year for *new* disability cases each year. A set aside of 1% of the total basic pay of all active duty service members is needed to cover this cost (personal communication, Office of the DoD Actuary, 20 August 1998).

Worksheet Data for Figure 4-23

Compensation Costs	DoD - Rates of Combined Disability Compensation Costs by Fiscal Year*										
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Permanent Disability	$1,137.0	$1,249.0	$1,303.0	$1,331.0	$1,327.0	$1,335.0	$1,313.0	$1,296.0	$1,312.0	$1,335.0	$1,373.0
Temporary Disability	$59.1	$55.7	$53.3	$51.4	$54.8	$61.1	$68.6	$75.9	$86.0	$90.9	$91.6
Severance Pay	$17.9	$16.4	$20.0	$23.4	$36.0	$49.4	$55.1	$70.7	$93.2	$98.6	$85.2
Total	$1,214.0	$1,321.1	$1,376.3	$1,405.8	$1,417.8	$1,445.5	$1,436.7	$1,442.6	$1,491.2	$1,524.5	$1,549.8

* Rates per 1,000 personnel calculated using denominator data in Table 1-7.



Source: Military Compensation Background Paper, OUSD/P&R(MPP), November 1991.

Figure 4-23

4-11. Veterans Administration

The VA disability data for December 1994 are presented in three parts:

- The VA Summary. The VA disability case and compensation data are summarized in tables 4-11 and 4-12.
- Magnitude of the Injury Problem Relative to Other Causes of Disability. The distribution of total disability cases by two-digit VASRD codes is displayed in Figure 4-24.
- Costs of Disabilities.
  - The distribution of disability compensation costs by two-digit VASRD codes is displayed in Figure 4-25.
  - The cost per case by two-digit VASRD codes is displayed in Figure 4-26.

Table 4-11. Overall Summary of VA Disability Case and Compensation Data, December 1994

Total Disability Cases	Disability Compensation Costs		Conclusions
	Total Cost Per Month	Average Cost Per Case Per Month	
2,221,547	$1.02 billion	$443	• The total cost to the military services for VA disability cases is about one billion dollars per month (see Figure 4-25). • These costs are in addition to the individual service-related costs. For example, the projected lifetime costs to the Army were $485 million for disability cases that occurred in FY 1993 (see Figure 4-8).

Table 4-12. Summary of VA Disability Case and Compensation Data by VASRD Codes, December 1994

Disabilities by VASRD Codes*	Total Disability Compensation Costs/Month			Conclusions
	(%)	Million Dollars	Average Cost Per Case	
50-53: Musculoskeletal (Orthopedic)	34%	$346.8	$322	**Musculoskeletal (Orthopedic)** • Musculoskeletal (orthopedic) conditions accounted for a third of disability costs in December 1994. **Mental Disorders** • Mental disorders accounted for a quarter of disability costs in December 1994. • Mental disorders and neurological/convulsive conditions accounted for the highest costs per case.
90-95: Mental Disorders	26%	$265.2	$794	
80-89: Neurological/Convulsive	10%	$102.0	$741	
70-71: Cardiovascular	8%	$81.6	$424	
60-62: Visual/Auditory	6%	$61.2	$353	
63-68: Systemic/Respiratory	5%	$51.0	$352	
77-79: Blood/Skin/Endocrine	5%	$51.0	$259	
72-73: Digestive	4%	$40.8	$305	
75-76: Genitourinary/Gynecological	2%	$20.4	$431	

* Codes as defined in 38 CFR 4.

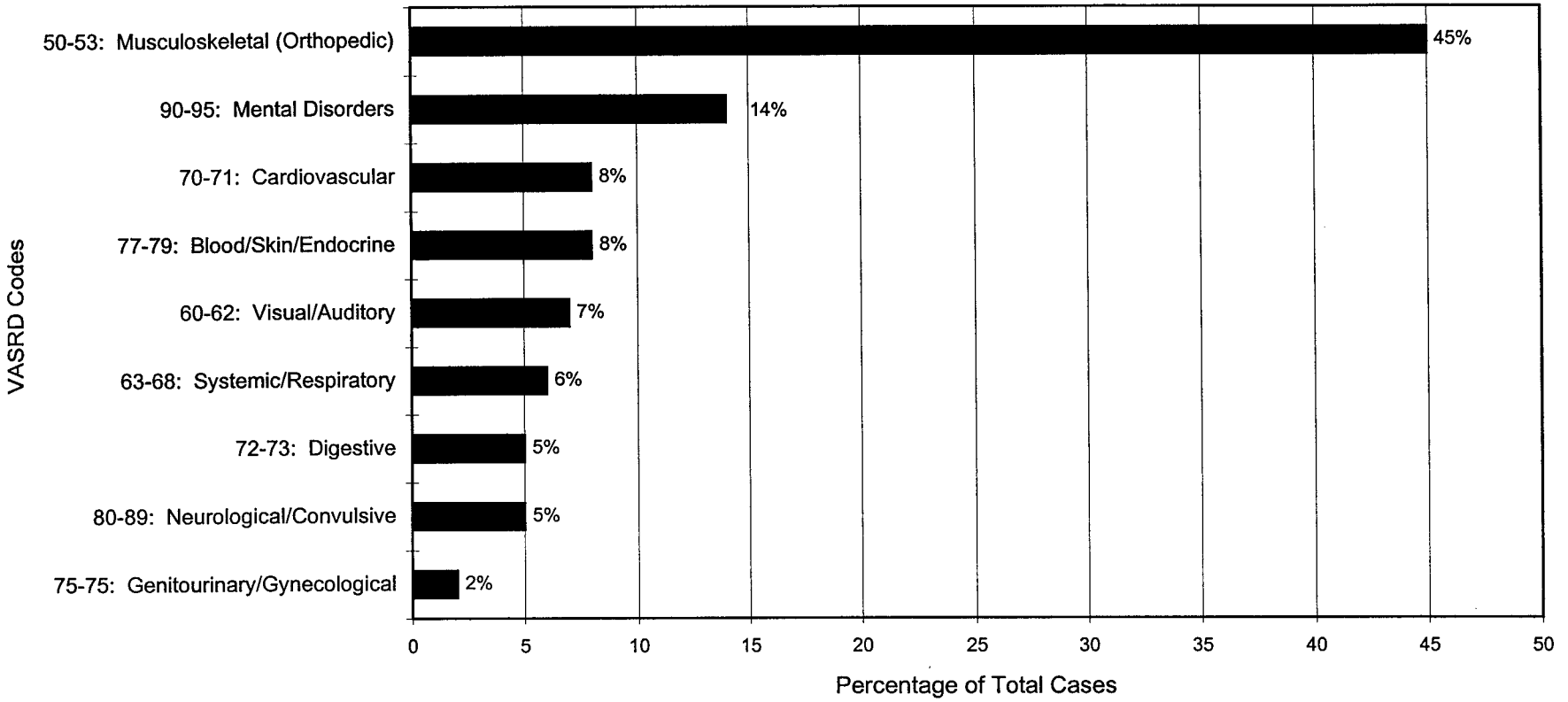
Magnitude of the Injury Problem Relative to Other Causes of Disabilities.

Figure 4-24 illustrates the distribution of total disability cases by two-digit VASRD codes for December 1994. The top five codes were:

- Musculoskeletal (orthopedic)—45%.
- Mental disorders—14%.
- Cardiovascular—8%.
- Blood/skin/endocrine—8%.
- Visual/auditory—7%.

Injuries/musculoskeletal (orthopedic) conditions account for nearly half of all disability cases.

Veterans Administration - Distribution (%) of Total Disability Cases by Two-Digit VASRD Codes,* December 1994



n = 2,221,547.
Other disabilities accounted for < 0.2% of total cases.
* VASRD codes as defined in 38 CFR 4.

Source: Department of Veterans Affairs, National Center for Veteran Analysis and Statistics, Washington, DC, VA Annual Report, 1995.

Figure 4-24

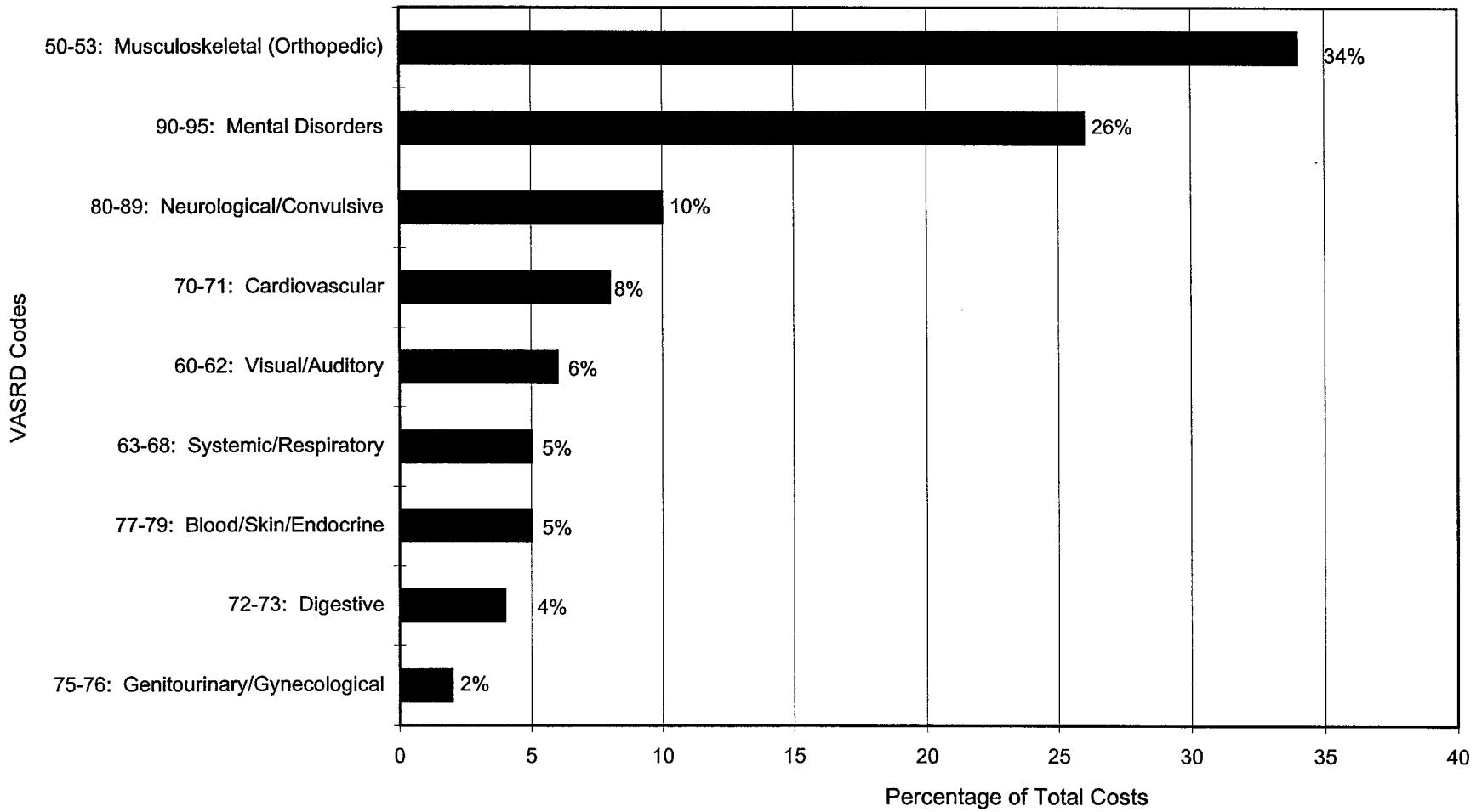
Costs of Disabilities.

Figure 4-25 illustrates the distribution of disability compensation costs by two-digit VASRD codes for December 1994. The top five codes were:

- Musculoskeletal (orthopedic)—34%.
- Mental disorders—26%.
- Neurological/convulsive—10%.
- Cardiovascular—8%.
- Visual/auditory—6%.

Musculoskeletal (orthopedic) conditions account for one third of all disability compensation costs.

Veterans Administration - Distribution (%) of Disability Compensation Costs by Two-Digit VASRD Codes,* December 1994



Total compensation cost is approximately $1.02 billion.
Other disabilities accounted for < 0.2% of total costs.
* VASRD codes as defined in 38 CFR 4.

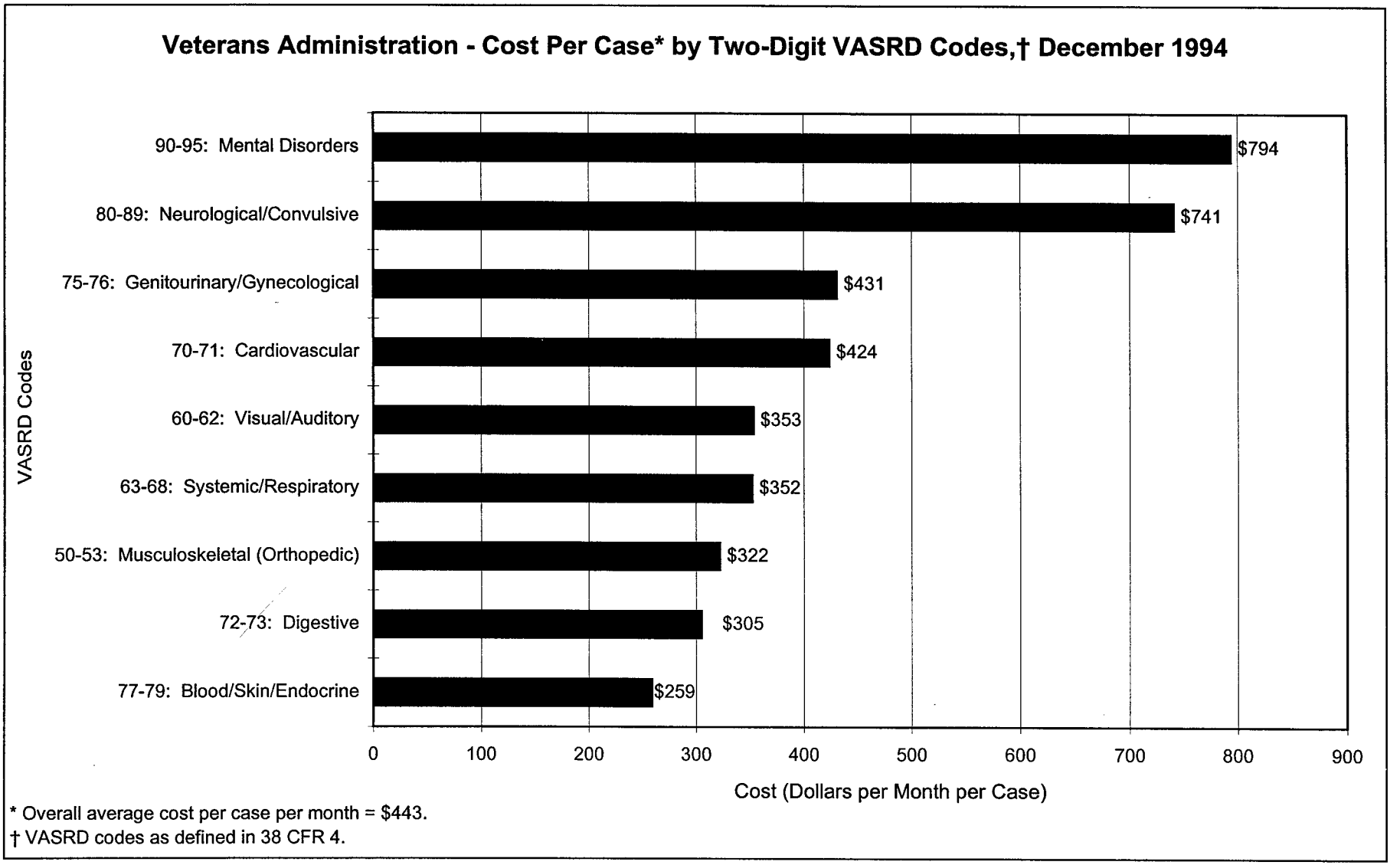
Source: Department of Veterans Affairs, National Center for Veteran Analysis and Statistics, Washington, DC, VA Annual Report, 1995.

Figure 4-25

Figure 4-26 illustrates the cost per case by two-digit VASRD codes for December 1994. The top five codes were:

- Mental disorders—$794 per month per case.
- Neurological/convulsive—$741 per month per case.
- Genitourinary/gynecological—$431 per month per case.
- Cardiovascular—$424 per month per case.
- Visual/auditory—$353 per month per case.

When the cost per case is calculated, there is a more than a three-fold difference between the most expensive cause of disability (mental disorders) and the least expensive cause of disability (blood/skin/ endocrine).



Source: Department of Veterans Affairs, National Center for Veteran Analysis and Statistics, Washington, DC, VA Annual Report, 1995.

Figure 4-26