

Disability Evaluation Systems Analysis and Research

Annual Report 2016

Prepared by
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Disability Evaluation Systems Analysis and Research Annual Report 2016

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Material has been reviewed by the Walter Reed Army Institute of Research. There is no objection to its publication. The opinions or assertions contained herein are the private views of the authors, and are not to be construed as official, or as reflecting true views of the Department of the Army or the Department of Defense.

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Executive Summary

The Accession Medical Standards Analysis and Research Activity (AMSARA) has provided the Department of Defense (DoD) with evidence-based evaluations of accession medical standards since 1996. As part of this ongoing research activity, data are collected from each service's Disability Evaluation System (DES). The disability evaluation is administered at the service level with each branch of service responsible for the evaluation of disability in its members. Variability exists in the type of disability data available among AMSARA databases for each service as a result of service level data collection on disability evaluations. In fiscal year (FY) 2009, AMSARA's mission was expanded to include audits and studies of existing DES per the request of the Office of Assistant Secretary of Defense, Health Affairs. This report describes analyses conducted in fiscal year 2016 of existing DES data collected for accessions and disability research through the end of FY 2015.

In the period from FY 2010 to FY 2015, data were collected on about 200,000 disability evaluations on over 150,000 service members. Over half of disability evaluations were for discharge from the Army. Regardless of service, the vast majority of disability evaluations were completed on enlisted active duty service members. The predominant demographic among personnel who undergo disability evaluation are male, white, and 20-29 years old at the time of disability evaluation.

For the first time since 2001, the year for which disability data were first available, musculoskeletal conditions were not the leading cause of disability in all services. In the Navy, psychiatric disorders were more prevalent (48%) than musculoskeletal conditions (43%) in 2015. Psychiatric conditions continued to increase in prevalence in 2015 relative to the previous five year period in the Army, Marine Corps, and Air Force but remained the second leading disability condition in these services. Musculoskeletal conditions, the most common medical condition associated with disability in the Army, Marine Corps, and Air Force, had a prevalence that ranged from 43% (Navy) to 70% (Marine Corps) of individuals discharged for disability. Psychiatric and neurological conditions were the next most common disability types in the Army, Marine Corps, and Air Force.

The particular conditions associated with each body system category vary by service. Dorsopathies, arthritis, and limitation of motion were the most common musculoskeletal conditions in all services. Posttraumatic stress disorder (PTSD) was the most common condition associated with psychiatric disability in the Army, Marine Corps, and Air Force while mood disorders were the most common psychiatric condition in the Navy. Traumatic brain injury (TBI) is the most common neurological condition among Marine Corps service members; paralysis was the most common type of neurological conditions in the Army, Navy, and Air Force.

The most common dispositions associated with disability evaluation (e.g., retirement or separation) in FY 2015 varied by service. In the Army and Air Force, permanent disability retirement was the most common disposition; whereas, being placed on the temporary disability retirement list in the Navy and separated with severance in the Marine Corps was the most common disposition. This is in contrast to the previous five year period when the most commonly assigned disposition in all services was separated with severance pay. In FY 2015, 10% was the most commonly assigned rating to disability in the Army and Marine Corps, 30% was the most commonly assigned disability ratings in the Air Force, and 50% was the most commonly assigned rating in the Navy. The proportion of evaluations resulting in a disability rating of 30% or higher and resulting in disability retirement in FY 2015 varied from 57% (Marine Corps) to 75% (Air Force).

The history of permanent medical disqualification prior to accession in service members evaluated for disability ranged from 7% (Air Force) to 11% (Army). The most common medical conditions at Military Entrance Processing Station (MEPS) medical examination in the disability population were similar to that of the military population as a whole exceeding weight and body fat standards (i.e. overweight or obesity) was the most common condition listed in MEPS examination records in both the disability evaluated population and the accessed population. Conditions listed in accession medical waiver applications among those evaluated for disability were also similar to those observed in the general applicant population. Hospitalization among service members evaluated for disability was most commonly associated with a psychiatric diagnosis. This is in contrast to hospitalizations among the general active duty population wherein injuries and fractures are more commonly associated with hospitalization.

Based on the data presented in this report and the variability observed in service disability evaluation system data, we present the following programmatic recommendations:

1. Include Medical Evaluation Board (MEB) International Classification of Disease 10th Revision (ICD-10) diagnoses in all disability evaluation records, allowing for more in-depth analyses of the specific medical conditions that result in disability evaluation, separation, and retirement.
2. Include laboratory and diagnostic information on the medical condition or injury that precipitated the disability evaluation so that severity of disability conditions can be objectively assessed.
3. Record each service member's Military Occupational Specialty (MOS) at the time of disability evaluation.
4. Include variables to indicate date of onset of symptoms or injury and date of initial diagnosis in service members evaluated for disability.
5. Expand the VASRD codes, particularly musculoskeletal codes, to reduce the utilization of analogous codes and provide more complete information on the disability condition.

Introduction to the Disability Evaluation System

The Disability Evaluation System (DES) process follows guidelines laid out by the Department of Defense (DoD) and public law. The disability evaluation is administered at the service level with each branch of service responsible for the specific evaluation. While inter-service differences exist, the disability evaluation process for all services includes two main components: an evaluation by the Medical Evaluation Board (MEB) to determine if a service member meets medical standards, and a determination by the Physical Evaluation Board (PEB) of a service member's ability to perform his/her military duties [1,2].

The disability evaluation process is described in Department of Defense Instruction (DoDI) 1332.18 and serves as the basis for each service's disability evaluation [3]. The process of disability evaluation begins when a service member is diagnosed with a condition or injury at a Military Treatment Facility (MTF). If the condition or injury is considered potentially disqualifying or significantly interferes with the service member's ability to carry out the duties of his/her office, grade, or rank, the case is referred to the MEB. Service members who meet medical standards or deemed capable of carrying out their duties are returned to duty [1-2,4-6]. Those unable to perform assigned duties are forwarded to an Informal Physical Evaluation Board (IPEB) for a medical record review, where a determination regarding a service member's fitness for continued military service is made. Members deemed fit are returned to duty, while those deemed unfit are discharged or placed on limited duty. In the event a service member is dissatisfied with the determination made by the IPEB, he/she can appeal to the Formal PEB (FPEB) and eventually to the final review authority (which varies by service, as detailed below) if the case is not resolved to the service member's satisfaction.

Key variables collected at each stage of disability evaluation are shown in Figure 1. At the MEB, each case is diagnosed and it is determined whether the service member is able to perform assigned duties [4-6]. Cases are forwarded to the IPEB if it is determined that the member cannot perform his/her assigned duties or that the member does not meet medical retention standards [4-6]. The IPEB panel must determine the member's fitness, disability rating using the appropriate Veterans Affairs Schedule for Rating Disabilities (VASRD) code for the disabling condition, the appropriate disposition for the case and whether the condition is combat related [1]. If a service member does not agree with the determination of the IPEB, the decision can be appealed to the FPEB, and eventually to the final reviewing authority (Service Secretary), where the determination of the FPEB is reviewed. The FPEB is an independent board from the IPEB and the decision may be different from that of the IPEB. The final reviewing authority can either concur with the FPEB or revise the determination.

Figure 2 and Figure 3 describe the Army and Navy/Marine Corps disability evaluation processes, respectively. Those who meet medical retention standards at the MEB or are able to continue military duties are returned to duty, while cases that do not meet medical retention standards, in the Army, or are not able to perform military duties, in the Navy and Marine Corps (no medical retention standards), are forwarded to the IPEB for further review. The IPEB makes a fit/unfit determination and the service member is either returned to duty (deemed fit) or medically discharged (deemed unfit) and assigned a disposition and rating. Dispositions assigned include fit, separated without benefits, separated with severance pay, Permanent Disability Retirement list (PDRL), or Temporary Disability Retirement list (TDRL).

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Ratings vary from 0-100% disability. Those assigned a disposition of separated without benefits are either unrated or rated 0%. Separated with severance pay carries a rating varying from 0% to 20%; while permanent and temporary disability retirement carry ratings of 30% or higher.

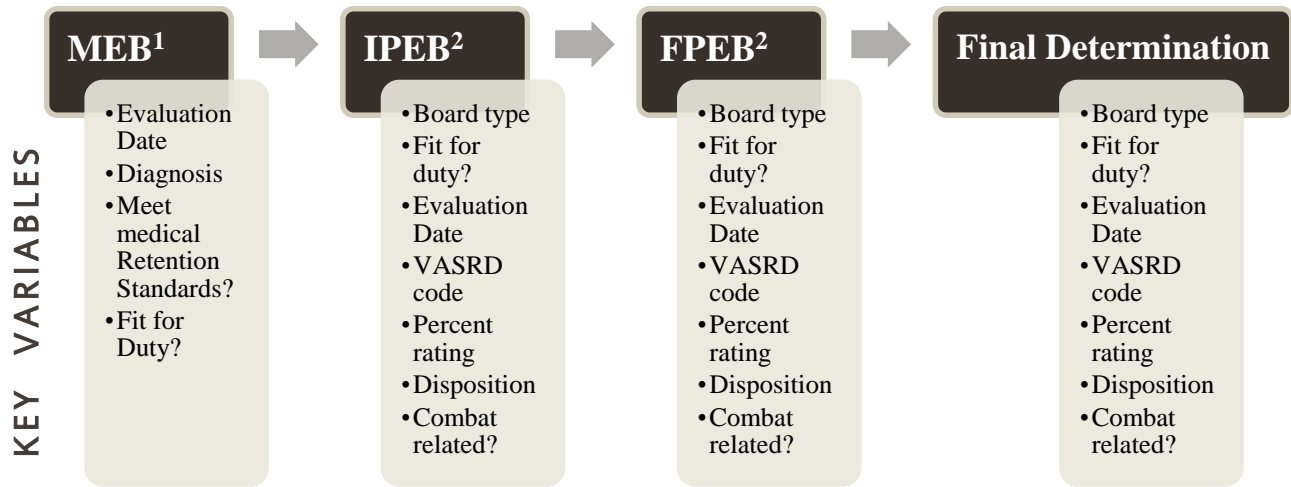
The service member can appeal the IPEB determinations of disposition and rating, though appeals to the FPEB may be denied if a service member is deemed fit by the IPEB. Following service member appeal of the IPEB, the case is reviewed by the FPEB or reconsidered by the IPEB, again determining the fitness of the service member. An Army service member can appeal the FPEB determination to the United States Army Physical Disability Authority (USAPDA); the USAPDA is the final appeal authority before separation or retirement. A Navy or Marine Corps service member can appeal an FPEB determination to the Secretary of the Navy; the Secretary of the Navy is also a final appeal authority before separation or retirement from service. In the Navy and Marine Corps, all discharge recommendations are forwarded to the Service Headquarters where the recommendation for discharge can be accepted or denied (Figure 3). Both Services (Army and Navy) have a Board for Correction of Military Records which can be petitioned once a service member has left military service.

The Air Force disability evaluation process is described in Figure 4. This process is generally similar to that of the other services; disability evaluation begins with the MEB where cases are evaluated against medical retention standards and those not meeting retention standards are referred to the IPEB [4]. If a service member disagrees with the decision of the IPEB, it can be appealed to the FPEB, and eventually to the Secretary of the Air Force. However, in contrast to other services, MEB cases not forwarded to the IPEB can be appealed through the Air Force Surgeon General to determine if a case should be forwarded to the FPEB.

The objective of this report is to summarize the content of existing databases, to provide a basis for studies of the prevalence of disability in the U.S. military and studies of risk factors for disability evaluation, separation, and retirement, overall and for specific disability condition types. Though the general process for evaluating service members for disability discharge is similar across services, each service completes disability evaluations and collects and maintains disability evaluation data independent of one another. Small variations are present in the disability evaluation process across services and in the types of data collected across services.

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Figure 1: Key Variables Collected at Each Stage of Disability Evaluation



1. Medical Evaluation Board (MEB): An informal board of no less than two military physicians.

2. Informal Physical Evaluation Board (IPEB)/ Formal Physical Evaluation Board (FPEB): A three person administrative panel consisting of a presiding officer, personnel management officer and a medical member.

Figure 1a: Example of Disability Evaluation Process in the Army

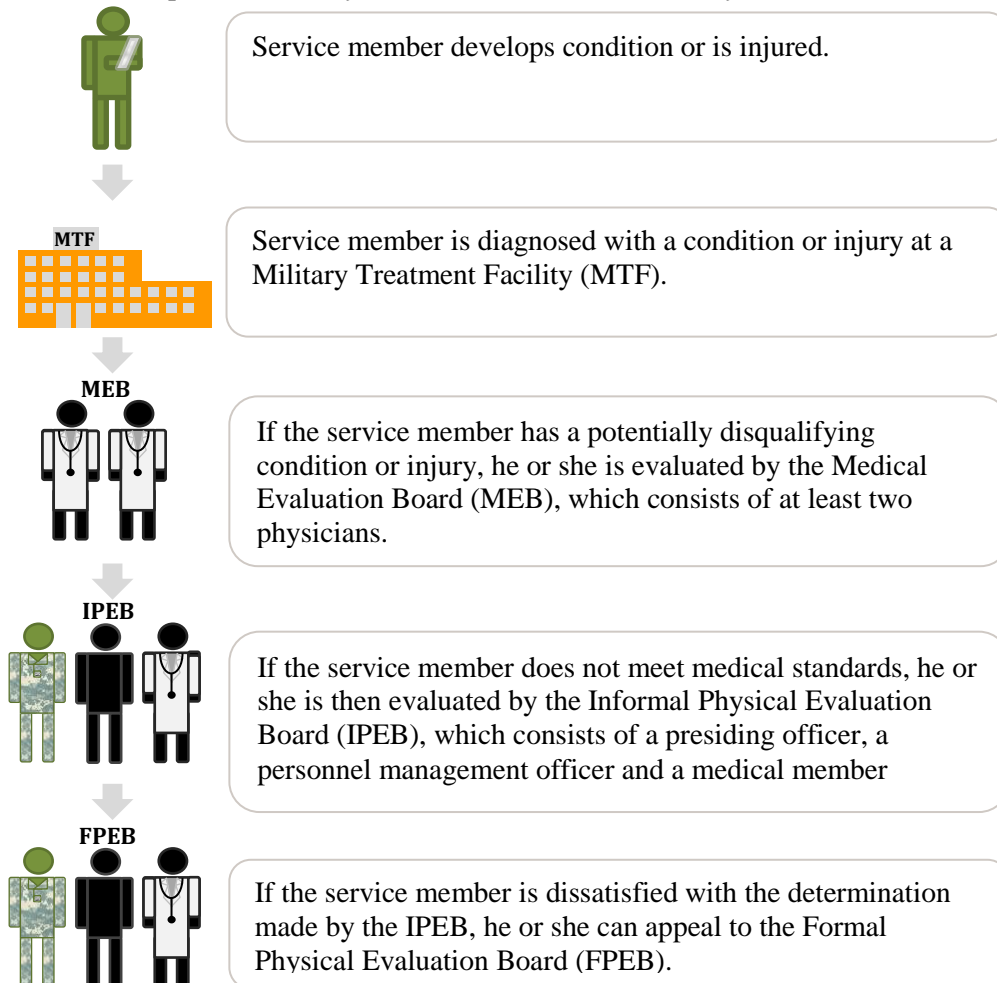


Figure 2: Disability Evaluation Process in the Army

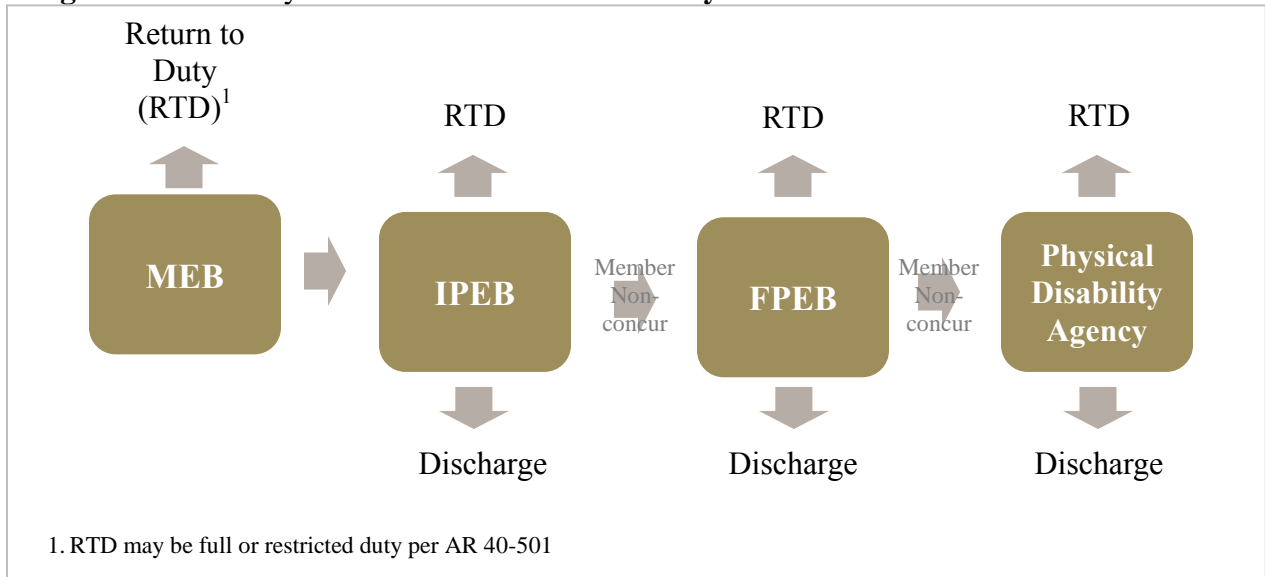


Figure 3: Disability Evaluation Process in the Navy and Marine Corps¹

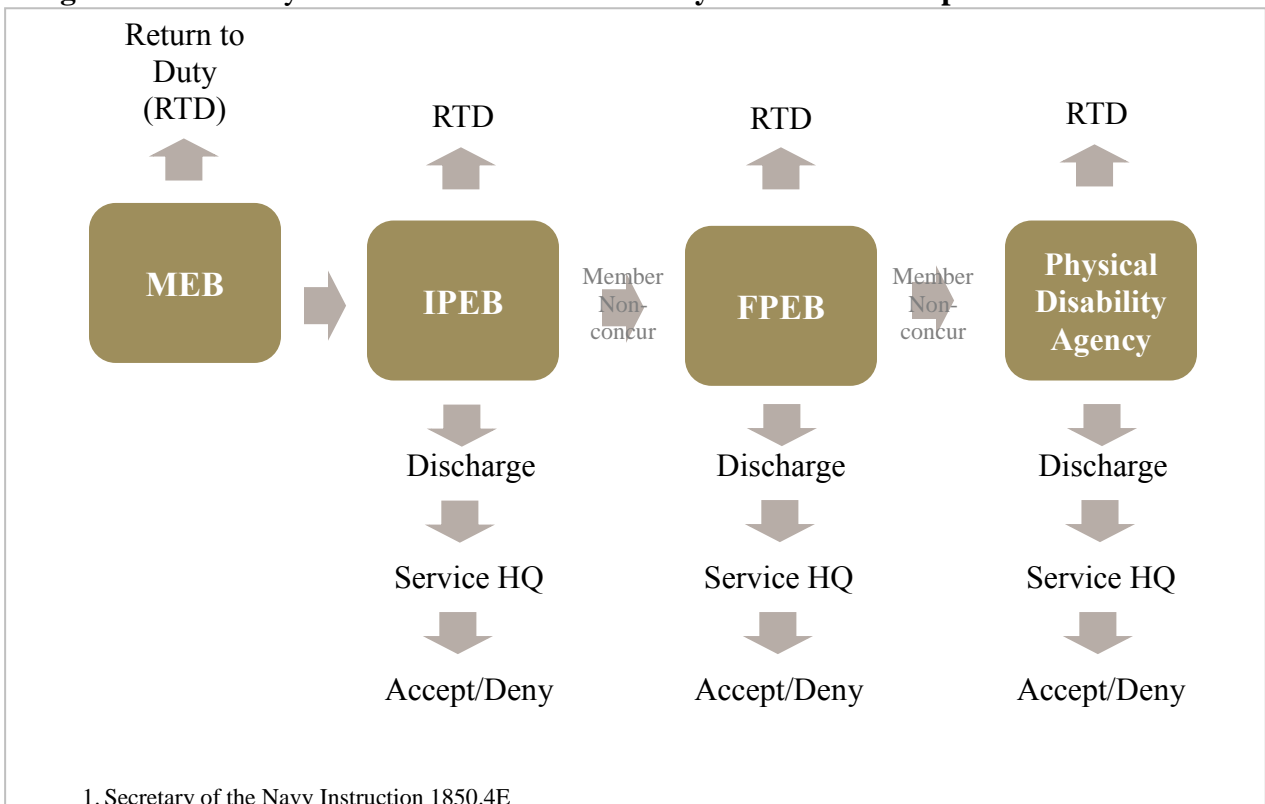
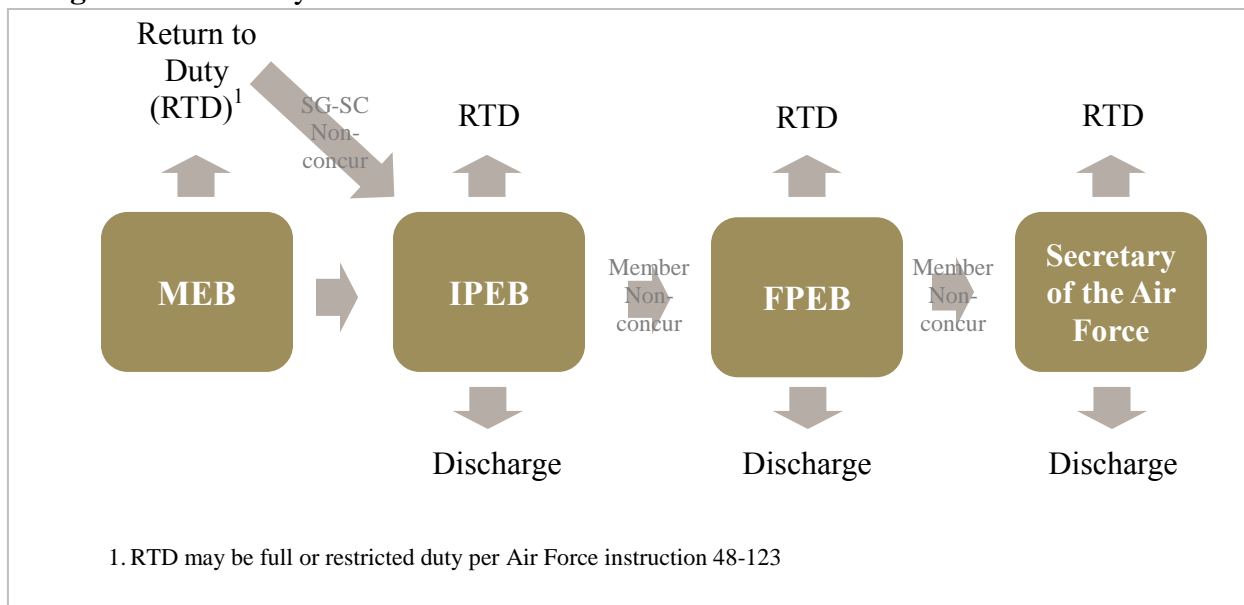


Figure 4: Disability Evaluation in the **Air Force**



Methods

Study Population

Table 1 shows the characteristics of the Disability Evaluation System (DES) datasets by service. Databases maintained by the services may contain information not sent to AMSARA. Disability evaluation data were available for all services for enlisted and officers as well as active duty and reserve components. However, the types of records received from each service varied. All Physical Evaluation Board (PEB) evaluations for separately unfitting conditions in the Army, Navy, and Marine Corps were transmitted to AMSARA for all years in which data are available. Air Force disability data only includes disability retirements and separations in years prior to FY 2007. In addition, while Army and Navy/Marine Corps send AMSARA multiple disability evaluations for individuals for all years in which data are available, multiple disability evaluations for the Air Force are not available.

TABLE 1: DES DATABASE CHARACTERISTICS BY SERVICE

	Army	Navy/Marine Corps	Air Force
Years received	1990-2015	2001-2015	2007-2015
Type of evaluations included	All PEB	All PEB	All but TDRL Re-evaluations
Ranks included	Enlisted, Officer	Enlisted, Officer	Enlisted, Officer
Components included	Active Duty, Reserve	Active Duty, Reserve	Active Duty, Reserve
Multiple evaluations per individual?	Yes	Yes	One evaluation per year

TDRL: Temporary Disability Retirement List

To create analytic files for this report, service-specific databases were restricted to unique records with a final disposition date between October 1, 2010 and September 30, 2015. All ranks and components were included in these analyses. Multiple records were available at the individual level, defined using Social Security Number (SSN), for all services. When *individuals* were the unit of analysis, the last record per SSN was retained; when *evaluations* were the unit of analysis, multiple records were used per SSN. Unique evaluations were defined by SSN and date of final disposition. Therefore, an individual may appear more than once in the source population when evaluations are the unit of analysis.

Variables

Table 2 shows the key variables included in each DES dataset received by AMSARA. Additional variables are included in each service's database, but not presented in this report.

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TABLE 2: DES KEY VARIABLES

Variables	Army	Navy/Marine Corps	Air Force
Demographic Characteristics¹			
Age/Date of Birth	Y	Y	N
Sex	Y	Y	FY 2014-15
Race	Y	Y	N
Education	N	N	N
Rank	Y	Y	Y
Component	Y	Y	Y
MOS	Y	FY 2010-15	N
MEB			
Date of MEB Evaluation	FY 1990-2012, 2014-15	Y	Y
MEB diagnosis	N	Y	N
PEB			
Board type	N	Y	Y
Date of PEB Evaluation	Y	Y	Y
VASRD	Y	Y	Y
VASRD Analog	Y	Y	Y
Percent Rating	Y	Y	Y
Disposition	Y	Y	Y
Disposition Date	Y	Y	Y
Combat			
Combat Related	Y	Y	FY 2010-15
Armed Conflict	Y	Y	FY 2010-15
Instrumentality of War	FY 1990-2012	N	FY 2010-15

MOS: Military Occupational Specialty; MEB: Medical Evaluation Board; PEB: Physical Examination Board; VASRD:

1. Demographic characteristics at time of disability evaluation.

Demographic Characteristics

Demographic variables (age, date of birth, sex, race, rank, and component) are available in all databases except Air Force databases. Education was not available in any DES database and Military Occupation Specialty (MOS) was available only for Army data. AMSARA utilizes demographic variables from other sources, such as Defense Manpower Data Center (DMDC) personnel records and MEPS application records, in the analysis of demographic variables. These sources can be used in combination with disability databases to obtain information on certain constant demographic characteristics (i.e. date of birth, race, sex) for individuals who have personnel and application records in AMSARA databases. Demographic characteristics of individuals evaluated for disability in the Air Force are obtained using DMDC and Military Entrance Processing Station (MEPS) records. Characteristics which can vary over time, such as

education, rank, component, and MOS, are most valuable when collected at the time of disability evaluation.

MEB variables

Date of Medical Evaluation Board (MEB) evaluations is present in all disability databases prior to FY 2013. Army disability data do not contain MEB dates for FY 2013, the first year of data collected under a new data reporting system, but were available again starting in FY 2014 for the Army. MEB diagnosis is only available for Navy/Marine Corps disability evaluations. For Navy/Marine Corps evaluations, the MEB diagnosis is recorded as a text field rather than as a code. Recoding of this field into ICD-9 codes by a nosologist will be necessary before further analysis of this field can be conducted.

PEB variables

All AMSARA datasets contain several key variables regarding the PEB evaluation including: board type, date of PEB, Veterans Affairs Schedule for Rating Disabilities (VASRD) and analogous codes, percent rating, disposition, and disposition date. VASRD codes, specific for the unfitting condition, and analogous coding (VASRD code that best approximates the functional impairment rendered by a medical condition for which there is no specific VASRD code) are used to define unfitting medical conditions that prompted the disability evaluation. These codes are not diagnostic codes, but are derived from the MEB diagnosis, and specify criteria associated with disability ratings and determine disability compensation. The number of VASRD codes assigned to each diagnosis varies by service. Prior to FY 2013, Army evaluations allowed for each condition to have one VASRD code and one analogous code with up to four conditions included per evaluation. Starting in FY 2013, up to five VASRD codes can be assigned to an unfitting condition and the number of conditions an individual can be rated for is not restricted. Up to three VASRD codes may be used for the same condition in the Air Force with no limit on the number of conditions per evaluation. In the Navy and Marine Corps, the number of VASRD codes per condition is unlimited and there is no limit to the number of conditions that can be assigned to an evaluation.

There are two general disposition types for members determined unfit for duty:

1. Separation: Can be further classified as separated with severance pay and separated without benefits.
 - Severance pay is given when a service member's condition is found to be unfitting and assigned a disability rating between 0 and 20 percent.
 - Separation without benefits occurs when a service member is found unfit for duty, but the condition is determined to have occurred as a result of misconduct, negligence, or if the service member has less than eight years of service and the condition is the result of a medical condition that existed prior to service.
2. Disability retirements: Can be classified as either permanent disability retirement or temporary disability retirement.
 - Permanent disability is assigned when the service member is found unfit, and either has a length of service greater than 20 years or has a disability rating that is 30 percent or higher, and the condition is considered unlikely to improve or likely to worsen.

- Temporary disability is assigned when a service member is deemed unfit for continued service and either has a length of service greater than 20 years or has a disability percent rating of 30 percent or higher. Service members placed on the temporary disability retirement list (TDRL) are re-evaluated every 6-18 months, for up to five years following initial placement on the TDRL. Once the unfitting condition is considered stable for purposes of rating by the PEB, the case is assigned a final disposition and percent rating. Therefore, a re-evaluation may result in a service member returning to duty or converting to another disposition, though most on the TDRL eventually convert to permanent disability retired [1].

Combat Variables

Data received by AMSARA from the Army, Navy, and Marine Corps include variables regarding combat (Table 2); the values of which are described in the DoDI 1332.18 [6]. Though the Air Force data includes similar variables, these variables are not well populated and are unreliable for research purposes. Combat variables are used as a part of the percent rating determination taking into account if the disability was caused by, exacerbated by, or had no relation to combat experiences.

Combat related is the standard that covers those injuries and diseases attributable to the special dangers associated with armed conflict or the preparation or training for armed conflict [6,7].

Armed conflict is described as the physical disability being a disease or injury incurred in the line of duty as a direct result of armed conflict. There must be a definite causal relationship between the armed conflict and the resulting unfitting disability. Armed conflict includes a war, expedition, occupation of an area or territory, battle, skirmish, raid, invasion, rebellion, insurrection, guerrilla action, riot, or any other action in which service members are engaged with a hostile or belligerent nation, faction, force, or terrorists. Armed conflict may also include such situations as related to prisoner of war or detained status [6,7].

Instrumentality of war is described as a vehicle, vessel, or device designed primarily for military service and intended for use in such service at the time of the occurrence of the injury. There must be a direct causal relationship between the use of the instrumentality of war and the disability, and the disability must be incurred incident to a hazard or risk of the service [6,7].

Other Data Sources

Applications for Military Service

AMSARA receives data on all applicants who undergo an accession medical examination at any of the 65 MEPS sites. These data, provided by US Military Entrance Processing Command (USMEPCOM) Headquarters (North Chicago, IL), contains several hundred demographic, medical, and administrative elements on enlisted applicants for each applicable component (regular, reserve, National Guard) of each service (Air Force, Army, Marine Corps, and Navy). It also includes records on a relatively small number of officer recruit applicants and other non-applicants receiving periodic physical examinations.

Accession Medical Waivers

AMSARA receives records on all recruits considered for an accession medical waiver, i.e. those who received a permanent medical disqualification at the MEPS and sought a waiver for that

disqualification. Each service is responsible for its own waiver decisions about applicants, and information on these decisions is generated and provided to AMSARA by each service waiver authority. Specifically, AMSARA receives medical waiver data annually from Air Education Training Command (Lackland AFB, TX) for the Air Force; US Army Recruiting Command (USAREC, Fort Knox, KY) for the Army; US Navy Bureau of Medicine and Surgery (BUMED, Washington, DC) for the Marine Corps; the Office of the Commander, US Navy Recruiting Command (Millington, TN) for the Navy.

Accession and Discharge Records

The DMDC provides data on individuals entering military service and on individuals discharged from military service. Data are provided to AMSARA annually for all accessions into service and discharges from military service.

Hospitalizations

AMSARA receives Military Health System (MHS) direct care hospitalization data annually from the MHS data repository. Information includes admissions of active duty officers and enlisted personnel as well as medically eligible reserve component personnel to any military hospital.

Descriptive Statistics for All Disability Evaluations

Service-specific characteristics of DES records are shown in Table 3. For the purpose of these analyses and throughout this report, records are defined as units of a dataset (i.e. lines of data). Changes to the data collection system used by the US Army Physical Disability Agency (USAPDA), which administers disability evaluations in the Army, were made during 2013 which resulted in an increase in the number of observations sent to AMSARA. Prior to 2013, Army disability evaluation records contained multiple conditions for each evaluation. In 2013, each Army disability evaluation record represented one condition. Disability records from the Army and Air Force contain multiple conditions per individual while in the Navy and Marine Corps data, the number of records is representative of the number of conditions adjudicated. Evaluations represent an individual's unique encounter with the Physical Evaluation Board (PEB), defined using SSN and date of final disposition. Therefore, each individual in this report may have more than one evaluation if they had multiple encounters for disability evaluation.

As the largest service, the Army has more records, evaluations, and individuals evaluated for disabilities than the other services. The highest number of records per evaluation is found in the Navy (3.2) and Marine Corps (3.8). Across services, the average number of evaluations per service member is only slightly higher in the Marine Corps (1.4) and Army (1.2) relative to the Air Force (1.1) and Navy (1.0). The average number of VASRD codes assigned, per evaluation, is highest in the Army (2.6) and lower in the three other services (1.7-1.9)

Observed differences in the number of records, individuals, and evaluations can be partially accounted for by the differences in the types of records received by AMSARA from each service. While the Army sends data on only those who were evaluated by the PEB, Navy/Marine Corps sends data on any individual evaluated by the PEB including those without any unfitting conditions. The inclusion of all PEB evaluations contributes a larger proportion of individuals without VASRD codes in the Navy/Marine Corps, and thus a lower average across all records. The TDRL re-evaluations are not included in the Air Force data which causes average evaluations per individual to be underestimated.

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TABLE 3: CHARACTERISTICS OF DES EVALUATIONS: FY 2010-2015

	Army	Navy	Marine Corps	Air Force
Total records	198,638	68,601	97,125	24,511
Total individuals	104,491	18,229	20,942	21,565
Total evaluations	130,064	21,513	25,892	23,526
Average records per evaluation	1.5	3.2	3.8	1.0
Average evaluations per individual	1.2	1.0	1.4	1.1
Non-TDRL	1.2	1.0	1.0	-
TDRL	1.1	1.5	1.7	-
Average VASRD/evaluation	2.6	1.7	1.8	1.9

Total DES evaluations are shown by service and FY in Table 4. Individuals may be counted more than once in this table due to TDRL re-evaluations. Between 2010 and 2012, the number of disability evaluations per year remained relatively stable in the Army. However, there was a large increase in the number of disability evaluation in 2013. No concurrent increase was observed in the other services. In fact, the number of disability evaluations in both the Navy and Marine Corps decreased slightly in 2013 relative to 2012 before returning to previous levels in 2014. The number of evaluations between 2010 and 2013 was relatively stable in the Air Force with a small increase observed in 2014 that continued in 2015.

TABLE 4: TOTAL DES EVALUATIONS BY SERVICE AND FISCAL YEAR: FY 2010-2015

	Army		Navy		Marine Corps		Air Force	
	n	%	n	%	n	%	n	%
2010	14,788	11.4	3,061	14.2	3,418	13.2	3,624	15.4
2011	14,123	10.9	2,826	13.1	3,764	14.5	3,814	16.2
2012	15,859	12.2	4,078	19.0	5,485	21.2	3,516	14.9
2013	23,938	18.4	3,357	15.6	4,173	16.1	3,626	15.4
2014	27,153	20.9	3,895	18.1	4,460	17.2	4,379	18.6
2015	34,203	26.3	4,296	20.0	4,592	17.7	4,567	19.4
Total	130,064		21,513		25,892		23,526	

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Estimates of the rate of disability evaluation per total military population from 2010 to 2015 are shown in Table 5 by service and demographic characteristics. Rates from 2015 are compared to the previous five years in aggregate. Because demographic information on Air Force disability evaluation is collected from application, accession, and loss files, and not available for all disability evaluations, the rates of evaluation by demographic characteristics may be underestimated in the Air Force. The overall rate of disability evaluation per 1,000 service members was highest in the Army and Marine Corps during both 2015 and the previous five years. In the Army, the rate of disability evaluation has increased in 2014 (22.3 per 1,000) relative to the previous five years (14.3 per 1,000). Rates of disability evaluation in the remaining three services are similar in 2015 to the rate of disability evaluation in the previous five year period. In all services except the Army, the rate of disability evaluation was higher in females than males, both in 2015 and in the previous five years. Rates of disability evaluation were the highest in the 25-29 age group in the period from 2010 to 2014 in all services. In 2015, rates of disability evaluation were highest among those over 40 in the Army and were highest in the 25-29 age group in all other services though the disability evaluation rates were similar in the 30-34 age group in these services. Large increases in the rate of disability evaluation were observed in the Army in 2015 relative to the previous five years across all demographic groups.

TABLE 5: RATE OF DES EVALUATION PER 1,000 SERVICE MEMBERS (TOTAL SERVICE POPULATION) BY DEMOGRAPHIC CHARACTERISTICS AND SERVICE: FY 2010-2014 VS. FY 2015¹

	2010-2014								2015							
	Army		Navy		Marine Corps		Air Force ²		Army		Navy		Marine Corps		Air Force ²	
	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate
Sex																
Male	65,736	14.2	11,216	7.1	15,865	14.4	11,793	5.9	18,999	22.0	2,154	6.4	2,764	13.4	2,839	7.4
Female	13,112	15.1	3,924	11.7	1,832	23.4	5,436	10.9	4,090	23.8	920	12.8	469	29.9	1,193	12.2
Age at Evaluation																
<20	672	1.9	168	1.9	621	4.3	412	4.7	89	1.1	50	2.6	98	3.4	26	1.6
20-24	14,214	11.6	3,724	6.8	7,320	13.7	4,114	7.2	3,323	12.0	858	8.0	1,327	12.8	772	7.2
25-29	21,020	20.8	4,285	9.4	5,795	23.2	4,259	7.3	5,540	24.3	871	9.4	1,012	24.0	1,032	9.1
30-34	15,183	22.8	2,933	9.5	2,317	19.9	3,008	6.9	4,991	30.2	534	8.4	486	22.0	740	7.9
35-39	9,805	20.3	1,968	8.2	1,019	13.4	2,180	6.6	3,253	28.4	356	7.7	187	13.5	444	6.6
≥ 40	17,880	18.5	1,991	7.3	534	8.7	2,742	5.5	5,854	33.9	379	7.4	112	9.6	472	5.5
Race																
White	56,918	14.3	9,300	7.8	12,017	12.8	12,896	6.9	12,942	17.7	1,757	7.5	2,029	11.5	2,956	8.3
Black	13,377	12.9	2,444	7.4	1,290	10.7	2,675	7.9	3,545	17.1	480	7.4	253	10.8	547	8.4
Other	8,082	30.6	3,168	9.2	4,138	63.1	1,484	8.4	6,438	107.3	606	9.0	707	53.9	436	6.3
Rank																
Enlisted	74,539	16.2	14,072	8.9	17,179	16.3	16,039	7.9	21,362	24.9	2,853	9.1	3,131	15.9	3,708	9.5
Officer	4,355	4.9	1,032	3.0	461	3.6	1,468	3.1	1,719	9.7	223	3.2	77	3.1	324	3.6
Component																
Active	60,182	22.3	14,289	8.9	16,698	16.9	14,943	9.2	17,251	35.4	2,915	9.0	3,114	17.0	3,172	10.3
Reserve/NG	18,644	6.7	862	2.7	1,008	5.1	2,575	2.9	5,838	10.6	163	2.8	122	3.1	862	5.0
Total Individuals	78,899	14.3	15,151	7.9	17,706	15.0	17,531	7.0	23,089	22.3	3,078	8.1	3,236	14.6	4,034	8.4

1. Data on total service population was generated using data from Defense Manpower Data Center (DMDC) queries and represents the total number of service members with each demographic as of 30 September of the fiscal year in question. This data does not include the number of service members who have missing demographic data; therefore, rates for service members that were evaluated for disability could not be calculated.

2. Demographic information is not provided for Air Force disability evaluations and is appended using accession and applicant databases. Because applicant and accession data are not available for a large percentage of Air Force disability evaluations rates presented by age, sex, and race are likely underestimated and should not be compared with the corresponding rates in other services.

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Characteristics of individuals who underwent disability evaluation from 2010 to 2015 are shown in Table 6, comparing 2015 evaluations to 2010 through 2014 in aggregate. The vast majority of disability evaluations are performed on enlisted, active component personnel, regardless of service. Army and Air Force had higher percentages of reserve component disability evaluations, likely due to the inclusion of National Guard service members not present in the Navy and Marine Corps reserve component. In addition, most individuals evaluated for disability were male, aged 20-29 at the time of disability evaluation, and white, in all four services. No substantial changes in the demographic composition of the disability evaluated population were observed in 2015 relative to the previous five years, in any service.

TABLE 6: DEMOGRAPHIC CHARACTERISTICS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: FY 2010-2014 vs. FY 2015

	2010-2014								2015							
	Army		Navy		Marine Corps		Air Force		Army		Navy		Marine Corps		Air Force	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Sex																
Male	65,736	83.3	11,216	74.0	15,865	89.6	11,793	67.3	18,999	82.3	2,154	70.0	2,764	85.4	2,839	70.4
Female	13,112	16.6	3,924	25.9	1,832	10.3	5,436	31.0	4,090	17.7	920	29.9	469	14.5	1,193	29.6
Missing ¹	51	0.1	11	0.1	9	0.1	301	1.7	0	-	4	0.1	3	0.1	2	<0.1
Age																
<20	672	0.9	168	1.1	621	3.5	412	2.4	89	0.4	50	1.6	98	3.0	26	0.6
20-24	14,214	18.0	3,724	24.6	7,320	41.3	4,114	23.5	3,323	14.4	858	27.9	1,327	41.0	772	19.1
25-29	21,020	26.6	4,285	28.3	5,795	32.7	4,259	24.3	5,540	24.0	871	28.3	1,012	31.3	1,032	25.6
30-34	15,183	19.2	2,933	19.4	2,317	13.1	3,008	17.2	4,991	21.6	534	17.3	486	15.0	740	18.3
35-39	9,805	12.4	1,968	13.0	1,019	5.8	2,180	12.4	3,253	14.1	356	11.6	187	5.8	444	11.0
≥ 40	17,880	22.7	1,991	13.1	534	3.0	2,742	15.6	5,854	25.4	379	12.3	112	3.5	472	11.7
Missing ¹	125	0.2	82	0.5	100	0.6	816	4.7	39	0.2	30	1.0	14	0.4	548	13.6
Race																
White	56,918	72.1	9,300	61.4	12,017	67.9	12,896	73.6	12,942	56.1	1,757	57.1	2,029	62.7	2,956	73.3
Black	13,377	17.0	2,444	16.1	1,290	7.3	2,675	15.3	3,545	15.4	480	15.6	253	7.8	547	13.6
Other	8,082	10.2	3,168	20.9	4,138	23.4	1,484	8.5	6,438	27.9	606	19.7	707	21.8	436	10.8
Missing ¹	522	0.7	239	1.6	261	1.5	476	2.7	164	0.7	235	7.6	247	7.6	95	2.4
Rank		0.0														
Enlisted	74,539	94.5	14,072	92.9	17,179	97.0	16,039	91.5	21,362	92.5	2,853	92.7	3,131	96.8	3,708	91.9
Officer	4,355	5.5	1,032	6.8	461	2.6	1,468	8.4	1,719	7.4	223	7.2	77	2.4	324	8.0
Missing ¹	5	<0.1	47	0.3	66	0.4	24	0.1	8	<0.1	2	0.1	28	0.9	2	0.0
Component																
Active	60,182	76.3	14,289	94.3	16,698	94.3	14,943	85.2	17,251	74.7	2,915	94.7	3,114	96.2	3,172	78.6
Reserve/NG	18,644	23.6	862	5.7	1,008	5.7	2,575	14.7	5,838	25.3	163	5.3	122	3.8	862	21.4
Missing ¹	73	0.1	0	-	0	-	13	0.1	0	-	0	-	0	-	0	-
Total Individuals	78,899		15,151		17,706		17,531		23,089		3,078		3,236		4,034	

1. Service members missing on demographic characteristics are included in the total.

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The distribution of unfitting conditions, in individuals discharged with a service connected disability, by disability body system for each service, is shown in Tables 7A through 7D. Classification of an individual's unfitting conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category, if an individual was evaluated for more than one condition. Counts presented in each table represent the number of individuals evaluated for one or more conditions in a given body system. Percentages represent the percent of individuals that had a disability in a given body system among all individuals discharged with a service connected disability and may exceed 100% as individuals may have conditions in multiple body systems.

In all services, except the Navy, musculoskeletal conditions were the most common type of disability evaluation, followed by psychiatric and neurological conditions. In the Navy, psychiatric conditions surpassed musculoskeletal conditions as the leading cause of disability in 2015. The proportion of individuals discharged with a disability in 2015 with a psychiatric condition increased substantially when compared to the previous five year period in all services but was particularly large in the Navy and Marine Corps. In the Marine Corps large increases in the proportion of individuals with a musculoskeletal-related disability discharge in 2015 were observed relative to previous five year period. The proportion of individuals evaluated for musculoskeletal disability discharge in 2015 in all other services was similar to the previous five year period.

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TABLE 7A: DISTRIBUTION OF UNFITTING CONDITIONS BY BODY SYSTEM CATEGORY IN INDIVIDUALS WITH A DISABILITY DISCHARGE: ARMY, FY 2010-2014 vs. FY 2015

Body System Category	2010-2014			2015		
	n	% ¹	Rate ²	n	% ¹	Rate ²
Musculoskeletal	52,955	70.3	96.3	22,575	66.3	218.0
Psychiatric	24,180	32.1	44.0	18,774	55.2	181.3
Neurological	17,252	22.9	31.4	8,560	25.2	82.7
Respiratory	3,628	4.8	6.6	1,119	3.3	10.8
Digestive	1,948	2.6	3.5	708	2.1	6.8
Dermatologic	1,753	2.3	3.2	712	2.1	6.9
Cardiovascular	1,730	2.3	3.1	708	2.1	6.8
Endocrine	1,497	2.0	2.7	581	1.7	5.6
Genitourinary	1,219	1.6	2.2	440	1.3	4.2
Ears and Hearing	1,130	1.5	2.1	400	1.2	3.9
Eyes and Vision	782	1.0	1.4	306	0.9	3.0
Hemic and Lymphatic	359	0.5	0.7	140	0.4	1.4
Immune	282	0.4	0.5	112	0.3	1.1
Gynecologic	267	0.4	0.5	110	0.3	1.1
Dental and Oral	116	0.2	0.2	71	0.2	0.7
Other Sensory	28	<0.1	0.1	13	<0.1	0.1
Total Individuals Discharged	75,339	100	137.0	34,026	100	328.6

1. Percent of individuals who have at least one condition within the specified body system category. Individuals may be included in more than one body system category, if an individual was evaluated for more than one condition.

2. Rate of disability discharge related to each body system per 10,000 service members.

TABLE 7B: DISTRIBUTION OF UNFITTING CONDITIONS BY BODY SYSTEM CATEGORY IN INDIVIDUALS WITH A DISABILITY DISCHARGE: NAVY, FY 2010-2014 vs. FY 2015

Body System Category	2010-2014			2015		
	n	% ¹	Rate ²	n	% ¹	Rate ²
Psychiatric	3,153	20.8	16.5	1,467	47.7	38.5
Musculoskeletal	4,877	32.2	25.5	1,319	42.9	34.6
Neurological	2,293	15.1	12.0	669	21.7	17.6
Digestive	771	5.1	4.0	192	6.2	5.0
Respiratory	331	2.2	1.7	103	3.3	2.7
Cardiovascular	297	2.0	1.6	86	2.8	2.3
Endocrine	359	2.4	1.9	78	2.5	2.0
Genitourinary	283	1.9	1.5	76	2.5	2.0
Dermatologic	181	1.2	0.9	50	1.6	1.3
Eyes and Vision	184	1.2	1.0	42	1.4	1.1
Hemic and Lymphatic	155	1.0	0.8	37	1.2	1.0
Gynecologic	75	0.5	0.4	30	1.0	0.8
Ears and Hearing	102	0.7	0.5	27	0.9	0.7
Infectious Disease	115	0.8	0.6	24	0.8	0.6
Dental and Oral	17	0.1	0.1	4	0.1	0.1
Other Sensory Disorders	1	<0.1	0.0	1	<0.1	0.0
Endocrine	1	<0.1	0.0	0	-	-
Total Individuals Discharged	15,151	100	79.1	3,078	100	80.9

1. Percent of individuals who have at least one condition within the specified body system category. Individuals may be included in more than one body system category, if an individual was evaluated for more than one condition.

2. Rate of disability discharge related to each body system per 10,000 service members.

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TABLE 7C: DISTRIBUTION OF UNFITTING CONDITIONS BY BODY SYSTEM CATEGORY IN INDIVIDUALS WITH A DISABILITY DISCHARGE: MARINE CORPS, FY 2010-2014 vs. FY 2015

Body System Category	2010-2014			2015		
	n	% ¹	Rate ²	n	% ¹	Rate ²
Musculoskeletal	8,697	49.1	73.5	2,257	69.7	101.5
Psychiatric	3,999	22.6	33.8	1,543	47.7	69.4
Neurological	3,271	18.5	27.6	853	26.4	38.4
Digestive	494	2.8	4.2	163	5.0	7.3
Respiratory	456	2.6	3.9	120	3.7	5.4
Cardiovascular	241	1.4	2.0	64	2.0	2.9
Genitourinary	300	1.7	2.5	62	1.9	2.8
Dermatologic	277	1.6	2.3	55	1.7	2.5
Eyes and Vision	260	1.5	2.2	46	1.4	2.1
Ears and Hearing	165	0.9	1.4	37	1.1	1.7
Endocrine	189	1.1	1.6	31	1.0	1.4
Hemic and Lymphatic	90	0.5	0.8	23	0.7	1.0
Infectious Disease	61	0.3	0.5	14	0.4	0.6
Gynecologic	27	0.2	0.2	8	0.2	0.4
Dental and Oral	30	0.2	0.3	5	0.2	0.2
Other Sensory Disorders	4	<0.1	0.0	0	-	-
Total Individuals Discharged	17,706	100	149.6	3,236	100	145.6

1. Percent of individuals who have at least one condition within the specified body system category. Individuals may be included in more than one body system category, if an individual was evaluated for more than one condition.

2. Rate of disability discharge related to each body system per 10,000 service members.

TABLE 7D: DISTRIBUTION OF UNFITTING CONDITIONS BY BODY SYSTEM CATEGORY IN INDIVIDUALS WITH A DISABILITY DISCHARGE: AIR FORCE, FY 2010-2014 vs. FY 2015

Body System Category	2010-2014			2015		
	n	% ¹	Rate ²	n	% ¹	Rate ²
Musculoskeletal	7467	50.5	29.7	2002	51.7	41.6
Psychiatric	3917	26.5	15.6	1196	30.9	24.8
Neurological	3066	20.7	12.2	800	20.7	16.6
Respiratory	1631	11.0	6.5	303	7.8	6.3
Digestive	761	5.1	3.0	196	5.1	4.1
Cardiovascular	634	4.3	2.5	152	3.9	3.2
Endocrine	364	2.5	1.4	117	3.0	2.4
Genitourinary	321	2.2	1.3	88	2.3	1.8
Dermatologic	256	1.7	1.0	80	2.1	1.7
Eyes and Vision	211	1.4	0.8	45	1.2	0.9
Hemic and Lymphatic	159	1.1	0.6	33	0.9	0.7
Infectious Disease	100	0.7	0.4	33	0.9	0.7
Ears and Hearing	178	1.2	0.7	27	0.7	0.6
Dental and Oral	16	0.1	0.1	7	0.2	0.1
Gynecologic	30	0.2	0.1	0	-	-
Immune	65	0.4	0.3	0	-	-
Total Individuals Discharged	14,791	100.0	58.9	3,873	100.0	80.4

1. Percent of individuals who have at least one condition within the specified body system category. Individuals may be included in more than one body system category, if an individual was evaluated for more than one condition.

2. Rate of disability discharge related to each body system per 10,000 service members.

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The leading VASRD categories (excluding analogous codes) among disability discharges in the most common body system categories from 2010 to 2015 are shown in Tables 8A through 8D. Classification of an individual's conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category in cases of multiple conditions. Like the body system categories, VASRD categories within a body system are not mutually exclusive and an individual is represented in multiple VASRD categories if he/she has more than one code. Therefore, percentages associated with VASRD categories within each body system can be interpreted as the percent of individuals in a VASRD category among all individuals with a condition in the body system.

Among musculoskeletal conditions, dorsopathies (i.e. vertebral fracture, sacroiliac injury, lumbosacral strain, degenerative arthritis) were the most common musculoskeletal condition type in 2015 in the Army and Air Force. In the Navy and Marine Corps, limitation of motion was the most common musculoskeletal condition in 2015. The prevalence of the leading musculoskeletal conditions in the Army in 2015 was similar to the previous five years. In the Navy the prevalence of the leading musculoskeletal conditions decreased in 2015 relative to previous years. Modest increases in the prevalence of dorsopathies and limitation of motion were observed in the Marine Corps in 2015 with larger increases observed in the Air Force.

Posttraumatic stress disorder (PTSD) was the most commonly diagnosed psychiatric disorder in the Army, Marine Corps, and Air Force disability discharges in 2015; in the Navy, PTSD was the second most common psychiatric disorder. PTSD has increased markedly in prevalence among psychiatric disorders in Army, Navy, and Air Force in 2015 relative to previous years. In the Marine Corps PTSD prevalence in psychiatric disability cases remained about 70%, similar to previous years. Nearly 80% of psychiatric disability cases in 2015 in the Army had PTSD-related disability, as compared to 70% in the Air Force and Marine Corps, and 44% in the Navy. In the Air Force, the increased prevalence of PTSD among psychiatric disorders was most striking, more than doubling relative to the previous five year period.

Paralysis was the most common type of neurological disability condition in 2015 in the Army, Navy, and Air Force. In the Marine Corps, residuals of traumatic brain injury was the most common neurological disability type. Residuals of traumatic brain injury were the second most common reason for neurological disability in the Army followed closely by migraine. In the Navy and Air Force, residuals of traumatic brain injury was not among the leading three neurological disability conditions.

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TABLE 8A: MOST PREVALENT CONDITIONS WITHIN LEADING BODY SYSTEM CATEGORIES AMONG INDIVIDUALS WITH A DISABILITY DISCHARGE: ARMY, FY 2010-2014 vs. FY 2015

2010-2014				2015			
	n	% ¹	Rate ²		n	% ¹	Rate ²
Musculoskeletal	52,955	70.3	96.3	Musculoskeletal	22,575	66.3	218.0
Dorsopathies	29,769	56.2	54.1	Dorsopathies	13,222	58.6	127.7
Limitation of motion	23,167	43.7	42.1	Limitation of motion	11,562	51.2	111.7
Arthritis	11,419	21.6	20.8	Arthritis	4,640	20.6	44.8
Psychiatric	24,180	32.1	44.0	Psychiatric	18,774	55.2	181.3
PTSD	16,130	66.7	29.3	PTSD	14,938	79.6	144.3
Mood Disorder	5,685	23.5	10.3	Mood Disorder	3,375	18.0	32.6
Anxiety Disorder	2,291	9.5	4.2	Anxiety Disorder	1,293	6.9	12.5
Neurological	17,252	22.9	31.4	Neurological	8,560	25.2	82.7
Paralysis	5,674	32.9	10.3	Paralysis	3,346	39.1	32.3
Migraine	4,315	25.0	7.8	Residuals of TBI	2,398	28.0	23.2
Residuals of TBI	4,243	24.6	7.7	Migraine	2,360	27.6	22.8
Total Individuals Discharged	75,339		137.0	Total Individuals Discharged	34,026		328.6

1. Percent includes individuals who have at least one condition within the specified body system/VASRD category. Individuals may be included in more than one body system/VASRD category if evaluated for more than one condition.

2. Rate of each type of disability discharge per 10,000 total service members.

TABLE 8B: MOST PREVALENT CONDITIONS WITHIN LEADING BODY SYSTEM CATEGORIES AMONG INDIVIDUALS WITH A DISABILITY DISCHARGE: NAVY, FY 2010-2014 vs. FY 2015

2010-2014				2015			
	n	% ¹	Rate ²		n	% ¹	Rate ²
Musculoskeletal	3,153	20.8	16.5	Musculoskeletal	1,467	47.7	38.5
Limitation of motion	1,968	62.4	10.3	Limitation of motion	656	44.7	17.2
Dorsopathies	1,830	58.0	9.6	Dorsopathies	461	31.4	12.1
Arthritis	1,089	34.5	5.7	Arthritis	242	16.5	6.4
Psychiatric	4,877	32.2	25.5	Psychiatric	1,319	42.9	34.6
Mood disorder	1,435	29.4	7.5	Mood disorder	615	46.6	16.2
PTSD	1,012	20.8	5.3	PTSD	577	43.7	15.2
Anxiety disorder	331	6.8	1.7	Anxiety disorder	174	13.2	4.6
Neurological	2,293	15.1	12.0	Neurological	669	21.7	17.6
Paralysis	532	23.2	2.8	Paralysis	174	26.0	4.6
Epilepsy	516	22.5	2.7	Migraine	158	23.6	4.2
Migraine	325	14.2	1.7	Epilepsy	128	19.1	3.4
Total Individuals Discharged	15,151		79.1	Total Individuals Discharged	3,078		80.9

1. Percent includes individuals who have at least one condition within the specified body system/VASRD category. Individuals may be included in more than one body system/VASRD category if evaluated for more than one condition.

2. Rate of each type of disability discharge per 10,000 total service members.

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TABLE 8C: MOST PREVALENT CONDITIONS WITHIN LEADING BODY SYSTEM CATEGORIES AMONG INDIVIDUALS WITH A DISABILITY DISCHARGE: MARINE CORPS, FY 2010-2014 vs. FY 2015

2010-2014				2015			
	n	% ¹	Rate ²		n	% ¹	Rate ²
Musculoskeletal	8,697	49.1	73.5	Musculoskeletal	2,257	69.7	101.5
Limitation of motion	4,394	50.5	37.1	Limitation of motion	1,268	56.2	57.0
Dorsopathies	2,640	30.4	22.3	Dorsopathies	824	36.5	37.1
Arthritis	1,636	18.8	13.8	Arthritis	352	15.6	15.8
Psychiatric	3,999	22.6	33.8	Psychiatric	1,543	47.7	69.4
PTSD	2,779	69.5	23.5	PTSD	1,086	70.4	48.9
Mood disorder	890	22.3	7.5	Mood disorder	371	24.0	16.7
Anxiety disorder	212	5.3	1.8	Anxiety disorder	78	5.1	3.5
Neurological	3,271	18.5	27.6	Neurological	853	26.4	38.4
Residuals of TBI	944	28.9	8.0	Residuals of TBI	243	28.5	10.9
Paralysis	913	27.9	7.7	Paralysis	199	23.3	9.0
Migraine	449	13.7	3.8	Migraine	187	21.9	8.4
Total Individuals Discharged	17,706		149.6	Total Individuals Discharged	3,236		145.6

1. Percent includes individuals who have at least one condition within the specified body system/VASRD category. Individuals may be included in more than one body system/VASRD category if evaluated for more than one condition.

2. Rate of each type of disability discharge per 10,000 total service members.

TABLE 8D: MOST PREVALENT CONDITIONS WITHIN LEADING BODY SYSTEM CATEGORIES AMONG INDIVIDUALS WITH A DISABILITY DISCHARGE: AIR FORCE, FY 2010-2014 vs. FY 2015

2010-2014				2015			
	n	% ¹	Rate ²		n	% ¹	Rate ²
Musculoskeletal	7,467	49.5	29.7	Musculoskeletal	2,002	52.8	41.6
Dorsopathies	4,107	53.4	16.4	Dorsopathies	1,190	64.4	24.7
Limitation of motion	2,240	26.2	8.9	Limitation of motion	767	40.5	15.9
Arthritis	1,535	21.5	6.1	Arthritis	313	18.4	6.5
Psychiatric	3,917	25.3	15.6	Psychiatric	1,196	30.3	24.8
Mood disorder	1,756	35.4	7.0	PTSD	756	71.5	15.7
PTSD	1,570	47.7	6.3	Mood disorder	562	49.6	11.7
Anxiety disorder	571	14.7	2.3	Anxiety disorder	210	17.7	4.4
Neurological	3,066	19.3	12.2	Neurological	800	26.0	16.6
Paralysis	803	24.1	3.2	Paralysis	283	33.6	5.9
Migraine	657	21.3	2.6	Migraine	197	25.8	4.1
Epilepsy	400	15.2	1.6	Epilepsy	115	18.2	2.4
Total Individuals Discharge	14,791		58.9	Total Individuals Discharged	3,873		80.4

1. Percent includes individuals who have at least one condition within the specified body system/VASRD category. Individuals may be included in more than one body system/VASRD category if evaluated for more than one condition.

2. Rate of each type of disability discharge per 10,000 total service members.

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Tables 9A-9D show the top ten most common VASRD condition categories present in service members discharged with a disability for 2010-2014 as compared to 2015. In the Army, the leading VASRD condition category in 2015 was PTSD, followed by dorsopathies and limitation of motion. PTSD was much more prevalent among Soldiers disability discharged in 2015 (44%) as compared to previous years (21%). Limitation of motion and mood disorders were the most common condition categories in 2015 in the Navy followed by PTSD and dorsopathies. The prevalence of limitation of motion increased in 2015 (21%) relative the previous five years in the Navy (13%); PTSD also increased in prevalence in 2015 (44%) more than doubling relative to the previous five year period (21%). Among those disability discharged in the Marine Corps, limitation of motion was the most common VASRD condition type in 2015 (39%) followed by PTSD (34%). Both of these conditions also increased in prevalence in 2015 relative to the previous five years when limitation of motion was present in 25% of cases and PTSD was present in 16% of cases. In the Air Force, dorsopathies were the most common disability condition in 2015 (31%) with a prevalence similar to previous years (28%). The next most common conditions in 2015, were limitation of motion (20%) and PTSD (20%) with an increase in PTSD observed in 2015 relative to previous years (11%)

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TABLE 9A: TEN MOST COMMON VASRD CATEGORIES IN INDIVIDUALS WITH A DISABILITY DISCHARGE: ARMY, FY 2010-2014 vs. FY 2015

2010-2014				2015			
	n	% ¹	Rate ²		n	% ¹	Rate ²
Dorsopathies	29,769	39.5	54.1	PTSD	14,938	43.9	144.3
Limitation of motion	23,167	30.8	42.1	Dorsopathies	13,222	38.9	127.7
PTSD	16,130	21.4	29.3	Limitation of motion	11,562	34.0	111.7
Arthritis	11,419	15.2	20.8	Arthritis	4,640	13.6	44.8
Paralysis	5,688	7.5	10.3	Mood disorder	3,375	9.9	32.6
Mood disorder	5,685	7.5	10.3	Paralysis	3,350	9.8	32.4
Joint disorders or inflammation	4,917	6.5	8.9	Joint disorders or inflammation	2,401	7.1	23.2
Migraine	4,315	5.7	7.8	Residuals of TBI	2,398	7.0	23.2
Residuals of TBI	4,243	5.6	7.7	Migraine	2,360	6.9	22.8
Skeletal and joint deformities	4,145	5.5	7.5	Skeletal and joint deformities	1,767	5.2	17.1
Total Individuals Discharged	75,339	100	137.0	Total Individuals Discharged	34,026	100	328.6

1. Percent includes individuals who have at least one condition within the specified VASRD category. Individuals may be included in more than one VASRD category if evaluated for more than one condition.

2. Rate of each type of disability per 10,000 total service members.

TABLE 9B: TEN MOST COMMON VASRD CATEGORIES IN INDIVIDUALS WITH A DISABILITY DISCHARGE: NAVY, FY 2010-2014 vs. FY 2015

2010-2014				2015			
	n	% ¹	Rate ²		n	% ¹	Rate ²
Limitation of motion	1,968	13.0	10.3	Limitation of motion	656	21.3	17.2
Dorsopathies	1,830	12.1	9.6	Mood disorder	615	20.0	16.2
Mood disorder	1,435	9.5	7.5	PTSD	577	18.7	15.2
Arthritis	1,089	7.2	5.7	Dorsopathies	461	15.0	12.1
PTSD	1,012	6.7	5.3	Arthritis	242	7.9	6.4
Joint disorders or inflammation	633	4.2	3.3	Joint disorders or inflammation	240	7.8	6.3
Paralysis	532	3.5	2.8	Anxiety disorder	174	5.7	4.6
Epilepsy	516	3.4	2.7	Paralysis	174	5.7	4.6
Noninfectious enteritis and colitis	509	3.4	2.7	Migraine	158	5.1	4.2
Anxiety disorder	331	2.2	1.7	Noninfectious enteritis and colitis	141	4.6	3.7
Total Individuals Discharged	15,151	100	79.1	Total Individuals Discharged	3,078	100	80.9

1. Percent includes individuals who have at least one condition within the specified VASRD category. Individuals may be included in more than one VASRD category if evaluated for more than one condition.

2. Rate of each type of disability per 10,000 total service members.

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TABLE 9C: TEN MOST COMMON VASRD CATEGORIES IN INDIVIDUALS WITH A DISABILITY DISCHARGE: MARINE CORPS, FY 2010-2014 vs. FY 2015

2010-2014				2015			
	n	% ¹	Rate ²		n	% ¹	Rate ²
Limitation of motion	4,394	24.8	37.1	Limitation of motion	1,268	39.2	57.0
PTSD	2,779	15.7	23.5	PTSD	1,086	33.6	48.9
Dorsopathies	2,640	14.9	22.3	Dorsopathies	824	25.5	37.1
Arthritis	1,636	9.2	13.8	Mood disorder	371	11.5	16.7
Residuals of TBI	944	5.3	8.0	Arthritis	352	10.9	15.8
Joint disorders or inflammation	941	5.3	7.9	Joint disorders or inflammation	275	8.5	12.4
Paralysis	914	5.2	7.7	Residuals of TBI	243	7.5	10.9
Mood disorder	890	5.0	7.5	Paralysis	199	6.1	9.0
Amputations	533	3.0	4.5	Migraine	187	5.8	8.4
Migraine	449	2.5	3.8	Epilepsy	146	4.5	6.6
Total Individuals Discharged	17,706	100	149.6	Total Individuals Discharged	3,236	100	145.6

1. Percent includes individuals who have at least one condition within the specified VASRD category. Individuals may be included in more than one VASRD category if evaluated for more than one condition.

2. Rate of each type of disability per 10,000 total service members.

TABLE 9D: TEN MOST COMMON VASRD CATEGORIES IN INDIVIDUALS WITH A DISABILITY DISCHARGE: AIR FORCE, FY 2010-2014 vs. FY 2015

2010-2014				2015			
	n	% ¹	Rate ²		n	% ¹	Rate ²
Dorsopathies	4,107	27.8	16.4	Dorsopathies	1,190	30.7	24.7
Limitation of motion	2,240	15.1	8.9	Limitation of motion	767	19.8	15.9
Mood disorder	1,756	11.9	7.0	PTSD	756	19.5	15.7
PTSD	1,570	10.6	6.3	Mood disorder	562	14.5	11.7
Arthritis	1,535	10.4	6.1	Arthritis	313	8.1	6.5
Asthma	1,173	7.9	4.7	Paralysis	283	7.3	5.9
Joint disorders or inflammation	918	6.2	3.7	Joint disorders or inflammation	248	6.4	5.2
Paralysis	804	5.4	3.2	Anxiety disorder	210	5.4	4.4
Migraine	657	4.4	2.6	Asthma	207	5.3	4.3
Anxiety disorder	571	3.9	2.3	Migraine	197	5.1	4.1
Total Individuals Discharged	14,791	100	58.9	Total Individuals Discharged	3,873	100	80.4

1. Percent includes individuals who have at least one condition within the specified VASRD category. Individuals may be included in more than one VASRD category if evaluated for more than one condition.

2. Rate of each type of disability per 10,000 total service members.

Table 10A shows the distribution of the last disposition, by service, for all disability discharge evaluations comparing 2015 to 2010-2014, excluding periodic TDRL re-evaluations. Compared to the previous five year period, the proportion of disability evaluations that resulted in a disposition of permanent disability retirement increased in 2015 in the Army and Air Force and decreased in the Navy and Marine Corps. Permanent disability retirement was the most common disposition in the Army and Air Force in 2015. In the Navy, placement on the temporary disability retirement list was the most common disposition in 2015 followed by separated with severance pay. Among Marines, separated with severance pay was the most common disposition in 2015 followed by placed on the TDRL. The distribution of disability dispositions in the Army, Navy, and Marine Corps in 2015 was similar to previous years. In the Air Force, a larger proportion of disability dispositions were permanent disability retired in 2015 as compared to previous years. This increase in permanent disability retirement in the Air Force was accompanied by a substantial decrease in fit dispositions from 13% of dispositions in 2010-2014 to 3% in 2015. Fit determinations were most common in the Navy in 2015, similar to the previous five year period.

TABLE 10A: MOST RECENT DISPOSITION BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2010-2014 vs FY 2015¹

	2010-2014								2015							
	Army		Navy		Marine Corps		Air Force		Army		Navy		Marine Corps		Air Force	
	n	% ²	n	% ²	n	% ²	n	% ²	n	% ²	n	% ²	n	% ²	n	% ²
Permanent Disability Retired	28,924	36.8	3,505	23.5	3,831	22.1	4,679	26.7	10,744	46.6	591	19.2	607	18.8	1,891	46.9
Separated without Benefits	365	0.5	297	2.0	301	1.7	489	2.8	130	0.6	60	2.0	54	1.7	42	1.0
Separated with Severance	23,346	29.7	3,744	25.1	6,232	36.0	4,633	26.4	6,334	27.5	657	21.4	1,196	37.0	855	21.2
Fit	2,853	3.6	2,358	15.8	1,123	6.5	2,251	12.8	4	<0.1	439	14.3	161	5.0	119	2.9
Placed on TDRL	20,767	26.4	3,941	26.4	5,028	29.0	3,915	22.3	5,466	23.7	1,096	35.6	1,050	32.5	818	20.3
Administrative Termination ³	1,042	1.3	-	-	-	-	-	-	43	0.2	-	-	-	-	-	-
Other ⁴	1,403	1.8	1,084	7.3	808	4.7	86	0.5	342	1.5	233	7.6	166	5.1	309	7.7
Total Individuals	78,700		14,929		17,323		17,531		23,063		3,076		3,234		4,034	

1. Individuals with a 'Retained on the TDRL' disposition as their first disposition during the time period covered by this report are excluded from this table.

2. Percent of the total number of individuals by service and time period

3. The disposition 'administrative termination' is specific to the Army

4. Including, but not limited, individuals with dispositions of no action, limited duty, or administrative removal from TDRL.

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Table 10B shows the rate of disability disposition per 10,000 service members, by service, for all disability discharge evaluations comparing 2015 to 2010-2014, excluding periodic TDRL re-evaluations. Regardless of the type of disposition, rates were highest in the Army in 2015. Army rates were also much higher in 2015 for each disposition type than observed in the previous five year period. Rates of separation with severance pay and placement on TDRL in the Marine Corps were comparable to those observed in the Army. The rate of fit dispositions was highest in the Navy in 2015, similar to previous years. In the Air Force the rate of fit dispositions decreased in 2015 relative to previous years, while the rate of permanent disability retirement nearly doubled.

TABLE 10B: RATE OF DISPOSITION TYPE PER 10,000 SERVICE MEMBERS BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2010-2014 vs FY 2015¹

	2010-2014								2015							
	Army		Navy		Marine Corps		Air Force		Army		Navy		Marine Corps		Air Force	
	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²
Permanent Disability Retired	28,924	52.6	3,505	18.3	3,831	32.4	4,679	18.6	10,744	103.8	591	15.5	607	27.3	1,891	39.3
Separated without Benefits	365	0.7	297	1.6	301	2.5	489	1.9	130	1.3	60	1.6	54	2.4	42	0.9
Separated with Severance	23,346	42.5	3744	19.5	6,232	52.7	4,633	18.5	6,334	61.2	657	17.3	1,196	53.8	855	17.8
Fit	2,853	5.2	2358	12.3	1,123	9.5	2,251	9.0	4	<0.1	439	11.5	161	7.2	119	2.5
Placed on TDRL	20,767	37.8	3941	20.6	5,028	42.5	3,915	15.6	5,466	52.8	1,096	28.8	1,050	47.2	818	17.0
Administrative Termination ³	1,042	1.9	-	-	-	-	-	-	43	0.4	-	-	-	-	-	-
Other ⁴	1,403	2.6	1,084	5.7	808	6.8	86	0.3	342	3.3	233	6.1	166	7.5	309	8.0

1. Individuals with a 'Retained on the TDRL' disposition as their first disposition during the time period covered by this report are excluded from this table.

2. Rate of disposition type per 10,000 service members.

3. The disposition 'administrative termination' is specific to the Army

4. Including, but not limited, individuals with dispositions of no action, limited duty, or administrative removal from TDRL.

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Most recent percent rating among evaluations for disability discharge is shown, by service, for the period for 2015 as compared 2010-2014 in Table 11A. In 2015, the most frequently assigned rating in the Army and Marine Corps was 10%, similar to the previous five year period. However, in the Army, ratings from 10-70% were fairly evenly distributed in 2015 relative to previous years. In the Air Force, 30% was the most commonly assigned rating in 2015 followed closely by 50%, while in the Navy, 50% was the most commonly assigned rating in 2015. Air Force and Navy disability evaluations most frequently resulted in a rating of 100% when compared to other services in 2015. Relative to the previous five year period, the proportion of individuals who received a rating of 100% increased in the Air Force in 2015 while remaining similar in the other services. Disability ratings greater than 30% accounted for about 60% of Marine Corps disability ratings, 70% of ratings in the Army, Navy, and Air Force. The proportion of disability evaluations resulting in ratings of 30% or higher increased in 2015 relative to the previous five year period in the Air Force but remained stable in the other three services. A decrease in the proportion of disability evaluations that were unrated was observed in 2015 relative to the period from 2010 to 2014 in the Air Force and Army while the proportion of unrated disabilities remained stable in the Navy and Marine Corps relative to previous years.

TABLE 11A: MOST RECENT PERCENT RATING BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2010-2014 vs FY 2015¹

	2010-2014												2015											
	Army			Navy			Marine Corps			Air Force			Army			Navy			Marine Corps			Air Force		
	n	%	CP	n	%	CP	n	%	CP	n	%	CP	n	%	CP	n	%	CP	n	%	CP	n	%	CP
0	1,307	1.7	1.8	580	3.9	4.8	972	5.6	6.2	364	2.1	2.5	534	2.3	2.4	135	4.4	5.4	238	7.4	8.0	147	3.6	3.8
10	12,820	16.2	19.3	2,074	13.9	22.2	3,554	20.5	28.8	2,638	15.0	20.4	3,347	14.5	17.1	358	11.6	19.6	661	20.4	30.1	474	11.8	16.1
20	9,649	12.2	32.4	1,388	9.3	33.8	1,997	11.5	41.5	1,852	10.6	33.0	2,785	12.1	29.4	244	7.9	29.3	391	12.1	43.2	347	8.6	25.1
30	7,552	9.6	42.7	2,330	15.6	53.2	2,216	12.8	55.6	2,721	15.5	51.5	2,420	10.5	40.1	395	12.8	44.9	322	10.0	53.9	554	13.7	39.4
40	6,630	8.4	51.7	1,489	10.0	65.7	1,631	9.4	66.0	1,702	9.7	63.0	2,374	10.3	50.5	216	7.0	53.5	286	8.8	63.5	457	11.3	51.3
50	9,140	11.6	64.2	1,563	10.5	78.7	1,742	10.1	77.1	1,932	11.0	76.2	3,185	13.8	64.6	484	15.7	72.7	335	10.4	74.7	534	13.2	65.1
60	8,838	11.2	76.2	650	4.4	84.2	930	5.4	83.0	1,088	6.2	83.6	2,388	10.4	75.1	156	5.1	78.9	185	5.7	80.9	378	9.4	74.9
70	7,984	10.1	87.1	818	5.5	91.0	1,292	7.5	91.3	1,069	6.1	90.8	2,692	11.7	87.0	311	10.1	91.3	323	10.0	91.7	473	11.7	87.1
80	4,565	5.8	93.3	243	1.6	93.0	480	2.8	94.3	427	2.4	93.7	1,401	6.1	93.2	47	1.5	93.1	90	2.8	94.7	161	4.0	91.3
90	1,938	2.5	96.0	61	0.4	93.5	148	0.9	95.3	130	0.7	94.6	595	2.6	95.8	12	0.4	93.6	33	1.0	95.8	59	1.5	92.8
100	2,946	3.7	100	773	5.2	100	745	4.3	100	795	4.5	100	952	4.1	100	161	5.2	100	125	3.9	100	277	6.9	100
UR	3,752	4.8	N/A	2,648	17.7	N/A	1,423	8.2	N/A	2,748	15.7	N/A	123	0.5	N/A	498	16.2	N/A	215	6.6	N/A	172	4.3	N/A
Miss	1,777	2.3	N/A	312	2.1	N/A	193	1.1	N/A	65	0.4	N/A	275	1.2	N/A	59	1.9	N/A	30	0.9	N/A	1	0.0	N/A
Total	78,898			14,929			17,323			17,531			23,071			3,076			3,234			4,034		

UR: Unrated, Miss: Missing, CP: Cumulative Percent, excluding missing and unrated

1. Individuals with a 'Retained on the TDRL' disposition as their first disposition during the time period covered by this report are excluded from this table.

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Rate of percent rating per 10,000 service members is shown, by service, for the period for 2015 as compared 2010-2014 in Table 11B. In 2015, the 10% disability rating was assigned with the highest rate in the Army and Marine Corps, similar to the previous five year period. However, in the Army, the rate per 10,000 soldiers was similar in each disability rating category in 2015. In the Air Force, 30% disability rating was assigned most frequently followed closely by 50%, while in the Navy 50% disability rating was assigned at the highest rate. Air Force and Navy disability had the highest rate of disability ratings of 100% when compared to other services in 2015. Relative to the previous five year period, the rate of 100% disability rating increased in the Air Force in 2015 while remaining similar in the other services. The rate of unrated disability discharges decreased in 2015 in the Army and Air Force while the rate of unrated disabilities remained stable in the Navy and Marine Corps relative to previous years.

TABLE 11B: RATE OF PERCENT DISABILITY RATING PER 10,000 SERVICE MEMBERS BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2010-2014 vs FY 2015¹

	2010-2014								2015							
	Army		Navy		Marine Corps		Air Force		Army		Navy		Marine Corps		Air Force	
	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²	n	Rate ²
0	1,307	2.4	580	3.0	972	8.2	364	1.4	534	5.2	135	3.5	238	10.7	147	3.1
10	12,820	23.3	2,074	10.8	3,554	30.0	2,638	10.5	3,347	32.3	358	9.4	661	29.7	474	9.8
20	9,649	17.5	1,388	7.2	1,997	16.9	1,852	7.4	2,785	26.9	244	6.4	391	17.6	347	7.2
30	7,552	13.7	2,330	12.2	2,216	18.7	2,721	10.8	2,420	23.4	395	10.4	322	14.5	554	11.5
40	6,630	12.1	1,489	7.8	1,631	13.8	1,702	6.8	2,374	22.9	216	5.7	286	12.9	457	9.5
50	9,140	16.6	1,563	8.2	1,742	14.7	1,932	7.7	3,185	30.8	484	12.7	335	15.1	534	11.1
60	8,838	16.1	650	3.4	930	7.9	1,088	4.3	2,388	23.1	156	4.1	185	8.3	378	7.9
70	7,984	14.5	818	4.3	1,292	10.9	1,069	4.3	2,692	26.0	311	8.2	323	14.5	473	9.8
80	4,565	8.3	243	1.3	480	4.1	427	1.7	1,401	13.5	47	1.2	90	4.0	161	3.3
90	1,938	3.5	61	0.3	148	1.3	130	0.5	595	5.7	12	0.3	33	1.5	59	1.2
100	2,946	5.4	773	4.0	745	6.3	795	3.2	952	9.2	161	4.2	125	5.6	277	5.8
UR	3,752	6.8	2,648	13.8	1,423	12.0	2,748	10.9	123	1.2	498	13.1	215	9.7	172	3.6

UR: Unrated

1. Individuals with a 'Retained on the TDRL' disposition as their first disposition during the time period covered by this report are excluded from this table

2. Rate of each percent disability rating per 10,000 service members.

History of Medical Disqualification, Pre-existing Conditions, Accession Medical Waiver, and Hospitalization among Service Members Evaluated for Disability

AMSARA receives data on service members throughout the military career spanning from application to military service at MEPS to discharge. These data were merged with disability evaluation data in order to describe the medical history of the disability evaluated population. Applicant data, collected at MEPS, are available for enlisted service members from all components. Waiver data are for enlisted active duty and reserve service members. Hospitalization data were only available for active duty and eligible reserves at the time these analyses were completed. Accession and discharge data were available for all ranks and components.

Table 12 shows the number and percentages of individuals in the DES records with records in other datasets received by AMSARA. Regardless of service, the majority of those who were evaluated for disability had a discharge record. Applicant and accession records were also available for more than 75% of the disability population in all services. Accession records are available for the majority of individuals evaluated for disability. However, the percentage of individuals with an accession record is lower in the Army and Air Force than in the Navy and Marine Corps. Missing applicant data may represent applications prior to 1995, the first year complete data are available. Similarly, in the case of accession data, missing data may represent accessions prior to 1995.

The highest percentage of individuals evaluated for disabilities with waiver records from any waiver authority was found in the Army (8%). Most accession medical waiver records for individuals evaluated for disability were approved regardless of service. Hospitalization at a military treatment facility was least common in Air Force members evaluated for disability. In Army, Navy, and Marine Corps members evaluated for disability, hospitalization rates were similar.

TABLE 12: INDIVIDUALS EVALUATED FOR DISABILITY WITH RECORDS IN OTHER AMSARA DATA SOURCES: FY 2010-2015

	Army		Navy		Marine Corps		Air Force	
	n	%	n	%	n	%	n	%
Applicant record¹ (1995-2014)	84,982	80.2	13,744	81.2	18,665	91.9	15,176	76.9
Accession medical waiver record¹ (1995-2014)	8,349	7.9	1,083	6.4	1,263	6.2	630	3.2
Approved	7,683	7.3	1,030	6.1	1,135	5.6	611	3.1
Denied	666	0.6	53	0.3	128	0.6	19	0.1
Accession record (1995-2014)	89,854	79.7	17,110	93.9	20,193	96.4	16,833	78.1
Hospitalization record² (1995-2015)	33,506	39.3	7,845	45.6	8,136	41.1	5,825	32.2
Discharge record (1995-2015)	72,520	64.3	13,108	71.9	17,043	81.4	18,140	84.1
Total Individuals	112,779		18,229		20,942		21,565	
Total Enlisted	105,964		16,926		20,309		19,747	
Total Active Duty	85,183		17,204		19,813		18,114	

1. Applicant and waiver datasets include only enlisted service members. Therefore, percent for applicants and waiver were calculated using the total number of enlisted service members as the denominator.

2. Hospitalization dataset (i.e. SIDR) includes active duty service members and qualified reserves. Therefore, percent was calculated using the total number of active duty service members as the denominator.

Medical disqualification and pre-existing conditions among enlisted service members evaluated for disability

Enlisted applicant records include data on medical examinations conducted at a Military Entrance Processing Station (MEPS) from 1995 to present. MEPS medical examinations dated after the MEB date were excluded from the analyses. In cases where service members evaluated for disability had more than one MEPS medical examination record, only the most recent record preceding the disability evaluation was used.

Table 13 shows the history of medical examination and application for military service among service members evaluated for disability by year of disability evaluation and service. There is a general trend in all services of increasing proportions of applicant records in more recent years of disability, a trend which is expected given the time frame for which application records are available. Overall, the Marine Corps had the highest percentage of individuals evaluated for disability who also had a MEPS medical examination record for each year of disability evaluation.

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TABLE 13: RECORD OF MEDICAL EXAMINATION AT MEPS AMONG ENLISTED SERVICE MEMBERS EVALUATED FOR DISABILITY BY YEAR OF DISABILITY EVALUATION: FY 2010-2015

	Army			Navy			Marine Corps			Air Force		
	App	Total	%	App	Total	%	App	Total	%	App	Total	%
2010	7,532	9,939	75.8	1,558	2,158	72.2	1,991	2,290	86.9	2,185	3,274	66.7
2011	7,911	10,232	77.3	1,514	2,063	73.4	2,390	2,676	89.3	2,448	3,439	71.2
2012	9,287	11,911	78.0	2,180	2,791	78.1	3,525	3,815	92.4	2,410	3,214	75.0
2013	15,049	18,359	82.0	2,185	2,613	83.6	2,931	3,161	92.7	2,206	2,701	81.7
2014	19,136	23,689	80.8	2,873	3,366	85.4	3,706	3,999	92.7	2,843	3,411	83.3
2015	26,067	31,834	81.9	3,434	3,935	87.3	4,122	4,368	94.4	3,084	3,708	83.2
Total	84,982	105,964	80.2	13,744	16,926	81.2	18,665	20,309	91.9	15,176	19,747	76.9

App: Applicants with MEPS medical examination record, Total: Enlisted individuals evaluated for a disability.

Medical qualification status at time of application for service for enlisted service members who underwent disability evaluation are shown in Tables 14A-14D comparing service members evaluated for disability in 2015 to those evaluated for disability in the previous five years. The rates of permanent medical disqualification were similar for both time periods in each service but were slightly lower among 2015 disability evaluations. Between 6% and 12% of service members evaluated for disability had a history of permanent medical disqualification and 4-10% of service members had a history of temporary medical disqualification. Lowest rates of history of temporary medical disqualification were found in Air Force where less than 5% of cases with a medical exam record had a temporary disqualification; highest rates were found in the Army where approximately 8% of individuals evaluated for disability in 2015 had a history of temporary disqualification. The Air Force also had the lowest rates of permanent medical disqualification (less than 7%) and the Army had the highest rates of permanent medical disqualification (about 11%).

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TABLE 14A: MEDICAL QUALIFICATION STATUS AMONG ENLISTED INDIVIDUALS WHO WERE EVALUATED FOR DISABILITY WITH MEPS EXAMINATION RECORD: ARMY, FY 2010-2014 vs. FY 2015

	2010-2014		2015	
	n	%	n	%
Fully Qualified	46,572	79.0	21,092	80.9
Permanently Disqualified	6,811	11.6	2,815	10.8
Temporarily Disqualified ¹	5,532	9.4	2,160	8.3
Total DES Cases with Medical Exam Record	58,915		26,067	

1. The majority of temporary disqualifications are due to failure to meet weight for height and body fat standards.

TABLE 14B: MEDICAL QUALIFICATION STATUS AMONG ENLISTED INDIVIDUALS WHO WERE EVALUATED FOR DISABILITY WITH MEPS EXAMINATION RECORD: NAVY, FY 2010-2014 vs. FY 2015

	2010-2014		2015	
	n	%	n	%
Fully Qualified	8,735	84.7	2,932	85.4
Permanently Disqualified	934	9.1	314	9.1
Temporarily Disqualified ¹	641	6.2	188	5.5
Total DES Cases with Medical Exam Record	10,310		3,434	

1. The majority of temporary disqualifications are due to failure to meet weight for height and body fat standards.

TABLE 14C: MEDICAL QUALIFICATION STATUS AMONG ENLISTED INDIVIDUALS WHO WERE EVALUATED FOR DISABILITY WITH MEPS EXAMINATION RECORD: MARINE CORPS, FY 2010-2014 vs. FY 2015

	2010-2014		2015	
	n	%	n	%
Fully Qualified	12,332	84.8	3,544	86.0
Permanently Disqualified	1,255	8.6	347	8.4
Temporarily Disqualified ¹	956	6.6	231	5.6
Total DES Cases with Medical Exam Record	14,543		4,122	

1. The majority of temporary disqualifications are due to failure to meet weight for height and body fat standards.

TABLE 14D: MEDICAL QUALIFICATION STATUS AMONG ENLISTED INDIVIDUALS WHO WERE EVALUATED FOR DISABILITY WITH MEPS EXAMINATION RECORD: AIR FORCE, FY 2010-2014 vs. FY 2015

	2010-2014		2015	
	n	%	n	%
Fully Qualified	10,787	89.2	2,731	88.6
Permanently Disqualified	791	6.5	229	7.4
Temporarily Disqualified ¹	514	4.3	124	4.0
Total DES Cases with Medical Exam Record	12,092		3,084	

1. The majority of temporary disqualifications are due to failure to meet weight for height and body fat standards.

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ICD-9 codes present in records of MEPS examination indicate the presence of pre-existing conditions in applicants. The leading ICD-9 diagnoses present in MEPS examination records of enlisted service members by year of disability evaluation are shown in Tables 15A-15D. All ICD-9 diagnoses present in the most recent medical examination record that preceded disability evaluation were used in the generation of Table 15A-Table 15D.

In all services and for all time periods, the conditions noted in the applicant files of service members who underwent disability are consistent with highly prevalent conditions in the general military applicant population [8]. In all services except the Air Force, overweight, obesity, and other hyperalimantation was the most common condition noted at MEPS examination in 2015 and in the previous five year period. *Cannabis* abuse was also common in the Army, Navy, and Marine Corps. Hearing loss and disorders of refraction and accommodation were also among the leading ICD-9 codes in all services.

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TABLE 15A: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES APPEARING IN MEPS MEDICAL EXAMINATION RECORDS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: **ARMY**, FY 2010-2014 vs. FY 2015

2010-2014				2015			
ICD-9 Diagnosis Code	n	% of Cond ¹	% of App ²	ICD-9 Diagnosis Code	n	% of Cond ¹	% of App ²
Overweight, obesity and other hyperalimentation	3,173	31.8	5.4	Overweight, obesity and other hyperalimentation	1,183	29.0	4.5
Disorders of lipid metabolism	666	6.7	1.1	Disorders of lipid metabolism	239	5.8	0.9
Hearing loss	635	6.4	1.1	Hearing loss	230	5.6	0.9
<i>Cannabis</i> abuse	466	4.7	0.8	Disorders of refraction and accommodation	217	5.3	0.8
Disorders of refraction and accommodation	424	4.2	0.7	<i>Cannabis</i> abuse	181	4.4	0.7
Total Applicants with Medical Conditions	9,985		16.9	Total Applicants with Medical Conditions	4,086		15.7
Total DES Cases with Medical Exam Record	58,915			Total DES Cases with Medical Exam Record	26,067		

1. Percent of applicants with each medical condition among all applicants with medical conditions.

2. Percent of applicants with each medical condition among all DES cases with a medical exam record.

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TABLE 15B: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES APPEARING IN MEPS MEDICAL EXAMINATION RECORDS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: NAVY, FY 2010-2014 vs. FY 2015

2010-2014				2015			
ICD-9 Diagnosis Code	n	% of Cond ¹	% of App ²	ICD-9 Diagnosis Code	n	% of Cond ¹	% of App ²
Overweight, obesity and other hyperalimentation	278	19.9	2.7	Overweight, obesity and other hyperalimentation	83	16.7	2.4
Disorders of refraction and accommodation	77	5.5	0.7	Disorders of refraction and accommodation	35	7.0	1.0
Asthma	59	4.2	0.6	Hearing loss	17	3.4	0.5
Other and unspecified disorders of bone and cartilage	43	3.1	0.4	Asthma	16	3.2	0.5
<i>Cannabis</i> abuse	42	3.0	0.4	Contact dermatitis and other eczema	12	2.4	0.3
Total Applicants with Medical Conditions	1,398		13.6	Total Applicants with Medical Conditions	497		14.5
Total DES Cases with Medical Exam Record	10,310			Total DES Cases with Medical Exam Record	3,434		

1. Percent of applicants with each medical condition among all applicants with medical conditions.

2. Percent of applicants with each medical condition among all DES cases with a medical exam record.

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TABLE 15C: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES APPEARING IN MEPS MEDICAL EXAMINATION RECORDS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: **MARINE CORPS**, FY 2010-2014 vs. FY 2015

2010-2014				2015			
ICD-9 Diagnosis Code	n	% of Cond ¹	% of App ²	ICD-9 Diagnosis Code	n	% of Cond ¹	% of App ²
Overweight, obesity and other hyperalimentation	430	19.8	3.0	Overweight, obesity and other hyperalimentation	125	21.0	3.0
<i>Cannabis</i> abuse	171	7.9	1.2	Abnormal loss of weight and underweight	44	7.4	1.1
Abnormal loss of weight and underweight	149	6.9	1.0	<i>Cannabis</i> abuse	28	4.7	0.7
Disorders of refraction and accommodation	92	4.2	0.6	Asthma	24	4.0	0.6
Asthma	67	3.1	0.5	Disorders of refraction and accommodation	18	3.0	0.4
Total Applicants with Medical Conditions	2,173		14.9	Total Applicants with Medical Conditions	595		14.4
Total DES Cases with Medical Exam Record	14,543			Total DES Cases with Medical Exam Record	4,122		

1. Percent of applicants with each medical condition among all applicants with medical conditions.

2. Percent of applicants with each medical condition among all DES cases with a medical exam record.

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TABLE 15D: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES APPEARING IN MEPS MEDICAL EXAMINATION RECORDS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: **AIR FORCE**, FY 2010-2014 VS. FY 2015

2010-2014				2015			
ICD-9 Diagnosis Code	n	% of Cond ¹	% of App ²	ICD-9 Diagnosis Code	n	% of Cond ¹	% of App ²
Disorders of refraction and accommodation	64	4.9	0.5	Disorders of refraction and accommodation	22	6.1	0.7
Asthma	42	3.2	0.3	Other derangement of joint	14	3.9	0.5
Other nonspecific abnormal findings	40	3.1	0.3	Certain adverse effects, not elsewhere classified	11	3.1	0.4
Other disorders of bone and cartilage	32	2.4	0.3	Other and unspecified disorder of joint	9	2.5	0.3
Neurotic disorders	30	2.3	0.2	Obesity and other hyperailmentation	8	2.2	0.3
Total Applicants with Medical Conditions	1,309		10.8	Total Applicants with Medical Conditions	358		11.6
Total DES Cases with Medical Exam Record	12,092			Total DES Cases with Medical Exam Record	3,084		

1. Percent of applicants with each medical condition among all applicants with medical conditions.

2. Percent of applicants with each medical condition among all DES cases with a medical exam record.

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The most prevalent medical disqualification diagnoses at MEPS medical examination are shown in Tables 16A-16D for each service and by leading disability body systems. Only individuals who were discharged with a service connected disability were included in these tables (i.e. Fit and SWOB dispositions are excluded). Classification of an individual's disability conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category in cases of multiple disability conditions. Like the disability body system categories, ICD-9 diagnosis types at MEPS examination within a body system are not mutually exclusive and an individual is represented in multiple ICD-9 diagnosis categories if he/she has more than one type of medical disqualification. Therefore, percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.

Total rate of medical disqualification prior to accession among individuals disability discharged in 2015 varied from 9% in the Navy and Air Force to 16% in the Army. From 2010 to 2014, the rate of medical disqualification overall varied from 8% in the Navy to 18% in the Army. In the Army, individuals discharged with a musculoskeletal disability had the highest rates of medical disqualification prior to accession. Rates of disqualification were similar regardless of the type of disability evaluation in the Navy, Marine Corps, and Air Force. In all services, the leading reasons for medical disqualification, described using ICD-9 diagnoses, did not vary based on the body system evaluated for disability. Weight disqualifications, including both underweight and overweight, and musculoskeletal conditions were the most common types of pre-accession medical disqualification in all services regardless of the type of disability discharge.

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TABLE 16A: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: ARMY, FY 2010-2014 VS. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	73,408		Total Disability Discharged	33,732	
Weight	3,323	4.5	Weight	1,273	3.8
Musculoskeletal	1,308	1.8	Musculoskeletal	585	1.7
Psychiatric	1,069	1.5	Psychiatric	481	1.4
Any DQ	13,159	17.9	Any DQ	5,307	15.7
Musculoskeletal Disability	52,942	72.1	Musculoskeletal Disability	22,575	66.9
Weight	2,485	4.7	Weight	864	3.8
Musculoskeletal	1,054	2.0	Musculoskeletal	458	2.0
Psychiatric	734	1.4	Psychiatric	298	1.3
Any DQ	9,734	18.4	Any DQ	3,589	15.9
Psychiatric Disability	24,176	32.9	Psychiatric Disability	18,774	55.7
Weight	826	3.4	Weight	710	3.8
Psychiatric	340	1.4	Musculoskeletal	247	1.3
Musculoskeletal	313	1.3	Psychiatric	315	1.7
Any DQ	3,250	13.4	Any DQ	2,766	14.7
Neurological Disability	17,248	23.5	Neurological Disability	8,559	25.4
Weight	612	3.5	Weight	283	3.3
Psychiatric	230	1.3	Musculoskeletal	136	1.6
Musculoskeletal	241	1.4	Psychiatric	109	1.3
Neurological ²	36	0.2	Neurological ²	9	0.1
Any DQ	2,576	14.9	Any DQ	1,227	14.3

1. Percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.

2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

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TABLE 16B: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: NAVY, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	12,991		Total Disability Discharged	3,935	
Weight	252	1.9	Weight	73	1.9
Musculoskeletal	204	1.6	Musculoskeletal	68	1.7
Vision	102	0.8	Vision	55	1.4
Any DQ	999	7.7	Any DQ	370	9.4
Musculoskeletal Disability	4,680	36.0	Musculoskeletal Disability	1,261	32.0
Musculoskeletal	131	2.8	Musculoskeletal	35	2.8
Weight	118	2.5	Weight	27	2.1
Vision	42	0.9	Vision	17	1.3
Any DQ	467	10.0	Any DQ	134	10.6
Psychiatric Disability	2,941	22.6	Psychiatric Disability	1,377	35.0
Weight	68	2.3	Vision	29	2.1
Musculoskeletal	38	1.3	Weight	27	2.0
Vision	35	1.2	Musculoskeletal	24	1.7
Psychiatric	29	1.0	Psychiatric	14	1.0
Any DQ	274	9.3	Any DQ	160	11.6
Neurological Disability	2,136	16.4	Neurological Disability	614	15.6
Weight	50	2.3	Weight	19	3.1
Musculoskeletal	33	1.5	Musculoskeletal	10	1.6
Psychiatric	19	0.9	Vision	9	1.5
Neurological ²	10	0.5	Neurological ²	3	0.5
Any DQ	206	9.6	Any DQ	69	11.2

1. Percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.

2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

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TABLE 16C: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: MARINE CORPS, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	15,941		Total Disability Discharged	4,368	
Weight	389	2.4	Weight	114	2.6
Musculoskeletal	306	1.9	Musculoskeletal	80	1.8
Psychiatric	284	1.8	Psychiatric	62	1.4
Any DQ	1,680	10.5	Any DQ	476	10.9
Musculoskeletal Disability	8,481	53.2	Musculoskeletal Disability	2,193	50.2
Weight	253	3.0	Weight	56	2.6
Musculoskeletal	215	2.5	Musculoskeletal	50	2.3
Psychiatric	165	1.9	Psychiatric	29	1.3
Any DQ	1,024	12.1	Any DQ	262	11.9
Psychiatric Disability	3,907	24.5	Psychiatric Disability	1,496	34.2
Weight	87	2.2	Weight	44	2.9
Psychiatric	77	2.0	Musculoskeletal	26	1.7
Musculoskeletal	64	1.6	Psychiatric	26	1.7
Any DQ	375	9.6	Any DQ	154	10.3
Neurological Disability	3,171	19.9	Neurological Disability	820	18.8
Weight	76	2.4	Weight	22	2.7
Musculoskeletal	66	2.1	Musculoskeletal	15	1.8
Psychiatric	58	1.8	Psychiatric	8	1.0
Neurological ²	11	0.3	Neurological ²	2	0.2
Any DQ	338	10.7	Any DQ	90	11.0

1. Percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.

2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

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TABLE 16D: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: AIR FORCE, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	13,702		Total Disability Discharged	3,572	
Musculoskeletal	345	2.5	Musculoskeletal	143	2.6
Weight	201	1.4	Vision	63	1.6
Vision	184	1.2	Weight	57	1.4
Any DQ	1,309	9.6	Any DQ	358	9.4
Musculoskeletal Disability	7,014	50.0	Musculoskeletal Disability	1,887	54.2
Musculoskeletal	214	3.0	Musculoskeletal	76	3.3
Weight	119	1.6	Weight	27	1.8
Vision	76	1.1	Vision	26	1.0
Any DQ	655	9.1	Any DQ	179	9.7
Psychiatric Disability	3,564	24.8	Psychiatric Disability	1,100	29.7
Musculoskeletal	76	2.2	Musculoskeletal	35	2.7
Vision	62	1.2	Vision	23	2.2
Weight	46	0.7	Weight	18	1.4
Psychiatric	35	0.7	Psychiatric	12	1.4
Any DQ	334	8.9	Any DQ	101	9.6
Neurological Disability	2,796	18.9	Neurological Disability	716	25.7
Musculoskeletal	59	2.1	Musculoskeletal	33	2.3
Weight	37	0.9	Weight	12	1.9
Vision	28	0.9	Vision	6	1.0
Neurological	0	-	Neurological	0	-
Any DQ	228	7.9	Any DQ	67	8.2

1. Percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.

2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

History of accession medical waiver among enlisted service members evaluated for disability

Enlisted waiver records include data on medical waivers considered by each service's waiver authority from 1995 to present. Only waiver applications that occurred prior to the date of medical evaluation board were included in these analyses. In cases where more than one waiver record was available for an individual, only the most recent waiver record was included.

Table 17 shows the history of medical waiver application among enlisted service members evaluated for disability by year of disability evaluation and service. The overall prevalence of an accession medical waiver application was highest in the Army where about 8% of all disability evaluated service members applied for a waiver. Air Force members evaluated for disability had the lowest percentage of service members with an accession medical waiver, about 3%. In the Navy and Marine Corps the rate of accession medical waiver in the disability evaluated population was approximately 6%.

TABLE 17: HISTORY OF ACCESSION MEDICAL WAIVER APPLICATIONS AMONG ENLISTED SERVICE MEMBERS EVALUATED FOR DISABILITY BY YEAR OF DISABILITY EVALUATION: FY 2010-2015

	Army			Navy			Marine Corps			Air Force		
	Waiver App	Total ¹	% ²	Waiver App	Total ¹	% ²	Waiver App	Total ¹	% ²	Waiver App	Total ¹	% ²
2010	801	9,939	8.1	105	2,158	4.9	151	2,290	6.6	64	3,274	2.0
2011	779	10,232	7.6	119	2,063	5.8	187	2,676	7.0	102	3,439	3.0
2012	969	11,911	8.1	188	2,791	6.7	235	3,815	6.2	104	3,214	3.2
2013	1,492	18,359	8.1	157	2,613	6.0	197	3,161	6.2	103	2,701	3.8
2014	1,806	23,689	7.6	249	3,366	7.4	243	3,999	6.1	122	3,411	3.6
2015	2,502	31,834	7.9	265	3,935	6.7	250	4,368	5.7	135	3,708	3.6
Total	8,349	105,964	7.9	1083	16,926	6.4	1263	20,309	6.2	630	19,747	3.2

1.Total enlisted individuals evaluated for disability

2.Percent of enlisted disability cases with a history of accession medical waiver application

The leading diagnosis codes listed in medical accession waiver application records of enlisted service members are shown in Tables 18A-18D. Results are shown by year of disability evaluation comparing 2015 disability evaluations to those occurring in the previous five years. Among Army service members evaluated for disability with a waiver, the leading waiver condition in both 2015 and the preceding five years was hearing loss. Among Navy and Air Force service members evaluated for disability, disorders of refraction and accommodation was most common in both time periods. Non-specific abnormal findings was the leading reason Marine Corps personnel sought pre-accession medical waivers, regardless of the time period they became disabled.

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TABLE 18A: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: ARMY, FY 2010-2014 vs. FY 2015

2010-2014			2015		
ICD-9 Diagnosis Code	n	%	ICD-9 Diagnosis Code	n	%
Hearing loss	621	10.4	Hearing loss	231	8.9
Disorders of refraction and accommodation	464	7.8	Disorders of refraction and accommodation	228	8.8
Disorders of lipid metabolism	467	7.8	Disorders of lipid metabolism	179	6.9
Elevated blood pressure reading without diagnosis of hypertension	308	5.2	Elevated blood pressure reading without diagnosis of hypertension	123	4.8
Asthma	261	4.4	Asthma	113	4.4
Total Waiver Applications	5,966		Total Waiver Applications	2,586	

TABLE 18B: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: NAVY, FY 2010-2014 vs. FY 2015

2010-2014			2015		
ICD-9 Diagnosis Code	n	%	ICD-9 Diagnosis Code	n	%
Disorders of refraction and accommodation	74	9.0	Disorders of refraction and accommodation	34	12.8
Asthma	60	7.3	Other anaphylactic shock	20	7.5
Other and unspecified disorders of bone and cartilage	57	7.0	Hearing loss	18	6.8
Hearing loss	41	5.0	Asthma	12	4.5
Internal derangement of knee	26	3.2	Other and unspecified disorders of bone and cartilage	12	4.5
Total Waiver Applications	818		Total Waiver Applications	265	

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TABLE 18C: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **MARINE CORPS**, FY 2010-2014 vs. FY 2015

2010-2014			2015		
ICD-9 Diagnosis Code	n	%	ICD-9 Diagnosis Code	n	%
Other nonspecific abnormal findings	102	10.1	Other nonspecific abnormal findings	36	14.4
Other and unspecified disorders of bone and cartilage	96	9.5	Asthma	23	9.2
Disorders of refraction and accommodation	74	7.3	Anxiety, dissociative and somatoform disorders	19	7.6
Asthma	74	7.3	Hearing loss	14	5.6
Hearing loss	50	4.9	Other and unspecified disorders of bone and cartilage	14	5.6
Total Waiver Applications	1,013		Total Waiver Applications	250	

TABLE 18D: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **AIR FORCE**, FY 2010-2014 vs. FY 2015

2010-2014			2015		
ICD-9 Diagnosis Code	n	%	ICD-9 Diagnosis Code	n	%
Disorders of refraction and accommodation	58	12.1	Disorders of refraction and accommodation	22	16.8
Hyperkinetic syndrome of childhood	36	7.5	Other derangement of joint	12	9.2
Reduction of fracture and dislocation	31	6.5	Reduction of fracture and dislocation	9	6.9
Asthma	28	5.8	Episodic mood disorders	8	6.1
Episodic mood disorders	29	6.0	Other and unspecified disorder of joint	8	6.1
Total Waiver Applications	480		Total Waiver Applications	131	

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The most prevalent waiver approvals are shown in Tables 19A-19D for each service and by leading disability body systems. Only individuals who were discharged with a service connected disability were included in these tables (i.e. Fit and SWOB dispositions are excluded). Classification of an individual's disability conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category in cases of multiple disability conditions. Like the disability body system categories, ICD-9 diagnosis waiver types within a body system are not mutually exclusive and an individual is represented in multiple ICD-9 diagnosis categories if he/she has more than one type of medical waiver. Therefore, percentages associated with ICD-9 diagnosis waiver types within each body system should be interpreted as the percent of individuals with discharged with a specific disability type who had each specific waiver type.

Total rate of waiver among individuals disability discharged in 2015 was between 3-9% in all services. From 2010 to 2014 the rate of waiver overall varied from 4% in the Air Force to 9% in the Army. Within each service, the overall waiver rate did not vary significantly by type of disability discharge. Waivers for musculoskeletal conditions were most common in all services. Hearing and vision waivers were the second and third most common waiver type in the Army, while psychiatric and vision waivers were second and third most common in the Navy and Air Force. Psychiatric and respiratory condition waivers were second and third most common in the Marine Corps. In all services, the leading reasons for waiver, described using ICD-9 diagnoses, did not vary based on the body system evaluated for disability.

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TABLE 19A: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: ARMY, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	73,408		Total Disability Discharged	33,732	
Musculoskeletal	1,359	1.9	Musculoskeletal	610	1.8
Hearing	642	0.9	Vision	330	1.0
Vision	679	0.9	Hearing	249	0.7
Any Waiver	6,248	8.5	Any Waiver	2,847	8.4
Musculoskeletal Disability	52,942	72.1	Musculoskeletal Disability	22,575	66.9
Musculoskeletal	1,081	2.0	Musculoskeletal	489	2.2
Vision	481	0.9	Vision	221	1.0
Hearing	406	0.8	Hearing	169	0.7
Any Waiver	4,639	8.8	Any Waiver	1,987	8.8
Psychiatric Disability	24,176	32.9	Psychiatric Disability	18,774	55.7
Musculoskeletal	348	1.4	Musculoskeletal	275	1.5
Hearing	190	0.8	Vision	148	0.8
Psychiatric	168	0.7	Psychiatric	164	0.9
Any Waiver	1,653	6.8	Any Waiver	1,425	7.6
Neurological Disability	17,248	23.5	Neurological Disability	8,559	25.4
Musculoskeletal	265	1.5	Musculoskeletal	147	1.7
Hearing	153	0.9	Hearing	67	0.8
Vision	128	0.7	Vision	57	0.7
Neurological ²	22	0.1	Neurological ²	7	0.1
Any Waiver	1,340	7.8	Any Waiver	654	7.6

1. Percentages associated with ICD-9 diagnosis types at waiver within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific waiver type.

2. The prevalence of neurological waivers is presented to show the relationship between History of neurological waiver and disability. Neurological waivers are not among the leading reasons for waiver among individuals with a neurological disability.

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TABLE 19B: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: NAVY, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	12,991		Total Disability Discharged	3,935	
Musculoskeletal	182	1.4	Musculoskeletal	52	1.3
Vision	86	0.7	Vision	44	1.1
Respiratory	56	0.4	Psychiatric	18	0.5
Any Waiver	655	5.0	Any Waiver	229	5.8
Musculoskeletal Disability	4,680	36.0	Musculoskeletal Disability	1,261	32.0
Musculoskeletal	118	2.5	Musculoskeletal	27	2.1
Vision	35	0.7	Vision	15	1.2
Respiratory	25	0.5	Hearing	9	0.7
Any Waiver	328	7.0	Any Waiver	93	7.4
Psychiatric Disability	2,941	22.6	Psychiatric Disability	1,377	35.0
Musculoskeletal	34	1.2	Vision	20	1.5
Vision	25	0.9	Musculoskeletal	16	1.2
Psychiatric	20	0.7	Psychiatric	12	0.9
Any Waiver	181	6.2	Any Waiver	99	7.2
Neurological Disability	2,136	16.4	Neurological Disability	614	15.6
Musculoskeletal	26	1.2	Vision	9	1.5
Vision	19	0.9	Musculoskeletal	8	1.3
Hearing	13	0.6	Psychiatric	5	0.8
Neurological ²	1	0.0	Neurological ²	2	0.3
Any Waiver	143	6.7	Any Waiver	41	6.7

1. Percentages associated with ICD-9 diagnosis types at waiver within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific waiver type.

2. The prevalence of neurological waivers is presented to show the relationship between History of neurological waiver and disability. Neurological waivers are not among the leading reasons for waiver among individuals with a neurological disability.

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TABLE 19C: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: MARINE CORPS, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	15,941		Total Disability Discharged	4,368	
Musculoskeletal	220	1.4	Musculoskeletal	52	1.2
Vision	111	0.7	Psychiatric	34	0.8
Psychiatric	107	0.7	Respiratory	29	0.7
Any Waiver	808	5.1	Any Waiver	215	4.9
Musculoskeletal Disability	8,481	53.2	Musculoskeletal Disability	2,193	50.2
Musculoskeletal	143	1.7	Musculoskeletal	34	1.6
Psychiatric	63	0.7	Psychiatric	18	0.8
Vision	59	0.7	Respiratory	17	0.8
Any Waiver	565	6.7	Any Waiver	151	6.9
Psychiatric Disability	3,907	24.5	Psychiatric Disability	1,496	34.2
Musculoskeletal	58	1.5	Musculoskeletal	17	1.1
Psychiatric	28	0.7	Psychiatric	12	0.8
Vision	23	0.6	Respiratory	10	0.7
Any Waiver	229	5.9	Any Waiver	76	5.1
Neurological Disability	3,171	19.9	Neurological Disability	820	18.8
Musculoskeletal	48	1.5	Musculoskeletal	12	1.5
Vision	29	0.9	Respiratory	8	1.0
Psychiatric	20	0.6	Psychiatric	7	0.9
Neurological ²	0	0.0	Neurological ²	0	0.0
Any Waiver	203	6.4	Any Waiver	53	6.5

1. Percentages associated with ICD-9 diagnosis types at waiver within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific waiver type.

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TABLE 19D: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: AIR FORCE, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	13,702		Total Disability Discharged	3,572	
Musculoskeletal	99	0.7	Musculoskeletal	34	1.0
Psychiatric	71	0.5	Vision	24	0.7
Vision	68	0.5	Psychiatric	20	0.6
Any Waiver	480	3.5	Any Waiver	131	3.7
Musculoskeletal Disability	7,014	51.2	Musculoskeletal Disability	1,887	52.8
Musculoskeletal	61	0.9	Musculoskeletal	20	1.1
Psychiatric	32	0.5	Vision	10	0.5
Vision	28	0.4	Psychiatric	5	0.3
Any Waiver	236	3.4	Any Waiver	67	3.6
Psychiatric Disability	3,564	26.0	Psychiatric Disability	1,100	30.8
Vision	26	0.7	Vision	10	0.9
Psychiatric	25	0.7	Musculoskeletal	7	0.6
Musculoskeletal	22	0.6	Psychiatric	7	0.6
Any Waiver	136	3.8	Any Waiver	38	3.5
Neurological Disability	2,796	20.4	Neurological Disability	716	20.0
Musculoskeletal	14	0.5	Musculoskeletal	8	1.1
Psychiatric	9	0.3	Psychiatric	3	0.4
Vision	9	0.3	Vision	2	0.3
Neurological ²	2	0.1	Neurological ²	1	0.1
Any Waiver	81	2.9	Any Waiver	24	3.4

1. Percentages associated with ICD-9 diagnosis types at waiver within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific waiver type.

2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

History of hospitalization among active duty service members evaluated for disability

Hospitalization records received by AMSARA include data on direct care inpatient visits among active duty service members from 1995 to present. Only hospitalizations that occurred prior to the date of medical evaluation board were included in these analyses. All hospitalizations that occurred among individuals who were later evaluated for disability were included in these analyses. Only the diagnoses listed as primary in the hospitalization record were utilized in the creation of these tables.

Table 20 shows the history of hospitalization among service members evaluated for disability by year of disability evaluation and service. Over time, the prevalence of hospitalization in the disability evaluated population has remained stable in the Navy and Air Force. In 2014 and 2015, Marine Corps hospitalization rates decreased slightly relative to previous years. Army hospitalization rates have increased in 2014 and 2015 relative to the period from 2010 to 2013. The Air Force and Army had lower percentages of service members evaluated for disability that had been hospitalized. Hospitalization rates were highest in the Navy.

TABLE 20: HISTORY OF HOSPITALIZATION BY YEAR OF DISABILITY EVALUATION: FY 2010-2015

	Army			Navy			Marines Corps			Air Force		
	Hosp	Total ¹	% ²	Hosp	Total ¹	% ²	Hosp	Total ¹	% ²	Hosp	Total ¹	% ²
2010	3,290	10,866	30.3	1,347	2,864	47.0	1,380	3,079	44.8	1,057	3,101	34.1
2011	3,218	10,505	30.6	1,135	2,531	44.8	1,423	3,198	44.5	1,030	3,175	32.4
2012	3,787	11,950	31.7	1,597	3,413	46.8	1,886	4,212	44.8	887	3,004	29.5
2013	5,671	19,264	29.4	1,231	2,698	45.6	1,325	3,204	41.4	815	2,514	32.4
2014	7,006	20,006	35.0	1,273	2,783	45.7	1,051	3,006	35.0	1,023	3,148	32.5
2015	10,534	26,416	39.9	1,262	2,915	43.3	1,071	3,114	34.4	1,013	3,172	31.9
Total	33,506	99,007	33.8	7,845	17,204	45.6	8,136	19,813	41.1	5,825	18,114	32.2

1.Total disability evaluations.

2.Percent of disability cases with a hospitalization.

The most common primary diagnoses at hospitalization for service members evaluated for disability are shown in Tables 21A-21D. Psychiatric disorders were the leading reason for hospitalization among individuals evaluated for disability in 2015 in all services except the Air Force where birth trauma was the leading reason for hospitalization. In the Army and Marine Corps, adjustment disorders were the most common reason for hospitalization of individuals evaluated for disability in 2015 as well as those evaluated for disability in the previous five year period. Episodic mood disorders were the most common reason for hospitalization in 2015 Navy disability evaluations and evaluations in the previous five year period. In the Air Force, hospitalizations due to childbirth were most common but were followed closely by episodic mood disorders both in 2015 and the previous five year period.

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TABLE 21A: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **ARMY**, FY 2010-2014 vs. FY 2015

2010-2014			2015		
ICD-9 Diagnosis Code	n	%	ICD-9 Diagnosis Code	n	%
Adjustment disorders	2,299	10.0	Adjustment disorders	1,711	16.2
Episodic mood disorders	1,749	7.6	Episodic mood disorders	1,079	10.2
Intervertebral disc disorders	1,340	5.8	Intervertebral disc disorders	554	5.3
Symptoms involving respiratory system and other chest symptoms	971	4.2	Symptoms involving respiratory system and other chest symptoms	468	4.4
Trauma to perineum and vulva during delivery	754	3.3	Anxiety, dissociative and somatoform disorders	355	3.4
Total DES Hospitalized	22,972		Total DES Hospitalized	10,534	

TABLE 21B: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **NAVY**, FY 2010-2014 vs. FY 2015

2010-2014			2015		
ICD-9 Diagnosis Code	n	%	ICD-9 Diagnosis Code	n	%
Episodic mood disorders	720	10.9	Episodic mood disorders	160	12.7
Adjustment disorders	490	7.4	Adjustment disorders	140	11.1
Trauma to perineum and vulva during delivery	417	6.3	Trauma to perineum and vulva during delivery	77	6.1
Intervertebral disc disorders	302	4.6	Anxiety, dissociative and somatoform disorders	63	5.0
Schizophrenic disorders	214	3.3	Alcohol dependence syndrome	50	4.0
Total DES Hospitalized	6,583		Total DES Hospitalized	1,262	

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TABLE 21C: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **MARINE CORPS**, FY 2010-2014 vs. FY 2015

2010-2014			2015		
ICD-9 Diagnosis Code	n	%	ICD-9 Diagnosis Code	n	%
Adjustment disorders	569	8.1	Adjustment disorders	102	9.5
Episodic mood disorders	461	6.5	Episodic mood disorders	65	6.1
Other complications of procedures, not elsewhere classified	251	3.6	Other cellulitis and abscess	52	4.9
Intervertebral disc disorders	232	3.3	Intervertebral disc disorders	42	3.9
Other cellulitis and abscess	217	3.1	Trauma to perineum and vulva during delivery	41	3.8
Total DES Hospitalized	7,065		Total DES Hospitalized	1,071	

TABLE 21D: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **AIR FORCE**, FY 2010-2014 vs. FY 2015

2010-2014			2015		
ICD-9 Diagnosis Code	n	%	ICD-9 Diagnosis Code	n	%
Trauma to perineum and vulva during delivery	358	7.4	Trauma to perineum and vulva during delivery	92	9.1
Episodic mood disorders	301	6.3	Episodic mood disorders	89	8.8
Intervertebral disc disorders	212	4.4	Adjustment reaction	61	6.0
Adjustment reaction	188	3.9	Intervertebral disc disorders	44	4.3
Symptoms involving respiratory system and other chest symptoms	162	3.4	Acute appendicitis	41	4.0
Total DES Hospitalized	4,812		Total DES Hospitalized	1,013	

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The most prevalent primary medical diagnoses at hospitalization are shown in Tables 22A-22D for each service and by leading disability body systems. Only individuals who were discharged with a service connected disability were included in these tables (i.e. Fit and SWOB dispositions are excluded). Classification of an individual's disability conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category in cases of multiple disability conditions. Like the disability body system categories, ICD-9 diagnosis types at hospitalization within a body system are not mutually exclusive and an individual is represented in multiple ICD-9 diagnosis categories if he/she has more than one type of medical diagnosis at hospitalization. Therefore, percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals with discharged with a specific disability type who had each specific condition type at hospitalization.

Total rate of hospitalization among individuals disability discharged in 2015 varied from 33% in the Air Force to 55% in the Navy. From 2010 to 2014, the rate of hospitalization varied from 29% in Army to 38% in the Air Force. In all services, the rates of hospitalization were lowest in individuals discharged with a musculoskeletal condition. More concordance was observed between the reason for hospitalization and the reason for disability discharge than was observed with either medical disqualifications or waivers, especially among those with musculoskeletal or psychiatric conditions. In 2015, the percentage of musculoskeletal disability cases with a history of hospitalization for a musculoskeletal condition varied from 10% in the Army to 16% in the Navy. Rates of psychiatric hospitalizations varied from 15% of psychiatric disability discharges in the Army to 35% of psychiatric disability discharges in the Navy in 2015. Similar trends in the rate of hospitalization by body system type were observed in the previous five year period though considerable variation was observed by service.

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TABLE 22A: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: ARMY, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	73,408		Total Disability Discharged	33,732	
Musculoskeletal	6,527	8.9	Psychiatric	3,188	9.5
Psychiatric	4,725	6.4	Musculoskeletal	2,520	7.5
Neurological	1,721	2.3	Neurological	662	2.0
Any Hospitalization	28,558	38.9	Any Hospitalization	13,454	39.9
Musculoskeletal Disability	52,942	72.1	Musculoskeletal Disability	22,575	66.9
Musculoskeletal	5,797	10.9	Musculoskeletal	2,205	9.8
Psychiatric	2,049	3.9	Psychiatric	1,309	5.8
Neurological	1,060	2.0	Neurological	404	1.8
Any Hospitalization	18,913	35.7	Any Hospitalization	8,413	37.3
Psychiatric Disability	24,176	32.9	Psychiatric Disability	18,774	55.7
Psychiatric	3,622	15.0	Psychiatric	2,890	15.4
Musculoskeletal	1,878	7.8	Musculoskeletal	1,382	7.4
Neurological	623	2.6	Neurological	399	2.1
Any Hospitalization	11,424	47.3	Any Hospitalization	8,885	47.3
Neurological Disability	17,248	23.5	Neurological Disability	8,559	25.4
Musculoskeletal	2,005	11.6	Musculoskeletal	930	10.9
Psychiatric	871	5.0	Psychiatric	625	7.3
Neurological	864	5.0	Neurological	346	4.0
Any Hospitalization	8,121	47.1	Any Hospitalization	4,023	47.0

1. Percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at hospitalization.

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TABLE 22B: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: NAVY, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	14,289		Total Disability Discharged	2,915	
Psychiatric	1,294	9.1	Psychiatric	565	19.4
Musculoskeletal	1,073	7.5	Musculoskeletal	256	8.8
Neurological	467	3.3	Neurological	132	4.5
Any Hospitalization	5,005	35.0	Any Hospitalization	1,610	55.2
Musculoskeletal Disability	4,577	32.0	Musculoskeletal Disability	1,227	42.1
Musculoskeletal	848	18.5	Musculoskeletal	193	15.7
Psychiatric	188	4.1	Psychiatric	63	5.1
Neurological	146	3.2	Neurological	45	3.7
Any Hospitalization	1,802	39.4	Any Hospitalization	462	37.7
Psychiatric Disability	2,961	20.7	Psychiatric Disability	1,404	48.2
Psychiatric	1,050	35.5	Psychiatric	484	34.5
Musculoskeletal	141	4.8	Substance Abuse	59	4.2
Neurological	97	3.3	Musculoskeletal	43	3.1
Any Hospitalization	1,673	56.5	Any Hospitalization	765	54.5
Neurological Disability	2,183	15.3	Neurological Disability	631	21.6
Neurological	277	12.7	Neurological	73	11.6
Musculoskeletal	257	11.8	Musculoskeletal	65	10.3
Psychiatric	104	4.8	Psychiatric	34	5.4
Any Hospitalization	1,079	49.4	Any Hospitalization	283	44.8

1. Percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at hospitalization.

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TABLE 22C: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: MARINE CORPS, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	16,699		Total Disability Discharged	3,114	
Musculoskeletal	2,192	13.1	Musculoskeletal	391	12.6
Psychiatric	1,095	6.6	Psychiatric	391	12.6
Neurological	466	2.8	Neurological	127	4.1
Any Hospitalization	6,023	36.1	Any Hospitalization	1,522	48.9
Musculoskeletal Disability	8,162	48.9	Musculoskeletal Disability	2,170	69.7
Musculoskeletal	1,915	23.5	Musculoskeletal	325	15.0
Neurological	257	3.1	Neurological	88	4.1
Psychiatric	228	2.8	Psychiatric	57	2.6
Any Hospitalization	3,303	40.5	Any Hospitalization	723	33.3
Psychiatric Disability	3,729	22.3	Psychiatric Disability	1,491	47.9
Psychiatric	915	24.5	Psychiatric	338	22.7
Musculoskeletal	406	10.9	Musculoskeletal	114	7.6
Neurological	104	2.8	Neurological	48	3.2
Any Hospitalization	1,962	52.6	Any Hospitalization	702	47.1
Neurological Disability	3,080	18.4	Neurological Disability	822	26.4
Musculoskeletal	509	16.5	Musculoskeletal	87	10.6
Neurological	223	7.2	Neurological	60	7.3
Psychiatric	135	4.4	Psychiatric	53	6.4
Any Hospitalization	1,474	47.9	Any Hospitalization	330	40.1

1. Percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at hospitalization.

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TABLE 22D: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: AIR FORCE, FY 2010-2014 vs. FY 2015

2010-2014			2015		
	n	% ¹		n	% ¹
Total Disability Discharged	12,592		Total Disability Discharged	3,034	
Musculoskeletal	652	5.2	Psychiatric	206	6.8
Psychiatric	597	4.7	Musculoskeletal	159	5.2
Neurological	298	2.4	Neurological	76	2.5
Any Hospitalization	4,812	38.2	Any Hospitalization	1,013	33.4
Musculoskeletal Disability	6,244	49.6	Musculoskeletal Disability	1,578	52.0
Musculoskeletal	517	8.3	Musculoskeletal	116	7.4
Neurological	128	2.0	Psychiatric	31	2.0
Psychiatric	113	1.8	Respiratory	31	2.0
Any Hospitalization	2,175	34.8	Any Hospitalization	485	30.7
Psychiatric Disability	3,242	25.7	Psychiatric Disability	940	31.0
Psychiatric	491	15.1	Psychiatric	180	19.1
Musculoskeletal	118	3.6	Musculoskeletal	52	5.5
Neurological	75	2.3	Neurological	30	3.2
Any Hospitalization	1,330	41.0	Any Hospitalization	504	53.6
Neurological Disability	2,602	20.7	Neurological Disability	615	20.3
Musculoskeletal	173	6.6	Musculoskeletal	41	6.7
Neurological	164	6.3	Neurological	36	5.9
Psychiatric	57	2.2	Psychiatric	22	3.6
Any Hospitalization	1,031	39.6	Any Hospitalization	252	41.0

1. Percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at hospitalization.

Database Limitations

- Data utilized in the generation of this report were initially collected for purposes of supporting the Accession Medical Standards Working Group (AMSWG) in the development of evidence-based medical accession standards to reduce morbidity and attrition due to pre-existing conditions. Data use agreements reflected data elements and study populations to support this research and required revision to support DES database analysis. Therefore, not all data elements were available from the period from FY 2001 to FY 2015 for all services.
- Military Occupational Specialty (MOS) at disability evaluation is only complete for Army for the full study period. The Department of the Navy collects information regarding MOS, but this variable was not included in the initial data extracts that were sent to AMSARA. Occupational classification has been associated with disability in both civilian and military literature and is essential to understanding the precise risk factors associated with disability evaluation, separation, and retirement in the military.
- Medical Evaluation Board (MEB) ICD-9/ICD-10 diagnosis codes of the medical condition that precipitated the disability evaluation are not included in any of the service disability datasets received by AMSARA. Veterans Affairs Schedule for Rating Disabilities (VASRD) codes give an indication of the unfitting conditions referred to the Physical Evaluation Board (PEB), but do not contain the level of detail available when diagnoses are coded using ICD-9/ICD-10 codes.
- While the majority of disability evaluations had an accession record in the AMSARA databases, some who undergo disability evaluation do not have an accession record in AMSARA databases due to missing accession records prior to 1995. This may limit the ability to study the relationship between characteristics of service members at accession and disability evaluation, separation, and retirement in detail.
- None of the VASRD codes associated with medical conditions for which service members are evaluated for disability is identified as primary in the databases. Therefore, it cannot be determined which condition was the primary condition which precipitated disability evaluation and the impact and prevalence of some conditions in the population may be incorrectly characterized.

LIMITATIONS

Data Quality and Standardization Recommendations

1. Accurate indicators of the medical conditions that result in disability rating are not available, precluding surveillance of or evaluation of conditions which lead to disability. Though Veterans Affairs Schedule for Rating Disabilities (VASRD) codes are available, they are not diagnosis codes. To allow for more accurate surveillance of the burden of disability in the military, each service's DES database should include one or more Medical Evaluation Board (MEB) diagnoses in the electronic disability record, in the form of text and ICD-9 codes.
2. To ensure Military Occupational Specialty (MOS) and education are accurate at the time of disability evaluation, each service's DES database should record these variables at the time of disability evaluation. This will allow for the assessment of the role of MOS and education on disability evaluation, separation, and retirement, including changes in these characteristics throughout length of service.
3. Date of the underlying injury or onset of the condition is an important variable to consider when utilizing disability evaluation system data, allowing for the measurement of time elapsed from onset to MEB to Physical Evaluation Board (PEB) to discharge. Though healthcare utilization patterns can be determined from hospitalization and ambulatory data, the precise date of the event, onset of symptoms, or initial diagnosis is difficult to infer from the data available. Each service should include additional variables within to indicate date of onset of illness or injury and whether medical condition for which a service member is undergoing disability.
4. High utilization of analogous codes, particularly among individuals with musculoskeletal disabilities, and lack of formal MEB medical diagnosis in the electronic file preclude the evaluation of the association of certain types of disability with specific medical conditions. In the absence of formal medical diagnoses that describe the disabling condition, expanding the VASRD codes, particularly musculoskeletal codes, may reduce the utilization of analogous codes and provide more complete information on the condition that precipitated the disability evaluation to inform interventions to decrease disability.

Publications

Epidemiology of Psychiatric Disability without Posttraumatic Stress Disorder among U.S. Army and Marine Corps Personnel Evaluated For Disability Discharge

Amanda L. Piccirillo, MPH; Elizabeth R. Packnett, MPH; Michael R. Boivin, MD, MPH;
David N. Cowan, PhD, MPH

Journal of Psychiatric Research. 2015(71): 56-62

Objective: To describe characteristics and correlates of disability in Army and Marine Corps personnel diagnosed with psychiatric disorders other than PTSD.

Methods: In this cross-sectional study, the chi-square and Wilcoxon-Mann-Whitney tests compared the distribution of demographic, disability and deployment characteristics between those evaluated for non-PTSD psychiatric disability (N=9,125) versus those evaluated for any other non-psychiatric condition (N=78,072). Multivariate logistic regression examined associations between disability retirement and demographic and disability characteristics.

Results: A significantly higher prevalence of disability retirement, deployment, and comorbidity was observed among Army and Marine Corps personnel evaluated for disability discharge related to a non-PTSD psychiatric disorder. Mood disorders, anxiety disorders and dementia were the most commonly evaluated psychiatric disorders. Characteristics associated with increased odds of non-PTSD psychiatric-related disability retirement includes being in the Marine Corps (OR=1.24), being black (OR=1.29) or other race (OR=1.33), having a combat-related condition (OR=2.50), and older age.

Conclusions: Service members evaluated for a non-PTSD psychiatric disability have similar rates of disability retirement as those evaluated for PTSD, suggesting non-PTSD psychiatric disorders cause a severe and highly compensated disability. Additional research is needed describing the epidemiology of specific non-PTSD psychiatric disorders, such as depression, in service members evaluated for disability discharge.

Risk Factors for Disability Discharge in Enlisted Active Duty Army Soldiers

Amanda L. Piccirillo, MPH; Elizabeth R. Packnett, MPH; David N. Cowan, PhD, MPH; Michael R. Boivin, MD, MPH

Disability and Health Journal, 2016(9): 324-331

Objective: To identify risk factors for disability discharge among soldiers enlisted in the U.S. Army during military operations in Iraq and Afghanistan.

Methods: In this case-control study, cases included active duty soldiers evaluated for disability discharge. Controls, randomly selected from soldiers with no history of disability evaluation, were matched to cases based on enlistment year and sex. Conditional logistic regression models calculated odds of disability discharge. Attributable fractions estimated burden of disability for specific pre-existing condition categories. Poisson regression models compared risk of disability discharge related to common disability types by deployment and combat status.

Results: Characteristics at military enlistment with increased odds of disability discharge included a pre-existing condition, increased age or body mass index, white race, and being divorced. Musculoskeletal conditions and overweight contributed the largest proportion of disabilities. Deployment was protective against disability discharge or receiving a musculoskeletal-related disability, but significantly increased the risk of disability related to a psychiatric or neurological condition.

Conclusions: Soldiers with a pre-existing condition at enlistment, particularly a musculoskeletal condition, had increased odds of disability discharge. Risk of disability was dependent on condition category when stratified by deployment and combat status. Additional research examining conditions during pre-disability hospitalizations could provide insight on specific conditions that commonly lead to disability discharge.

Pre-enlistment and Early Service Risk Factors for Traumatic Brain Injury in the Army and Marine Corps: FY 2002-2010

Hoda Elmasry, MPH; Michael R. Boivin, MD, MPH; Xiaoshu Feng, MPH; Elizabeth R. Packnett, MPH; David N. Cowan, PhD, MPH

Journal of Head Trauma Rehabilitation, DOI: 10.1097/HTR.0000000000000229. epub ahead of print 28 Mar 2016.

Objective: To determine the pre-enlistment and early service risk factors for traumatic brain injury (TBI) related disability in Army and Marine Corps service members.

Methods: A matched case control study was conducted to determine the relationship between pre-enlistment and early service risk factors and disability discharge for TBI. Army and Marine Corps service members with an enlistment record and disability discharge for TBI were included as cases. Controls were selected from the enlisted population with no disability evaluation record and were matched on fiscal year of enlistment, sex and service at a ratio of 5:1.

Results: Older age at enlistment resulted in significantly increased risk for TBI disability in the crude and adjusted models (Adjusted Odds Ratio (aOR): 1.49, 95% Confidence Interval (CI): 1.16, 1.91). An enlistment military occupational specialties (MOS) with a combat arms designation resulted in an almost 3 fold increased odds of TBI disability compared to other MOS categories (OR: 2.75, 95% CI: 2.46, 3.09). This remained a significant risk factor for TBI disability in the multivariate model (OR: 2.74, 95% CI: 2.45, 3.08).

Conclusions: Results from this study help to inform the existing body of military TBI research by highlighting the pre-enlistment demographic and early service risk factors for TBI disability. Further research into the role of age on TBI disability in the military is merited.

Epidemiology of Asthma-Related Disability in the U.S. Armed Forces: 2007-2012

Amanda L. Piccirillo, MPH; Elizabeth R. Packnett, MPH; David N. Cowan, PhD, MPH; Michael R. Boivin MD, MPH

Journal of Asthma, DOI: 10.3109/02770903.2016.1154070. epub ahead of print 6 Apr 2016.

Objective: To characterize the demographic, disability and deployment characteristics of U.S. Armed Forces personnel with an asthma-related disability discharge, which includes separation (without benefits) and retirement (with disability benefits).

Methods: Incidence rates for personnel evaluated for disability discharge and/or disability retired due to asthma and due to all other causes of disability discharge were calculated per 100,000 active duty enlisted service members by year. Multivariate logistical regression was used to examine the associations between disability retirement and several demographic and disability characteristics of service members evaluated for asthma-related disability discharge versus those evaluated for any other non-respiratory condition for each branch of military service.

Results: Service members evaluated for disability discharge related to asthma most often do not have comorbidity and are disability retired rather than separated, with rates of disability retirement increasing over time. Groups with a significantly higher incidence of evaluation for asthma-related disability include females, individuals who entered the military prior to the age of 20, nonwhite race, and those with a history of deployment to Iraq or Afghanistan. The characteristic most associated with the odds of disability retirement was a history of deployment.

Conclusions: New-onset asthma occurring after military entry often causes occupational impairment in service members, especially in those that have been deployed to Iraq or Afghanistan.

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