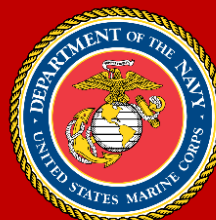


Annual Report

2022

Disability Evaluation System Analysis and Research (DESAR)



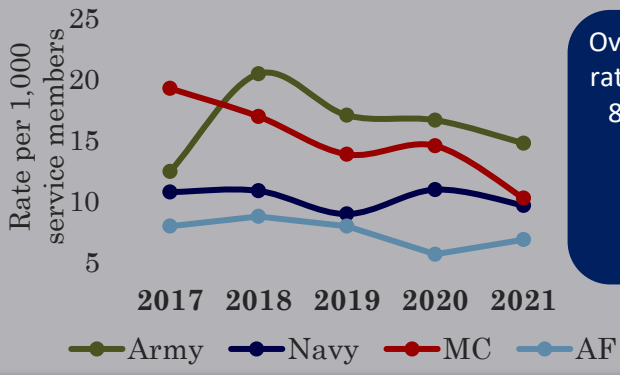


REPORT AT A GLANCE

FY2017-2021 Disability Evaluation System Metrics

Evaluation Metrics

Evaluation Rate Trend



Rates Higher For:

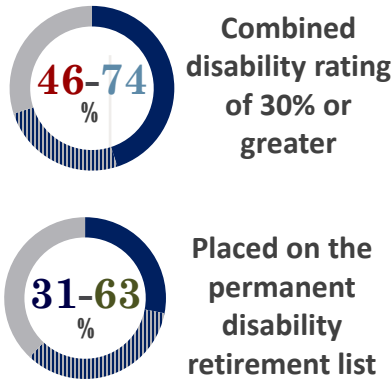
- **Enlisted**
2-3x higher than Officers
- **Active Duty**
4-7x higher than Reserve
- **Females**
25% to 2.5x higher than males
- **Other race**
2-3x higher than White or Black race

Discharge Metrics

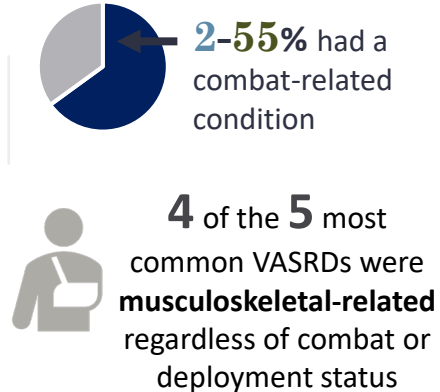
Most Common VASRDs

- Musculoskeletal 36-64%**
Dorsopathies
Limitation of Motion
- Psychiatric 25-44%**
PTSD
Mood Disorders
- Neurological 16-24%**
Paralysis
Migraine

Ratings and Dispositions



Combat and Deployment



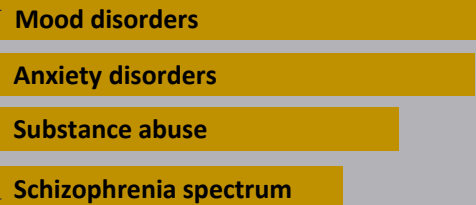
Medical History

Medical DQs

7-8%
with history of pre-accession medical DQ - similar proportion to all FY17-21 accessions

Hospitalization within 1 Year

4 out of **5** leading dxs were **psychiatric disorders**



*Little to no concordance between DQ/waiver and reason for disability discharge (<2%).
More concordance observed with primary admission diagnosis at hospitalization, particularly among psychiatric-related disability discharges (8-19%).*

Contributors

Natalya Weber, MD, MPH
Acting Director, Statistics and
Epidemiology Branch
Acting Chief, Medical Standards
Analytics and Research (MSAR)

Amanda Kelley, MPH
Program Manager, MSAR
Contractor, ManTech Health

Timothy Powers, MS
Lead Statistician, MSAR
Contractor, ManTech Health

Raneem Hawari, MPH
Public Health Analyst, MSAR
Contractor, ManTech Health

CPT Jared Egbert, MD, MPH
Associate Director, Statistics and
Epidemiology Branch
Associate Chief, Medical Standards
Analytics and Research

Caitlin Rushin, MPH
Deputy Program Manager, MSAR
Contractor, ManTech Health

Rhonda R. Jackson, MPH
Public Health Analyst, MSAR
Contractor, ManTech Health

Darrah Edwards, MPH
Public Health Analyst, MSAR
Contractor, ManTech Health

Statistics and Epidemiology Branch
Walter Reed Army Institute of Research
503 Robert Grant Road, Forest Glen Annex
Silver Spring, MD 20910

<https://wrair.health.mil/Collaborate/AMSARA-DESAR/Capabilities-and-Expertise>

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.

Mission and Objectives

MISSION

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

OBJECTIVES

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



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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 resilience of warfighters.

The objective of this report is to provide impactful descriptions of the current disability population to policymakers and medical providers tasked with evaluating and retaining service members, highlighting conditions and characteristics that are commonly associated with disability discharge. The specific aim of this report is to describe demographic, service and medical characteristics of service members evaluated for disability discharge by each service-specific Physical Evaluation Board between FY 2017 to 2021.

This report is divided into three distinct sections. Section 1 provides metrics on *disability evaluated* service members, including rates and yearly trends by demographic or service-related characteristic, rating and disposition. Section 2 provides metrics on *disability discharged* service members, including rates and yearly trends by unfitting condition, combat-related determination, and deployment history. Section 3 describes medical history, including pre-accession medical disqualifications and hospitalizations within one year prior to disability evaluation, among *disability discharged* service members.

Key findings are as follows:



KEY FINDINGS

Sections 1: Disability Evaluation Metrics

From the fiscal year 2017 to 2021, approximately 132,000 Army, Navy, Marine Corps, and Air Force service members were evaluated for disability discharge by a Physical Evaluation Board (PEB). Results from the Army should be interpreted with caution due to a large number of missing records among data received by DESAR for fiscal year 2017.

RATES AND TRENDS OF DISABILITY EVALUATIONS (TABLE 3 AND FIGURES 1-2)

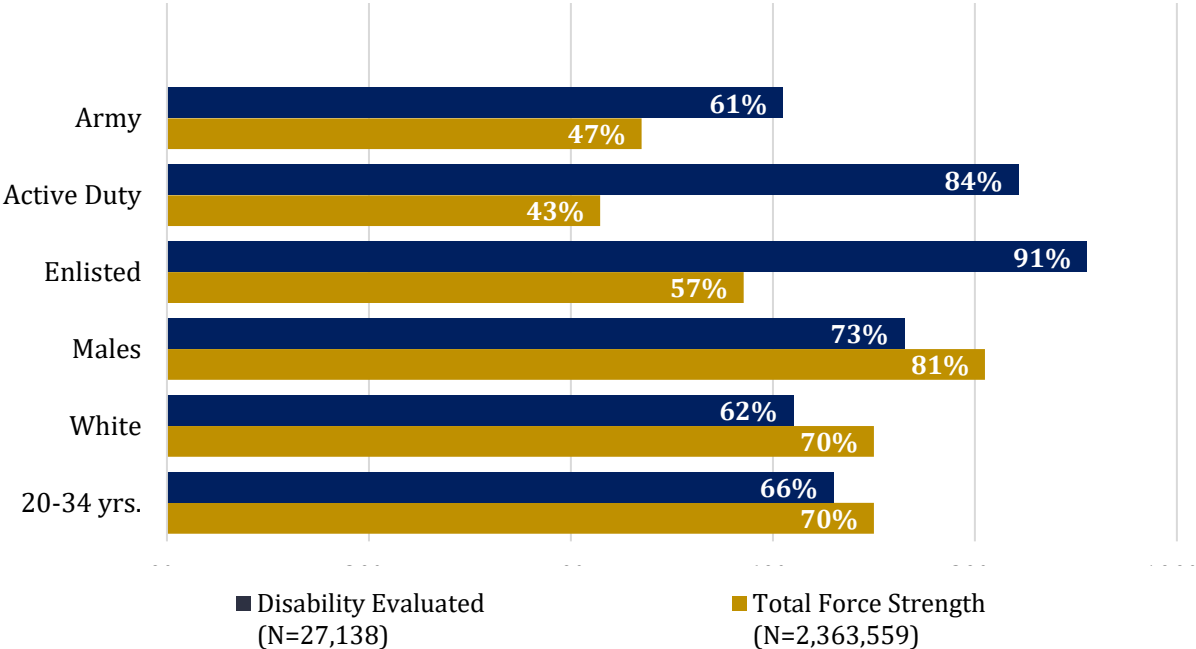
Overall rates of disability evaluation (per 1,000 service members) varied by service and year. Trends in disability evaluation rates may correspond to changes in the DoD policies and operations.

- The overall rate of disability evaluation was higher in the Army (16.4) and Marine Corps (15.0) compared to the Navy (10.3) and Air Force (7.5).
- Over the five years, there was a slight downward trend in the rate of disability evaluation for the Army, Marine Corps, and Air Force, and the trend for the Navy appears to remain stable.

DEMOGRAPHIC AND SERVICE-RELATED CHARACTERISTICS (TABLES 4-5, FIGURES 3-5)

Some demographic and service-related characteristics among service members evaluated for disability were similar to the total force strength for FY 2021.

Comparison of Most Common Characteristics of DES Population vs. Total Force Strength for FY2021



However, some characteristics were associated with higher frequencies and rates of disability evaluation.

- For all services, rates of disability evaluation were generally higher among active-duty service members and enlisted components.
- The rates of disability evaluation for sex and race varied over time and by service.
 - Among Soldiers and Marines, the rate for those who identified as Other race was 2-3 times higher than the rate of those who identified as White.
 - The disability evaluation rate for female Sailors, Marines, and Airmen was up to two times higher than males in FY 2021.
- For the Army, the rate of disability evaluation increased as age increased, while for all other services, the rate was highest among those aged 20-34 years.

Section 2: Disability Discharge Metrics

DISABILITY RATING AND DISPOSITION (TABLES 6-7, FIGURES 6-7)

Disability disposition and combined rating reflect the level of impairment and eligibility for DoD disability benefits.

- Although the most commonly assigned combined disability rating differed by service, on average, 46-74% of boarded service members received a rating of 30% or greater, qualifying for disability retirement.
- Permanent disability retirement (PDRL) was the most commonly assigned disposition among Soldiers (63%), Sailors (31%), and Airmen (59%), while separated with severance pay (SWSP) was most common among Marines (45%).
- Over the five years, there has been an upward trend in the percentage of ratings under the Severe (disability rating 60-100%) category for all services.

Service	Most Common Disposition	Most Common Rating	Percent with ≥30% Rating	Notable Trends
Army	PDRL	70%	69%	Downward trend for PDRL from FY18 to FY21. SWSP had 13 percentage point (pp) decrease between FY17 and FY21.
Navy	PDRL	Unrated	58%	Downward trend for Fit/Limited Duty (19 pp decrease from FY17 to FY21). Upward trend of assignment of 70% rating (3% in FY17 vs. 11% in FY21).
Marine Corps	SWSP	10%	46%	Downward trend for SWSP (8 pp decrease between FY17 and FY21) and Fit/Limited Duty (6 pp decrease).
Air Force	PDRL	70%	74%	Downward trend in 0-20% ratings with corresponding downward trend of SWSP (16 pp decrease over time).

UNFITTING CONDITIONS (TABLES 8-9, FIGURES 8-9)

The ten most commonly assigned unfitting condition categories fell within the musculoskeletal, psychiatric, and neurological body systems, with the following exceptions: noninfectious enteritis and colitis in the Navy, and asthma in the Air Force.

- Musculoskeletal:
 - Among disability discharges, 64% of Soldiers, 60% of Marines, 43% of Airmen, and 35% of Sailors had musculoskeletal disability.
 - For all services, the most common musculoskeletal condition categories were dorsopathies (e.g., vertebral fracture, sacroiliac injury, lumbosacral strain, and degenerative arthritis), limitation of motion, joint disorders or inflammation, and arthritis.
 - There was a notable downward trend in the proportion of service members discharged with a musculoskeletal condition for the Navy and Air Force over the five-year period.
- Psychiatric:
 - Roughly 25% (Marine Corps) to 44% (Navy) of disability discharged service members had an unfitting psychiatric disorder.
 - There was a notable upward trend in psychiatric disability in the Navy and Air Force over the surveillance period, and by FY19, psychiatric disorders were the most common reason for disability discharge in both services.
 - Between 14% (Marine Corps) and 27% (Army) of all disability discharged service members had service-connected post-traumatic stress disorder (PTSD). Mood disorders were also a common reason for disability discharge in all services, ranging from 6% (Marine Corps) to 17% (Navy).
- Neurological:
 - 16% (Marine Corps) to 24% (Army, Air Force) of disability discharged service members had an unfitting neurologic disorder.
 - The most common neurological condition in the Army, Marine Corps, and Air Force was paralysis, whereas migraine was the most common among Sailors.

COMBAT-RELATED DETERMINATION AND DEPLOYMENT (TABLES 10-11, FIGURE 10)

Unfitting conditions may be considered combat-related if sustained as a direct result of armed combat, while engaged in hazardous service, or during war-simulating conditions.

- Among all disability discharges, nearly 36% of Soldiers, 17% of Marines, 5% of Sailors, and 4% of Airmen were determined to have a combat-related condition.
 - Among those with a history of deployment, 54% of Soldiers, 32% of Marines, 9% of Sailors, and 6% of Airmen were determined to have a combat-related condition.
- When assessing the VASRD categories stratified by both combat-related determination and deployment status, the five most common categories did not vary across the strata with the exception of mood disorders, which were common only in Sailors with conditions unrelated to combat, regardless of deployment status.
- Four of the five most common VASRD categories were musculoskeletal-related, regardless of combat-related determination and deployment status.

Section 3: Medical History among Disability Discharged Service Members

Section 3 describes the medical history of disability discharged service members and evaluates concordance between medical history and reason for disability discharge. Medical history encompasses history of a medical disqualification identified during the pre-accession physical examination at a Military Entrance Processing Station (MEPS) and hospitalization at any military treatment facility (MTF) within one year prior to first disability evaluation.

PRE-ACCESSION MEDICAL DISQUALIFICATIONS (DQs) (TABLES 12-13, FIGURE 11)

- Approximately 6.5% (Marine Corps) to 7.6% (Army) of service members disability discharged between FY 2017-2021 had history of a pre-accession medical DQ, which is similar to the proportion of medical DQ among all enlisted military accessions who applied for service between FY 2017-2021 (5-8%) [11].
- In general, the five most common DQs among disability discharged service members (eye, vision, miscellaneous conditions of the extremities, psychiatric conditions, and conditions of the lower extremities) were consistent with highly prevalent DQs/waivers among all accessions [11].
- Little to no concordance (<2%) was observed between pre-accession DQs and reason for disability evaluation for the most common disability body systems.

HOSPITALIZATIONS WITHIN ONE YEAR OF DISABILITY EVALUATION (TABLES 14-15, FIGURE 12)

- Overall, 7.5% (Air Force) to 18.9% (Navy) of disability discharged service members had been hospitalized within one year prior to their first disability evaluation.
- Four of the five most common diagnosis categories in hospitalizations occurring within 1 year of disability evaluation were psychiatric disorders (mood disorders, anxiety and stress-related disorders, substance use, schizophrenia spectrum/other psychotic disorders).
 - Psychiatric disorders, particularly adjustment disorders, alcohol dependence, major depressive disorder, and PTSD, are also common reasons for hospitalizations among all active duty service members [12].
- More concordance was observed between the primary admission diagnosis at hospitalization and reason for disability discharge than was observed with pre-accession DQs or accession medical waivers.
 - 8% (Air Force) to 22% (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 by each service's Physical Evaluation Board (PEB). 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 of the data received by DESAR. For example, while the Navy sends all PEB evaluation records per service member per year, the Army sends PEB evaluation records for unfitting conditions only, and the Air Force sends only the most recent evaluation record per service member per year. In addition, the Navy (all years) and Army (FY 2013-2021) PEBs sent both condition-specific disability ratings and the combined rating, while the Air Force sent the combined rating only.

To create the analytic files for this report, service-specific datasets were restricted to unique records with a final disposition date between October 1, 2016 and September 30, 2021. 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. Since, unique evaluations were defined by SSN and the date of final disposition, 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
Years received*	1990-2021	2000-2021	1995-2021
Types of evaluation included	All PEB	All PEB	1995-2006: PEB for discharges only (PDRL, TDRL, SWSP) 2007-2017: All PEB excluding TDRL re-evaluations 2018-2021: All PEB
Conditions Included	All Unfitting Conditions	All Evaluated Conditions	Up to 3 Unfitting Conditions
Ranks included	Enlisted, Officer	Enlisted, Officer	Enlisted, Officer
Components included	Active Duty, Reserve	Active Duty, Reserve	Active Duty, Reserve
Multiple evaluations per person/year	Yes	Yes	No - one evaluation per year

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

KEY DES ELEMENTS

Table 2A shows the key data elements included in each DES dataset received by DESAR. Additional data elements 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 2A: DES Key Variables

	Army	Navy/Marine Corps	Air Force
Demographic and Service-Related Characteristic			
Age	FY 1990-2016	✓	FY 2017-2021
Sex/Gender	✓	✓	FY 2014-2021
Race	✓	✓	X
Rank	✓	✓	✓
Component	✓	✓	✓
MOS	✓	FY 2010-2021	FY 2017-2020
PEB			
Board type	X	✓	✓
Date of PEB Evaluation	FY 1990-2012, 2017-2021	✓	✓
VASRD	✓	✓	✓
VASRD Analog	✓	✓	✓
Percent Rating	FY 2013-2021	✓	X
Disposition	✓	✓	✓
Disposition Date	✓	✓	✓
Combined Rating	✓	✓	✓
Combat			
Combat Related	✓ ¹	✓	FY 2010-2021
Armed Conflict	X	✓	FY 2010-2021
Instrumentality of War	X	✓	FY 2010-2021

MOS: Military Occupational Specialty; PEB: Physical Examination Board; VASRD: Veterans Affairs Schedule for Rating Disabilities
 1. The Army data includes only a combat-related determination, which is assigned when the unfitting conditions were incurred in combat, were the result of armed conflict, or were caused by an instrumentality of war [1].

Demographic and Service-Related Characteristics

Information on demographic variables (i.e., age, sex, race) and service-related characteristics (i.e., MOS, rank, component) received by DESAR varied 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 available demographic characteristics (i.e., date of birth, race, sex).

Military component assessed in this report included 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 were enlisted personnel and officers, which included both warrant officers and commissioned officers.

PEB

All service-specific PEB datasets contained several key data elements 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 [2], and specify criteria associated with disability ratings. In cases where the true disabling condition had no directly associated VASRD code, service members were assigned the analogous 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 may explain some inter-service differences in this report's results. Due to large number of individual VASRD codes, DESAR reports disabling conditions based on body system categories listed in 38 CFR Book C, Schedule for Rating Disabilities, as well as broad VASRD categories (e.g., limitation of motion) [3] (**Table 2B**).

TABLE 2B: Body System Categories by VASRD Codes

VASRD Code	Body System Category
5000-5331	Musculoskeletal System
6000-6092	Eyes and Vision
6100-6260	Impairment of Auditory Acuity
6275-6276	Other Sensory
6300-6354 except 6313-6315	Infectious Diseases and Immune Disorders
6501-6847	Respiratory System
7000-7124	Cardiovascular System
7200-7354	Digestive System
7500-7545	Genitourinary System
7610-7632	Gynecological Conditions and Disorders of the Breast
7700-7725	Hematologic and Lymphatic Systems
7800-7833	Dermatologic System
7900-7919, 6313-6315	Endocrine System and Nutritional Deficiencies
8000-8914	Neurological Conditions and Convulsive Disorders
9200-9521	Psychiatric Disorders
9900-9918	Dental and Oral Conditions

To account for inter-service differences in disposition types, DESAR grouped dispositions into the following seven (7) categories. For definitions on DOD or service-specific dispositions, please refer to DOD Instruction 1332.18 [2], Army Regulation 635.40 [1], SECNAV M-1850 [4], or Air Force Instruction 36-3212 [5].

1. **Fit/Limited Duty:** The ‘Fit/Limited Duty’ category encompasses all service members allowed to continue service, and includes the following dispositions: fit, limited duty, continuation on active duty, and physically qualified to continue reserve status.
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 fewer than 20 years of service [2].
3. **Separated without DOD Disability Benefits (SWODDB):** The category ‘Separated without DOD Disability Benefits’ encompasses all separations for which the service member is not entitled to disability benefits from the DOD. This category includes the following dispositions: separated without entitlement to benefits, discharge pursuant to other than Chapter 61 of Reference, revert to retired status without disability benefits, nonduty unfit, not physically qualified, miscellaneous administrative removal, and administrative removal off the TDRL.

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 approximately 90% of service members placed on the TDRL convert to the PDRL [6, 7], service members placed or retained on the TDRL are included in the 'disability discharged' population within this report's '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, the maximum length of time allowable on the TDRL was shortened to 36 months [8, 9]. This change may increase the rate of retirements and separations both overall and by condition through 2021.

6. **Other:** The 'other' disposition category includes transfer to retired reserve, revert to retired status, no action, reboard, deceased, and dual-action term.

Combat Determination

Data received by DESAR from the Army, Navy, Marine Corps, and Air Force include up to three variables regarding combat, the values of which are described in the Department of Defense Instruction (DoDI) 1332.18 [2]. Since combat variables received by DESAR differ between each service's DES, a disability discharge was categorized as combat-related if an unfitting condition was incurred from armed conflict, combat-related activities, or an instrumentality of war.

OTHER DATA SOURCES AND VARIABLES

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 the Air Force, Army, Marine Corps, and Navy. Although the data also include records on a relatively small number of officer recruit applicants and other non-applicants receiving periodic physical examinations, DESAR included only military application records for enlisted service. The MEPS records provide extensive medical examination information, including date of examination, screening test results, medical qualification status, and, when applicable, medical disqualifications observed by or reported to physicians.

A military applicant's disqualification status is determined during the physical examination at MEPS per DoDI 6130.03, Volume 1 [10]. Disqualifications are recorded as International Classification of Diseases, 9th or 10th revision (ICD-9/10) codes 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.

Accession, Discharge, and Deployment Records

The Defense Manpower Data Center (DMDC) provides data annually on individuals entering military service (gain or accession), service members discharged from military service (loss or discharged), 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. Only the primary diagnosis on admission listed in the service member's hospitalization record was evaluated for the purposes of this report. Due to the large number of diagnosis codes, specific diagnoses were grouped into broader diagnosis categories (e.g., mood disorders).

Section I: Descriptive Statistics of Disability Evaluations

I. DES DATA METRICS

Table 3 presents metrics of PEB evaluations which occurred between fiscal years (FY) 2017 and 2021. Throughout this report, an evaluation is a service member’s unique encounter with the PEB, defined by identifier (e.g., 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 2017-2021, 150,837 PEB disability evaluations were completed on 132,353 service members.
- On average, service members placed on TDRL received their final disposition at their second evaluation.
- The average number of VASRD codes assigned per evaluation was higher in Army (2.2) than the other services (Navy 1.4; Marine Corps 1.5; Air Force 1.6).

TABLE 3: DES Evaluation Metrics, FY 2017-2021

	Army ¹	Navy	Marine Corps	Air Force
Total SMs	79,193	19,052	16,634	17,474
Total evaluations	90,145	21,733	19,145	19,814
Average # of evaluation/SM	1.1	1.1	1.2	1.1
Non-TDRL	1.0	1.0	1.0	1.0
TDRL²	2.0	2.0	2.0	2.1
Average # of VASRDs/evaluation³	2.2	1.4	1.5	1.6

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

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

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.

Discussion of Results – Table 3: Inter-service differences in the disability evaluation process may account for the observed differences in the total number of service members and evaluations per service. The Air Force and Army have a pre-Medical Evaluation Board (MEB) process that may screen out those likely to be returned to duty, which may explain the lower number of evaluations overall. Prior to December 2020, the Navy and Marine Corps did not have a pre-MEB process which may result in more service members being directly processed into the DES and a higher number of evaluations.

Observed differences may also be due to variations in the type of evaluations each PEB sends to DESAR. The Army and Navy send data on all PEB evaluations completed per year. Whereas, the Air Force sends only one evaluation per Airman and year, which may underestimate the number of evaluations per Airman.

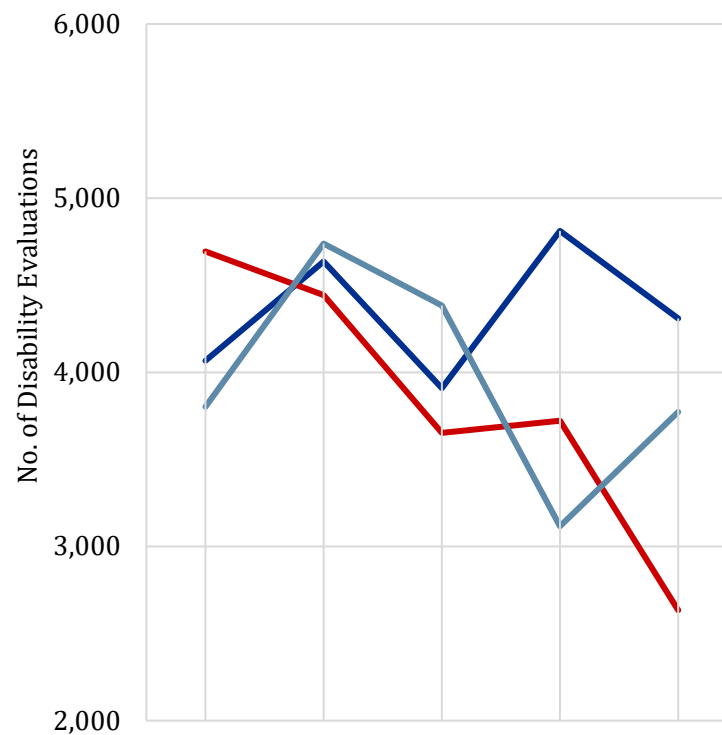
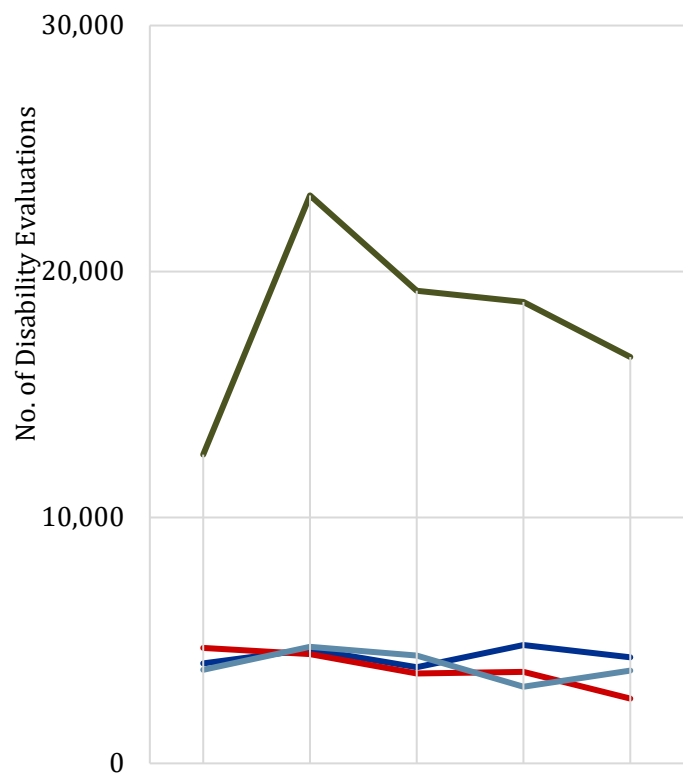
Figure 1 presents the number of DES evaluation by service and fiscal year. Service members may be counted more than once in this table due to TDRL re-evaluations.

Figure 1 Key Findings

- Overall, the number of PEB disability evaluations per service fluctuated over the five year period (FY2017-2021), but since 2018, the Army and Marine Corps reported a steady decline in the number of disability evaluations.
- During the surveillance period, the highest number of PEB disability evaluations occurred in FY2018 for the Army and Air Force, FY2020 for the Navy, and FY2017 for the Marine Corps.



FIGURE 1: Total PEB Evaluations by Service and Year: FY 2017-2021



	2017	2018	2019	2020	2021	TOTAL
Army ¹	12,556	23,093	19,218	18,758	16,520	90,145

	2017	2018	2019	2020	2021	TOTAL
Navy	4,067	4,636	3,909	4,812	4,309	21,733
Marine Corps	4,694	4,443	3,652	3,722	2,634	19,145
Air Force	3,802	4,739	4,384	3,116	3,773	19,814

1. Number of evaluations in 2017 may be underestimated due to missing or incomplete FY17 Army DES data received by DESAR.

II. RATE AND TRENDS OF DISABILITY EVALUATIONS

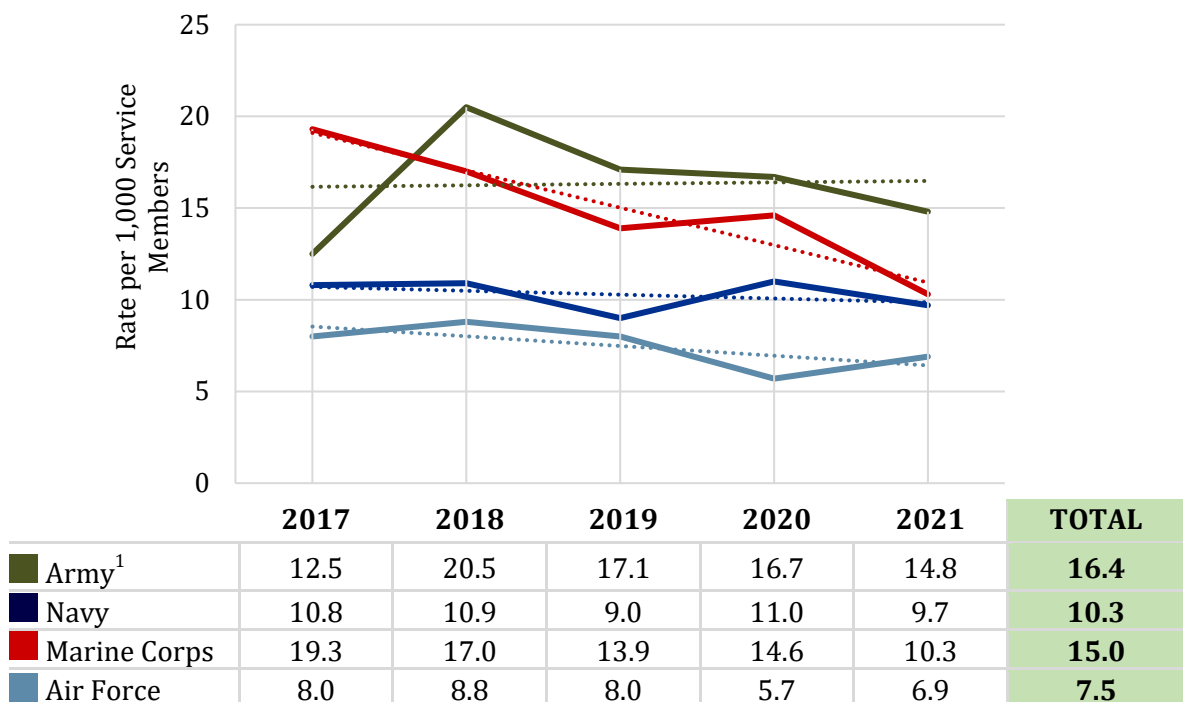
The figures presented in this section of the report describe the rate of PEB disability evaluation per fiscal year (solid lines) and the linear trend (dotted lines). Temporal trends of the rate of PEB disability evaluation were calculated per 1,000 service members per service (**Figure 2**). Rates are 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.

Rate calculations throughout the report were based on the fiscal year of the service member's most recent PEB disability evaluation.

Figure 2 Key Finding

- Overall, the Army had the highest rate of disability evaluation (16.4 per 1,000 Soldiers) and the Air Force had the lowest rate (7.5 per 1,000 Airmen).
- Over the five-year period, the Army, Marine Corps, and Air Force had a downward trend in the rate of disability evaluations; while the Navy trend appears stable.

FIGURE 2: Rate (per 1,000) of Service Members Evaluated for Disability Discharge by Service and FY of PEB Disability Evaluation



1. Rates may be underestimated due to missing or incomplete FY17 Army DES data received by DESAR.

III. 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 presented in **Tables 4 and 5**. Service-specific temporal trends of disability evaluation rates by military component/rank, sex and race, are shown in **Figures 3A-D, 4A-D, and 5A-D**, respectively.

Demographic characteristics (e.g., race, date of birth) were unavailable from disability evaluation data and have been supplemented through data collected from the SM's application, accession, and loss files. The service member's age was calculated at the time of the most recent PEB disability evaluation.

Table 4 & Figures 3A-D Key Findings

- Across all services, rates of PEB disability evaluation were highest among enlisted (2 to 3 times the rate of Officers) and active duty (4 to 7 times the rate of Reserve/National Guard components) service members.
- The Army had a higher number of PEB disability evaluations among Reservists than the other services, likely, at least in part, due to the inclusion of the National Guard not present in the Navy or Marine Corps.
- Temporal trends over the five years for rank and component fluctuated by service.

TABLE 4: Distribution and Rate (per 1,000) of Service-Related Characteristics of Service Members Evaluated for Disability Discharge by Service, FY 2017-2021

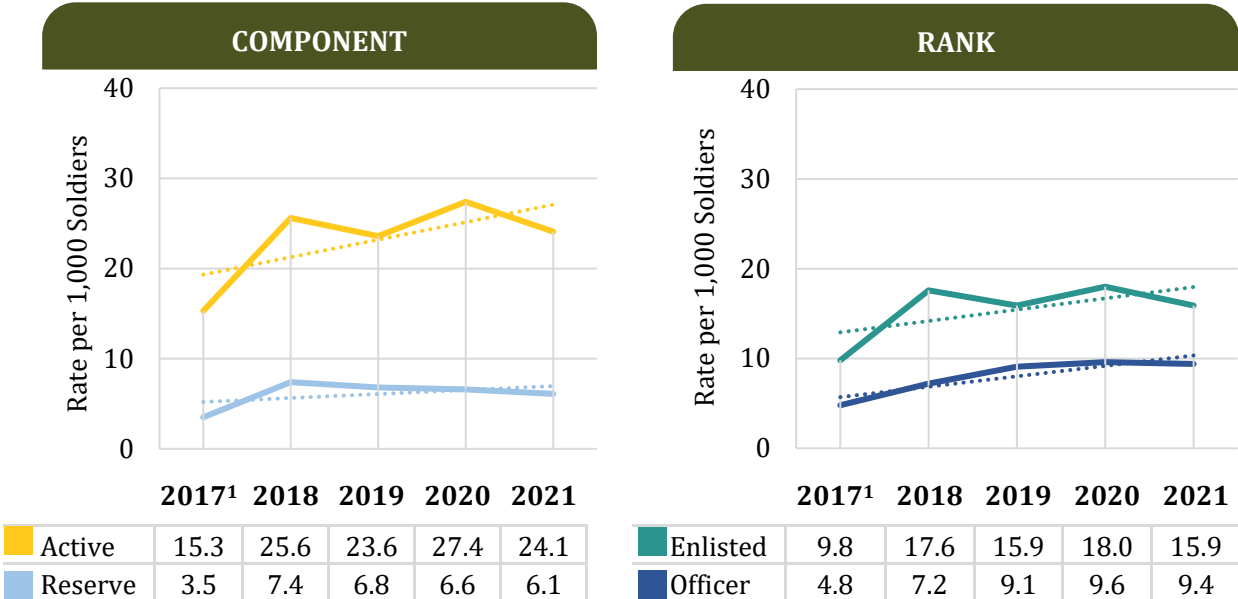
Characteristic	Army ¹ (n=79,193)			Navy (n=19,052)			Marine Corps (n=16,634)			Air Force (n=17,474)		
	n	%	Rate	n	%	Rate	n	%	Rate	n	%	Rate
Rank												
Enlisted	71,631	90.5	15.5	17,720	93.0	10.1	16,057	96.5	14.1	16,086	92.1	7.4
Officer	7,211	9.1	8.2	1,331	7.0	3.7	577	3.5	4.3	1,356	7.8	2.9
Missing	351	0.4	-	1	0.0	-	0	0.0	-	32	0.2	-
Component												
Active Duty	61,672	77.9	23.4	18,379	96.5	10.2	16,138	97.0	15.3	15,167	86.8	8.7
Reserve/NG	17,512	22.1	6.1	673	3.5	2.1	496	3.0	2.2	2,307	13.2	2.5
Missing	9	0.0	-	0	0.0	-	0	0.0	-	0	0.0	-

NG: National Guard

1. Rates may be underestimated due to missing or incomplete FY17 Army DES data received by DESAR.

ARMY

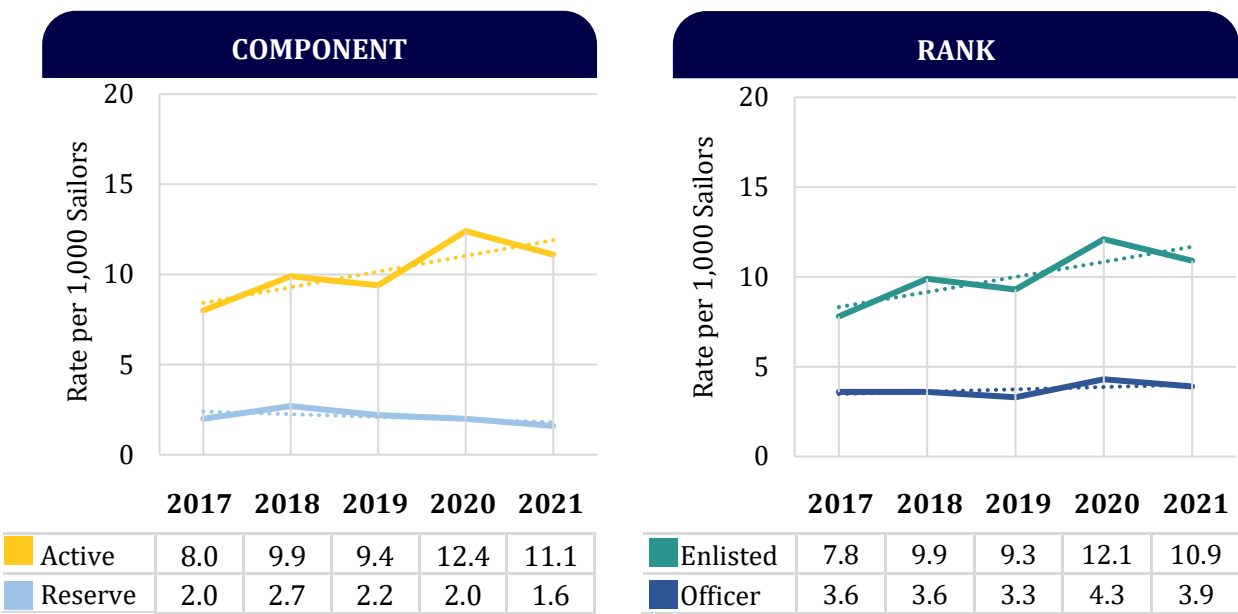
FIGURE 3A: Temporal Trend of the Rate (per 1,000 Soldiers) of Disability Evaluation by Component and Rank: Army FY 2017-2021



1. Rates may be underestimated due to missing or incomplete FY17 Army DES data received by DESAR.

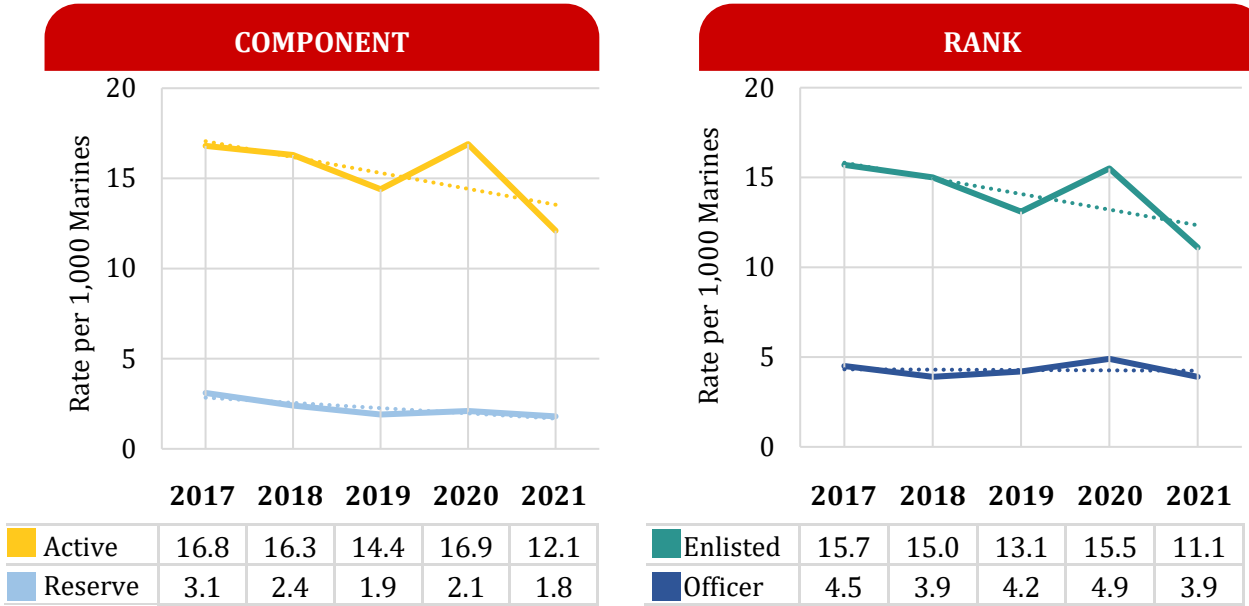
NAVY

FIGURE 3B: Temporal Trend of the Rate (per 1,000 Sailors) of Disability Evaluation by Component and Rank: Navy FY 2017-2021



MARINE CORPS

FIGURE 3C: Temporal Trend of the Rate (per 1,000 Marines) of Disability Evaluation by Component and Rank: Marine Corps FY 2017-2021



AIR FORCE

FIGURE 3D: Temporal Trend of the Rate (per 1,000 Airmen) of Disability Evaluation by Component and Rank: Air Force FY 2017-2021

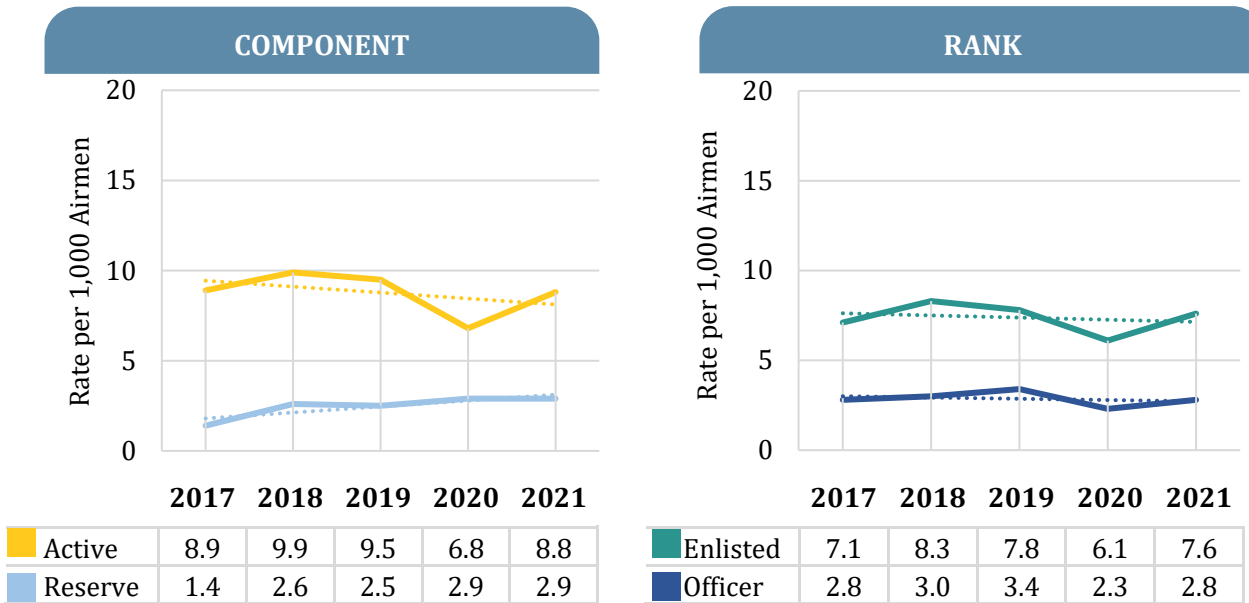


Table 5, Figures 4A-D & Figures 5A-D Key Findings

- Most service members evaluated for a disability were male (66-82%), aged 20-34 years (61-85%), or identified as White (59-72%).
- The disability evaluation rate for female service members was 25% (Army) to 2.5 times (Marine Corps) higher than males, and trended upward over the past five years for the Army and Navy.
- The disability evaluation rate for Soldiers and Marines identifying as “Other” race were 2-3 times higher than those who identified as White or Black race.
- Among Soldiers, disability evaluation rates were highest among those aged 40 years or older. For Sailors and Marines, higher rates were seen among those aged 30-34 years.

TABLE 5: Distribution and Rate (per 1,000) of Demographic¹ Characteristics of Service Members Evaluated for Disability Discharge by Service, FY 2017-2021

Characteristic	Army ² (n=79,193)			Navy (n=19,052)			Marine Corps (n=16,634)			Air Force (n=17,474)		
	n	%	Rate	n	%	Rate	n	%	Rate	n	%	Rate
Sex												
Male	62,031	78.3	13.8	12,573	66.0	7.5	13,661	82.1	11.6	12,072	69.1	5.8
Female	17,162	21.7	17.3	6,446	33.8	14.7	2,927	17.6	28.6	5,402	30.9	9.4
Missing	0	0.0	-	33	0.2	-	46	0.3	-	0	0.0	-
Age												
<20	579	0.7	0.9	150	0.8	0.8	407	2.4	1.6	119	0.7	0.6
20-24	15,024	19.0	9.8	4,058	21.3	6.9	6,576	39.5	11.5	3,530	20.2	5.6
25-29	18,239	23.0	15.8	5,605	29.4	11.6	4,626	27.8	22.0	4,586	26.2	7.8
30-34	14,846	18.7	18.6	4,288	22.5	12.5	2,894	17.4	27.2	3,568	20.4	7.6
35-39	11,892	15.0	20.0	2,695	14.1	10.7	1,389	8.4	19.3	2,532	14.5	6.7
≥40	17,816	22.5	23.7	2,225	11.7	8.9	720	4.3	13.0	2,589	14.8	6.5
Missing	797	1.0	-	31	0.2	-	22	0.1	-	550	3.1	-
Race												
White	46,885	59.2	1.2	11,259	59.1	8.4	11,860	71.3	11.8	12,494	71.5	6.5
Black	18,451	23.3	1.7	3,690	19.4	10.2	1,626	9.8	11.1	2,912	16.7	7.7
Other	13,380	16.9	3.5	4,004	21.0	12.9	3,097	18.6	35.7	1,692	9.7	6.7
Missing	477	0.6	-	99	0.5	-	51	0.3	-	376	2.2	-

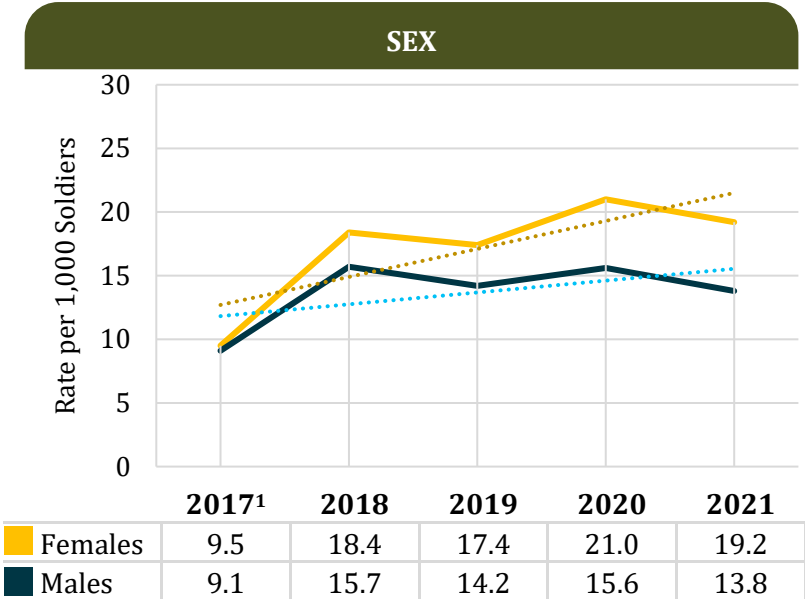
1. Demographic information not included in disability evaluation data has been supplemented using data collected from DMDC.

2. Rates may be underestimated due to missing or incomplete FY17 Army DES data 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.

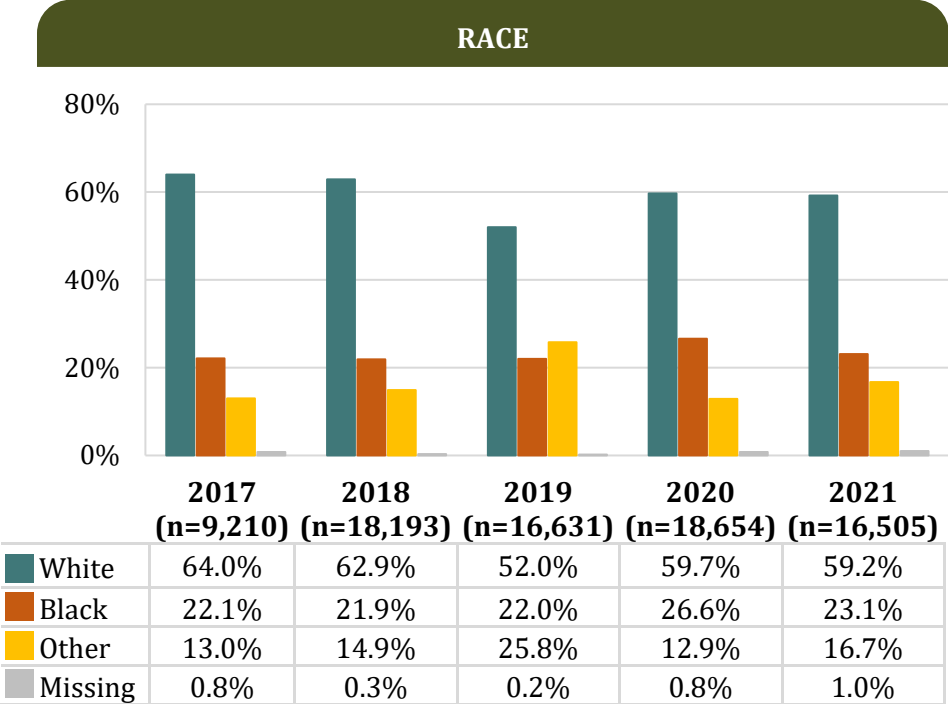
ARMY

FIGURE 4A: Temporal Trend of the Disability Evaluation Rate (per 1,000 Soldiers) by Sex: Army FY 2017-2021



1. Rates may be underestimated due to missing or incomplete FY17 Army DES data received by DESAR.

FIGURE 5A: Distribution of Race among Soldiers Evaluated for Disability Discharge: FY 2017-2021



NAVY

FIGURE 4B: Temporal Trend of the Rate of Disability Evaluation (per 1,000 Sailors) by Sex: Navy FY 2017-2021

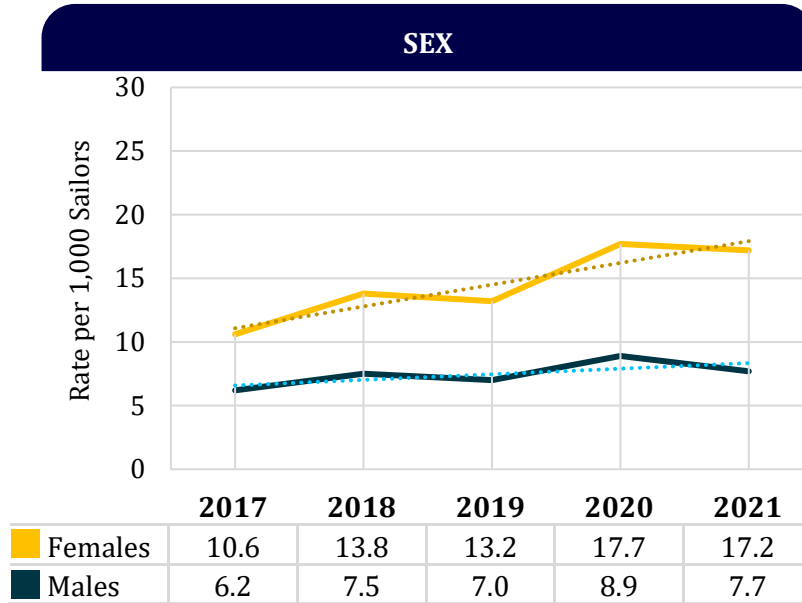
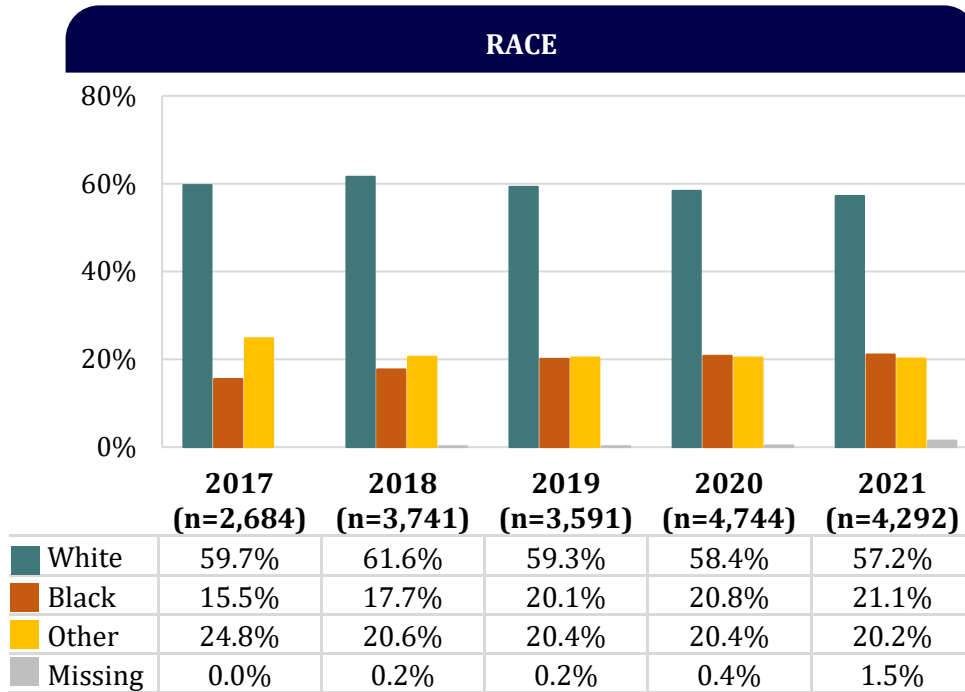


FIGURE 5B: Distribution of Race among Sailors Evaluated for Disability Discharge: FY 2017-2021



MARINE CORPS

FIGURE 4C: Temporal Trend of the Rate of Disability Evaluation (per 1,000 Marines) by Sex: Marine Corps FY 2017-2021

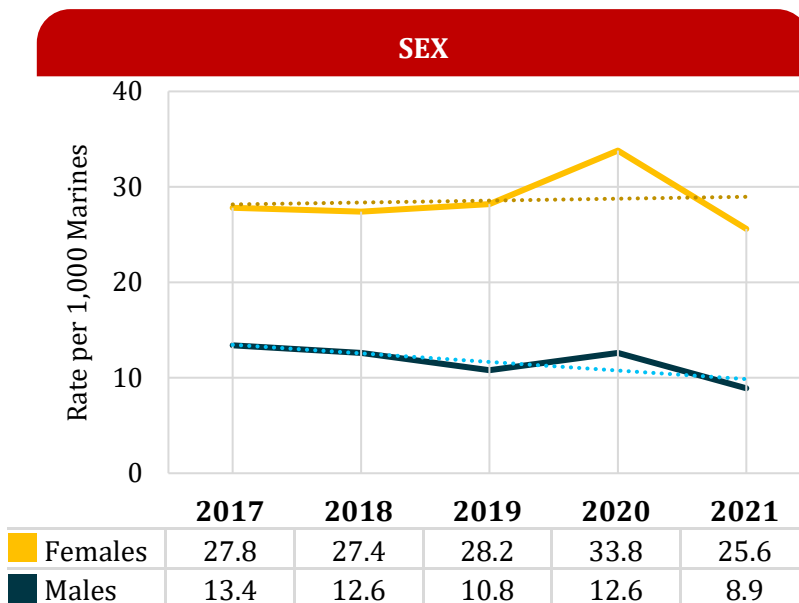
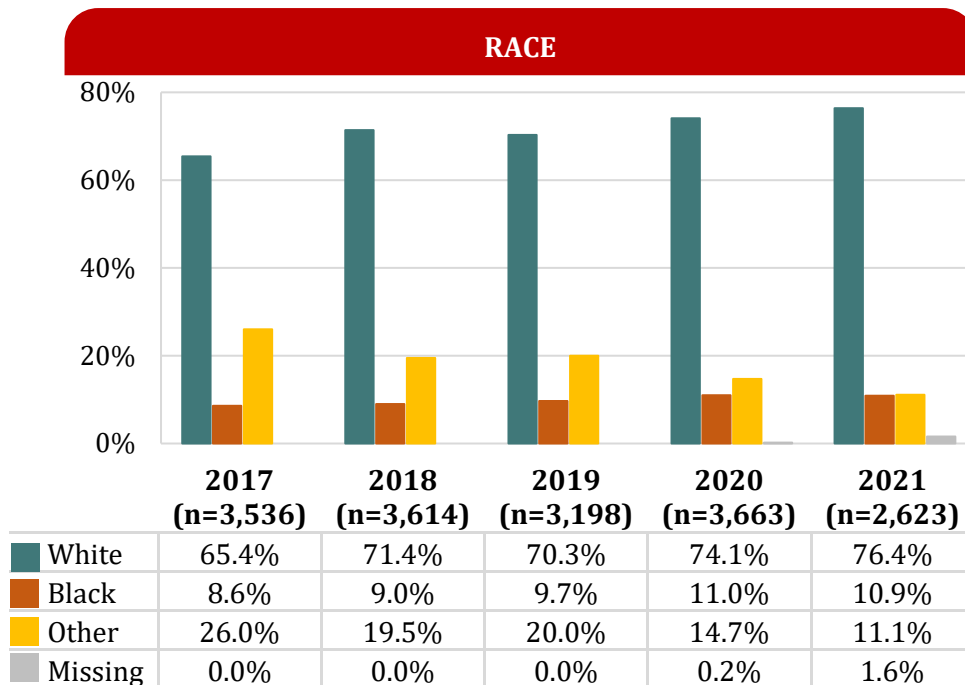


FIGURE 5C: Distribution of Race among Marines Evaluated for Disability Discharge: FY 2017-2021



AIR FORCE

FIGURE 4D: Temporal Trend of the Rate of Disability Evaluation (per 1,000 Airmen) by Sex: Air Force FY 2017-2021

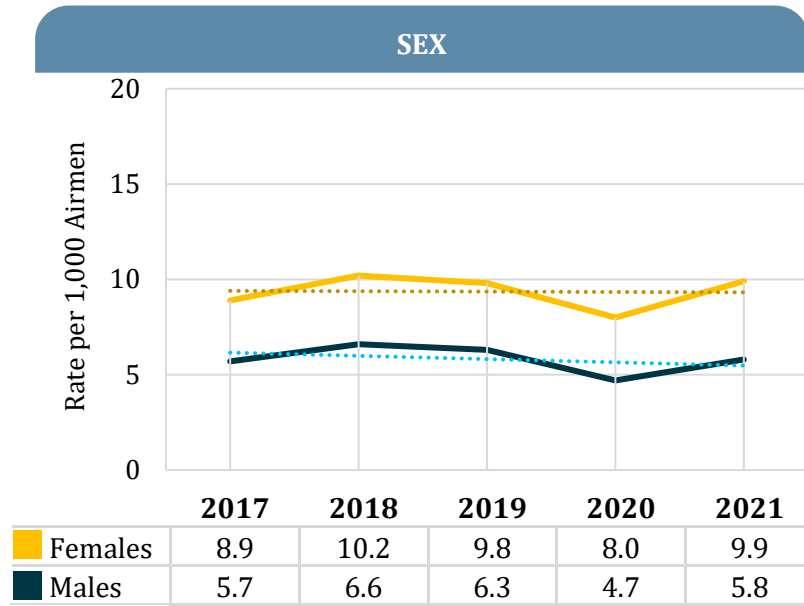
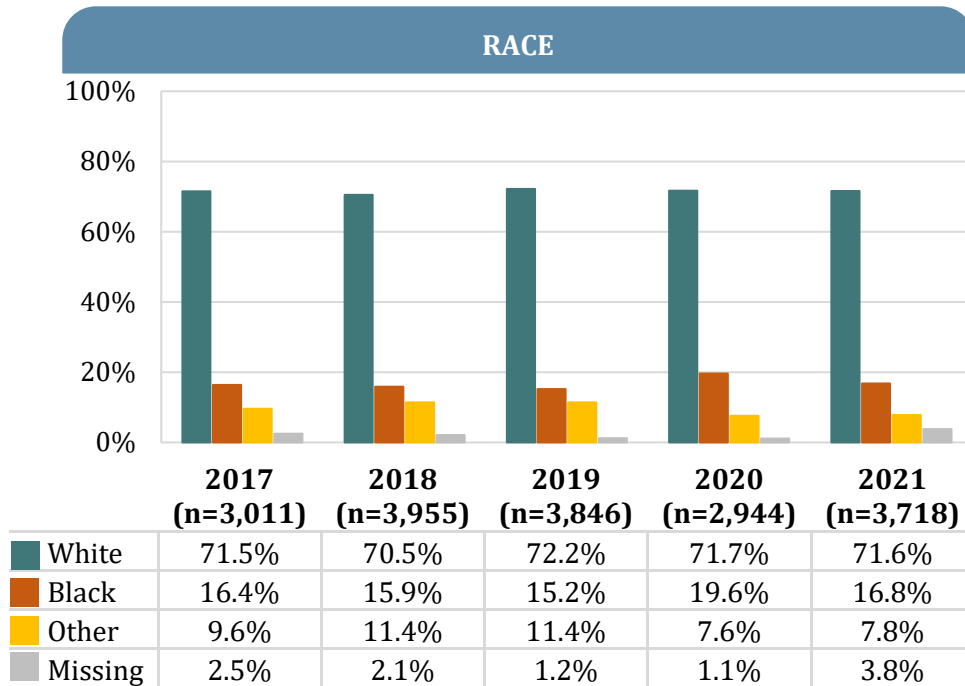


FIGURE 5D: Distribution of Race among Airmen Evaluated for Disability Discharge: FY 2017-2021



IV. DISABILITY RATING & DISPOSITION

DISABILITY RATING: Tables 6A-D provide service-specific comparisons of the distribution and ranking of the most recent combined disability rating among service members evaluated for disability from FY2017-2021. Service-specific temporal trends of combined disability ratings categorized by severity (unrated, low, moderate, severe) are shown in Figures 6A-D.

Tables 6A-D & Figures 6A-D Key Findings

- During FY2017-2021, the most commonly assigned combined disability ratings were 70% in the Army, Unrated in the Navy, 10% in the Marine Corps, and 70% in the Air Force.
 - The proportion of Airmen assigned a 100% disability rating steadily increased over time ranging from 4% (FY2017) to 8% (FY2021), while there was a downward trend in assigned ratings of 0%, 10%, 20%, and 40%.
- Over the five-year time period, over 60% of Soldiers and Airmen, and over 30% of Sailors and Marines received a combined disability rating of $\geq 30\%$ or greater, qualifying them for permanent disability retirement.
- The most common disability rating severity category was Severe (60-100%) for the Army, Moderate (30-50%) for the Air Force and Navy, and Low (0-20%) for the Marine Corps.
- Over the five years, there has been an upward trend in the percentage of ratings under the severe category for all services.
 - The proportion assigned a rating in the severe category was two to three times higher among service members evaluated in FY2021 than those evaluated in FY2017 for the Navy, Marine Corps, and Air Force.



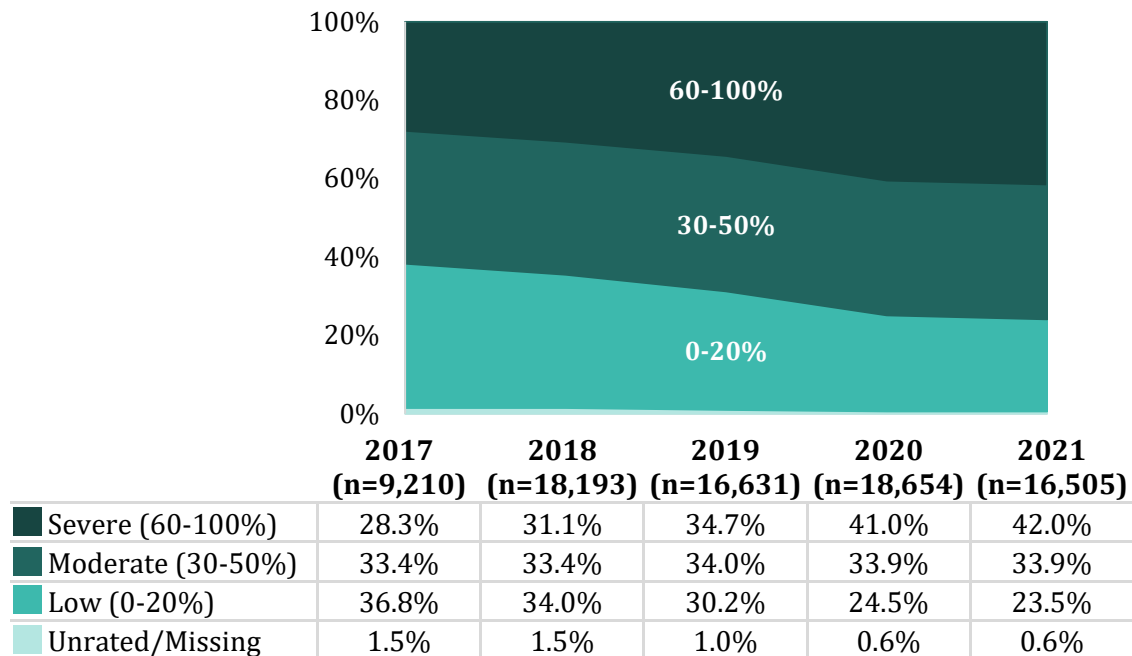
ARMY

TABLE 6A: Distribution and Ranking of Most Recent Combined Rating by FY: Army FY2017-2021

Combined Rating	2017 (n=9,210)		2018 (n=19,193)		2019 (n=16,631)		2020 (n=18,654)		2021 (n=16,505)		Total (N=79,193)	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
0	3.4	10	2.1	11	2.1	11	1.6	11	1.7	11	2.0	11
10	17.6	1	16.9	1	15.1	1	12.1	3	10.9	4	14.2	2
20	15.9	2	15.0	2	13.1	3	10.8	4	11.0	3	12.9	4
30	12.2	3	12.2	3	11.6	5	10.0	5	9.7	5	11.0	5
40	11.6	4	10.7	5	9.7	6	8.9	6	9.2	6	9.8	6
50	9.7	6	10.4	6	12.8	4	15.1	2	15.0	2	12.9	3
60	7.4	7	7.2	7	7.4	7	7.8	7	7.1	7	7.4	7
70	9.9	5	11.3	4	13.7	2	17.5	1	19.3	1	14.8	1
80	4.6	8	5.5	8	6.3	8	7.3	8	6.7	8	6.2	8
90	2.3	11	2.2	10	2.5	10	3.0	10	2.9	10	2.6	10
100	4.1	9	4.8	9	4.8	9	5.4	9	6.1	9	5.2	9
UR	1.2	12	1.2	12	0.9	12	0.5	12	0.5	12	0.8	12
MISS	0.3	13	0.3	13	0.1	13	0.2	13	0.1	13	0.2	13

UR: Unrated, Miss: Missing

FIGURE 6A: Temporal Trend of Ratings Category: Army FY2017-2021



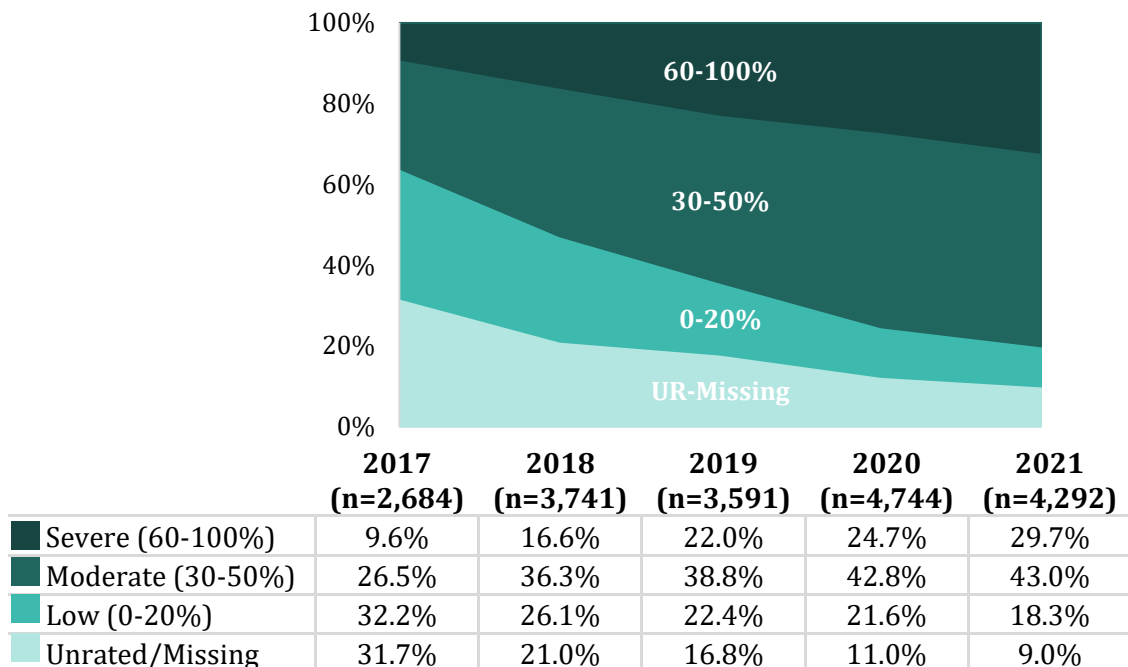
NAVY

TABLE 6B: Distribution and Ranking of Most Recent Combined Rating by FY: Navy FY2017-2021

Combined Rating	2017 (n=2,684)		2018 (n=3,741)		2019 (n=3,591)		2020 (n=4,744)		2021 (n=4,292)		Total (N=19,052)	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
0	3.8	7	2.5	10	2.6	10	2.2	10	2.1	11	2.5	10
10	17.3	2	13.8	3	11.8	5	11.0	4	9.9	4	12.3	4
20	11.2	4	9.8	5	7.9	7	8.3	7	6.4	7	8.5	6
30	12.6	3	15.3	2	14.9	3	15.8	2	15.5	3	15.0	3
40	6.7	6	9.4	6	8.1	6	8.5	6	8.7	5	8.4	7
50	7.2	5	11.6	4	15.8	2	18.5	1	18.8	1	15.1	2
60	2.8	9	3.7	9	3.9	9	4.1	9	5.3	8	4.1	9
70	2.8	9	6.6	7	12.3	4	13.9	3	17.2	2	11.3	5
80	0.7	12	1.5	11	1.5	11	1.8	11	2.4	10	1.7	11
90	0.2	13	0.4	12	0.2	13	0.5	13	0.5	13	0.4	13
100	3.2	8	4.3	8	4.2	8	4.4	8	4.2	9	4.1	8
UR	30.6	1	20.6	1	16.4	1	10.2	5	8.4	6	15.9	1
MISS	1.1	11	0.4	13	0.4	12	0.8	12	0.7	12	0.7	12

UR: Unrated, Miss: Missing

FIGURE 6B: Temporal Trend of Ratings Category: Navy FY2017-2021



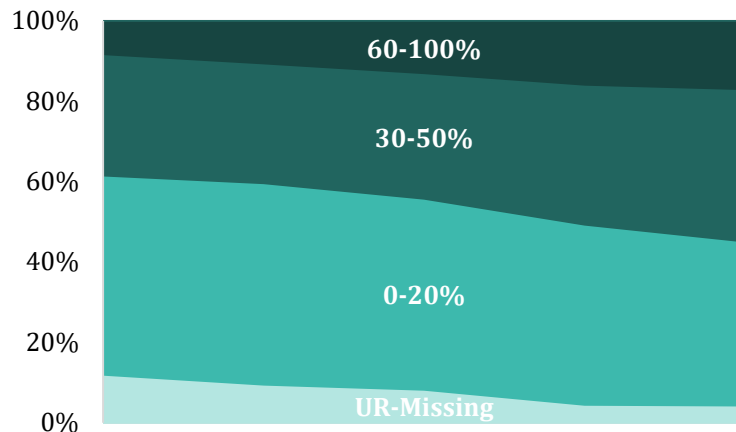
MARINE CORPS

TABLE 6C: Distribution and Ranking of Most Recent Combined Rating by FY: Marine Corps FY2017-2021

Combined Rating	2017 (n=3,526)		2018 (n=3,614)		2019 (n=3,198)		2020 (n=3,663)		2021 (n=2,623)		Total (N=16,634)	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
0	6.2	7	3.8	8	4.0	9	2.9	9	3.3	10	4.1	9
10	25.9	1	28.9	1	26.0	1	24.6	1	21.1	1	25.5	1
20	17.6	2	17.4	2	17.5	2	17.3	2	16.4	3	17.3	2
30	13.0	3	12.7	3	12.8	3	15.2	3	17.2	2	14.1	3
40	7.8	6	8.7	5	8.9	5	10.7	4	12.4	4	9.6	4
50	8.8	5	7.9	6	9.0	4	8.4	5	7.9	5	8.4	5
60	3.3	8	4.2	7	4.3	8	4.3	7	4.5	7	4.1	8
70	3.0	9	3.8	8	5.5	7	7.8	6	6.9	6	5.3	7
80	0.9	11	1.3	11	1.5	11	1.3	11	1.4	11	1.3	11
90	0.2	13	0.3	13	0.3	13	0.3	13	0.6	12	0.3	13
100	1.4	10	1.4	10	2.0	10	2.8	10	4.1	8	2.2	10
UR	11.3	4	8.9	4	7.8	6	4.1	8	3.9	9	7.4	6
MISS	0.7	12	0.5	12	0.4	12	0.4	12	0.4	13	0.5	12

UR: Unrated, Miss: Missing

FIGURE 6C: Temporal Trend of Ratings Category: Marine Corps FY2017-2021



	2017 (n=3,536)	2018 (n=3,614)	2019 (n=3,198)	2020 (n=3,663)	2021 (n=2,623)
Severe (60-100%)	8.8%	11.1%	13.5%	16.4%	17.5%
Moderate (30-50%)	29.7%	29.3%	30.7%	34.3%	37.4%
Low (0-20%)	49.6%	50.1%	47.5%	44.8%	40.8%
Unrated/Missing	12.0%	9.5%	8.2%	4.5%	4.3%

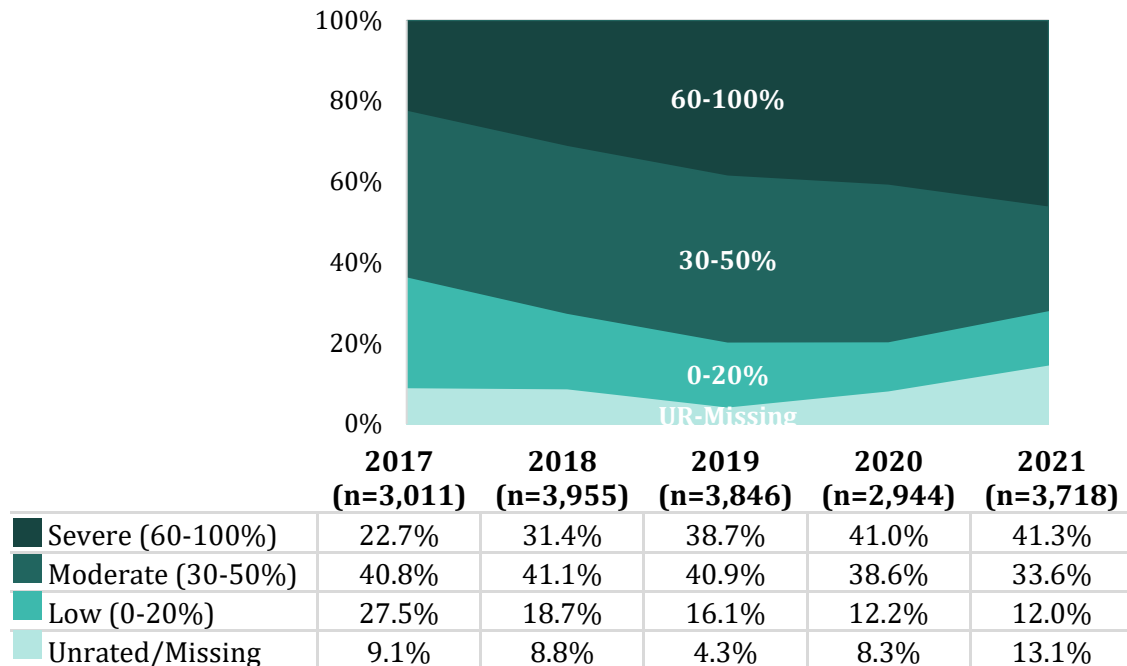
AIR FORCE

TABLE 6D: Distribution and Ranking of Most Recent Combined Rating by FY: Air Force FY2017-2021

Combined Rating	2017 (n=3,011)		2018 (n=3,955)		2019 (n=3,846)		2020 (n=2,944)		2021 (n=3,718)		Total (N=17,474)	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
0	3.7	10	2.6	11	2.1	12	1.5	13	1.5	13	2.2	12
10	13.6	3	9.3	5	7.4	6	5.9	8	5.9	8	8.3	5
20	10.3	4	6.8	8	6.7	8	4.8	10	4.5	9	6.5	7
30	16.3	1	16.9	1	14.9	3	12.5	3	12.0	3	14.6	3
40	14.4	2	10.4	4	9.3	4	7.8	4	6.7	6	9.6	4
50	10.1	5	13.8	2	16.7	2	18.2	2	14.9	2	14.8	2
60	8.2	7	7.2	7	7.6	5	7.3	5	6.4	7	7.3	6
70	6.1	8	12.2	3	17.0	1	18.3	1	20.3	1	15.0	1
80	2.9	11	4.3	10	5.0	9	5.9	7	4.4	10	4.5	10
90	1.5	12	1.9	12	2.3	11	2.3	12	2.6	12	2.2	13
100	4.1	9	5.8	9	6.7	7	7.1	6	7.5	5	6.3	8
UR	8.6	6	8.3	6	3.8	10	2.7	11	4.1	11	5.5	9
MISS	0.5	13	0.5	13	0.5	13	5.6	9	9.0	4	3.2	11

UR: Unrated, Miss: Missing

FIGURE 6D: Temporal Trend of Ratings Category: Air Force FY2017-2021



DISABILITY DISPOSITION: Table 7 compares the distribution and rates (per 10,000 service members) of disability dispositions among service members evaluated for disability from FY 2017-2021. Service-specific temporal trends of selected dispositions are shown in Figures 7A-D. 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. Due to the small numbers for disability dispositions, ratings, and unfitting conditions, rates were calculated per 10,000 service members. Disability dispositions were captured from the service member’s most recent disability evaluation.

Table 7 & Figure 7A-D Key Findings

- Placement on permanent disability retirement list (PDRL) was the most commonly assigned disposition for the Army (63%), Navy (31%), and Air Force (59%), while separated with severance pay (SWSP) was the most common for the Marine Corps (45%).
- During the five years, the proportion of Soldiers, Sailors, Marines, and Airmen assigned with SWSP, fit/limited duty, or separated without DOD disability benefits (SWODDB) trended downward.
- The proportion of service members assigned fit/limited duty was higher for the Navy and Marine Corps than the other services; however, assignment of this disposition became less common over time.

TABLE 7: Distribution and Rate (per 10,000 Service Members) for Disposition by Service, FY 2017-2021

Dispositions	Army ¹ (n=79,193)		Navy (n=19,052)		Marine Corps (n=16,634)		Air Force (n=17,474)	
	%	Rate	%	Rate	%	Rate	%	Rate
Placement on PDRL	63.2	91.0	30.8	27.8	30.9	40.3	58.6	38.6
SWODDB	1.2	1.8	3.6	3.2	1.9	2.4	2.1	1.4
SWSP	25.6	36.9	22.4	20.1	45.3	59.1	15.5	10.2
Fit/Limited Duty	0.4	0.6	14.2	12.8	6.2	8.1	3.7	2.4
Placement on TDRL	8.9	12.8	25.8	23.2	12.0	15.6	15.4	10.1
Retained on TDRL	<0.1	<0.1	0.1	0.1	0.1	0.1	1.5	1.0
Other ²	0.7	1.0	3.1	2.8	3.7	4.8	3.2	2.1

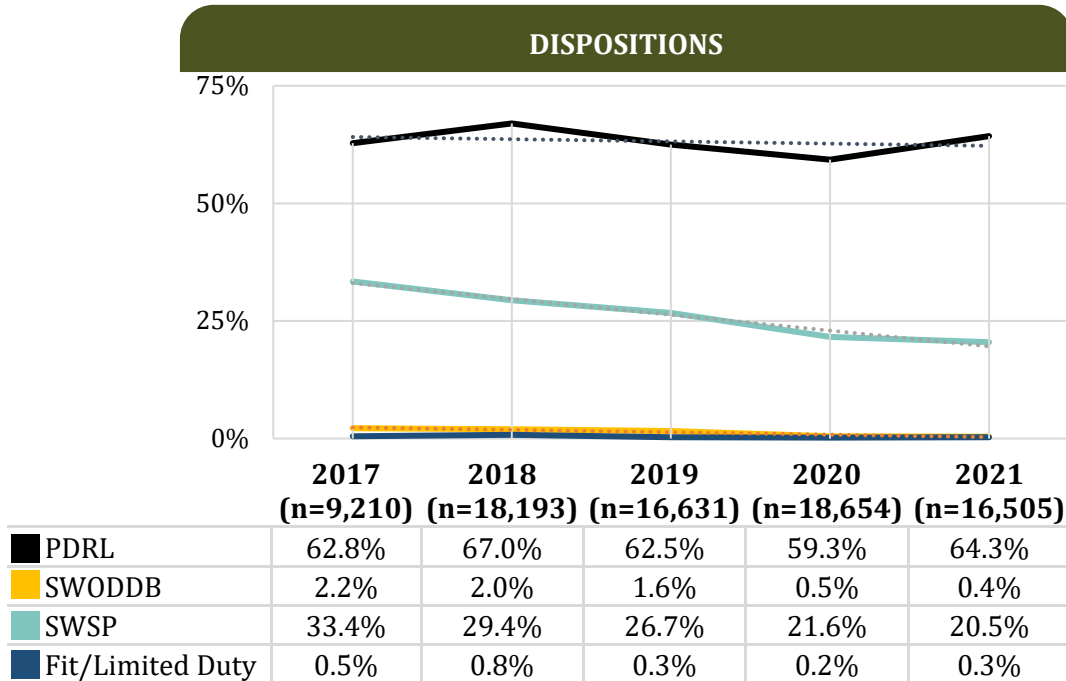
PDRL: permanent disability retirement list; TDRL: temporary disability retirement list; SWODDB: separated without DOD disability benefits; SWSP: separated with severance pay

1. Rates may be underestimated due to missing or incomplete FY17 Army DES data received by DESAR.

2. 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.

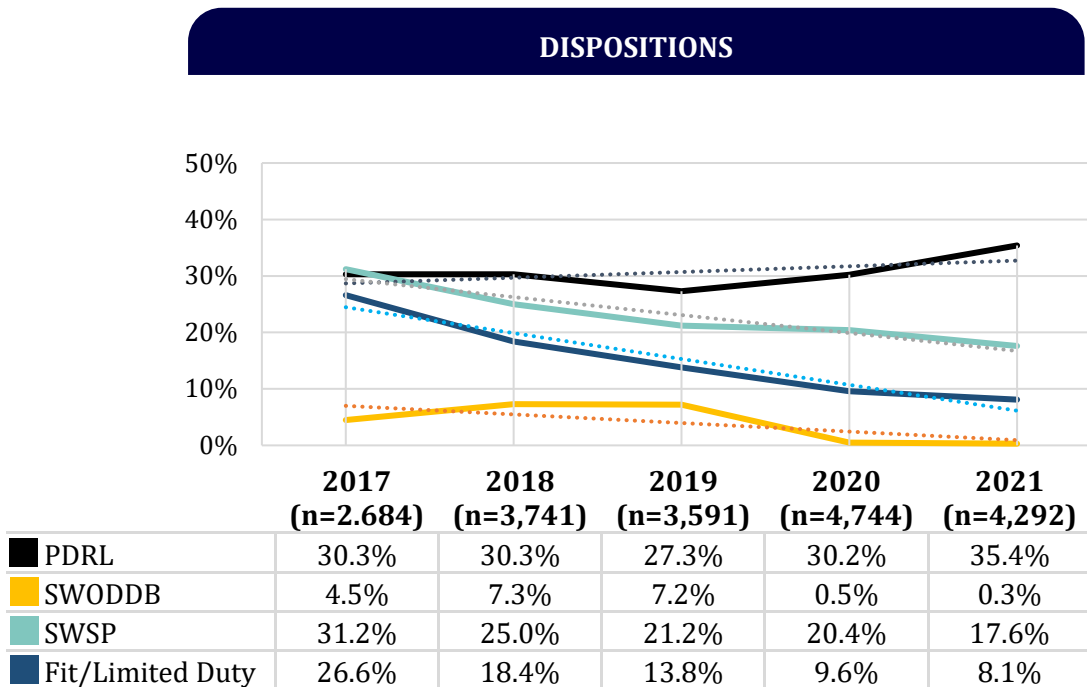
ARMY

FIGURE 7A: Temporal Trend of Selected Dispositions Assigned to Soldiers Disability Evaluated between FY 2017-2021



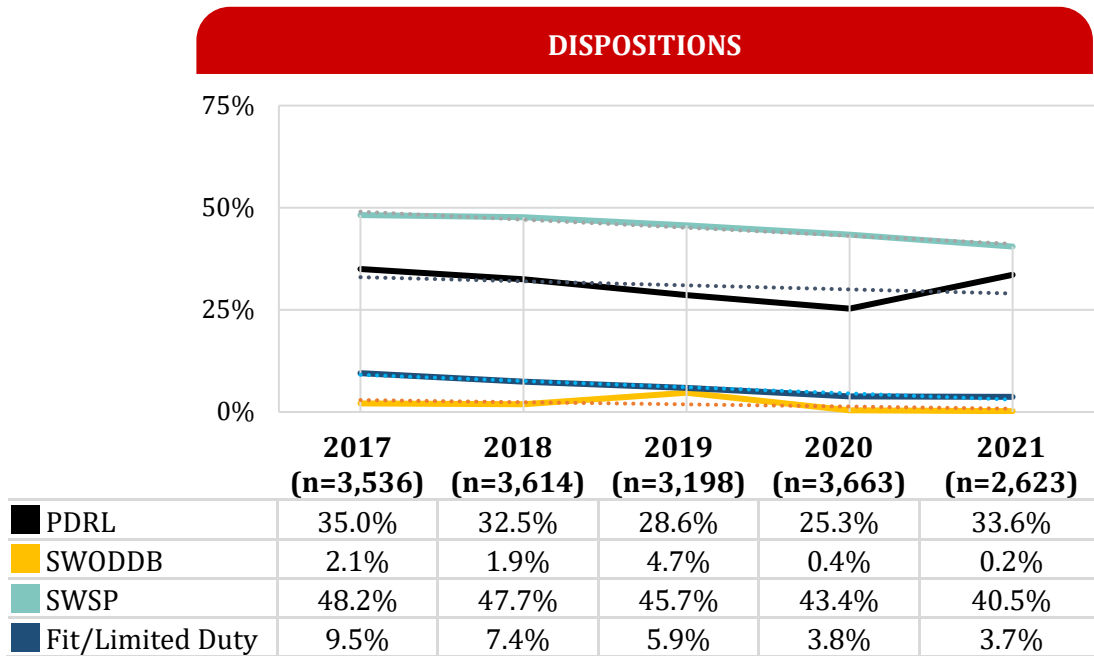
NAVY

FIGURE 7B: Temporal Trend of Selected Dispositions Assigned to Sailors Disability Evaluated between FY 2017-2021



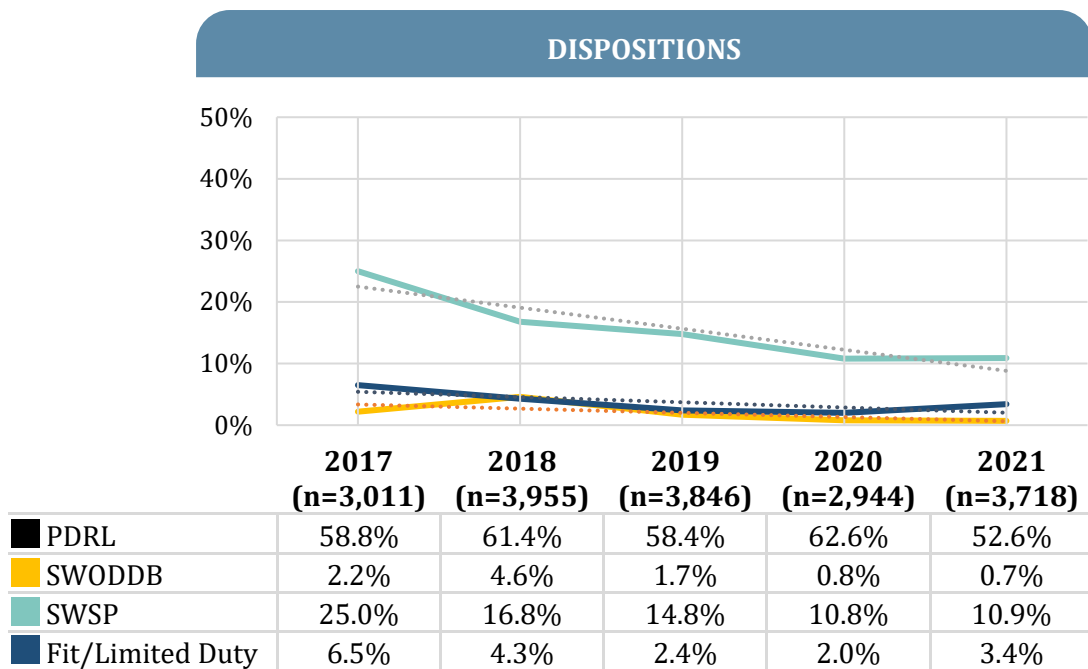
MARINE CORPS

FIGURE 7C: Temporal Trend of Selected Dispositions Assigned to Marines Disability Evaluated between FY 2017-2021



AIR FORCE

FIGURE 7D: Temporal Trend of Selected Dispositions Assigned to Airmen Disability Evaluated between FY 2017-2021



Section 2: Descriptive Statistics of Disability Discharges

V. UNFITTING CONDITIONS

This section focuses on describing the unfitting conditions associated with disability discharge (dispositions of fit/limited duty and separated without DOD disability benefits were excluded).

Tables 8A-D describe the prevalence and rate of unfitting conditions for each service. Service members may be included in more than one body system category if evaluated for more than one condition across different categories. However, service members were only counted once per body system. **Figures 8A-D** present temporal trends for the three most common body system categories. Counts presented in each table represent the number of service members evaluated for one or more conditions in a given body system.

Tables 8A-D & Figures 8A-D Key Findings

- Consistent with previous DESAR reports, the most common unfitting conditions among disability discharged service members were related to the musculoskeletal, psychiatric, or neurological categories.
- About 35% (Navy) to 64% (Army) of disability discharged service members had an unfitting musculoskeletal condition.
 - The prevalence of musculoskeletal-related disability discharges had a downward trend for the Army, Navy, and Air Force; however, the trend remained constant for the Marine Corps.
- 25% (Marine Corps) to 44% (Navy) of disability discharged service members had an unfitting psychiatric disorder.
 - Over the five years, there was an upward trend in the proportion of psychiatric-related disability discharges in the Navy and Air Force; however, there was a constant downward trend in the Marines. By FY2019, more Airmen were discharged due to a psychiatric disorder than a musculoskeletal condition.
- All other body system categories remained relatively stable over time (results not shown).

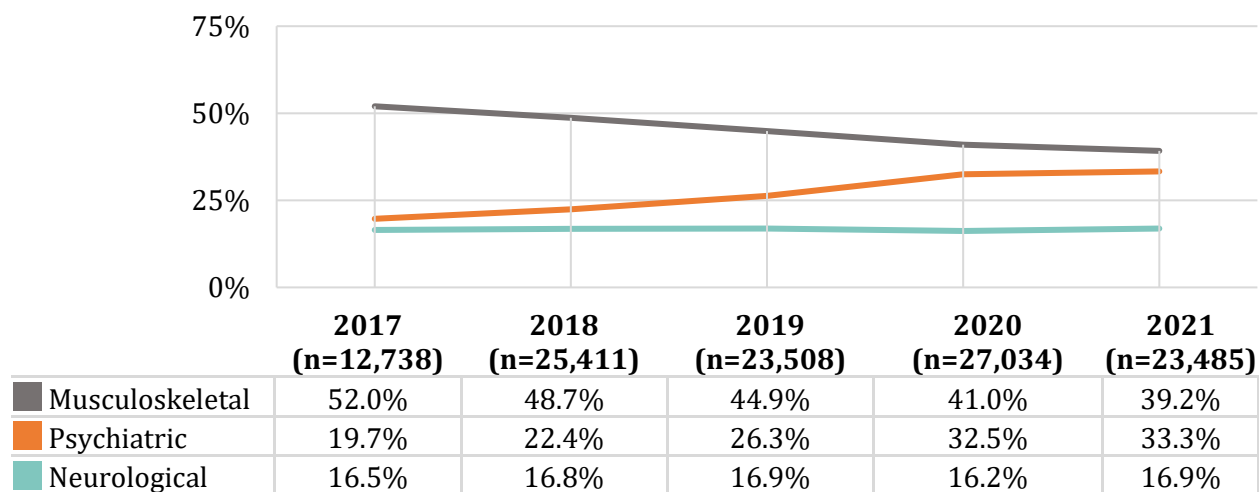
ARMY

TABLE 8A: Distribution and Rate (per 10,000 Soldiers) of Disability Body System Categories among Disability Discharged Soldiers, FY 2017-2021

ARMY ¹ (n=77,883)		
Body System Category	% ¹	Rate ^{2,3}
Musculoskeletal	64.0	90.7
Psychiatric	39.8	56.4
Neurological	24.0	34.0
Respiratory	3.0	4.3
Cardiovascular	2.5	3.5
Digestive	2.3	3.3
Endocrine	2.2	3.1
Dermatologic	1.8	2.6
Genitourinary	1.4	2.0
Impairment of Auditory Acuity	0.9	1.2
Eyes/Vision	0.8	1.1
Hemic/Lymphatic	0.5	0.7
Gynecologic	0.4	0.5
Infectious Disease	0.3	0.5
Dental and Oral	0.1	0.2
Other Sense Organs	<0.1	<0.1

1. 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.
1. Rates may be underestimated due to missing or incomplete FY17 Army DES data received by DESAR.
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 FY 2017-2021¹



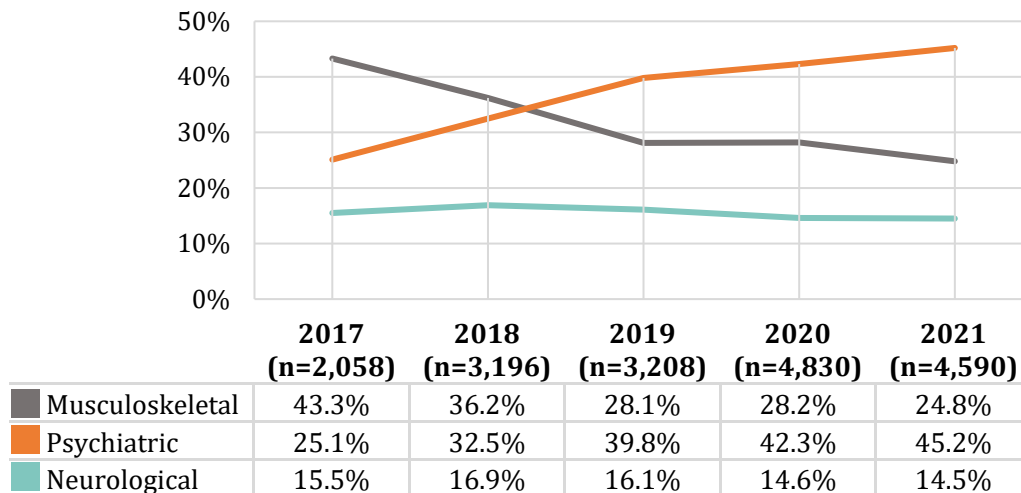
NAVY

TABLE 8B: Distribution and Rate (per 10,000 Sailors) of Disability Body System Categories among Disability Discharged Sailors, FY 2017-2021

NAVY (n=15,663)		
Body System Category	% ¹	Rate ²
Psychiatric	44.4	32.9
Musculoskeletal	34.8	25.8
Neurological	17.5	13.0
Digestive	4.4	3.3
Endocrine	2.2	1.6
Cardiovascular	2.1	1.5
Respiratory	2.0	1.5
Genitourinary	1.5	1.1
Dermatologic	1.3	0.9
Eyes/Vision	1.2	0.9
Hemic/Lymphatic	0.8	0.6
Impairment of Auditory Acuity	0.7	0.5
Infectious Disease	0.6	0.4
Gynecologic	0.5	0.4
Dental and Oral	0.1	0.1
Other Sense Organs	<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 FY 2017-2021



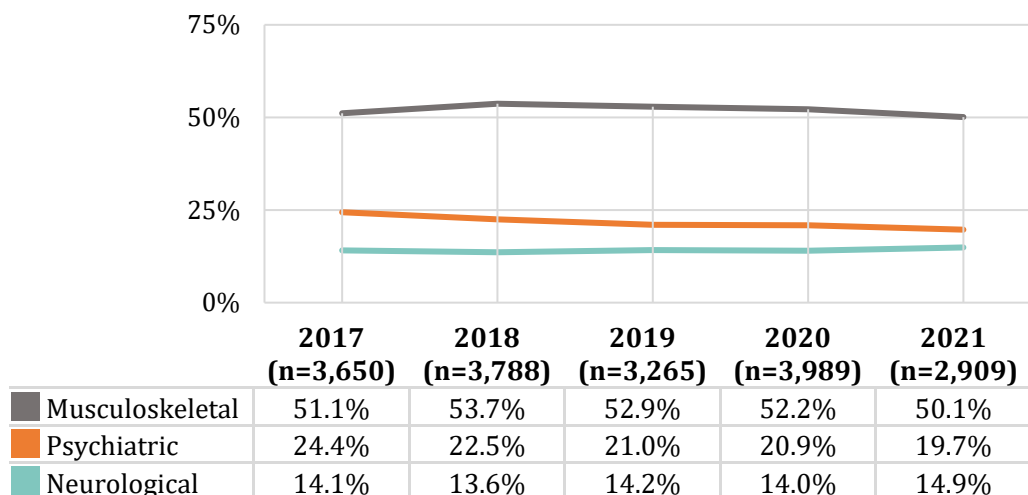
MARINE CORPS

TABLE 8C: Distribution and Rate (per 10,000 Marines) of Disability Body System Categories among Disability Discharged Marines, FY 2017-2021

MARINE CORPS (n=15,294)		
Body System Category	%¹	Rate²
Musculoskeletal	60.0	71.9
Psychiatric	25.1	30.1
Neurological	16.2	19.5
Digestive	3.2	3.8
Respiratory	3.1	3.7
Cardiovascular	1.6	2.0
Endocrine	1.2	1.5
Genitourinary	1.2	1.4
Dermatologic	1.0	1.2
Eyes/Vision	0.8	0.9
Hemic/Lymphatic	0.5	0.6
Impairment of Auditory Acuity	0.5	0.7
Infectious Disease	0.3	0.4
Gynecologic	0.3	0.3
Dental and Oral	0.1	0.1
Other Sense Organs	<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, and Neurological Conditions: Marine Corps FY 2017-2021



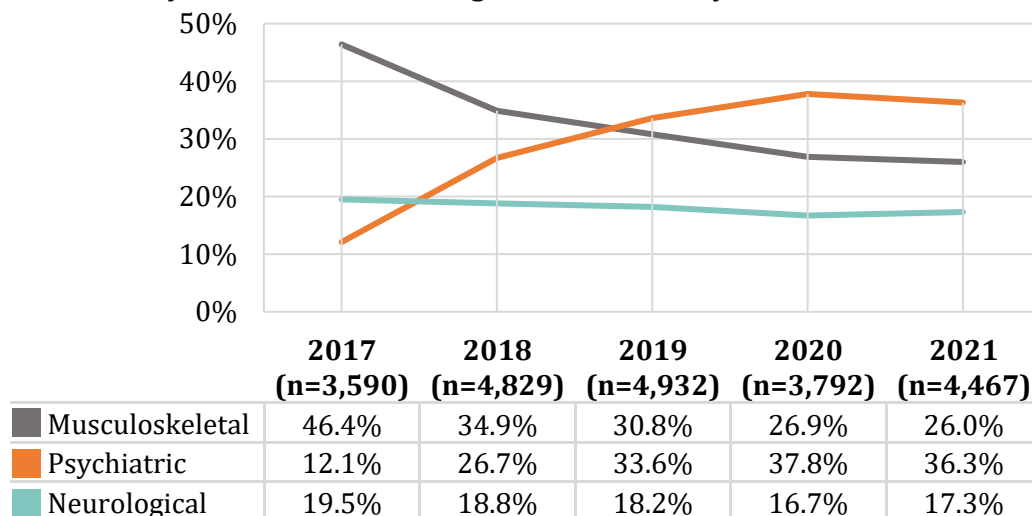
AIR FORCE

TABLE 8D: Distribution and Rate (per 10,000 Airmen) of Disability Body System Categories among Disability Discharged Airmen, FY 2017-2021

AIR FORCE (n=16,468)		
Body System Category	% ¹	Rate ²
Musculoskeletal	42.9	26.6
Psychiatric	39.1	24.3
Neurological	23.8	14.8
Respiratory	6.8	4.2
Digestive	4.1	2.5
Cardiovascular	3.8	2.4
Dermatologic	2.6	1.6
Endocrine	2.1	1.3
Genitourinary	1.4	0.9
Impairment of Auditory Acuity	1.1	0.7
Eyes/Vision	1.0	0.6
Infectious Disease	1.0	0.6
Hemic/Lymphatic	0.8	0.5
Gynecologic	0.6	0.4
Dental and Oral	0.1	0.1
Other Sense Organs	<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 by FY 2017-2021



Tables 9A-D describe the prevalence and rate of the ten most common unfitting conditions among FY2017-2021 disability discharged service members. Due to the high number of VASRD codes, unfitting conditions were categorized according to pathology. **Figures 9A-D** present the temporal trend for the five most common unfitting conditions categories for each service as of FY2021. Service members were only counted once per category; however, service members may be included in more than one category if evaluated for multiple conditions. Percentages represent the number of service members in each unfitting condition category among all service members discharged with a service-connected disability.

Table 9A-D & Figure 9A-D Key Findings

- All ten most common unfitting conditions among disability discharged service members were related to the musculoskeletal, psychiatric, and neurological systems, except for asthma in the Air Force and noninfectious enteritis and colitis in the Navy.
- *Musculoskeletal conditions* - Dorsopathies (e.g., vertebral fracture, sacroiliac injury, lumbosacral strain, and degenerative arthritis), limitation of motion, joint disorders/inflammation and arthritis were among the most common unfitting conditions for all services.
- *Psychiatric disorders* – Between 16% (Navy) and 27% (Army) of all disability discharged service members had service-connected PTSD. Mood disorders were also a common reason for disability discharge in all services, ranging from 6% (Marine Corps) to 17% (Navy). Anxiety disorders were more prevalent among Sailors (5%) and Airmen (4%).
 - The prevalence of PTSD-related disability discharge among Airmen sharply increased from FY2017 to FY2018, continued to have an upward trend to FY2020, then slightly decreased in FY2021. There was also an upward trend in prevalence of mood disorder-related disability discharge among Airmen, rising from 8% in FY2017 to 15% in FY2021.
 - Similarly, there was also an upward trend in prevalence of PTSD and mood disorders among disability discharged Sailors, and by FY2019, PTSD and mood disorders became the two most common VASRD categories.
 - PTSD-related disability discharges steadily increased over the time period for the Army, but the prevalence among Marines steadily decreased by approximately two to four percentage points each year.
- *Neurological conditions* - Paralysis (4-12%) and migraine (3-5%) were among ten leading reasons for disability discharge for all services. Residuals of traumatic brain injury (TBI) was common only among disability discharged Soldiers (5%) and Marines (4%).

ARMY

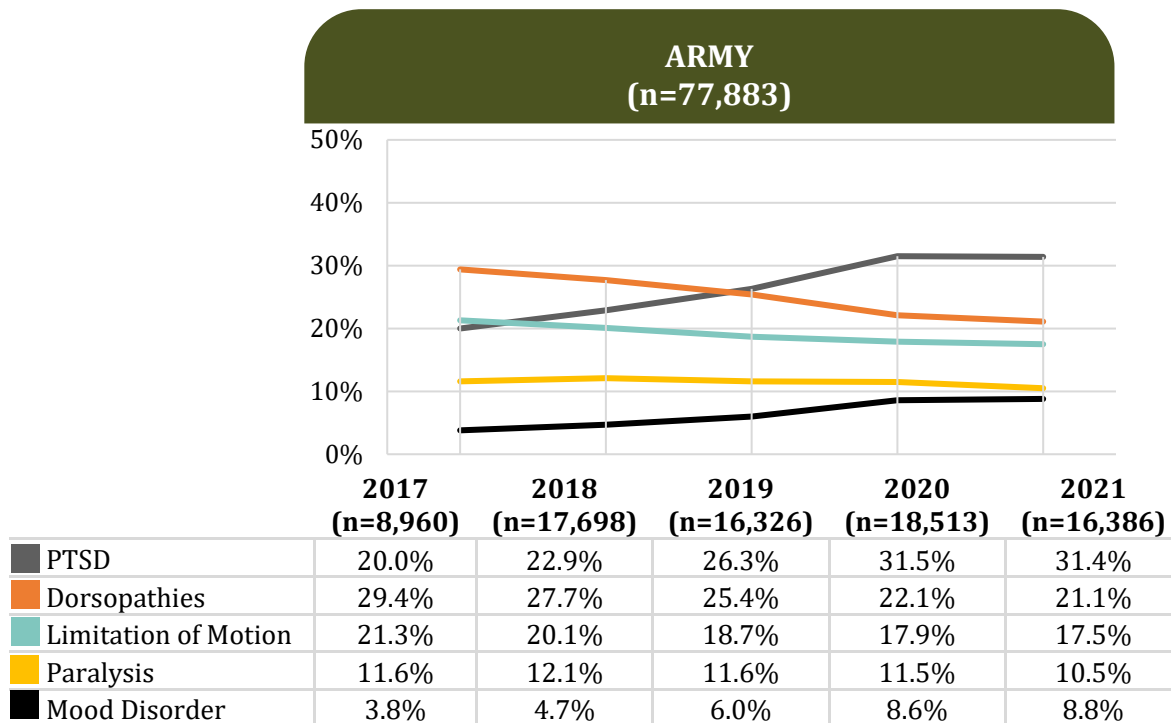
TABLE 9A: Ten Most Common Unfitting Conditions among Disability Discharged Soldiers: FY 2017-2021

ARMY ¹ (n=77,883)			
Unfitting Conditions	n	%	Rate ²
PTSD	21,118	27.1	38.4
Dorsopathies	19,216	24.7	35.0
Limitation of Motion	14,704	18.9	26.8
Paralysis	8,931	11.5	16.3
Arthritis	8,764	11.3	15.9
Mood Disorders	5,191	6.7	9.4
Joint Disorders or Inflammation	4,180	5.4	7.6
Residuals of TBI	3,947	5.1	7.2
Migraine	2,809	3.6	5.1
Skeletal and Joint Deformities	1,896	2.4	3.5

1. Rates may be underestimated due to missing or incomplete FY17 Army DES data received by DESAR.

2. Rate per 10,000 Soldiers

FIGURE 9A: Temporal Trend of the Top 5 Unfitting Conditions among Disability Discharged Soldiers: FY2017-2021



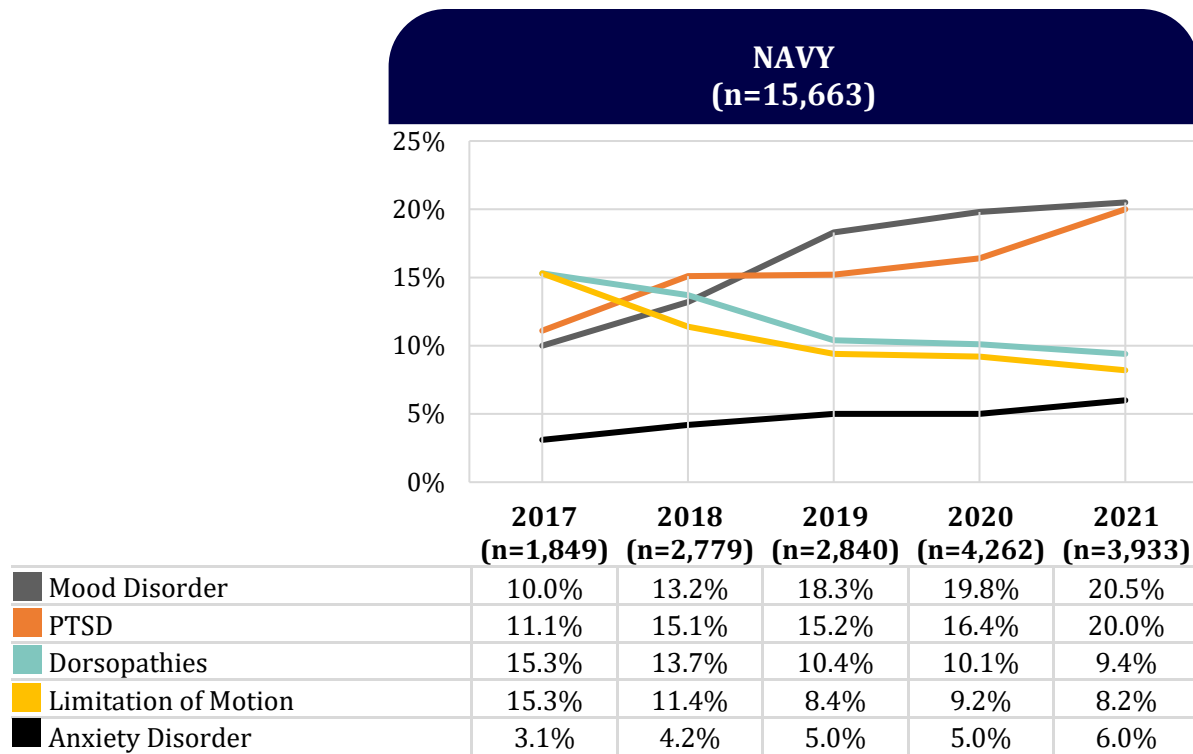
NAVY

TABLE 9B: Ten Most Common Unfitting Conditions among Disability Discharged Sailors: FY2017-2021

NAVY (n=15,663)			
Unfitting Conditions	n	%	Rate ¹
Mood Disorders	2,727	17.4	12.9
PTSD	2,542	16.2	12.0
Dorsopathies	1,760	11.2	8.3
Limitation of Motion	1,541	9.8	7.3
Arthritis	862	5.5	4.1
Joint Disorders or Inflammation	801	5.1	3.8
Anxiety Disorder	767	4.9	3.6
Migraine	660	4.2	3.1
Paralysis	608	3.9	2.9
Noninfectious enteritis and colitis	472	3.0	2.2

1. Rate per 10,000 Sailors

FIGURE 9B: Temporal Trend of the Top 5 Unfitting Conditions among Disability Discharged Sailors: FY 2017-2021



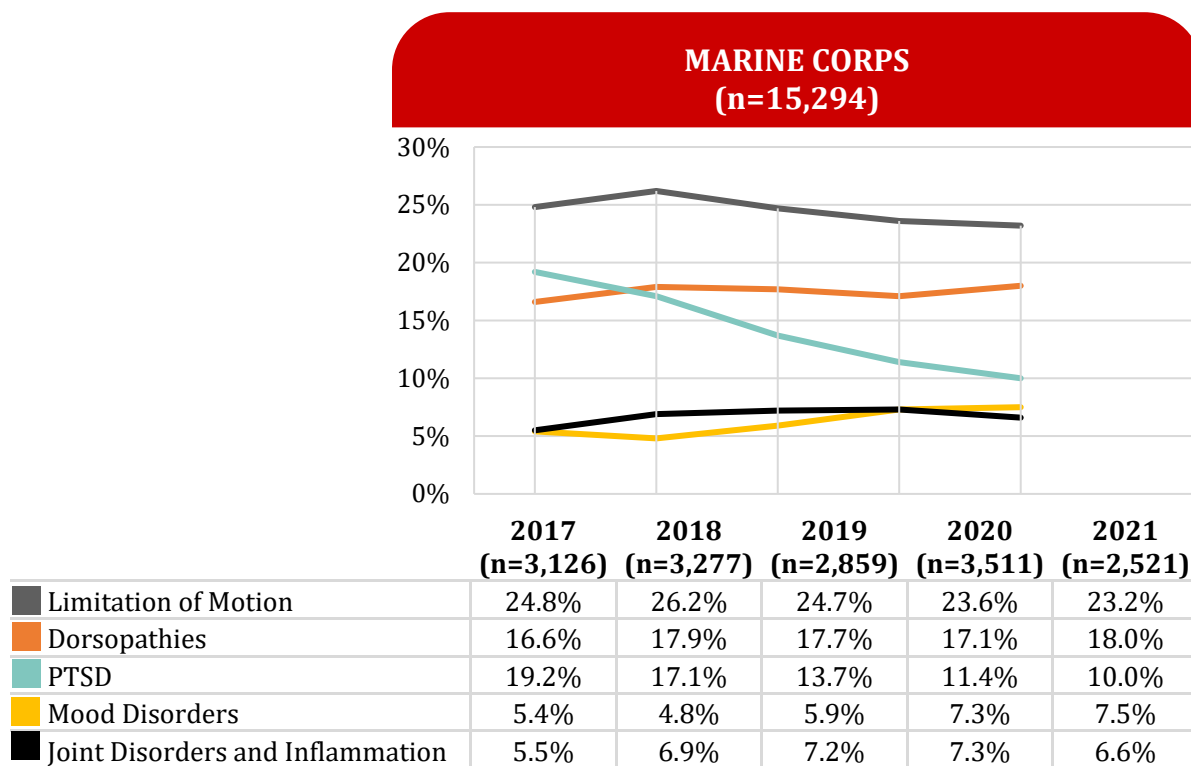
MARINE CORPS

TABLE 9C: Ten Most Common Unfitting Conditions among Disability Discharged Marines: FY 2017-2021

MARINE CORPS (n=15,294)			
Unfitting Conditions	n	%	Rate¹
Limitation of Motion	3,754	24.5	29.4
Dorsopathies	2,664	17.4	20.9
PTSD	2,206	14.4	17.3
Joint Disorders or Inflammation	1,023	6.7	8.0
Mood Disorder	942	6.2	7.4
Arthritis	938	6.1	7.3
Paralysis	701	4.6	5.5
Residuals of TBI	592	3.9	4.6
Skeletal and Joint Deformities	451	2.9	3.5
Migraine	448	2.9	3.5

1. Rate per 10,000 Marines

FIGURE 9C: Temporal Trend of the Top 5 Unfitting Conditions among Disability Discharged Marines: FY 2017-2021



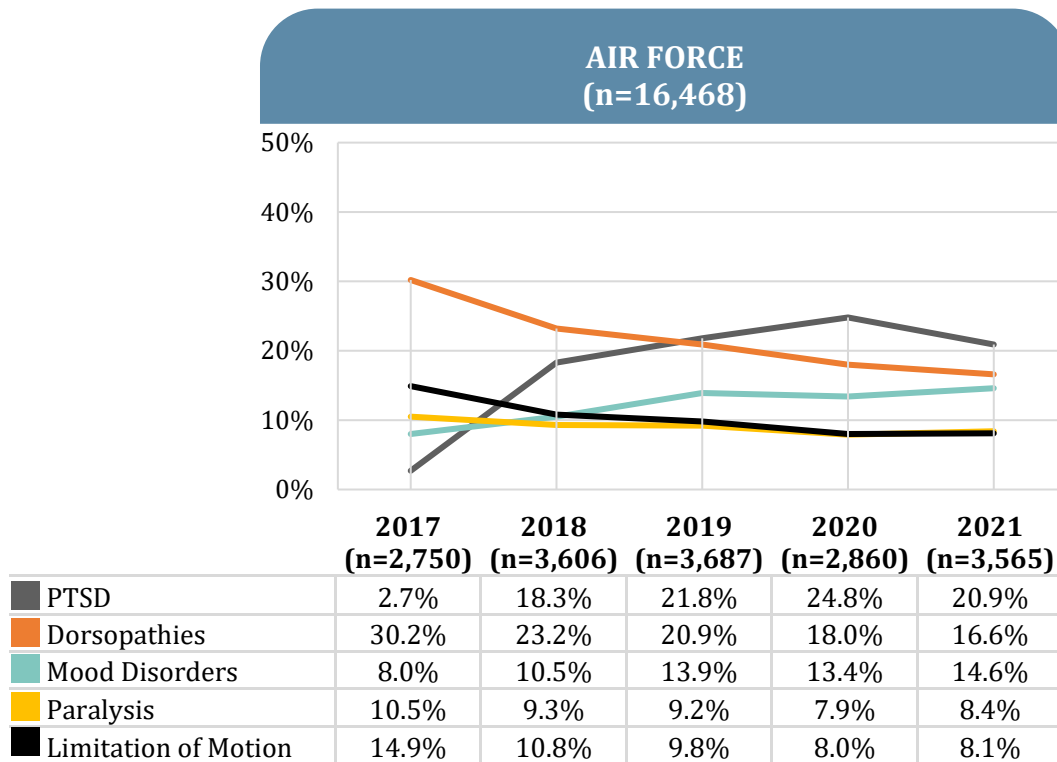
AIR FORCE

TABLE 9D: Ten Most Common Unfitting Conditions among Disability Discharged Airmen: FY 2017-2021

AIR FORCE (n=16,468)			
Unfitting Conditions	n	%	Rate ¹
Dorsopathies	3,543	21.5	13.3
PTSD	2,987	18.1	11.3
Mood Disorders	2,012	12.2	7.6
Limitation of Motion	1,678	10.2	6.3
Paralysis	1,491	9.1	5.6
Migraine	803	4.9	3.0
Asthma	721	4.4	2.7
Joint Disorders or Inflammation	716	4.3	2.7
Anxiety Disorder	690	4.2	2.6
Arthritis	608	3.7	2.3

1. Rate per 10,000 Airmen

FIGURE 9D: Temporal Trend of the Top 5 Unfitting Conditions among Disability Discharged Airmen: FY 2017-2021



VI. COMBAT-RELATED DETERMINATION & DEPLOYMENT HISTORY

Unfitting conditions are considered to be combat-related if sustained as a direct result of armed combat, while engaged in hazardous service, during war-simulating conditions or caused by an instrumentality of war. This section describes the interconnection between combat-related disability discharges and history of deployment in support of Overseas Contingency Operations. Only service members discharged with



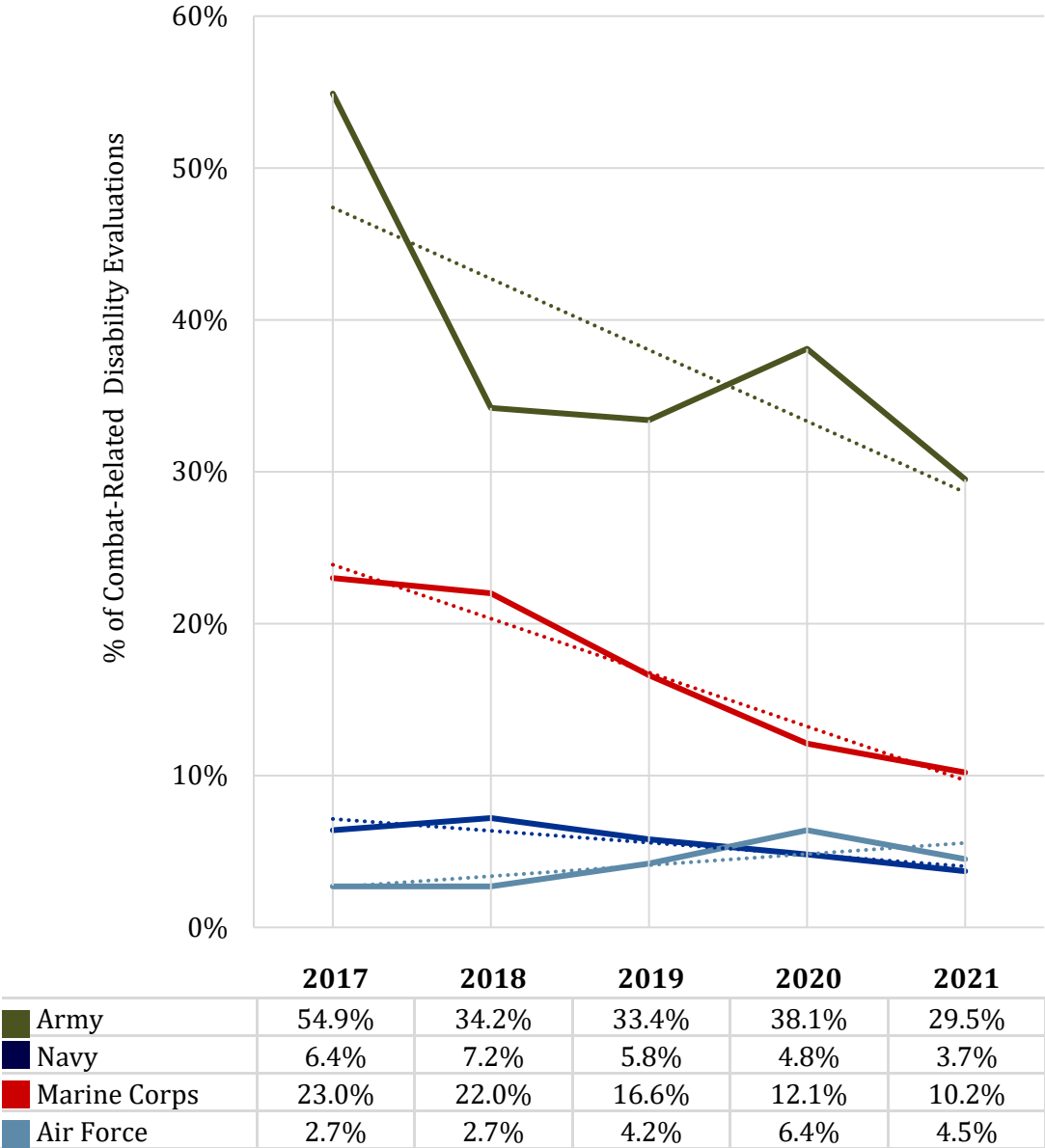
a service-connected disability were included in the tables (i.e., fit/limited duty and separated without DOD disability benefits dispositions were excluded). For service members with multiple deployment records, only information from the last deployment record was used in our analyses.

Temporal trends of the proportion of combat-related disability discharged service members are displayed in **Figure 10**.

Figure 10 Key Findings

- The proportion of disability discharged service members with a combat-related condition varied by service and fiscal year, ranging from 3% (FY2017-2018 Air Force) to 55% (FY 2017 Army).
 - Over the time period, there was downward trend in the proportion of combat-related disability discharges for the Army and Marine Corps. For the Army, the proportion of combat-related discharges decreased by about 9% between FY2020-2021. For the Marine Corps, the proportion had a steady downward trend, ranging from 23% in FY2017 to 10% in FY2021.

FIGURE 10: Temporal Trend of Combat-Related Determination among Disability Discharged Service Members, by Service: FY 2017-2021



Tables 10A-D present the service-specific proportion of service members with a combat-related disability determination, stratified by deployment status (deployed vs not deployed). **Tables 11A-D** depict the most frequently assigned VASRD categories assigned to service members per combat-related determination and deployment status.

Tables 10-11A-D Key Findings

- The overall (full surveillance period) proportion of disability discharges with a combat-related conditions ranged from 4% (Air Force) to 36% (Army).
 - When stratified by deployment status, 6% (Air Force) to 54% (Army) of service members with history of deployment had a combat-related condition, while 1% (Air Force) to 11% (Army) of those with no record of deployment had a combat-related condition.
 - Air Force results should be considered as underestimated since 53% of disability discharge records were missing a combat-related determination.
- When assessing the VASRD categories stratified by both combat-related determination and deployment status, the five most common categories did not vary across the strata with the exception of mood disorders, which was the most common non-combat-related condition among Sailors, regardless of deployment status.
 - In all four strata, four out of the five most common VASRD categories were musculoskeletal-related (limitation of motion, dorsopathies, paralysis, and arthritis) with proportions varying slightly across the strata.
 - For all services, the proportion of disability discharged service members with PTSD was highest among those with both a combat-related condition and history of deployment (60-77%), while the proportion with PTSD in the other strata ranged from 9% to 30% (results for all services not shown, see below for service-specific results).

ARMY

TABLE 10A: Distribution of Combat-Related Determination by Deployment Status among Disability Discharged Soldiers, FY 2017-2021

Combat Status	Deployed (n=45,662)		Not Deployed (n=32,221)		Total ¹ (n=77,883)	
	n	%	n	%	n	%
Combat-related	24,725	54.1	3,580	11.1	28,305	36.3
Not Combat-related	20,906	45.8	28,603	88.8	49,509	63.6
Missing	31	0.1	38	0.1	69	0.1

TABLE 11A: Most Frequent VASRD Categories among Soldiers¹ by Deployment Status and Combat-Related Determination, FY 2017-2021

Combat-Related + Deployed (n=24,725)			Combat-Related + Not Deployed (n=3,580)		
VASRD Categories	n	%	VASRD Categories	n	%
PTSD	14,727	59.6	Limitation of Motion (Joints)	1,653	46.2
Dorsopathies	8,982	36.3	Dorsopathies	1,339	37.4
Limitation of Motion (Joints)	7,362	29.8	Paralysis	555	15.5
Arthritis	3,300	13.3	PTSD	449	12.5
Paralysis	3,219	13.0	Arthritis	391	10.9
Not Combat-Related + Deployed (n=20,906)			Not Combat-Related + Not Deployed (n=28,603)		
VASRD Categories	n	%	VASRD Categories	n	%
Dorsopathies	7,654	36.6	Limitation of Motion (Joints)	11,610	40.6
Limitation of Motion (Joints)	7,207	34.5	Dorsopathies	7,388	25.8
Paralysis	3,556	17.0	Mood Disorder	3,036	10.6
PTSD	3,317	15.9	Paralysis	2,781	9.7
Arthritis	2,874	13.7	PTSD	2,705	9.5

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

NAVY

TABLE 10B: Distribution of Combat-Related Determination by Deployment Status among Disability Discharged Sailors, FY 2017-2021

Combat Status ¹	Deployed (n=8,151)		Not Deployed (n=7,512)		Total (n=15,663)	
	n	%	n	%	n	%
Combat-related	690	8.5	142	1.9	832	5.3
Not Combat-related	7,415	91.0	7,345	97.8	14,760	94.2
Missing	46	0.6	25	0.3	71	0.5

TABLE 11B: Most Frequent VASRD Categories among Sailors by Deployment Status and Combat-Related Determination, FY 2017-2021

Combat-Related + Deployed (n=690)			Combat-Related + Not Deployed (n=142)		
VASRD Categories	n	%	VASRD Categories	n	%
PTSD	528	76.5	Limitation of Motion (Joints)	51	35.9
Limitation of Motion (Joints)	102	14.8	PTSD	42	29.6
Dorsopathies	93	13.5	Dorsopathies	18	12.7
Residuals TBI	92	13.3	Migraine	9	6.3
Migraine	57	8.3	Paralysis	9	6.3
Not Combat-Related + Deployed (n=7,415)			Not Combat-Related + Not Deployed (n=7,345)		
VASRD Categories	n	%	VASRD Categories	n	%
Mood Disorder	1,482	20.0	Mood Disorder	1,439	19.6
Limitation of Motion (Joints)	1,219	16.4	Limitation of Motion (Joints)	1,366	18.6
Dorsopathies	1,155	15.6	PTSD	971	13.2
PTSD	1,011	13.6	Dorsopathies	801	10.9
Arthritis	497	6.7	Anxiety Disorder	384	5.2

MARINE CORPS

TABLE 10C: Distribution of Combat-Related Determination by Deployment Status among Disability Discharged Marines, FY 2017-2021

Combat Status	Deployed (n=6,260)		Not Deployed (n=9,034)		Total (n=15,294)	
	n	%	n	%	n	%
Combat-related	1,986	31.7	611	6.8	2,597	17.0
Not Combat-related	4,264	68.1	8,411	93.1	12,675	82.9
Missing	10	0.2	12	0.1	22	0.1

TABLE 11C: Most Frequent VASRD Categories among Marines by Deployment Status and Combat-Related Determination, FY 2017-2021

Combat-Related + Deployed (n=1,986)			Combat-Related + Not Deployed (n=611)		
VASRD Categories	n	%	VASRD Categories	n	%
PTSD	1,480	74.5	Limitation of Motion (Joints)	403	66.0
Limitation of Motion (Joints)	373	18.8	Dorsopathies	105	17.2
Dorsopathies	371	18.7	Joint Disorders/Inflammation	53	8.7
Residuals TBI	320	16.1	Paralysis	34	5.6
Migraine	176	8.9	Arthritis	31	5.1
Not Combat-Related + Deployed (n=4,264)			Not Combat-Related + Not Deployed (n=8,411)		
VASRD Categories	n	%	VASRD Categories	N	%
Limitation of Motion (Joints)	1,344	31.5	Limitation of Motion (Joints)	3,478	41.4
Dorsopathies	1,129	26.5	Dorsopathies	1,463	17.4
Mood Disorder	445	10.4	Joint Disorders/Inflammation	647	7.7
PTSD	378	8.9	Mood Disorder	516	6.1
Arthritis	377	8.8	Skeletal/Joint Deformities	410	4.9

AIR FORCE

TABLE 10D: Distribution of Combat-Related Determination by Deployment Status among Disability Discharged Marines, FY 2017-2021

Combat Status	Deployed (n=9,586)		Not Deployed (n=6,882)		Total (n=16,468)	
	n	%	n	%	n	%
Combat-related	607	6.3	65	0.9	672	4.1
Not Combat-related	3,613	37.7	3,475	50.5	7,088	43.0
Missing	5,366	56.0	3,342	48.6	8,708	52.9

TABLE 11D: Most Frequent VASRD Categories among Airmen by Deployment Status and Combat-Related Determination, FY 2017-2021

Combat-Related + Deployed (n=607)			Combat-Related + Not Deployed (n=65)		
VASRD Categories	n	%	VASRD Categories	n	%
PTSD	419	69.0	Dorsopathies	26	40.0
Dorsopathies	209	34.4	Limitation of Motion (Joints)	19	29.2
Migraine	85	14.0	PTSD	14	21.5
Residuals of TBI	80	13.2	Paralysis	7	10.8
Limitation of Motion (Joints)	76	12.5	Migraine	6	9.2
Not Combat-Related + Deployed (n=3,613)			Not Combat-Related + Not Deployed (n=3,475)		
VASRD Categories	n	%	VASRD Categories	n	%
Dorsopathies	921	25.5	Mood Disorder	759	21.8
PTSD	846	23.4	PTSD	589	16.9
Mood Disorder	546	15.1	Dorsopathies	542	15.6
Limitation of Motion (Joints)	504	13.9	Limitation of Motion (Joints)	455	13.1
Paralysis	453	12.5	Paralysis	244	7.0

Section 3: Medical History

History of Medical Disqualification 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 pre-accession and in-service medical history of the disability discharged population. Pre-accession medical information collected during the MEPS physical examination, including medical disqualifications based on the DoDI 6130.03 Volume 1, are available only for enlisted service members from all components. Hospitalization data were only available for inpatient stays at military treatment facilities (MTF) for active duty service members and eligible reserves. Although medical history data sources may be limited by service, rank, and component, all disability discharged service members were included in these tables, as a service member may change rank during their military career.

Prior to the fiscal year (FY) 2016, medical disqualifications and hospitalization diagnoses were reported using 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 at least FY 2023 because the use of ICD-9 codes began transitioning to ICD-10 codes effective FY 2016 and MEPS medical examinations are valid for up to 2 years. To allow for comparisons over this transition period, DESAR converted ICD-9 codes into ICD-10 codes utilizing the Center for Medicare and Medicaid's (CMS) General Equivalence Mapping System (GEMS). For disqualification, ICD-10 codes were then categorized according to subsections listed in DoDI 6130.03, Volume 1 (e.g., upper extremities). In cases where the ICD code assigned was not explicitly listed in the DoDI 6130.03, Volume 1 reference table, the code was assigned to the most clinically meaningful subsection. For hospitalization diagnoses, specific ICD-10 codes were combined into clinically meaningful ICD-10 categories.

VII. PRE-ACCESSION DISQUALIFICATION

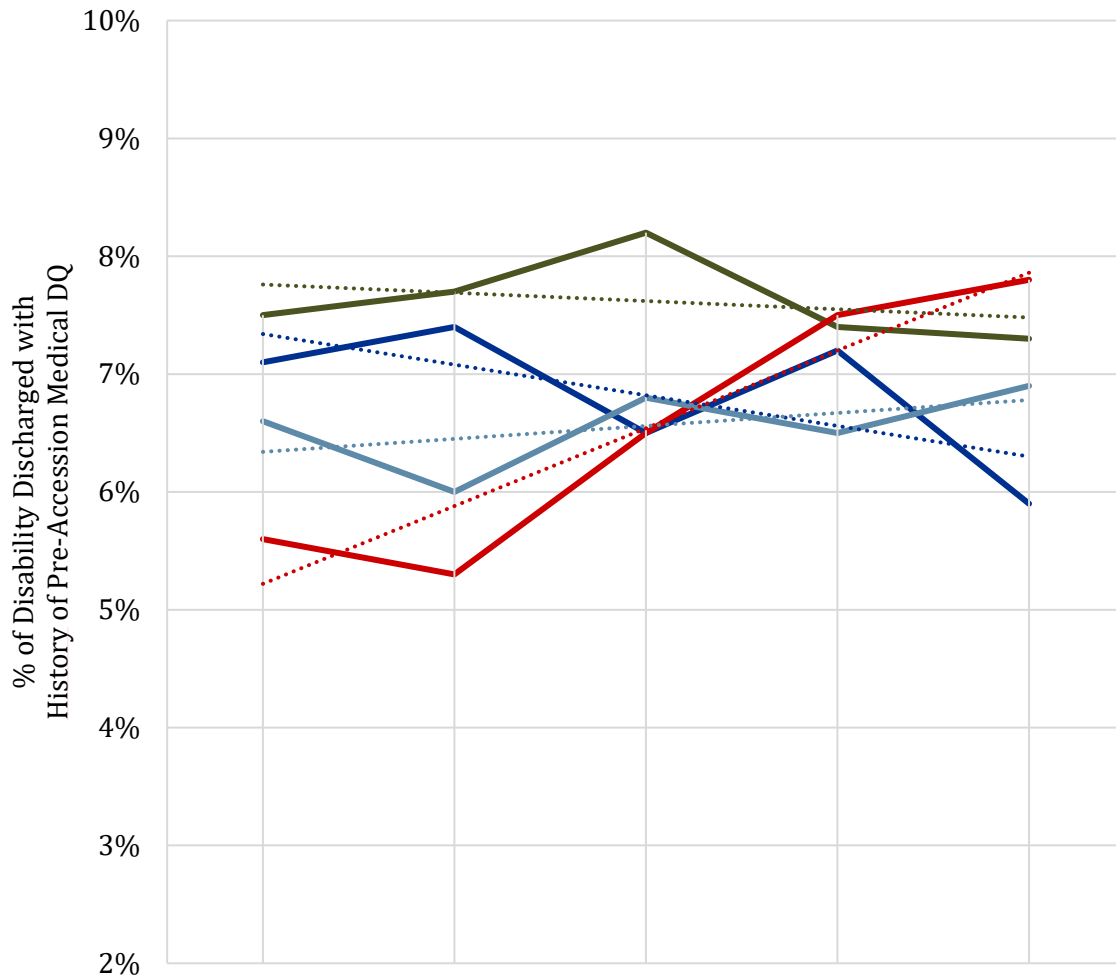
The U.S. Medical Entrance Processing Command (USMEPCOM) has provided DESAR with information from all pre-accession physical examinations conducted at any of the 65 Military Entrance Processing Stations (MEPS) since 1995. During the MEPS physical examination, an applicant is determined to be medically qualified or medically disqualified for accession. Applicants are considered medically qualified when found to be free of contagious diseases, medical conditions, and/or physical defects that may require excessive time lost from duty or separation from military service, and are medically capable of completing required training and initial period of contracted service [10]. Applicants are considered medically disqualified upon presence of a current or verified past medical history of a condition listed in the DoDI 6130.03, Volume 1 [10].

The following tables describe pre-accession disqualification status (i.e., medically qualified, medically disqualified) and disqualification (DQ) categories for disability discharged service members (fit/limited duty and separated without DOD disability benefits dispositions were excluded) with history of MEPS examination. **Figure 11** 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.

Figure 11 Key Findings

- Among disability discharged service members with a history of a MEPS exam, approximately 7-8% were medically disqualified at application.
 - The rate of pre-accession medical DQ among disability discharged service members was similar to the rate of pre-accession medical DQ among all enlisted service members who had received a MEPS exam between FY 2017-2021 (7-8%) [11].
- Over the surveillance period, the proportion of disability discharged Soldiers, Sailors, and Airmen with history of a pre-accession medical DQ remained relatively stable, while there appears to be a slight upward trend in the proportion among disability discharged Marines.

FIGURE 11: Prevalence of Pre-Accession Medical Disqualifications (DQ) among Disability Discharged Service Members with a MEPS Exam by Service and FY 2017-2021



	2017	2018	2019	2020	2021	TOTAL
Army	7.5%	7.7%	8.2%	7.4%	7.3%	7.6%
Navy	7.1%	7.4%	6.5%	7.2%	5.9%	6.8%
Marine Corps	5.6%	5.3%	6.5%	7.5%	7.8%	6.5%
Air Force	6.6%	6.0%	6.8%	6.5%	6.9%	6.6%

Out of the full population of disability discharged service members during this time period, approximately 87% had received a physical examination at MEPS prior to accession. Those with no accession record were excluded from this table.

Tables 12A-D present the most common pre-accession DQs assigned during MEPS examinations among disability discharged service members. 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, pre-accession DQ categories are not mutually exclusive and applicants disqualified under more than one DoDI 6130.03, Volume 1 subsection were counted once within each relevant DoDI subsection.

Table 12A-D Key Findings

- The most common pre-accession DQ categories were generally consistent for all services and fell under the eyes, vision, extremity-related conditions, learning, psychiatric and behavioral disorders DoDI 6130.03 Volume 1 DQ categories.
 - The most common pre-accession DQs in disability discharged service members were consistent with highly prevalent medical DQs in the general military applicant population [11].
 - Within DoDI 6130.03, Volume 1, there are several overlapping DQ codes between the eyes and vision subsections which, in part, could explain the similar high proportions for both categories [10].

TABLE 12A: Most Common Pre-Accession Disqualifications (DQ) Categories among Disability Discharged Soldiers: FY 2017-2021

Army			
DQ Category	n	% with DQ ¹	% with Exam ²
Eyes	878	17.6	1.3
Vision	769	15.4	1.2
Miscellaneous Conditions of the Extremities	685	13.7	1.0
Learning, Psychiatric, and Behavioral Disorders	492	9.9	0.8
Lower Extremity Conditions	480	9.6	0.7
Total DES Cases with hx of DQ	4,987		7.6
Total DES Cases with Medical Exam Record	63,305		

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

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

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

TABLE 12B: Most Common Pre-Accession Disqualifications (DQ) Categories among Disability Discharged Sailors: FY 2017-2021

Navy			
DQ Category	n	% with DQ ¹	% with Exam ²
Eyes	169	17.3	1.2
Miscellaneous Conditions of the Extremities	153	15.7	1.1
Vision	151	15.5	1.1
Lower Extremity Conditions	113	11.6	0.8
Learning, Psychiatric, and Behavioral Disorders	83	8.5	0.6
Total DES Cases with hx of DQ	976		6.8
Total DES Cases with Medical Exam Record	14,356		

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 12C: Most Common Pre-Accession Disqualifications (DQ) Categories among Disability Discharged Marines: FY 2017-2021

Marine Corps			
DQ Category	n	% with DQ ¹	% with Exam ²
Learning, Psychiatric, and Behavioral Disorders	157	16.4	1.1
Eyes	144	15.0	1.0
Vision	126	13.2	0.9
Miscellaneous Conditions of the Extremities	111	11.6	0.8
Lungs, Chest Wall, Pleura and Mediastinum	68	7.1	0.5
Total DES Cases with hx of DQ	958		6.5
Total DES Cases with Medical Exam Record	14,732		

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 12D: Most Common Pre-Accession Disqualifications (DQ) Categories among Disability Discharged Airmen: FY 2017-2021

Air Force			
DQ Category	n	% with DQ ¹	% with Exam ²
Eyes	150	16.1	1.1
Learning, Psychiatric, and Behavioral Disorders	138	14.8	1.0
Vision	135	14.5	0.9
Miscellaneous Conditions of the Extremities	124	13.3	0.9
Lower Extremity Conditions	81	8.7	0.6
Total DES Cases with hx of DQ	933		6.6
Total DES Cases with Medical Exam Record	14,236		

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 DQs and reason for disability discharge, DESAR assessed the most prevalent pre-accession DQ categories within each disability body system. Some DQ categories were combined due to the high prevalence of overlapping codes. **Tables 13A-D** present the most common pre-accession DQ categories, both overall and within the 3 leading disability body systems (musculoskeletal, psychiatric, and neurological).

Service members may be included in more than one category in cases of multiple disability conditions. Similar to 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 13A-D Key Findings

- As shown in **Figure 11**, the overall proportion of disability discharged service members with history of a pre-accession medical DQ ranged from 6.5% (Marine Corps) to 7.6% (Army).
 - When assessing the proportion by disability body system category, the results were similar to the overall proportion for all disability categories (results shown for 3 most common disability body system categories only).
- There was little to no concordance between pre-accession DQ and reason for disability discharge for the three most common disability body systems.
 - Less than 2% of musculoskeletal-related disability discharges had a history of a pre-accession musculoskeletal DQ.
 - Less than 1.5% of disability discharges related to a psychiatric disorder had a history of a pre-accession psychiatric DQ.
 - Less than 1% of neurological-related disability discharges had a history of a pre-accession neurological DQ.



ARMY

TABLE 13A: Most Prevalent Pre-accession Disqualifications (DQ) Categories at MEPS Medical Examination within Leading Disability Body System Categories: Army FY 2017-2021

ARMY		
	n	% ¹
Total Disability Discharged with MEPS Exam	65,305	
Musculoskeletal DQ	1,102	1.7
Eyes/Vision DQ	884	1.4
Systemic/Rheumatologic/Miscellaneous DQ	497	0.8
Any DQ	4,987	7.6
Musculoskeletal Disability	49,852	
Musculoskeletal DQ	718	1.4
Eyes/Vision DQ	507	1.0
Psychiatric DQ	266	0.5
Any DQ	2,458	4.9
Psychiatric Disability	31,010	
Eyes/Vision DQ	241	0.8
Musculoskeletal DQ	210	0.7
Psychiatric DQ	168	0.5
Any DQ	1,103	3.6
Neurological Disability	18,663	
Musculoskeletal DQ	170	0.9
Eyes/Vision DQ	130	0.7
Psychiatric DQ	91	0.5
Neurological DQ ²	14	0.1
Any DQ	676	3.6

1. 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.

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.

NAVY

TABLE 13B: Most Prevalent Pre-accession Disqualifications (DQ) Categories at MEPS Medical Examination within Leading Disability Body System Categories, Navy FY 2017-2021

NAVY		
	n	% ¹
Total Disability Discharged with MEPS Exam	14,356	
Musculoskeletal DQ	237	1.7
Eyes/Vision DQ	171	1.2
Systemic/Rheumatologic/Miscellaneous DQ	112	0.8
Any DQ	976	6.8
Musculoskeletal Disability	5,452	
Musculoskeletal DQ	97	1.8
Eyes/Vision DQ	50	0.9
Psychiatric DQ	24	0.4
Any DQ	258	4.7
Psychiatric Disability	6,952	
Eyes/Vision DQ	74	1.1
Musculoskeletal DQ	63	0.9
Systemic/Rheumatologic/Miscellaneous DQ	40	0.6
Psychiatric DQ ²	38	0.5
Any DQ	299	4.3
Neurological Disability	2,747	
Musculoskeletal DQ	33	1.2
Eyes/Vision DQ	23	0.8
Systemic/Rheumatologic/Miscellaneous DQ	17	0.6
Neurological DQ ²	3	0.1
Any DQ	115	4.2

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 13C: Most Prevalent Pre-accession Disqualifications (DQ) Categories at MEPS Medical Examination within Leading Disability Body System Categories, Marine Corps FY 2017-2021

MARINE CORPS		
	n	% ¹
Total Disability Discharged with MEPS Exam	14,732	
Musculoskeletal DQ	202	1.4
Psychiatric DQ	157	1.1
Eyes/Vision DQ	147	1.0
Any DQ	958	6.5
Musculoskeletal Disability	9,170	
Musculoskeletal DQ	117	1.3
Eyes/Vision DQ	84	0.9
Psychiatric DQ	80	0.9
Any DQ	457	5.0
Psychiatric Disability	3,838	
Psychiatric DQ	49	1.3
Musculoskeletal DQ	36	0.9
Eyes/Vision DQ	28	0.7
Any DQ	154	4.0
Neurological Disability	2,485	
Musculoskeletal DQ	25	1.0
Psychiatric DQ	17	0.7
Eyes/Vision DQ	10	0.4
Neurological DQ ²	0	0.0
Any DQ	96	3.9

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 13D: Most Prevalent Pre-accession Disqualifications (DQ) Categories at MEPS Medical Examination within Leading Disability Body System Categories, Air Force FY 2017-2021

AIR FORCE		
	n	% ¹
Total Disability Discharged with MEPS Exam	14,236	
Musculoskeletal DQ	195	1.4
Eye/Vision DQ	152	1.1
Psychiatric DQ	138	1.0
Any DQ	933	6.6
Musculoskeletal Disability	7,063	
Musculoskeletal DQ	102	1.4
Eyes/Vision DQ	49	0.7
Psychiatric DQ	40	0.6
Any DQ	321	4.5
Psychiatric Disability	6,445	
Psychiatric DQ	59	0.9
Eyes/Vision DQ	50	0.8
Musculoskeletal DQ	46	0.7
Any DQ	268	4.2
Neurological Disability	3,921	
Musculoskeletal DQ	34	0.9
Eyes/Vision DQ	28	0.7
Psychiatric DQ	25	0.6
Neurological DQ ²	4	0.1
Any DQ	155	4.0

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.

VIII. HOSPITALIZATION WITHIN ONE YEAR OF FIRST DISABILITY EVALUATION

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 2021. 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.

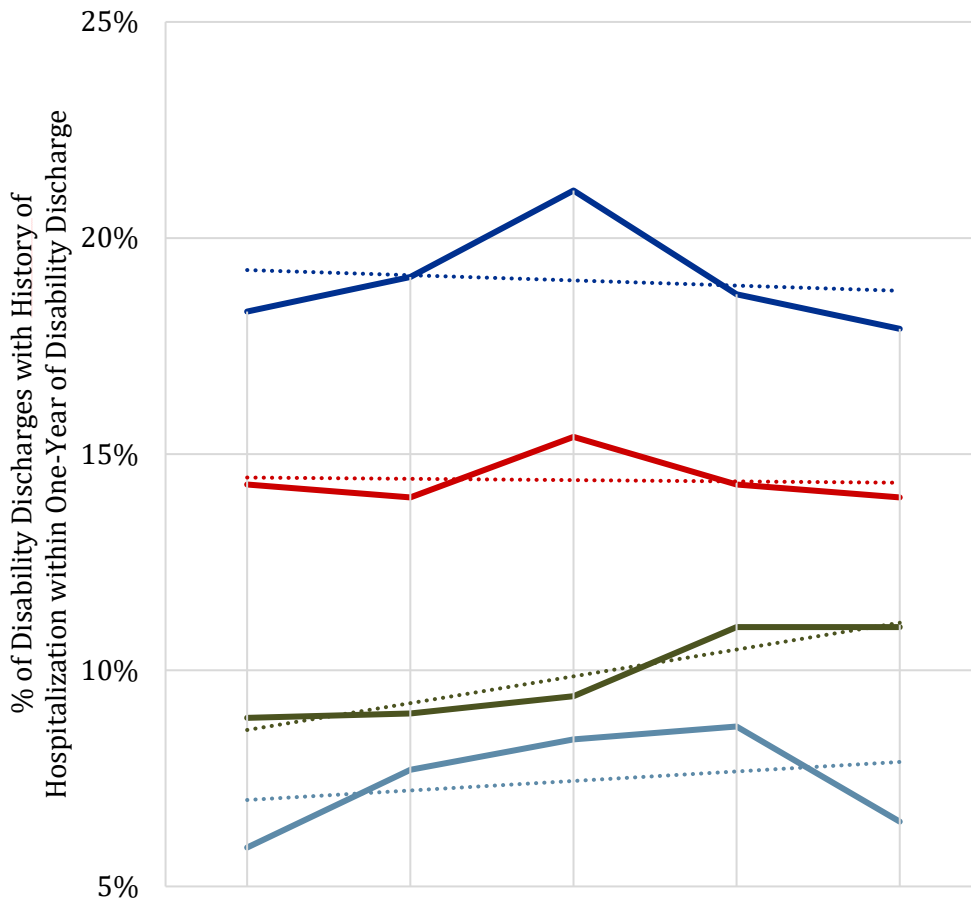
The following tables describe the prevalence of hospitalizations within one year of the first disability evaluation among disability discharged service members (fit/limited duty and separated without DOD benefits dispositions were excluded). Only the primary diagnosis at admission was explored in these analyses. **Figure 12** shows 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.

Figure 12 Key Findings

- Overall, 7.5% (Air Force) to 18.9% (Navy) of disability discharged service members had been hospitalized at an MTF within one year prior to their first disability evaluation.
- Over the five-year period, there appears to be an upward trend in hospitalizations within one year of first disability evaluation among Soldiers. The proportion of Sailors, Marines and Airmen with a hospitalization varied over time, yet remained relatively stable.



FIGURE 12: Prevalence of Hospitalization within One Year of Disability Evaluation among Disability Discharged Service Members by Service and Year of Disability Evaluation by FY 2017-2021



	2017	2018	2019	2020	2021	TOTAL
Army	8.9%	9.0%	9.4%	11.0%	11.0%	10.0%
Navy	18.3%	19.1%	21.1%	18.7%	17.9%	18.9%
Marine Corps	14.3%	14.0%	15.4%	14.3%	14.0%	14.4%
Air Force	5.9%	7.7%	8.4%	8.7%	6.5%	7.5%

Tables 14-D present the most common diagnosis categories from hospitalizations which occurred within one year of the service member’s first disability evaluation, for each service.

Table 14A-D Key Findings

- Among disability discharged service members, four out of the five leading primary diagnosis categories at hospitalization were psychiatric disorders.
 - Psychiatric disorders are also the most common primary diagnosis category in hospitalizations among all active duty service members [12].
 - Three of the four most commonly diagnosed psychiatric disorders (anxiety and stress-related disorders, substance use disorders, and mood disorders) were comparable to the most commonly diagnosed psychiatric disorders among active duty service members (adjustment disorders, alcohol dependence, major depressive disorder, PTSD) [12].

TABLE 14A: Most Common Primary Diagnosis Categories in Hospitalizations among Disability Discharged Soldiers¹, FY 2017-2021

ARMY		
Diagnosis Category	n	%
Anxiety and stress-related disorders	2,198	28.3
Mood disorders	1,538	19.8
Substance use disorders	478	6.2
Dorsopathies	302	3.9
Schizophrenia spectrum and other psychotic disorders	294	3.8
Total DES Hospitalized	7,772	

TABLE 14B: Most Common Primary Diagnosis Categories in Hospitalizations among Disability Discharged Sailors, FY 2017-2021

NAVY		
Diagnosis Category	n	%
Mood disorders	808	27.2
Anxiety and stress-related disorders	669	22.5
Schizophrenia spectrum and other psychotic disorders	205	6.9
Substance use disorders	179	6.0
Poisoning by, adverse effect of and under dosing of drugs, medicaments and biological substances	100	3.4
Total DES Hospitalized	2,968	

TABLE 14C: Most Common Primary Diagnosis Categories in Hospitalizations among Disability Discharged Marines, FY2017-2021

MARINE CORPS		
Diagnosis Category	n	%
Anxiety and stress-related disorders	416	18.9
Mood disorders	387	17.6
Schizophrenia spectrum and other psychotic disorders	138	6.3
Dorsopathies	112	5.1
Substance use disorders	100	4.5
Total DES Hospitalized	2,199	

TABLE 14D: Most Common Primary Diagnosis Categories in Hospitalizations among Disability Discharged Airmen, FY2017-2021

AIR FORCE		
Diagnosis Category	n	%
Mood disorders	292	23.7
Anxiety and stress-related disorders	223	18.1
Schizophrenia spectrum and other psychotic disorders	75	6.1
Substance use disorders	53	4.3
Dorsopathies	40	3.2
Total DES Hospitalized	1,231	

To evaluate the concordance between hospitalization and reason for a disability discharge, DESAR examined the most prevalent primary admission diagnosis, categorized by body system, at hospitalization within each disability category. **Tables 15A-D** present the most common diagnosis categories overall and within the three (3) most common disability body systems (musculoskeletal, psychiatric, and neurological).

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 they had 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 15A-D Key Findings

- As shown in Figure 12, the overall proportion of disability discharged service members hospitalized within one year prior to first disability evaluation ranged from 7.5% (Air Force) to 18.9% (Navy). When assessing 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 hospitalization within one year of disability evaluation were higher among those disability discharged for a psychiatric disorder (11-27%) or a neurological condition (5-14%), and lower among those discharged with a musculoskeletal condition (4-8%).
- There was more concordance between the primary admission diagnosis at hospitalization and reason for disability discharge than was observed with pre-accession medical disqualifications (Tables 13A-D).
 - 8-23% of service members discharged for a psychiatric disorder had been hospitalized for a psychiatric disorder.
 - 1-5% of service members discharged for a neurological condition had been hospitalized for a neurological condition.
 - 1-3% of service members discharged for a musculoskeletal condition had been hospitalized for a musculoskeletal condition.
 - Approximately 25% of Marines disability discharged with an endocrine disorder had been hospitalized for an endocrine disorder within one year prior to their first disability evaluation (results not shown).

ARMY

TABLE 15A: Most Prevalent Hospitalization Body System Categories within Leading Disability Body System Categories, Army FY2017-2021

ARMY		
	n	% ¹
Total Disability Discharged	77,883	
Psychiatric Hospitalization	4,205	5.4
Musculoskeletal Hospitalization	718	0.9
Neurological Hospitalization	384	0.5
Any Hospitalization	7,772	10.0
Musculoskeletal Disability	49,852	
Psychiatric Hospitalization	1,138	2.3
Musculoskeletal Hospitalization	629	1.3
Neurological Hospitalization	147	0.3
Any Hospitalization	2,628	5.3
Psychiatric Disability	31,010	
Psychiatric Hospitalization	3,748	12.1
Musculoskeletal Hospitalization	201	0.6
Neurological Hospitalization	185	0.6
Any Hospitalization	4,686	15.1
Neurological Disability	18,663	
Psychiatric Hospitalization	618	3.3
Musculoskeletal Hospitalization	249	1.3
Neurological Hospitalization	235	1.3
Any Hospitalization	1,435	7.7

1. 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.

NAVY

TABLE 15B: Most Prevalent Hospitalization Body System Categories within Leading Disability Body System Categories, Navy FY2017-2021

NAVY		
	n	% ¹
Total Disability Discharged	15,663	
Psychiatric Hospitalization	17,47	11.2
Neurological Hospitalization	226	1.4
Musculoskeletal Hospitalization	167	1.1
Any Hospitalization	2,968	18.9
Musculoskeletal Disability	5,452	
Psychiatric Hospitalization	149	2.7
Musculoskeletal Hospitalization	107	2.0
Neurological Hospitalization	34	0.6
Any Hospitalization	413	7.6
Psychiatric Disability	6,952	
Psychiatric Hospitalization	1,563	22.5
Neurological Hospitalization	80	1.2
Musculoskeletal Hospitalization	49	0.7
Any Hospitalization	1,859	26.7
Neurological Disability	2,747	
Neurological Hospitalization	133	4.8
Psychiatric Hospitalization	111	4.0
Musculoskeletal Hospitalization	42	1.5
Any Hospitalization	374	13.6

1. 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.

MARINE CORPS

TABLE 15C: Most Prevalent Hospitalization Body System Categories within Leading Disability Body System Categories, Marine Corps FY2017-2021

MARINE CORPS		
	n	% ¹
Total Disability Discharged	15,294	
Psychiatric Hospitalization	966	6.3
Musculoskeletal Hospitalization	356	2.3
Neurological Hospitalization	159	1.0
Any Hospitalization	2,199	14.4
Musculoskeletal Disability	9,170	
Musculoskeletal Hospitalization	307	3.3
Psychiatric Hospitalization	187	2.0
Neurological Hospitalization	55	0.6
Any Hospitalization	704	7.7
Psychiatric Disability	3,838	
Psychiatric Hospitalization	770	20.1
Neurological Hospitalization	51	1.3
Musculoskeletal Hospitalization	45	1.2
Any Hospitalization	978	25.5
Neurological Disability	2,485	
Psychiatric Hospitalization	80	3.2
Neurological Hospitalization	76	3.1
Musculoskeletal Hospitalization	48	1.9
Any Hospitalization	271	10.9

1. 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.

AIR FORCE

TABLE 15D: Most Prevalent Hospitalization Body System Categories within Leading Disability Body System Categories, Air Force FY2017-2021

AIR FORCE		
	n	% ¹
Total Disability Discharged	16,468	
Psychiatric Hospitalization	615	3.7
Neurological Hospitalization	96	0.6
Musculoskeletal Hospitalization	76	0.5
Any Hospitalization	1,231	7.5
Musculoskeletal Disability	7,063	
Psychiatric Hospitalization	78	1.1
Musculoskeletal Hospitalization	56	0.8
Neurological Hospitalization	24	0.3
Any Hospitalization	246	3.5
Psychiatric Disability	6,445	
Psychiatric Hospitalization	544	8.4
Neurological Hospitalization	34	0.5
Musculoskeletal Hospitalization	23	0.4
Any Hospitalization	684	10.6
Neurological Disability	3,921	
Neurological Hospitalization	65	1.7
Psychiatric Hospitalization	45	1.1
Musculoskeletal Hospitalization	30	0.8
Any Hospitalization	206	5.3

1. 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.



LIMITATIONS

The following 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, and therefore not presented. 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. Only hospitalizations occurring in a Military Treatment Facility (MTF) were included in this report. Service members may be treated at non-MTF hospitals however, these data were unavailable to DESAR at the time of this report, and therefore the overall number of hospitalization should be considered an underestimate.
5. 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.

REFERENCES

Publications

1. U.S. Department of the Army, *Army Regulation 635-40. Personnel Separations: Procedures for Disability Evaluation for Retention, Retirement, or Separation*. 2019.
2. Department of Defense, *Department of Defense Instructions (DoDI) 1332.18: Disability Evaluation System*. 2018.
3. Department of Veteran Affairs, *38 CFR Book, Schedule for Rating Disabilities*. 2021.
4. The Assistant Secretary of the Navy Manpower and Reserve Affairs (M&RA). *SECNAV M-1850.1. Disability Evaluation System Manual*. 2019.
5. Department of the Air Force, *Air Force Instruction 36-3212*. 2020.
6. Piccirillo, A., Gubata, M., Blandford, C., et al., *Temporary Disability Retirement Cases: Variations in Time to Final Disposition and Disability Rating by Service and Medical Condition*. *Military Medicine*, 2012. 177: p. 417-422.
7. Office of the Under Secretary of Defense, *The Temporary Disability Retired List (TDRL): An Assessment of its Continuing Utility and Future Role*. 2008.
8. Office of the Under Secretary of Defense (Personnel and Readiness), *Wounded, III, and/or Injured Compensation and Benefits Handbook*. 2020.
9. Congress, U.S., *S. 2943 National Defense Authorization Act for Fiscal year 2017*. 2017.
10. Department of Defense, *Department of Defense Instruction (DoDI) 6130.03 Volume 1: Medical standards for appointment, enlistment, or induction into the military services*. 2018.
11. Washington, W., et al., *Accession Medical Standards Analysis and Research Activity (AMSARA) 2020 Annual Report*.
12. Armed Forces Health Surveillance Branch, *Hospitalizations, active component, U.S. Armed Forces, 2020*. *Medical Surveillance Monthly Report*, 2021. 27.
13. Weber, N., et al., *Accession Medical Standards Analysis and Research Activity (AMSARA) 2021 Annual Report*.

Pictures

Alfred, C. (2017). Flag Fix [Photograph]. VIRIN 170621-N-ON977-0069C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002037483/>.

Barrios, K. (2020). Trio Transit [Photograph]. VIRIN 220309-N-NO901-0778C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002974450/>.

Engblom, E. (2017). Airborne Review [Photograph]. VIRIN 170525-F-AX764-1153C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002037292/>.

Ferdinando, L. (2019). Pentagon Flag [Photograph]. VIRIN 190911-D-BN624-0441C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002184259/>.

Finn, E. (2019). Sailor Signals [Photograph]. VIRIN 190329-Z-CG859-1902A. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002109869/>.

Patricio, J. (2021). Evacuation Training [Photograph]. VIRIN 210723-A-YF786-1116M. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002815840/>.

Pitt, K. (2022). Supplemental Meals [Photograph]. VIRIN 220126-A-AW719-1024. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002936391/>.

Rufus, Z. (2022). Shot in Silhouette [Photograph]. VIRIN 220413-F-LY743-1008M. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002982320/>.

Siemandel, J. (2021). Sample Testing [Photograph]. VIRIN 210105-D-MN117-916C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002561670/>.

Smith, H. (2022). Angels Overhead [Photograph]. VIRIN 220214-N-HS181-1091C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002941831/>.

Spessa, K. (2017). Color Guard View [Photograph]. VIRIN 170619-F-TY749-987G. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002037482/>.

Taekens, J. (2022). Competitive Fired [Photograph]. VIRIN 220429-A-JF826-1014M. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002988033/>.

Tanenbaum, K. (2019). Glorious Flag [Photograph]. VIRIN 191116-F-YM181-0013C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002215782/>.

Vanshur, B. (2022). Purple Haze [Photograph]. VIRIN 220330-Z-AY311-1568C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/200297519/>.

Woods, J. (2020). Leap Frogs [Photograph]. VIRIN 200704-N-IQ655-1081A. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002451340/>.

ACRONYMS

AETC	Air Education Training Command
AMSARA	Accession Medical Standards Analysis and Research Activity
CMS	Center for Medicare & Medicaid Services
CTS	Contingency Tracking System
DES	Disability Evaluation System
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
NG	National Guard
NRC	US Navy Recruiting Command
PEB	Physical Evaluation Board
PDQ	Permanent Disqualification
PDRL	Permanent Disability Retirement List
SSN	Social Security Number
SWODDB	Separated without DOD Disability Benefits
SWSP	Separated with Severance Pay
TDRL	Temporary Disability Retirement List
USAREC	U.S. Army Recruiting Command
USMEPCOM	US 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

Disability Evaluation System Analysis and Research

Medical Standards Analytics and Research

Statistics and Epidemiology Branch

Center for Enabling Capabilities

Walter Reed Army Institute of Research

503 Robert Grant Avenue

Silver Spring, MD 20910

<https://wrair.health.mil/Collaborate/AMSARA-DESAR/>

