



# Annual Medical Discharges in the UK Regular Armed Forces

## Ministry of Defence

1 April 2018 to 31 March 2023

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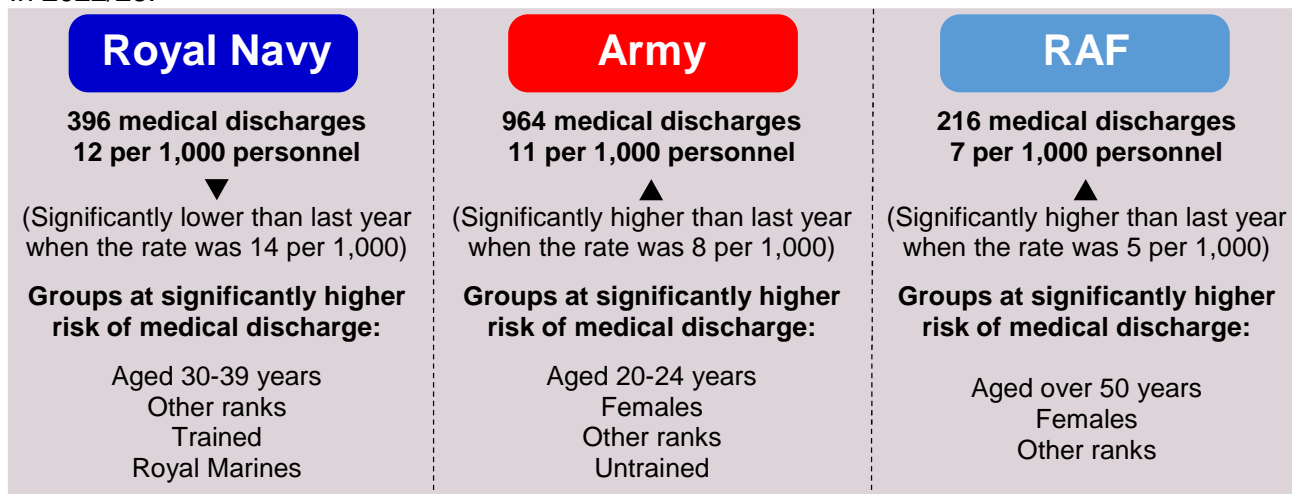
This official statistic provides information on medical discharges among UK regular service personnel. The bulletin focuses on medical discharges within the most recent financial year including demographic factors and the medical causes leading to the discharge, as well as providing time trends for the last ten years.

When a medical condition or fitness issue affects a member of the UK armed forces, their ability to perform their duties is assessed. If they are unable to perform their duties and alternative employment within the armed forces is not available, personnel may be medically discharged. Medically discharged personnel leave the armed forces prior to the completion of their contract and may be entitled to additional payments as part of their military pension.

The medical reason for the discharge is recorded and categorised. It is possible for personnel to be medically discharged for multiple reasons.

### Key Points and Trends

In 2022/23:



For all three services, the most common principal cause of medical discharge were **Musculoskeletal Disorders and Injuries** and **Mental and Behavioural Disorders**. This was in line with findings from previous years.



Around **half** (45%) of all medical discharges were the result of more than one medical condition.

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**Background quality report:** <https://www.gov.uk/government/collections/medical-discharges-among-uk-service-personnel-statistics-index>

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Past publications and supplementary tables containing all data presented in this publication can be found at:

<https://www.gov.uk/government/collections/medical-discharges-among-uk-service-personnel-statistics-index>.

## Introduction

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Service personnel with medical conditions or fitness issues which affect their ability to perform their duties will generally be referred to a medical board for a medical examination and review of their medical grading. In clear cut cases where the individual's fitness falls below the service employment and retention standards the board will recommend a medical discharge; as laid down in the medical policy and/or the single services retention standards for their career group. In many cases however, the patient will first be downgraded to allow for treatment, recovery, and rehabilitation. For personnel who do not make a total recovery, the board may recommend the patient is retained as permanently downgraded with limited duties, or they may recommend a medical discharge. The recommendation is then forwarded to personnel administration units or an employment board for ratification or decision and action.

This report provides the Ministry of Defence (MOD), the general public, and the media with information on medical discharges in the UK regular armed forces. In addition, this information is used to prioritise resources used for the rehabilitation and reintegration of personnel leaving the armed forces for medical reasons and to help inform discussions on injury prevention in the armed forces. Each of the three services are presented separately as comparisons between the services are considered invalid. This is because practices and protocols for recommending and awarding a medical discharge differ. This is particularly true for untrained personnel.

Please note that this report focuses exclusively on medical discharges that have occurred; personnel who exit the forces for any other reason<sup>1</sup> or medically downgraded personnel who are retained in service are excluded. In addition, as these statistics relate only to the population of personnel who medically discharged, the proportions of medical reasons leading to discharge are not necessarily indicative of the prevalence of such conditions in the entire UK armed forces population. It is possible for personnel to be medically discharged for multiple reasons; this document focuses on principal cause of medical discharge and information on principal and contributory cause can be found in the supplementary tables.

This official statistic includes medical discharges of regular UK armed forces personnel only and excludes all reservist personnel. This is because the medical discharge process and medical record information for reservist personnel is not comparable to that of regular personnel. Most reserve personnel do not receive their primary medical care from MOD, but instead receive their primary medical care from the NHS. Therefore, Defence Statistics Health are unable to verify the quality of information relating to the discharge of reservist personnel and it has not been deemed appropriate to include information on this population until further understanding is gained.

Please note that Defence Statistics Health did not receive all army discharge paperwork confirming cause of medical discharge between 2013/14 and 2018/19, and Royal Navy/Royal Marines and RAF paperwork for 2015/16. Therefore, cause information for these years should be considered a minimum. It is not expected that further information will be obtained and therefore figures considered final. Please see the annual medical discharges in the UK regular armed forces background quality report for further information<sup>2</sup>.

Since 2019/20, the primary source of the cause of medical discharge is the electronic medical record (DMICP), supplemented by paperwork in the form of FMed 23s. Please see the methodology (page 35) and the annual medical discharges in the UK regular armed forces background quality report for further information<sup>2</sup>.

## Main Points

Between 1 April 2022 and 31 March 2023 (2022/23), of the UK regular armed forces population:

### Royal Navy

**396** Royal Navy/Royal Marines personnel were medically discharged, a rate of **12 per 1,000 personnel**. The rate was significantly **lower** than last year (14 per 1,000 personnel).

### Army

**964** army personnel were medically discharged, a rate of **11 per 1,000 personnel**. The rate was significantly **higher** than last year (8 per 1,000 personnel).

### RAF

**216** RAF personnel were medically discharged, a rate of **7 per 1,000 personnel**. The rate was significantly **higher** than last year (5 per 1,000 personnel).

A total of **1,576 medical discharges** occurred in 2022/23, representing approximately 4 UK regular armed forces personnel medically discharged each day.

The rate of medical discharges in 2022/23 fell in the Royal Navy/Marines and increased in the army and the RAF. However, changes in rates do not necessarily reflect prevalence of injury and/or illness, and instead may reflect changes in medical boarding practices, retention policies or changes to employment standards.

When looking at trends, caution should be taken when comparing rates of medical discharges in 2022/23 to the previous two years. As a result of the COVID-19 pandemic, there was a reduction in some routine and training activities. This, along with temporary amendments to medical employment policy, to reduce the pressure on the military medical chain and the NHS, may have resulted in fewer medical discharges in 2020/21 and had subsequent impact in the years following the pandemic. In 2022/23, rates of Royal Navy medical discharges were not significantly different to the rate prior to the pandemic, army rates remained significantly lower and RAF rates were significantly higher.

In 2022/23 the following demographic groups were significantly more likely to medically discharge:

- **Other ranks** in all services.
- **Females** in the army and RAF.
- **Trained** personnel in the Royal Navy/Royal Marines.
- **Untrained** personnel in the army.
- Royal Navy/Royal Marines aged **30-39 years**.
- Army aged **20-24 years**.
- RAF aged **over 50 years**.
- **Royal Marines** compared to the Royal Navy.

The demographic groups with higher rates of discharge were broadly consistent with the results from previous reports. The annual MOD Health and Safety Statistics historically has found other ranks and untrained personnel had higher rates of injury<sup>3</sup>. The Women in Ground Close Combat Roles review also found that female personnel had a higher rate of injuries than males<sup>4</sup>.

**Mental and Behavioural Disorders** and **Musculoskeletal Disorders and Injuries** were the two most common principal causes of medical discharge for each service. This finding is likely to be due to the physical demands of the UK armed forces; challenges in retaining personnel with severe or enduring mental ill-health given the nature of their role and access to weapons, as well as the commonality of these conditions among the general population. Other militaries report similar findings; the United States Army<sup>5</sup> and Canadian military<sup>6</sup> report Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders as the two most common reasons for medical release.

Prior to 2019/20, Musculoskeletal Disorders and Injuries was the most common principal cause of medical discharge across all three services. Since 2019/20 for the RAF and 2020/21 for the army, the proportion of medical discharges as a result of Mental and Behavioural Disorders, has been higher than that of Musculoskeletal Disorders and Injuries. In the army, this change could be the result of temporary amendments introduced to medical employment policy and restricted clinical activity in rehabilitation services due to COVID-19, which may have led to more deferrals for discharge for personnel with Musculoskeletal Disorders and Injuries than Mental and Behavioural Disorders. Additionally, the reduction in some routine and training activities may have led to fewer Musculoskeletal Disorders and Injuries, and thus fewer medical discharges in the following years. In recent years, the increasing proportion of Mental and Behavioural Disorders discharges may also be due to MOD led anti-stigma campaigns, improving awareness of mental health issues among UK armed forces personnel, Commanding Officers, and clinicians which may have led to greater detection of mental ill-health.

# Royal Navy/Royal Marines

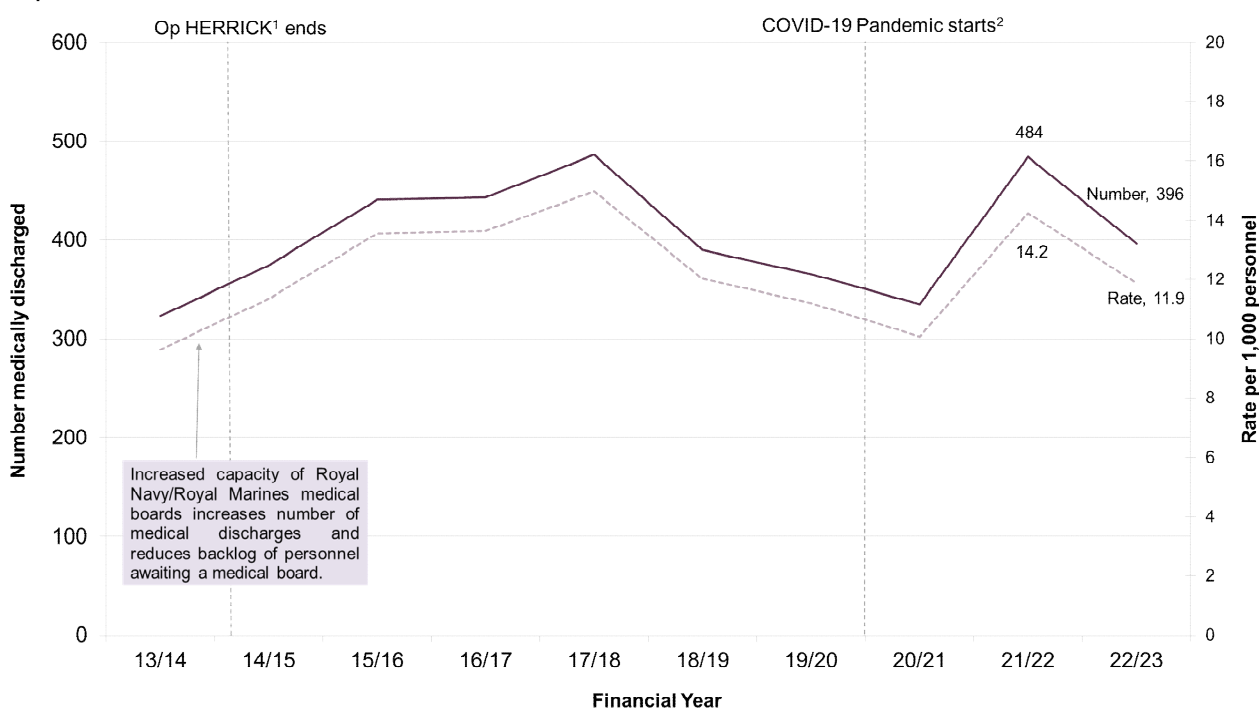
## Trends in Medical Discharges

In 2022/23, there were **396** medical discharges from the Royal Navy/Royal Marines; a rate of **12 per 1,000** personnel. This rate was **significantly lower** than last year.

The rates of medical discharge by demographic groups can be found for the Royal Navy and Royal Marines as individual populations in **Annex A** (pages 38 to 41).

**Figure 1** shows the number and rate of Royal Navy/Royal Marines medical discharges over time from 2013/14 to 2022/23.

**Figure 1: UK Regular Royal Navy/Royal Marines medical discharges by financial year, numbers and rates per 1,000 personnel**  
1 April 2013 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> Operation HERRICK is the name for UK operations in Afghanistan which began 1 April 2006 and ended on 30 November 2014.

<sup>2</sup> March 2020 - start of COVID-19 pandemic; Defence, in line with the rest of the country followed guidance on restrictions from the UK Government and devolved administrations.

▲ The rate of medical discharges rose between 2013/14 and 2017/18 from 9.6 to 15.0 per 1,000. The rise may in part have been due to an increase in the capacity of Royal Navy/Royal Marines medical boards. Increased capacity meant that the medical boards could reduce any backlog of personnel awaiting a formal medical board following the reduction in the capacity during 2013/14 due to a lack of administrative support.

▼ The rate of medical discharges fell between 2017/18 and 2020/21 from 15.0 to 10.1 per 1,000. The reasons for this are unclear, however the fall in 2020/21 may partially be explained by COVID-19 restrictions on routine and clinical activity, and a deferral of discharges to minimise burden on the NHS.

▲ The rate of medical discharges in 2021/22 returned to similar levels seen in 2017/18 (14.2 and 15.0 per 1,000 respectively). This rise may in part have been due to a review of the management and retention of long-term downgraded personnel.

▼ The rate of medical discharges fell between 2021/22 and 2022/23 from 14.2 to 11.9 per 1,000, with rates returning to similar levels seen prior to the COVID-19 pandemic.

## Royal Navy/Royal Marines Continued

### Demographic Risk Groups

In 2022/23, the rate of medical discharge was significantly higher for regular **Royal Navy/Royal Marines** personnel within the following demographic groups (Table 1):

- Aged 30-39 years
- Other ranks
- Trained
- Royal Marines


















#### Royal Navy personnel only:

- Aged 30-34 years
- Females
- Other ranks
- Trained

#### Royal Marines personnel only:

- Aged 30-39 years
- Other ranks
- Untrained

**Table 1: UK Regular Royal Navy/Royal Marines medical discharges by demographics<sup>1</sup>, numbers and rates per 1,000 personnel**  
1 April 2022 to 31 March 2023

|                               | n          | rate        | Rate of UK Regular Royal Navy/Royal Marines personnel medically discharged           |
|-------------------------------|------------|-------------|--|
| <b>All medical discharges</b> | <b>396</b> | <b>11.9</b> |    |
| <b>Age</b>                    |            |             |  |
| Aged under 20 -               | 5          | 2.8         |     |
| Aged 20-24 -                  | 62         | 8.6         |   |
| Aged 25-29                    | 84         | 12.4        |  |
| Aged 30-34 +                  | 102        | 18.1        |  |
| Aged 35-39 +                  | 72         | 15.2        |  |
| Aged 40-44                    | 33         | 9.9         |  |
| Aged 45-49                    | 22         | 11.5        |  |
| Aged 50 and over              | 16         | 8.2         |  |
| <b>Gender</b>                 |            |             |  |
| Male                          | 346        | 11.6        |  |
| Female                        | 50         | 14.4        |  |
| <b>Rank</b>                   |            |             |  |
| Officer                       | 35         | 5.0         |  |
| Other Rank*                   | 361        | 13.7        |  |
| <b>Training Status</b>        |            |             |  |
| Trained*                      | 360        | 12.3        |  |
| Untrained                     | 36         | 8.6         |  |
| <b>Service</b>                |            |             |  |
| Royal Navy                    | 301        | 11.2        |  |
| Royal Marines*                | 95         | 14.4        |  |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

+/- Age groups found to be at a statistically significantly higher (+) or lower (-) risk than the remaining age groups combined using a z-test for a single proportion at a 95% confidence level.

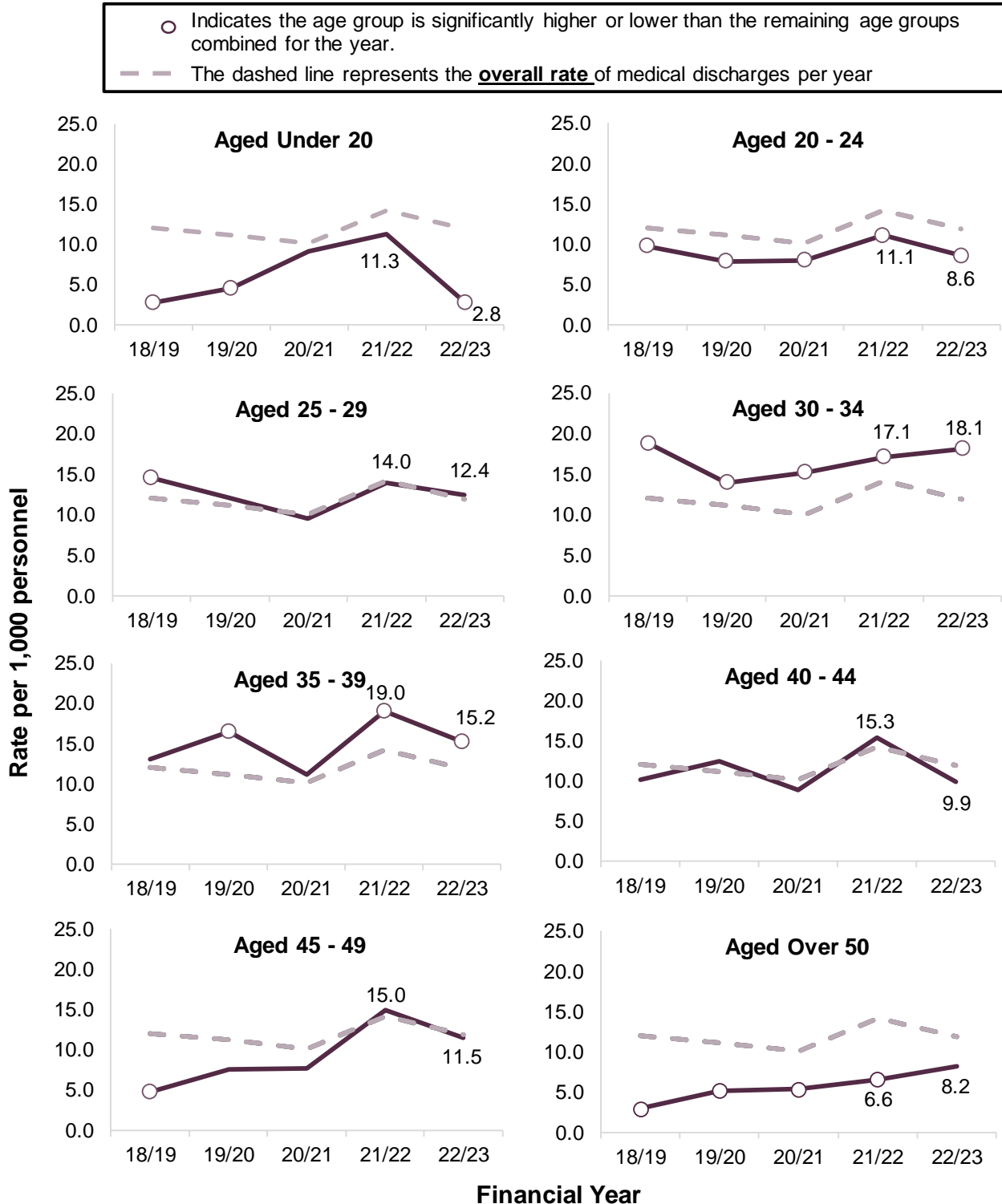
\* Groups found to be at a statistically significantly higher risk using a z-test for proportions at a 95% confidence level

## Royal Navy/Royal Marines Continued

Figures 2 to 6 present the Royal Navy/Royal Marines medical discharges by demographic group from 2018/19 to 2022/23 with possible explanations for the differences observed.

The rates of medical discharge by demographic groups can be found for the Royal Navy and Royal Marines as individual populations in **Annex A** (pages 38 to 41).

**Figure 2: UK Regular Royal Navy/Royal Marines medical discharges by age group<sup>1</sup> and financial year<sup>2</sup>, rates per 1,000 personnel**  
1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.

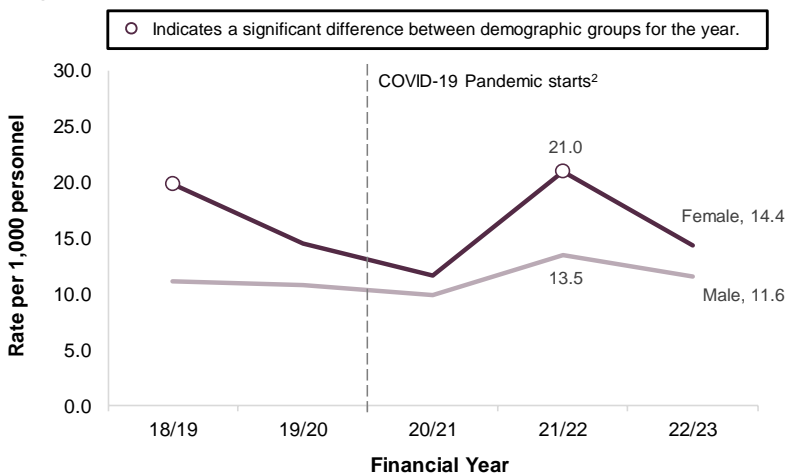


## Royal Navy/Royal Marines Continued

In 2022/23, the rate of medical discharge for personnel **aged 30-34 years** and **aged 35-39 years** were **significantly higher** than other age groups and the rate for those **aged under 20 years** and **aged 20-24 years** were **significantly lower** compared to other age groups.

Personnel aged 30-34 had significantly higher rates of medical discharge than other age groups throughout whole reporting period. The rate of medical discharges for personnel aged over 50 has increased since 2017/18 and in 2022/23 was no longer significantly lower than other age groups. The rate of medical discharges for personnel aged under 20 increased in the four years between 2018/19 and 2021/22, however the rate fell in the latest year to a similar level to 2018/19.

**Figure 3: UK Regular Royal Navy/Royal Marines medical discharges by gender<sup>1</sup> and financial year, rates per 1,000 personnel**  
1 April 2018 to 31 March 2023



The rate of medical discharges in females has been higher than males for all years presented.

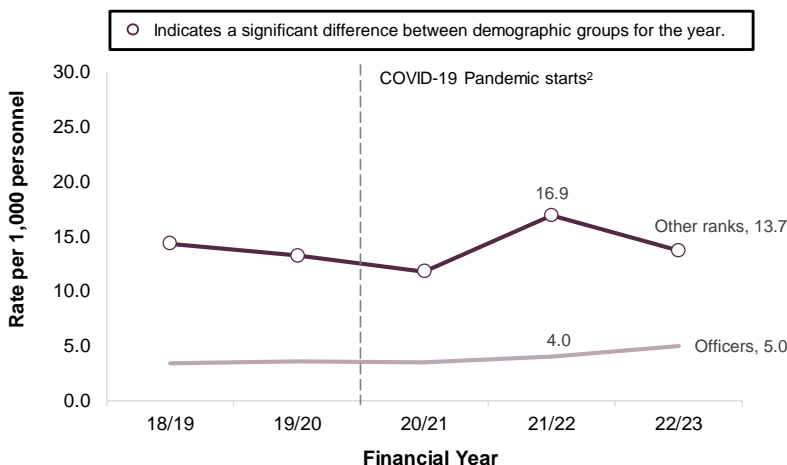
The higher rate of medical discharges in female personnel may be due to their higher risk of sustaining Musculoskeletal Disorders and Injuries<sup>4</sup>, reporting injury<sup>3</sup> and higher presentation of mental health disorders<sup>7</sup>.

Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.

**Figure 4: UK Regular Royal Navy/Royal Marines medical discharges by rank<sup>1</sup> and financial year, rates per 1,000 personnel**  
1 April 2018 to 31 March 2023



The rate of medical discharge among **other ranks was significantly higher** than officers throughout the period presented. The reason for this is unclear, however it may in part be due to role requirements. Officers may have more opportunities to be placed in an ashore role where it is easier to deliver medical care and assess treatment. There are complexities of retaining personnel with medical needs in on-board ship roles.

Source: DMICP, FMed 23 and JPA

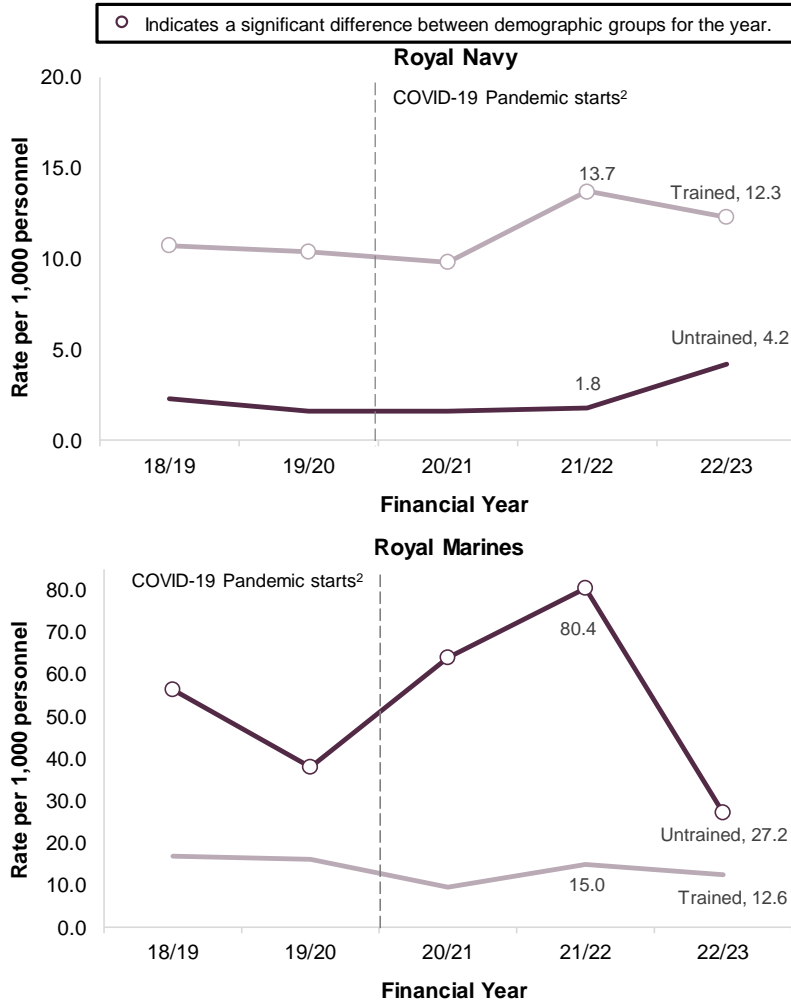
<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.



## Royal Navy/Royal Marines Continued

**Figure 5: UK Regular Royal Navy/Royal Marines medical discharges by training status<sup>1</sup> and financial year, rates per 1,000 personnel**  
1 April 2018 to 31 March 2023



The rate of medical discharge was **significantly higher** among **trained personnel for Royal Navy/Royal Marines** combined.

When considering the Royal Navy and Royal Marines separately; the rate of medical discharge was **significantly higher** among **trained Royal Navy** personnel and **untrained Royal Marines** throughout the period presented.

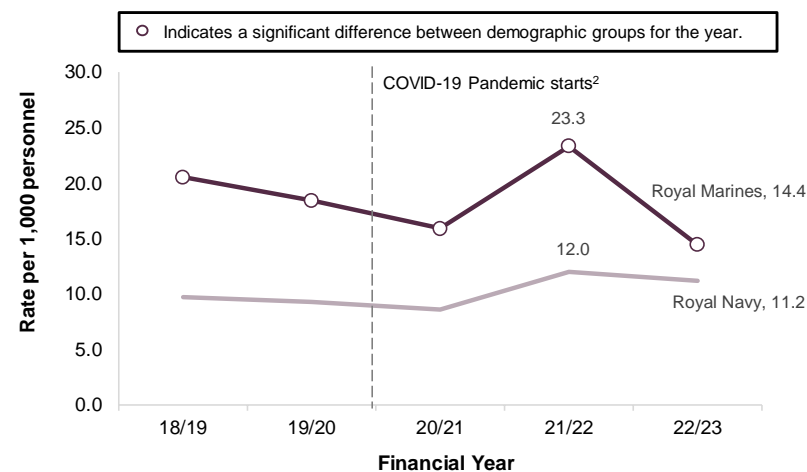
The higher rate of medical discharges among untrained Royal Marines may be due to the intensive nature of the training programme. The reason for the change in untrained Royal Marine rates over time is unclear, however changes in the small numbers involved can have an effect on the rate.

Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.

**Figure 6: UK Regular Royal Navy/Royal Marines medical discharges by service<sup>1</sup> and financial year, rates per 1,000 personnel**  
1 April 2018 to 31 March 2023



The rate of medical discharges among **Royal Marines** was **significantly higher** than the **Royal Navy** in each of the years presented.

This is likely to be due to a combination of factors:

- A higher standard of physical fitness associated with training and deployment is required in the Royal Marines. Rigorous training routines may lead to increased injuries.
- Less availability of roles within the Royal Marines for personnel with limited deployability compared to the Royal Navy.

Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.

## Royal Navy/Royal Marines Continued

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### Causes of Medical Discharge

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When UK armed forces personnel are medically discharged, the medical reason for the discharge is recorded and categorised using a coding system known as ICD-10 (see glossary). **Principal cause** is the main medical cause of the discharge. **Contributory causes** include any other conditions identified that would result in a medical discharge. All further information presented in the cause of medical discharge section will be relating to principal cause of discharge only.

In 2022/23, the two most common principal causes of medical discharges in the Royal Navy/Royal Marines were Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders.

**46%** of medical discharges (approx. 1 in 2) were due to **Musculoskeletal Disorders and Injuries**.

**29%** of medical discharges (approx. 1 in 3) were due to **Mental and Behavioural Disorders**.

#### Royal Navy personnel only:

- **40%** of medical discharges were due to Musculoskeletal Disorders and Injuries.
- **35%** of medical discharges were due to Mental and Behavioural Disorders.

#### Royal Marines personnel only:

- **65%** of medical discharges were due to Musculoskeletal Disorders and Injuries.
- **11%** of medical discharges were due to Mental and Behavioural Disorders.

**Table 2** presents Royal Navy/Royal Marines medical discharges by principal ICD-10 cause code group (the chapter within which the condition is categorised) for 2022/23 and the total for the latest five year period, 2018/19 to 2022/23. The five year total is provided as a comparator for the cause group percentages in the latest year. For a breakdown of each of the five years, please see the supplementary tables (Table 3).

## Royal Navy/Royal Marines Continued

**Table 2: UK Regular Royal Navy/Royal Marines medical discharges by principal ICD-10 cause code group<sup>1</sup> and financial year, numbers and percentages<sup>2</sup>**

1 April 2018 to 31 March 2023

|   | 5 Year Total<br>2018/19-2022/23 |            | 2022/23    |            |
|---|---------------------------------|------------|------------|------------|
|   | n                               | %          | n          | %          |
| <b>All medical discharges</b>                               | <b>1,970</b>                    |            | <b>396</b> |            |
| <b>All cause coded medical discharges</b>                   | <b>1,968</b>                    | <b>100</b> | <b>396</b> | <b>100</b> |
| Infectious and parasitic diseases                           | ~                               | <1         | ~          | <1         |
| Neoplasms   | 26                              | 1          | 6          | 2          |
| Blood disorders   | ~                               | <1         | ~          | <1         |
| Endocrine, nutritional and metabolic diseases               | 43                              | 2          | 8          | 2          |
| - Of which diabetes   | 30                              | 2          | 5          | 1          |
| - Of which insulin-dependent                                | 16                              | <1         | ~          | 1          |
| - Of which non-insulin-dependent                            | 11                              | <1         | 0          | 0          |
| Mental and behavioural disorders                            | 488                             | 25         | 116        | 29         |
| - Of which mood disorders                                   | 150                             | 8          | 35         | 9          |
| - Of which depression                                       | 132                             | 7          | 32         | 8          |
| - Of which neurotic, stress related and somatoform          | 293                             | 15         | 69         | 17         |
| - Of which post-traumatic stress disorder (PTSD)            | 142                             | 7          | 22         | 6          |
| - Of which adjustment disorder                              | 31                              | 2          | 8          | 2          |
| Nervous system disorders                                    | 82                              | 4          | 16         | 4          |
| - Of which epilepsy   | 6                               | <1         | ~          | <1         |
| Eye and adnexa diseases                                     | 14                              | <1         | ~          | 1          |
| - Of which blindness, low vision and visual disturbance     | ~                               | <1         | 0          | 0          |
| Ear and mastoid process diseases                            | 63                              | 3          | 9          | 2          |
| - Of which hearing loss                                     | 50                              | 3          | 7          | 2          |
| - Of which noise-induced hearing loss                       | 10                              | <1         | 0          | 0          |
| - Of which tinnitus   | 6                               | <1         | ~          | <1         |
| Circulatory system disorders                                | 54                              | 3          | 10         | 3          |
| Respiratory system disorders                                | 28                              | 1          | 6          | 2          |
| - Of which asthma   | 21                              | 1          | 5          | 1          |
| Digestive system disorders                                  | 57                              | 3          | 11         | 3          |
| Skin and subcutaneous tissue diseases                       | 44                              | 2          | 6          | 2          |
| Musculoskeletal disorders and injuries                      | 964                             | 49         | 182        | 46         |
| - Of which injuries and disorders of the knee               | 228                             | 12         | 45         | 11         |
| - Of which knee pain  | 108                             | 5          | 27         | 7          |
| - Of which back pain  | 178                             | 9          | 33         | 8          |
| - Of which low back pain                                    | 161                             | 8          | 26         | 7          |
| - Of which injuries and disorders of the ankle and foot     | 110                             | 6          | 28         | 7          |
| - Of which heat injury                                      | 5                               | <1         | 0          | 0          |
| - Of which cold injury                                      | 17                              | <1         | ~          | <1         |
| Genitourinary system diseases                               | 13                              | <1         | 5          | 1          |
| Pregnancy, childbirth and puerperium                        | 0                               | 0          | 0          | 0          |
| Congenital malformations                                    | 8                               | <1         | 0          | 0          |
| Clinical and laboratory findings                            | 57                              | 3          | 10         | 3          |
| External causes of morbidity and mortality                  | ~                               | <1         | 0          | 0          |
| Factors influencing health status                           | 20                              | 1          | ~          | 1          |
| No details held on principal condition for medical boarding | 2                               |            | 0          |            |
| Withheld consent  | 0                               |            | 0          |            |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> Each cause of discharge category has been compiled using ICD-10 codes, please see the supplementary tables for specific codes.

<sup>2</sup> Percentages are calculated from the total of all cause-coded medical discharges. Data presented as "<1%" represent a percentage greater than 0% but smaller than 1%.

~ In line with JSP 200 on statistical disclosure, figures fewer than five have been suppressed. Where there was only one cell in a row or column that was fewer than five, the next smallest number has also been suppressed so that numbers cannot simply be derived from totals.

## Royal Navy/Royal Marines Continued

**Figure 7** shows the main principal cause coded medical discharges between 2018/19 and 2022/23.

Musculoskeletal Disorders and Injuries was the largest principal cause of Royal Navy/Royal Marines medical discharges over the last five years, accounting for approximately half of all discharges (46%). The proportion of Musculoskeletal Disorders and Injuries discharges over the last five years was higher among Royal Marines personnel (68%) than Royal Navy personnel (40%), which may be due to the physically intensive nature of many of the roles within this service.

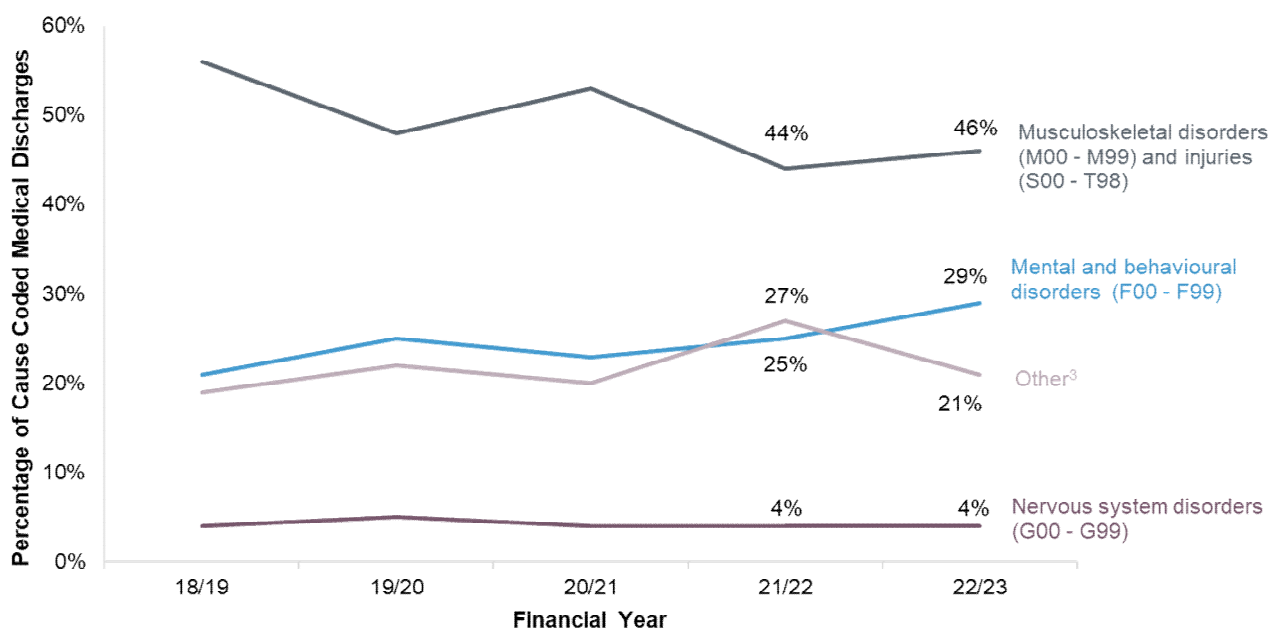
Mental and Behavioural Disorders remained the second largest principal cause of Royal Navy/Royal Marines medical discharges across the reporting period and the proportion of medical discharges for these disorders increased between 2018/19 and 2022/23. Mental and Behavioural Disorders over the last five years accounted for a lower proportion of all medical discharges among Royal Marines (10%) than Royal Navy personnel (31%). Rates of personnel seen in any military healthcare setting for a mental health related reason<sup>7</sup> were also significantly lower among Royal Marines compared to the Royal Navy and the other services (army and RAF); this may be attributed to their selection processes, tight unit cohesion and high levels of preparedness.

Nervous System Disorders was the third largest principal cause of Royal Navy/Royal Marines medical discharges over the last five years, accounting for around 4% of all medical discharges since 2018/19.

Please note that each medical discharge can only have one principal condition, and a decrease in one cause code group may appear as an increase in another. Therefore, it is important to consider all cause code groups when looking at trends over time.

**Figure 7: UK Regular Royal Navy/Royal Marines medical discharges by principal ICD-10 cause code group and financial year, percentages<sup>1,2</sup>**

1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> Percentages are calculated from the total of all cause-coded medical discharges.

<sup>2</sup> Due to rounding, percentages might not add to 100%.

<sup>3</sup> Includes 15 cause code groups; each accounting for a maximum of 3% of all Royal Navy/Royal Marines cause coded medical discharges.

## Royal Navy/Royal Marines Continued

Figure 8 shows the proportions of cause coded medical discharges by principal ICD-10 cause code groups in 2022/23.

Over half of the medical discharges as a result of Musculoskeletal Disorders and Injuries in 2022/23 were linked to the knee, back, and ankle and foot (n = 106, 58%). The high numbers of medical discharges for these conditions is likely to be due to physical activity required in many areas of the Royal Navy/Royal Marines; training on uneven ground carrying heavy loads, adopting firing positions, climbing ladders and working on a moving platform aboard ship. Back pain is also the leading cause of disability in the UK and global populations<sup>8</sup>.

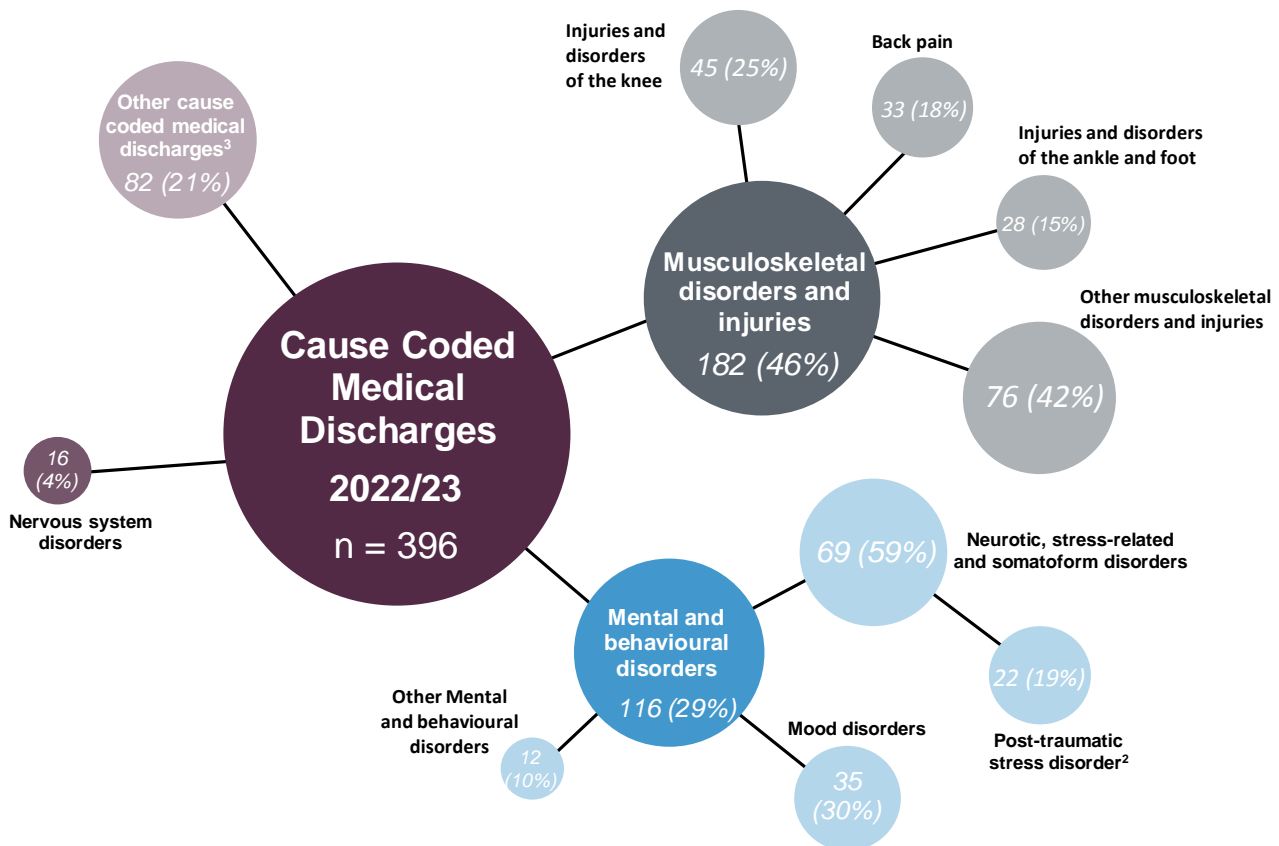
The remaining medical discharges due to Musculoskeletal Disorders and Injuries (n = 76, 42%) were distributed across a wide range of disorders and injuries, with no large numbers of discharges in one particular body region or medical condition.

The majority of medical discharges as a result of Mental and Behavioural Disorders in 2022/23 were due to Neurotic, Stress and Somatoform Disorders (n = 69, 59%), and Mood Disorders (n = 35, 30%). Neurotic Disorders were the most prevalent mental disorder assessed at MOD Specialist Mental Health services (DCMHs) in 2022/23<sup>7</sup>.

In 2022/23, Post-Traumatic Stress Disorder (PTSD) accounted for approximately 1 in 5 Mental and Behavioural Disorder medical discharges whereas PTSD only accounted for fewer than 1 in 10 initial assessments by MOD specialist mental health clinicians<sup>7</sup>. This difference may reflect the severity of PTSD and the impact that a continued role in the military may have on the individual's condition.

**Figure 8: UK Regular Royal Navy/Royal Marines medical discharges by principal ICD-10 cause code group, numbers and percentages<sup>1</sup>**

1 April 2022 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> Due to rounding, percentages might not add to 100%.

<sup>2</sup> Post-traumatic stress disorder discharges are shown as a percentage of Mental and Behavioural Disorders and not Neurotic Stress-related and Somatoform Disorders.

<sup>3</sup> Includes 13 cause code groups; each accounting for a maximum of 3% of all Royal Navy/Royal Marines cause coded medical discharges.

## Royal Navy/Royal Marines Continued

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When considering both the principal and contributory causes of discharge in the Royal Navy/Royal Marines in 2022/23:

- Musculoskeletal Disorders and Injuries were present in over half of discharges (n = 223, 56%).
- Mental and Behavioural Disorders were present in just under half of discharges (n = 168, 42%).
- Whilst the top two principal and contributory causes of discharge were consistent in both the Royal Navy and Royal Marines, the third most common causes differed:
  - In the Royal Navy, Endocrine, Nutritional and Metabolic diseases were the third most common cause (n = 21, 7%).
  - In the Royal Marines, Ear and Mastoid Process Diseases were the third most common cause (n = 7, 7%).

Further information on the principal and contributory causes of medical discharge in the UK regular Royal Navy/Royal Marines can be found in the supplementary tables to this report (**Table 4, 15, and 18**).



# Army

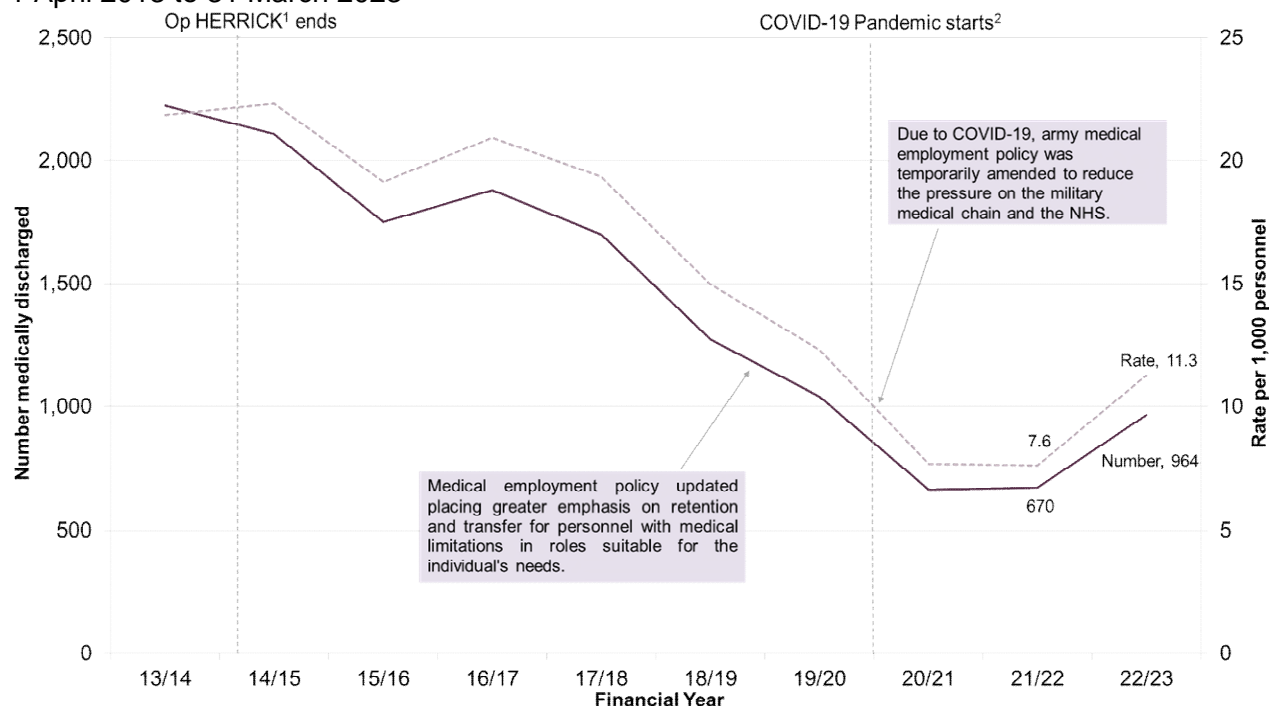
## Trends in Medical Discharges

In 2022/23, there were **964** medical discharges from the army; a rate of **11 per 1,000** personnel. This rate was **significantly higher** than last year.

**Figure 9** shows the number and rate of army medical discharges over time from 2013/14 to 2022/23. In 2022/23 rates increased for the first time since 2016/17. Despite this increase, rates of medical discharge are still significantly lower than in 2019/20 (prior to the COVID-19 pandemic).

### Figure 9: UK Regular army medical discharges by financial year, numbers and rates per 1,000 personnel

1 April 2013 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> Operation HERRICK is the name for UK operations in Afghanistan which began 1 April 2006 and ended on 30 November 2014.

<sup>2</sup> March 2020 - start of COVID-19 pandemic; Defence, in line with the rest of the country followed guidance on restrictions from the UK Government and devolved administrations.

▼ The rate of medical discharges fell between 2016/17 and 2021/22 from 20.9 per 1,000 to 7.6 per 1,000. This may be due to an increased availability of roles suitable for personnel with medical restrictions. In 2019/20, the army updated their medical employment policy placing greater emphasis on retention and transfer for personnel with medical limitations into roles suitable for their individual needs, either within their unit, cap badge or elsewhere in the army, thus retaining personnel who may previously have been medically discharged.

► Between 2020/21 and 2021/22, as a result of COVID-19, army medical employment policy was temporarily amended to reduce the pressure on the military medical chain and the NHS. Changes included medical extensions and deferrals of a person's last day of service. Additionally, a reduction in some routine and training activities may have resulted in fewer injuries and subsequently impacted the number of discharges in these years.

▲ Between 2021/22 and 2022/23 the rate of medical discharges increased for the first time since 2016/17, however the rate remains significantly lower than prior to the COVID-19 pandemic. The increase in the latest year may in part be due to personnel being medically discharged who had previously had their date of discharge deferred during the COVID-19 pandemic. It may also be due to a change in policy definition for how those who choose not to accept an alternative employment offer are categorised.

## Army Continued
















### Demographic Risk Groups

In 2022/23, the rate of medical discharge was significantly higher for regular army personnel within the following demographic groups (**Table 3**):

- Aged 20-24 years
- Females
- Other ranks
- Untrained

**Table 3: UK Regular Army medical discharges by demographics<sup>1</sup>, numbers and rates per 1,000 personnel**

1 April 2022 to 31 March 2023

|                               | n          | rate        | Rate of UK Regular Army personnel medically discharged                               |
|-------------------------------|------------|-------------|--|
| <b>All medical discharges</b> | <b>964</b> | <b>11.3</b> |    |
| <b>Age</b>                    |            |             |  |
| Aged under 20                 | 58         | 10.6        |    |
| Aged 20-24 <sup>+</sup>       | 222        | 12.7        |    |
| Aged 25-29                    | 187        | 10.9        |    |
| Aged 30-34                    | 162        | 10.4        |   |
| Aged 35-39                    | 145        | 10.8        |  |
| Aged 40-44                    | 113        | 12.2        |  |
| Aged 45-49                    | 39         | 9.4         |  |
| Aged 50 and over              | 38         | 12.0        |  |
| <b>Gender</b>                 |            |             |  |
| Male                          | 822        | 10.6        |  |
| Female*                       | 142        | 17.7        |  |
| <b>Rank</b>                   |            |             |  |
| Officer                       | 66         | 4.9         |  |
| Other Rank*                   | 898        | 12.4        |  |
| <b>Training Status</b>        |            |             |  |
| Trade Trained <sup>2</sup>    | 820        | 10.4        |  |
| Untrained*                    | 144        | 20.3        |  |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> Army personnel are considered trade trained when they have completed both phase 1 and 2 training.

+/- Age groups found to be at a statistically significantly higher (+) or lower (-) risk than the remaining age groups combined using a z-test for a single proportion at a 95% confidence level.

\* Groups found to be at a statistically significantly higher risk using a z-test for proportions at a 95% confidence level.

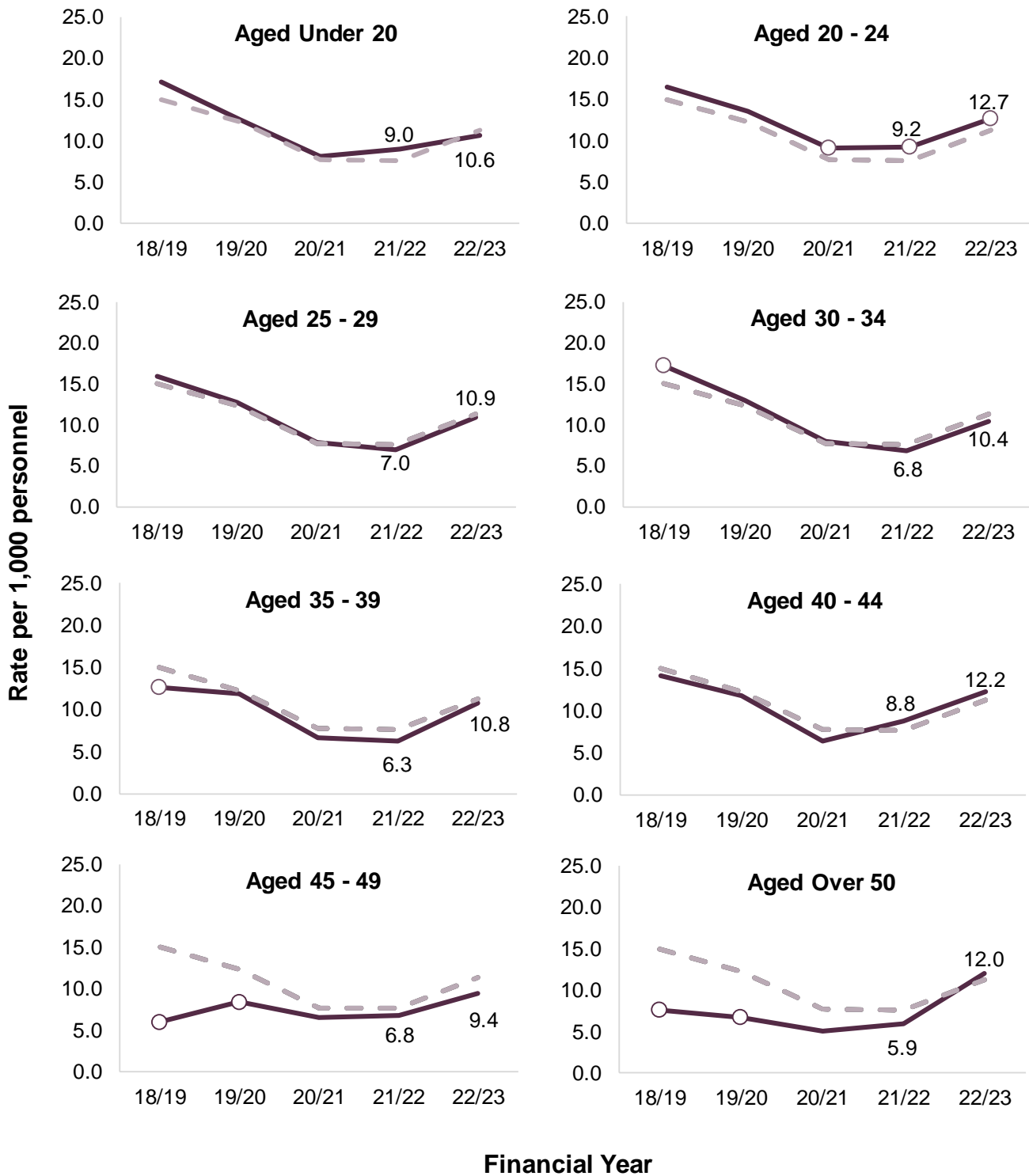
The higher rates of presentation among the demographic groups seen in Table 3 were broadly consistent to those seen in previous years. **Figures 10 to 13** present the army medical discharges by demographic group over time, with possible explanations for the differences observed.

# Army Continued

**Figure 10: UK Regular Army medical discharges by age group<sup>1</sup> and financial year<sup>2</sup>, rates per 1,000 personnel**

1 April 2018 to 31 March 2023

○ Indicates the age group is significantly higher or lower than the remaining age groups combined for the year.  
 - - The dashed line represents the overall rate of medical discharges per year



Source: DMICP, FMed 23 and JPA

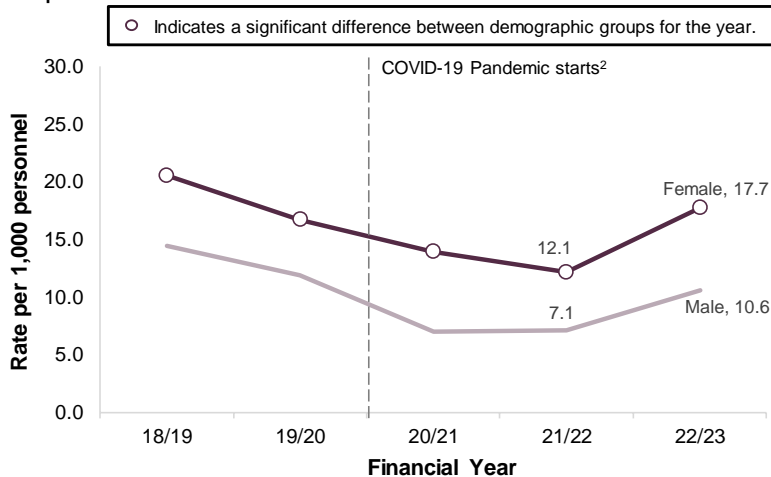
<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.

## Army Continued

In 2022/23, the rate of medical discharge for personnel **aged 20-24** was significantly higher than the remaining age groups for the third year in a row.

**Figure 11: UK Regular Army medical discharges by gender<sup>1</sup> and financial year, rates per 1,000 personnel**  
1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

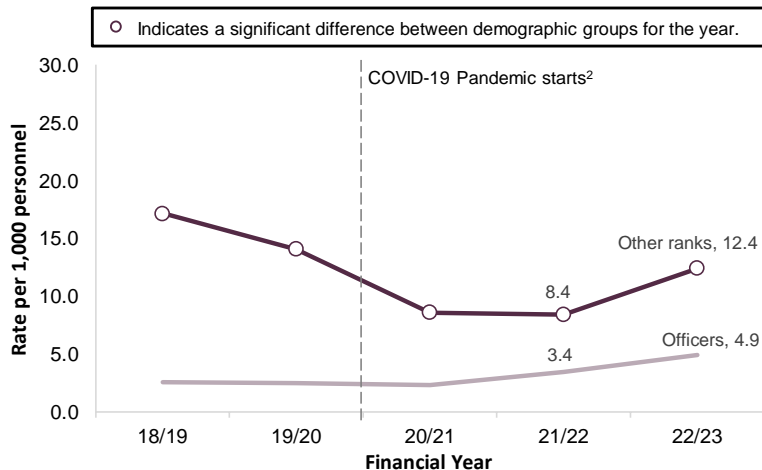
<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.

Army **females** had **significantly higher rates** of medical discharge than males throughout the period presented.

The higher rate of medical discharges in female personnel may be due to their higher risk of sustaining Musculoskeletal Disorders and Injuries<sup>4</sup>, and higher presentation of mental health disorders<sup>7</sup> (the leading two causes of medical discharge).

**Figure 12: UK Regular Army medical discharges by rank<sup>1</sup> and financial year, rates per 1,000 personnel**  
1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

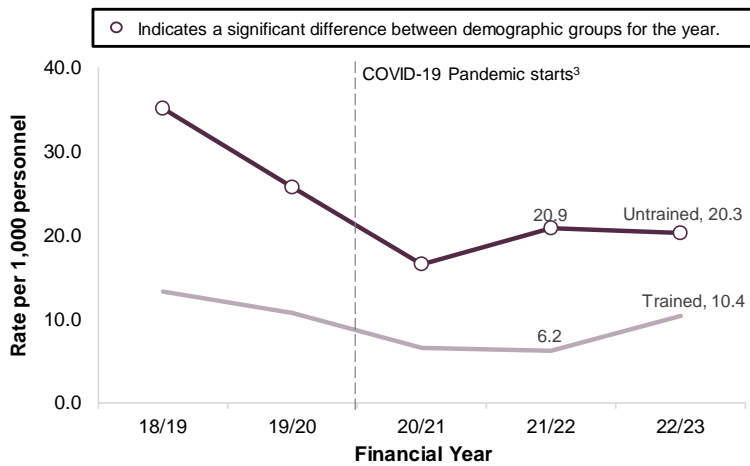
<sup>2</sup> March 2020 - start of COVID-19 pandemic.

The rates of medical discharge among **other ranks** were **significantly higher** than for officers throughout the period presented.

Officers are more likely to be employed in office-based roles than other ranks and are more likely to be employed in or can be reassigned to duties that are compatible with their individual medical limitations.

## Army Continued

**Figure 13: UK Regular Army medical discharges by training status<sup>1,2</sup> and financial year, rates per 1,000 personnel**  
1 April 2018 to 31 March 2023



The rate of medical discharge among **untrained personnel** remained **significantly higher** than trade trained personnel throughout the period presented. The rates of medical discharges were also higher among untrained Royal Marines which may be due to the similarly intensive nature of the army and Royal Marines training programmes.

Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> Army personnel are considered trade trained when they have completed both phase 1 and 2 training.

<sup>3</sup> March 2020 - start of COVID-19 pandemic.

## Army Continued

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### Causes of Medical Discharges

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When UK armed forces personnel are medically discharged, the medical reason for the discharge is recorded and categorised using a coding system known as ICD-10 (see glossary). **Principal cause** is the main medical cause of the discharge. **Contributory causes** include any other conditions identified that would result in a medical discharge. All information presented in the cause of medical discharge section will be relating to principal cause of discharge only.

In 2022/23, the two most common principal causes of medical discharges in the army were Mental and Behavioural Disorders and Musculoskeletal Disorders and Injuries.

**39%** of medical discharges (approx. 2 in 5) were due to **Mental and Behavioural Disorders**.

**37%** of medical discharges (approx. 2 in 5) were due to **Musculoskeletal Disorders and Injuries**.

**Table 4** presents army medical discharges by principal ICD-10 cause code group (the chapter within which the condition is categorised) for 2022/23 and the total for the latest five year period, 2018/19 to 2022/23. The five year total is provided as a comparator for the cause group percentages in the latest year. For a breakdown of each of the five years, please see the supplementary tables (Table 7).



## Army Continued

**Table 4: UK Regular Army medical discharges by principal ICD-10 cause code group<sup>1</sup> and financial year, numbers and percentages<sup>2</sup>**

1 April 2018 to 31 March 2023

|   | 5 Year Total<br>2018/19-2022/23 |            | 2022/23    |            |
|---|---------------------------------|------------|------------|------------|
|   | n                               | %          | n          | %          |
| <b>All medical discharges</b>                               | <b>4,609</b>                    |            | <b>964</b> |            |
| <b>All cause coded medical discharges</b>                   | <b>4,505</b>                    | <b>100</b> | <b>953</b> | <b>100</b> |
| Infectious and parasitic diseases                           | 16                              | <1         | 9          | <1         |
| Neoplasms   | 44                              | <1         | 10         | 1          |
| Blood disorders   | ~                               | <1         | ~          | <1         |
| Endocrine, nutritional and metabolic diseases               | 29                              | <1         | 11         | 1          |
| - Of which diabetes   | 16                              | <1         | 8          | <1         |
| - Of which insulin-dependent                                | 11                              | <1         | 5          | <1         |
| - Of which non-insulin-dependent                            | ~                               | <1         | ~          | <1         |
| Mental and behavioural disorders                            | 1700                            | 38         | 374        | 39         |
| - Of which mood disorders                                   | 640                             | 14         | 165        | 17         |
| - Of which depression                                       | 539                             | 12         | 125        | 13         |
| - Of which neurotic, stress related and somatoform          | 957                             | 21         | 186        | 20         |
| - Of which post-traumatic stress disorder (PTSD)            | 618                             | 14         | 110        | 12         |
| - Of which adjustment disorder                              | 149                             | 3          | 32         | 3          |
| Nervous system disorders                                    | 103                             | 2          | 27         | 3          |
| - Of which epilepsy   | 17                              | <1         | ~          | <1         |
| Eye and adnexa diseases                                     | 16                              | <1         | 6          | <1         |
| - Of which blindness, low vision and visual disturbance     | ~                               | <1         | 0          | 0          |
| Ear and mastoid process diseases                            | 128                             | 3          | 43         | 5          |
| - Of which hearing loss                                     | 94                              | 2          | 31         | 3          |
| - Of which noise-induced hearing loss                       | 21                              | <1         | 7          | <1         |
| - Of which tinnitus   | 13                              | <1         | 7          | <1         |
| Circulatory system disorders                                | 84                              | 2          | 27         | 3          |
| Respiratory system disorders                                | 28                              | <1         | 5          | <1         |
| - Of which asthma   | 21                              | <1         | ~          | <1         |
| Digestive system disorders                                  | 55                              | 1          | 20         | 2          |
| Skin and subcutaneous tissue diseases                       | 37                              | <1         | 8          | <1         |
| Musculoskeletal disorders and injuries                      | 2,055                           | 46         | 353        | 37         |
| - Of which injuries and disorders of the knee               | 433                             | 10         | 99         | 10         |
| - Of which knee pain  | 210                             | 5          | 53         | 6          |
| - Of which back pain  | 263                             | 6          | 35         | 4          |
| - Of which low back pain                                    | 235                             | 5          | 32         | 3          |
| - Of which injuries and disorders of the ankle and foot     | 230                             | 5          | 50         | 5          |
| - Of which heat injury                                      | 8                               | <1         | ~          | <1         |
| - Of which cold injury                                      | 119                             | 3          | 12         | 1          |
| Genitourinary system diseases                               | 22                              | <1         | ~          | <1         |
| Pregnancy, childbirth and puerperium                        | 0                               | 0          | 0          | 0          |
| Congenital malformations                                    | 11                              | <1         | ~          | <1         |
| Clinical and laboratory findings                            | 140                             | 3          | 35         | 4          |
| External causes of morbidity and mortality                  | ~                               | <1         | ~          | <1         |
| Factors influencing health status                           | 28                              | <1         | 13         | 1          |
| No details held on principal condition for medical boarding | 103                             |            | 11         |            |
| Withheld consent  | 1                               |            | 0          |            |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> Each cause of discharge category has been compiled using ICD-10 codes, please see the supplementary tables for specific codes.

<sup>2</sup> Percentages are calculated from the total of all cause-coded medical discharges. Data presented as "<1%" represent a percentage greater than 0% but smaller than 1%.

~ In line with JSP 200 on statistical disclosure, figures fewer than five have been suppressed. Where there was only one cell in a row or column that was fewer than five, the next smallest number has also been suppressed so numbers cannot simply be derived from totals.

## Army Continued

**Figure 14** shows the main principal cause coded medical discharges between 2018/19 and 2022/23.

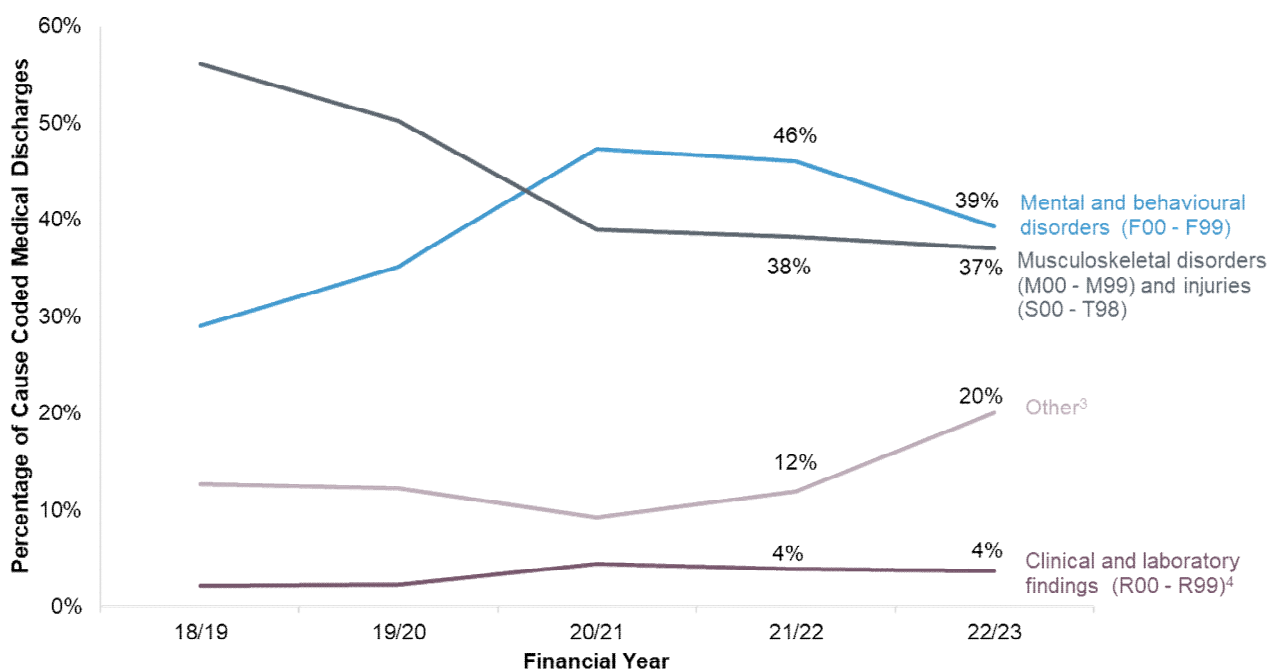
In the last five years Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders were the leading principal causes, accounting for three quarters of army medical discharges. This finding is in line with the United States<sup>5</sup> and Canadian Militaries<sup>6</sup> who also reported Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders as the two most common causes for medical release.

In 2018/19 and 2019/20, Musculoskeletal Disorders and Injuries was the largest principal cause of army medical discharges. However, since 2020/21, Mental and Behavioural Disorders was the largest principal cause. This could be the result of the temporary amendments to the army medical employment policy and restricted clinical activity in rehabilitation services due to COVID-19, which may have led to more discharge deferrals for personnel with Musculoskeletal Disorders and Injuries than Mental and Behavioural Disorders. In 2022/23, the proportion of Mental and Behavioural Disorders and Musculoskeletal Disorders and Injuries discharges became the most similar it has been in the last five years.

Please note that each medical discharge can only have one principal condition and a percentage decrease reduction in one cause code group may appear as an increase in another. Therefore, it is important to consider all cause code groups when looking at trends over time.

**Figure 14: UK Regular Army medical discharges by principal ICD-10 cause code group and financial year, percentages<sup>1,2</sup>**

1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> Percentages are calculated from the total of all cause-coded medical discharges.

<sup>2</sup> Due to rounding, percentages might not add to 100%

<sup>3</sup> Includes 15 cause code groups; each accounting for a maximum of 5%

**Figure 15** presents the proportions of cause coded medical discharges by principal ICD-10 cause code groups in 2022/23.

In 2022/23, just over half of the medical discharges as a result of Musculoskeletal Disorders and Injuries were linked to the knee, back, and ankle and foot (n = 184, 52%). Injuries to the knee, ankle and foot may be the result of the physical activity required of many army personnel, such as training on hard ground carrying heavy loads, marching and assuming fire positions. Back pain is prevalent in the general population and is the leading cause of disability in the UK and global populations<sup>8</sup>.

## Army Continued

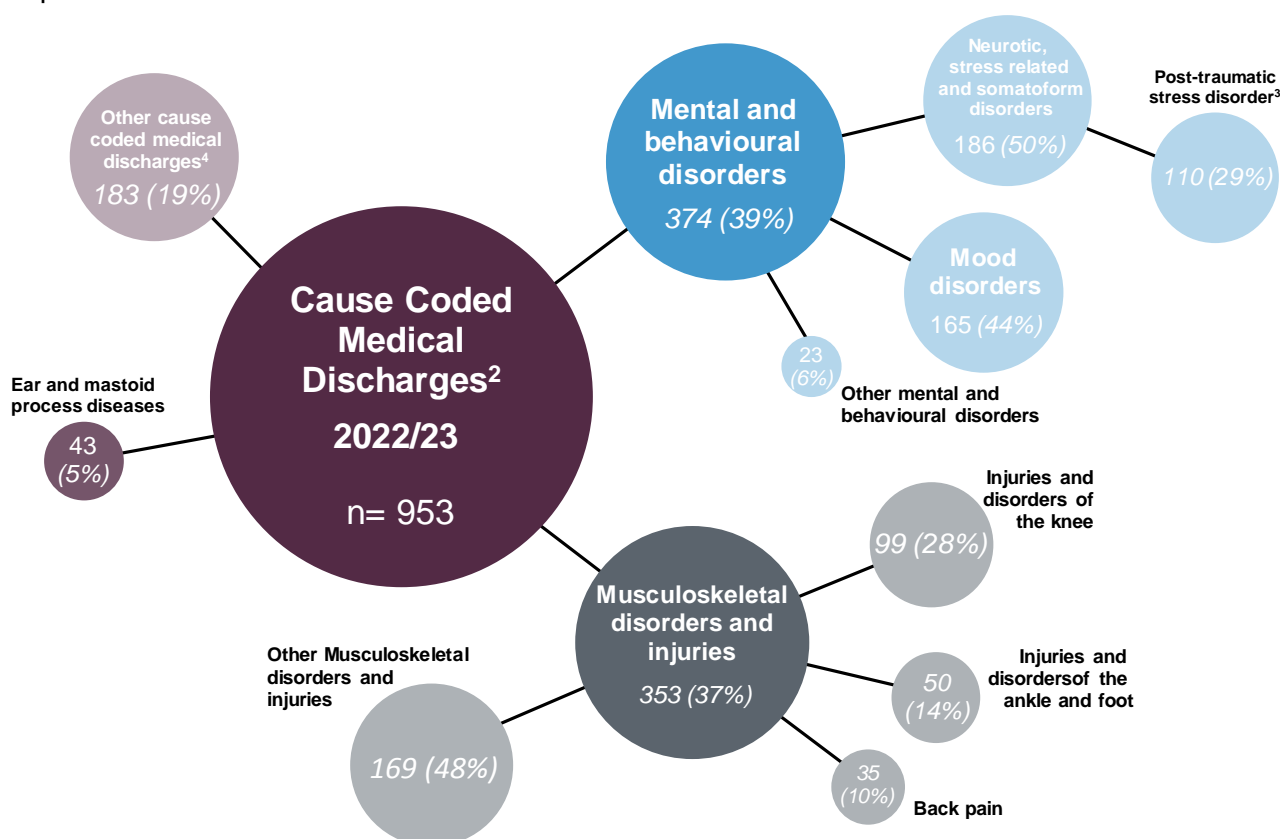
The remaining half of medical discharges due to Musculoskeletal Disorders and Injuries (n = 169) were distributed across a wide range of disorders and injuries, with no large numbers in one particular body region or medical condition.

The majority of medical discharges due to Mental and Behavioural Disorders in 2022/23 were the result of Neurotic, Stress Related and Somatoform Disorders (n = 186, 50%), and Mood Disorders (n = 165, 44%). Neurotic Disorders were the most prevalent mental disorder assessed at MOD specialist health services (DCMHs) in 2022/23<sup>7</sup>.

Post-Traumatic Stress Disorder (PTSD) accounted for approximately 3 in 10 Mental and Behavioural Disorder medical discharges, whereas PTSD only accounted for fewer than 1 in 10 assessments seen at MOD specialist mental health services<sup>7</sup>. This difference may reflect the severity of PTSD and the impact that a continued role in the military may have on the individual's condition.

**Figure 15: UK Regular Army medical discharges by principal ICD-10 cause code group, numbers and percentages<sup>1</sup>**

1 April 2022 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> Due to rounding, percentages might not add to 100%.

<sup>2</sup> Total number of army discharges were 964, however 11 personnel had no details on principal condition for medical discharge.

<sup>3</sup> Post-traumatic stress disorder discharges are shown as a percentage of Mental and Behavioural Disorders and not Neurotic Stress-related and Somatoform Disorders.

<sup>4</sup> Includes 15 cause code groups; each accounting for a maximum of 4% of all regular army cause coded medical discharges.

When considering both the principal and contributory cause of discharge in 2022/23:

- Musculoskeletal Disorders and Injuries were present in over half of discharges (n = 511, 54%).
- Mental and Behavioural Disorders were present in half of all discharges (n = 472, 50%).
- Ear and Mastoid Process Diseases were the third most prevalent cause (n = 73, 8%).

Further information on the principal and contributory causes of medical discharge in the UK regular army can be found in the supplementary tables to this report (**Table 8**).

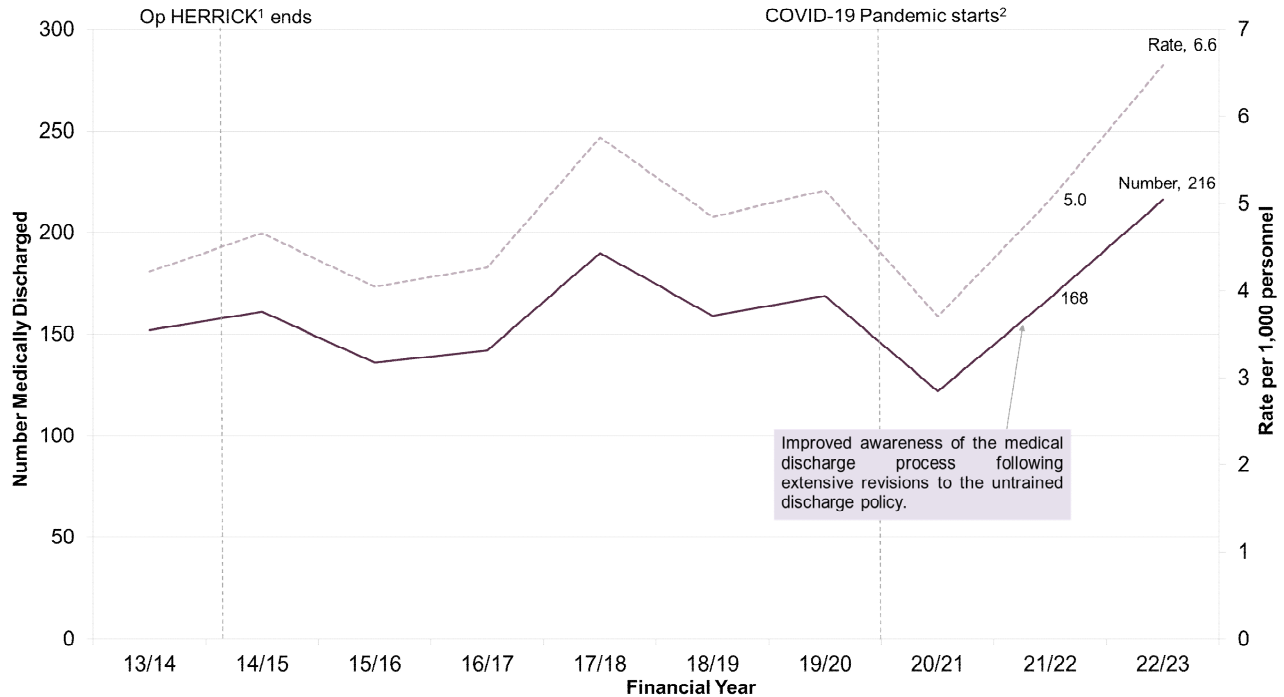
Trends in Medical Discharges

In 2022/23, there were **216** medical discharges from the RAF; a rate of **7 per 1,000** personnel. This rate was **significantly higher** compared to last year.

Figure 16 shows the number and rates of RAF medical discharges over time from 2013/14 to 2022/23. In 2022/23 the rate is the highest it has been in the reporting period.

**Figure 16: UK Regular RAF medical discharges by financial year, numbers and rates per 1,000 personnel**

1 April 2013 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> Operation HERRICK is the name for UK operations in Afghanistan which began 1 April 2006 and ended on 30 November 2014.

<sup>2</sup> March 2020 - start of COVID-19 pandemic; Defence, in line with the rest of the country followed guidance on restrictions from the UK Government and devolved administrations.

▲ The rate of medical discharge rose from 2016/17 and 2017/2018. This may have been due to an increase in the capacity of RAF medical boards where the medical boards were clearing a backlog of medical boards from the previous year.

▼ The rate of medical discharge fell from 5.2 in 2019/20 to 3.7 per 1,000 in 2020/21. The reason for this is unclear, however the fall in 2020/21 may in part be due to COVID-19 restrictions which led to a reduction in some routine and training activities and may have resulted in fewer injuries. A deferral of discharges to minimise burden on the NHS may also be a potential reason for the fall.

▲ The rate of medical discharge rose between 2020/21 and 2022/23 from 3.7 to 6.6 per 1,000, in line with overall upward trend in RAF total outflow<sup>1</sup>. During this time, the RAF revised their discharge policy for untrained personnel, improving awareness of the discharge process at Phase 2 training establishments, which may, in part, have contributed to the rise in medical discharges (See Figure 20). Personnel being medically discharged who had previously had their date of discharge deferred during the COVID-19 pandemic may also partially account for this rise.

## RAF Continued
















### Demographic Risk Groups

In 2022/23, the rate of medical discharge was significantly higher for regular RAF personnel within the following demographic groups (**Table 5**):

- Aged over 50 years
- Females
- Other ranks

**Table 5: UK Regular RAF medical discharges by demographics<sup>1</sup>, numbers<sup>2</sup> and rates per 1,000 personnel**

1 April 2022 to 31 March 2023

|                               | n          | rate       | Rate of UK Regular RAF personnel medically discharged                                |
|-------------------------------|------------|------------|--|
| <b>All medical discharges</b> | <b>216</b> | <b>6.6</b> |    |
| <b>Age</b>                    |            |            |  |
| Aged under 20                 | 7          | 6.4        |    |
| Aged 20-24                    | 31         | 5.5        |    |
| Aged 25-29                    | 43         | 7.3        |    |
| Aged 30-34                    | 39         | 7.1        |    |
| Aged 35-39                    | 29         | 5.3        |   |
| Aged 40-44                    | 29         | 6.7        |  |
| Aged 45-49                    | 13         | 5.6        |  |
| Aged 50 and over <sup>+</sup> | 25         | 10.2       |  |
| <b>Gender</b>                 |            |            |  |
| Male                          | 165        | 6.0        |  |
| Female <sup>*</sup>           | 51         | 10.0       |  |
| <b>Rank</b>                   |            |            |  |
| Officer                       | 19         | 2.4        |   |
| Other Rank <sup>*</sup>       | 197        | 8.0        |  |
| <b>Training Status</b>        |            |            |  |
| Trained                       | 186        | 6.3        |  |
| Untrained                     | 30         | 8.7        |  |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

+/- Age groups found to be at a statistically significantly higher (+) or lower (-) risk than the remaining age groups combined using a z-test for a single proportion at a 95% confidence level.

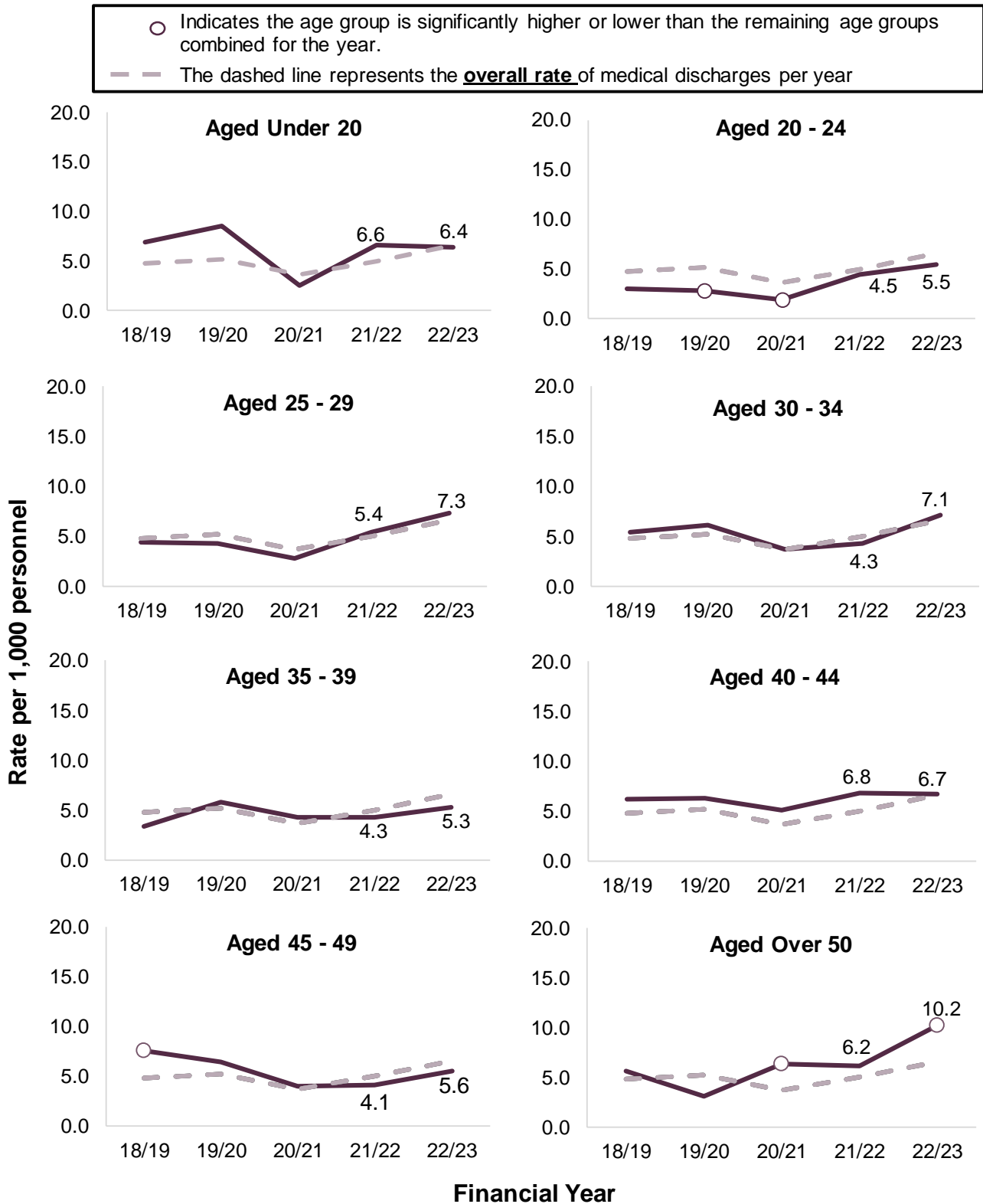
\* Groups found to be at a statistically significantly higher risk using a z-test for proportions at a 95% confidence level.

**Figures 17 to 20** present RAF medical discharges for each demographic group between 2018/19 and 2022/23 with possible explanations for the differences observed.

# RAF Continued

**Figure 17: UK Regular RAF medical discharges by age group<sup>1</sup> and financial year<sup>2</sup>, rates per 1,000 personnel**

1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.

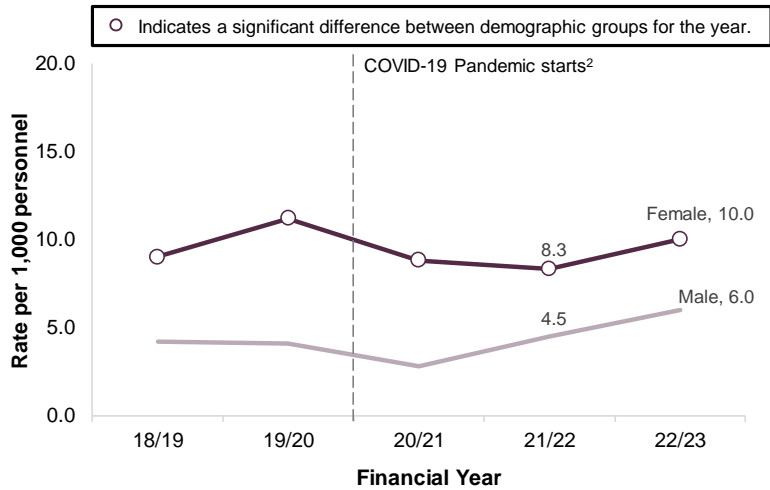
In 2022/23, the rate of medical discharge for personnel aged over 50 was significantly higher than the remaining age groups. It should be noted that the numbers in some age groups were low and a small change in numbers can have a large effect on the rates.



## RAF Continued

**Figure 18: UK Regular RAF medical discharges by gender<sup>1</sup> and financial year, rates per 1,000 personnel**

1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

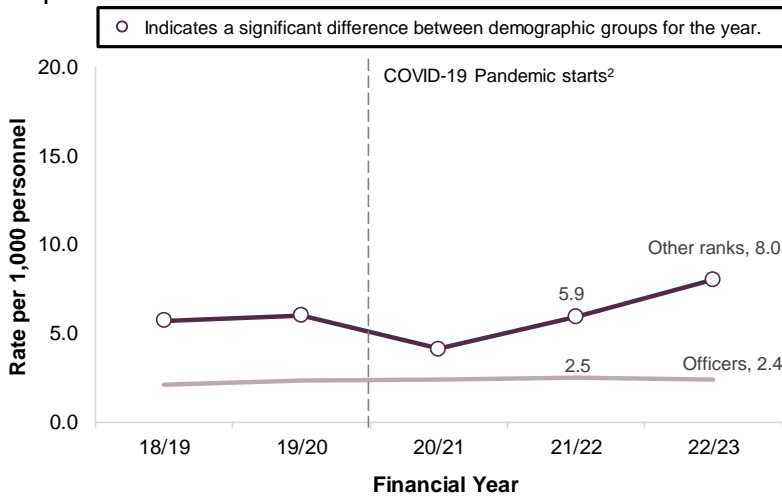
<sup>2</sup> March 2020 - start of COVID-19 pandemic.

**Females** had **significantly higher** rates of medical discharge than males for all years presented.

The higher rate of medical discharges in female personnel may be due to their higher risk of sustaining Musculoskeletal Disorders and Injuries<sup>4</sup>, and higher presentation of mental health disorders<sup>7</sup> (the leading two causes of medical discharge).

**Figure 19: UK Regular RAF medical discharges by rank<sup>1</sup> and financial year, rates per 1,000 personnel**

1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.

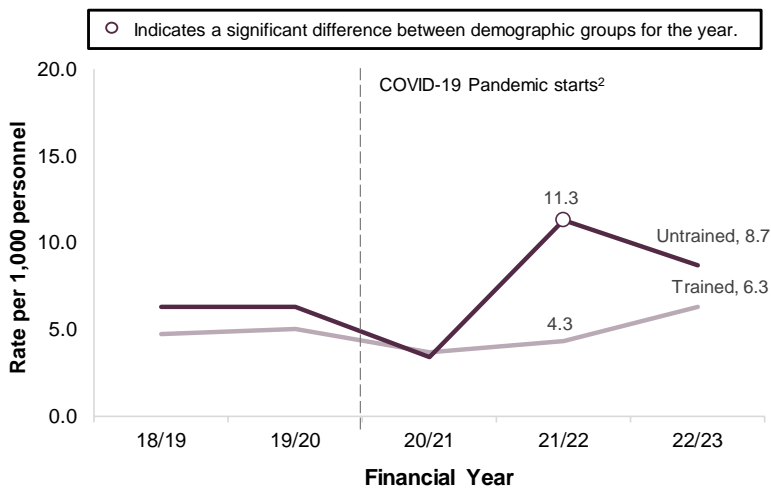
**Other ranks** had **significantly higher** rates of medical discharge than officers for all years presented.

Officers are more likely to be employed in or can be reassigned to alternative duties that can be continued with certain injuries and illnesses.

## RAF Continued

**Figure 20: UK Regular RAF medical discharges by training status<sup>1</sup> and financial year, rates per 1,000 personnel**

1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> March 2020 - start of COVID-19 pandemic.

In 2021/22, untrained personnel had **significantly higher rates** of medical discharge than trained personnel for the first time in the years presented. The RAF extensively revised their discharge policy for untrained personnel, improving awareness of the discharge process at Phase 2 training establishments, which may have led to an increase in untrained medical discharges. In 2022/23 the untrained rate remains higher but the difference is no longer significant.

The fluctuation over time shown in the rate among the untrained population may be a result of the small numbers involved which can have a large effect on the rate; in total over the five year period presented only 118 untrained RAF personnel were medically discharged, compared to 716 trained personnel.

## RAF Continued

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### Causes of Medical Discharges

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When UK armed forces personnel are medically discharged, the medical reason for the discharge is recorded and categorised using a coding system known as ICD-10 (see glossary). **Principal cause** is the main medical cause of the discharge. **Contributory causes** include any other conditions identified that would result in a medical discharge. All information presented in the cause of medical discharge section will be relating to principal cause of discharge only.

In 2022/23, the two most common principal causes of medical discharges in the RAF were Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders.

**49%** of medical discharges (approx. 1 in 2) were due to **Mental and Behavioural Disorders**.

**26%** of medical discharges (approx. 1 in 4) were due to **Musculoskeletal Disorders and Injuries**.

**Table 6** presents RAF medical discharges by principal ICD-10 cause code group (the chapter within which the condition is categorised) for 2022/23 and the total for the latest five year period, 2018/19 – 2022/23. The five year total is provided as a comparator for the cause group percentages in the latest year. For a breakdown of each of the five years, please see the supplementary tables (Table 11).

## RAF Continued

**Table 6: UK Regular RAF medical discharges by principal ICD-10 cause code group<sup>1</sup> and financial year, numbers and percentages<sup>2</sup>**

1 April 2018 to 31 March 2023

|   | 5 Year Total<br>2018/19-2022/23 |              | 2022/23    |              |
|---|---------------------------------|--------------|------------|--------------|
|   | n                               | %            | n          | %            |
| <b>All medical discharges</b>                               | <b>834</b>                      |              | <b>216</b> |              |
| <b>All cause coded medical discharges</b>                   | <b>832</b>                      | <b>100</b>   | <b>215</b> | <b>100</b>   |
| Infectious and parasitic diseases                           | 0                               | 0            | 0          | 0            |
| Neoplasms   | 22                              | 3            | 5          | 2            |
| Blood disorders   | ~                               | <1           | 0          | 0            |
| Endocrine, nutritional and metabolic diseases               | 6                               | <1           | ~          | <1           |
| - Of which diabetes   | ~                               | <1           | ~          | <1           |
| - Of which insulin-dependent                                | ~                               | <1           | ~          | <1           |
| - Of which non-insulin-dependent                            | ~                               | <1           | 0          | 0            |
| <b>Mental and behavioural disorders</b>                     | <b>357</b>                      | <b>43</b>    | <b>106</b> | <b>49</b>    |
| - Of which mood disorders                                   | 139                             | 17           | 42         | 20           |
| - Of which depression                                       | 125                             | 15           | 38         | 18           |
| - Of which neurotic, stress related and somatoform          | 188                             | 23           | 52         | 24           |
| - Of which post-traumatic stress disorder (PTSD)            | 81                              | 10           | 16         | 7            |
| - Of which adjustment disorder                              | 29                              | 3            | 11         | 5            |
| <b>Nervous system disorders</b>                             | <b>40</b>                       | <b>5</b>     | <b>15</b>  | <b>7</b>     |
| - Of which epilepsy   | 0                               | 0            | 0          | 0            |
| <b>Eye and adnexa diseases</b>                              | <b>5</b>                        | <b>&lt;1</b> | <b>0</b>   | <b>0</b>     |
| - Of which blindness, low vision and visual disturbance     | 0                               | 0            | 0          | 0            |
| <b>Ear and mastoid process diseases</b>                     | <b>8</b>                        | <b>&lt;1</b> | <b>0</b>   | <b>0</b>     |
| - Of which hearing loss                                     | 5                               | <1           | 0          | 0            |
| - Of which noise-induced hearing loss                       | 0                               | 0            | 0          | 0            |
| - Of which tinnitus   | ~                               | <1           | 0          | 0            |
| <b>Circulatory system disorders</b>                         | <b>16</b>                       | <b>2</b>     | <b>7</b>   | <b>3</b>     |
| <b>Respiratory system disorders</b>                         | <b>~</b>                        | <b>&lt;1</b> | <b>~</b>   | <b>&lt;1</b> |
| - Of which asthma   | ~                               | <1           | ~          | <1           |
| <b>Digestive system disorders</b>                           | <b>14</b>                       | <b>2</b>     | <b>~</b>   | <b>&lt;1</b> |
| <b>Skin and subcutaneous tissue diseases</b>                | <b>12</b>                       | <b>1</b>     | <b>~</b>   | <b>1</b>     |
| <b>Musculoskeletal disorders and injuries</b>               | <b>294</b>                      | <b>35</b>    | <b>55</b>  | <b>26</b>    |
| - Of which injuries and disorders of the knee               | 57                              | 7            | 12         | 6            |
| - Of which knee pain  | 24                              | 3            | 6          | 3            |
| - Of which back pain  | 66                              | 8            | 9          | 4            |
| - Of which low back pain                                    | 60                              | 7            | 9          | 4            |
| - Of which injuries and disorders of the ankle and foot     | 27                              | 3            | 5          | 2            |
| - Of which heat injury                                      | 0                               | 0            | 0          | 0            |
| - Of which cold injury                                      | 5                               | <1           | ~          | <1           |
| <b>Genitourinary system diseases</b>                        | <b>11</b>                       | <b>1</b>     | <b>~</b>   | <b>1</b>     |
| <b>Pregnancy, childbirth and puerperium</b>                 | <b>0</b>                        | <b>0</b>     | <b>0</b>   | <b>0</b>     |
| <b>Congenital malformations</b>                             | <b>~</b>                        | <b>&lt;1</b> | <b>0</b>   | <b>0</b>     |
| <b>Clinical and laboratory findings</b>                     | <b>34</b>                       | <b>4</b>     | <b>14</b>  | <b>7</b>     |
| <b>External causes of morbidity and mortality</b>           | <b>0</b>                        | <b>0</b>     | <b>0</b>   | <b>0</b>     |
| <b>Factors influencing health status</b>                    | <b>7</b>                        | <b>&lt;1</b> | <b>~</b>   | <b>2</b>     |
| No details held on principal condition for medical boarding | 2                               |              | 1          |              |
| Withheld consent  | 0                               |              | 0          |              |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> Each cause of discharge category has been compiled using ICD-10 codes, please see the supplementary tables for specific codes.

<sup>2</sup> Percentages are calculated from the total of all cause-coded medical discharges. Data presented as "<1%" represent a percentage greater than 0% but smaller than 1%.

~ In line with JSP 200 on statistical disclosure, figures fewer than five have been suppressed. Where there was only one cell in a row or column that was fewer than five, the next smallest number has also been suppressed so that numbers cannot simply be derived from totals.

## RAF Continued

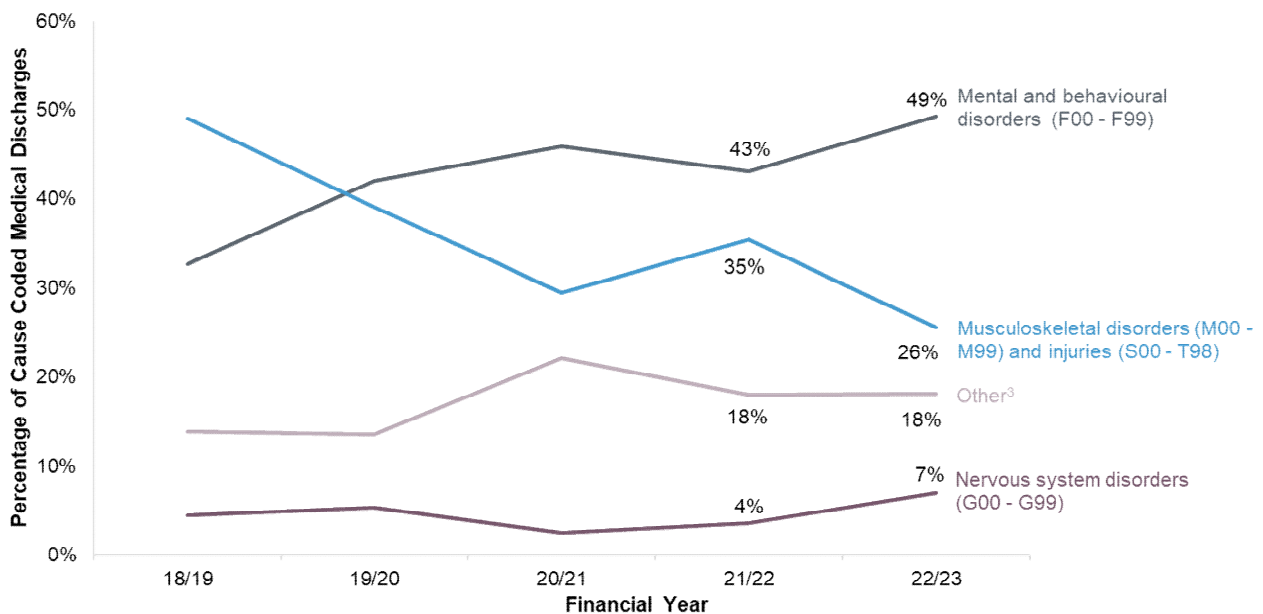
**Figure 21** shows the main principal cause coded medical discharges between 2018/19 and 2022/23.

Over the last five years, both Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders have accounted for 78% of all discharges. Since reporting began, Musculoskeletal Disorders and Injuries had been the largest principal cause of RAF medical discharges with Mental and Behavioural Disorders the second largest cause. However, since 2019/20, Mental and Behavioural Disorders has been the largest principal cause of RAF medical discharges.

Please note that each medical discharge can only have one principal condition and a decrease in one cause code group may appear as an increase in another. Therefore, it is important to consider all cause code groups when looking at trends over time.

**Figure 21: UK Regular RAF medical discharges by principal ICD-10 cause code group and financial year, percentages<sup>1,2</sup>**

1 April 2018 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> Percentages are calculated from the total of all cause-coded medical discharges.

<sup>2</sup> Due to rounding, percentages might not add to 100%.

<sup>3</sup> Includes 13 cause code groups; each accounting for a maximum of 5% of all RAF cause coded medical discharges.

**Figure 22** shows the proportions of cause coded medical discharges by principal ICD-10 cause code groups in 2022/23.

The majority of medical discharges as a result of Mental and Behavioural Disorders were due to Neurotic, Stress and Somatoform Disorders ( $n = 52$ , 49%), and Mood Disorders ( $n = 42$ , 40%). Neurotic Disorders were the most prevalent mental disorder assessed at MOD specialist health services (DCMHs) in 2022/23<sup>7</sup>.

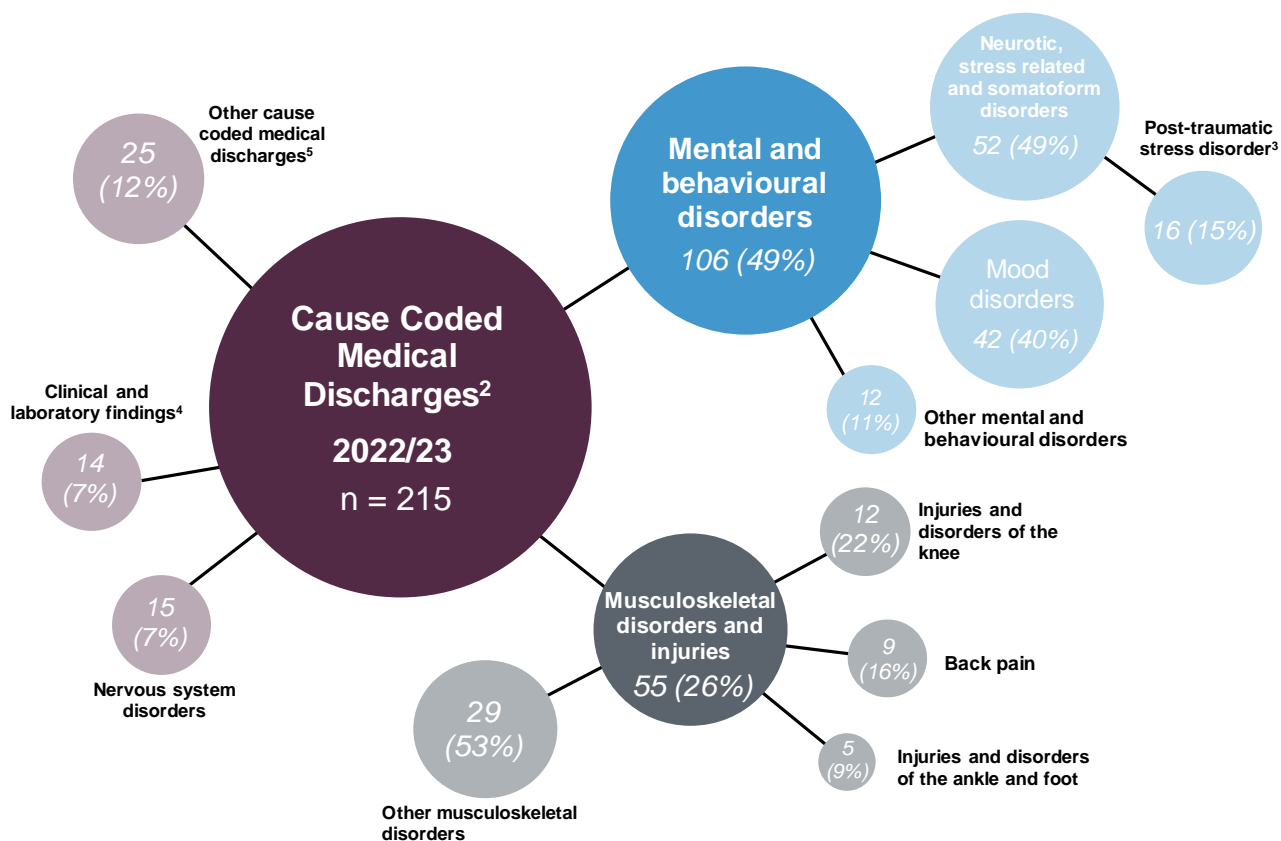
In 2022/23, Post-Traumatic Stress Disorder (PTSD) accounted for approximately 1 in 7 Mental and Behavioural Disorder medical discharges whereas PTSD only accounted for fewer than 1 in 20 initial assessments at MOD specialist mental health services<sup>7</sup>. This difference may reflect the severity of PTSD and the impact that a continued role in the military may have on the individual's condition.

Around half of medical discharges as a result of Musculoskeletal Disorders and Injuries were linked to the knee, back, and ankle and foot ( $n = 26$ , 47%). The number of personnel medically discharged for these conditions may be the result of the physical activity required of many RAF personnel, such as training on hard ground carrying heavy loads. Back pain is also the leading cause of disability in the UK and global populations<sup>8</sup>.

## RAF Continued

The remaining discharges due to Musculoskeletal Disorders and Injuries (n = 29, 53%) were distributed across a range of disorders and injuries.

**Figure 22: UK Regular RAF medical discharges by principal ICD-10 cause code group, numbers and percentages<sup>1</sup>**  
1 April 2022 to 31 March 2023



Source: DMICP, FMed 23 and JPA

<sup>1</sup> Due to rounding, percentages might not add to 100%.

<sup>2</sup> Total number of RAF discharges were 216, however one personnel had no details on principal condition for medical discharge.

<sup>3</sup> Post-traumatic stress disorder discharges are shown as a percentage of Mental and behavioural disorders and not Neurotic stress related and somatoform disorders.

<sup>4</sup> Clinical and Laboratory Findings include symptoms and abnormal clinical findings - such as irregular heartbeat and abdominal pain - which are ill-defined and may not have a diagnosis that can be elsewhere classified

<sup>5</sup> Includes 8 cause code groups; each accounting for a maximum of 3% of all RAF cause coded medical discharges

When considering both the principal and contributory causes of discharge in 2022/23:

- Mental and Behavioural Disorders were present in over half of discharges (n = 127, 59%)
- Musculoskeletal Disorders and Injuries were present in just under half of discharges (n = 96, 45%).
- Nervous system disorders were the third most prevalent cause (n = 24, 11%).

Further information on the principal and contributory causes of medical discharge in the UK regular RAF can be found in the supplementary tables to this report (**Table 12**).



## Glossary

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**Defence Medical Information Capability Programme (DMICP)** is the MOD electronic primary health care patient record.

**Departments of Community Mental Health (DCMH)** are specialised psychiatric services based on community mental health teams closely located with primary care service at sites in the UK and abroad.

**FMed 23** is the form completed to record the outcome of a medical board held for members of the UK armed forces leading to medical discharge.

**International Statistical Classification of Diseases and Health-Related Disorders 10<sup>th</sup> edition (ICD-10)** is the standard diagnostic tool for epidemiology, health management and clinical purposes.

**Joint Personnel Administration (JPA)** is the system used by the UK armed forces to deal with matters of pay, leave and other personnel administrative tasks. JPA replaced a number of single-service IT systems and was implemented in April 2006 for the RAF, November 2006 for the Royal Navy and April 2007 for the army.

**Officer** An officer is a member of the armed forces holding the Monarch's Commission to lead and command elements of the forces. Officers form the middle and senior management of the armed forces. This includes ranks from Sub-Lt/2nd Lt/Pilot Officer up to Admiral of the Fleet/Field Marshal/Marshal of the Royal Air Force, but excludes Non-Commissioned officers.

**Operation HERRICK** is the name for UK operations in Afghanistan which started in April 2006 and ended on 30 November 2014. UK Forces are deployed to Afghanistan in support of UN authorised, NATO led International Security Assistance Force (IASF) mission and as part of the US-led Operation Enduring Freedom (OEF).

**Other Ranks** Other ranks are members of the Royal Navy, army and Royal Air Force who are not officers but other ranks include Non-Commissioned officers.

### **Principal/Contributory Condition/Cause of Discharge**

#### *Principal condition/cause*

The principal condition is the first principal ICD-10 code on medical discharge documents.

#### *Contributory condition/cause*

Contributory cause contains all other principal conditions and any contributory conditions on the medical discharge documents.

**Trade Trained** personnel are army personnel who have completed both Phase 1 and 2 training. From 1 October 2017, UK regular forces and Gurkha personnel in the army who have completed both their Phase 1 (basic service training) and Phase 2 training (trade training), are considered trade trained personnel.

**Trained** personnel are Royal Navy and RAF personnel who have completed both Phase 1 and Phase 2 training.

**UK regulars** are full time service personnel, including Nursing Services, Gurkhas and Military Provost Guarding Service (MPGS) but excluding FTRS personnel, naval activated reservists, mobilised Reservists, and Non Regular Permanent Service (NRPS). Unless otherwise stated, includes trained and untrained personnel. This definition may differ from other MOD reports.

**Untrained** personnel in this report are personnel who are in Phase 1 and Phase 2 training.

## Methodology

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**This section provides a brief summary of the methodology and data sources; more detailed information is available in the background quality report for this bulletin:**

<https://www.gov.uk/government/collections/medical-discharges-among-uk-service-personnel-statistics-index>

Data are compiled by Defence Statistics from three sources:

- Medically discharged personnel were identified from the Joint Personnel Administration System (JPA). JPA is used to hold the administration data for all regular forces.
- Principal and contributory causes of medical discharge are taken from the electronic patient record (DMICP) and FMed 23s (paper medical documents used to record all medical board proceedings).
- Prior to 2019/20, FMed 23 forms were the primary source of cause information using the electronic medical record (DMICP) where FMed 23s were unavailable.
- Since 2019/20, the electronic patient record was the primary source of cause information, supplemented where necessary by the FMed paperwork. This is in line with the Defence Medical Services drive to move to paper free records.

This bulletin includes regular service personnel (trained and untrained). Army regular personnel include Gurkha Regiments and Military Provost Guard Service (MPGS). Reserve personnel were not included.

This bulletin reports on personnel that have already left the UK regular armed forces on a medical discharge; downgraded personnel that are expected to be medically discharged after the reporting period, and personnel discharged under administrative categories on medical grounds were excluded.

Trends in the statistics presented do not directly reflect actual occupational health morbidity within the armed forces. Medical discharges are presented by year of discharge, and not year of onset of condition that led to medical discharge. Therefore, trends may only correspond to changes in boarding practice, retention policies or changes to employment standards.

The length of time between detecting and diagnosing a medical condition and the date at which an individual is eventually released under a medical discharge varies for each individual. The timing of a discharge medical board must strike an appropriate balance between the needs of the individual service and those of the patient. The date of the medical discharge board should allow the timely provision of occupational health advice following the initial referral, and time elapsed waiting for further treatment may affect this board process.

The International Classification of Diseases and Related Health Problems version 10 (ICD-10) was used to classify medical discharges and causes are presented by ICD-10 chapter. As a result of interest, some ICD-10 groups were provided in more detail allowing the presentation of specific conditions. Please see the supplementary tables to this report (Tables 3, 4, 7, 8, 11, 12, 14, 15, 17 & 18) for a full list of ICD-10 codes for each chapter and specific condition.

Medical boards do not make decisions on possible causes for medical conditions leading to discharge. Therefore, the report does not offer analysis of external causes of injuries or illnesses.

Medical boards also do not make decisions on attributability to service. These decisions are made by administrators of the MOD pension and compensation schemes at Veterans-UK. Defence Statistics produce annual reports on the Armed Forces Compensation Scheme<sup>9</sup> and annual reports on War Pension Scheme<sup>10</sup>.

Rates enable comparisons between groups and over time, taking account of the number of personnel in a group (personnel at risk) at a particular point in time. The number of events (i.e. medical discharges) is then divided by the number of personnel at risk per annum and multiplied by 1,000 to calculate the rate per 1,000 personnel at risk.

## Methodology Continued

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The z test for independent proportions was used to evaluate if two rates are different to a statistically significant degree, and where appropriate, a Fisher's exact test was used. A Fisher's exact test is the more accurate statistical test when one of the numerators in the rates is fewer than five. A 95% confidence level was used for this report; this means that if the test determines two populations to have significantly different medical discharge rates, this will be true in greater than 95% of cases.

## Further Information

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### Symbols

~ Data has been suppressed due to Statistical Disclosure Control (greater than zero, fewer than 5).

† Indicates data has been revised from previously published data.

### Disclosure Control

In line with JSP 200 (March 2020), the suppression methodology has been applied to ensure individuals are not inadvertently identified dependent on the risk of disclosure. Numbers greater than zero but fewer than five have been suppressed and presented as '~'. Where there was only one cell in a row or column that was fewer than five, the next smallest number has also been suppressed so that numbers cannot simply be derived from totals. For further information on statistical disclosure control see Background Quality Report.

If Defence Statistics Health are asked to release further information on medical discharges the information provided may require further disclosure control to ensure individuals cannot be identified.

### Revisions

Since the last release of this Statistical Bulletin in July 2022, the following revisions have been made:

- Between 1 April 2013 and 31 March 2020, a small number of personnel (n = 12) were included twice within the reported figures in error. The duplicate record has been removed from the reported figures, and the numbers and rates of medical discharges have been updated. This had no significant impact on findings presented in previous reports.
- Further ICD-10 codes (T33 – T35) have been included in the subcategory of cold injury within the musculoskeletal disorders and injuries group. This had no significant impact on findings presented in previous reports.
- Between 1 April 2018 and 31 March 2020, a small number of personnel (n = 25) had a principal and/or contributory a cause incorrectly assigned affecting both numbers and percentages. This had no significant impact on findings presented in previous reports.

Revised figures have been represented with an 'r'. Where figures previously marked as provisional have been revised and updated no marker has been used.

Revisions can be addressed in two ways. For this report, the first of these two methods has been applied:

- Where the number of figures updated in a table is small, figures will be updated and those which have been revised will be identified with the symbol "r". An explanation for the revisions will be provided in Revisions section.
- Where the number of figures updated in a table is substantial, the revisions to the table, together with the reason for the revisions will be identified in the commentary at the beginning of the relevant chapter / section, and in the commentary above the affected tables. Revisions will not be identified by the symbol "r" since where there are a large number of revisions in a table this could make them more difficult to read.

Occasionally updated figures will be provided to the editor during the course of the year. Since this bulletin is published electronically, it is possible to revise figures during the course of the year. However, to ensure continuity and consistency, figures will only be adjusted during the year where it is likely to substantially affect interpretation and use of the figures.

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## Annex A

Due to interest in the differences between Royal Navy and Royal Marines personnel, Table 1 and Table 2 from the main report have been presented with a Royal Navy and Royal Marines split and are provided this annex; **Annex A**.

Further tables on the demographic risk groups and principal and contributory causes of medical discharge in the Royal Navy and Royal Marines can be found in the supplementary tables to this report (Table 13-18).

### Royal Navy

#### Demographic Risk Groups
















In 2022/23, **301** Royal Navy personnel were medically discharged, a rate of **11** per 1,000. This was not significantly different to last year (12 per 1,000).

During 2022/23 the rate of medical discharge was significantly higher for regular Royal Navy personnel within the following specific demographic groups (**Table A2.1**):

- Aged 30-34 years
- Females
- Other ranks
- Trained

**Table A2.1: UK Regular Royal Navy medical discharges by demographics<sup>1</sup>, numbers<sup>2</sup> and rates per 1,000 personnel**

1 April 2022 to 31 March 2023

|                               | n          | rate        | Rate of UK Regular Royal Navy personnel medically discharged                         |
|-------------------------------|------------|-------------|--|
| <b>All medical discharges</b> | <b>301</b> | <b>11.2</b> |  |
| <b>Age</b>                    |            |             |  |
| Aged under 20 <sup>-</sup>    | 1          | 0.7         |   |
| Aged 20-24 <sup>-</sup>       | 51         | 8.8         |  |
| Aged 25-29                    | 68         | 13.1        |  |
| Aged 30-34 <sup>+</sup>       | 70         | 16.1        |  |
| Aged 35-39                    | 51         | 13.4        |  |
| Aged 40-44                    | 28         | 10.1        |  |
| Aged 45-49                    | 19         | 11.7        |  |
| Aged 50 and over              | 13         | 7.6         |  |
| <b>Gender</b>                 |            |             |  |
| Male                          | 252        | 10.8        |  |
| Female*                       | 49         | 14.6        |  |
| <b>Rank</b>                   |            |             |  |
| Officer                       | 31         | 5.1         |  |
| Other Rank*                   | 270        | 13.1        |  |
| <b>Training Status</b>        |            |             |  |
| Trained*                      | 287        | 12.3        |  |
| Untrained                     | 14         | 4.2         |  |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> In line with JSP 200, numbers fewer than five were not suppressed in demographics tables as Defence Statistics assessed that these figures did not disclose sensitive personal information.

\* Age groups found to be at a statistically significantly higher (+) or lower (-) risk than the remaining age groups combined using a z-test for a single proportion at a 95% confidence level. Due to small numbers, a Fisher's exact test was used to determine significance for the aged under 20 category.

\* Groups found to be at a statistically significantly higher risk using a z-test for proportions at a 95% confidence level.

## Royal Navy Continued

### Causes of Medical Discharge

**Table A2.2: UK Regular Royal Navy medical discharges by principal ICD-10 cause code group<sup>1</sup> and financial year, numbers and percentages<sup>2</sup>**

1 April 2018 to 31 March 2023

|   | 5 Year Total<br>2018/19-2022/23 |            | 2022/23    |            |
|---|---------------------------------|------------|------------|------------|
|   | n                               | %          | n          | %          |
| <b>All medical discharges</b>                               | <b>1,348</b>                    |            | <b>301</b> |            |
| <b>All cause coded medical discharges</b>                   | <b>1,347</b>                    | <b>100</b> | <b>301</b> | <b>100</b> |
| Infectious and parasitic diseases                           | ~                               | <1         | ~          | <1         |
| Neoplasms   | 17                              | 1          | ~          | <1         |
| Blood disorders   | ~                               | <1         | ~          | <1         |
| Endocrine, nutritional and metabolic diseases               | 31                              | 2          | 5          | 2          |
| - Of which diabetes   | 24                              | 2          | ~          | 1          |
| - Of which insulin-dependent                                | 10                              | <1         | ~          | <1         |
| - Of which non-insulin-dependent                            | 11                              | <1         | 0          | 0          |
| Mental and behavioural disorders                            | 423                             | 31         | 106        | 35         |
| - Of which mood disorders                                   | 136                             | 10         | 30         | 10         |
| - Of which depression                                       | 121                             | 9          | 28         | 9          |
| - Of which neurotic, stress related and somatoform          | 250                             | 19         | 65         | 22         |
| - Of which post-traumatic stress disorder (PTSD)            | 110                             | 8          | 21         | 7          |
| - Of which adjustment disorder                              | 29                              | 2          | 7          | 2          |
| Nervous system disorders                                    | 64                              | 5          | 12         | 4          |
| - Of which epilepsy   | 6                               | <1         | ~          | <1         |
| Eye and adnexa diseases                                     | 12                              | <1         | ~          | 1          |
| - Of which blindness, low vision and visual disturbance     | ~                               | <1         | 0          | 0          |
| Ear and mastoid process diseases                            | 24                              | 2          | 8          | 3          |
| - Of which hearing loss                                     | 16                              | 1          | 6          | 2          |
| - Of which noise-induced hearing loss                       | 0                               | 0          | 0          | 0          |
| - Of which tinnitus   | ~                               | <1         | ~          | <1         |
| Circulatory system disorders                                | 42                              | 3          | 6          | 2          |
| Respiratory system disorders                                | 20                              | 1          | ~          | 1          |
| - Of which asthma   | 14                              | 1          | ~          | <1         |
| Digestive system disorders                                  | 49                              | 4          | 8          | 3          |
| Skin and subcutaneous tissue diseases                       | 40                              | 3          | 6          | 2          |
| Musculoskeletal disorders and injuries                      | 544                             | 40         | 120        | 40         |
| - Of which injuries and disorders of the knee               | 127                             | 9          | 33         | 11         |
| - Of which knee pain  | 62                              | 5          | 20         | 7          |
| - Of which back pain  | 111                             | 8          | 19         | 6          |
| - Of which low back pain                                    | 99                              | 7          | 13         | 4          |
| - Of which injuries and disorders of the ankle and foot     | 59                              | 4          | 18         | 6          |
| - Of which heat injury                                      | 0                               | 0          | 0          | 0          |
| - Of which cold injury                                      | 7                               | <1         | 0          | 0          |
| Genitourinary system diseases                               | 11                              | <1         | 5          | 2          |
| Pregnancy, childbirth and puerperium                        | 0                               | 0          | 0          | 0          |
| Congenital malformations                                    | 5                               | <1         | 0          | 0          |
| Clinical and laboratory findings                            | 42                              | 3          | 8          | 3          |
| External causes of morbidity and mortality                  | ~                               | <1         | 0          | 0          |
| Factors influencing health status                           | 18                              | 1          | ~          | 1          |
| No details held on principal condition for medical boarding | 1                               |            | 0          |            |
| Withheld consent  | 0                               |            | 0          |            |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> Each cause of discharge category has been compiled using ICD-10 codes, please see the supplementary tables for specific codes.

<sup>2</sup> Percentages are calculated from the total of all cause-coded medical discharges. Data presented as "<1%" represent a percentage of cause coded medical discharges of greater than 0% but smaller than 1%.

~ In line with JSP 200 on statistical disclosure, figures fewer than five have been suppressed. Where there was only one cell in a row or column that was fewer than five, the next smallest number has also been suppressed so that numbers cannot simply be derived from totals.



# Royal Marines

## Demographic Risk Groups
















In 2022/23, **95** Royal Marines personnel were medically discharged, a rate of **14** per 1,000. This was significantly lower compared to last year (23 per 1,000).

During 2022/23 the rate of medical discharge was significantly higher for regular Royal Marines personnel within the following specific demographic groups (**Table A3.1**):

- Aged 30-34 years
- Aged 35-39 years
- Other ranks
- Untrained

**Table A3.1: UK Regular Royal Marines medical discharges by demographics<sup>1</sup>, numbers<sup>2</sup> and rates per 1,000 personnel**

1 April 2022 to 31 March 2023

|                               | n         | rate        | Rate of UK Regular Royal Marines personnel medically discharged                      |
|-------------------------------|-----------|-------------|--|
| <b>All medical discharges</b> | <b>95</b> | <b>14.4</b> |    |
| <b>Age</b>                    |           |             |  |
| Aged under 20                 | 4         | 14.9        |    |
| Aged 20-24*                   | 11        | 7.6         |   |
| Aged 25-29                    | 16        | 9.9         |  |
| Aged 30-34*                   | 32        | 25.1        |  |
| Aged 35-39*                   | 21        | 23.2        |  |
| Aged 40-44                    | 5         | 9.1         |  |
| Aged 45-49                    | 3         | 10.2        |  |
| Aged 50 and over              | 3         | 12.5        |  |
| <b>Gender</b>                 |           |             |  |
| Male                          | 94        | 14.5        |  |
| Female                        | 1         | 8.2         |  |
| <b>Rank</b>                   |           |             |  |
| Officer                       | 4         | 4.7         |   |
| Other Rank*                   | 91        | 15.8        |  |
| <b>Training Status</b>        |           |             |  |
| Trained                       | 73        | 12.6        |  |
| Untrained*                    | 22        | 27.2        |  |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

<sup>2</sup> In line with JSP 200, numbers fewer than five were not suppressed in demographics tables as Defence Statistics assessed that these figures did not disclose sensitive personal information.

+/- Age groups found to be at a statistically significantly higher (+) or lower (-) risk than the remaining age groups combined using a z-test for a single proportion at a 95% confidence level. Due to small numbers, a Fisher's exact test was used to determine significance for the aged under 20, aged 40-44, aged 45-49, gender and rank groups.

\* Groups found to be at a statistically significantly higher risk using a z-test for proportions at a 95% confidence level.

## Royal Marines Continued

### Causes of Medical Discharge

**Table A3.2: UK Regular Royal Marines medical discharges by principal ICD-10 cause code<sup>1</sup> group and financial year, numbers and percentages<sup>2</sup>**

1 April 2018 to 31 March 2023

|   | 5 Year Total<br>2018/19-2022/23 |            | 2022/23   |            |
|---|---------------------------------|------------|-----------|------------|
|   | n                               | %          | n         | %          |
| <b>All medical discharges</b>                               | <b>622</b>                      |            | <b>95</b> |            |
| <b>All cause coded medical discharges</b>                   | <b>621</b>                      | <b>100</b> | <b>95</b> | <b>100</b> |
| Infectious and parasitic diseases                           | ~                               | <1         | ~         | <5         |
| Neoplasms   | 9                               | 1          | ~         | <5         |
| Blood disorders   | ~                               | <1         | 0         | 0          |
| Endocrine, nutritional and metabolic diseases               | 12                              | 2          | ~         | <5         |
| - Of which diabetes   | 6                               | <1         | ~         | <5         |
| - Of which insulin-dependent                                | 6                               | <1         | ~         | <5         |
| - Of which non-insulin-dependent                            | 0                               | 0          | 0         | 0          |
| Mental and behavioural disorders                            | 65                              | 10         | 10        | 11         |
| - Of which mood disorders                                   | 14                              | 2          | 5         | 5          |
| - Of which depression                                       | 11                              | 2          | ~         | <5         |
| - Of which neurotic, stress related and somatoform          | 43                              | 7          | ~         | <5         |
| - Of which post-traumatic stress disorder (TSD)             | 32                              | 5          | ~         | <5         |
| - Of which adjustment disorder                              | ~                               | <1         | ~         | <5         |
| Nervous system disorders                                    | 18                              | 3          | ~         | <5         |
| - Of which epilepsy   | 0                               | 0          | 0         | 0          |
| Eye and adnexa diseases                                     | ~                               | <1         | 0         | 0          |
| - Of which blindness, low vision and visual disturbance     | ~                               | <1         | 0         | 0          |
| Ear and mastoid process diseases                            | 39                              | 6          | ~         | <5         |
| - Of which hearing loss                                     | 34                              | 5          | ~         | <5         |
| - Of which noise-induced hearing loss                       | 10                              | 2          | 0         | 0          |
| - Of which tinnitus   | ~                               | <1         | 0         | 0          |
| Circulatory system disorders                                | 12                              | 2          | ~         | <5         |
| Respiratory system disorders                                | 8                               | 1          | ~         | <5         |
| - Of which asthma   | 7                               | 1          | ~         | <5         |
| Digestive system disorders                                  | 8                               | 1          | ~         | <5         |
| Skin and subcutaneous tissue diseases                       | ~                               | <1         | 0         | 0          |
| Musculoskeletal disorders and injuries                      | 420                             | 68         | 62        | 65         |
| - Of which injuries and disorders of the knee               | 101                             | 16         | 12        | 13         |
| - Of which knee pain  | 46                              | 7          | 7         | 7          |
| - Of which back pain  | 67                              | 11         | 14        | 15         |
| - Of which low back pain                                    | 62                              | 10         | 13        | 14         |
| - Of which injuries and disorders of the ankle and foot     | 51                              | 8          | 10        | 11         |
| - Of which heat injury                                      | 5                               | <1         | 0         | 0          |
| - Of which cold injury                                      | 10                              | 2          | ~         | <5         |
| Genitourinary system diseases                               | ~                               | <1         | 0         | 0          |
| Pregnancy, childbirth and puerperium                        | 0                               | 0          | 0         | 0          |
| Congenital malformations                                    | ~                               | <1         | 0         | 0          |
| Clinical and laboratory findings                            | 15                              | 2          | ~         | <5         |
| External causes of morbidity and mortality                  | 0                               | 0          | 0         | 0          |
| Factors influencing health status                           | ~                               | <1         | 0         | 0          |
| No details held on principal condition for medical boarding | 1                               |            | 0         |            |
| Withheld consent  | 0                               |            | 0         |            |

Source: DMICP, FMed 23 and JPA

<sup>1</sup> Each cause of discharge category has been compiled using ICD-10 codes, please see the supplementary tables for specific codes.

<sup>2</sup> Percentages are calculated from the total of all cause-coded medical discharges. Data presented as "<1%" represent a greater than 0% but smaller than 1%. For 2022/23 data presented as "<5%" represent a percentage greater than 0% but smaller than 5%. This is to prevent inadvertent disclosure of suppressed numbers, in line with JSP 200.

~ In line with JSP 200 on statistical disclosure, figures fewer than five have been suppressed. Where there was only one cell in a row or column that was fewer than five, the next smallest number has also been suppressed so that numbers cannot simply be derived from totals.

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