

# 2020

Annual Report

# Disability Evaluation System Analysis and Research



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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. The investigators have adhered to the policies for protection of human subjects as prescribed in AR 70-25.**



# DESAR MISSION

## Background

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Since 2009, DESAR has utilized epidemiological research and analytics to optimize retention of military Service Members. Using historical perspective and subject matter expertise, we assess and measure the impact of exposure, disease, and injury on military service and disability. Our work provides important information and knowledge to assist decisions by DOD level stakeholders and policymakers.

## Mission

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Execute advanced analytics and epidemiological research to inform DOD retention and disability policy decisions to improve readiness and lethality by reducing attrition, streamlining the Warfighter's disability evaluation process, and decreasing replacement time and cost.

## Objectives

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- Provide key metrics on disability evaluations and discharges
- Evaluate and describe of certain aspects of the military disability evaluation systems
- Design and execute of epidemiologic studies to identify risk factors associated with disability retirement from the military



# Report at a Glance

## FY2015-2019 Disability Evaluation Metrics

### Report Intro

# 11 Years

To commemorate over a decade of DES analytics, DESAR made 3 significant changes:

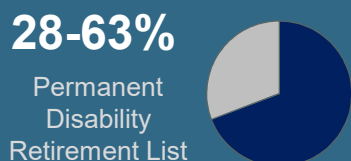
1. Reported year-over-year trends to highlight patterns and detect fluctuations due to changes in policies or processes.
2. Updated disposition categories to better account for inter-service differences in assigning dispositions.
3. Integrated impactful data visualizations for easier interpretability to support decision-making.

### More Info

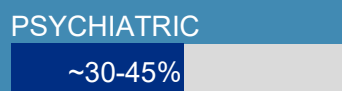
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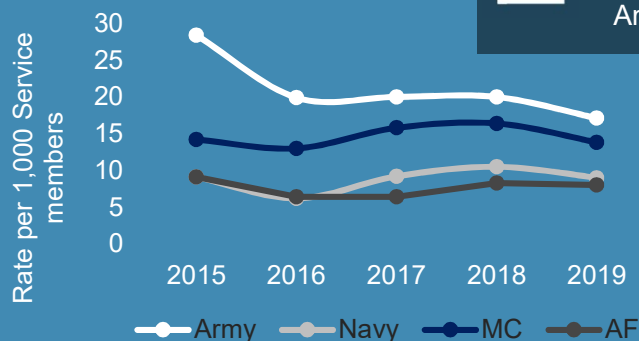
### Ratings and Dispositions



### Most Common Disability Categories



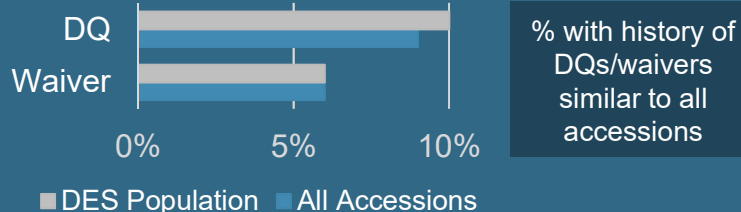
### Rates of Disability Evaluation



### Higher Rates for:

**Enlisted Active Duty**      **Females 'Other' race**

### Pre-accession Medical DQs/Waivers

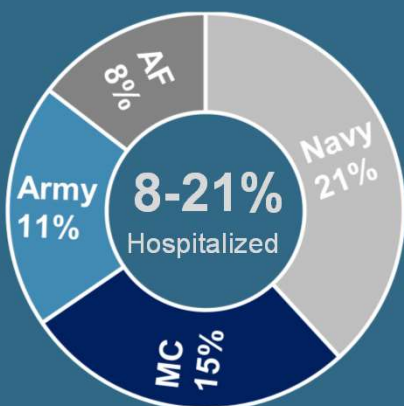


Little to no concordance between DQ/waiver and reason for disability discharge (<4%) for most conditions.



Slightly more concordance between hearing loss DQs/waivers and hearing disability in Army (7%) and Marine Corps (5%)

### Hospitalizations w/in 1 Year of Disability Evaluation



**4 out of 5** leading reasons for hospitalizations were **psychiatric disorders**



More concordance observed between reason for hospitalization and disability discharge than DQs/waivers



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# EXECUTIVE SUMMARY

At the request of the Assistant Secretary of Defense (Health Affairs), the Disability Evaluation System Research and Analysis (DESAR) team was established to provide audits and studies of the Disability Evaluation System. Since 2009, DESAR has employed epidemiological research and advanced analytics to inform DOD retention and disability policy decisions aimed at improving readiness and lethality of warfighters.

This report describes demographic, service and medical characteristics of Service members evaluated for disability discharge by the service-specific Physical Evaluation Board during fiscal years 2015 to 2019. Section 1 of this report provides metrics on disability evaluated Service members, including rates and yearly trends by demographic characteristic, disposition, unfitting condition, and rating. Section 2 describes medical history, including pre-accession medical disqualifications, accession medical waivers, and hospitalizations within one year prior to disability evaluation among Service members disability discharged between FY 2015 and 2019.

This year, DESAR made three significant changes to the report. To allow for a more comprehensive analysis of patterns and associations across time, DESAR now presents year-over-year trends instead of a comparison of the most recent year versus the previous 5-year period in aggregate. DESAR also updated the disability disposition categories, to better account for inter-service differences in assigning dispositions. Finally, we have included more impactful data visualizations for easier translation from data point to decision.

Key findings are as follows:



# KEY FINDINGS

## Section 1: Disability Evaluation Metrics

From FY 2015 through 2019, over 150,000 Service members were evaluated for disability discharge from the Army, Navy, Marine Corps and Air Force. All results for the Army should be interpreted as an underestimate due to a large number of missing records among data received by DESAR for FY 2017.

### Rates and Trends of Disability Evaluations (Figure 2)

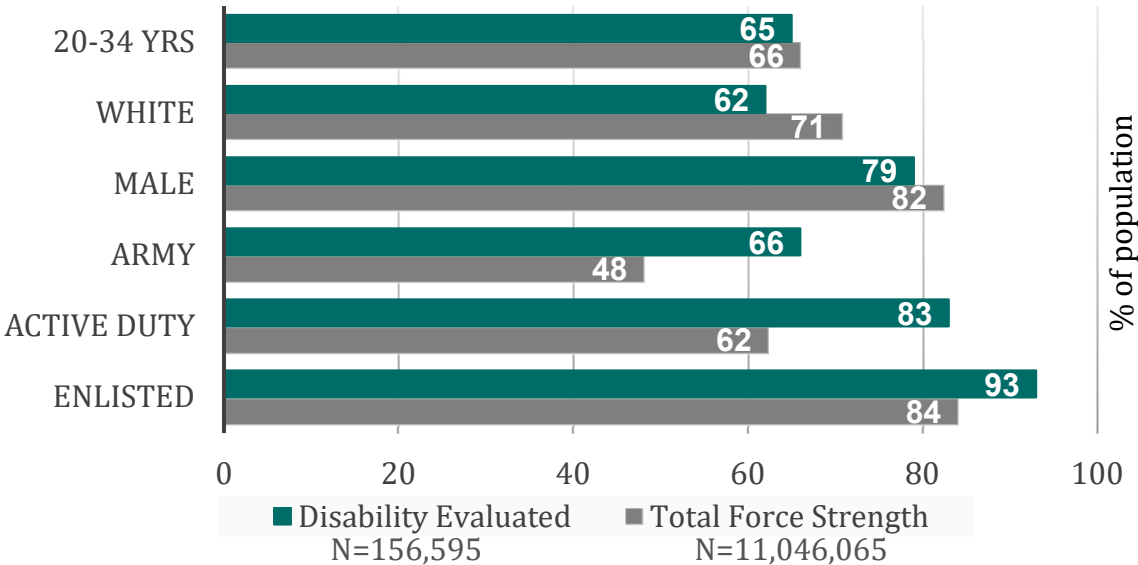
Overall rates of disability evaluation (per 1,000 Service members) were different over time per service; trends in disability evaluation rates may correspond to changes in DOD policies and operations.

- The overall rate of disability evaluation was higher in the Army (19.1) and Marine Corps (14.7) compared to the Navy (8.8) and Air Force (7.7).
- Over the 5-year period, there was a downward trend in the rate of disability evaluation for the Army, and a slight upward trend for the Navy and Marine Corps, while the Air Force remained relatively stable.

### Demographic and Service-related Characteristics (Tables 4-5, Figures 3-5)

Demographic and service-related characteristics among Service members evaluated for disability were typically similar to the total force strength between FY 2015 to 2019.

**Comparison of Most Common Characteristics of DES Population vs. Total Force Strength from FY2015-2019**



1. Rates were calculated per 1,000 Service members based on total force strength from FY 2015 to 2019. The denominators were derived using the Defense Manpower Data Center data.

However, certain characteristics were associated with higher rates of disability evaluation.

- Across all services and throughout the study time period, rates of disability evaluation were generally higher among active duty Service members and enlisted component.
- Differences in rates of disability evaluation for gender and race varied over time and by service.
  - Rate for other race (other than white or black race) among Soldiers and Marines was approximately four times the rate of white Soldiers and Marines.
  - The rate for female Sailors and Marines was approximately two times the rate for males, and had an upward trend over the five-year period.
- For the Army, the rate of disability evaluation increases as age increases. For all other services, the rates peaked at ages 30-34.

### Disability Dispositions and Ratings (Tables 6-7, Figures 6-7)

Disability dispositions and ratings reflect the level of impairment and eligibility for DOD disability benefits of Service members evaluated for disability.

- Placement on the permanent disability retirement list (PDRL) was the most common disposition among Soldiers (63%), Airmen (54%) and Sailors (28%); whereas, separated with severance pay (SWSP) was most common among Marines (42%).
  - Over the study period, there was a downward trend in the proportion of Soldiers, Sailors and Marines placed on the PDRL.
- Although the most commonly assigned combined disability rating differed by service, on average, approximately 50-70% of evaluated Service members received a rating of 30% or greater, qualifying for disability retirement.
  - Over the five-year period, there was an upward trend in the percentage of Sailors, Marines and Airmen assigned a combined disability rating of 60% or higher.

Service	Most Common Disposition	Most Common Rating	Percent of Ratings $\geq 30\%$	Notable Trends
Army	PDRL	70%	~70%	Downward trend in PDRL (-18% pt difference between FY15 and FY19)
Air Force	PDRL	30%	~70%	Upward trend for disability ratings of $\geq 60\%$ (29% in FY15 to 42% in FY19)
Navy	PDRL	Unrated	~55%	From FY15 to FY16, % found fit doubled while PDRL decreased by 10 percentage points
Marine Corps	SWSP	10%	~47%	Downward trend in PDRL placements (43% in FY15 to 25% in FY19)

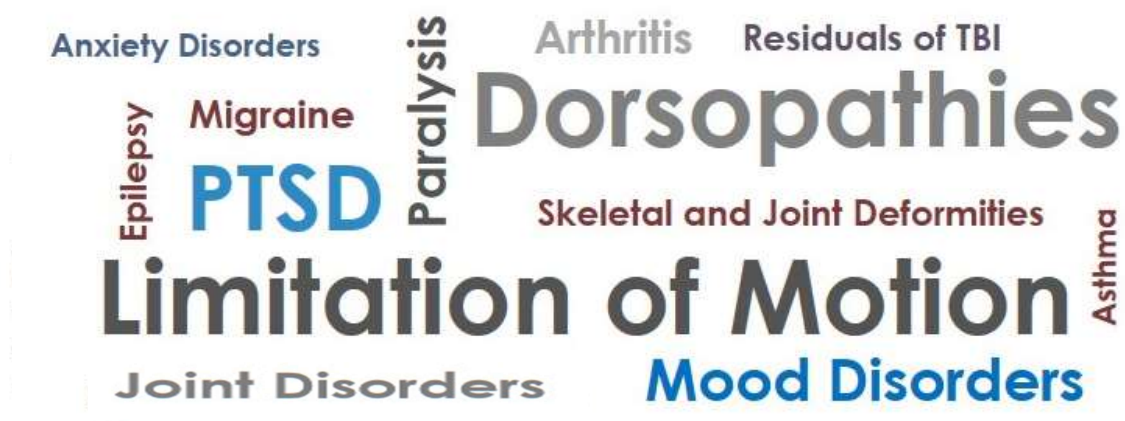


## Unfitting Conditions (Tables 8-9) (Figures 8-9)

Among disability discharged Service members, the ten most commonly assigned VASRD categories fell within the musculoskeletal, psychiatric, and neurological systems, with one exception: asthma was the ninth most commonly evaluated condition in the Air Force.

- Musculoskeletal:
  - More than half of all Soldiers, Marines and Airmen were disability discharged for a musculoskeletal disability.
  - The most common musculoskeletal conditions for all services include dorsopathies (e.g., vertebral fracture, sacroiliac injury, lumbosacral strain, degenerative arthritis of the spine), limitation of motion, joint disorders, and arthritis.
  - Across all services, the proportion of Service members discharged with a musculoskeletal condition had a downward trend over the 5-year period.
- Psychiatric:
  - Over the study period, there was an upward trend in psychiatric disability in the Navy and Air Force, and by FY 2019, psychiatric disorders were the most common reason for disability discharge in both services.
  - Posttraumatic stress disorder (PTSD) was the most common psychiatric disability condition in the Army, Marine Corps and Air Force, while mood disorder was the most common psychiatric disorder in the Navy.
- Neurological:
  - The proportion of Service members evaluated for a neurological disorder remained relatively stable over the five-year period.
  - The most common neurological conditions include paralysis and migraine in all services, residuals of TBI in the Army and Marine Corps, and epilepsy in the Navy.

### Most Common VASRD Categories among Disability Discharged Service Members: FY2015-2019



## Section 2: Medical History among Disability Discharged Service Members

Section 2 describes the medical histories of disability discharged Service members and evaluates concordance between medical histories and reasons for disability discharge. For this report, medical history encompasses the following three data points: (1) history of a medical disqualification identified during the pre-accession physical examination at Military Entrance Processing Station (MEPS); (2) history of an accession medical waiver; and, (3) hospitalization at any military treatment facility (MTF) within one year prior to the Service member's first disability evaluation.

### Pre-Accession Medical Disqualifications (DQs) and Waivers (Tables 10-13, Figures 10-11)

- Approximately 8% to 11% of disability discharged Service members had a history of pre-accession medical DQ, which is similar to the proportion of those with a medical DQ among all enlisted military accessions between FY 2013 and 2018 (9%)[9].
- Approximately 6% of disability discharged Service members entered service with an accession medical waiver. In comparison, 6% of all enlisted service who accessed between FY 2013 and 2018 entered service with an accession medical waiver [9].
- In general, the five most common DQs and waivers were consistent with highly prevalent DQs/waivers among all accessions [1].
- Little to no concordance (<4%) was observed between pre-accession DQs or waivers and reason for disability evaluation for the most common disability body systems.
  - Slightly more concordance (4-7%) was observed between pre-accession hearing loss DQs/waivers and hearing-loss related disability discharge among Soldiers and Marines.

### History of Hospitalization (Tables 14-16, Figure 12)

- Overall, 8% (Air Force) to 21% (Navy) of disability discharged Service members had been hospitalized within 1 year prior to their first disability evaluation.
- Across all services, four out of the five most common reasons for hospitalizations among disability discharged Service members were psychiatric disorders (mood disorders, anxiety and stress-related disorders, substance abuse, schizophrenia).
  - Psychiatric disorders are also common reasons for hospitalization among the general active duty population [10].
- More concordance was observed between the reason for hospitalization and the reason for disability discharge than was observed with pre-accession medical DQs or accession medical waivers.
  - 9% (Air Force) to 25% (Navy) of psychiatric-related disability discharges had been hospitalized for a psychiatric disorder within one year prior to their first disability evaluation.

# METHODS

## DES DATA SOURCES

Data on disability discharge considerations are compiled separately for each service at its disability agency:

- U.S. Army Physical Disability Agency (PDA) provides data on Army disability evaluations
- Air Force Personnel Center (AFPC) provides data on Air Force disability evaluations
- Secretary of the Navy Council of Review Board (CORB) provides disability evaluation data for the Navy and Marine Corps

## DES DATABASE CHARACTERISTICS

**Table 1** shows the characteristics of the Disability Evaluation System (DES) data received by DESAR for each service. Disability evaluation is administered at the service level with each branch of service responsible for evaluating disability in its members; therefore, variability exists in the structure and type of disability data collected by DESAR. For example, while the Navy sends all Physical Evaluation Board (PEB) evaluation records per Service member per year, the Army sends all PEB evaluation records for unfitting conditions only, and the Air Force sends one evaluation record per Service member per year. In addition, the Navy (all years) and Army (FY 2013-2019) sends disability ratings for each unfitting condition as well as a combined rating, while the Air Force sends the combined rating only.

To create analytic files for this report, service-specific databases were restricted to unique records with a final disposition date between October 1, 2014 and September 30, 2019. All ranks and components per service were included in these analyses. When *Service members* were the unit of analysis, the last record per Social Security Number (SSN) was retained; when *disability evaluations* were the unit of analysis, multiple records were used per SSN. Unique evaluations were defined by SSN and date of final disposition. Therefore, a Service member may appear more than once in the source population when evaluations were the unit of analysis.

**TABLE 1: DES DATABASE CHARACTERISTICS BY SERVICE**

	Army	Navy/Marine Corps	Air Force
<b>Years received*</b>	1990-2019	2000-2019	1995-2019
<b>Types of evaluation included</b>	All PEB evaluations	All PEB evaluations	1995-2006: PEB for discharges only (PDRL, TDRL, SWSP) 2007-2017: All PEB evaluations, excluding TDRL re-evaluations 2018-2019: All PEB
<b>Conditions included</b>	All Unfitting Conditions	All Evaluated Conditions	Up to 3 Unfitting Conditions
<b>Ranks included</b>	Enlisted, Officer	Enlisted, Officer	Enlisted, Officer
<b>Components included</b>	Active Duty, Reserve	Active Duty, Reserve	Active Duty, Reserve
<b>Multiple evaluations per person/year</b>	Yes	Yes	No - one evaluation per year

\*In order to report DOD-level information, DESAR harmonizes data from all services into one standardized dataset. Due to different data structures between services, some data were excluded from DESAR's database, including FY 2000 Marine Corps and Navy disability data and FY 1995-2006 Air Force disability data.

PEB: Physical Evaluation Board; TDRL: Temporary Disability Retirement List; PDRL: Permanent Disability Retirement List; SWSP: Separated with Severance Pay



## KEY DES VARIABLES

**Table 2** shows the key variables included in each DES dataset received by DESAR. Additional variables may have been included in each service's database but were not presented in this report. A check mark (✓) denotes that data were received in all years in which the data were available. If a data element was not available for all years, those years for which the data were available are listed. An X mark denotes that data has never been received by DESAR.

**TABLE 2 : DES KEY VARIABLES**

	Army	Navy/Marine Corps	Air Force
<b>Demographic and Service-Related Characteristic</b>			
Age/Date of Birth	FY 1990-2016	✓	FY 2017-2019
Sex	✓	✓	FY 2014-2019
Race	✓	✓	X
Rank	✓	✓	✓
Component	✓	✓	✓
MOS	✓	FY 2010-2019	FY 2017-2019
<b>PEB</b>			
Board type	X	✓	✓
Date of PEB Evaluation	FY 1990-2012, 2017-2019	✓	✓
VASRD	✓	✓	✓
VASRD Analog	✓	✓	✓
Percent Rating	FY 2013-2019	✓	X
Combined Rating	✓	✓	✓
Disposition	✓	✓	✓
Disposition Date	✓	✓	✓
<b>Combat</b>			
Combat Related	✓ <sup>1</sup>	✓	FY 2010-2019
Armed Conflict	X	✓	FY 2010-2019
Instrumentality of War	X	✓	FY 2010-2019

MOS: Military Occupational Specialty; PEB: Physical Examination Board; VASRD: Veterans Affairs Schedule for Rating Disabilities

1. The combat-related variable at the Army is assigned when the unfitting conditions were incurred in combat, were the result of armed conflict, or were caused by an instrumentality of war [11].

## Demographic and Service-Related Characteristics

Information on demographic variables (i.e., age, date of birth, sex, race) and service-related characteristics (i.e. MOS, rank, component) received by DESAR varies by service and year. For demographic variables missing in the DES dataset, DESAR utilized other military databases, such as Defense Manpower Data Center (DMDC) personnel records and Military Entrance Processing Station (MEPS) application records, to obtain additional information on specific constant demographic characteristics (i.e., date of birth, race, sex).

Military component assessed in this report includes active duty, reserve and National Guard. The Army and Air Force National Guard components were categorized within the reserve component. Military rank assessed in this report include enlisted and officers. When describing service-related characteristics, warrant officers and commissioned officers were categorized as officers.

## PEB Variables

All DESAR 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, combined disability rating, disposition, and disposition date. VASRD codes are not diagnostic codes, but are derived from the MEB diagnosis, and specify criteria



associated with disability ratings and determine disability compensation. Analogous codes are used when there is no specific VASRD code that best approximates the functional impairment rendered by a medical condition. Service members may be evaluated for multiple unfitting conditions; therefore, disability evaluation records may have multiple VASRD codes. The number of VASRD codes provided to DESAR varied by service, which could account for differences in this report's results.

This year, DESAR updated the disposition categories into seven (7) types:

1. **Fit/Limited Duty** – The historic category 'Fit' has been replaced with 'Fit/Limited Duty', which encompasses all Service members who were allowed to continue service. This category includes following dispositions: fit, limited duty, continued on active duty, and physically qualified to continue reserve status. For definitions on DOD or service-specific definitions, please refer to DOD Instruction 1332.18, Army Regulation 635.40, SECNAV M-1850, or Air Force Instruction 36-3212.

2. **Separation with Severance Pay (SWSP)** – This DOD disposition is assigned when at least one condition is found to be unfitting, the combined disability rating is less than 30 percent, and the Service member has less than 20 years of service [6].
3. **Separated without DOD Disability Benefits (SWODDB)** – The historical category ‘separated without benefit’ has been replaced by ‘separated without DOD disability benefits’, which encompasses all separations for which the Service member is not entitled to disability benefits from the DOD. This category includes following dispositions: separated without entitlement to benefits, discharge pursuant to other than Chapter 61 of Reference, revert to retired status without disability benefits, non-duty unfit, not physically qualified (NPQ), miscellaneous administrative removal, and administrative removal off the TDRL. For definitions on DOD or service-specific definitions, please refer to DOD Instruction 1332.18, Army Regulation 635.40, SECNAV M-1850, or Air Force Instruction 36-3212.
4. **Permanent Disability Retirement List (PDRL)** – This DOD disposition is assigned when the Service member is found unfit with a condition that is considered stable (unlikely to change within three years), has a combined disability rating of 30 percent or higher or has a length of service greater than 20 years.
5. **Temporary Disability Retirement List (TDRL)** – A Service member is placed on the temporary disability retirement list when determined to be unfit for continued service due to a temporary or unstable condition (i.e., may improve or worsen within three years), with a combined disability rating of 30 percent or higher. Service members on the TDRL are re-evaluated every 6-18 months for up to three years. A re-evaluation may result in a Service member returning to duty, converting to another disposition, or in cases when the condition remains unstable, retained on the TDRL. For this report, TDRL is categorized into two groups, **placement on the TDRL** and **retained on the TDRL**.

Since the majority of Service members placed on the TDRL convert to the PDRL [3, 4], Service members placed or retained on the TDRL are considered by DESAR as disability discharged and are included in the ‘Medical History’ section.

Prior to 31 December 2016, a Service member could be on the TDRL for up to five years following initial placement on the TDRL. Beginning on 1 January 2017, a Service member may remain on the TDRL for up to 36 months [2, 5]. This change may increase the rate of retirements and separations both overall and by condition until approximately 2021.

6. **Other** – The historical ‘other’ disposition category was updated to only include transfer to retired reserve, revert to retired status, no action, reboard, deceased, and dual action term. This change may decrease the number of ‘other’ disposition types. For definitions on DOD or service-specific definitions, please refer to DOD Instruction 1332.18, Army Regulation 635.40, SECNAV M-1850, or Air Force Instruction 36-3212.

## Combat Variables

Combat variables are used in determining combined disability rating when the disability was caused or exacerbated by combat experiences. Data received by DESAR from the Army, Navy, and Marine Corps include up to three variables regarding combat; the values of which are described in the Department of Defense Instruction (DODI) 1332.18 [6]. Since the combat variables differ between each service’s DES, for this report, a disability discharge was categorized as combat-related if the condition was determined to be combat-related, a result of armed conflict, and/or a result of an instrumentality of war.





## **OTHER DATA SOURCES AND VARIABLES**

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### **Application for Military Service**

DESAR 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 (active duty, reserve, National Guard) of each service (Air Force, Army, Marine Corps, and Navy). The data also include records on a relatively small number of officer recruit applicants and other non-applicants receiving periodic physical examinations.

A military applicant's disqualification status is determined during the physical examination at MEPS per Department of Defense Instruction 6130.03 [7]. Disqualifications are recorded as International Classification of Diseases, 9th or 10<sup>th</sup> revision (ICD-9/10) or other medical failure (OMF) code listed in US Military Entrance Processing Command Integrated Resource System (USMIRS) application record. Disqualified Service members require an accession medical waiver in order to access into the military. For this report, DESAR included only military application records for enlisted service in any component.

### **Accession Medical Waiver**

DESAR receives records on all recruits considered for an accession medical waiver. Each service is responsible for its own waiver decisions, and information on these decisions is generated and provided to DESAR by each service's medical waiver review authority. Specifically, DESAR receives medical waiver data from the Air Education Training Command (AETC, Lackland AFB, TX) for the Air Force; US Army Recruiting Command (USAREC, Fort Knox, KY) for the Army; Marine Corps Recruiting Command (MCMR, Quantico, VA) for the Marine Corps via WebWave; the Office of the Commander, US Navy Recruiting Command (NRC, Millington, TN) for the Navy via WebWave.

### **Accession, Discharge and Deployment Records**

The Defense Manpower Data Center (DMDC) provides data annually on individuals entering military service, Service members discharged from military service, and Service members deployed in support of Overseas Contingency Operations.

### **Hospitalization**

DESAR receives Military Health System (MHS) direct care hospitalization data annually from the MHS data repository (MDR). Information includes admissions of active-duty officers and enlisted personnel, and medically eligible reserve component personnel to any military hospital. For the purpose of this report, only the primary diagnosis listed in a Service member's hospitalization record was included. Specific primary diagnoses were grouped into broader condition categories for cross comparison.



# DESCRIPTIVE STATISTICS: DISABILITY EVALUATIONS

## 1. DES Data Metrics

Characteristics of DESAR’s disability database are shown in **Table 3**. Throughout this report, records are defined as units of a dataset (e.g., lines of data), and evaluations represent a Service member’s unique encounter with the Physical Evaluation Board (PEB), defined by SSN and disposition date. Service members may have more than one disability evaluation, particularly if placed and/or retained on the TDRL.

### Table 3 Key Findings

- From FY 2015-2019, approximately 175,500 disability evaluations were completed on 156,595 Service members.
- Service members placed on the TDRL received their final disposition, on average, at their second evaluation.
- The average number of VASRD codes assigned per evaluation was higher in the Army (2.3) compared to the other services (1.4-1.6).

**TABLE 3: DES DATA METRICS: FY 2015-2019**

	Army <sup>1</sup>	Navy	Marine Corps	Air Force
<b>Total records</b>	<b>247,208</b>	<b>52,791</b>	<b>63,713</b>	<b>21,165</b>
<b>Total Service members</b>	101,721	17,609	18,043	19,222
<b>Total evaluations</b>	112,913	20,003	21,554	21,165
<b>Average # of records/evaluation</b>	2.2	2.6	3.0	1.0
<b>Average # of eval/SM</b>	1.1	1.1	1.2	1.1
<b>TDRL<sup>2</sup></b>	2.0	2.1	2.1	2.0
<b>Non-TDRL</b>	1.0	1.0	1.0	1.0
<b>Average # of VASRDs/evaluation<sup>3</sup></b>	2.3	1.4	1.5	1.6

SM: Service member; VASRD: Veterans Administration Schedule for Rating Disabilities; TDRL: Temporary Disability Retirement List; Eval: Evaluation

1. Values are underestimated due to missing or incomplete FY 2017 DES data for the Army received by DESAR.

2. Average number of evaluations is inclusive of Service members with a TDRL disposition, and a final disposition resulting in their removal from the temporary disability retirement list.

3. The average number of VASRDs per evaluations counts the number of unique VASRDs per evaluation. A Service member may be evaluated the same VASRD in different body parts, however for in this figure, each VASRD is only counted once.



### Discussion of Results - Table 3:

Inter-service differences in the disability process may partially account for the observed differences in the number of records, Service members, and evaluations per service. The Army refers a Soldier to the DES only when the Soldier develops a condition that permanently impairs required functional activities (such as carrying a weapon, wearing Mission Oriented Protective Posture (MOPP), carrying a ruck, or deploying) or does not meet retention standards described in AR 40-501 [8]. The Air Force has a pre-MEB process to screen out cases that would likely be returned to duty, which may account for the lower number of evaluations. The Navy and Marine Corps may have higher number of records due to: (1) the Navy considers placement on Limited Duty an MEB; and, (2) Navy MEBs are completed in the clinics, so the Navy PEB has a much greater role in reviewing records than the Army and Air Force PEBs.

Observed differences may also be due to the manner in which records are received by DESAR from each service. Disability data received by DESAR from the Air Force contain multiple conditions per record; in Army, Navy, and Marine Corps data, the number of records represents the number of conditions adjudicated, resulting in a higher average number of records per evaluation. The Air Force sends only one evaluation per year, which may cause the average evaluations per Service member to be underestimated. While the Army and Air Force send data only on those with unfitting conditions evaluated by the PEB, the Navy/Marine Corps sends data on any Service member evaluated by the PEB inclusive of those without any unfitting conditions.

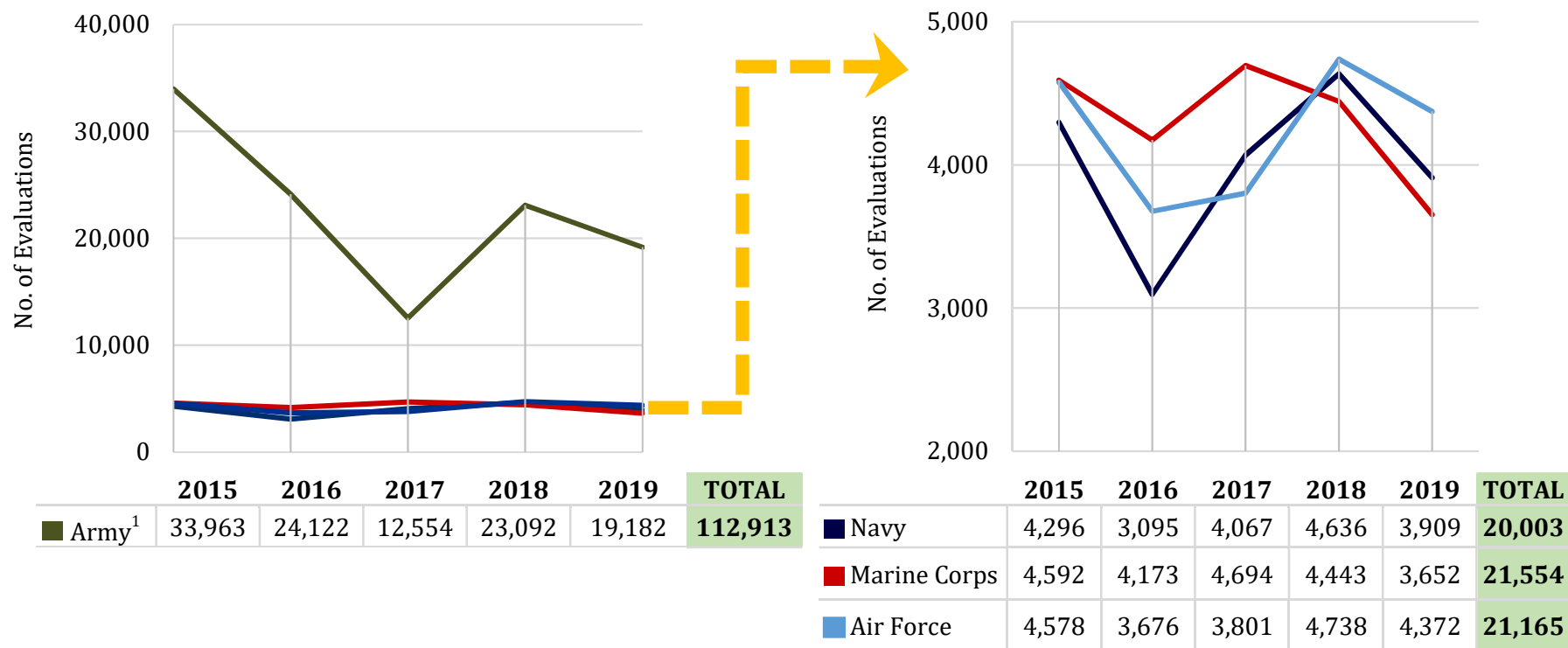
**Figure 1** presents the number of DES evaluations by service and FY. Service members may be counted more than once in this table due to TDRL re-evaluations.

#### Figure 1 Key Findings

- The number of disability evaluations were variable over the 5-year time period.
  - For all services, fewer disability evaluations were completed in FY 2019 than FY 2018. The most notable declines were seen for the Army (17% decline) and the Marine Corps (18% decline).
- Over the time period, the highest number of disability evaluations occurred in FY 2015 for the Army, FY 2017 for the Marine Corps, and FY 2018 for the Navy and Air Force.



**FIGURE 1: TOTAL DES EVALUATIONS BY SERVICE AND FISCAL YEAR: FY 2015-2019**



1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

## 2. Rates and Trends of Disability Evaluations

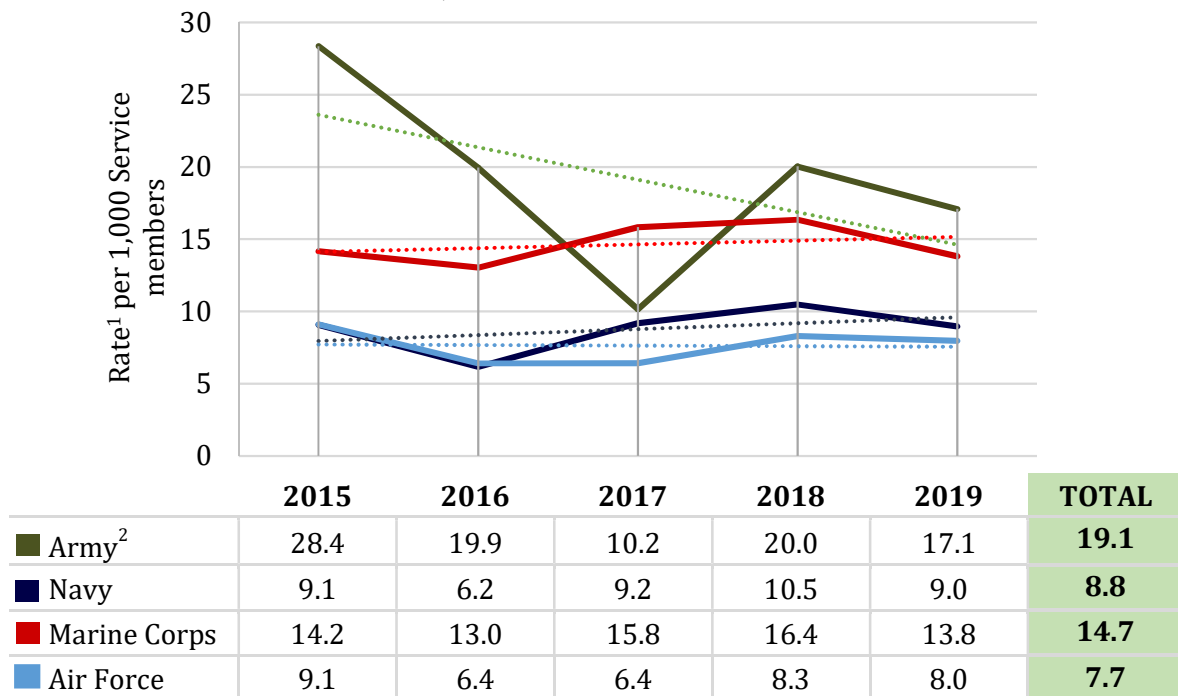
Figures throughout this section describe the rate of disability evaluation per fiscal year (solid lines) and the linear trend (dotted line). Temporal trends of the rate of disability evaluation (per 1,000 Service members) per service are shown in **Figure 2**.

*Rate calculations throughout this report were based on the fiscal year of the Service member's most recent evaluation.*

### Figure 2 Key Findings

- Similar to the decrease in the number of disability evaluation reported in Figure 1, the overall rate of disability evaluation per 1,000 Service members was lower in FY 2019 than FY 2018.
  - Over the five-year time period, there was a downward trend in the rate of disability evaluations for the Army, a slight upward trend for the Navy and Marine Corps, while Air Force remained relatively stable.

**FIGURE 2: OVERALL RATE<sup>1</sup> (PER 1,000) OF SERVICE MEMBERS EVALUATED FOR DISABILITY DISCHARGE BY SERVICE, FY 2015-2019**



1. Rates are based on total service population, using data from Defense Manpower Data Center (DMDC) and represents the total number of Service members as of 30 September of the fiscal year in question.

2. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

### 3. Demographic and Service-Related Characteristics

The distribution and rates (per 1,000 Service members) of demographic and service-related characteristics among Service members evaluated for a disability discharge are shown in **Tables 4 and 5, and Figures 3A-D, 4A-D and 5A-D**. Demographic characteristics (e.g., race, date of birth) unavailable from disability evaluation data have been supplemented through data collected from their application, accession, and loss files. Age was calculated at the time of the most recent disability evaluation.

Rates are based on total service population, using data from Defense Manpower Data Center (DMDC) and represents the total number of Service members with each demographic as of 30 September of the fiscal year in question. These data do not include the number of Service members who have missing demographic data.

#### Table 4 & Figures 3A-D Key Findings

- Across all services, rates of disability evaluation were highest among enlisted (2.2-3.5 times the rate of officers) and active duty (3.5-5.9 times the rate of reserve/guard components) Service members.
- Trends over the five-year time period in the disability evaluation rates for rank and component varied by service.
- Army and Air Force had higher percentages of reserve component disability evaluations compared to other services, likely due to the inclusion of National Guard not present in the Navy and Marine Corps reserve components.

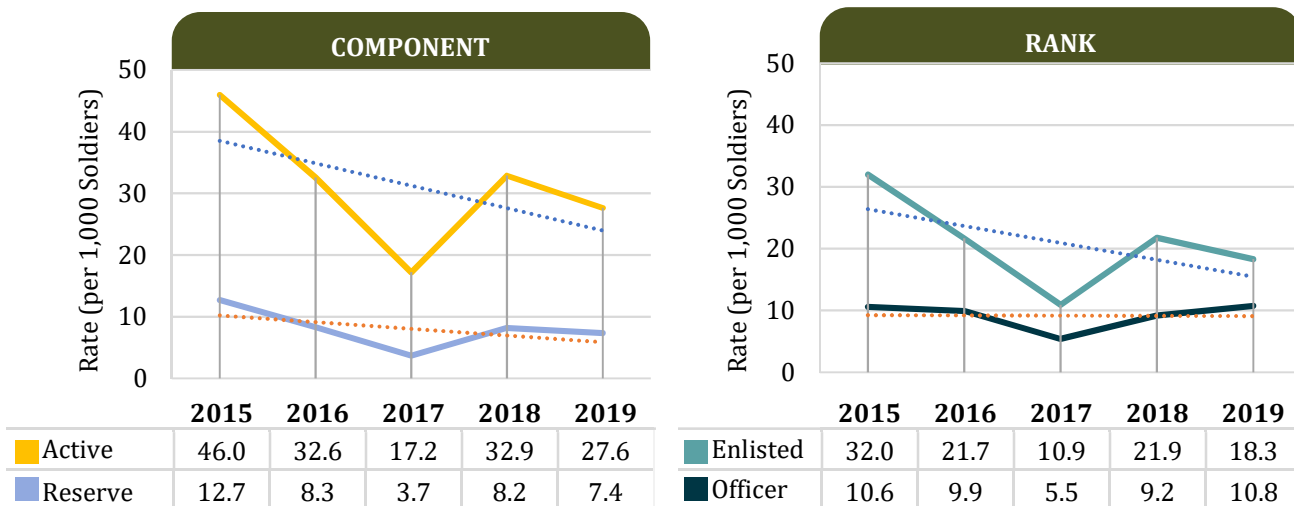
**TABLE 4: DISTRIBUTION AND RATE (PER 1,000 SERVICE MEMBERS) OF SERVICE-RELATED CHARACTERISTICS OF SERVICE MEMBERS EVALUATED FOR DISABILITY DISCHARGE: BY SERVICE FY 2015-2019**

Characteristic	Army <sup>1</sup> (n=101,721)			Navy (n=17,609)			Marine Corps (n=18,043)			Air Force (n=19,222)		
	n	%	Rate	n	%	Rate	n	%	Rate	n	%	Rate
<b>Rank</b>												
Enlisted	93,605	92.1	20.9	16,337	92.8	9.9	17,441	96.7	15.9	17,701	92.1	8.6
Officer	7,825	7.7	9.3	1,271	7.2	3.7	602	3.3	4.6	1,520	7.9	3.4
Missing	246	0.2	-	1	<0.1	-	0	-	-	1	<0.1	-
<b>Component</b>												
Active Duty	79,290	77.9	31.2	16,839	95.6	9.9	17,426	96.6	17.1	16,716	87.0	10.2
Reserve/NG	22,429	22.0	8.1	770	4.4	2.6	617	3.4	2.9	2,506	13.0	2.9
Missing	2	0.1	-	0	-	-	0	-	-	0	-	-

1. Values are underestimated due to missing or incomplete Disability Evaluation System data for the Army in FY 2017

# ARMY

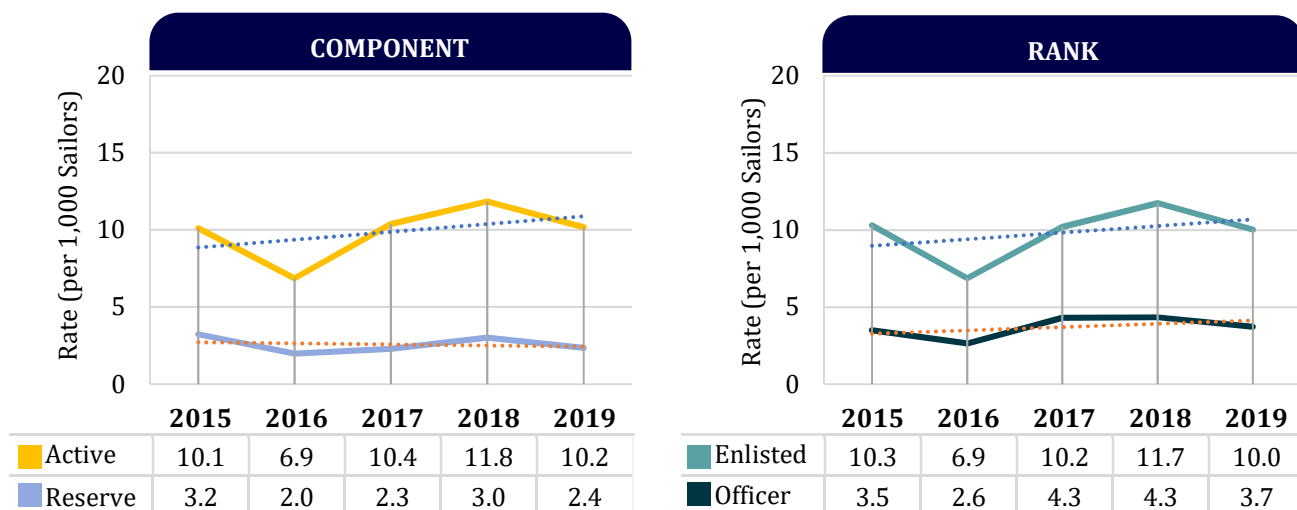
**FIGURE 3A: RATE (PER 1,000 SOLDIERS) OF SERVICE-RELATED CHARACTERISTICS OF SOLDIERS EVALUATED FOR DISABILITY DISCHARGE: ARMY<sup>1</sup> FY 2015-2019**



1. Values are underestimated due to missing or incomplete Disability Evaluation System data for the Army in FY 2017.

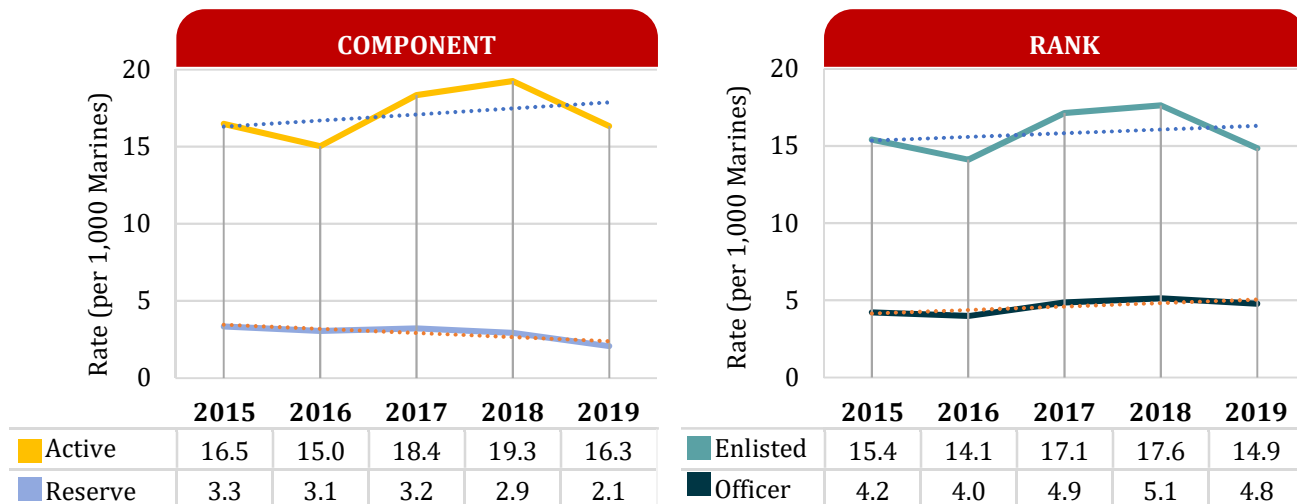
# NAVY

**FIGURE 3B: RATE (PER 1,000 SAILORS) OF SERVICE-RELATED CHARACTERISTICS OF SAILORS EVALUATED FOR DISABILITY DISCHARGE: NAVY FY 2015-2019**



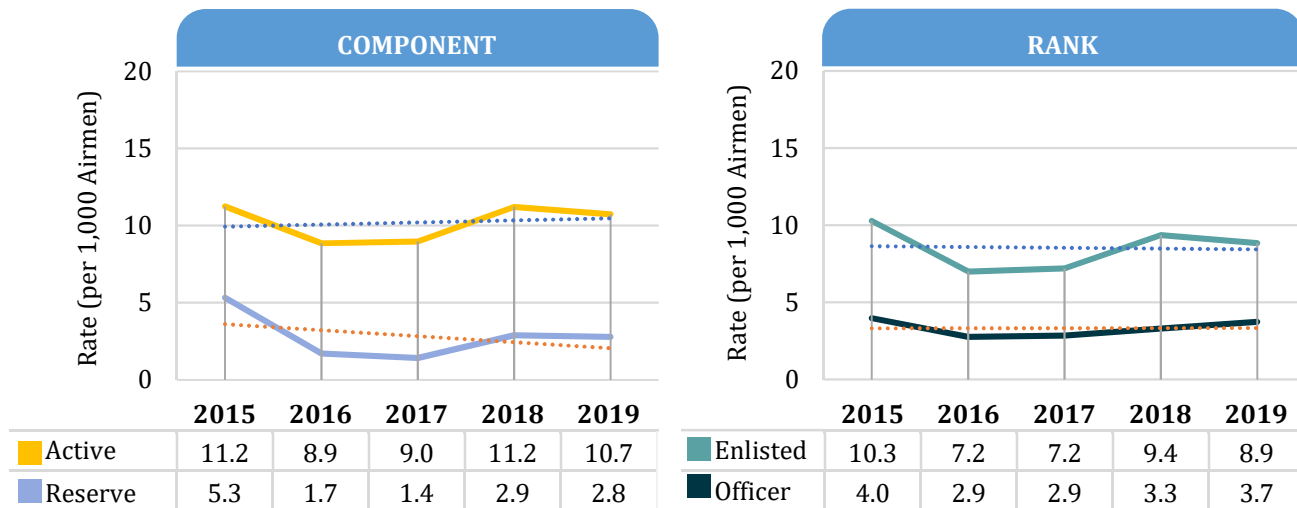
# MARINE CORPS

**FIGURE 3C: RATE (PER 1,000 MARINES) OF SERVICE-RELATED CHARACTERISTICS OF MARINES EVALUATED FOR DISABILITY DISCHARGE: MARINE CORPS FY 2015-2019**



# AIR FORCE

**FIGURE 3D: RATE (PER 1,000 AIRMEN) OF SERVICE-RELATED CHARACTERISTICS OF AIRMEN EVALUATED FOR DISABILITY DISCHARGE: AIR FORCE FY 2015-2019**





## Table 5, Figures 4A-D & 5A-D Key Findings

- Most Service members evaluated for disability were male (69-85%), age 20-34 at the time of disability evaluation (60-86%), or white (59-73%), yet higher disability evaluation rates were generally seen in females and other race.
  - Rates for females had an upward trend over the five-year period for the Navy and Marine Corps.
- Rates of disability evaluation for other race were more than three times the rate for white race in the Army and Marine Corps.
- For the Army, the rate of disability increased as age increased; for the Navy, Marine Corps and Air Force, the highest rates were seen in those between the ages of 25-34.

**TABLE 5: DISTRIBUTION AND RATE (PER 1,000 SERVICE MEMBERS) OF DEMOGRAPHIC<sup>1</sup> CHARACTERISTICS OF SERVICE MEMBERS EVALUATED FOR DISABILITY DISCHARGE: BY SERVICE FY 2015-2019**

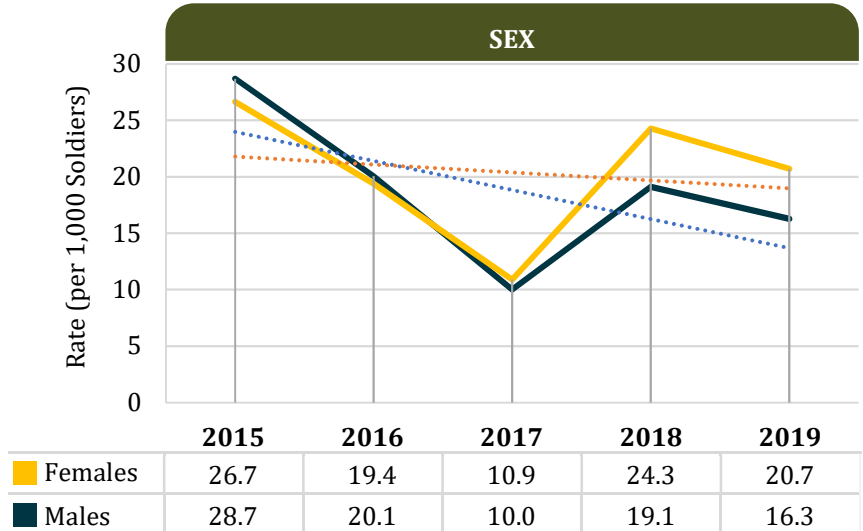
Characteristic	Army <sup>2</sup> (n=101,721)			Navy (n=17,609)			Marine Corps (n=18,043)			Air Force (n=19,222)		
	n	%	Rate	n	%	Rate	n	%	Rate	n	%	Rate
<b>Sex</b>												
Male	82,860	81.5	18.9	12,075	68.6	7.6	15,306	84.8	13.5	13,484	70.1	6.8
Female	18,861	18.5	20.5	5,532	31.4	13.9	2,737	15.2	29.1	5,738	29.9	10.9
Missing	0	-	-	2	<0.1	-	0	-	-	0	-	-
<b>Age</b>												
<20	706	0.7	1.2	141	0.8	0.9	400	2.2	1.7	123	0.6	0.8
20-24	16,404	16.1	11.1	3,841	21.8	6.7	6,588	36.5	11.7	3,507	18.2	5.9
25-29	23,441	23.0	20.5	5,075	28.8	10.9	5,420	30.0	26.0	5,194	27.0	9.1
30-34	21,472	21.1	27.3	3,918	22.2	12.2	3,432	19.0	32.1	4,329	22.5	9.5
35-39	15,296	15.0	27.4	2,394	13.6	10.3	1,427	7.9	21.1	2,836	14.8	8.4
≥ 40	23,973	23.6	31.2	2,240	12.7	9.3	776	4.3	14.1	3,111	16.2	7.9
Missing	429	0.4	-	0	-	-	0	-	-	122	0.6	-
<b>Race</b>												
White	60,456	59.4	16.1	10,504	59.7	8.1	12,318	68.3	13.0	14,060	73.1	7.7
Black	19,586	19.3	19.6	3,096	17.6	9.2	1,613	8.9	10.4	2,920	15.2	8.1
Other	21,515	21.2	56.7	3,990	22.7	14.2	4,109	22.8	46.4	2,113	11.1	9.6
Missing	164	0.2	-	19	0.1	-	3	<0.1	-	129	0.7	-

1. Demographic information not included in disability evaluation data has been supplemented using data collected from application, accession, and loss databases.

2. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

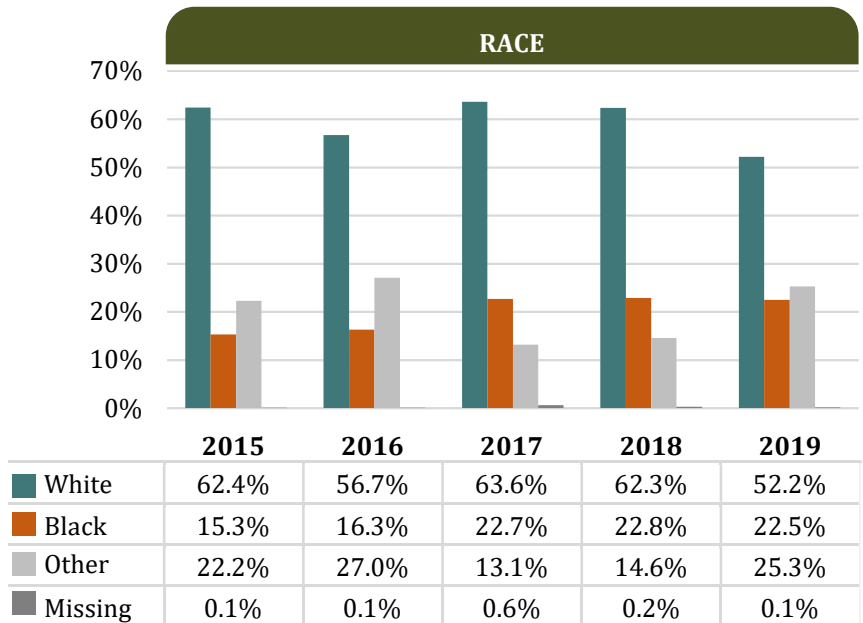
**Figures 4A-D** present the rates of disability evaluation over the five-year period by sex, stratified by service. **Figures 5A-D** show the distribution of race per year and service among Service members evaluated for disability discharge.

**FIGURE 4A: TEMPORAL TREND OF THE RATE OF DISABILITY EVALUATION (PER 1,000 SOLDIERS) BY SEX: ARMY FY 2015-2019<sup>1</sup>**



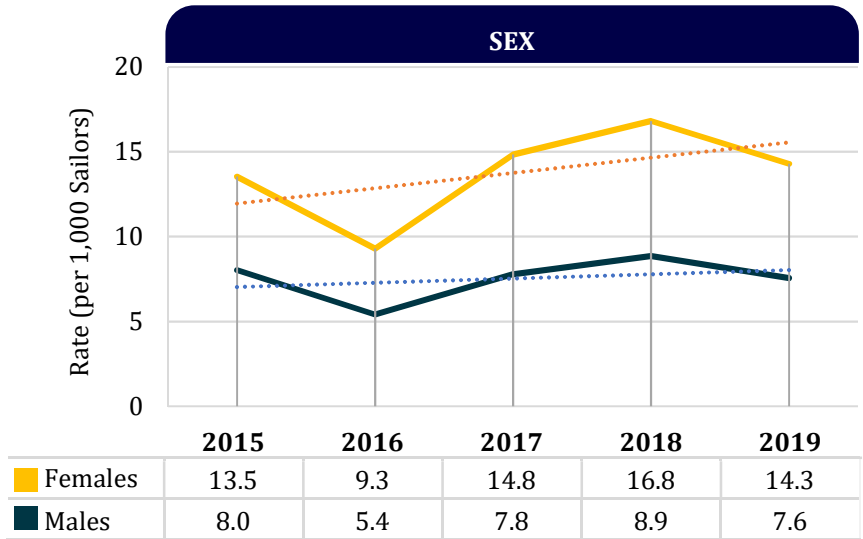
1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

**FIGURE 5A: RACE DISTRIBUTION OF SOLDIERS EVALUATED FOR DISABILITY DISCHARGE: ARMY FY 2015-2019**

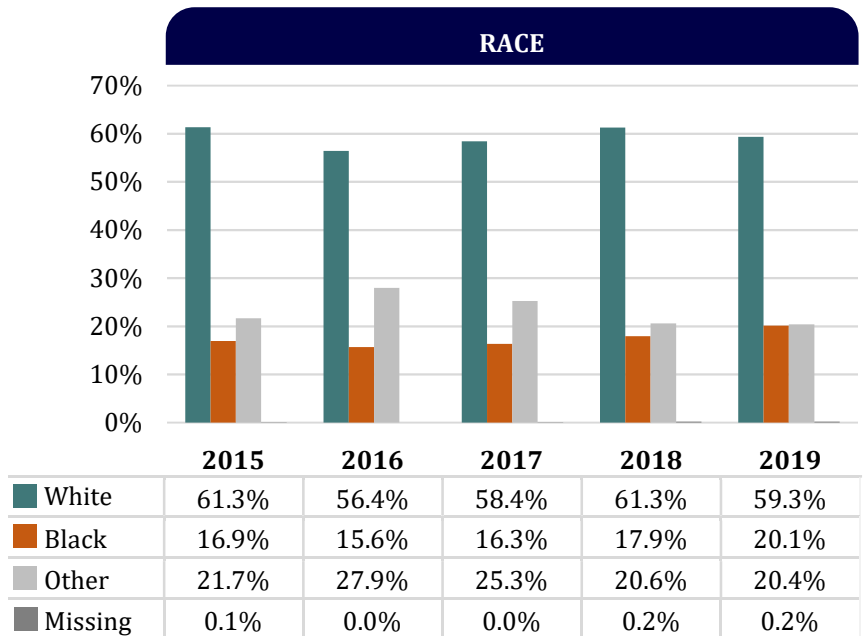


1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

**FIGURE 4B: TEMPORAL TREND OF THE RATE OF DISABILITY EVALUATION (PER 1,000 SAILORS) BY SEX: NAVY FY 2015-2019**

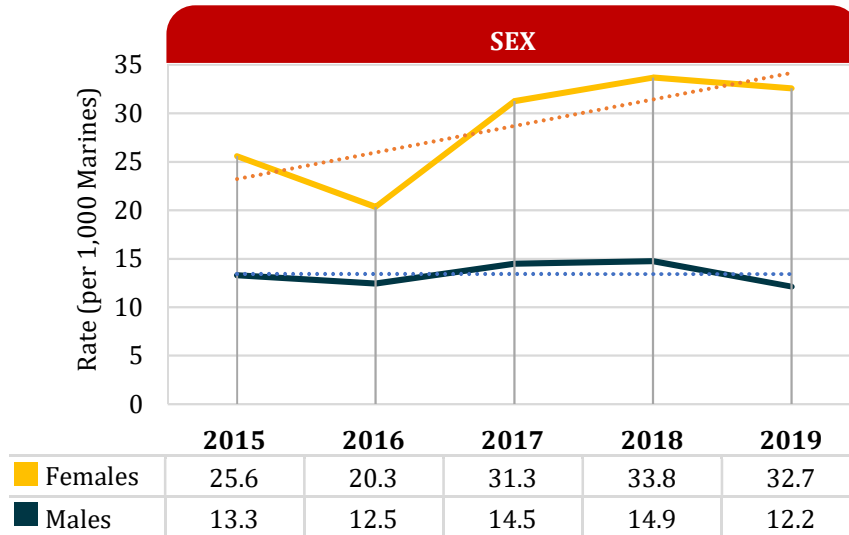


**FIGURE 5B: RACE DISTRIBUTION OF SAILORS EVALUATED FOR DISABILITY DISCHARGE: NAVY FY 2015-2019**

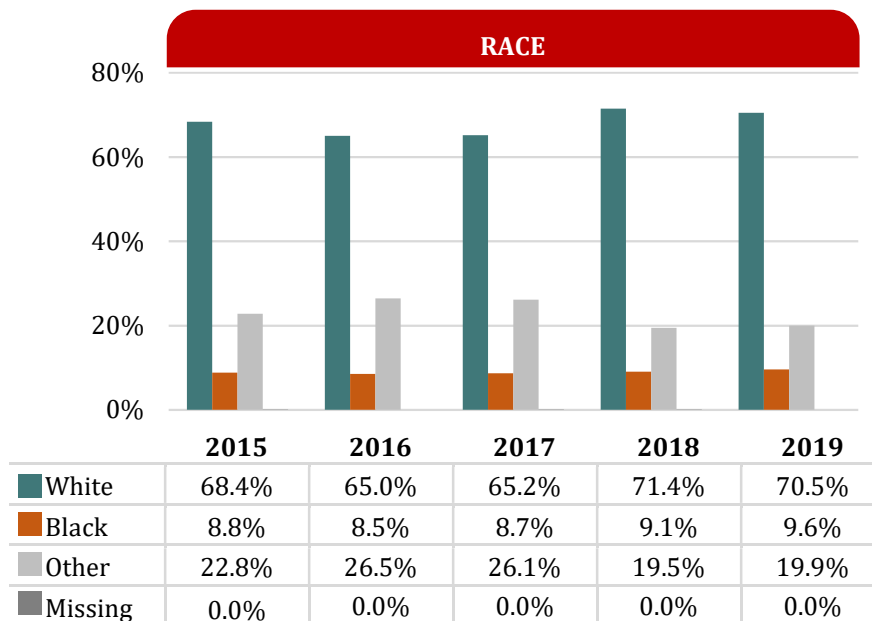


# MARINE CORPS

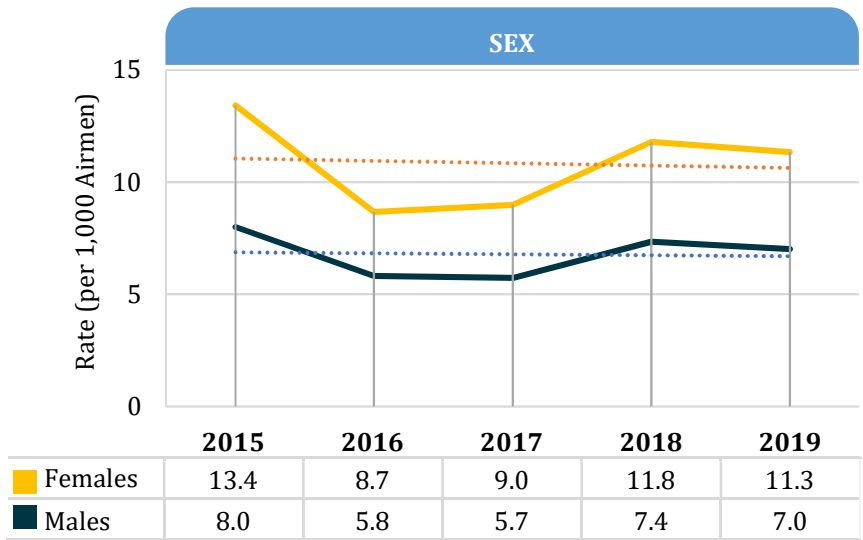
**FIGURE 4C: TEMPORAL TREND OF THE RATE OF DISABILITY EVALUATION (PER 1,000 MARINES) BY SEX: MARINE CORPS FY 2015-2019**



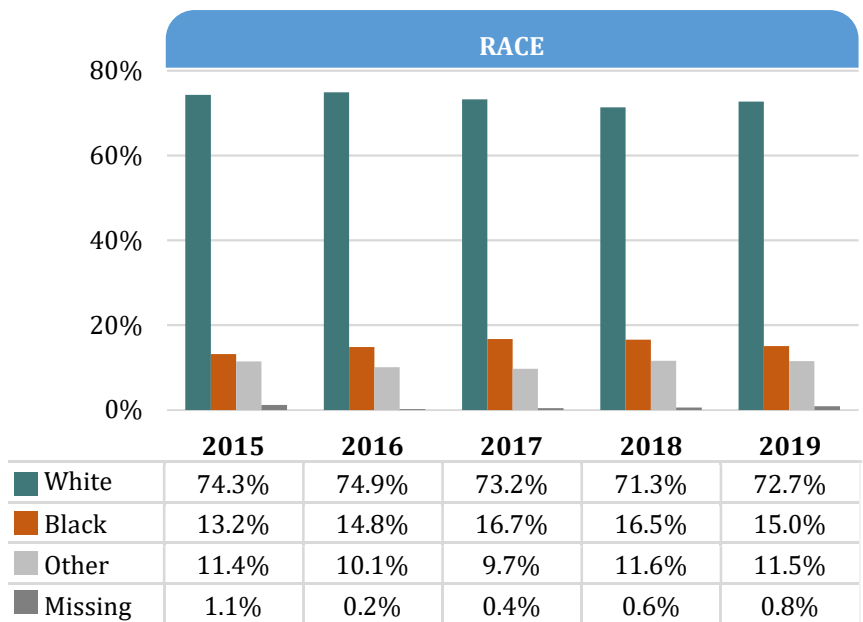
**FIGURE 5C: RACE DISTRIBUTION OF MARINES EVALUATED FOR DISABILITY DISCHARGE: MARINE CORPS FY 2015-2019**



**FIGURE 4D: TEMPORAL TREND OF THE RATE OF DISABILITY EVALUATION (PER 1,000 AIRMEN) BY SEX: AIR FORCE FY 2015-2019**



**FIGURE 5D: RACE DISTRIBUTION OF AIRMAN EVALUATED FOR DISABILITY DISCHARGE: AIR FORCE FY 2015-2019**





## 4. Disability Disposition

**Table 6 and Figures 6A-D** shows a comparison of the distribution and rate (per 10,000 Service members) of disability dispositions for Service members evaluated for disability from FY 2015-2019. For this table, disability disposition was taken from the Service member's most recent disability evaluation. Therefore, Service members with a disposition of placement on the temporary disability retirement list (TDRL) have not been assigned a final disability disposition; prior DESAR research found most Service members placed on the TDRL are subsequently placed on the permanent disability retirement list (PDRL) [3].

### Table 6 & Figures 6A-D Key Findings

- Overall, the most commonly assigned disposition in the Army (63%), Navy (28%) and Air Force (54%) was placement on the PDRL, while separated with severance pay was the most common in the Marine Corps (42%).
- Over the five-year period, the proportion of Soldiers, Sailors and Marines placed on the PDRL had a noteworthy downward trend; the proportion in FY 2019 was 18-percentage points lower than FY 2015 for both Soldiers (72% vs. 54%) and Marines (43% vs. 25%).
- In the Navy and Marine Corps, the percentage found fit generally trended downward over time except for a near doubling from FY2015 to FY2016.

**TABLE 6: DISTRIBUTION AND RATES<sup>1</sup> (PER 10,000 SERVICE MEMBERS) FOR MOST RECENTLY ASSIGNED DISPOSITION BY SERVICE: FY 2015-2019**

DISPOSITION	Army <sup>2</sup> (n=101,721)		Navy (n=17,609)		MC (n=18,043)		Air Force (n=19,222)	
	%	Rate	%	Rate	%	Rate	%	Rate
Placement on PDRL	62.5	119.7	27.5	24.2	32.4	47.5	53.8	41.3
Separated without DOD Disability Benefits (SWODDB)	1.3	2.5	5.5	4.8	2.5	3.7	3.8	2.9
Separated with Severance Pay	23.9	45.8	22.7	20.1	41.9	61.5	20.0	15.4
Fit/Limited Duty	0.3	0.5	17.3	15.3	7.2	10.6	4.0	3.1
Placement on TDRL	10.9	20.9	24.6	21.7	10.7	15.6	16.0	12.3
Retained on TDRL	0.2	0.4	1.0	0.9	0.7	1.0	2.0	1.5
Other <sup>3</sup>	0.8	1.6	1.4	1.3	4.5	6.6	0.4	0.3

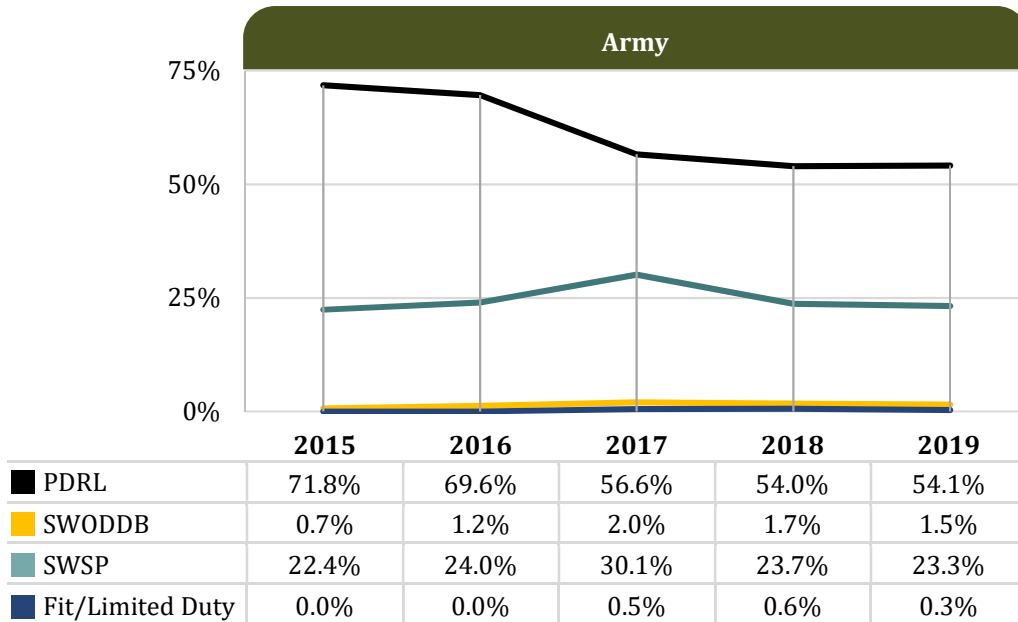
1. Rates are based on total service population, using data from Defense Manpower Data Center (DMDC) and represents the total number of Service members as of 30 September of the fiscal year in question.

2. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

3. Including, but not limited to, Service members with dispositions of no action, revert to retired status, transfer to retired reserve, dual action term, and reboard.

# ARMY

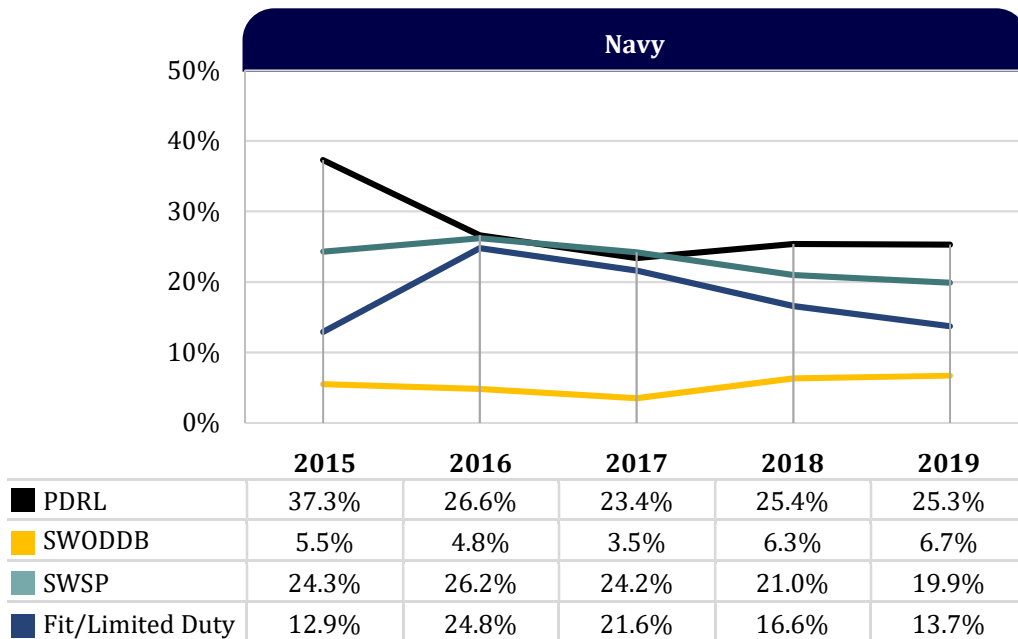
FIGURE 6A: TEMPORAL TREND OF FINAL DISPOSITION: ARMY FY 2015-2019<sup>1</sup>



1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

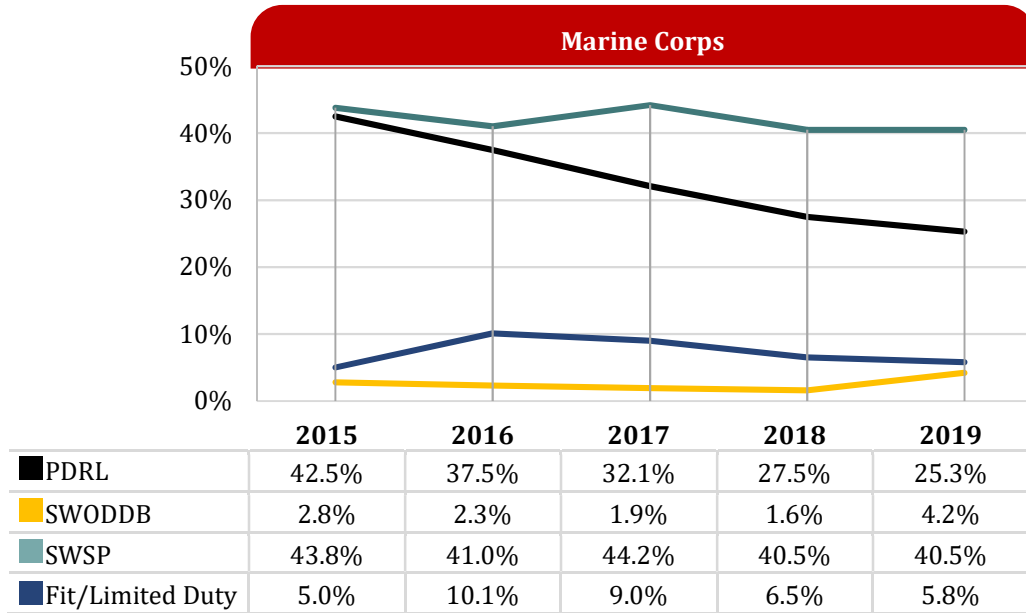
# NAVY

FIGURE 6B: TEMPORAL TREND OF FINAL DISPOSITION: NAVY FY 2015-2019



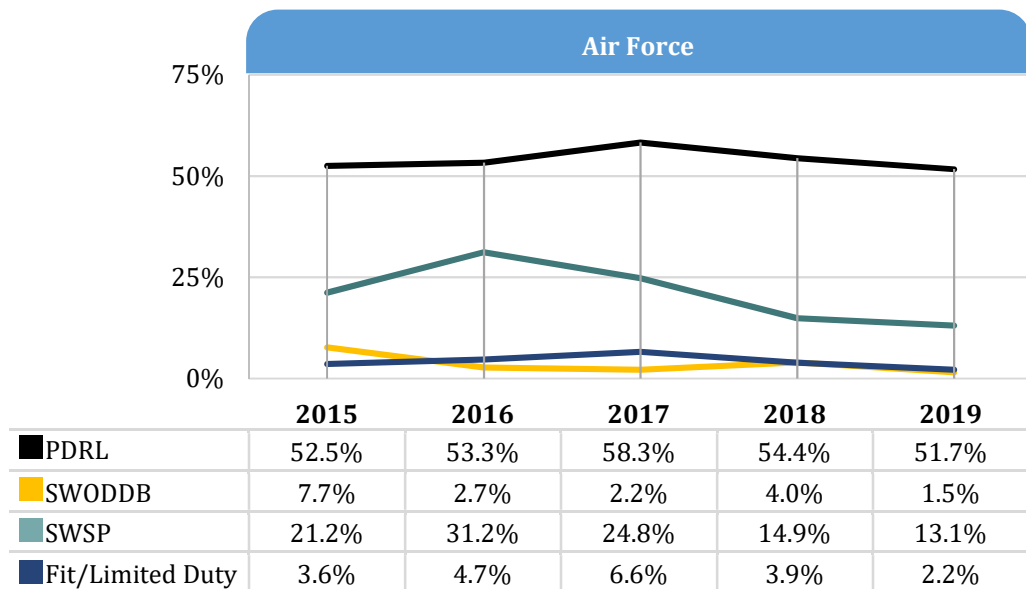
# MARINE CORPS

FIGURE 6C: TEMPORAL TREND OF FINAL DISPOSITION: MARINE CORPS FY 2015-2019



# AIR FORCE

FIGURE 6D: TEMPORAL TREND OF FINAL DISPOSITION: AIR FORCE FY 2015-2019



## 5. Disability Ratings

**Table 7 and Figures 7A-D** show a comparison of the distribution and rate (per 10,000 Service members) for the most recent combined disability ratings by service for Service members evaluated for disability from FY 2015-2019. Rates are based on total service population, using data from Defense Manpower Data Center (DMDC) and represents the total number of Service members as of 30 September of the fiscal year in question.

### Table 7 & Figure 7A-D Key Findings

- During the study period, the most frequently assigned combined disability ratings were 70% in the Army, Unrated in the Navy, 10% in the Marine Corps, and 30% in the Air Force.
- Across the study time period, those with a combined disability rating of 30% or greater, qualifying for disability retirement varied by service.
  - Over 40% of the Marines and Sailors, over half of Airmen and over 60% of Soldiers received a combined disability rating of 30% or greater.
- There was an upward trend in the percentage assigned combined disability ratings of 60% or higher in the Navy, Marine Corps and the Air Force.
  - This upward trend was most noteworthy in the Air Force; the percentage with a 60% or higher rating increased from 29% in FY 2015 to 42% in FY 2019.



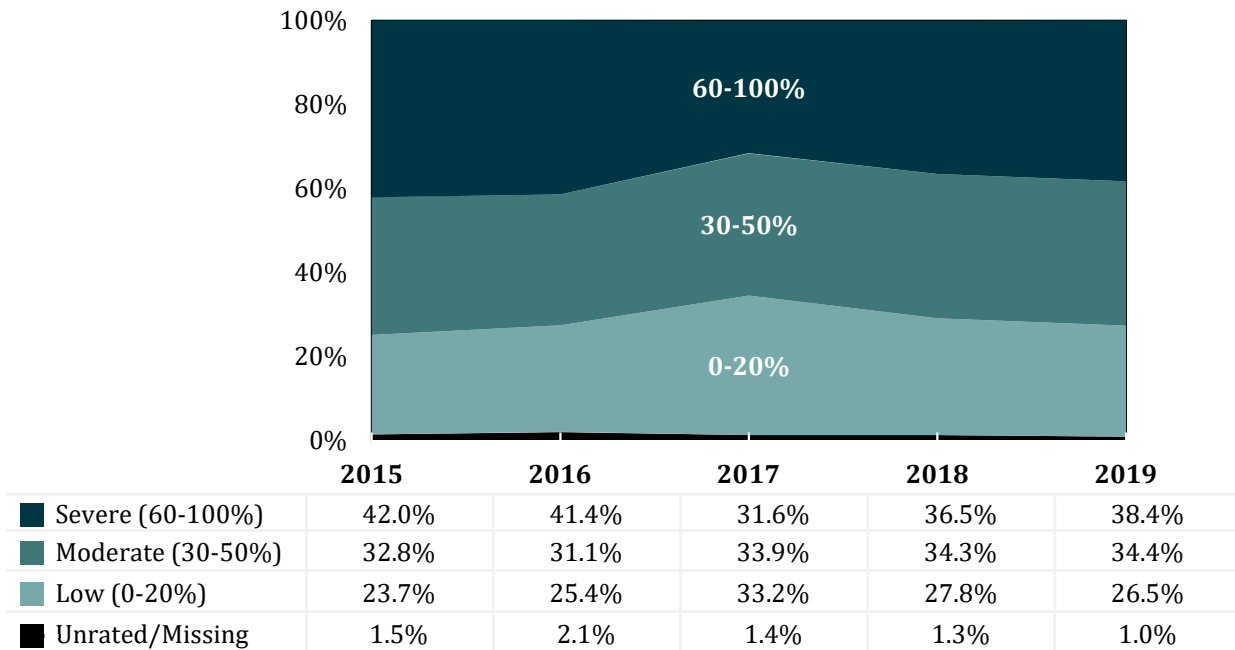
**TABLE 7A: DISTRIBUTION AND RATES (PER 10,000 SOLDIERS) OF MOST RECENT COMBINED RATING: ARMY FY 2015-2019<sup>1</sup>**

Rating	2015 (n=29,359)		2016 (n=20,398)		2017 (n=10,229)		2018 (n=22,568)		2019 (n=19,167)	
	%	Rate	%	Rate	%	Rate	%	Rate	%	Rate
<b>0</b>	2.0	5.5	2.2	4.4	3.0	3.1	1.7	3.5	1.8	3.1
<b>10</b>	11.9	33.6	13.1	26.2	15.9	16.2	13.8	27.6	13.2	22.5
<b>20</b>	9.9	28.0	10.1	20.1	14.3	14.5	12.3	24.7	11.5	19.6
<b>30</b>	10.5	29.8	9.7	19.4	11.3	11.5	10.2	20.4	10.3	17.6
<b>40</b>	9.8	27.7	8.9	17.8	10.8	11.0	9.4	18.8	8.8	15.0
<b>50</b>	12.5	35.4	12.5	24.9	11.8	12.0	14.8	29.6	15.3	26.1
<b>60</b>	10.9	30.8	9.3	18.6	8.2	8.3	8.4	16.8	7.8	13.3
<b>70</b>	14.2	40.3	14.9	29.7	11.2	11.3	14.2	28.4	16.0	27.3
<b>80</b>	8.5	24.0	8.5	16.9	5.4	5.5	6.6	13.3	7.0	11.9
<b>90</b>	3.3	9.5	3.5	7.0	2.6	2.6	2.5	5.0	2.7	4.6
<b>100</b>	5.2	14.7	5.1	10.3	4.3	4.3	4.8	9.6	4.9	8.3
<b>UR</b>	1.1	1.2	1.3	1.5	0.3	1.1	0.3	2.0	0.1	1.4
<b>Miss</b>	0.4	3.1	0.8	2.6	1.0	0.3	1.0	0.7	0.8	0.2

UR: Unrated, Miss: Missing

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

**FIGURE 7A: TEMPORAL TRENDS OF DISABILITY RATINGS SEVERITY: ARMY FY 2015-2019**



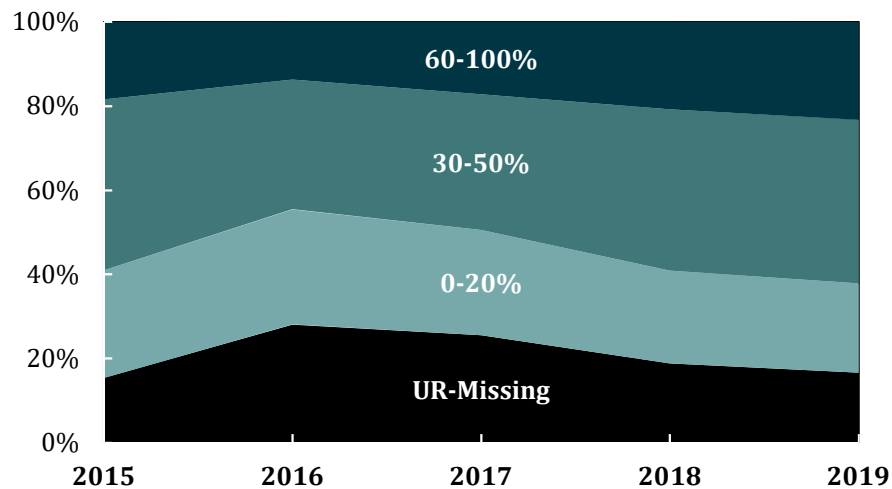


**TABLE 7B: DISTRIBUTION AND RATES (PER 10,000 SAILORS) OF MOST RECENT COMBINED RATING: NAVY FY 2015-2019**

Rating	2015 (n=3,456)		2016 (n=2,348)		2017 (n=3,469)		2018 (n=4,463)		2019 (n=3,873)	
	%	Rate	%	Rate	%	Rate	%	Rate	%	Rate
<b>0</b>	3.1	2.8	4.2	2.6	2.9	2.7	2.2	2.3	2.8	2.5
<b>10</b>	13.5	12.3	15.1	9.3	13.3	12.3	11.5	12.1	11.1	10.0
<b>20</b>	9.1	8.2	8.0	4.9	8.7	8.0	8.3	8.7	7.3	6.6
<b>30</b>	18.5	16.8	13.1	8.1	13.0	11.9	15.1	15.8	14.6	13.1
<b>40</b>	8.8	8.0	7.5	4.6	7.3	6.7	9.6	10.1	8.3	7.4
<b>50</b>	13.3	12.1	10.2	6.3	12.1	11.1	13.7	14.4	16.1	14.4
<b>60</b>	5.1	4.6	3.6	2.2	3.5	3.2	4.3	4.5	4.0	3.6
<b>70</b>	7.1	6.4	5.5	3.4	7.5	6.9	9.2	9.6	12.9	11.5
<b>80</b>	1.2	1.1	1.1	0.7	1.2	1.1	1.8	1.9	1.6	1.4
<b>90</b>	0.4	0.3	0.3	0.2	0.3	0.3	0.5	0.6	0.2	0.2
<b>100</b>	4.6	4.2	3.3	2.0	4.8	4.4	5.0	5.2	4.6	4.1
<b>UR</b>	14.9	13.5	27.0	16.7	24.6	22.6	18.5	19.4	16.1	14.5
<b>Miss</b>	0.5	0.4	1.0	0.6	0.9	0.8	0.4	0.4	0.5	0.4

UR: Unrated, Miss: Missing

**FIGURE 7B: TEMPORAL TRENDS OF DISABILITY RATINGS SEVERITY: NAVY FY 2015-2019**



	2015	2016	2017	2018	2019
Severe (60-100%)	18.4%	13.8%	17.2%	20.8%	23.2%
Moderate (30-50%)	40.6%	30.8%	32.3%	38.4%	38.9%
Low (0-20%)	25.6%	27.4%	25.0%	22.0%	21.2%
Unrated/Missing	15.4%	28.1%	18.8%	18.8%	16.6%

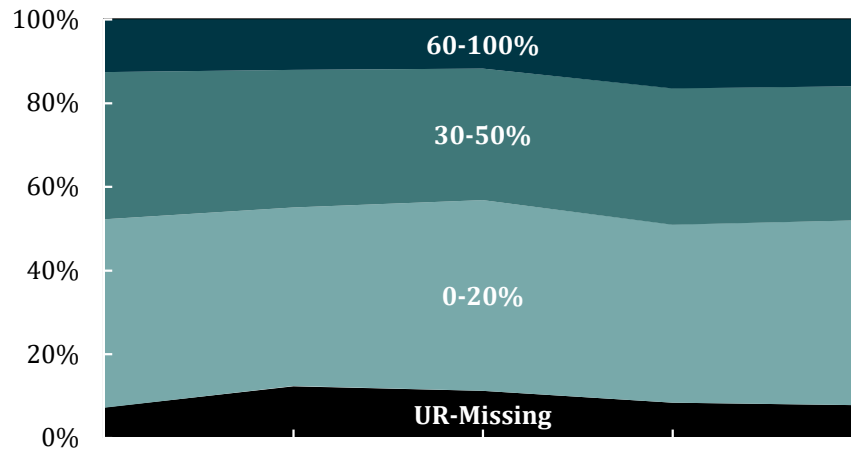
# MARINE CORPS

**TABLE 7C: DISTRIBUTION AND RATES (PER 10,000 MARINES) OF MOST RECENT COMBINED RATING: MARINE CORPS FY 2015-2019**

Rating	2015 (n=3,151)		2016 (n=3,152)		2017 (n=3,854)		2018 (n=4,266)		2019 (n=3,620)	
	%	Rate	%	Rate	%	Rate	%	Rate	%	Rate
<b>0</b>	6.1	8.7	5.6	7.2	5.7	9.0	3.4	5.6	5.6	7.7
<b>10</b>	24.4	34.5	23.3	30.4	23.8	37.6	24.5	40.0	23.1	31.9
<b>20</b>	14.5	20.5	13.8	18.0	16.1	25.5	14.8	24.1	15.5	21.4
<b>30</b>	15.2	21.6	15.4	20.1	13.0	20.6	13.3	21.8	13.5	18.6
<b>40</b>	10.6	15.1	8.5	11.1	8.7	13.8	10.1	16.5	9.3	12.9
<b>50</b>	9.3	13.2	8.9	11.7	9.7	15.4	9.2	15.0	9.3	12.8
<b>60</b>	4.9	6.9	4.3	5.5	3.6	5.7	5.4	8.9	4.8	6.6
<b>70</b>	3.4	4.8	4.6	6.0	4.7	7.5	6.4	10.4	6.9	9.5
<b>80</b>	1.5	2.1	1.3	1.7	1.3	2.1	1.8	2.9	1.6	2.2
<b>90</b>	0.8	1.1	0.3	0.5	0.3	0.4	0.4	0.6	0.3	0.4
<b>100</b>	2.1	3.0	1.6	2.1	1.9	3.0	2.5	4.1	2.4	3.4
<b>UR</b>	6.8	9.6	11.5	15.0	10.6	16.7	7.8	12.8	7.4	10.2
<b>Miss</b>	0.5	0.7	0.9	1.1	0.6	1.0	0.5	0.9	0.4	0.6

UR: Unrated, Miss: Missing

**FIGURE 7C: TEMPORAL TRENDS OF DISABILITY RATINGS SEVERITY: MARINE CORPS FY 2015-2019**



	2015	2016	2017	2018	2019
Severe (60-100%)	12.6%	12.1%	11.8%	16.4%	16.0%
Moderate (30-50%)	35.2%	32.9%	31.5%	31.5%	32.6%
Low (0-20%)	45.0%	42.7%	45.6%	42.6%	44.2%
Unrated/Missing	7.2%	12.4%	11.2%	8.4%	7.8%

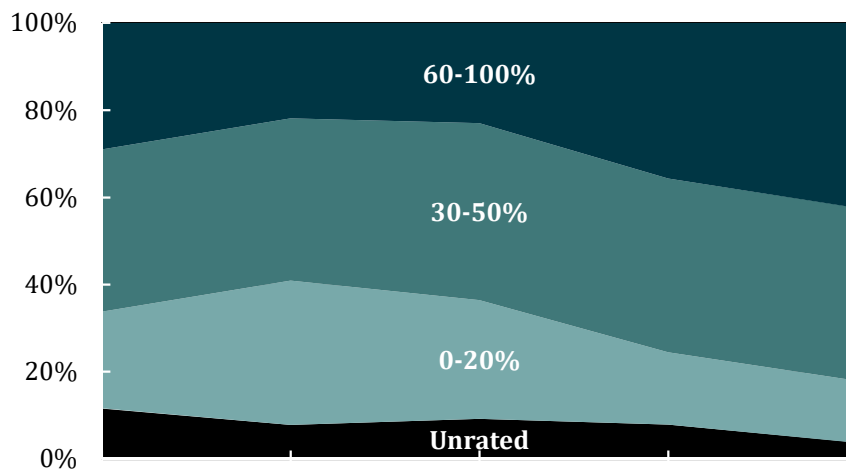
# AIR FORCE

**TABLE 7D: DISTRIBUTION AND RATES<sup>1</sup> (PER 10,000 AIRMEN) OF MOST RECENT COMBINED RATING: AIR FORCE FY 2015-2019**

Rating	2015 (n=4,383)		2016 (n=2,972)		2017 (n=3,039)		2018 (n=4,475)		2019 (n=4,353)	
	%	Rate	%	Rate	%	Rate	%	Rate	%	Rate
<b>0</b>	3.2	2.9	4.3	2.8	3.6	2.3	2.3	1.9	1.8	1.4
<b>10</b>	11.3	10.3	16.7	10.7	13.4	8.6	8.2	6.8	6.5	5.2
<b>20</b>	7.7	7.0	12.1	7.8	10.2	6.5	6.0	5.0	5.9	4.7
<b>30</b>	13.7	12.5	15.0	9.6	16.2	10.4	15.7	13.0	13.7	10.9
<b>40</b>	10.4	9.5	12.1	7.8	14.3	9.2	9.4	7.8	8.3	6.6
<b>50</b>	13.0	11.9	10.1	6.5	10.1	6.5	14.8	12.3	17.6	14.0
<b>60</b>	8.4	7.6	6.8	4.4	8.1	5.2	7.3	6.1	7.4	5.9
<b>70</b>	10.0	9.1	6.4	4.1	6.4	4.1	14.4	12.0	19.3	15.4
<b>80</b>	3.5	3.2	2.7	1.7	2.9	1.8	5.2	4.3	5.6	4.5
<b>90</b>	1.3	1.2	1.1	0.7	1.4	0.9	2.1	1.8	2.5	2.0
<b>100</b>	5.9	5.3	4.9	3.1	4.1	2.7	6.6	5.5	7.4	5.9
<b>UR</b>	11.2	10.2	7.2	4.6	8.7	5.6	7.4	6.2	3.4	2.7
<b>Miss</b>	0.4	0.4	0.6	0.4	0.5	0.3	0.4	0.4	0.3	0.2

UR: Unrated, Miss: Missing

**FIGURE 7D: TEMPORAL TRENDS OF DISABILITY RATINGS SEVERITY: AIR FORCE FY 2015-2019**

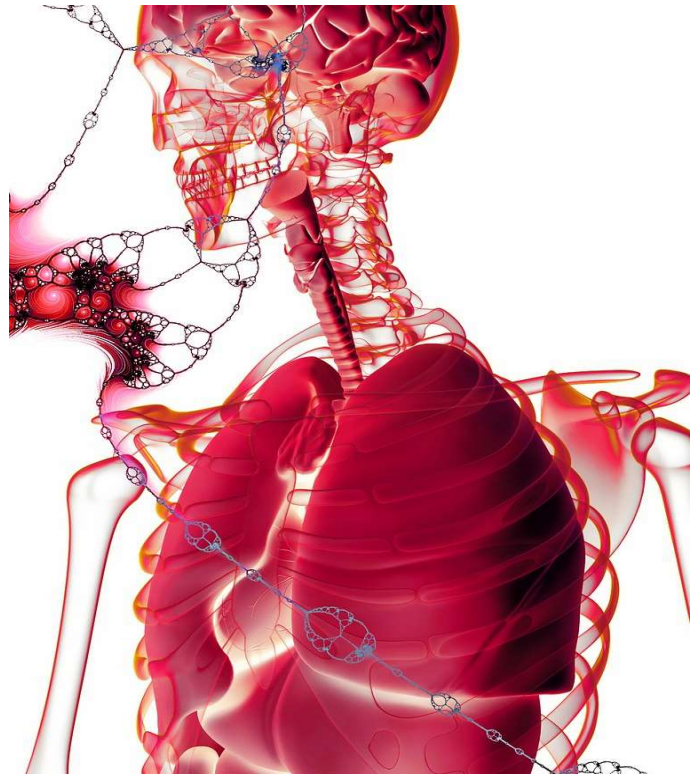


	2015	2016	2017	2018	2019
Severe (60-100%)	29.0%	21.9%	23.0%	35.7%	42.4%
Moderate (30-50%)	37.2%	37.2%	40.6%	39.9%	39.7%
Low (0-20%)	22.2%	33.1%	27.2%	16.6%	14.2%
Unrated/Missing	11.6%	7.8%	9.2%	7.8%	3.7%

## 6. Unfitting Conditions

Due to the high number of VASRD codes, unfitting conditions were categorized into body systems. Service members may be included in more than one category if evaluated for multiple conditions across multiple categories. However, Service members were only counted once per body system.

**Tables 8 A-D and Figures 8 A-H** show the three most common body system categories for unfitting conditions by service, as well as any body system categories which may have a notable trend over the time period. Counts presented in each table represent the number of Service members evaluated for one or more conditions in a given body system. Percentages represent the quantity of Service members with a disability condition in a given body system among all Service members discharged with a service-connected disability and may exceed 100% as Service members may have conditions in multiple body systems.



### Table 8A-D & Figures 8A-D Key Findings

- Consistent with previous DESAR reports, the most common unfitting conditions among disability discharged Service members were within the musculoskeletal, psychiatric and neurological systems.
- Overall, musculoskeletal conditions were the most common reasons for disability discharge from the Army (~60%), Marine Corps (~55%) and Air Force (~45%).
  - However, the prevalence of musculoskeletal discharges trended downward in all services over the time period.
- Nearly 40% of disability discharged Sailors were discharged due to a psychiatric disorder.
  - Over time, there were substantial increases in disability discharges due to psychiatric disorders in the Navy and Air Force; by FY 2019, a higher percentage of Sailors and Airmen were disability discharged for psychiatric disorders than musculoskeletal conditions.
- All other system categories remained relatively stable over the time period (results not shown), with the exception of a slight upward trend in disability discharges related to endocrine disorders in the Marine Corps.

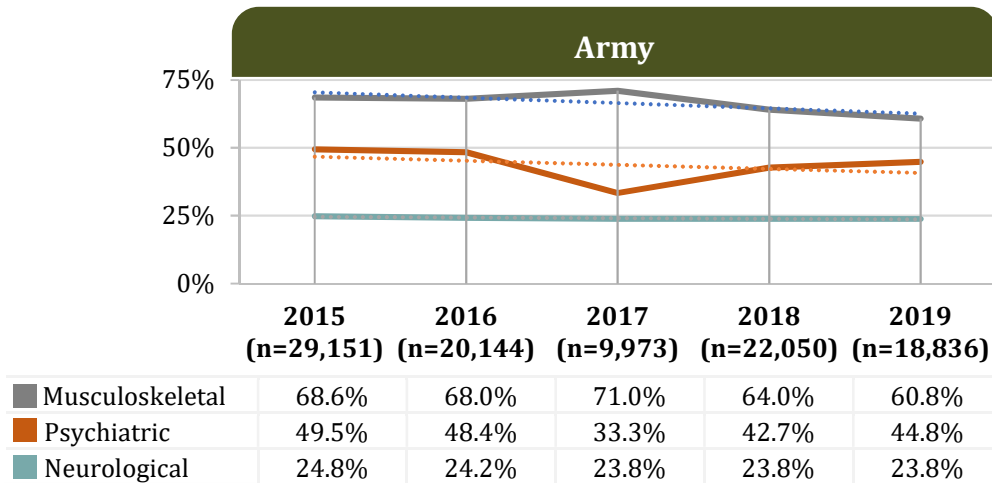
# ARMY

**TABLE 8A: DISTRIBUTION AND RATE (PER 10,000 SOLDIERS) OF DISABILITY BODY SYSTEM CATEGORIES AMONG DISABILITY DISCHARGED SOLDIERS: FY 2015-2019<sup>1</sup>**

Army (n=100,154)		
Body System Category	% <sup>2</sup>	Rate <sup>3</sup>
Musculoskeletal	66.3	124.9
Psychiatric	45.3	85.3
Neurological	24.2	45.6
Respiratory	3.1	5.9
Digestive	2.3	4.2
Cardiovascular	2.2	4.2
Endocrine	2.0	3.7
Dermatologic	1.9	3.6
Genitourinary	1.4	2.6
Ears and Hearing	1.1	2.0
Eyes and Vision	0.8	1.6
Hemic/Lymphatic	0.5	0.8
Gynecologic	0.3	0.6
Infectious Disease	0.3	0.6
Dental/Oral	0.1	0.3
Other Sensory Disorders	<0.1	0.1

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.
2. Percent of Soldiers who have at least one condition within the specified body system category. Soldiers may be included in more than one body system category, if the Soldier was evaluated for more than one condition.
3. Rate of disability discharge related to each body system per 10,000 Soldiers.

**FIGURE 8A: TEMPORAL TREND OF THE PERCENTAGE OF DISABILITY DISCHARGES RELATED TO MUSCULOSKELETAL, PSYCHIATRIC, AND NEUROLOGICAL CONDITIONS: ARMY**



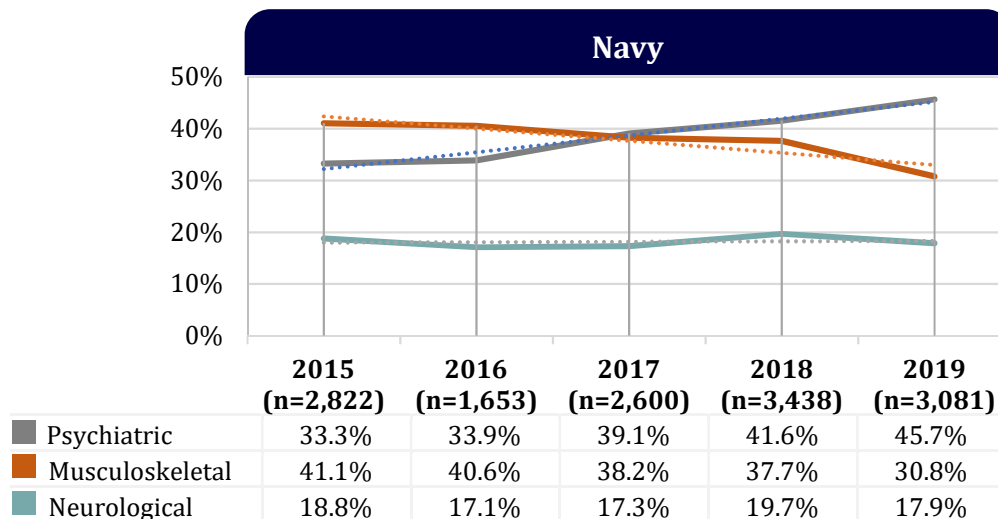


**TABLE 8B: DISTRIBUTION AND RATE (PER 10,000 SAILORS) OF DISABILITY BODY SYSTEM CATEGORIES AMONG DISABILITY DISCHARGED SAILORS: FY 2015-2019**

Navy (n=13,594)		
Body System Category	% <sup>1</sup>	Rate <sup>2</sup>
Psychiatric	39.4	26.8
Musculoskeletal	37.3	25.4
Neurological	18.3	12.5
Digestive	4.7	3.2
Endocrine	2.2	1.5
Cardiovascular	2.2	1.5
Respiratory	2.2	1.5
Genitourinary	1.8	1.2
Dermatologic	1.3	0.9
Eyes and Vision	1.2	0.8
Hemic/Lymphatic	0.8	0.6
Ears and Hearing	0.8	0.5
Gynecologic	0.6	0.4
Infectious Disease	0.6	0.4
Dental/Oral	0.1	0.1
Other Sensory Disorders	<0.1	<0.1

1. Percent of Sailors who have at least one condition within the specified body system category. Sailors may be included in more than one body system category, if the Sailor was evaluated for more than one condition.  
 2. Rate of disability discharge related to each body system per 10,000 Sailors.

**FIGURE 8B: TEMPORAL TREND OF THE PERCENTAGE OF DISABILITY DISCHARGES RELATED TO MUSCULOSKELETAL, PSYCHIATRIC, AND NEUROLOGICAL CONDITIONS: NAVY**



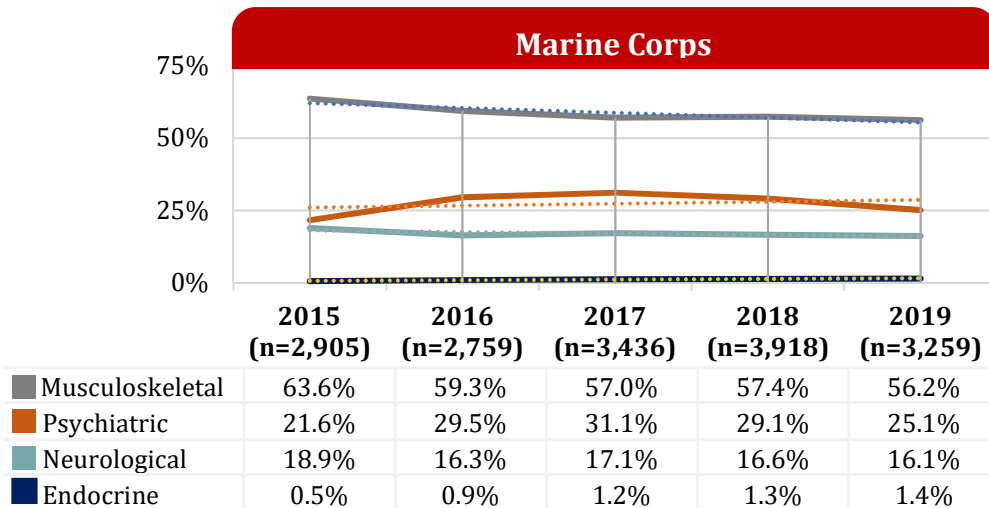
# MARINE CORPS

**TABLE 8C: DISTRIBUTION AND RATE (PER 10,000 MARINES) OF DISABILITY BODY SYSTEM CATEGORIES AMONG DISABILITY DISCHARGED MARINES: FY 2015-2019**

Marine Corps (n=16,277)		
Body System Category	% <sup>1</sup>	Rate <sup>2</sup>
Musculoskeletal	58.5	77.4
Psychiatric	27.5	36.4
Neurological	17.0	22.5
Digestive	3.2	4.3
Respiratory	2.8	3.7
Cardiovascular	1.4	1.9
Genitourinary	1.3	1.8
Dermatologic	1.1	1.5
Endocrine	1.1	1.4
Eyes and Vision	0.9	1.2
Ears and Hearing	0.7	0.9
Hemic/Lymphatic	0.4	0.6
Infectious Disease	0.3	0.4
Gynecologic	0.2	0.2
Dental/Oral	0.1	0.1
Other Sensory Disorders	<0.1	<0.1

1. Percent of Marines who have at least one condition within the specified body system category. Marines may be included in more than one body system category, if the Marine was evaluated for more than one condition.  
2. Rate of disability discharge related to each body system per 10,000 Marines.

**FIGURE 8C: TEMPORAL TREND OF THE PERCENTAGE OF DISABILITY DISCHARGES RELATED TO MUSCULOSKELETAL, PSYCHIATRIC, NEUROLOGICAL, AND ENDOCRINE CONDITIONS: MARINE CORPS**



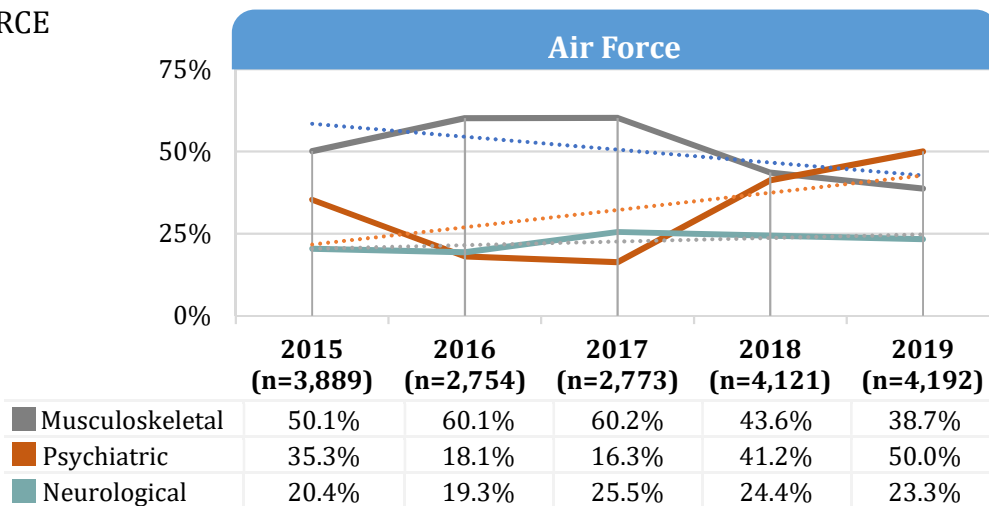
# AIR FORCE

**TABLE 8D: DISTRIBUTION AND RATE (PER 10,000 AIRMEN) OF DISABILITY BODY SYSTEM CATEGORIES AMONG DISABILITY DISCHARGED AIRMEN: FY 2015-2019**

Air Force (n=17,729)		
Body System Category	% <sup>1</sup>	Rate <sup>2</sup>
Musculoskeletal	49.0	34.7
Psychiatric	34.5	24.4
Neurological	22.6	16.0
Respiratory	7.4	5.2
Digestive	4.2	3.0
Cardiovascular	3.4	2.4
Dermatologic	2.3	1.6
Endocrine	2.0	1.4
Genitourinary	1.4	1.0
Ears and Hearing	1.0	0.7
Eyes and Vision	1.0	0.7
Infectious Disease	1.0	0.7
Hemic/Lymphatic	0.8	0.6
Gynecologic	0.6	0.4
Dental/Oral	0.1	0.1
Other Sensory Disorders	<0.1	<0.1

1. Percent of Airmen who have at least one condition within the specified body system category. Airmen may be included in more than one body system category, if the Airman was evaluated for more than one condition.  
2. Rate of disability discharge related to each body system per 10,000 Airmen.

**FIGURE 8D: TEMPORAL TREND OF THE PERCENTAGE OF DISABILITY DISCHARGES RELATED TO MUSCULOSKELETAL, PSYCHIATRIC, AND NEUROLOGICAL CONDITIONS: AIR FORCE**



**Tables 9A-D and Figures 9A-D** show the ten most common VASRD condition categories present in Service members discharged with a disability from 2015-2019. Service members are only counted once per category, but Service members may be included in more than one category if they were evaluated for multiple conditions. Percentages represent the number of Service members in each VASRD category among all Service members discharged with a service-connected disability.

## Tables 9 & Figures 9 Key Findings

- The ten most common VASRD categories were related to the musculoskeletal, psychiatric, and neurological systems, except for asthma in the Air Force.
- **Musculoskeletal conditions:** Across all services, dorsopathies (e.g., vertebral fracture, sacroiliac injury, lumbosacral strain, degenerative arthritis), limitation of motion, joint disorders, and arthritis were among the most common disability conditions.
  - In all services, these musculoskeletal conditions tended to have a downward trend in prevalence over the 5-year period.
- **Psychiatric disorders:** PTSD and mood disorder were among the most common disability conditions for all services, while anxiety disorder was more prevalent in the Navy and Air Force.
  - The prevalence of PTSD among Airmen sharply increased in 2018. This may be partially accounted for by the 2017 National Defense Authorization Act, which decreased the maximum time allowed for Service members to remain on the TDRL from 5 years to 3 years. Since Service members with psychiatric disabilities must be placed on the TDRL, this change may have artificially increased on the number of PTSD disability discharges.
  - There was an upward trend for mood disorders in the Navy, Marine Corps and Air Force.
- **Neurological conditions:** Paralysis and migraine were among the most common disability conditions in all services. Simultaneously, residuals of TBI were more prevalent in the Army and Marine Corps, and epilepsy was more prevalent in the Navy.

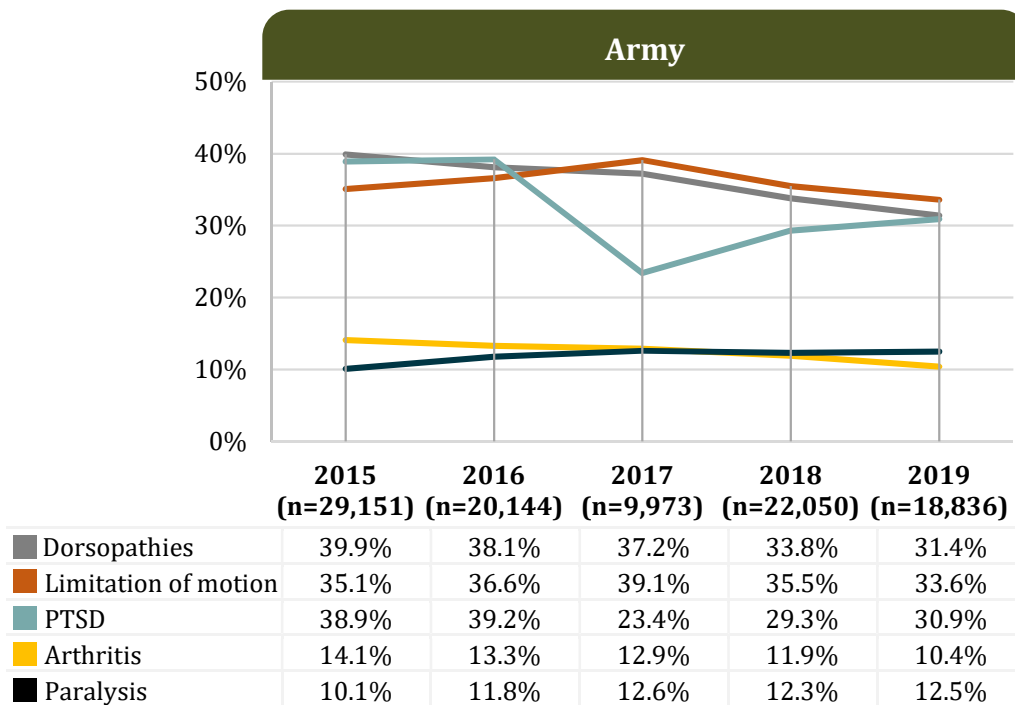
# ARMY

**TABLE 9A: TEN MOST COMMON VASRD CATEGORIES AMONG SOLDIERS WITH A DISABILITY DISCHARGE: FY 2015-2019**

Army (n=100,154)			
VASRD Category	n	% <sup>2</sup>	Rate <sup>3</sup>
Dorsopathies	36,370	36.3	68.4
Limitation of motion	35,672	35.6	67.1
PTSD	33,831	33.8	63.7
Arthritis	12,659	12.6	23.8
Paralysis	11,624	11.6	21.9
Mood disorder	8,964	9.0	16.9
Joint disorders	6,725	6.7	12.7
Migraine	6,050	6.0	11.4
Residuals of TBI	5,559	5.6	10.5
Skeletal and joint deformities	5,485	5.5	10.3

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.
2. Percent includes Soldiers who have at least one condition within the specified VASRD category. Soldiers may be included in more than one VASRD category if evaluated for more than one condition.
3. Rate of each type of disability per 10,000 Soldiers.

**FIGURE 9A: DISTRIBUTION OVER TIME OF THE TOP 5 VASRD CATEGORIES AMONG SOLDIERS WITH A DISABILITY DISCHARGE: FY 2015-2019**



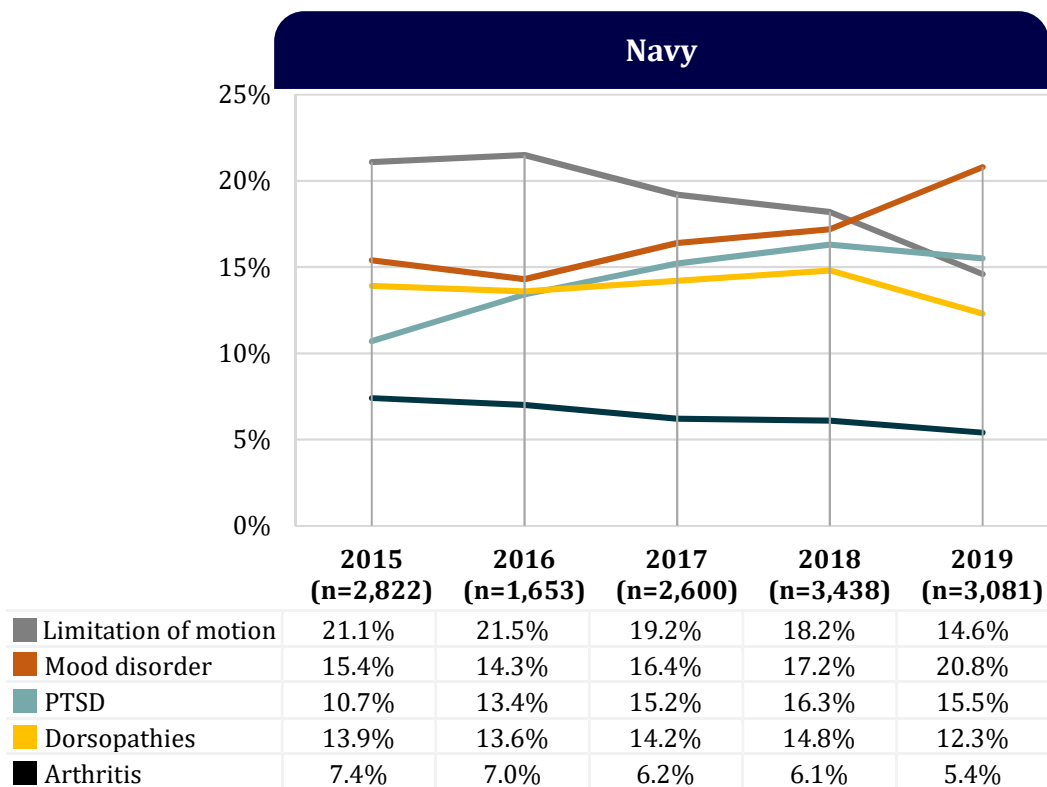
# NAVY

**TABLE 9B: TEN MOST COMMON VASRD CATEGORIES AMONG DISABILITY DISCHARGED SAILORS: FY 2015-2019**

Navy (n=13,594)			
VASRD Category	n	% <sup>1</sup>	Rate <sup>2</sup>
Limitation of motion	2,523	18.6	12.6
Mood disorder	2,330	17.1	11.7
PTSD	1,956	14.4	9.8
Dorsopathies	1,872	13.8	9.4
Arthritis	862	6.3	4.3
Joint disorders	804	5.9	4.0
Migraine	641	4.7	3.2
Paralysis	637	4.7	3.2
Anxiety disorder	602	4.4	3.0
Epilepsy	503	3.7	2.5

1. Percent includes Sailors who have at least one condition within the specified VASRD category. Sailors 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 Sailors.

**FIGURE 9B: DISTRIBUTION OVER TIME OF THE TOP 5 VASRD CATEGORIES AMONG SAILORS WITH A DISABILITY DISCHARGE: FY 2015-2019**





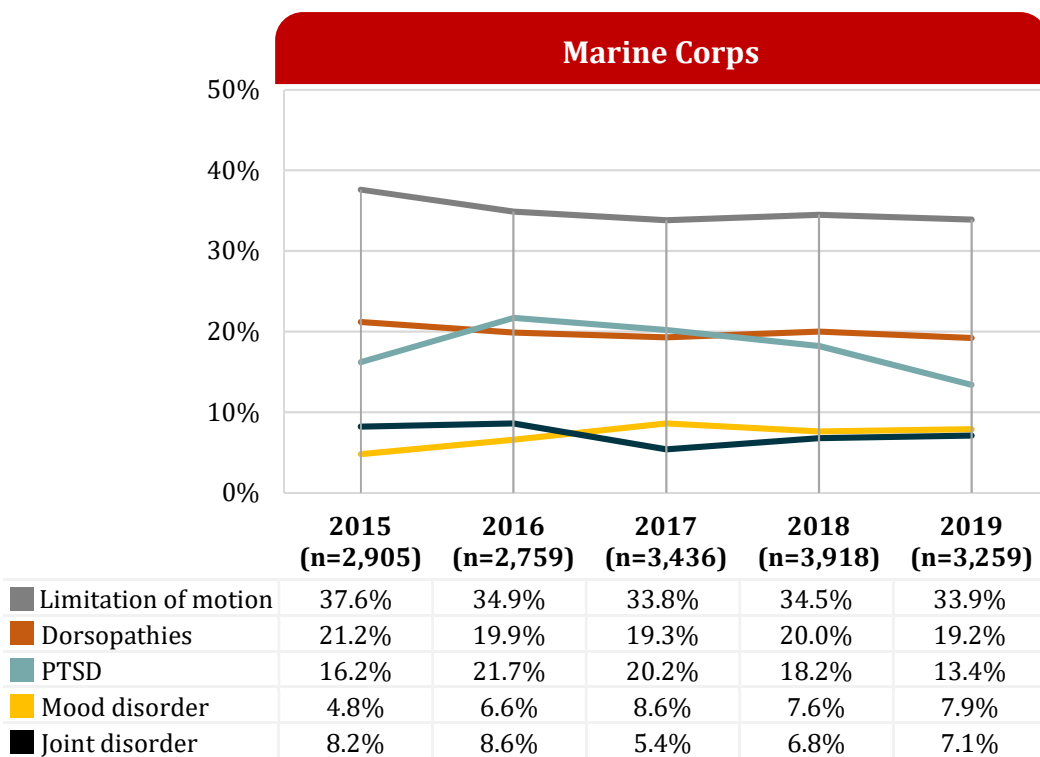
# MARINE CORPS

**TABLE 9C: TEN MOST COMMON VASRD CATEGORIES AMONG DISABILITY DISCHARGED MARINES: FY 2015-2019**

Marine Corps (n=16,277)			
VASRD Category	n	% <sup>1</sup>	Rate <sup>2</sup>
Limitation of motion	5,671	34.8	46.1
Dorsopathies	3,238	19.9	26.3
PTSD	2,913	17.9	23.7
Mood disorder	1,170	7.2	9.5
Joint disorders	1,158	7.1	9.4
Arthritis	1,120	6.9	9.1
Paralysis	762	4.7	6.2
Residuals of TBI	744	4.6	6.0
Migraine	566	3.5	4.6
Skeletal and joint deformities	537	3.3	4.4

1. Percent includes Marines who have at least one condition within the specified VASRD category. Marines 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 Marines.

**FIGURE 9C: DISTRIBUTION OVER TIME OF THE TOP 5 VASRD CATEGORIES AMONG MARINES WITH A DISABILITY DISCHARGE: FY 2015-2019**



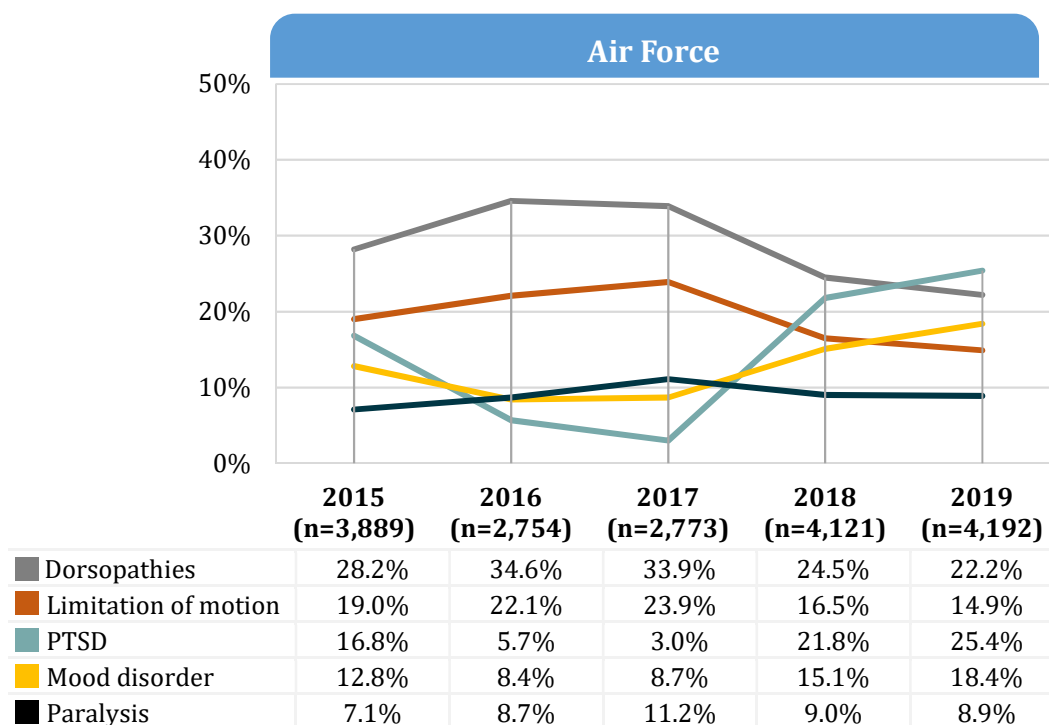
# AIR FORCE

**TABLE 9D: TEN MOST COMMON VASRD CATEGORIES AMONG AIRMEN WITH A DISABILITY DISCHARGE: FY 2015-2019**

Air Force (n=17,729)			
VASRD Category	n	% <sup>1</sup>	Rate <sup>2</sup>
Dorsopathies	4,931	27.8	19.7
Limitation of motion	3,317	18.7	13.2
PTSD	2,857	16.1	11.4
Mood disorder	2,362	13.3	9.4
Paralysis	1,572	8.9	6.3
Joint disorders	943	5.3	3.8
Arthritis	924	5.2	3.7
Migraine	920	5.2	3.7
Asthma	813	4.6	3.2
Anxiety disorder	671	3.8	2.7

1. Percent includes Airmen who have at least one condition within the specified VASRD category. Airmen 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 Airmen.

**FIGURE 9D: DISTRIBUTION OVER TIME OF THE TOP 5 VASRD CATEGORIES AMONG AIRMEN WITH A DISABILITY DISCHARGE: FY 2015-2019**





## History of Medical Disqualification, Accession Medical Waiver, and Hospitalization among Disability Discharged Service Members

DESAR receives data on Service members throughout their military career, spanning from the pre-accession medical examination at a Military Entrance Processing Station (MEPS) to discharge. These data were merged with disability evaluation data to describe the medical history of the disability discharged population. Applicant data, collected at MEPS, are available for enlisted Service members from all components. Waiver data include enlisted active duty and reserve Service members only. Hospitalization data were only available for inpatient stays at military treatment facilities (MTF) for active duty Service members and eligible reserves. Accession and discharge data were available for all ranks and components. Although medical history data sources may be limited by service, rank and/or component, all Service members were included in our analyses, as a Service member may change rank and/or component during their career.

Prior to the fiscal year (FY) 2016, medical disqualifications, medical waivers, and hospitalizations were reported by the International Classification of Diseases, 9th revision (ICD-9) codes. A mixture of ICD-9 and ICD-10 codes is expected to persist in our database through FY 2023 because the use of ICD-9 codes transitioned to ICD-10 codes effective FY 2016 (starting 01 Oct 2015) and MEPS medical examinations are valid for up to 2 years. To allow for comparisons over this transition, DESAR utilized the General Equivalence Mappings (GEMS) ICD-9-CM to ICD-10-CM crosswalk, a tool created by the Center for Medicare & Medicaid Services (CMS) to convert ICD-9 codes to ICD-10 codes. In this report, ICD-10 codes are reported within clinically meaningful ICD-10 categories. Previous DESAR reports utilized the Clinical Classifications Software (CCS) codes developed at the Agency for Healthcare Research and Quality (AHRQ) to report diagnosis categories; the use of ICD-10 categories allow for more specificity in the reporting diagnoses

## 7. Pre-accession Disqualifications among Disability Discharged Service Members

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Since 1995, the U.S. Medical Entrance Processing Command (USMEPCOM) has provided DESAR with information derived from all pre-accession physical examinations conducted at any of the 65 Military Entrance Processing Stations (MEPS). These application records are limited to enlisted applications; however, all disability discharged Service members are included in these tables regardless of rank, as a Service member may change rank during their military career. The following tables describe pre-accession disqualification status (i.e. fully medically qualified, medically disqualified) and disqualifications (DQs) for disability discharged Service members (fit/limited duty and separated without DOD disability benefits dispositions were excluded).

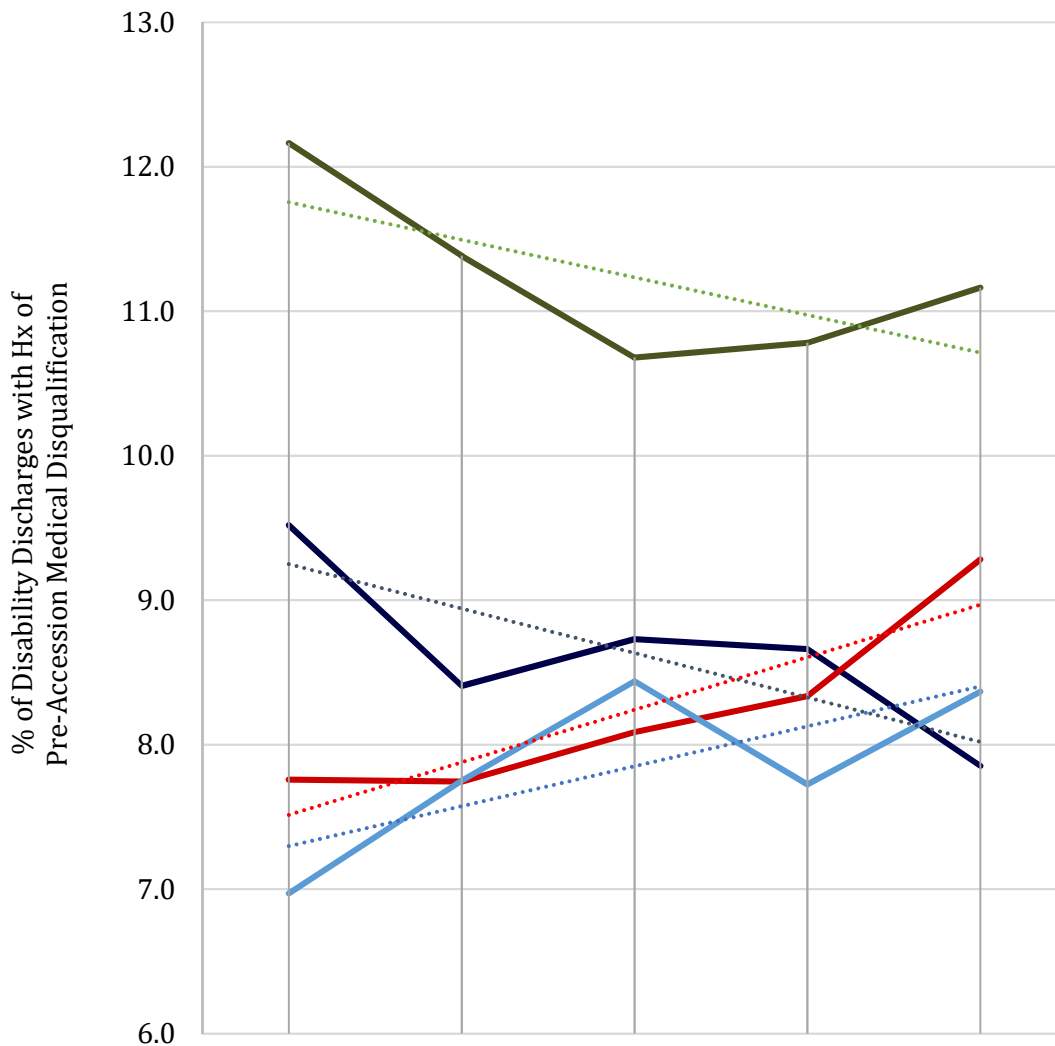
**Figure 10** shows the prevalence (solid line) and linear trend (dotted line) of history of pre-accession medical disqualification among disability discharged Service members, by year of disability discharge and service. For this report, applicants with DQs at MEPS that were later cleared by the Chief Medical Officer were considered fully qualified. In previous years, these Service members were classified as having a DQ. Therefore, this report's results may show a higher percentage of disability discharged Service members who were fully medically qualified at MEPS compared to previous reports.

### FIGURE 10 Key Findings

- Among disability discharged Service members with history of a MEPS exam, 8% to 11% had a pre-accession medical disqualification, while 88% were fully medically qualified at application.
  - The rate of pre-accession medical disqualification among Service members disability discharged between FY 2015-2019 was similar to the rate among all enlisted military accessions who received a MEPS exam between FY 2013-2018 (9%)[9].
- Over the study period, there was a slight downward trend in the percentage of disability discharged Service members with a history of pre-accession medical disqualification in the Army and Navy, while the Marine Corps and Air Force had a slight upward trend.



**FIGURE 10: PREVALENCE OF PRE-ACCESSION MEDICAL DISQUALIFICATION AMONG DISABILITY DISCHARGED SERVICE MEMBERS WITH A MEPS EXAM: BY SERVICE, FY 2015-2019**



	2015	2016	2017	2018	2019	TOTAL
Army <sup>1</sup>	12.2%	11.4%	10.7%	10.8%	11.2%	11.4%
Navy	9.5%	8.4%	8.7%	8.7%	7.9%	8.6%
Marine Corps	7.8%	7.7%	8.1%	8.3%	9.3%	8.3%
Air Force	7.0%	7.8%	8.4%	7.7%	8.4%	7.8%

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.



**Tables 10A-D** present the most common pre-accession disqualifications (DQs) assigned during MEPS examinations among disability discharged Service members. Pre-accession DQs are defined by the Department of Defense Instruction (DODI) 6130.03 and recorded using International Classification of Diseases, Version 9 (ICD-9) and Version 10 (ICD-10) codes. Findings are presented for both medical DQs, which require an accession medical waiver for accession, and medical administrative DQs (i.e. unmet DOD weight standards, failed alcohol or drug screening). DQs are not medical diagnoses; therefore, Service members may have either a current or verified past medical history of the disqualifying condition, according to the DODI 6130.03.

### Table 10A-D Key Findings

- In all services, the most common pre-accession disqualification categories included unmet DOD weight standards, joint disorders, and vision defects, a category mainly comprised of disorders of refraction and accommodation.
  - The most common pre-accession DQs in disability discharged Service members were consistent with highly prevalent medical disqualifications in the general military applicant population [1].



**TABLE 10A: MOST COMMON PRE-ACCESSION DISQUALIFICATIONS (DQ) CATEGORIES AMONG DISABILITY DISCHARGED SOLDIERS: FY 2015-2019<sup>1</sup>**

Army			
DQ Category	n	% of DQ <sup>2</sup>	% with Exam <sup>3</sup>
Unmet DOD weight standards	1,131	11.7	1.3
Vision defects	785	8.1	0.9
Joint disorders	526	5.5	0.6
Hearing loss and other disorders of the ear	452	4.7	0.5
Metabolic disorders	341	3.5	0.4
<b>Total DES Cases with hx of DQ</b>	<b>9,634</b>		<b>11.4</b>
<b>Total DES Cases with Medical Exam Record</b>	<b>84,854</b>		

Hx: History; DOD: Department of Defense; DES: Disability Evaluation System; DQ: Disqualification

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

2. Percent of disability discharged Soldiers within that specific DQ category among all DES cases with history of any DQ at MEPS

3. Percent of disability discharged Soldiers within that specific DQ category among all DES cases with a medical exam record

**TABLE 10B: MOST COMMON PRE-ACCESSION DISQUALIFICATIONS (DQ) CATEGORIES AMONG DISABILITY DISCHARGED SAILORS: FY 2015-2019**

Navy			
DQ Category	n	% of DQ <sup>1</sup>	% with Exam <sup>2</sup>
Vision defects	120	11.4	1.0
Joint disorders	99	9.4	0.8
Hx of allergic reaction	69	6.5	0.6
Unmet DOD weight standards	57	5.4	0.5
Asthma and other chronic lower respiratory diseases	41	3.9	0.3
<b>Total DES Cases with hx of DQ</b>	<b>1,056</b>		<b>8.6</b>
<b>Total DES Cases with Medical Exam Record</b>	<b>12,239</b>		

Hx: History; DOD: Department of Defense; DES: Disability Evaluation System; DQ: Disqualification

1. Percent of disability discharged Sailors within that specific DQ category among all DES cases with history of any DQ at MEPS

2. Percent of disability discharged Sailors within that specific DQ category among all DES cases with a medical exam record

**TABLE 10C: MOST COMMON PRE-ACCESSION DISQUALIFICATIONS (DQ) CATEGORIES AMONG DISABILITY DISCHARGED MARINES: FY 2015-2019**

Marine Corps			
DQ Category	n	% of DQ <sup>1</sup>	% with Exam <sup>2</sup>
Unmet DOD weight standards	272	21.0	1.7
Vision defects	117	9.0	0.7
Hx of behavioral and emotional disorders	62	4.8	0.4
Joint disorders	62	4.8	0.4
Asthma and other chronic lower respiratory diseases	57	4.4	0.4
<b>Total DES Cases with hx of DQ</b>	<b>1,295</b>		<b>8.3</b>
<b>Total DES Cases with Medical Exam Record</b>	<b>15,650</b>		

Hx: History; DOD: Department of Defense; DES: Disability Evaluation System; DQ: Disqualification

1. Percent of disability discharged Marines within that specific DQ category among all DES cases with history of any DQ at MEPS.

2. Percent of disability discharged Marines within that specific DQ category among all DES cases with a medical exam record.

**TABLE 10D: MOST COMMON PRE-ACCESSION DISQUALIFICATIONS (DQ) CATEGORIES AMONG DISABILITY DISCHARGED AIRMEN: FY 2015-2019**

Air Force			
DQ Category	n	% of DQ <sup>1</sup>	% with Exam <sup>2</sup>
Vision defects	131	11.1	0.9
Joint disorders	91	7.7	0.6
Unmet DOD weight standards	54	4.6	0.4
Hx of allergic reaction	53	4.5	0.4
Hx of behavioral and emotional disorders	48	4.1	0.3
<b>Total DES Cases with hx of DQ</b>	<b>1,175</b>		<b>7.8</b>
<b>Total DES Cases with Medical Exam Record</b>	<b>14,983</b>		

Hx: History; DOD: Department of Defense; DES: Disability Evaluation System; DQ: Disqualification

1. Percent of disability discharged Airmen within that specific DQ category among all DES cases with history of any DQ at MEPS.

2. Percent of disability discharged Airmen within that specific DQ category among all DES cases with a medical exam record.

To evaluate concordance between pre-accession disqualifications and reason for disability discharge, DESAR assessed the most prevalent pre-accession disqualification categories within each disability body system. **Tables 11A-D** present the most common pre-accession disqualification categories, both overall and within the 3 leading disability body systems (musculoskeletal, psychiatric, and neurological), as well as any disability body system categories which may have a notable rate of pre-accession disqualifications. Included in these tables were Service members with a pre-accession application record who were later disability discharged; those with a disposition of fit/limited duty and separated without DOD disability benefits dispositions were excluded.

Service members may be included in more than one category in cases of multiple disability conditions. Like the disability body system categories, pre-accession DQs are not mutually exclusive; a Service member may be represented in multiple DQ categories if he/she had more than one type of DQ.

### **Table 11A-D Key Findings**

- As shown in Figure 10, the overall proportion of those disability discharged with history of a pre-accession medical DQ ranged from 8% (Air Force) to 11% (Army). Proportions within disability body system category remained similar to the overall (results shown only for 3 most common disability body system categories), with the following exception:
  - In the Army, 17% of those with a hearing loss-related disability discharge had a history of a pre-accession medical disqualification.
- Little to no concordance was observed between pre-accession DQ and reason for disability discharge for the three most common disability body systems.
  - Less than 4% of disability discharges related to a musculoskeletal condition had a history of a pre-accession musculoskeletal DQ.
  - Less than 2% of disability discharges related to a psychiatric disorder had a history of a pre-accession psychiatric DQ.
  - Less than 1% of disability discharges related to a neurological condition had a history of a pre-accession neurological DQ.
- The highest concordance was observed between hearing loss-related disability discharge and pre-accession hearing loss DQ in Soldiers (7.4%) and Marines (4.8%).

# ARMY

**TABLE 11A: MOST PREVALENT DISQUALIFICATION (DQ) TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: ARMY FY 2015-2019<sup>1</sup>**

Army		
	n	% <sup>2</sup>
<b>Total Disability Discharged with MEPS Exam</b>	<b>84,854</b>	
Musculoskeletal DQ	2,017	2.4
Weight DQ	1,408	1.7
Vision DQ	1,263	1.5
Any DQ	9,634	11.4
<b>Musculoskeletal Disability</b>	<b>55,827</b>	
Musculoskeletal DQ	1,507	2.7
Weight DQ	940	1.7
Vision DQ	842	1.5
Any DQ	6,559	11.7
<b>Psychiatric Disability</b>	<b>37,374</b>	
Weight DQ	717	1.9
Musculoskeletal DQ	708	1.9
Vision DQ	484	1.3
Psychiatric <sup>3</sup> DQ	369	1.0
Any DQ	4,265	11.4
<b>Neurological Disability</b>	<b>19,407</b>	
Musculoskeletal	436	2.2
Weight	338	1.7
Vision	267	1.4
Neurological <sup>3</sup>	62	0.3
Any DQ	2,258	11.6
<b>Ear and Hearing Disability</b>	<b>838</b>	
Hearing DQ	62	7.4
Musculoskeletal DQ	28	3.3
Weight DQ	14	1.7
Any DQ	146	17.4

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

2. Percentages associated with disqualification categories at MEPS examination within each body system should be interpreted as the percent of Soldiers discharged within the specific disability category who had the specific DQ type at MEPS.

3. In cases where the 3 most common DQ categories did not match the disability body system, the DQ category matching the disability category is listed in the 4<sup>th</sup> position regardless of ranking.

## NAVY

**TABLE 11B: MOST PREVALENT DISQUALIFICATION (DQ) TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: NAVY FY 2015-2019**

Navy		
	n	% <sup>1</sup>
<b>Total Disability Discharged with MEPS Exam</b>	<b>12,239</b>	
Musculoskeletal DQ	255	2.1
Vision DQ	171	1.4
Respiratory DQ	90	0.7
Any DQ	1,056	8.6
<b>Psychiatric Disability</b>	<b>4,828</b>	
Vision DQ	79	1.6
Musculoskeletal DQ	68	1.4
Psychiatric DQ	37	0.8
Any DQ	412	8.5
<b>Musculoskeletal Disability</b>	<b>4,657</b>	
Musculoskeletal DQ	141	3.0
Vision DQ	66	1.4
Respiratory DQ	31	0.7
Any DQ	430	9.2
<b>Neurological Disability</b>	<b>2,211</b>	
Musculoskeletal DQ	39	1.8
Vision DQ	33	1.5
Respiratory DQ	15	0.7
Neurological <sup>2</sup> DQ	13	0.6
Any DQ	194	8.8

1. Percentages associated with disqualification categories at MEPS examination within each body system should be interpreted as the percent of Sailors discharged within the specific disability category who had the specific DQ type at MEPS.

2. In cases where the 3 most common DQ categories did not match the disability body system, the DQ category matching the disability category is listed in the 4th position regardless of ranking.



# MARINE CORPS

**TABLE 11C: MOST PREVALENT DISQUALIFICATION (DQ) TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: MARINE CORPS FY 2015-2019**

Marine Corps		
	n	% <sup>1</sup>
<b>Total Disability Discharged with MEPS Exam</b>	<b>15,650</b>	
Weight DQ	304	1.9
Musculoskeletal DQ	260	1.7
Vision DQ	156	1.0
Any DQ	1,295	8.3
<b>Musculoskeletal Disability</b>	<b>9,224</b>	
Weight DQ	198	2.1
Musculoskeletal DQ	171	1.9
Vision DQ	97	1.1
Any DQ	782	8.5
<b>Psychiatric Disability</b>	<b>4,216</b>	
Musculoskeletal DQ	61	1.4
Weight DQ	56	1.3
Psychiatric DQ	50	1.2
Any DQ	311	7.4
<b>Neurological Disability</b>	<b>2,593</b>	
Musculoskeletal DQ	43	1.7
Weight DQ	40	1.5
Respiratory DQ	24	0.9
Neurological <sup>2</sup> DQ	7	0.3
Any DQ	229	8.8
<b>Ear and Hearing Disability</b>	<b>104</b>	
Hearing DQ	5	4.8
Musculoskeletal DQ	2	1.9
Respiratory DQ	2	1.9
Any DQ	9	8.7

1. Percentages associated with disqualification categories at MEPS examination within each body system should be interpreted as the percent of Marines discharged within the specific disability category who had the specific DQ type at MEPS.

2. In cases where the 3 most common DQ categories did not match the disability body system, the DQ category matching the disability category is listed in the 4th position regardless of ranking.

# AIR FORCE

**TABLE 11D: MOST PREVALENT DISQUALIFICATION (DQ) TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: AIR FORCE FY 2015-2019**

Air Force		
	n	% <sup>1</sup>
<b>Total Disability Discharged with MEPS Exam</b>	<b>14,983</b>	
Musculoskeletal DQ	292	1.9
Vision DQ	188	1.3
Psychiatric DQ	125	0.8
Any DQ	1,175	7.8
<b>Musculoskeletal Disability</b>	<b>7,350</b>	
Musculoskeletal DQ	169	2.3
Vision DQ	88	1.2
Respiratory DQ	47	0.6
Any DQ	588	8.0
<b>Psychiatric Disability</b>	<b>5,113</b>	
Musculoskeletal DQ	83	1.6
Vision DQ	66	1.3
Psychiatric DQ	58	1.1
Any DQ	397	7.8
<b>Neurological Disability</b>	<b>3,281</b>	
Musculoskeletal DQ	68	2.1
Vision DQ	27	0.8
Psychiatric DQ	26	0.8
Neurological <sup>2</sup> DQ	15	0.5
Any DQ	251	7.7

1. Percentages associated with disqualification categories at MEPS examination within each body system should be interpreted as the percent of Airmen discharged within the specific disability category who had the specific DQ type at MEPS.

2. In cases where the 3 most common DQ categories did not match the disability body system, the DQ category matching the disability category is listed in the 4th position regardless of ranking.

## 8. History of Accession Medical Waiver among Disability Discharged Service Members

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Medically disqualified applicants must apply and be approved for an accession medical waiver from the applicable Service Medical Waiver Review Authority (SMWRA) to enlist in that branch of service. Waiver records received by DESAR include information on accession medical waivers considered by each SMWRA for enlisted applicants from 1995 to the most recently completed fiscal year. Service members are included regardless of rank at the time of disability evaluation, as Service members may change rank during their military career. For Service members with multiple medical waiver records, only information from the last waiver record preceding their first accession record was used in our analyses.

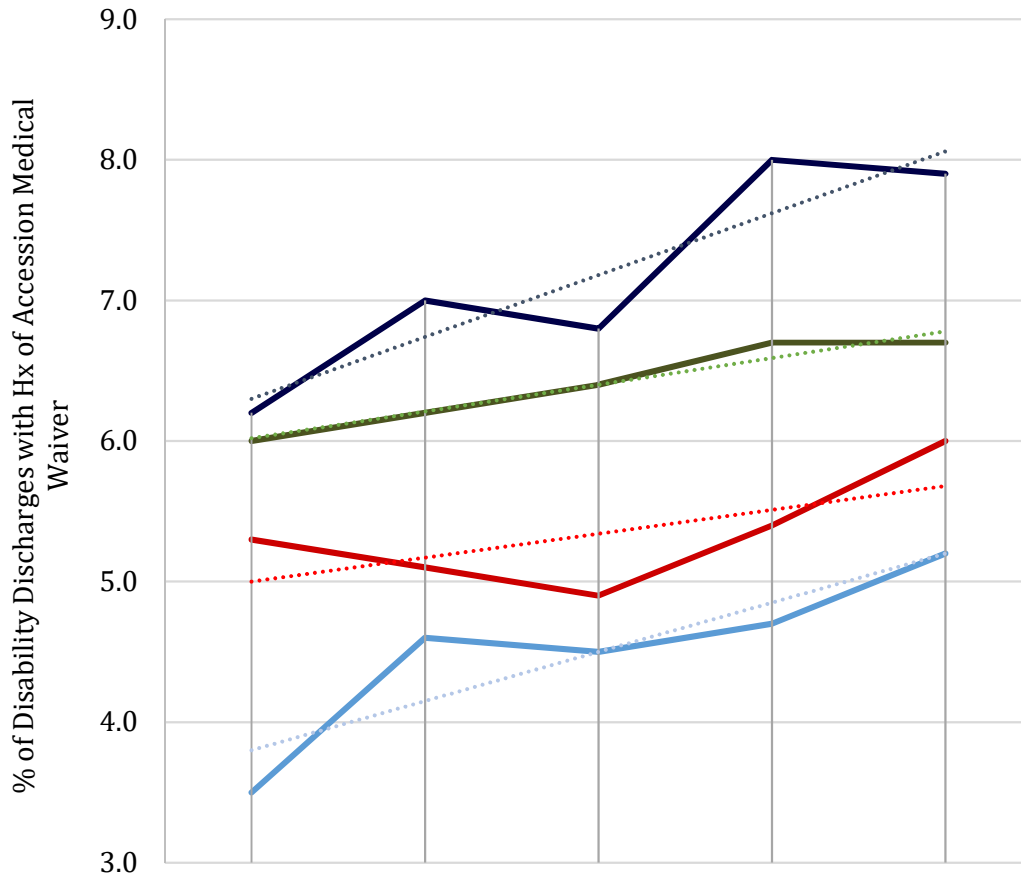
**Figure 11** shows the prevalence (solid line) and linear trend (dotted line) of history of accession medical waiver consideration among all disability discharged Service members, regardless of rank or presence of a MEPS examination record, by year of disability discharge and service. Service members with a final disposition category of fit/limited duty or separated without DOD disability benefits dispositions were excluded.

### Figure 11 Key Findings

- Among Service members disability discharged between FY 2015-2019, 4.5% (Air Force) to 7.3% (Navy) entered service with an accession medical waiver.
  - Over the study period, there was an upward trend in the percentage of disability discharged Service members with a history of accession medical waiver application in all services.



**FIGURE 11: PREVALENCE OF ACCESSION MEDICAL WAIVERS AMONG DISABILITY DISCHARGED SERVICE MEMBERS BY SERVICE AND YEAR OF DISABILITY EVALUATION: FY 2015-2019**



	2015	2016	2017	2018	2019	TOTAL
■ Army <sup>1</sup>	6.0%	6.2%	6.4%	6.7%	6.7%	6.4%
■ Navy	6.2%	7.0%	6.8%	8.0%	7.9%	7.3%
■ Marine Corps	5.3%	5.1%	4.9%	5.4%	6.0%	5.3%
■ Air Force	3.5%	4.6%	4.5%	4.7%	5.2%	4.5%

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

**Tables 12A-D** present the most commonly waived pre-accession medical disqualifications among disability discharged Service members.

### Tables 12A-D Key Findings

- The most commonly waived pre-accession DQs among disability discharged Service members included vision defects, joint disorders, hearing loss, history of allergic reaction, asthma, and history of behavioral and emotional disorders.
  - These are consistent with the highly prevalent DQs for which medical waivers were sought among all military applicants from FY 2013-2018 [1].
- The DQ category, ‘symptoms and signs involving the circulatory and respiratory systems’, which is largely comprised of elevated blood pressure (70%), was common among disability discharged Soldiers and Sailors with history of an accession medical waiver.
  - This DQ category was not among the ten most commonly sought accession medical waivers among all military applicants from FY 2013-2018 [1].

**TABLE 12A: FIVE MOST COMMON DISQUALIFICATIONS CONSIDERED FOR ACCESSION MEDICAL WAIVERS AMONG DISABILITY DISCHARGED SOLDIERS: FY 2015-2019<sup>1</sup>**

Army		
DQ Category	n	%
Vision defects	859	13.5
Joint disorders	544	8.5
Hearing loss and other disorders of the ear	404	6.3
Symptoms and signs involving the circulatory and respiratory systems	348	5.5
Hx of allergic reaction	314	4.9
<b>Total Waiver Applications</b>	<b>6,373</b>	

DQ: Disqualification; Hx: History

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

**TABLE 12B: FIVE MOST COMMON DISQUALIFICATIONS CONSIDERED FOR ACCESSION MEDICAL WAIVERS AMONG DISABILITY DISCHARGED SAILORS: FY 2015-2019**

Navy		
DQ Category	n	%
Vision defects	136	13.8
Hx of allergic reaction	102	10.3
Joint disorders	71	7.2
Asthma and other chronic lower respiratory diseases	43	4.4
Symptoms and signs involving the circulatory and respiratory systems	42	4.3
<b>Total Waiver Applications</b>	<b>988</b>	

DQ: Disqualification; Hx: History

**TABLE 12C: FIVE MOST COMMON DISQUALIFICATIONS CONSIDERED FOR ACCESSION MEDICAL WAIVERS AMONG DISABILITY DISCHARGED MARINES: FY 2015-2019**

Marine Corps		
DQ Category	n	%
Vision defects	120	13.8
General symptoms and signs <sup>1</sup>	98	11.3
Asthma and other chronic lower respiratory diseases	81	9.3
Other disorders of bone and cartilage osteochondritis	78	9.0
Hx of behavioral and emotional disorders	66	7.6
<b>Total Waiver Applications</b>	<b>870</b>	

DQ: Disqualification; Hx: History

1. This DQ category, per DoDI 6130.03, is largely comprised of 'history of any condition that may reasonably be expected to interfere with the successful performance of military duty or training or limit geographical assignment' [7].

**TABLE 12D: FIVE MOST COMMON DISQUALIFICATIONS CONSIDERED FOR ACCESSION MEDICAL WAIVERS AMONG DISABILITY DISCHARGED AIRMEN: FY 2015-2019**

Air Force		
DQ Category	n	%
Vision defects	143	17.9
Joint disorder	86	10.8
Hx of behavioral and emotional disorders	50	6.3
Hx of allergic reaction	49	6.1
Asthma and other chronic lower respiratory diseases	39	4.9
<b>Total Waiver Applications</b>	<b>799</b>	

DQ: Disqualification; Hx: History



To evaluate concordance between pre-accession medical waivers and reason for disability discharge, DESAR assessed the most commonly waived pre-accession disqualification categories within each disability body system. **Tables 13A-D** present the most commonly waived disqualification categories, both overall and within the 3 leading disability body systems (musculoskeletal, psychiatric, and neurological), as well as any disability body system categories which may have a notable rate of waived pre-accession disqualifications. Only Service members discharged with a service-connected disability were included in these tables (i.e., fit/limited duty and separated without DOD disability benefits dispositions were excluded).

Service members may be included in more than one body system category in cases of multiple disability conditions. Similar to the disability body system categories, waiver types within each body system are not mutually exclusive, and a Service member is represented in multiple waiver categories if he/she has more than one type of medical waiver. Therefore, percentages should be interpreted as the proportion of Service members discharged with that specific waiver type within that specific disability body system.

### Tables 13A-D Key Findings

- As shown in Figure 10, the overall proportion of disability discharged Service members with history of a pre-accession medical waiver ranged from 5% (Marine Corps, Air Force) to 7% (Navy). When assessing the proportion by disability body system category, the results were similar to the overall proportion for all disability categories (results shown only for 3 most common disability body system categories), with the following exception:
  - In the Army, 9% of those with a hearing loss-related disability discharge had a history of a pre-accession medical waiver.
- Similar to all pre-accession disqualifications, little to no concordance was observed between waived pre-accession DQs and the reason for disability evaluation for the three most common disability body systems.
  - Less than 3% of disability discharges related to a musculoskeletal condition had a history of a pre-accession musculoskeletal waiver.
  - Less than 1% of disability discharges related to a psychiatric disorder had a history of a pre-accession psychiatric waiver.
  - Less than 1% of disability discharges related to a neurological condition had a history of a pre-accession neurological waiver.
- Slightly more concordance was observed between a hearing loss-related disability discharge and a pre-accession hearing loss medical waiver in Soldiers (4.2%) and Marines (4.5%).

# ARMY

**TABLE 13A: MOST PREVALENT ACCESSION MEDICAL WAIVER CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: ARMY FY 2015-2019<sup>1</sup>**

Army		
	n	% <sup>2</sup>
<b>Total Disability Discharged</b>	<b>100,154</b>	
Musculoskeletal waiver	1,434	1.4
Vision waiver	1,068	1.1
Psychiatric waiver	524	0.5
Any waiver	6,373	6.4
<b>Musculoskeletal Disability</b>	<b>66,359</b>	
Musculoskeletal waiver	1,114	1.7
Vision waiver	724	1.1
Psychiatric waiver	328	0.5
Any waiver	4,398	6.6
<b>Psychiatric Disability</b>	<b>45,348</b>	
Musculoskeletal waiver	457	1.0
Vision waiver	357	0.8
Psychiatric waiver	250	0.6
Any waiver	2,477	5.5
<b>Neurological Disability</b>	<b>24,211</b>	
Musculoskeletal waiver	302	1.2
Vision waiver	199	0.8
Hearing waiver	122	0.5
Neurological <sup>2</sup> waiver	20	0.1
Any waiver	1,383	5.7
<b>Ear and Hearing Disability</b>	<b>1,054</b>	
Hearing waiver	44	4.2
Musculoskeletal waiver	17	1.6
Vision waiver	8	0.8
Any waiver	95	9.0

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

2. Percentages associated with waiver categories within each body system should be interpreted as the percent of Soldiers discharged with a specific disability type who had each specific waiver type.

3. In cases where none of the leading waiver categories matched the disability body system, the matching waiver category was also included.

**TABLE 13B: MOST PREVALENT ACCESSION MEDICAL WAIVER CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: NAVY FY 2015-2019**

Navy		
	n	% <sup>1</sup>
<b>Total Disability Discharged</b>	<b>13,594</b>	
Musculoskeletal waiver	228	1.7
Vision waiver	168	1.2
Psychiatric waiver	66	0.5
Any waiver	988	7.3
<b>Psychiatric Disability</b>	<b>5,357</b>	
Vision waiver	73	1.4
Musculoskeletal waiver	52	1.0
Psychiatric waiver	32	0.6
Any waiver	367	6.9
<b>Musculoskeletal Disability</b>	<b>5,071</b>	
Musculoskeletal waiver	131	2.6
Vision waiver	64	1.3
Psychiatric waiver	21	0.4
Any waiver	412	8.1
<b>Neurological Disability</b>	<b>2,491</b>	
Musculoskeletal waiver	44	1.8
Vision waiver	30	1.2
Psychiatric waiver	15	0.6
Neurological <sup>2</sup> waiver	2	0.1
Any waiver	184	7.4

1. Percentages associated with waiver categories within each body system should be interpreted as the percent of Sailors discharged with a specific disability type who had each specific waiver type.  
 2. In cases where none of the leading waiver categories matched the disability body system, the matching waiver category was also included.

# MARINE CORPS

**TABLE 13C: MOST PREVALENT ACCESSION MEDICAL WAIVER CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: MARINE CORPS FY 2015-2019**

Marine Corps		
	n	% <sup>1</sup>
<b>Total Disability Discharged</b>	<b>16,277</b>	
Musculoskeletal waiver	202	1.2
Vision waiver	140	0.9
Psychiatric waiver	122	0.7
Any waiver	870	5.3
<b>Musculoskeletal Disability</b>	<b>9,520</b>	
Musculoskeletal waiver	143	1.5
Vision waiver	87	0.9
Psychiatric waiver	62	0.7
Any waiver	530	5.6
<b>Psychiatric Disability</b>	<b>4,474</b>	
Musculoskeletal waiver	45	1.0
Psychiatric waiver	40	0.9
Vision waiver	28	0.6
Any waiver	193	4.3
<b>Neurological Disability</b>	<b>2,764</b>	
Musculoskeletal waiver	33	1.2
Psychiatric waiver	24	0.9
Vision waiver	21	0.8
Neurological <sup>2</sup> waiver	1	<0.1
Any waiver	163	5.9
<b>Ear and Hearing Disability</b>	<b>112</b>	
Hearing waiver	5	4.5
Musculoskeletal waiver	2	1.8
Vision waiver	1	0.9
Any waiver	8	7.1

1. Percentages associated with waiver categories within each body system should be interpreted as the percent of Marines discharged with a specific disability type who had each specific waiver type.

2. In cases where none of the leading waiver categories matched the disability body system, the matching waiver category was also included.

# AIR FORCE

**TABLE 13D: MOST PREVALENT ACCESSION MEDICAL WAIVER CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: AIR FORCE FY 2015-2019**

Air Force		
	n	% <sup>1</sup>
<b>Total Disability Discharged</b>	<b>17,729</b>	
Musculoskeletal waiver	177	1.0
Vision waiver	171	1.0
Psychiatric waiver	112	0.6
Any waiver	799	4.5
<b>Musculoskeletal Disability</b>	<b>8,688</b>	
Musculoskeletal waiver	108	1.2
Vision waiver	72	0.8
Psychiatric waiver	42	0.5
Any waiver	385	4.4
<b>Psychiatric Disability</b>	<b>6,118</b>	
Vision waiver	65	1.1
Psychiatric waiver	49	0.8
Musculoskeletal waiver	41	0.7
Any waiver	269	4.4
<b>Neurological Disability</b>	<b>4,014</b>	
Musculoskeletal waiver	40	1.0
Vision waiver	25	0.6
Psychiatric waiver	18	0.4
Neurological <sup>2</sup> waiver	5	0.1
Any waiver	154	3.8

1. Percentages associated with waiver categories within each body system should be interpreted as the percent of Airmen discharged with a specific disability type who had each specific waiver type.

2. In cases where none of the leading waiver categories matched the disability body system, the matching waiver category was also included.

## 9. History of Hospitalization among Disability Discharged Service Members

Hospitalization records received by DESAR include data on inpatient stays at military treatment facilities (MTF) for active duty Service members and eligible reserves from 1995 through 2019. Although hospitalization records are limited by component, all Service members were included regardless of the component at the time of disability evaluation, as Service members may change service components during their military career. The following tables describe the prevalence and characteristics of hospitalizations within one year of the first disability evaluation among disability discharged Service members only (fit/limited duty and separated without DOD benefits dispositions are excluded). Only the primary diagnoses were explored in these analyses. **Table 14 and Figure 12** show the number and percentage of disability discharged Service members with a hospitalization within one year prior to first evaluation for disability, by year of disability discharge and service.

### Table 14 Key Findings

- Overall, 8% (Air Force) to 21% (Navy) of disability discharged Service members had been hospitalized at an MTF within one year prior to their first disability evaluation.
  - Over the time period, the prevalence of hospitalization among disability discharged Service members were relatively stable.

**TABLE 14:** HISTORY OF HOSPITALIZATION WITHIN ONE YEAR OF DISABILITY EVALUATION BY YEAR OF DISABILITY DISCHARGE: FY 2015-2019

	Army <sup>1</sup>		Navy		Marine Corps		Air Force	
	Hosp.	% <sup>2</sup>	Hosp.	% <sup>2</sup>	Hosp.	% <sup>2</sup>	Hosp.	% <sup>2</sup>
<b>2015</b>	3,089	10.6	666	23.6	456	15.7	335	8.6
<b>2016</b>	2,265	11.2	295	17.8	359	13.0	182	6.6
<b>2017</b>	982	9.8	552	21.2	517	15.0	167	6.0
<b>2018</b>	2,450	11.1	671	19.5	598	15.3	347	8.4
<b>2019</b>	2,044	10.9	658	21.4	512	15.7	375	8.9
<b>Total</b>	<b>10,830</b>	<b>10.8</b>	<b>2,842</b>	<b>20.9</b>	<b>2,442</b>	<b>15.0</b>	<b>1,406</b>	<b>7.9</b>

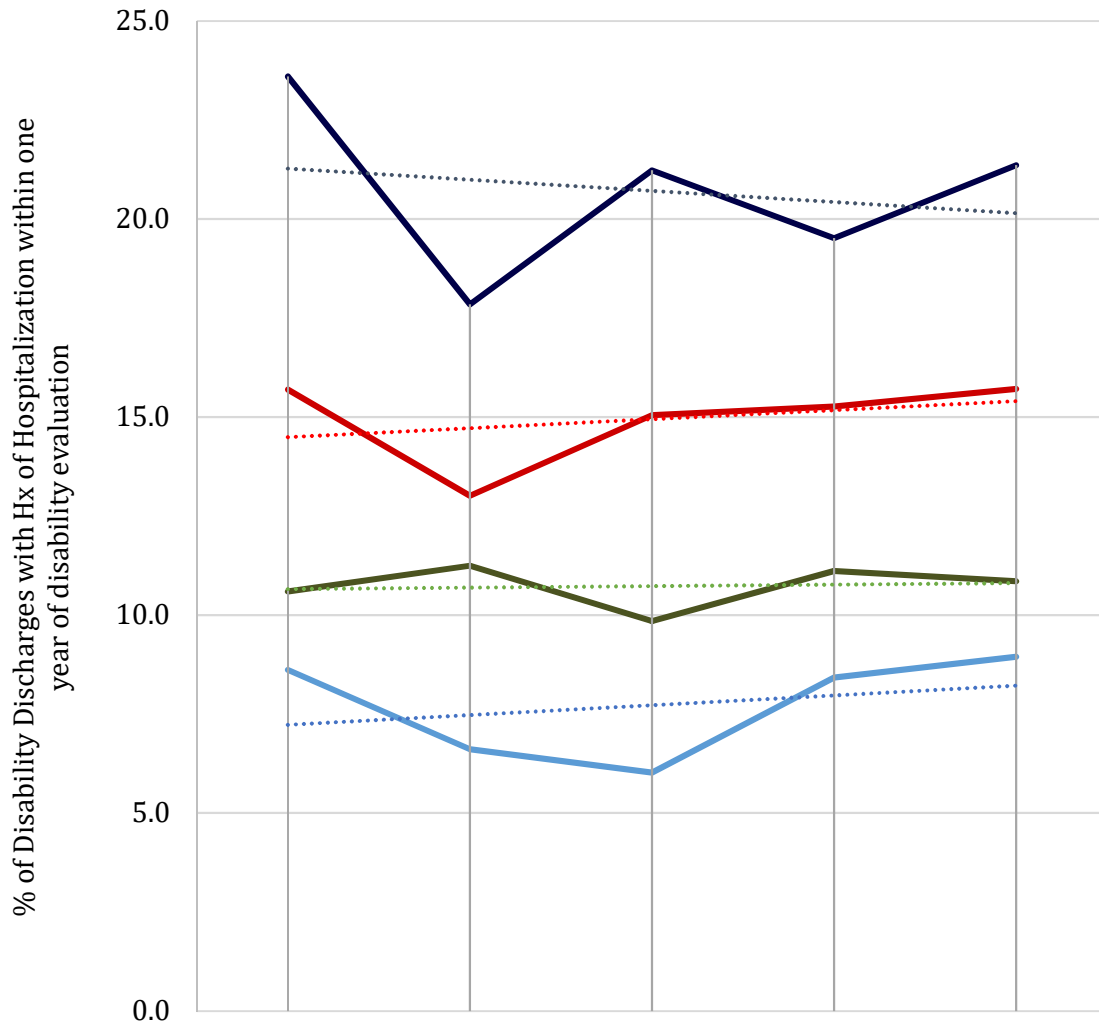
Hosp: Number Hospitalized

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

2. Percent of disability discharged Service members with a hospitalization.



**FIGURE 12: PREVALENCE OF HOSPITALIZATION WITHIN ONE YEAR OF DISABILITY EVALUATION AMONG DISABILITY DISCHARGED SERVICE MEMBERS BY SERVICE AND YEAR OF DISABILITY EVALUATION: FY 2015-2019**



	2015	2016	2017	2018	2019	TOTAL
Army <sup>1</sup>	10.6%	11.2%	9.8%	11.1%	10.9%	10.8%
Navy	23.6%	17.8%	21.2%	19.5%	21.4%	20.9%
Marine Corps	15.7%	13.0%	15.0%	15.3%	15.7%	15.0%
Air Force	8.6%	6.6%	6.0%	8.4%	8.9%	7.9%

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

**Tables 15A-D** present the most common primary diagnoses at hospitalizations, which occurred within one year of the Service member’s disability evaluation, per service and year of disability discharge.

## Tables 15A-D Key Findings

- Four out of the five leading reasons for hospitalization among disability discharged Service members were psychiatric disorders.
  - Psychiatric disorders are also the most common reason for hospitalizations among active duty Service members [10].
  - Four out of the five most commonly diagnosed psychiatric disorders among disability discharged Service members (anxiety, stress-related, mood, and substance use disorders) were comparable to the most commonly diagnosed psychiatric disorders among active duty Service members (adjustment disorders, alcohol dependence, major depressive disorder, PTSD) [10].

**TABLE 15A: FIVE MOST COMMON PRIMARY DIAGNOSES IN HOSPITALIZATIONS (OCCURRING WITHIN ONE YEAR OF DISABILITY EVALUATION) AMONG DISABILITY DISCHARGED SOLDIERS: FY 2015-2019<sup>1</sup>**

Army		
Diagnosis Category	N	%
Anxiety and stress-related disorders	2,660	24.6
Mood disorders	1,867	17.2
Substance abuse disorders	701	6.5
Dorsopathies	580	5.4
Schizophrenia and other psychotic disorders	374	3.5
<b>Total DES Hospitalized</b>	<b>10,830</b>	

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

**TABLE 15B: FIVE MOST COMMON PRIMARY DIAGNOSES IN HOSPITALIZATIONS OCCURRING WITHIN ONE YEAR OF DISABILITY EVALUATION AMONG DISABILITY DISCHARGED SAILORS: FY 2015-2019**

Navy		
Diagnosis Category	N	%
Mood disorders	703	24.7
Anxiety and stress-related disorders	578	20.3
Schizophrenia and other psychotic disorders	200	7.0
Substance abuse disorders	184	6.5
Episodic and paroxysmal disorders	90	3.2
<b>Total DES Hospitalized</b>	<b>2,842</b>	

**TABLE 15C: FIVE MOST COMMON PRIMARY DIAGNOSES IN HOSPITALIZATIONS (OCCURRING WITHIN ONE YEAR OF DISABILITY EVALUATION) AMONG DISABILITY DISCHARGED MARINES: FY 2015-2019**

Marine Corps		
Diagnosis Category	N	%
Anxiety and stress-related disorders	441	18.1
Mood disorders	388	15.9
Dorsopathies	130	5.3
Schizophrenia and other psychotic disorders	126	5.2
Substance abuse disorders	113	4.6
<b>Total DES Hospitalized</b>	<b>2,442</b>	

**TABLE 15D: FIVE MOST COMMON PRIMARY DIAGNOSES IN HOSPITALIZATIONS (OCCURRING WITHIN ONE YEAR OF DISABILITY EVALUATION) AMONG DISABILITY DISCHARGED AIRMEN: FY 2015-2019**

Air Force		
Diagnosis Category	N	%
Mood disorders	317	22.5
Anxiety and stress-related disorders	208	14.8
Schizophrenia and other psychotic disorders	84	6.0
Substance abuse disorders	66	4.7
Dorsopathies	59	4.2
<b>Total DES Hospitalized</b>	<b>1,406</b>	



To evaluate concordance between reason for hospitalization and reason for disability discharge, DESAR examined the most prevalent categorized primary diagnoses at hospitalization within each disability category. **Tables 16A-D** present the most common diagnosis categories both overall and within the three (3) most common disability body systems (musculoskeletal, psychiatric, and neurological), plus any disability body system categories which may have a notable rate of pre-evaluation hospitalizations. Only Service members who were discharged with a service-connected disability were included in these tables (e.g., fit and separated without benefits dispositions are excluded).

Service members may be included in more than one body system category in cases of multiple disability conditions. Similar to the disability categories, a Service member may be represented in multiple body system categories if he/she has more than one type of medical diagnosis at hospitalization. Therefore, percentages associated with body system categories at hospitalization should be interpreted as the percent of Service members with a hospitalization diagnosis within the specified disability body system (e.g., musculoskeletal disability).

### **Table 16A-D Key Findings**

- As shown in Figure 12, the overall proportion of disability discharged Service members with a hospitalization within 1 year of first disability evaluation ranged from 8% (Air Force) to 21% (Navy). When assessing any hospitalization by disability body system category, the results were similar to the overall proportion for all disability categories (results shown only for 3 most common disability body system categories), with the following exceptions:
  - Across all services, rates of any hospitalization within one year of disability evaluation were highest in those disability discharged with a psychiatric disorder (13%-32%) and lowest in those discharged with a musculoskeletal condition (4%-11%) or an ears/hearing condition (4%-12%).
- More concordance was observed between the primary reason for hospitalization and the reason for disability discharge than was observed with either pre-accession disqualifications (Tables 11A-D) or waivers (Tables 13A-D).
  - 9%-25% of Service members discharged for a psychiatric disorder had been hospitalized for a psychiatric disorder.
  - 2%-7% of Service members discharged for a neurological condition had been hospitalized for a neurological condition.
  - 1%-5% of Service members discharged for a musculoskeletal condition had been hospitalized for a musculoskeletal condition.

**TABLE 16A: MOST PREVALENT HOSPITALIZATION BODY SYSTEM CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: ARMY, FY 2015-2019<sup>1</sup>**

Army		
	n	% <sup>2</sup>
<b>Total Disability Discharged</b>	<b>100,154</b>	
Psychiatric hospitalization	4,733	4.7
Musculoskeletal hospitalization	1,516	1.5
Neurological hospitalization	628	0.6
Any hospitalization	10,830	10.8
<b>Musculoskeletal Disability</b>	<b>66,359</b>	
Psychiatric hospitalization	1,443	2.2
Musculoskeletal hospitalization	1,366	2.1
Neurological hospitalization	301	0.5
Any hospitalization	5,250	7.9
<b>Psychiatric Disability</b>	<b>45,348</b>	
Psychiatric hospitalization	4,306	9.5
Substance abuse hospitalization	546	1.2
Musculoskeletal hospitalization	479	1.1
Any hospitalization	6,904	15.2
<b>Neurological Disability</b>	<b>24,211</b>	
Psychiatric hospitalization	685	2.8
Musculoskeletal hospitalization	487	2.0
Neurological hospitalization	359	1.5
Any hospitalization	2,414	10.0

1. Values are underestimated due to missing or incomplete DES data for the Army in FY 2017 received by DESAR.

2. Percentages associated with body system category at hospitalization within each body system should be interpreted as the percent of Soldiers discharged with a specific disability type who had each specific primary diagnosis category at hospitalization.

**TABLE 16B: MOST PREVALENT HOSPITALIZATION BODY SYSTEM CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: NAVY, FY 2015-2019**

Navy		
	n	% <sup>1</sup>
<b>Total Disability Discharged</b>	<b>13,594</b>	
Psychiatric hospitalization	1,467	10.8
Neurological hospitalization	254	1.9
Musculoskeletal hospitalization	226	1.7
Any hospitalization	2,842	20.9
<b>Psychiatric Disability</b>	<b>5,357</b>	
Psychiatric hospitalization	1,312	24.5
Substance abuse hospitalization	120	2.2
Musculoskeletal hospitalization	73	1.4
Any hospitalization	1,688	31.5
<b>Musculoskeletal Disability</b>	<b>5,071</b>	
Musculoskeletal hospitalization	171	3.4
Psychiatric hospitalization	132	2.6
Neurological hospitalization	52	1.0
Any hospitalization	557	11.0
<b>Neurological Disability</b>	<b>2,491</b>	
Neurological hospitalization	162	6.5
Psychiatric hospitalization	94	3.8
Musculoskeletal hospitalization	41	1.6
Any hospitalization	449	18.0

1. Percentages associated with body system category at hospitalization within each body system should be interpreted as the percent of Sailors discharged with a specific disability type who had each specific primary diagnosis category at hospitalization.

# MARINE CORPS

**TABLE 16C: MOST PREVALENT HOSPITALIZATION BODY SYSTEM CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: MARINE CORPS, FY 2015-2019**

Marine Corps		
	n	% <sup>1</sup>
<b>Total Disability Discharged</b>	<b>16,277</b>	
Psychiatric hospitalization	938	5.8
Musculoskeletal hospitalization	497	3.1
Neurological hospitalization	198	1.2
Any hospitalization	2,442	15.0
<b>Musculoskeletal Disability</b>	<b>9,520</b>	
Musculoskeletal hospitalization	427	4.5
Psychiatric hospitalization	178	1.9
Neurological hospitalization	77	0.8
Any hospitalization	982	10.3
<b>Psychiatric Disability</b>	<b>4,474</b>	
Psychiatric hospitalization	768	17.2
Musculoskeletal hospitalization	63	1.4
Substance abuse hospitalization	63	1.4
Any hospitalization	1,089	24.3
<b>Neurological Disability</b>	<b>2,764</b>	
Neurological hospitalization	104	3.8
Psychiatric hospitalization	84	3.0
Musculoskeletal hospitalization	58	2.1
Any hospitalization	378	13.7

1. Percentages associated with body system category at hospitalization within each body system should be interpreted as the percent of Marines discharged with a specific disability type who had each specific primary diagnosis category at hospitalization.



# AIR FORCE

**TABLE 16D: MOST PREVALENT HOSPITALIZATION BODY SYSTEM CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: AIR FORCE, FY 2015-2019**

Air Force		
	n	% <sup>1</sup>
<b>Total Disability Discharged</b>	<b>17,729</b>	
Psychiatric hospitalization	588	3.3
Musculoskeletal hospitalization	137	0.8
Neurological hospitalization	126	0.7
Any hospitalization	1,406	7.9
<b>Musculoskeletal Disability</b>	<b>8,688</b>	
Musculoskeletal hospitalization	102	1.2
Psychiatric hospitalization	73	0.8
Neurological hospitalization	36	0.4
Any hospitalization	385	4.4
<b>Psychiatric Disability</b>	<b>6,118</b>	
Psychiatric hospitalization	538	8.8
Substance abuse hospitalization	53	0.9
Neurological hospitalization	42	0.7
Any hospitalization	772	12.6
<b>Neurological Disability</b>	<b>4,014</b>	
Neurological hospitalization	82	2.0
Musculoskeletal hospitalization	46	1.1
Psychiatric hospitalization	36	0.9
Any hospitalization	275	6.9

1. Percentages associated with body system category at hospitalization within each body system should be interpreted as the percent of Airmen discharged with a specific disability type who had each specific primary diagnosis category at hospitalization.

# DATA LIMITATIONS

## **The following data limitations should be considered when interpreting the results of this report.**

1. Military Occupational Specialty (MOS) at disability evaluation is only complete for Army and Navy for the full study period. The Department of the Air Force collects information regarding MOS, but this variable was not available for the full study period. Occupational classification has been associated with disability in both civilian and military literature and is essential to understanding the specific risk factors associated with disability evaluation, separation, and retirement in the military.
2. Medical Evaluation Board (MEB) International Classification of Diseases, Version 9 and Version 10 (ICD-9/10) codes of the medical condition that precipitated the disability evaluation are not included in any of the service-specific disability datasets received by DESAR. 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-9/10 codes.
3. For this report, FY 2017 Army disability data were unavailable or incomplete and, therefore, some rates are missing or underestimated.
4. Due to the use of both ICD-9 and ICD-10 codes during the time period of this report, DESAR utilized the General Equivalence Mappings (GEMS) code crosswalk to convert ICD-9 to ICD-10 codes. Due to increased specificity in the ICD-10 coding system compared to that of the ICD-9, single ICD-9 codes may convert to multiple ICD-10 codes. For this report, codes are reported within categories with one record per Service member with a condition in each category; this should mitigate the complications caused by converting ICD-9 codes into multiple ICD-10 codes, as the resulting ICD-10 codes are likely to be within the same category.



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# ACRONYMS

AETC	Air Education Training Command
AHRQ	Agency for Healthcare Research and Quality
AMSARA	Accession Medical Standards Analysis and Research Activity
CCS	Clinical Classifications Software
CMS	Center for Medicare & Medicaid Services
CTS	Contingency Tracking System (DMDC)
DES	Disability Evaluation System
DESAR	Disability Evaluation System Analysis and Research
DMDC	Defense Manpower Data Center
DOD	Department of Defense
DODI	Department of Defense Instruction
DQ	Disqualification
FY	Fiscal Year
GEMS	General Equivalence Mappings
ICD-9	International Classification of Diseases, 9th Revision
ICD-10	International Classification of Diseases, 10th Revision
MCMR	Marine Corps Recruiting Command
MEB	Medical Evaluation Board
MEPS	Military Entrance Processing Station
MHS	Military Health System
MOS	Military Occupation Specialty
MSAR	Medical Standards and Research
NRC	US Navy Recruiting Command
OCO	Overseas Contingency Operations
PEB	Physical Evaluation Board
PDQ	Permanent Disqualification
PDRL	Permanent Disability Retirement List
SSN	Social Security Number
TDRL	Temporary Disability Retirement List
USAREC	U.S. Army Recruiting Command
USMEDCOM	U.S. Medical Command
USMEPCOM	U.S. Military Entrance Processing Command
USMIRS	U.S. Military Entrance Processing Command Integrated Resource System
VASRD	Veterans Administration Schedule for Rating Disabilities
WRAIR	Walter Reed Army Institute of Research



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