



2023

Annual Report

Disability Evaluation System Analytics and Research (DESAR)



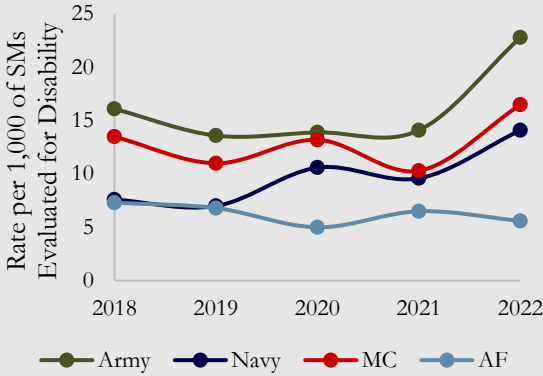


REPORT AT A GLANCE

FY 2018-2022 Disability Evaluation System (DES) Metrics

Evaluation Metrics

Evaluation Rate Trend



Overall evaluation rates ranged from 6.3 (Air Force) to 16.1 (Army) per 1,000 service members (SM)

Rates Higher For:

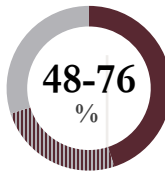
- **Enlisted**
2-3x higher than Officers
- **Active Duty**
3-7x higher than Reserve
- **Females**
1.2 to 2.6x higher than males
- **Other race**
2-3x higher than White or Black race

Discharge Metrics

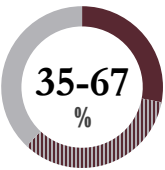
Most Common VASRDs

- Musculoskeletal 33-63%**
Dorsopathies
Limitation of Motion
- Psychiatric 23-49%**
Post-Traumatic Stress Disorder (PTSD)
Mood Disorders
- Neurological 16-25%**
Paralysis
Migraine

Ratings and Dispositions



Combined disability rating of 30% or greater



Placed on the permanent disability retirement list (PDRL)

Combat and Deployment



had a combat-related condition



4 of the 5 most common conditions were musculoskeletal-related, regardless of combat or deployment status

Medical History

Medical Disqualifications (DQs)

7-8%

with history of pre-accession medical DQ - similar proportion to all FY 16-20 accessions

Hospitalization within 1 Year

4 out of 5 leading diagnoses were psychiatric disorders

Mood disorders

Anxiety disorders

Substance abuse

Schizophrenia spectrum

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 (8-21%).

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Material has been reviewed by the Walter Reed Army Institute of Research. There is no objection to its publication. The opinions or assertions contained herein are the private views of the authors, and are not to be construed as official, or as reflecting true views of the Department of the Army or the Department of Defense. The investigators have adhered to the policies for protection of human subjects as prescribed in AR 70–25.

Mission and Objectives

MISSION

Execute advanced analytics and epidemiological research to inform Department of Defense (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



Table of Contents

I	Executive Summary
1	Methods DES Data Sources • DES Database Characteristics • Key DES Elements • Other Data Sources and Elements
5	Descriptive Statistics – Evaluations DES Data Metrics • Rates and Trends of Disability Evaluations • Demographic and Service-Related Characteristics • Disability Ratings and Dispositions
19	Descriptive Statistics – Discharges Unfitting Conditions • Combat-related Determination and Deployment Status
36	Medical History Pre-accession Disqualifications • Hospitalizations within 1 Year of First Disability Evaluation
55	Limitations
56	References
59	Acronyms

Executive Summary

At the request of the Assistant Secretary of Defense (Health Affairs), the DESAR team was established to provide audits and studies of the DES. 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 (PEB) between fiscal year (FY) 2018 to 2022.



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 Overseas Contingency Operations (OCO) 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

Section 1: Descriptive Statistics of Disability Evaluations

From the fiscal year 2018 to 2022, approximately 145,000 Army, Navy, Marine Corps, and Air Force service members were evaluated for disability discharge by a PEB.

DES DATA METRICS – RATE AND TRENDS (TABLE 2 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.

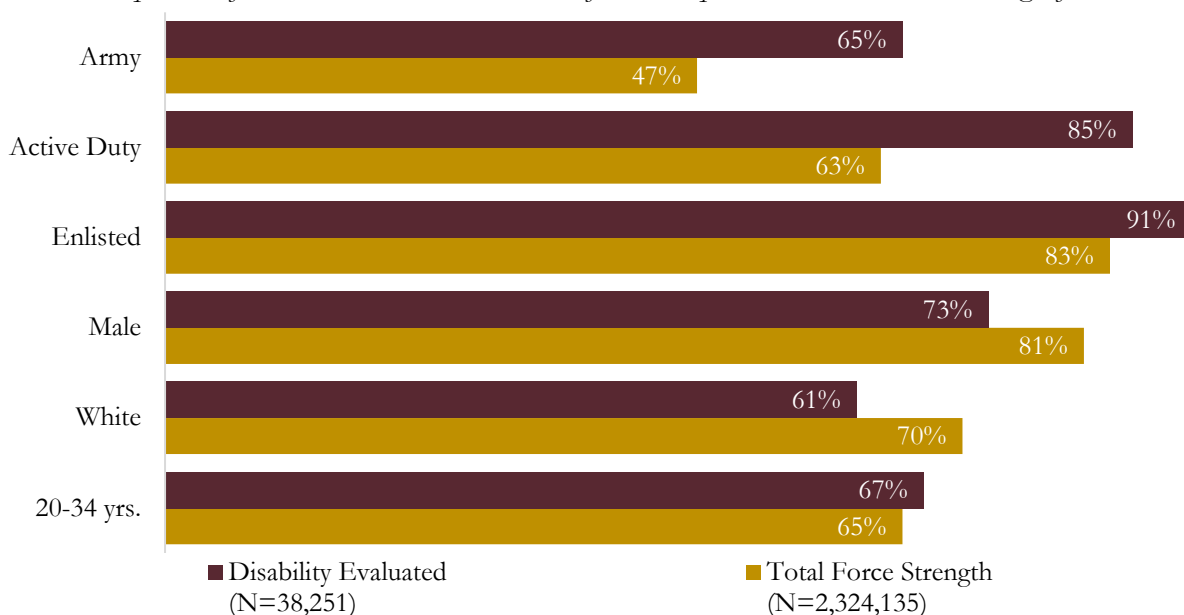
- The overall rate of disability evaluation was higher in the Army (16.1) and Marine Corps (12.9) compared to the Navy (9.8) and Air Force (6.3).
- Over the five years, there were upward trends in the Army, Navy, and Marine Corps. However, the upward trend for the Army and Marine Corps may be driven by the increase of evaluations in 2022. Meanwhile, Air Force had a downtrend trend in evaluations.

DEMOGRAPHICS AND SERVICE-RELATED CHARACTERISTICS (TABLES 3-4)

Some demographic and service-related characteristics among service members evaluated for disability were similar to the total force strength for FY 2022. However, other characteristics were associated with higher frequencies and rates of disability evaluation.

- For all services, disability evaluation rates were generally higher among active-duty service members and enlisted components.
- The disability evaluation rate for female service members was 1.3-2.6 times higher than males.
- Among Soldiers and Marines, the disability evaluation rate for service members who identified as other race was 2-3 times higher than those who identified as White.
- For the Army, the disability evaluation rate increased as age increased, while for all other services, the rate was highest among those aged 20-34 years.

Comparison of Most Common Characteristics of DES Population vs. Total Force Strength for FY 2022



DISABILITY RATING AND DISPOSITION (TABLES 5-6, FIGURES 3-4)

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, 48-76% of boarded service members received a rating of 30% or greater, qualifying for disability retirement.
- PDRL was the most commonly assigned disposition among Soldiers (67%), Sailors (39%), 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.

Section 2: Descriptive Statistics of Disability Discharges

UNFITTING CONDITIONS (TABLES 7-8, FIGURES 5)

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

- *Musculoskeletal*: Among disability discharges, about 60% of Soldiers and Marines and about 35% of Airmen and 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 Army, Navy, and Air Force over the five-year period.
- *Psychiatric*: Roughly 23% (Marine Corps) to 49% (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, and by FY 2019, psychiatric disorders became the most common reason for disability discharge in both services.
 - Between 12%-27% of disability discharged service members had service-connected PTSD. Mood disorders were also a common reason for disability discharge in all services, ranging from 7% (Marine Corps) to 21% (Navy).
- *Neurological*: About 16% (Marine Corps) to 25% (Army) 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 & OCO DEPLOYMENT (TABLES 9-10, FIGURE 6)

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.

- During FY 2018-2022, the proportion of disability discharges with a combat-related condition ranged from 5% (Navy) to 33% (Army).

- Among those with a history of OCO deployment, 7% (Navy) to 48% (Army) were determined to have a combat-related condition.
- When assessing unfitting conditions stratified by both combat-related determination and OCO deployment status, the five most common conditions were similar across the services and combat/OCO deployment strata, although their distributions differed considerably.
- Three of the five most common unfitting conditions were musculoskeletal-related, regardless of combat-related determination and OCO 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 DISQUALIFICATION (DQ) (TABLES 11-12, FIGURE 7)

- Among disability-evaluated service members in FY 2018-2022 who had a pre-accession MEPS exam, approximately 7% (Marine Corps and Air Force) to 8% (Army) had a history of a pre-accession medical DQ, which is similar to the proportion of medical DQ among all enlisted military accessions [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 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 13-14, FIGURE 8)

- Overall, 8.0% (Air Force) to 16.6% (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 one 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.
 - 8% (Air Force) to 21% (Marine Corps) of psychiatric-related disability discharges had been hospitalized for a psychiatric disorder within one year prior to their first disability evaluation.

Methods

STUDY POPULATION

The DES has multiple phases, including initial review by a Medical Evaluation Board (MEB). Cases potentially involving a disabling condition are forwarded to the relevant service's PEB. The population for this report consists of all service members evaluated by an Army, Navy or Air Force PEB between October 1, 2017 and September 30, 2022 (FY 2018-2022).

KEY DES ELEMENTS

All service-specific PEB datasets provided to DESAR by each service (U.S. Army Physical Disability Agency, Air Force Personnel Center, Secretary of the Navy Council of Review Board) contained several key data elements regarding the PEB evaluation, including demographic and service-related characteristics, date of PEB, Veterans Affairs Schedule for Rating Disabilities (VASRD) codes, total disability rating, disposition, disposition date, and combat-related determination.

Inter-service differences exist in the PEB data received by DESAR. For example, the Army and Navy sends all PEB evaluation records per service member per year, while the Air Force sends only the most recent evaluation record per service member per year.

Demographic and Service-Related Characteristics

Information on demographic variables (i.e., age, sex, race) and service-related characteristics (i.e., military occupational specialty (MOS), rank, component) received by DESAR varied by service and year. For demographic variables missing in the DES dataset, DESAR utilized information provided in other military databases, such as Defense Manpower Data Center (DMDC) personnel records and MEPs application records.

All military components (active duty, Reserve, National Guard) and service ranks (enlisted and officer) were included in this report. The Army and Air Force National Guard components were categorized within the Reserve component. The officer category included both commissioned and warrant officers.

Unfitting Conditions

Unfitting conditions are coded using VASRD codes. VASRD codes are not comprehensive diagnostic codes, but rather indicate general medical conditions derived from more specific MEB diagnoses [2]. Each VASRD code has specific associated criteria for assigning a disability rating. In cases where the true disabling condition had no directly applicable VASRD code, service members are assigned an analogous code that best approximates the functional impairment rendered by the condition. Service

members may be evaluated for multiple unfitting conditions; therefore, disability evaluation records may have multiple VASRD codes.

Although this report’s results only include unfitting conditions, some DES metrics should be interpreted with caution, as inter-service differences may be impacted by the data sent to DESAR. For example, the Navy sends data on all conditions evaluated, while the Army sends all unfitting conditions, and the Air Force sends up to three (3) unfitting conditions.

Due to large number of individual VASRD codes, DESAR reports disabling conditions based on body system categories listed in 38 Code of Federal Regulations (CFR) Book C, Schedule for Rating Disabilities, as well as broad VASRD categories (e.g., limitation of motion) [3] (**Table 1**).

TABLE 1: 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

Dispositions

While the main disability case outcome categories, or “dispositions”, are generally similar across services, small differences exist among some categories. To allow for inter-service comparability of disposition types, DESAR grouped dispositions into the following seven (7) categories. For definitions on DoD or service-specific dispositions, please refer to DoD Instruction (DoDI) 1332.18 [2], Army Regulation (AR) 635.40 [1], Secretary of the Navy (SECNAV) M-1850 [4], or Air Force Instruction (AFI) 36-3212 [5].

1. **Permanent Disability Retirement List (PDRL):** This disposition is assigned when the service member is found unfit with a condition that is considered stable (unlikely to change

within three years) and has either a combined disability rating of 30 percent or higher or has a length of service greater than 20 years. Service member assigned this disposition are eligible to receive ongoing payments and care throughout their lifetime.

2. **Temporary Disability Retirement List (TDRL):** A service member is placed on the temporary disability retirement list when the condition has not stabilized sufficiently to accurately assess the degree of disability. To be eligible for this interim disposition, the service member must be determined to be unfit for continued service due to a temporary or unstable condition (i.e., may improve or worsen within three years). 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 FY 2021.

3. **Separation with Severance Pay (SWSP):** This 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]. Service members assigned this disposition will be given a one-time severance payment but limited or no ongoing benefits.
4. **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.
5. **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.
6. **Other:** This disposition category is comprised of administrative actions or separations, including 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 DoDI 1332.18 [2]. Since combat variables received by DESAR differ between each service’s DES, DESAR consolidates the service-specific information into a “combat” flag variable to indicate if an unfitting condition was incurred from armed conflict, combat-related activities, or an instrumentality of war.

OTHER DATA SOURCES AND ELEMENTS

DESAR has access to several data sources complementary to the PEB evaluations data to allow richer understanding of the demographic, service and medical backgrounds of service members evaluated for disability discharge. For each of the datasets listed below, DESAR's access dates back to 1995, thus covering roughly 29 years of historical information on service members separated in 2023.

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), 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 MEPS 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 USMEPCOM 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 DMDC provides data on individuals entering military service (gain or accession), service members discharged from military service (loss or discharged). From these data, DESAR can determine important aspects of service history such as total service time prior to disability evaluation, which can play an important role in determining a disability disposition. Most notably, service members determined to have a disabling condition after at least 20 years of service are entitled to permanent disability retirement benefits, regardless of degree of disability. DESAR can also identify any significant gaps in service, changes in service branch or component, and other relevant features of service. DESAR also receives data on service members deployed in support of OCO.

Hospitalization

DESAR receives Military Health System (MHS) direct care hospitalization data from the MHS data repository (MDR). Information includes admissions of active-duty officers and enlisted personnel, and medically eligible reserve component personnel. 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), designed to be consistent with the medical categories specified in the DoD accession medical standards (DoDI 6130.03 Vol 1).

Section I: Descriptive Statistics of Disability Evaluations

I. DES DATA METRICS – RATE AND TRENDS

Table 2 presents metrics of PEB evaluations which occurred between fiscal years 2018 and 2022. Throughout this report, an evaluation is a service member’s unique encounter with the PEB, defined by identifier (i.e., social security number (SSN)) and disposition date. Service members may have more than one disability evaluation, particularly if placed and/or retained on the TDRL.

Table 2 Key Findings

- From FY 2018-2022, 164,057 PEB disability evaluations were completed on 144,654 service members.
- On average, service members initially 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 1.5; Marine Corps 1.6; Air Force 1.6)

TABLE 2: DES Evaluation Metrics, FY 2018-2022

	Army	Navy	Marine Corps	Air Force
Total SMs	89,715	21,379	16,502	17,058
Total evaluations	102,461	23,887	18,577	19,132
Average # of evaluation/SM	1.1	1.1	1.1	1.1
Average # of VASRDs/evaluation¹	2.2	1.5	1.6	1.6

SM: Service member; VASRD: Veterans Administration Schedule for Rating Disabilities

1. The average number of VASRDS per evaluations counts the number of unique VASRDS per evaluation.

Discussion of Results – Table 2: Inter-service differences in the disability evaluation process and variations in the type of evaluations each PEB sends to DESAR may account for some observed differences in the total number of evaluations per service. 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 true number of evaluations per Airman.

Figure 1 presents the temporal trend of the number of PEB 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 (FY 2018-2022), with the Army, Navy and Marine Corps having an influx from 2021-2022.
- During the period, the highest number of PEB disability evaluations occurred in FY 2022 for the Army and Navy, and FY 2018 for the Marine Corps and Air Force.



FIGURE 1: Total PEB Evaluations by Service and Year: FY 2018-2022

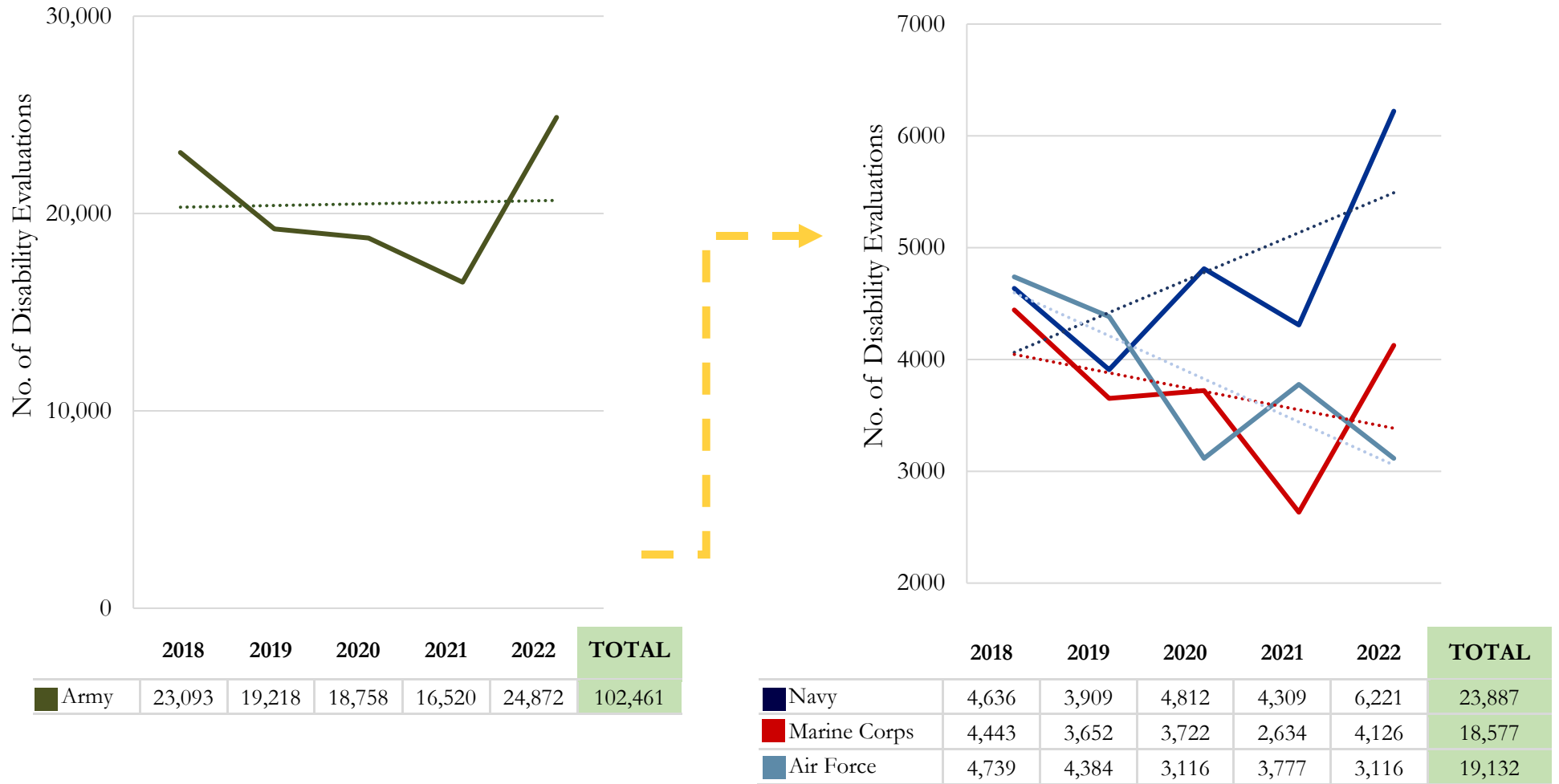


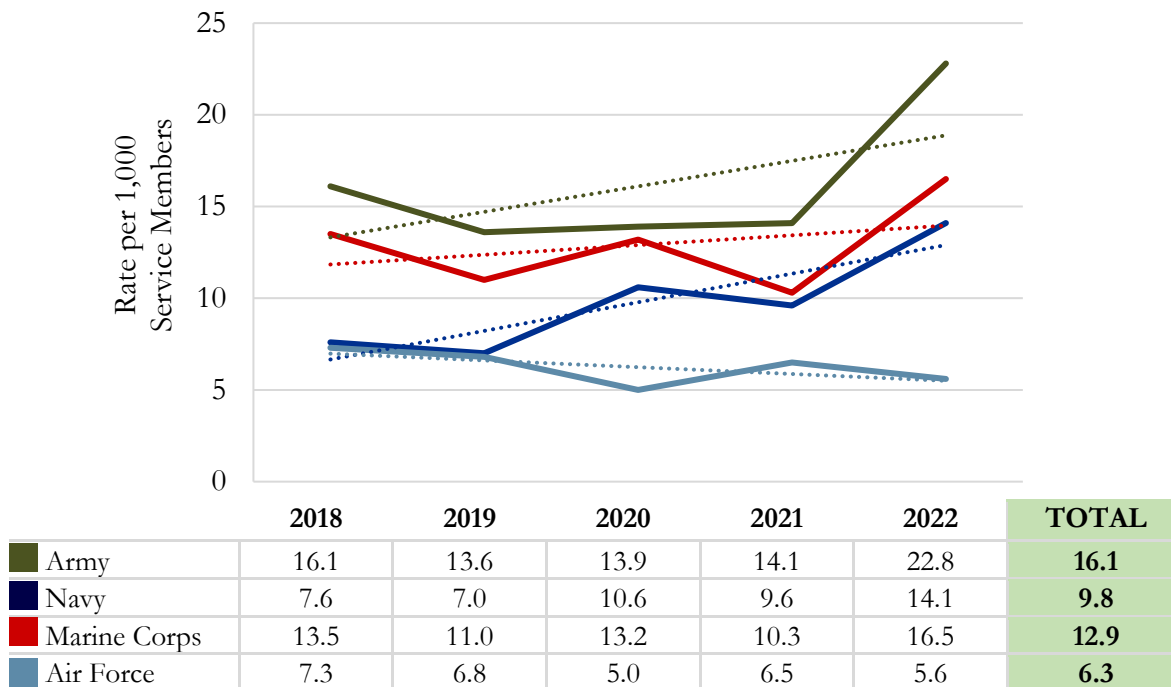
Figure 2 describes PEB disability evaluation rate per FY (solid lines) and the linear trend (dotted lines). PEB disability evaluation rates were calculated per 1,000 service members in the relevant service and are based on the total number of service members per service as of 30 September of the fiscal year in question. These denominators provide context for the disability evaluation numbers in the services, but they cannot account for differences between service populations on disability risk factors such as service member age, sex, time in service, and military occupation.

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

Figure 2 Key Findings

- Overall, the Army had the highest rate of disability evaluation (16.1 per 1,000 Soldiers) and the Air Force had the lowest rate (6.3 per 1,000 Airmen).
- Over the five-year period, the disability evaluation rate for the Army, Navy, and Marine Corps trended upward, though the Army and Marine Corps trend was driven almost exclusively by the considerable increase in evaluations in 2022. The Air Force's disability evaluation rate trended downward over time.

FIGURE 2: Rate (per 1,000) of Service Members Evaluated for Disability Discharge by Service and Fiscal Year



II. SERVICE-RELATED AND DEMOGRAPHIC CHARACTERISTICS

Tables 3 and 4 present the distribution and rates (per 1,000 service members within the relevant demographic category) of service-related and demographic characteristics among service members evaluated by the PEB.

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

Table 3 Key Findings

- Across all services, disability evaluation rates were highest among enlisted (2 to 3 times the rate of Officers) and active-duty (3 to 7 times the rate of Reserve/National Guard components) service members.
- The Army had a higher number of 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.

TABLE 3: Distribution and Rate (per 1,000) of Service-Related Characteristics of Service Members Evaluated for Disability Discharge by Service, FY 2018-2022

Characteristic	Army (n=89,715)			Navy (n=21,379)			Marine Corps (n=15,502)			Air Force (n=17,058)		
	n	%	Rate	n	%	Rate	n	%	Rate	n	%	Rate
Rank												
Enlisted	80,738	90.0	17.4	19,947	93.3	11.0	15,900	96.4	13.9	15,670	91.9	7.0
Officer	8,678	9.7	9.4	1,431	6.7	3.9	602	3.6	4.4	1,356	7.9	2.8
Missing	299	0.3	-	1	0.0	-	-	-	-	32	0.2	-
Component												
Active Duty	69,920	77.9	26.1	20,743	97.0	11.2	16,011	97.0	15.1	14,463	84.8	8.1
Reserve/NG	19,791	22.1	6.8	636	3.0	2.0	491	3.0	2.2	2,595	15.2	2.7
Missing	4	0.0	-	-	-	-	-	-	-	-	-	-

NG: National Guard

Table 4 Key Findings

- Most service members evaluated for disability discharge were male (64-81%), aged 20-34 years (61-85%), or identified as White (58-75%).
- The disability evaluation rate for female service members was 1.3 (Army) to 2.6 times (Marine Corps) higher than males and trended upward over the past five years for the Army and Navy (results not shown).
- 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 4: Distribution and Rate (per 1,000) of Demographic¹ Characteristics of Service Members Evaluated for Disability Discharge by Service, FY 2018-2022

Characteristic	Army (n=89,715)			Navy (n=21,379)			Marine Corps (n=16,502)			Air Force (n=17,058)		
	n	%	Rate	n	%	Rate	n	%	Rate	n	%	Rate
Sex												
Male	69,437	77.4	15.2	13,770	64.4	8.0	13,356	80.9	11.3	11,664	68.4	5.5
Female	20,278	22.6	19.9	7,578	35.4	16.6	3,109	18.8	29.6	5,394	31.6	9.0
Missing	-	-	-	31	0.1	-	37	0.2	-	-	-	-
Age												
<20	590	0.7	0.9	151	0.7	0.7	381	2.3	1.4	105	0.6	0.6
20-24	16,875	18.8	10.9	4,526	21.2	7.6	6,814	41.3	12.0	3,572	20.9	5.5
25-29	20,640	23.0	17.7	6,439	30.1	13.1	4,530	27.5	21.4	4,564	26.8	7.7
30-34	16,758	18.7	20.5	4,843	22.7	13.6	2,667	16.2	25.2	3,281	19.2	6.8
35-39	13,429	14.8	21.4	2,969	13.9	11.2	1,420	8.6	18.8	2,322	13.6	5.8
≥40	20,378	22.7	26.6	2,436	11.4	9.4	674	4.1	12.0	2,502	14.7	6.1
Missing	1,225	1.4	-	16	0.1	-	16	0.1	-	712	4.2	-
Race												
White	52,406	58.4	13.3	12,529	58.6	9.2	12,373	75.0	12.0	12,206	71.6	6.2
Black	21,094	23.5	19.2	4,415	20.7	11.7	1,703	10.3	12.8	2,851	16.7	7.4
Other	15,369	17.1	40.5	4,251	19.9	12.5	2,338	14.2	28.4	1,616	9.5	6.0
Missing	846	0.9	-	184	0.9	-	88	0.5	-	385	2.3	-

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

III. DISABILITY RATING & DISPOSITION

Tables 5A-D provide service-specific comparisons of the distribution and ranking of the combined disability rating among service members evaluated for disability discharge from FY 2018-2022. Service-specific temporal trends of combined disability ratings categorized by severity (unrated, low, moderate, severe) are shown in **Figures 3A-D**. For service members with more than one disability evaluation, the rating from the most recent disability evaluation was used.

Tables 5A-D & Figures 3A-D Key Findings

- The distributions of ratings reflect distinct service patterns in severity ratings, with the Air Force evaluations having the highest overall ratings and the Marine Corps evaluations having the lowest.
 - The top 5 ratings for Marine Corps evaluations are in ascending order from 10-50%.
 - The Army's most frequent rating is 70%, but the next 5 most frequent are within the 10-50% range.
 - The Navy and Air Force were more evenly dispersed across the 10-100% range, with most common ratings of 50% and 70%, respectively. The distribution of ratings.
- Over the five-year period, over 60% of disability evaluated Soldiers, Sailors, and Airmen, and over 30% of disability evaluated 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 and Air Force, moderate (30-50%) for the Navy, and low (0-20%) for the Marine Corps.
- Over the five years, the percentage of ratings under the severe category trended upward for all services.
 - The proportion assigned a rating in the severe category was two to three times higher among service members evaluated in FY 2022 than those evaluated in FY 2018 for the Navy and Marine Corps.

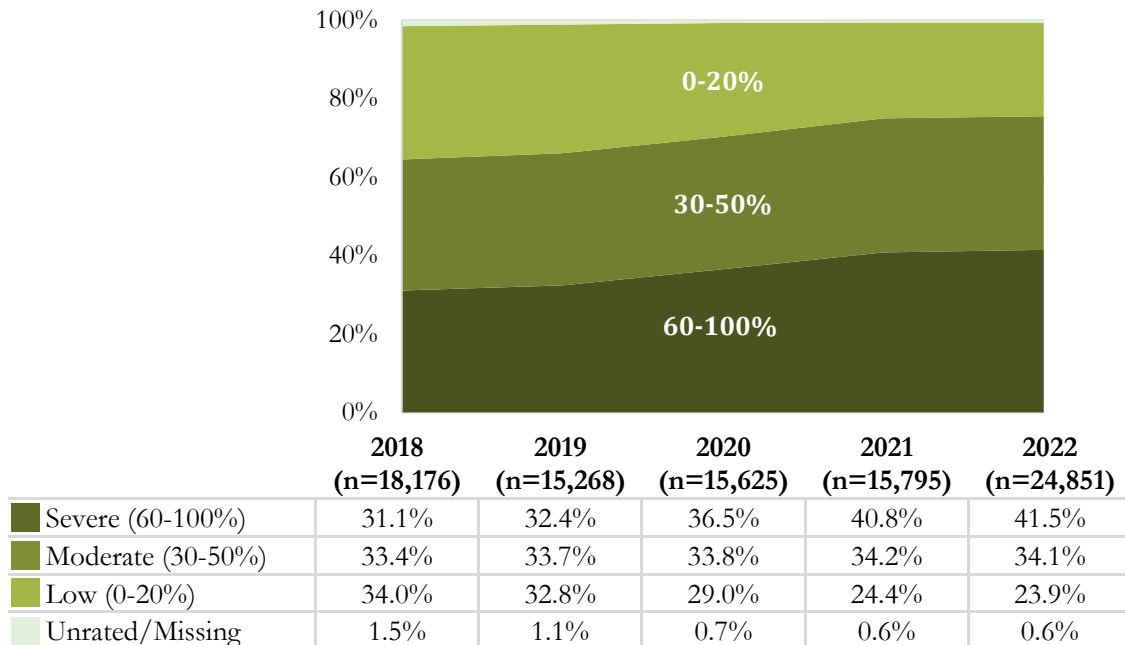
ARMY

TABLE 5A: Distribution and Ranking of Most Recent Combined Rating by FY: Army FY 2018-2022

	2018 (n=18,176)	2019 (n=15,268)	2020 (n=15,625)	2021 (n=15,795)	2022 (n=24,851)	Total (N=89,715)
Combined Rating	%	%	%	%	%	%
0	2.1	2.2	1.9	1.7	1.8	1.9
10	16.9	16.3	14.3	11.3	10.7	13.7
20	15.0	14.2	12.8	11.4	11.4	12.9
30	12.2	12.1	11.4	10.0	9.8	11.0
40	10.7	9.8	9.9	9.6	10.0	10.0
50	10.5	11.7	12.6	14.5	14.3	12.8
60	7.2	7.0	7.1	7.0	6.6	7.0
70	11.4	12.4	14.9	18.5	19.4	15.7
80	5.5	6.0	6.5	6.4	6.6	6.2
90	2.2	2.4	2.7	2.8	2.8	2.6
100	4.8	4.6	5.3	6.1	6.1	5.4
UR	1.2	1.0	0.5	0.5	0.5	0.7
MISS	0.3	0.1	0.2	0.1	0.1	0.2

UR: Unrated, Miss: Missing

FIGURE 3A: Temporal Trend of Ratings Category: Army FY 2018-2022



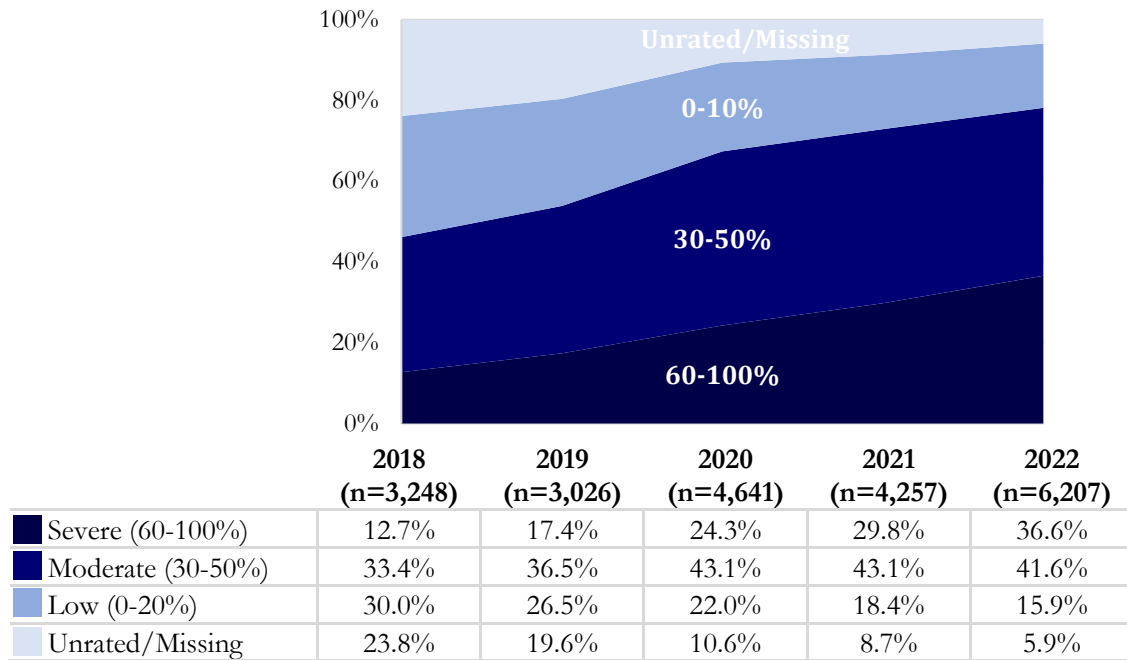
NAVY

TABLE 5B: Distribution and Ranking of Most Recent Combined Rating by FY: Navy FY 2018-2022

	2018 (n=3,248)	2019 (n=3,026)	2020 (n=4,641)	2021 (n=4,257)	2022 (n=6,207)	Total (N=21,379)
Combined Rating	%	%	%	%	%	%
0	2.9	3.1	2.2	2.1	1.6	2.2
10	15.9	14.0	11.2	9.9	8.5	11.3
20	11.3	9.4	8.5	6.4	5.8	7.8
30	14.9	15.3	16.0	15.6	15.2	15.4
40	9.2	8.1	8.6	8.7	7.7	8.4
50	9.3	13.1	18.6	18.8	18.7	16.5
60	3.2	3.4	4.1	5.4	5.5	4.5
70	4.3	8.9	13.7	17.3	22.0	14.7
80	1.2	1.2	1.8	2.5	3.3	2.2
90	0.2	0.2	0.5	0.5	1.0	0.6
100	3.8	3.8	4.3	4.1	4.8	4.2
UR	23.4	19.1	9.8	8.2	5.4	11.6
MISS	0.5	0.5	0.7	0.5	0.5	0.5

UR: Unrated, Miss: Missing

FIGURE 3B: Temporal Trend of Ratings Category: Navy FY 2018-2022



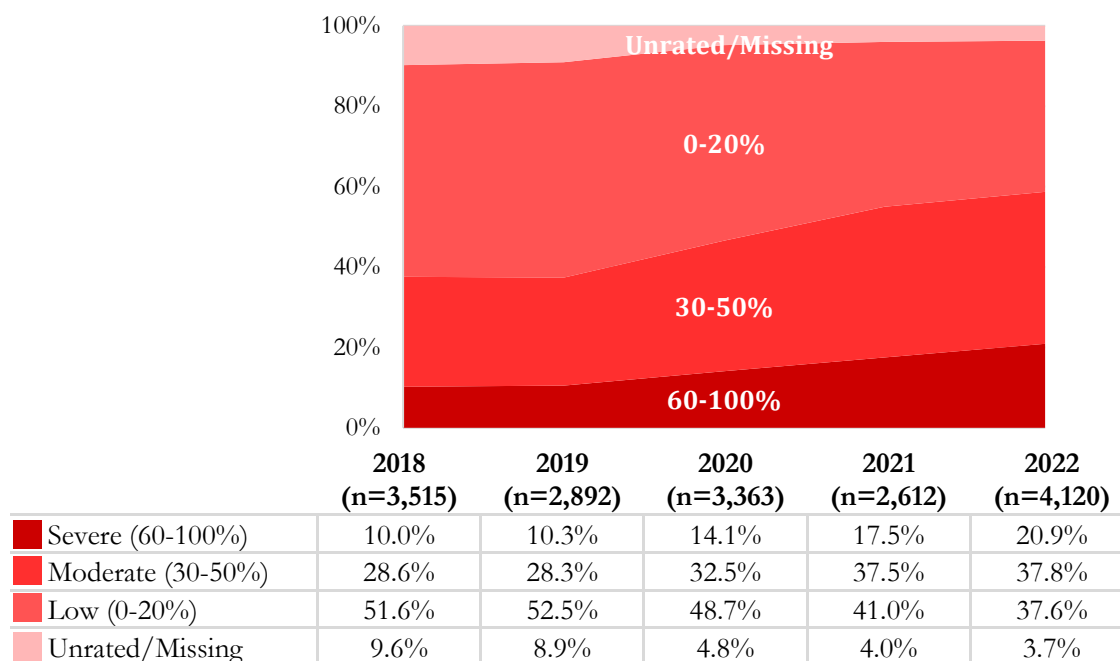
MARINE CORPS

TABLE 5C: Distribution and Ranking of Most Recent Combined Rating by FY: Marine Corps FY 2018-2022

	2018 (n=3,515)	2019 (n=2,892)	2020 (n=3,363)	2021 (n=2,612)	2022 (n=4,120)	Total (N=16,502)
Combined Rating	%	%	%	%	%	%
0	4.0	4.3	3.1	3.3	2.5	3.4
10	29.7	28.8	26.8	21.2	19.9	25.2
20	17.9	19.3	18.8	16.5	15.2	17.4
30	12.5	12.2	15.0	17.3	15.8	14.5
40	8.4	7.8	9.7	12.4	13.8	10.6
50	7.6	8.2	7.9	7.8	8.2	7.9
60	3.9	3.3	4.3	4.5	4.9	4.2
70	3.5	4.3	6.5	6.9	10.1	6.4
80	1.2	1.2	1.0	1.4	1.8	1.3
90	0.3	0.2	0.3	0.6	0.8	0.4
100	1.3	1.3	2.1	4.1	3.3	2.4
UR	9.1	8.5	4.4	3.7	3.1	5.7
MISS	0.5	0.4	0.4	0.3	0.7	0.5

UR: Unrated, Miss: Missing

FIGURE 3C: Temporal Trend of Ratings Category: Marine Corps FY 2018-2022



AIR FORCE

TABLE 5D: Distribution and Ranking of Most Recent Combined Rating by FY: Air Force FY 2018-2022

	2018 (n=3,944)	2019 (n=3,737)	2020 (n=2,748)	2021 (n=3,556)	2022 (n=3,073)	Total (N=17,058)
Combined Rating	%	%	%	%	%	%
0	2.6	2.1	1.6	1.6	1.6	1.9
10	9.3	7.6	6.3	6.2	4.4	6.9
20	6.8	6.9	5.1	4.8	4.0	5.6
30	16.9	15.2	13.0	12.4	9.5	13.6
40	10.4	9.3	8.2	6.9	7.3	8.5
50	13.8	16.4	17.9	14.6	15.6	15.5
60	7.2	7.5	7.2	6.7	6.6	7.0
70	12.2	16.7	17.3	19.5	22.4	17.4
80	4.3	5.0	5.7	4.5	5.1	4.9
90	2.0	2.4	2.3	2.7	2.6	2.4
100	5.8	6.6	6.5	7.3	7.7	6.7
UR	8.2	3.9	2.9	4.2	3.2	4.7
MISS	0.5	0.5	6.0	8.6	10.1	4.8

UR: Unrated, Miss: Missing

FIGURE 3D: Temporal Trend of Ratings Category: Air Force FY 2018-2022

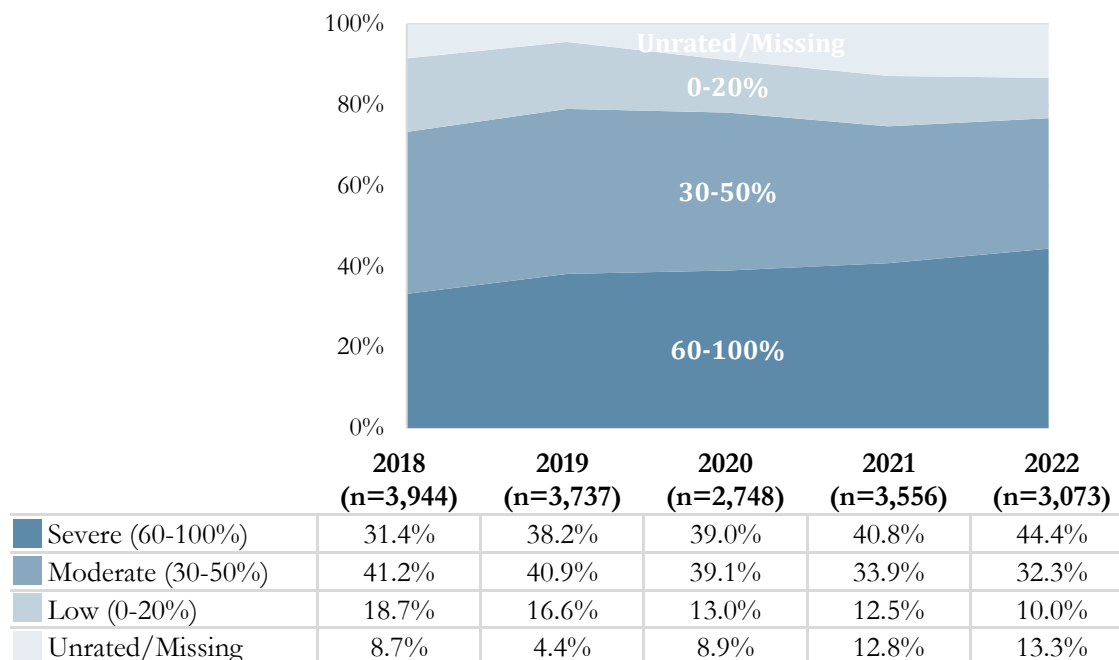


Table 6 compares the distribution and rates (per 10,000 service members) of disability dispositions among service members evaluated for disability from FY 2018-2022. Service-specific temporal trends of selected dispositions are shown in **Figures 4A-D**. Rates are based on total service population of the relevant service branch, using data from the 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 6 & Figures 4A-D Key Findings

- Placement on PDRL was the most commonly assigned disposition for the Army (67%), Navy (39%), and Air Force (59%), while SWSP was the most common for the Marine Corps (45%).
- Over the five years, there was a downward trend in the proportion of evaluations of Soldiers, Sailors, Marines, and Airmen receiving either limited or no disability benefit, i.e., those assigned a disposition of SWSP, fit/limited duty, or SWODDB.
- 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 6: Distribution and Rate (per 10,000 Service Members) for Disposition by Service, FY 2018-2022

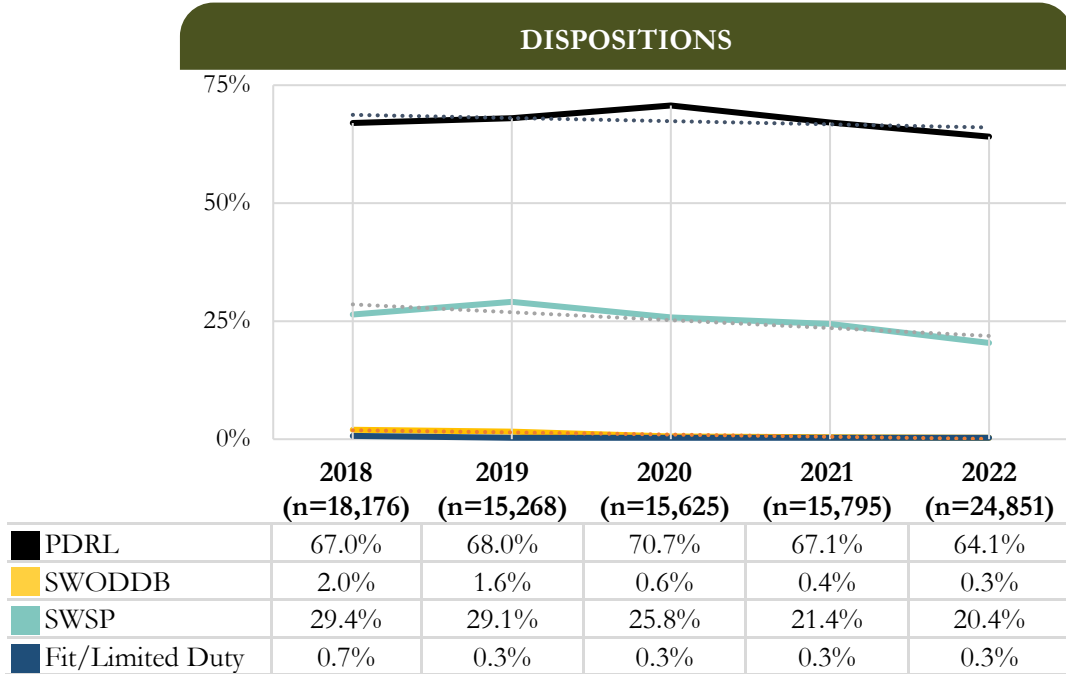
Dispositions	Army (n=89,715)		Navy (n=21,379)		Marine Corps (n=16,502)		Air Force (n=17,058)	
	%	Rate	%	Rate	%	Rate	%	Rate
Placement on PDRL	67.0	107.8	38.5	37.8	35.0	45.1	59.4	37.2
SWODDB	1.0	1.5	2.7	2.6	1.5	1.9	1.8	1.1
SWSP	24.8	39.9	20.3	20.0	44.6	57.4	13.1	8.2
Fit/Limited Duty	0.4	0.6	10.6	10.4	4.8	6.2	3.0	1.9
Placement on TDRL	6.1	9.8	25.2	24.7	10.9	14.0	16.2	10.1
Retained on TDRL	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.0
Other ¹	0.7	1.2	2.7	2.6	3.2	4.1	4.8	3.0

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

1. 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.

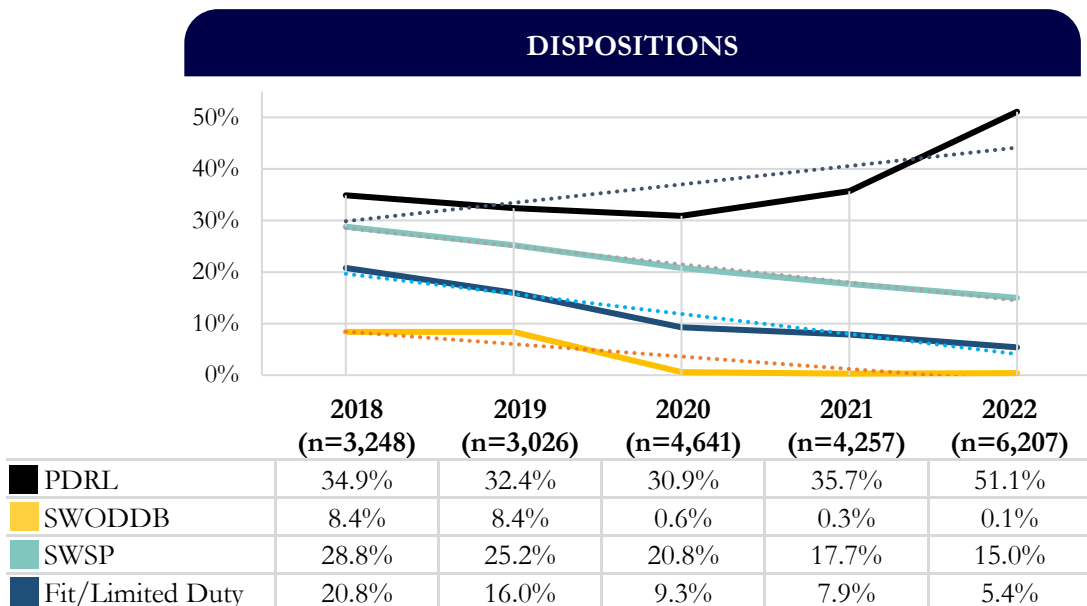
ARMY

FIGURE 4A: Temporal Trend of Selected Dispositions Assigned to Soldiers Disability Evaluated between FY 2018-2022



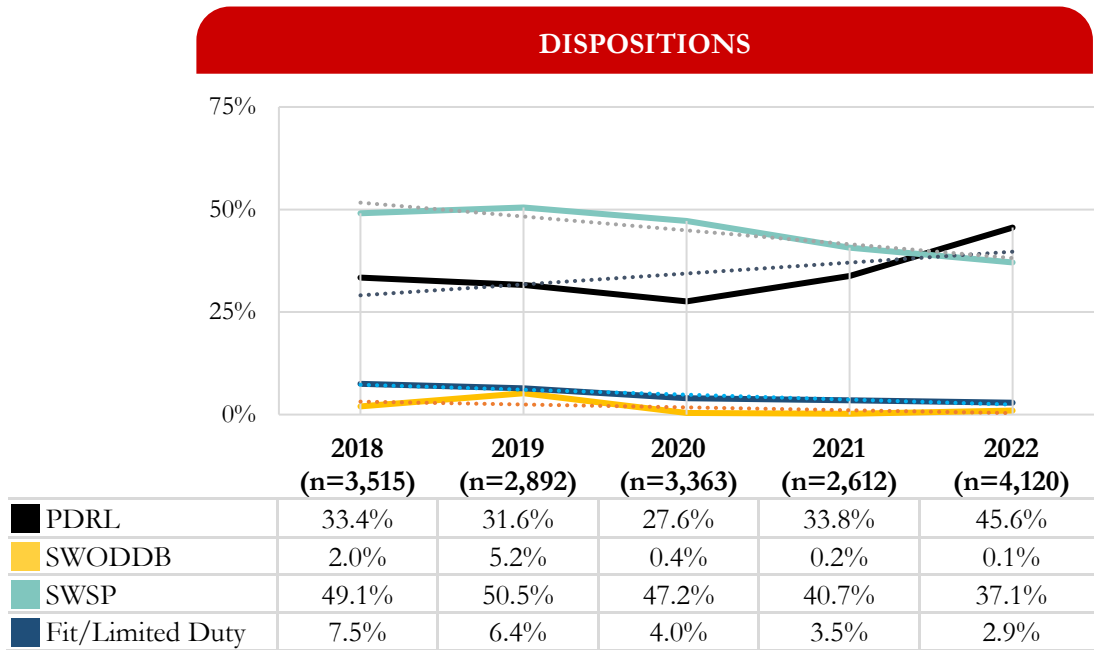
NAVY

FIGURE 4B: Temporal Trend of Selected Dispositions Assigned to Sailors Disability Evaluated between FY 2018-2022



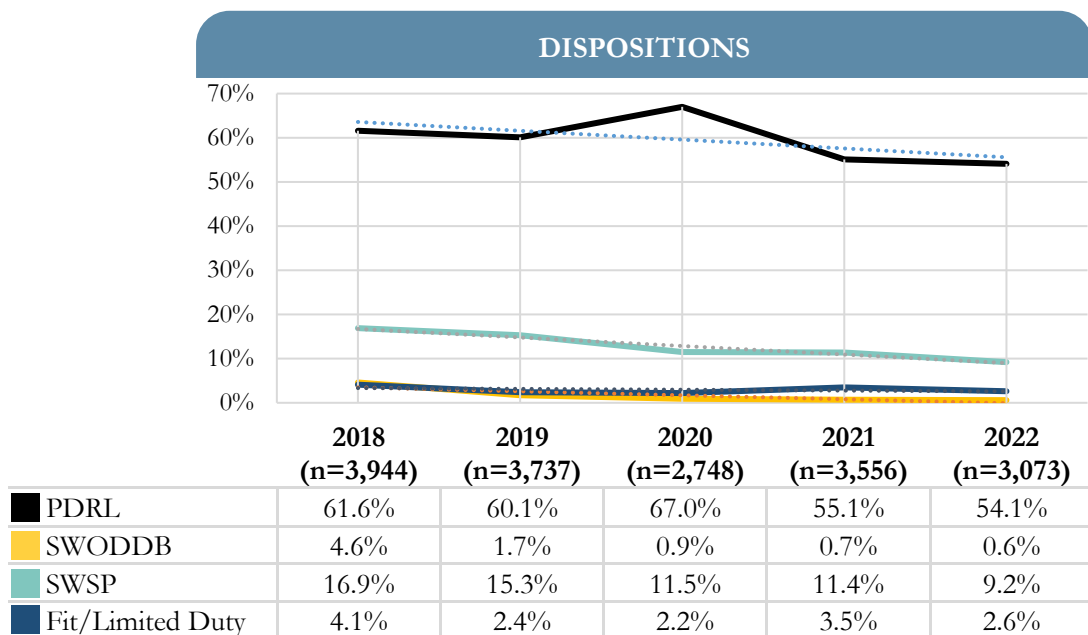
MARINE CORPS

FIGURE 4C: Temporal Trend of Selected Dispositions Assigned to Marines Disability Evaluated between FY 2018-2022



AIR FORCE

FIGURE 4D: Temporal Trend of Selected Dispositions Assigned to Airmen Disability Evaluated between FY 2018-2022



Section 2: Descriptive Statistics of Disability Discharges

IV. 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 7A-D describe the percentage distributions and rates 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 body system categories. However, service members were only counted once per body system.

Tables 7A-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 systems.
- Approximately 1/3 (Navy) to 2/3 (Army) of disability discharged service members had an unfitting musculoskeletal condition.
- Approximately 1/4 (Marine Corps) to 1/2 (Navy) of disability discharged service members had an unfitting psychiatric disorder.



ARMY

TABLE 7A: Percentages and Rates (per 10,000 Soldiers) of Disability Body System Categories among Disability Discharged Soldiers, FY 2018-2022

ARMY (n=87,861)		
Body System Category	% ¹	Rate ^{2,3}
Musculoskeletal	62.7	98.7
Psychiatric	40.0	63.1
Neurological	24.8	39.0
Respiratory	3.0	4.7
Cardiovascular	2.6	4.1
Digestive	2.4	3.7
Endocrine	2.2	3.5
Dermatologic	1.8	2.9
Genitourinary	1.4	2.2
Impairment of Auditory Acuity	0.8	1.3
Eyes/Vision	0.8	1.2
Hemic/Lymphatic	0.6	0.9
Gynecologic	0.4	0.6
Infectious Disease	0.3	0.5
Dental and Oral	0.1	0.2
Other Sense Organs	0.0	0.1

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

NAVY

TABLE 7B: Distribution and Rate (per 10,000 Sailors) of Disability Body System Categories among Disability Discharged Sailors, FY 2018-2022

NAVY (n=17,974)		
Body System Category	% ¹	Rate ²
Psychiatric	48.7	40.2
Musculoskeletal	33.3	27.4
Neurological	17.7	14.6
Digestive	4.5	3.7
Endocrine	2.2	1.9
Cardiovascular	2.2	1.8
Respiratory	2.1	1.7
Dermatologic	1.5	1.2
Genitourinary	1.4	1.1
Eyes/Vision	1.2	1.0
Hemic/Lymphatic	0.8	0.6
Impairment of Auditory Acuity	0.7	0.6
Infectious Disease	0.6	0.5
Gynecologic	0.6	0.5
Dental and Oral	0.1	0.1
Other Sense Organs	0.0	0.0

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.

MARINE CORPS

TABLE 7C: Distribution and Rate (per 10,000 Marines) of Disability Body System Categories among Disability Discharged Marines, FY 2018-2022

MARINE CORPS (n=14,939)		
Body System Category	%¹	Rate²
Musculoskeletal	62.0	72.3
Psychiatric	23.4	27.2
Neurological	16.1	18.8
Digestive	3.4	3.9
Respiratory	3.2	3.7
Cardiovascular	1.7	2.0
Genitourinary	1.3	1.5
Endocrine	1.2	1.4
Dermatologic	1.1	1.3
Eyes/Vision	0.8	0.9
Hemic/Lymphatic	0.6	0.6
Impairment of Auditory Acuity	0.4	0.4
Infectious Disease	0.3	0.3
Gynecologic	0.2	0.3
Dental and Oral	0.1	0.1
Other Sense Organs	0.0	0.0

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.

AIR FORCE

TABLE 7D: Distribution and Rate (per 10,000 Airmen) of Disability Body System Categories among Disability Discharged Airmen, FY 2018-2022

AIR FORCE (n=15,403)		
Body System Category	% ¹	Rate ²
Psychiatric	45.7	25.8
Musculoskeletal	39.2	22.2
Neurological	24.2	13.7
Respiratory	6.6	3.7
Digestive	4.1	2.3
Cardiovascular	3.7	2.1
Dermatologic	2.9	1.6
Endocrine	2.0	1.1
Genitourinary	1.4	0.8
Impairment of Auditory Acuity	1.1	0.6
Infectious Disease	1.1	0.6
Eyes/Vision	1.0	0.6
Hemic/Lymphatic	0.9	0.5
Gynecologic	0.7	0.4
Dental and Oral	0.1	0.1
Other Sense Organs	0.0	0.0

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.

Tables 8A-D describe the percentage distributions and rates of the ten most common unfitting conditions among FY 2018-2022 disability discharged service members. Due to the high number of VASRD codes, unfitting conditions were categorized according to pathology. **Figures 5A-D** present temporal trends for the five most common unfitting condition categories for each service as of FY 2022. 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.

Tables 8A-D & Figures 5A-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.
- *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 musculoskeletal conditions for all services.
- *Psychiatric disorders* – Between 12% (Marine Corps) 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 7% (Marine Corps) to 21% (Navy). Anxiety disorders were more common among Sailors (6%) and Airmen (5%).
 - The proportion of PTSD-related disability discharge among Airmen increased over time. There was also an upward trend in prevalence of mood disorder-related disability discharge among Airmen, rising from 13% in FY 2018 to 20% in FY 2022.
 - Similarly, there was also an upward trend in the proportion of PTSD and mood disorders among disability discharged Sailors, and by FY2021, 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 proportion among Marines steadily decreased by approximately two to four percentage points each year.
- *Neurological conditions* - Paralysis (5-14%) and migraine (4-6%) were among top ten reasons for disability discharge for all services. Residuals of traumatic brain injury (TBI) was common only among disability discharged Soldiers (6%) and Marines (4%).

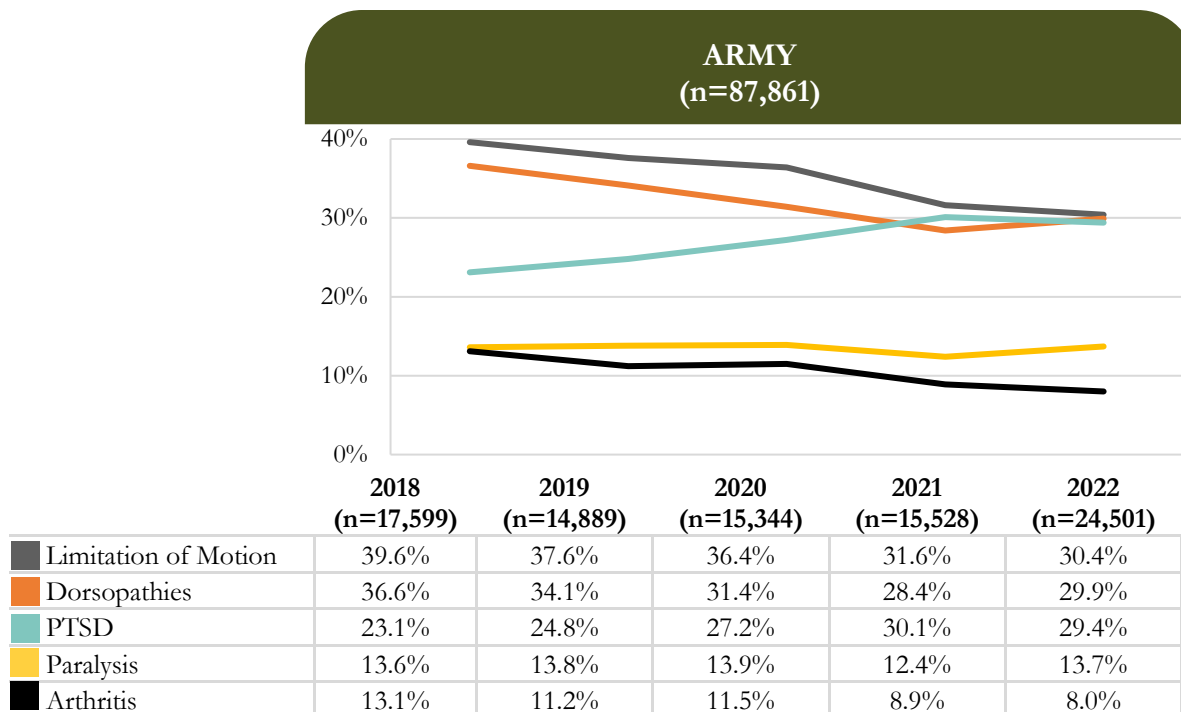
ARMY

TABLE 8A: Ten Most Common Unfitting Conditions among Disability Discharged Soldiers: FY 2018-2022

ARMY (n=87,861)			
Unfitting Condition	n	%	Rate ¹
Limitation of Motion	30,501	34.7	54.7
Dorsopathies	28,066	31.9	50.3
PTSD	23,809	27.1	42.7
Paralysis	11,856	13.5	21.3
Arthritis	9,074	10.3	16.3
Mood Disorder	7,518	8.6	13.5
Joint Disorders or Inflammation	5,779	6.6	10.4
Residuals of TBI	5,070	5.8	9.1
Skeletal and Joint Deformities	4,808	5.5	8.6
Migraine	4,717	5.4	8.5

1. Rate per 10,000 Soldiers

FIGURE 5A: Temporal Trend of the Top 5 Unfitting Conditions among Disability Discharged Soldiers: FY 2018-2022



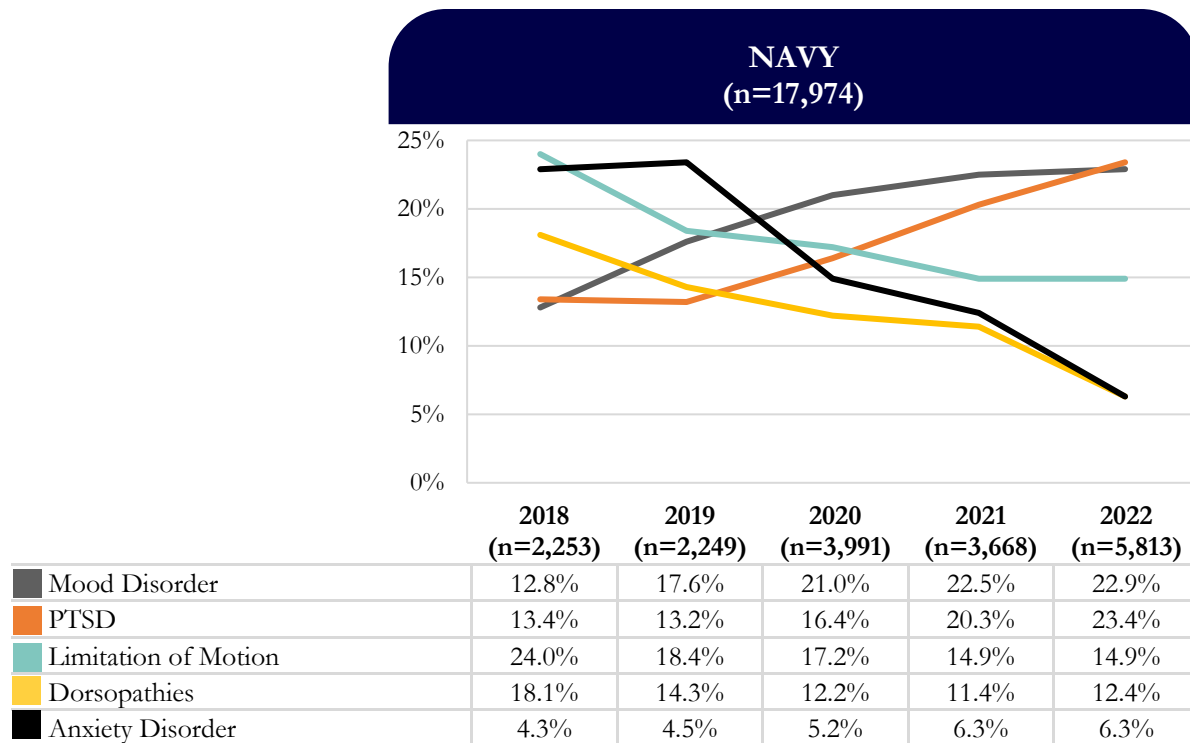
NAVY

TABLE 8B: Ten Most Common Unfitting Conditions among Disability Discharged Sailors: FY 2018-2022

NAVY (n=17,974)			
Unfitting Condition	n	%	Rate ¹
Mood Disorder	3,678	20.5	16.9
PTSD	3,359	18.7	15.4
Limitation of Motion	3,050	17.0	14.0
Dorsopathies	2,355	13.1	10.8
Anxiety Disorder	999	5.6	4.6
Joint Disorders or Inflammation	929	5.2	4.3
Migraine	916	5.1	4.2
Arthritis	892	5.0	4.1
Paralysis	823	4.6	3.8
Epilepsy	638	3.5	2.9

1. Rate per 10,000 Sailors

FIGURE 5B: Temporal Trend of the Top 5 Unfitting Conditions among Disability Discharged Sailors: FY 2018-2022



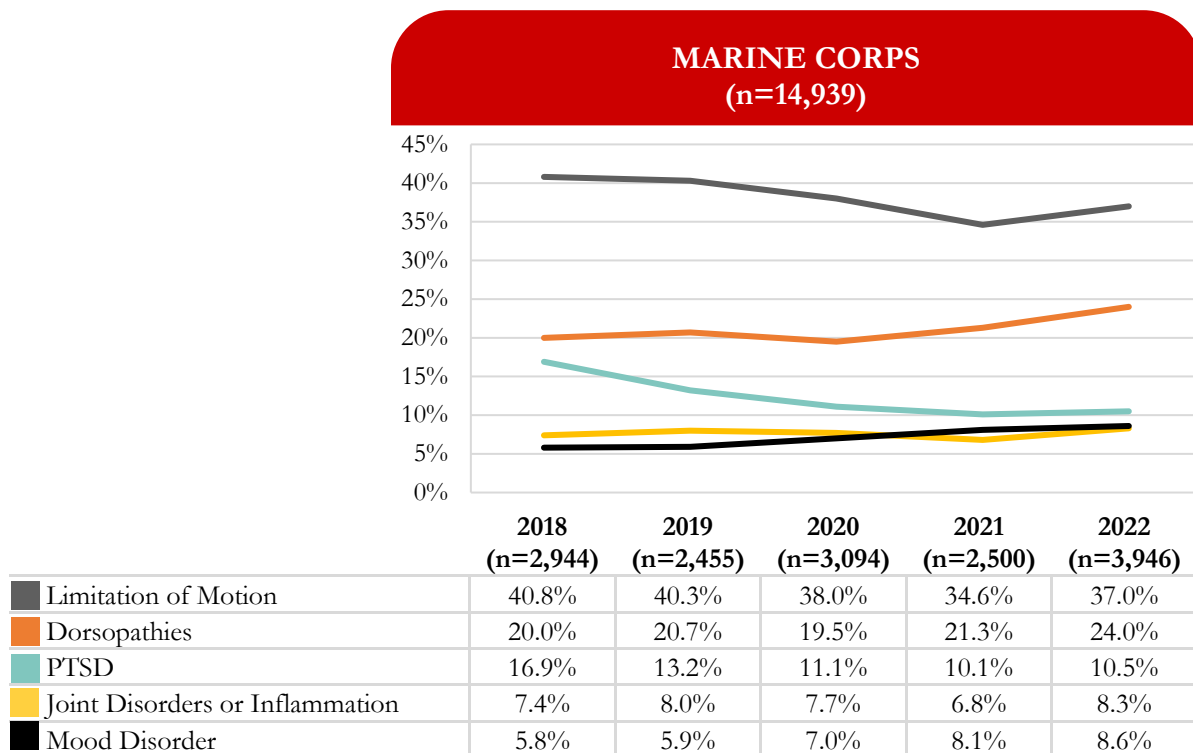
MARINE CORPS

TABLE 8C: Ten Most Common Unfitting Conditions among Disability Discharged Marines: FY 2018-2022

MARINE CORPS (n=14,939)			
Unfitting Condition	n	%	Rate ¹
Limitation of Motion	5,692	38.1	44.4
Dorsopathies	3,177	21.3	24.8
PTSD	1,831	12.3	14.3
Joint Disorders or Inflammation	1,150	7.7	9.0
Mood Disorder	1,072	7.2	8.4
Arthritis	873	5.8	6.8
Paralysis	759	5.1	5.9
Skeletal and Joint Deformities	629	4.2	4.9
Residuals of TBI	572	3.8	4.5
Migraine	553	3.7	4.3

1. Rate per 10,000 Marines

FIGURE 5C: Temporal Trend of the Top 5 Unfitting Conditions among Disability Discharged Marines: FY 2018-2022



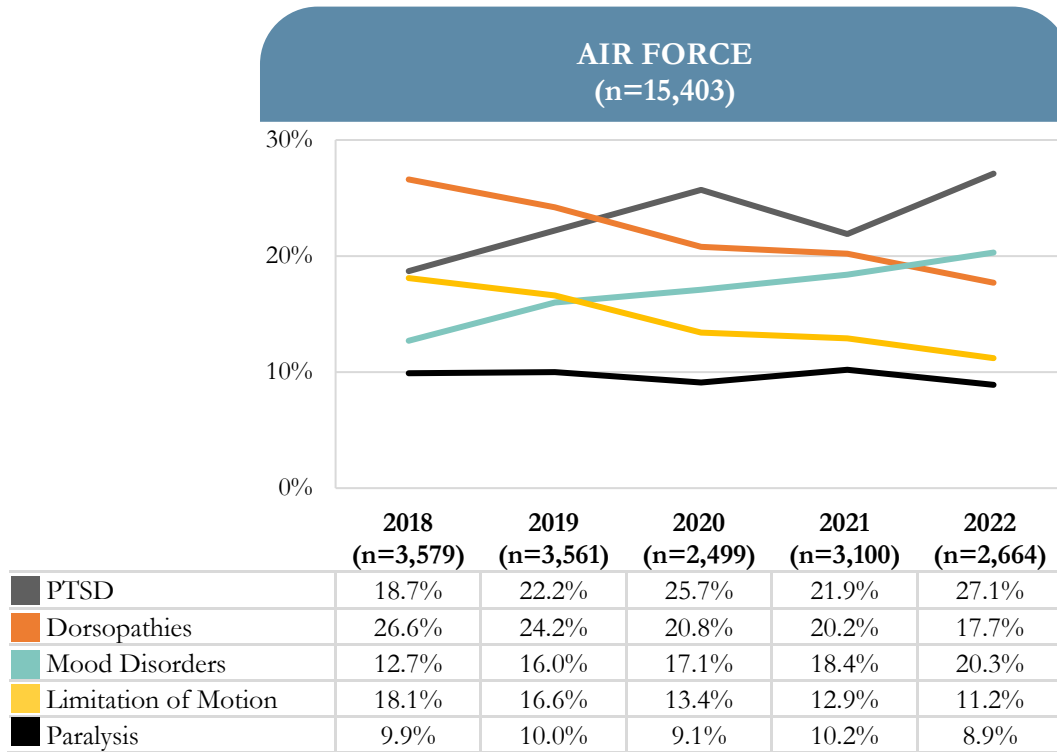
AIR FORCE

TABLE 8D: Ten Most Common Unfitting Conditions among Disability Discharged Airmen: FY 2018-2022

AIR FORCE (n=15,403)			
Unfitting Condition	n	%	Rate ¹
PTSD	3,501	22.7	12.8
Dorsopathies	3,429	22.3	12.6
Mood Disorders	2,563	16.6	9.4
Limitation of Motion	2,271	14.7	8.3
Paralysis	1,488	9.7	5.5
Migraine	933	6.1	3.4
Anxiety Disorder	738	4.8	2.7
Joint Disorders or Inflammation	655	4.3	2.4
Asthma	650	4.2	2.4
Arthritis	476	3.1	1.7

1. Rate per 10,000 Airmen

FIGURE 5D: Temporal Trend of the Top 5 Unfitting Conditions among Disability Discharged Airmen: FY 2018-2022



V. COMBAT-RELATED DETERMINATION & OCO DEPLOYMENT HISTORY

Unfitting conditions are considered 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 those 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 OCO deployment records, information from the most recent OCO deployment record was used in our analyses.



Temporal trends of the proportion of service members disability discharged with a combat-related condition are displayed in **Figure 6**.

Figure 6 Key Findings

- The proportion of disability discharged service members with a combat-related condition varied by service and fiscal year, ranging from 3% (FY 2018 Air Force) to 34% (FY 2020 Army).
 - Over time, the proportion of disability discharges deemed combat-related trended downward for the Army and Marine Corps. For the Army, the proportion decreased by about 8% from FY2020 to FY2021. For the Marine Corps, there was a steady downward trend, starting at 18% in FY2018 and declining to 4% in FY2022.
 - However, the proportion of disability discharges deemed combat-related trended upward for the Air Force (from 2.6% in 2018 up to 13.6% in 2022).

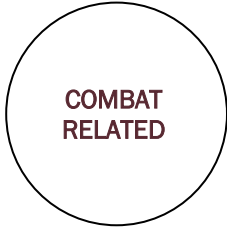
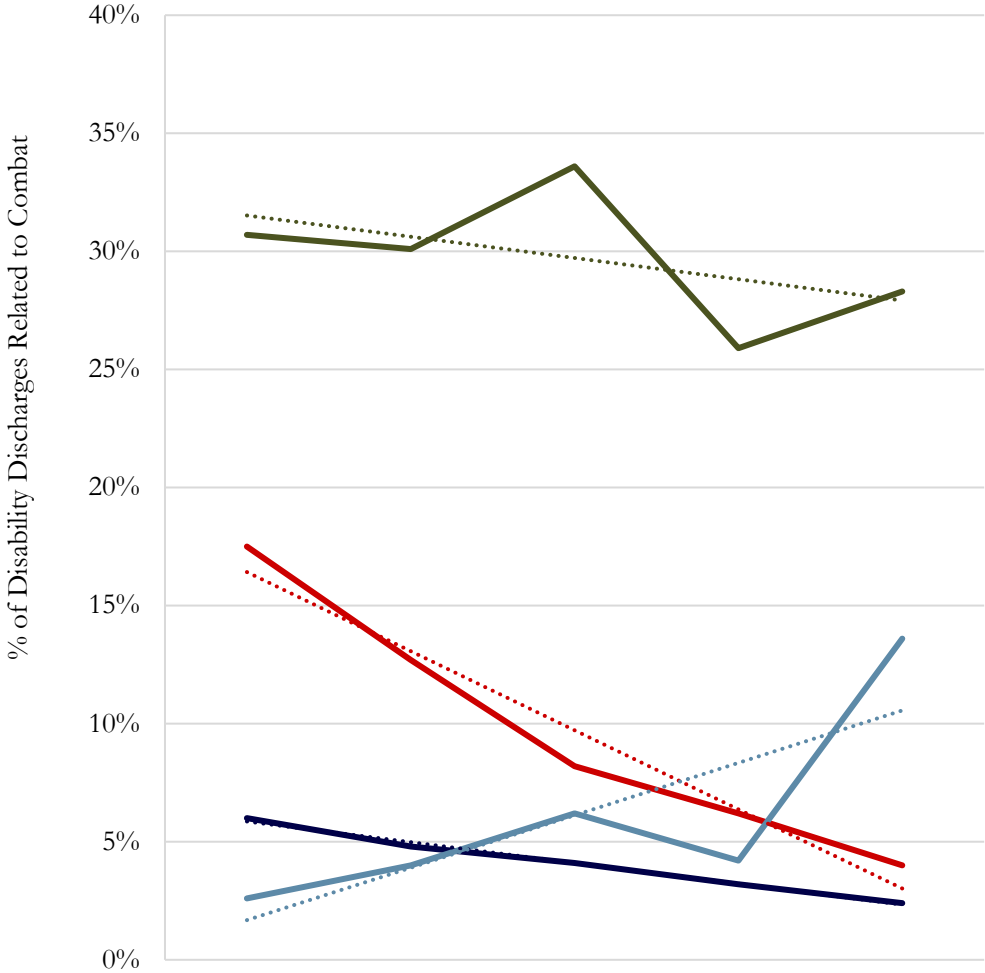


FIGURE 6: Temporal Trend of Combat-Related Determination among Disability Discharged Service Members, by Service: FY 2018-2022



	2018	2019	2020	2021	2022
Army	30.7%	30.1%	33.6%	25.9%	28.3%
Navy	6.0%	4.8%	4.1%	3.2%	2.4%
Marine Corps	17.5%	12.7%	8.2%	6.2%	4.0%
Air Force	2.6%	4.0%	6.2%	4.2%	13.6%

Tables 9A-D present the service-specific proportion of service members with a combat-related disability determination, stratified by OCO deployment status (deployed vs not deployed). **Tables 10A-D** depict the most frequently assigned unfitting conditions assigned to service members per combat-related determination and OCO deployment status.

Tables 9A-D and 10A-D Key Findings

- Among all disability discharges, nearly 33% of Soldiers, 14% of Marines, 5% of Sailors, and 6% of Airmen were determined to have a combat-related condition.
 - About 48% of Soldiers, 27% of Marines, 10% of Airmen, and 7% of Sailors with history of OCO deployment were determined to have a combat-related condition, while 1% (Air Force) to 8% (Army) of service members with no history of an OCO deployment had a combat-related condition.
 - Air Force results should be considered as underestimated since 36% of disability discharge records received by DESAR were missing a combat-related determination.
- When assessing unfitting conditions stratified by both combat-related determination and OCO deployment status, the five most common conditions were similar across the services and combat/deployment strata, although their distributions differed considerably.
 - Within the combat-related and deployed group, PTSD was the most prominent condition related to disability discharge, with involvement in 63% (Army) to 77% (Navy) of these disability discharges. PTSD was considerably less prominent among disability discharges that were either not combat-related or there was no evidence of deployment.
 - Among disability discharges not deemed combat-related, non-PTSD mental health disorders were more common. Mood disorders was among the top five non-combat disability discharge conditions for each service and was the top non-combat condition among Navy disability discharges.

ARMY

TABLE 9A: Distribution of Combat-Related Determination by OCO Deployment Status among Disability Discharged Soldiers, FY 2018-2022

Combat Status	Deployed (n=53,828)		Not Deployed (n=34,033)		Total (n=87,861)	
	n	%	n	%	n	%
Combat-related	25,997	48.3	2,708	8.0	28,705	32.7
Not Combat-related	27,776	51.6	31,273	91.9	59,049	67.2
Missing	55	0.1	52	0.2	107	0.1

TABLE 10A: Most Frequent Unfitting Conditions among Soldiers by OCO Deployment Status and Combat-Related Determination, FY 2018-2022

Combat-Related + Deployed (n=25,997)			Combat-Related + Not Deployed (n=2,708)		
Unfitting Condition	n	%	Unfitting Condition	n	%
PTSD	16,447	63.3	Limitation of Motion	1,332	49.2
Dorsopathies	9,011	34.7	Dorsopathies	983	36.3
Limitation of Motion	7,268	28.0	Paralysis	420	15.5
Paralysis	3,489	13.4	PTSD	398	14.7
Residuals of TBI	3,344	12.9	Arthritis	271	10.0
Not Combat-Related + Deployed (n=27,776)			Not Combat-Related + Not Deployed (n=31,273)		
Unfitting Condition	n	%	Unfitting Condition	n	%
Dorsopathies	10,018	36.1	Limitation of Motion	12,237	39.1
Limitation of motion	9,609	34.6	Dorsopathies	8,014	25.6
Paralysis	4,724	17.0	Mood Disorder	3,426	11.0
PTSD	3,584	12.9	PTSD	3,375	10.8
Arthritis	3,432	12.4	Paralysis	3,209	10.3

NAVY

TABLE 9B: Distribution of Combat-Related Determination by OCO Deployment Status among Disability Discharged Sailors, FY 2018-2022

Combat Status	Deployed (n=9,008)		Not Deployed (n=8,966)		Total (n=17,974)	
	n	%	n	%	n	%
Combat-related	664	7.4	147	1.6	811	4.5
Not Combat-related	8,344	92.6	8,819	98.4	17,163	95.5

TABLE 10B: Most Frequent Unfitting Conditions among Sailors by OCO Deployment Status and Combat-Related Determination, FY 2018-2022

Combat-Related + Deployed (n=664)			Combat-Related + Not Deployed (n=147)		
Unfitting Condition	n	%	Unfitting Condition	n	%
PTSD	513	77.3	Limitation of Motion	51	34.7
Residuals of TBI	103	15.5	PTSD	46	31.3
Limitation of Motion	99	14.9	Dorsopathies	20	13.6
Dorsopathies	96	14.5	Migraine	15	10.2
Migraine	63	9.5	Residuals of TBI	10	6.8
Not Combat-Related + Deployed (n=8,344)			Not Combat-Related + Not Deployed (n=8,819)		
Unfitting Condition	n	%	Unfitting Condition	n	%
Mood Disorder	1,772	21.2	Mood Disorder	1,857	21.1
PTSD	1,346	16.1	Limitation of Motion	1,570	17.8
Limitation of Motion	1,330	15.9	PTSD	1,454	16.5
Dorsopathies	1,282	15.4	Dorsopathies	957	10.9
Arthritis	502	6.0	Anxiety Disorder	501	5.7

MARINE CORPS

TABLE 9C: Distribution of Combat-Related Determination by OCO Deployment Status among Disability Discharged Marines, FY 2018-2022

Combat Status	Deployed (n=5,247)		Not Deployed (n=9,692)		Total (n=14,939)	
	n	%	n	%	n	%
Combat-related	1,388	26.5	632	6.5	2,020	13.5
Not Combat-related	3,859	73.5	9,060	93.5	12,919	86.5

TABLE 10C: Most Frequent Unfitting Conditions among Marines by OCO Deployment Status and Combat-Related Determination, FY 2018-2022

Combat-Related + Deployed (n=1,388)			Combat-Related + Not Deployed (n=632)		
Unfitting Condition	n	%	Unfitting Condition	n	%
PTSD	999	72.0	Limitation of Motion	424	67.1
Limitation of Motion	278	20.0	Dorsopathies	104	16.5
Dorsopathies	275	19.8	Joint Disorders	62	9.8
Residuals of TBI	247	17.8	Paralysis	33	5.2
Migraine	135	9.7	Arthritis	33	5.2
Not Combat-Related + Deployed (n=3,859)			Not Combat-Related + Not Deployed (n=9,060)		
Unfitting Condition	n	%	Unfitting Condition	N	%
Limitation of Motion	1,230	31.9	Limitation of Motion	3,760	41.5
Dorsopathies	1,100	28.5	Dorsopathies	1,698	18.7
Mood Disorder	392	10.2	Joint Disorders	753	8.3
PTSD	367	9.5	Mood Disorder	589	6.5
Arthritis	325	8.4	Skeletal and Joint Deformities	452	5.0

AIR FORCE

TABLE 9D: Distribution of Combat-Related Determination by OCO Deployment Status among Disability Discharged Marines, FY 2018-2022

	Deployed (n=8,782)		Not Deployed (n=6,621)		Total (n=15,403)	
Combat Status	n	%	n	%	n	%
Combat-related	878	10.0	59	0.9	937	6.1
Not Combat-related	4,592	52.3	4,350	65.7	8,942	58.1
Missing	3,312	37.7	2,212	33.4	5,524	35.9

TABLE 10D: Most Frequent Unfitting Conditions among Airmen by OCO Deployment Status and Combat-Related Determination, FY 2018-2022

Combat-Related + Deployed (n=878)			Combat-Related + Not Deployed (n=59)		
Unfitting Condition	n	%	Unfitting Condition	n	%
PTSD	611	69.6	Dorsopathies	22	37.3
Dorsopathies	238	27.1	Limitation of Motion	16	27.1
Migraine	113	12.9	PTSD	15	25.4
Residuals of TBI	106	12.1	Paralysis	8	13.6
Limitation of Motion	103	11.7	Mood Disorder	6	10.2
Not Combat-Related + Deployed (n=4,592)			Not Combat-Related + Not Deployed (n=4,350)		
Unfitting Condition	n	%	Unfitting Condition	n	%
Dorsopathies	1,148	25.0	Mood Disorder	979	22.5
PTSD	992	21.6	PTSD	796	18.3
Mood Disorder	708	15.4	Dorsopathies	680	15.6
Limitation of Motion	633	13.8	Limitation of Motion	565	13.0
Paralysis	575	12.5	Paralysis	304	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 MEPS to separation. These additional personnel and medical data were combined 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, were available only for enlisted service members from all components. Hospitalization data were only available for inpatient stays at MTFs 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 2016, medical disqualifications and hospitalization diagnoses were reported using the International Classification of Diseases, 9th revision (ICD-9) codes. Although ICD-9 codes began transitioning to ICD-10 codes in FY 2016, a mixture of ICD-9 and ICD-10 codes continues to persist in the data received by DESAR. To allow for comparisons over the 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.

VI. PRE-ACCESSION MEDICAL DISQUALIFICATION

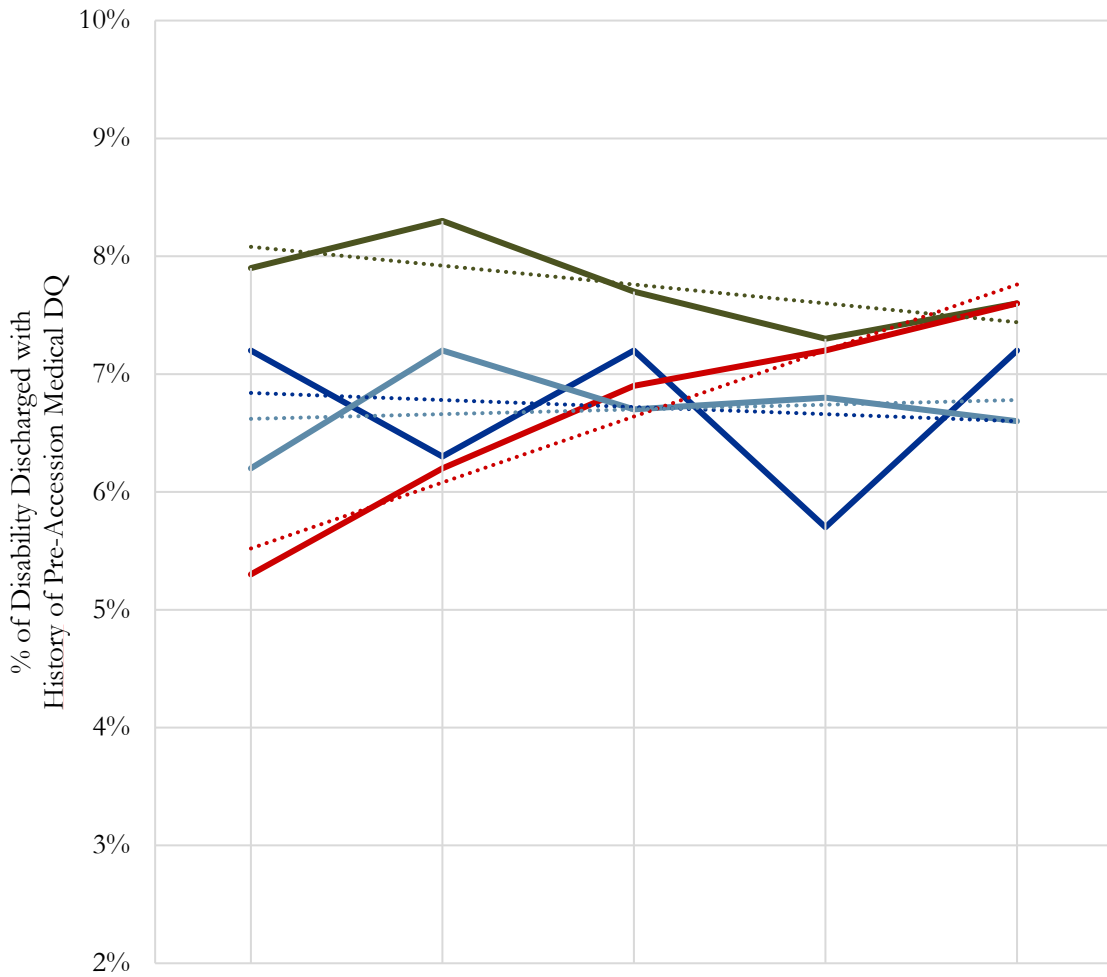
The USMEPCOM provided DESAR with information from all pre-accession physical examinations conducted at any of the 65 MEPS since 1995. As a result of the MEPS physical examination, an applicant is determined to be medically qualified or medically disqualified for accession. Applicants are considered medically 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 DQ categories among disability discharged service members (fit/limited duty and separated without DoD disability benefits dispositions were excluded) with history of MEPS examination. **Figure 7** 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 7 Key Findings

- Approximately 7-8% of disability discharged service members with a history of a MEPS exam had been 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 (7-8%) [11].
- Over the surveillance period, the proportion of disability discharged Sailors and Airmen with history of a pre-accession medical DQ remained relatively stable, while there appears to be an upward trend in the proportion among disability discharged Marines, and a downtrend for Soldiers.

FIGURE 7: Prevalence of Pre-Accession Medical Disqualifications (DQ) among Disability Discharged Service Members with a MEPS Exam by Service and FY 2018-2022



	2018	2019	2020	2021	2022	TOTAL
Army	7.9%	8.3%	7.7%	7.3%	7.6%	7.7%
Navy	7.2%	6.3%	7.2%	5.7%	7.2%	6.8%
Marine Corps	5.3%	6.2%	6.9%	7.2%	7.6%	6.7%
Air Force	6.2%	7.2%	6.7%	6.8%	6.6%	6.7%

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 11A-D present the most common pre-accession DQs assigned during MEPS examinations among disability discharged service members with a MEP examination record. DQ categories were based on the subsections listed in DoDI 6130.03, Volume 1. 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.

Tables 11A-D Key Findings

- Pre-accession medical DQ category-specific rates among disability discharged service members with a MEPS examination record were very low (1.4% or less).
- The most common pre-accession medical DQ categories (eyes, vision, extremity-related conditions, or learning, psychiatric and behavioral disorders) were generally consistent between the services.
 - The most common pre-accession medical DQs among 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 11A: Most Common Pre-Accession Disqualifications (DQ) Categories among Disability Discharged Soldiers: FY 2018-2022

Army			
DQ Category	n	% with DQ ¹	% with Exam ²
Eyes	1,082	18.5	1.4
Vision	937	16.0	1.2
Miscellaneous Conditions of the Extremities	864	14.7	1.1
Lower Extremity Conditions	596	10.2	0.8
Learning, Psychiatric, and Behavioral Disorders	541	9.2	0.7
Total DES Cases with hx of DQ	5,858		
Total DES Cases with Medical Exam Record	75,995		

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

1. Percent of total cases with a DQ.

2. Percent of total cases with a medical exam record.

TABLE 11B: Most Common Pre-Accession Disqualifications (DQ) Categories among Disability Discharged Sailors: FY 2018-2022

Navy			
DQ Category	n	% with DQ ¹	% with Exam ²
Eyes	217	19.2	1.3
Vision	194	17.1	1.2
Miscellaneous Conditions of the Extremities	164	14.5	1.0
Lower Extremity Conditions	113	10.0	0.7
Learning, Psychiatric, and Behavioral Disorders	98	8.7	0.6
Total DES Cases with hx of DQ	1,132		
Total DES Cases with Medical Exam Record	16,680		

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

1. Percent of total cases with a DQ.

2. Percent of total cases with a medical exam record.

TABLE 11C: Most Common Pre-Accession Disqualifications (DQ) Categories among Disability Discharged Marines: FY 2018-2022

Marine Corps			
DQ Category	n	% with DQ ¹	% with Exam ²
Eyes	171	17.5	1.2
Learning, Psychiatric, and Behavioral Disorders	164	16.8	1.1
Vision	153	15.7	1.1
Miscellaneous Conditions of the Extremities	102	10.5	0.7
Lower Extremity Conditions	68	7.0	0.5
Total DES Cases with hx of DQ	975		
Total DES Cases with Medical Exam Record	14,535		

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

1. Percent of total cases with a DQ.

2. Percent of total cases with a medical exam record.

TABLE 11D: Most Common Pre-Accession Disqualifications (DQ) Categories among Disability Discharged Airmen: FY 2018-2022

Air Force			
DQ Category	n	% with DQ ¹	% with Exam ²
Learning, Psychiatric, and Behavioral Disorders	143	15.7	1.1
Eyes	142	15.6	1.0
Vision	127	14.0	0.9
Miscellaneous Conditions of the Extremities	122	13.4	0.9
Lower Extremity Conditions	80	8.8	0.6
Total DES Cases with hx of DQ	908		
Total DES Cases with Medical Exam Record	13,567		

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

1. Percent of total cases with a DQ.

2. Percent of total 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 12A-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.

Tables 12A-D Key Findings

- The overall proportion of disability discharged service members with history of a pre-accession medical DQ ranged from 6.7% (Marine Corps and Air Force) to 7.7% (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 three 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.
 - 2.2% or less of musculoskeletal-related disability discharges had history of a pre-accession musculoskeletal DQ.
 - No more than 2.2% of disability discharges related to a psychiatric disorder had history of a pre-accession psychiatric DQ.
 - Less than 1% of neurological-related disability discharges had history of a pre-accession neurological DQ.

ARMY

TABLE 12A: Most Prevalent Pre-accession Disqualifications (DQ) Categories at MEPS Medical Examination within Leading Disability Body System Categories: Army FY 2018-2022

ARMY		
	n	% ¹
Total Disability Discharged with MEPS Exam	75,995	
Musculoskeletal DQ	1,399	1.8
Eyes/Vision DQ	1,096	1.4
Systemic/Rheumatologic/Miscellaneous DQ	573	0.8
Any DQ	5,858	7.7
Musculoskeletal Disability	55063	
Musculoskeletal DQ	1,139	2.1
Eyes/Vision DQ	725	1.3
Systemic/Rheumatologic/Miscellaneous DQ	468	0.8
Any DQ	3,688	6.7
Psychiatric Disability	35,172	
Musculoskeletal DQ	445	1.3
Eyes/Vision DQ	371	1.1
Psychiatric DQ	310	0.9
Any DQ	2,006	5.7
Neurological Disability	21,750	
Musculoskeletal DQ	349	1.6
Eyes/Vision DQ	222	1.0
Systemic/Rheumatologic/Miscellaneous DQ	172	0.8
Neurological DQ ²	41	0.2
Any DQ	1,253	5.8

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 12B: Most Prevalent Pre-accession Disqualifications (DQ) Categories at MEPS Medical Examination within Leading Disability Body System Categories, Navy FY 2018-2022

NAVY		
	n	% ¹
Total Disability Discharged with MEPS Exam	16,680	
Musculoskeletal DQ	264	1.6
Eyes/Vision DQ	222	1.3
Systemic/Rheumatologic/Miscellaneous DQ	122	0.7
Any DQ	1,132	6.8
Musculoskeletal Disability	5,978	
Musculoskeletal DQ	133	2.2
Eyes/Vision DQ	65	1.1
Systemic/Rheumatologic/Miscellaneous DQ	53	0.9
Any DQ	382	6.4
Psychiatric Disability	8,752	
Eyes/Vision DQ	127	1.5
Musculoskeletal DQ	116	1.3
Psychiatric DQ	74	0.8
Any DQ	510	5.8
Neurological Disability	3,190	
Musculoskeletal DQ	66	2.1
Eyes/Vision DQ	41	1.3
Systemic/Rheumatologic/Miscellaneous DQ	29	0.9
Neurological DQ ²	3	0.1
Any DQ	193	6.1

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 12C: Most Prevalent Pre-accession Disqualifications (DQ) Categories at MEPS Medical Examination within Leading Disability Body System Categories, Marine Corps FY 2018-2022

MARINE CORPS		
	n	% ¹
Total Disability Discharged with MEPS Exam	14,535	
Musculoskeletal DQ	192	1.3
Eyes/Vision DQ	174	1.2
Psychiatric DQ	164	1.1
Any DQ	975	6.7
Musculoskeletal Disability	9,264	
Musculoskeletal DQ	147	1.6
Eyes/Vision DQ	118	1.3
Psychiatric DQ	117	1.3
Any DQ	580	6.3
Psychiatric Disability	3,490	
Psychiatric DQ	76	2.2
Musculoskeletal DQ	42	1.2
Eyes/Vision DQ	41	1.2
Any DQ	220	6.3
Neurological Disability	2,412	
Musculoskeletal DQ	33	1.4
Psychiatric DQ	28	1.2
Eyes/Vision DQ	16	0.7
Neurological DQ ²	5	0.2
Any DQ	138	5.7

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

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

AIR FORCE

TABLE 12D: Most Prevalent Pre-accession Disqualifications (DQ) Categories at MEPS Medical Examination within Leading Disability Body System Categories, Air Force FY 2018-2022

AIR FORCE		
	n	% ¹
Total Disability Discharged with MEPS Exam	13,567	
Musculoskeletal DQ	193	1.4
Eye/Vision DQ	145	1.1
Psychiatric DQ	143	1.1
Any DQ	908	6.7
Musculoskeletal Disability	6,038	
Musculoskeletal DQ	118	2.0
Psychiatric DQ	53	0.9
Systemic/Rheumatologic/Miscellaneous DQ	43	0.7
Any DQ	345	5.7
Psychiatric Disability	7,045	
Psychiatric DQ	86	1.2
Musculoskeletal DQ	76	1.1
Eyes/Vision DQ	70	1.0
Any DQ	382	5.4
Neurological Disability	3,727	
Musculoskeletal DQ	63	1.7
Psychiatric DQ	39	1.0
Eyes/Vision DQ	36	1.0
Neurological DQ ²	8	0.2
Any DQ	213	5.7

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

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

VI. HOSPITALIZATION WITHIN ONE YEAR OF FIRST DISABILITY EVALUATION

Hospitalization records received by DESAR include data on inpatient stays at MTFs 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 prior to first disability evaluation among disability discharged service members only (fit/limited duty and separated without DoD benefits dispositions were excluded). Only the primary diagnosis at admission were included in these analyses. **Figure 8** 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 8 Key Findings

- Overall, 8.0% (Air Force) to 16.6% (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, hospitalizations within one year of first disability evaluation trended upwards among Soldiers and downward among Sailors and Marines. The proportion of disability discharged Airmen with a hospitalization varied over time yet remained relatively stable.

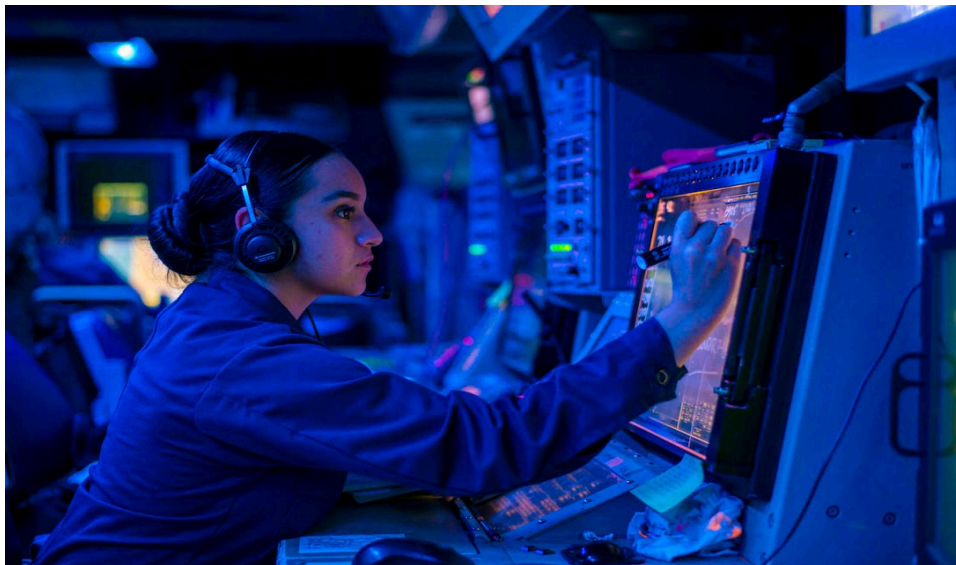
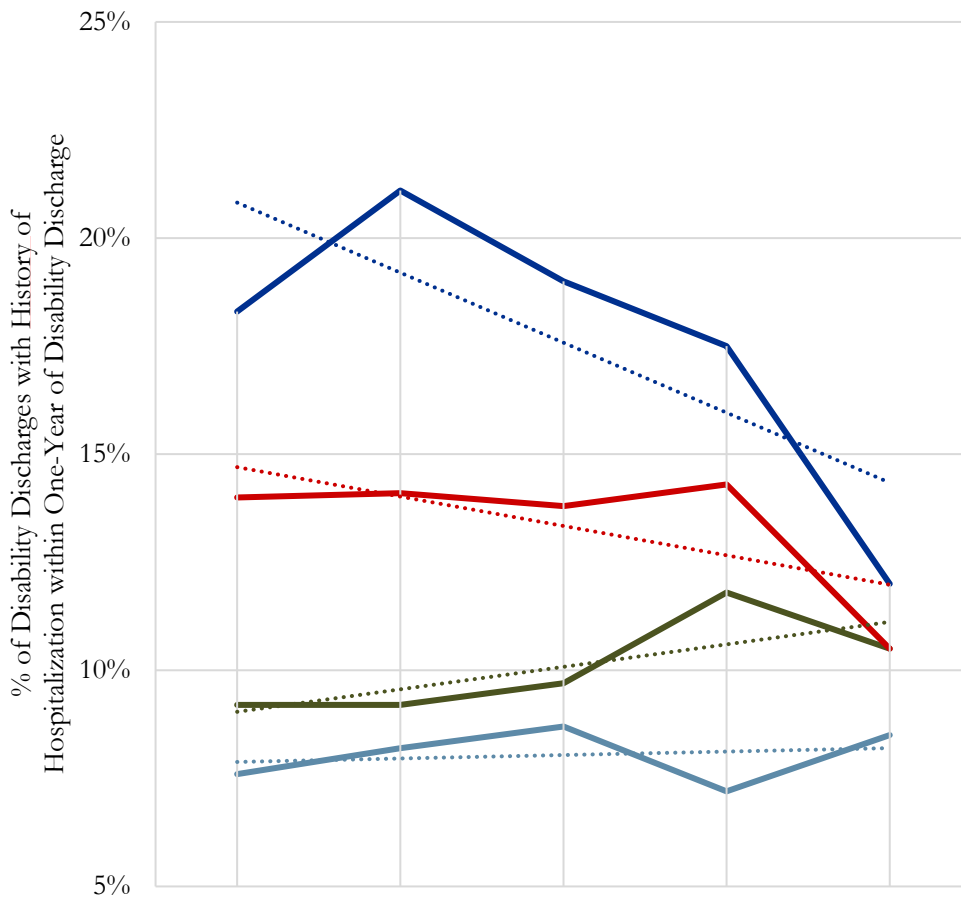


FIGURE 8: Prevalence of Hospitalization within One Year of Disability Evaluation among Disability Discharged Service Members by Service and Year of Disability Evaluation by FY 2018-2022



	2018	2019	2020	2021	2022	TOTAL
Army	9.2%	9.2%	9.7%	11.8%	10.5%	10.1%
Navy	18.3%	21.1%	19.0%	17.5%	12.0%	16.6%
Marine Corps	14.0%	14.1%	13.8%	14.3%	10.5%	13.1%
Air Force	7.6%	8.2%	8.7%	7.2%	8.5%	8.0%

Tables 13A-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.

Tables 13A-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 (MDD), PTSD) [12].

TABLE 13A: Most Common Primary Diagnosis Categories in Hospitalizations among Disability Discharged Soldiers, FY 2018-2022

ARMY		
Diagnosis Category	n	%
Anxiety and stress-related disorders	2,575	29.0
Mood disorders	1731	19.5
Substance use disorders	541	6.1
Schizophrenia spectrum and other psychotic disorders	366	4.1
Dorsopathies	327	3.7
Total DES Hospitalized	8,875	

TABLE 13B: Most Common Primary Diagnosis Categories in Hospitalizations among Disability Discharged Sailors, FY 2018-2022

NAVY		
Diagnosis Category	n	%
Mood disorders	791	26.5
Anxiety and stress-related disorders	676	22.6
Schizophrenia spectrum and other psychotic disorders	209	7.0
Substance use disorders	167	5.6
Poisoning by, adverse effect of and under dosing of drugs, medicaments and biological substances	108	3.6
Total DES Hospitalized	2,985	

TABLE 13C: Most Common Primary Diagnosis Categories in Hospitalizations among Disability Discharged Marines, FY 2018-2022

MARINE CORPS		
Diagnosis Category	n	%
Anxiety and stress-related disorders	375	19.2
Mood disorders	356	18.2
Schizophrenia spectrum and other psychotic disorders	125	6.4
Dorsopathies	91	4.7
Substance use disorders	83	4.2
Total DES Hospitalized	1,956	

TABLE 13D: Most Common Primary Diagnosis Categories in Hospitalizations among Disability Discharged Airmen, FY 2018-2022

AIR FORCE		
Diagnosis Category	n	%
Mood disorders	287	23.3
Anxiety and stress-related disorders	244	19.8
Schizophrenia spectrum and other psychotic disorders	75	6.1
Substance use disorders	53	4.3
Noninfective enteritis and colitis	41	3.3
Total DES Hospitalized	1,232	

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 14A-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).

Tables 14A-D Key Findings

- The overall proportion of disability discharged service members hospitalized within one year prior to first disability evaluation ranged from 8.0% (Air Force) to 16.6% (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 three most common disability body system categories), with the following exceptions:
 - Across all services, hospitalization rates within one year prior to disability evaluation were higher among those disability discharged for a psychiatric disorder (10-23%) than among those discharged with a neurological condition (4-10%), or a musculoskeletal condition (3-6%).
- There was higher concordance between the primary admission diagnosis at hospitalization and reason for disability discharge than was observed with pre-accession medical disqualifications (Tables 12A-D).
 - 8-21% of service members discharged for a psychiatric disorder had been hospitalized for a psychiatric disorder.
 - 1-4% 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.



ARMY

TABLE 14A: Most Prevalent Hospitalization Body System Categories within Leading Disability Body System Categories, Army FY 2018-2022

ARMY		
	n	% ¹
Total Disability Discharged	87,861	
Psychiatric Hospitalization	4,889	5.6
Musculoskeletal Hospitalization	690	0.8
Neurological Hospitalization	416	0.5
Any Hospitalization	8,875	10.1
Musculoskeletal Disability	55,063	
Psychiatric Hospitalization	1,239	2.3
Musculoskeletal Hospitalization	601	1.1
Neurological Hospitalization	160	0.3
Any Hospitalization	2,517	4.6
Psychiatric Disability	35,172	
Psychiatric Hospitalization	4,345	12.4
Musculoskeletal Hospitalization	196	0.6
Neurological Hospitalization	192	0.5
Any Hospitalization	5,012	14.2
Neurological Disability	21,750	
Psychiatric Hospitalization	727	3.3
Neurological Hospitalization	250	1.1
Musculoskeletal Hospitalization	249	1.1
Any Hospitalization	1,411	6.5

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 14B: Most Prevalent Hospitalization Body System Categories within Leading Disability Body System Categories, Navy FY 2018-2022

NAVY		
	n	% ¹
Total Disability Discharged	17,974	
Psychiatric Hospitalization	1,736	9.7
Neurological Hospitalization	207	1.2
Musculoskeletal Hospitalization	143	0.8
Any Hospitalization	2,985	16.6
Musculoskeletal Disability	5,978	
Psychiatric Hospitalization	149	2.5
Musculoskeletal Hospitalization	91	1.5
Neurological Hospitalization	35	0.6
Any Hospitalization	331	5.5
Psychiatric Disability	8,752	
Psychiatric Hospitalization	1,580	18.1
Neurological Hospitalization	79	0.9
Musculoskeletal Hospitalization	49	0.6
Any Hospitalization	1,750	20.0
Neurological Disability	3,190	
Neurological Hospitalization	121	3.8
Psychiatric Hospitalization	117	3.7
Musculoskeletal Hospitalization	36	1.1
Any Hospitalization	304	9.5

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 14C: Most Prevalent Hospitalization Body System Categories within Leading Disability Body System Categories, Marine Corps FY 2018-2022

MARINE CORPS		
	n	% ¹
Total Disability Discharged	14,939	
Psychiatric Hospitalization	874	5.9
Musculoskeletal Hospitalization	285	1.9
Neurological Hospitalization	131	0.9
Any Hospitalization	1,956	13.1
Musculoskeletal Disability	9,264	
Musculoskeletal Hospitalization	249	2.7
Psychiatric Hospitalization	174	1.9
Neurological Hospitalization	40	0.4
Any Hospitalization	528	5.7
Psychiatric Disability	3,490	
Psychiatric Hospitalization	714	20.5
Neurological Hospitalization	42	1.2
Musculoskeletal Hospitalization	38	1.1
Any Hospitalization	815	23.4
Neurological Disability	2,412	
Neurological Hospitalization	75	3.1
Psychiatric Hospitalization	70	2.9
Musculoskeletal Hospitalization	46	1.9
Any Hospitalization	217	9.0

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 14D: Most Prevalent Hospitalization Body System Categories within Leading Disability Body System Categories, Air Force FY 2018-2022

AIR FORCE		
	n	% ¹
Total Disability Discharged	15,403	
Psychiatric Hospitalization	627	4.1
Neurological Hospitalization	92	0.6
Musculoskeletal Hospitalization	69	0.4
Any Hospitalization	1,232	8.0
Musculoskeletal Disability	6,038	
Psychiatric Hospitalization	74	1.2
Musculoskeletal Hospitalization	49	0.8
Neurological Hospitalization	24	0.4
Any Hospitalization	192	3.2
Psychiatric Disability	7,045	
Psychiatric Hospitalization	579	8.2
Neurological Hospitalization	38	0.5
Musculoskeletal Hospitalization	24	0.3
Any Hospitalization	674	9.6
Neurological Disability	3,727	
Neurological Hospitalization	59	1.6
Psychiatric Hospitalization	41	1.1
Musculoskeletal Hospitalization	27	0.7
Any Hospitalization	157	4.2

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. 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.
2. 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 hospitalizations should be considered an underestimate.
3. Due to the use of both ICD-9 and ICD-10 codes during this report's time period, 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. Weber, N., et al., *Accession Medical Standards Analysis and Research Activity (AMSARA) 2022 Annual Report*.
12. Armed Forces Health Surveillance Branch, *Hospitalizations, active component, U.S. Armed Forces, 2020*. *Medical Surveillance Monthly Report*, 2021. 27.

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/>.

Alvarado, E. (2023). Warrior Shield [Photograph]. VIRIN 230316-A-JV122-009C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2003185032/>.

Archer, P. L. (2019). Dawn Display [Photograph]. VIRIN 190911-N-DM308-003Y. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002181874/>.

Asselta, D. (2023). Ready for Fuel [Photograph]. VIRIN 230220-F-UN842-0287M. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2003173064/>.

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

Chagnon, D. (2023). On Target [Photograph]. VIRIN 230211-M-HU496-1039. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2003162753/>.

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

Groue, K. (2023). Shooting Star [Photograph]. VIRIN 230428-F-BD983-1962Y. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2003213120/>.

Hardy, H. (2023). Going Up! [Photograph]. VIRIN 230406-F-NF371-1234. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2003208600/>.

Harmon, T. (2023). Flight Check. [Photograph]. VIRIN 230405-M-JO217-1257C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2003204064/>.

Keckeisen, M. (2023). Watch Work [Photograph]. VIRIN 230201-N-MK109-1020C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2003157369/>.

LaCorte, K. (2023). Guardian Blitz [Photograph]. VIRIN 230202-Z-VY485-2361C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2003157367/>.

Loessin, C. (2019). Fast Turn. [Photograph]. VIRIN 191029-N-YW238-1322C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2002204384/>.

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

Pena, A. (2023). Parachute Pack [Photography]. VIRIN 230307-F-HY271-0357C. U.S. Dept of Defense. <https://www.defense.gov/Multimedia/Photos/igphoto/2003182648/>.

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

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/>.

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

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

AFI	Air Force Instruction
AMSARA	Accession Medical Standards Analysis and Research Activity
AR	Army Regulation
CFR	Code of Federal Regulation
CMS	Center for Medicare & Medicaid Services
DES	Disability Evaluation System
DESAR	Disability Evaluation System Analytics and Research
DMDC	Defense Manpower Data Center
DoD	Department of Defense
DoDI	Department of Defense Instruction
DQ	Disqualification
FY	Fiscal Year
GEMS	General Equivalence Mapping System
Hx	History
ICD-9	International Classification of Diseases, 9th Revision
ICD-10	International Classification of Diseases, 10th Revision
MDD	Major Depressive Disorder
MDR	MHS Data Repository
MEB	Medical Evaluation Board
MEPS	Military Entrance Processing Station
MHS	Military Health System
MOS	Military Occupation Specialty
MTF	Military Treatment Facility
NG	National Guard
NRC	US Navy Recruiting Command
OCO	Overseas Contingency Operations
PEB	Physical Evaluation Board
PDRL	Permanent Disability Retirement List
PTSD	Post-Traumatic Stress Disorder
SECNAV	Secretary of the Navy
SM	Service Member
SSN	Social Security Number
SWODDB	Separated without DoD Disability Benefits
SWSP	Separated with Severance Pay
TBI	Traumatic Brain Injury
TDRL	Temporary Disability Retirement List
UR	Unrated
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