

Annual Medical Discharges in the UK Regular Armed Forces

1 April 2017 to 31 March 2022

Published 14 July 2022

This official statistic provides time trends for the last five years of medical discharges among UK regular service personnel with a focus on the most recent year of information, including demographic factors and the medical causes leading to the discharge.

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 can then 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 2021/22:

Royal Navy

484 medical discharges 14 per 1,000 personnel

(Significantly higher than last year when rate was 10 per 1,000)

Groups at significantly higher risk of medical discharge:

Aged 30-34 years Aged 35-39 years Females Other ranks Royal Marines

Army

670 medical discharges 8 per 1,000 personnel

=

(No change since last year when rate was 8 per 1,000)

Groups at significantly higher risk of medical discharge:

Aged 20-24 years Females Other ranks Untrained

RAF

168 medical discharges 5 per 1,000 personnel

(Significantly higher than last year when rate was 4 per 1,000)

Groups at significantly higher risk of medical discharge:

Females Other ranks Untrained

For all three services, the main causes of medical discharges were *Musculoskeletal Disorders and Injuries* and *Mental and Behavioural Disorders*. This was in line with findings from previous years.

44%
of Royal Navy
medical
discharges

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38% of Army medical discharges

Musculoskeletal Disorders and Injuries

> 35% of RAF medical discharges

Mental and Behavioural Disorders

> 26% of Royal Navy medical discharges

46% f Army medical discharges 43% of RAF medical discharges

2 in 5 personnel (43%) medically discharged left as a result of multiple medical conditions.

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

Would you like to be added to our **contact list**, so that we can inform you about updates to these statistics and consult you if we are thinking of making changes? You can subscribe to updates by emailing Analysis-Publications@mod.gov.uk

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Past publications and supplementary tables containing all data presented in this publication, including detailed monthly breakdowns, can be found at:

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

Introduction

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; medically downgraded personnel who are retained in service or exit the forces for any other reason are excluded¹. Also, 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 2014/15 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 information².

Please note that due to COVID-19 limiting access to places of work, Defence Statistics Health were not able to access all of the paperwork confirming cause of medical discharge for part of 2019/20 and 2020/21 – 2021/22. Therefore, cause information for these years should be considered **provisional and subject to change**. Please see the methodology (page 35) and the annual medical discharges in the UK regular armed forces background quality report for further information².

Main Points

Between 1 April 2021 and 31 March 2022 (2021/22) of the UK regular armed forces population:

Royal Navy

484 Royal Navy/Royal Marines personnel were medically discharged, a rate of 14 per 1,000 personnel. The rate was significantly higher than last year (10 per 1,000 personnel).

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484 Royal Navy/Royal Marines personnel were medically discharged, a rate of 14 per 1,000 personnel. The rate was not significantly different from last year (8 per 1,000 personnel).

168 RAF personnel were medically discharged, a rate of 5 per 1,000 personnel. The rate was significantly higher than last year (4 per 1,000 personnel).

A total of **1,322 medical discharges** occurred in 2021/22, representing approximately 4 UK regular armed forces personnel medically discharged each day.

The rate of medical discharges in 2021/22 increased in the Royal Navy/Royal Marines 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.

As a result of the COVID-19 pandemic, there was a reduction in some routine and training activities. This, along with 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. As COVID-19 restrictions have eased, Royal Navy/Royal Marines and RAF medical discharge rates have returned to levels similar to that seen prior to the pandemic. Therefore, caution should be taken when comparing rates of medical discharges in 2021/22 to 2020/21.

In 2021/22 the following demographic groups were significantly more likely to medically discharge:

- Other ranks in each of the three services.
- **Females** in each of the three services.
- Untrained personnel in the army and RAF.
- Royal Navy/Royal Marines aged 30-34 and 35-39 years.
- Army aged 20-24 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 and ill health related incidents³. The Women in Ground Close Combat Roles review also found that female personnel had a higher rate of injuries than males⁴.

Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders 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 Army⁵ and Canadian military⁶ 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 discharge deferrals 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

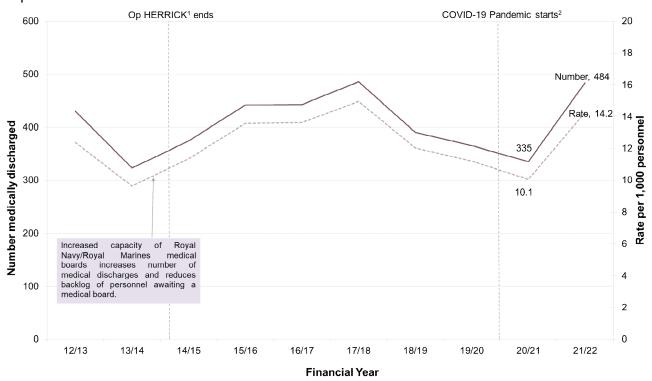
In 2021/22, there were **484** medical discharges from the Royal Navy/Royal Marines; a rate of **14 per 1,000** personnel. This rate was **significantly higher** than last year.

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 39 to 42).

Figure 1 shows the number and rate of Royal Navy/Royal Marines medical discharges over time from 2012/13 to 2021/22.

Figure 1: UK Regular Royal Navy/Royal Marines medical discharges by financial year, numbers and rates per 1,000 personnel

1 April 2012 to 31 March 2022



- ▼ The rate of medical discharges fell in 2013/14 to 9.6 per 1,000 personnel. During this year there was a reduction in the capacity of Royal Navy/Royal Marines medical boards due to a lack of administrative support which may have contributed to this fall. Additionally, following the 2010 Strategic Defence and Security Review (SDSR)⁷, there was a greater need to retain downgraded personnel.
- ▲ The rate of medical discharges rose between 2014/15 and 2017/18 from 11.3 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.
- ▼ 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. Whilst there were temporary deferrals of medical boards at the beginning of 2020/21 due to COVID-19 restrictions, these were quickly resumed and is not thought to have contributed to the fall in rates.
- ▲ The rate of medical discharges rose in 2021/22 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 policy change in the management and retention of long-term downgraded personnel.

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

² 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.

Demographic Risk Groups

In 2021/22, the rate of medical discharge was significantly higher for regular **Royal Navy/Royal Marines** personnel within the following demographic groups (Table 1):

- Aged 30-34 and 35-39 years
- Females
- Other ranks
- Royal Marines

Royal Navy personnel only:

- Aged 30-34 and 35-39 years
- Females
- Other ranks
- Trained

Royal Marines personnel only:

- Aged under 20 years
- Other ranks
- Untrained

Table 1: UK Regular Royal Navy/Royal Marines medical discharges by demographics¹, numbers and rates per 1,000 personnel

1 April 2021 to 31 March 2022

| April 2021 to 31 Mar | cn 2022 | | | |
|--|----------|-----|---------|--|
| | | | 2021/22 | |
| | | | | Rate of UK regular Royal Navy/Royal |
| Normalian of LUZ namedan | | n | rate | Marines personnel medically discharged |
| Number of UK regular Navy/Royal Marines p medically discharged | ersonnel | | | |
| | | 484 | 14.2 | |
| Age | | | | |
| Aged under 20 |) | 22 | 11.3 | |
| Aged 20-24 - | | 79 | 11.1 | |
| Aged 25-29 | | 96 | 14.0 | |
| Aged 30-34 ⁺ | | 101 | 17.1 | |
| Aged 35-39 + | | 92 | 19.0 | |
| Aged 40-44 | | 50 | 15.3 | |
| Aged 45-49 | | 31 | 15.0 | |
| Aged 50 and o | over - | 13 | 6.6 | |
| Gender | | | | |
| Male | | 411 | 13.5 | |
| Female* | | 73 | 21.0 | |
| Rank | | | | |
| Officer | | 28 | 4.0 | |
| Other Rank* | | 456 | 16.9 | |
| Training Status | | | | |
| Trained | | 409 | 13.9 | |
| Untrained | | 75 | 16.1 | |
| Service | | | | |
| Royal Navy | | 328 | 12.0 | |
| Royal Marines | * | 156 | 23.3 | |

¹ 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.

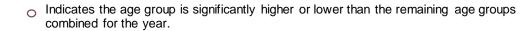
^{*} Groups found to be at a statistically significantly higher risk using a z-test for proportions at a 95% confidence level

Figures 2 to **6** present the Royal Navy/Royal Marines medical discharges by demographic group from 2017/18 to 2021/22 with possible explanations for the differences observed.

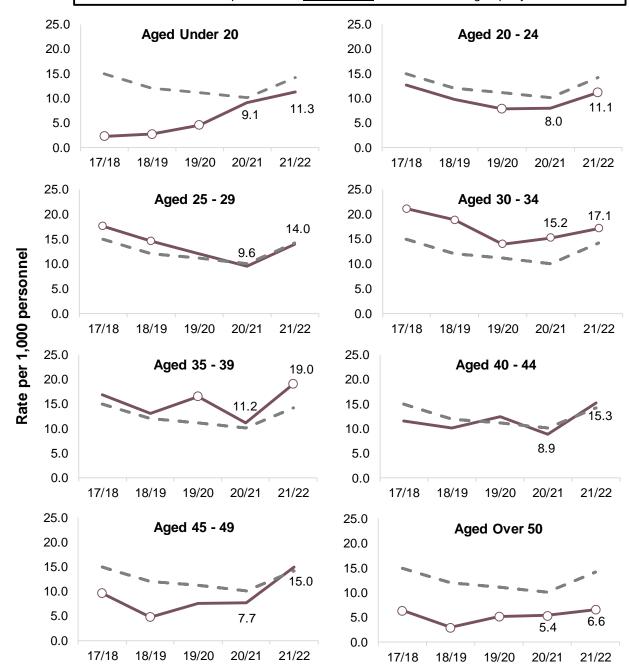
The rates of medical discharge by demographic groups can be found for the Royal Navy and Royal Marines as individual populations in **Annex A** (pages 39 to 42).

Figure 2: UK Regular Royal Navy/Royal Marines medical discharges by age group¹ and financial year², rates per 1,000 personnel

1 April 2017 and 31 March 2022



The dashed line represents the <u>overall rate</u> of medical discharges per year



Source: DMICP, FMed 23 and JPA

Financial Year

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

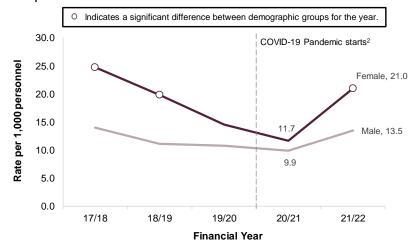
² March 2020 - start of COVID-19 pandemic.

In 2021/22, 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 20-24 years and aged 50 years and over were significantly lower compared to other age groups.

The rate of medical discharges for personnel aged under 20 have been increasing since 2017/18 and as of 2020/21 the rates are no longer significantly lower than the other age groups. Throughout the period presented those aged over 50 years have remained significantly lower than other age groups and those aged 30-34 have remained significantly higher than other age groups.

Figure 3: UK Regular Royal Navy/Royal Marines medical discharges by gender¹ and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



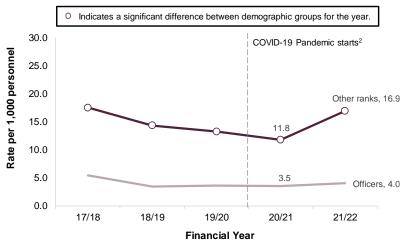
Source: DMICP, FMed 23 and JPA

The rate of medical discharges in females has been higher than males for all years presented. In 2021/22, the rate of medical discharges among females was significantly higher than males for the first time since 2018/19.

The higher rate of medical discharges in female personnel may be due to their higher risk of sustaining Musculoskeletal Disorders and Injuries⁴, reporting injury³ and higher presentation of mental health disorders⁸.

Figure 4: UK Regular Royal Navy/Royal Marines medical discharges by rank¹ and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



Source: DMICP, FMed 23 and JPA

The rate of medical discharge among other ranks 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.

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

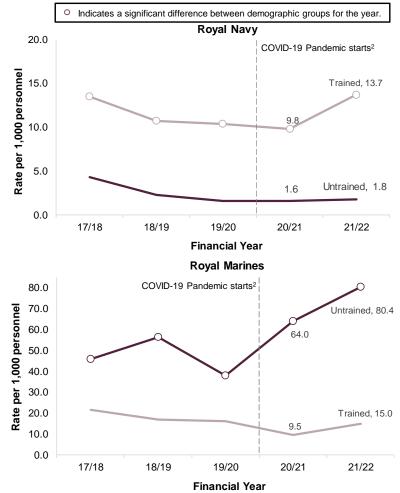
² March 2020 - start of COVID-19 pandemic.

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

² March 2020 - start of COVID-19 pandemic.

Figure 5: UK Regular Royal Navy/Royal Marines medical discharges by training status¹ and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



There was no significant difference in the rate of medical discharges between untrained and trained personnel for Royal Navy/Royal Marines combined.

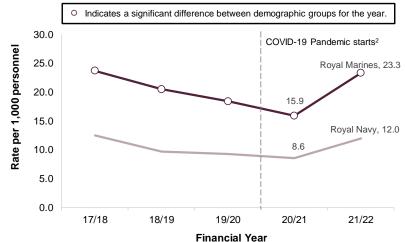
When considering the Royal Navy and Royal Marines separately; the rate of medical discharge was significantly higher among trained Royal Navy personnel and untrained Royal Marines throughout the period presented.

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 rise in untrained Royal Marines is unclear, however changes in the small numbers involved can have a large effect on the rate.

Source: DMICP, FMed 23 and JPA

Figure 6: UK Regular Royal Navy/Royal Marines medical discharges by service¹ and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



Source: DMICP, FMed 23 and JPA

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.

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

² March 2020 - start of COVID-19 pandemic.

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

² March 2020 - start of COVID-19 pandemic.

Causes of Medical Discharge

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.

Please note that due to COVID-19 limiting access to places of work, Defence Statistics Health were not able to access all of the paperwork confirming cause of medical discharge for Royal Navy/Royal Marines personnel for part of 2019/20 and 2020/21 – 2021/22. During this time period the electronic medical record (DMICP) was used as the primary source, therefore, cause information for these years should be considered **provisional and subject to change**.

In 2021/22, 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.

44% of medical discharges (approx. 1 in 2) were due to Musculoskeletal Disorders and Injuries.

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

Royal Navy personnel only:

- 34% of medical discharges were due to Musculoskeletal Disorders and Injuries.
- 33% 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.
- 13% 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 2021/22 and the total for the latest five year period, 2017/18 to 2021/22. 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).

Table 2: UK regular Royal Navy/Royal Marines medical discharges by principal ICD-10 cause code group¹ and financial year, numbers and percentages²

1 April 2017 and 31 March 2022

| | 5 Year 2017/18- | | 20 | 21/22 |
|--|--------------------|-----|----------|-----------------|
| | n | % | n | % |
| All medical discharges | 2,060 | | 484 | |
| All cause coded medical discharges | 2,058 | 100 | 483 | 100 |
| Infectious and parasitic diseases | 0 t | 0 | 0 | р 0 |
| Neoplasms | 23 F | 1 | 13 | p 3 |
| Blood disorders | ~ F | <1 | ~ | ^p <1 |
| Endocrine, nutritional and metabolic diseases | 41 | 2 | 18 | p 4 |
| - Of which diabetes | 31 | _ | | p 3 |
| Of which insulin-dependent Of which non-insulin-dependent | 17 F 12 F | | | p 1 2 |
| Mental and behavioural disorders | 471 | | | p 26 |
| - Of which mood disorders | 157 | | | p 20 |
| - Of which depression | 138 F | | <u> </u> | p 8 |
| - Of which neurotic, stress related and somatoform | 272 | . • | | p 14 |
| Of which post-traumatic stress disorder (PTSD) Of which adjustment disorder | 147 F 29 F | | | p 7 p <1 |
| Nervous system disorders | 85 F | | 18 | p 4 |
| - Of which epilepsy | 8 r | | | p <1 |
| Eye and adnexa diseases | 13 | <1 | ~ | p <1 |
| - Of which blindness, low vision and visual disturbance | ~ F | <1 | 0 | p 0 |
| Ear and mastoid process diseases | 82 F | | | p 3 |
| - Of which hearing loss | 66 F | | . – | p 2 p <1 |
| Of which noise-induced hearing loss Of which tinnitus | 8 4 | `' | | p <1 |
| Circulatory system disorders | 50 F | 2 | 21 | p 4 |
| Respiratory system disorders | 30 F | 1 | 5 | p 1 |
| - Of which asthma | 21 F | 1 | ~ | p <1 |
| Digestive system disorders | 65 F | 3 | 17 | P 4 |
| Skin and subcutaneous tissue diseases | 49 | 2 | 10 | p 2 |
| Musculoskeletal disorders and Injuries | 1,054 F | 51 | 214 | p 44 |
| - Of which injuries and disorders of the knee ³ | 239 | | | p 12 |
| Of which knee painOf which back pain | 113 F 198 F | | | p 5 p 8 |
| - Of which low back pain | 184 | | | p 7 |
| - Of which injuries and disorders of the ankle and foot ⁴ | 100 F | | | p 4 |
| Of which heat injuryOf which cold injury | 6 F 22 F | | | p <1 p <1 |
| Genitourinary system diseases | 13 | | | p <1 |
| Pregnancy, childbirth and puerperium | 0 1 | | | p 0 |
| Congenital malformations | 9 1 | | | p <1 |
| Clinical and laboratory findings | 61 | | | p 2 |
| External Causes of Morbidity and Mortality | ~ F | | | p <1 |
| Factors influencing health status | 6 | | | p <1 |
| | 2 4 | | | P < I |
| No details held on principal condition for medical boarding | | | | r |
| Withheld consent | 0 | | 0 | |

¹ Each cause of discharge category has been compiled using ICD-10 codes, please see the methodology section on page 35 for specific codes

² Data presented as "<1%" represent a percentage greater than 0% but smaller than 1%.

[~] In line with JSP 200 on statistical disclosure, figures less 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.

P Figures for cause information between 2019/20 – 2021/22 are provisional. Please see background quality report for more information.

Figure 7 shows the main principal cause coded medical discharges between 2017/18 and 2021/22.

Musculoskeletal Disorders and Injuries was the largest principal cause of Royal Navy/Royal Marines medical discharges over the last five years, accounting for just over half of all discharges. The proportion of Musculoskeletal Disorders and Injuries discharges over the last five years was higher among Royal Marines personnel (68%) than Royal Navy personnel (43%), which may be due to the physically intensive nature of many of the roles within this service.

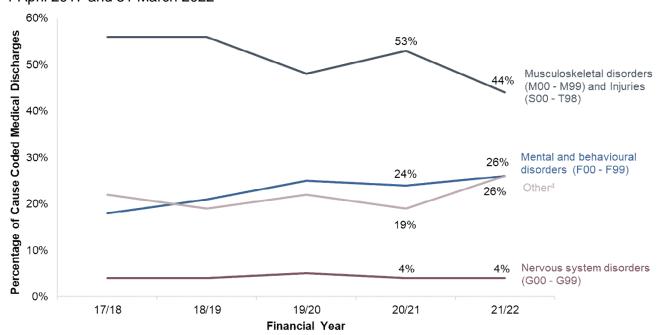
Mental and Behavioural Disorders remained the second largest principal cause of Royal Navy/Royal Marines medical discharges across the reporting period. The proportion of medical discharges for these disorders increased from 2017/18 to 2019/20 and has remained around 25% since 2019/20. The proportion of Mental and Behavioural Disorders over the last five years were lower among Royal Marines (11%) than Royal Navy personnel (29%). Rates of mental disorder seen in military healthcare settings⁸ were also lower among Royal Marines than 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 2017/18.

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 1,2,3





¹ Figures for cause information between 2019/20 – 2021/22 are provisional. Please see background quality report for more information.

² Percentages are calculated from only personnel who have a principal condition recorded.

³ Due to rounding, percentages might not add to 100%.

⁴ Includes 14 cause code groups; each accounting for a maximum of 4% of all Royal Navy/Royal Marines cause coded medical discharges.

Figure 8 shows the proportions of cause coded medical discharges by principal ICD-10 cause code groups in 2021/22.

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 = 114). 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 populations⁹.

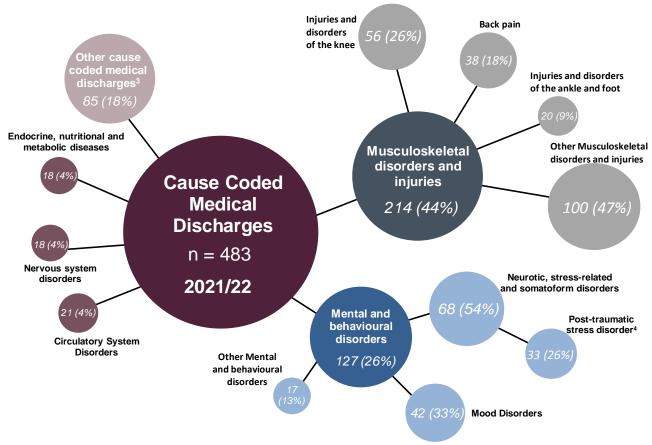
The remaining medical discharges due to Musculoskeletal Disorders and Injuries (n = 100) were distributed across a wide range of disorders and injuries, with no large numbers of discharges in one particular body region or medical condition.

The majority of medical discharges as a result of Mental and Behavioural Disorders were due to Neurotic, Stress and Somatoform Disorders (n = 68, 54%), and Mood Disorders (n = 42, 33%). Neurotic Disorders were the most prevalent mental disorder assessed at MOD specialist mental health services (DCMHs) in $2021/22^8$.

Post-Traumatic Stress Disorder (PTSD) accounted for approximately one in four Mental and Behavioural Disorder medical discharges whereas a PTSD diagnosis only accounted for less than one in 10 assessments by MOD specialist mental health clinicians⁸. 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^{1,2}

1 April 2021 to 31 March 2022



¹ Figures for cause information in 2021/22 are provisional. Please see background quality report for more information.

² Due to rounding, percentages might not add to 100%.

³ Includes 12 cause code groups; each accounting for a maximum of 4% of all Royal Navy/Royal Marines cause coded medical discharges.

⁴ Post-traumatic stress disorder discharges are shown as a percentage of Mental and Behavioural Disorders and not Neurotic Stress-related and Somatoform Disorders.

When considering both the principal and contributory causes of discharge in the Royal Navy/Royal Marines in 2021/22:

- Musculoskeletal Disorders and Injuries were present in over half of discharges (n = 262, 54%).
- Mental and Behavioural Disorders were present in a third of discharges (n = 165, 34%).
- While 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, Circulatory system disorders were the third most common cause (n = 25, 8%).
 - o In the Royal Marines, Ear and Mastoid Process Diseases were the third most common cause (n = 16, 10%).

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**).

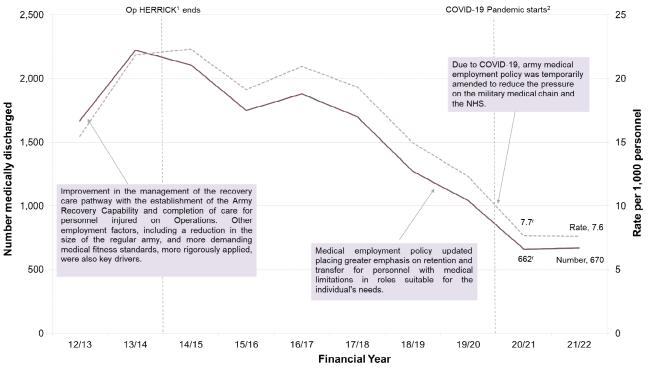
Trends in Medical Discharges

In 2021/22, there were **670** medical discharges from the army; a rate of **8 per 1,000** personnel. This rate was not significantly different from last year.

Figure 9 shows the number and rate of army medical discharges over time from 2012/13 to 2021/22. Rates have been falling since 2017/18.

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

1 April 2012 to 31 March 2022



- ▲ Between 2010/11 and 2013/14, the rate of medical discharge among army personnel increased. This is likely to be the result of more efficient management of the recovery care pathway with the establishment of the Army Recovery Capability (ARC). The ARC was established to manage the transition of ill and injured personnel either back to active service, or to civilian life. Additionally, it may be the result of the completion of treatment of personnel injured in Iraq and Afghanistan, and limited availability of roles suitable for personnel with medical restrictions.
- ▼ The rate of medical discharges fell between 2016/17 and 2021/22 and the latest annual rate was the lowest in 10 years at 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.

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

² 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.

^r indicates a revision to previously published data.

Demographic Risk Groups

In 2021/22, 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 demographics¹, numbers and rates per 1,000 personnel

1 April 2021 to 31 March 2022

| | | 2 | 2021/22 | |
|--|-----------------------|-----|---------|--|
| | _ | n | rate | Rate of UK regular army personnel medically discharged |
| Number of UK regu personnel medical | | | | |
| | | 670 | 7.6 | |
| Age | | | | |
| Aged unde | r 20 | 57 | 9.0 | |
| Aged 20-24 | 1 ⁺ | 167 | 9.2 | |
| Aged 25-29 | 9 | 124 | 7.0 | |
| Aged 30-34 | 4 | 111 | 6.8 | |
| Aged 35-39 | 9 | 84 | 6.3 | |
| Aged 40-4 | 4 | 81 | 8.8 | |
| Aged 45-49 | 9 | 28 | 6.8 | |
| Aged 50 ar | nd over | 18 | 5.9 | |
| Gender | | | | |
| Male | | 572 | 7.1 | |
| Female* | | 98 | 12.1 | |
| Rank | | | | |
| Officer | | 46 | 3.4 | |
| Other Ranl | (* | 624 | 8.4 | |
| Training Status | | | | |
| Trade Train | ned ² | 496 | 6.2 | |
| Untrained* | | 174 | 20.9 | |

Source: DMICP, FMed 23 and JPA

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.

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

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

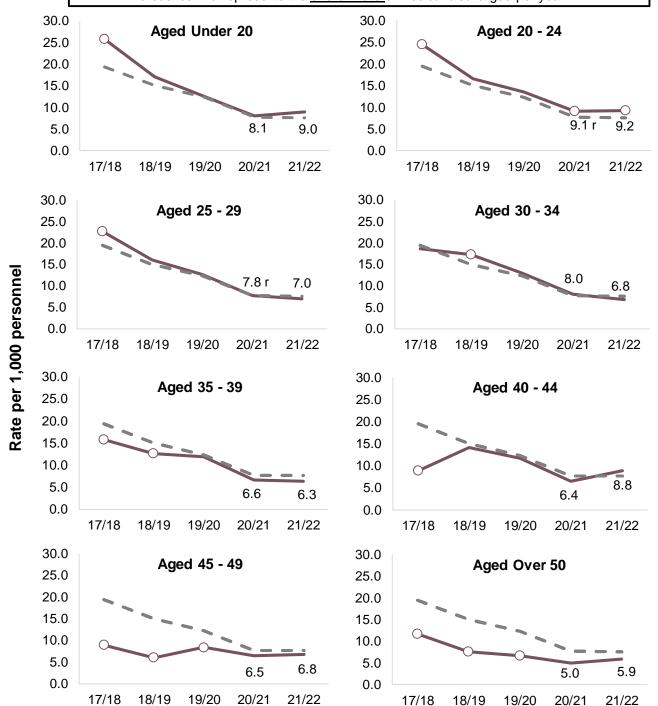
^{+/-} Age groups found to be at a statistically significantly higher (+) or lower (-) risk than the remaining age groups combined using a z-test for a single proportion at a 95% confidence level.

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

Figure 10: UK Regular army medical discharges by age group¹ and financial year², rates per 1,000 personnel

1 April 2017 and 31 March 2022

- O 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



Financial Year

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

² March 2020 - start of COVID-19 pandemic.

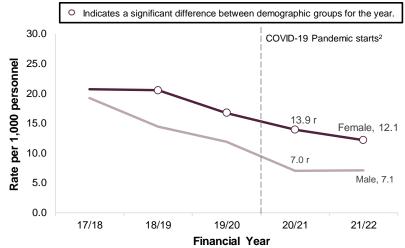
r indicates a revision to previously published data.

In 2021/22, the rate of medical discharge for personnel **aged 20-24 was significantly higher** than the remaining age groups for the second year in a row.

Rates fell between 2017/18 and 2020/21 among all age groups with the exception of those aged 40-49 years which have remained more stable over time. Rates among those aged 45-49 years and over 50 years were significantly lower than other age groups between 2017/18 to 2019/20, however in 2021/22 rates were similar to the overall rate of medical discharge.

Figure 11: UK Regular army medical discharges by gender¹ and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



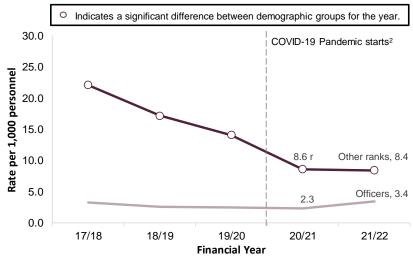
Army **females** had **significantly higher rates** of medical discharge than males in all years except 2017/18.

The higher rate of medical discharges in female personnel may be due to their higher risk of sustaining Musculoskeletal Disorders and Injuries⁴, and higher presentation of mental health disorders⁸ (the leading two causes of medical discharge).

Source: DMICP. FMed 23 and JPA

Figure 12: UK Regular army medical discharges by rank¹ and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



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.

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

² March 2020 - start of COVID-19 pandemic.

r indicates a revision to previously published data.

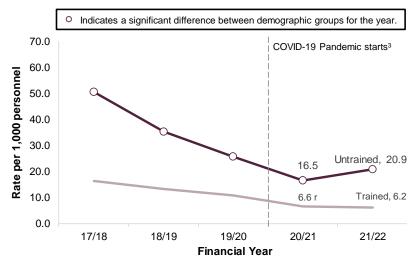
¹ As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

² March 2020 - start of COVID-19 pandemic.

indicates a revision to previously published data.

Figure 13: UK Regular army medical discharges by training status^{1,2} and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



Source: DMICP, FMed 23 and JPA

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

Untrained medical discharge rates fell over time to 16.5 per 1,000 in 2020/21. The rate rose to 20.9 per 1,000 in 2021/22, however remained below levels seen prior to the COVID-19 pandemic. temporary reduction in training activities during COVID-19 may have impacted injury rates and subsequent discharge rates.

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

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

³ March 2020 - start of COVID-19 pandemic.

r indicates a revision to previously published data.

Causes of Medical Discharges

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.

Please note that due to COVID-19 limiting access to places of work, Defence Statistics Health were not able to access all the paperwork confirming cause of medical discharge for army personnel in part of 2019/20 and 2020/21 – 2021/22. During these time periods DMICP was used as the primary source, therefore, cause information for these years should be considered **provisional and subject to change**.

In 2021/22, the two most common principal causes of medical discharges in the army were Mental and Behavioural Disorders and Musculoskeletal Disorders and Injuries.

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

38% 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 2021/22 and the total for the latest five year period, 2017/18 – 2021/22. 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).

Table 4: UK Regular army medical discharges by principal ICD-10 cause code group¹ and financial year, numbers and percentages²

1 April 2017 and 31 March 2022

| | 5 Year Total 2017/18-2021/22 | | | 2 | :02 1 | 1/22 |
|--|---------------------------------|--------|----------|------------|--------------|----------|
| | n | | % | n | | % |
| All medical discharges | 5,348 | | | 670 | | |
| All cause coded medical discharges | 5,200 | р | 100 | 665 | р | 100 |
| Infectious and parasitic diseases | ~ | р | <1 | ~ | р | <1 |
| Neoplasms | 41 | р | <1 | 6 | р | <1 |
| Blood disorders | ~ | р | <1 | ~ | р | <1 |
| Endocrine, nutritional and metabolic diseases | 31 | р | <1 | ~ | р | <1 |
| - Of which diabetes | 12 | р | <1 | ~ | р | <1 |
| - Of which insulin-dependent | 8 | р | <1 | ~ | р | <1 |
| - Of which non-insulin-dependent | ~ | р | <1 | 0 | р | 0 |
| Mental and behavioural disorders | 1,744 | р | 34 | 306 | р | 46 |
| - Of which mood disorders | 589 | р | 11 | 119 | р | 18 |
| - Of which depression | 515 | p | 10 | 99 | p n | 15 |
| Of which neurotic, stress related and somatoform Of which post-traumatic stress disorder (PTSD) | 1,043 677 | p p | 20 13 | 167 112 | p p | 25 17 |
| Of which adjustment disorder | 156 | p | 3 | 21 | p | 3 |
| Nervous system disorders | 114 | р | 2 | 15 | р | 2 |
| - Of which epilepsy | 19 | р | <1 | ~ | р | <1 |
| Eye and adnexa diseases | 14 | р | <1 | ~ | р | <1 |
| - Of which blindness, low vision and visual disturbance | ~ | р | <1 | 0 | р | 0 |
| Ear and mastoid process diseases | 143 | р | 3 | 19 | р | 3 |
| - Of which hearing loss | 111 | р | 2 | 11 | р | 2 |
| - Of which noise-induced hearing loss | 25 | р | <1 | ~ | р | <1 |
| - Of which tinnitus | 13 | р | <1 | ~ | р | <1 |
| Circulatory system disorders | 86 | р | 2 | 10 | р | 2 |
| Respiratory system disorders | 36 | р | <1 | ~ | р | <1 |
| - Of which asthma | 30 | р | <1 | ~ | р | <1 |
| Digestive system disorders | 60 | р | 1 | ~ | р | 1 |
| Skin and subcutaneous tissue diseases | 46 | р | <1 | ~ | р | <1 |
| Musculoskeletal disorders and Injuries | 2,654 | р | 51 | 255 | р | 38 |
| - Of which injuries and disorders of the knee | 509 | р | 10 | 60 | р | 9 |
| - Of which knee pain | 227 | р | 4 | 30 | р | 5 |
| - Of which back pain | 346 | р | 7 | 32 | р | 5 |
| - Of which low back pain | 307 | p | 6 | 25 | р | 4 |
| - Of which injuries and disorders of the ankle and foot | 283 12 | p p | 5 | 29 | p p | 4 0 |
| Of which heat injuryOf which cold injury | 183 | p | <1 4 | 0 13 | р | 2 |
| Genitourinary system diseases | 30 | р | <1 | ~ | р | <1 |
| | 30 | p . | | | , b | |
| Pregnancy, childbirth and puerperium | ~ | | <1 | 0 | | 0 |
| Congenital malformations | 11 | p | <1 | 0 | р | 0 |
| Clinical and laboratory findings ³ | 155 | р | 3 | 27 | р | 4 |
| External Causes of Morbidity and Mortality | 0 | р | 0 | 0 | р | 0 |
| Factors influencing health status | 18 | р | <1 | ~ | р | <1 |
| No details held on principal condition for medical boarding | 147 | р | | 5 | р | |
| Withheld consent | 1 | | | 0 | | |

¹ Each cause of discharge category has been compiled using ICD-10 codes, please see the methodology section on page 35 for specific

Data presented as "<1%" represent a percentage greater than 0% but smaller than 1%.
 In line with JSP 200 on statistical disclosure, figures less 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.

³ 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

P Figures for cause information between 2019/20 – 2021/22 are provisional. Please see background quality report for more information.

Figure 14 shows the main principal cause coded medical discharges between 2017/18 and 2021/22.

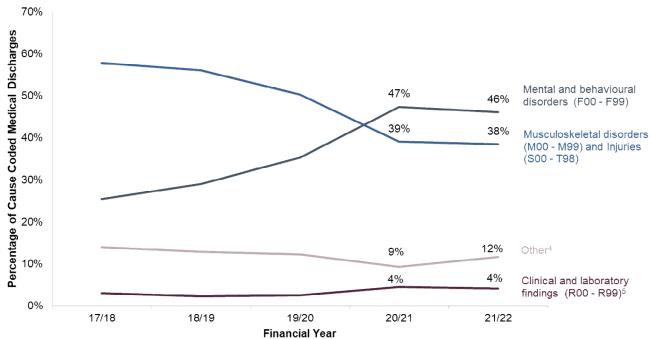
Between 2017/18 and 2019/20, Musculoskeletal Disorders and Injuries was the largest principal cause of army medical discharges, accounting for over half of all discharges over the last five years. Mental and Behavioural Disorders was the second largest cause accounting for a third of all discharges over the last five years. This finding is in line with other militaries the United States Army⁵ and Canada⁶ also reported Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders as the two most common causes for medical release.

In 2020/21, Mental and Behavioural Disorders was the largest principal cause of army medical discharges for the first time since reporting began, this has continued in 2021/22. This change could be the result of 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.

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 1,2,3

1 April 2017 and 31 March 2022



Source: DMICP, FMed 23 and JPA

Figure 15 presents the proportions of cause coded medical discharges by principal ICD-10 cause code groups in 2021/22.

In 2021/22, just under half of the medical discharges as a result of Musculoskeletal Disorders and Injuries were linked to the knee, back, and ankle and foot (n = 121). The prevalence of personnel medically discharged for disorders and injuries to the leg 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 populations⁹.

¹ Figures for cause information between 2019/20 – 2021/22 are provisional. Please see background quality report for more information.

² Percentages are calculated from only personnel who have a principal condition recorded.

³ Due to rounding, percentages might not add to 100%.

⁴ Includes 15 cause code groups; each accounting for a maximum of 3% of all regular army cause coded medical discharges.

⁵ 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.

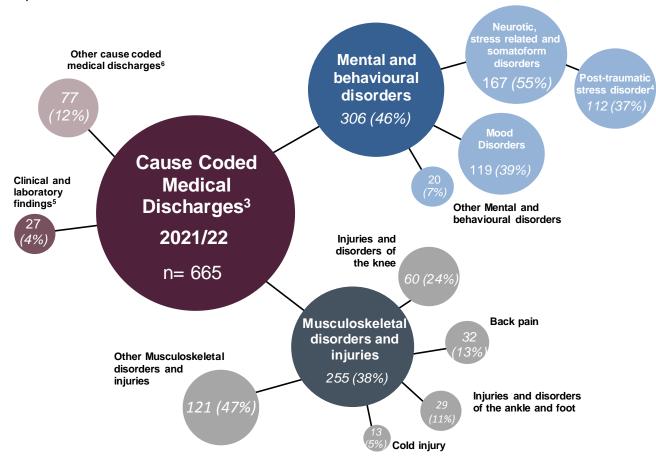
The remaining half of medical discharges due to Musculoskeletal Disorders and Injuries (n = 134) were distributed across a wide range of disorders and injuries, with no large numbers of discharges in one particular body region or medical condition.

The majority of medical discharges due to Mental and Behavioural Disorders in 2021/22 were the result of Neurotic, Stress Related and Somatoform Disorders (n = 167, 55%), and Mood Disorders (n = 119, 39%). Neurotic Disorders were the most prevalent mental disorder assessed at MOD specialist health services (DCMHs) in 2021/22⁸.

Post-Traumatic Stress Disorder (PTSD) accounted for approximately two in five Mental and Behavioural Disorder medical discharges, whereas PTSD only accounted for less than one in 10 assessments seen at MOD specialist mental health services⁸. 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^{1,2}

1 April 2021 to 31 March 2022



¹ Figures for cause information in 2021/22 is provisional. Please see background quality report for more information.

² Due to rounding, percentages might not add to 100%.

³ Total number of army discharges were 670, however 5 personnel had no details on principal condition for medical boarding.

⁴ Post-traumatic stress disorder discharges are shown as a percentage of Mental and Behavioural Disorders and not Neurotic Stress-related and Somatoform Disorders.

⁵ 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.

⁶ Includes 13 cause code groups; each accounting for a maximum of 3% of all regular army cause coded medical discharges.

When considering both the principal and contributory cause of discharge in 2021/22:

- Mental and Behavioural Disorders were present in over half of all discharges (n = 386, 58%).
- Musculoskeletal Disorders and Injuries were present in over half of discharges (n = 375, 56%).
- Ear and Mastoid Process Diseases were the third most prevalent cause (n = 42, 6%).

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**).

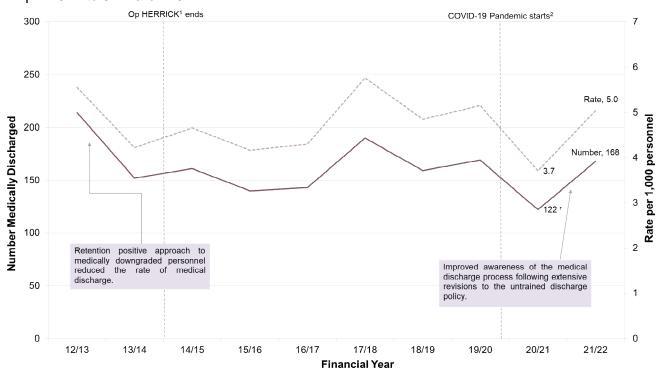
Trends in Medical Discharges

In 2021/22, there were **168** medical discharges from the RAF; a rate of **5 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 2012/13 to 2021/22.

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

1 April 2012 to 31 March 2022



Source: DMICP, FMed 23 and JPA

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

- ▼ The rate of medical discharges fell from 2012/13 and 2013/14. During this time the RAF were operating a retention positive approach which endeavoured to find alternative roles for personnel with limited deployability.
- ▲ The rate of medical discharge rose from 2016/17 and 2017/2018. This increase 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 discharge fell during 2018/19 to a level more comparable with 2017/18.
- ▼ 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; temporary deferrals of medical boards in 2020/21 due to COVID-19 were resumed quickly and is not thought to have contributed to the fall in rates.
- ▲ The rate of medical discharge rose in 2021/22 to 5.0 per 1,000, returning to similar to pre pandemic levels. During this time, the RAF revised their untrained discharge policy, improving awareness of the discharge process at Phase 2 training establishments, which may, in part, have contributed to the rise in untrained medical discharges (See Figure 20).

² 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.

r indicates a revision to previously published data.

RAF Continued

Demographic Risk Groups

In 2021/22, the rate of medical discharge was significantly higher for regular RAF personnel within the following demographic groups (**Table 5**):

- Females
- Other ranks
- Untrained

Table 5: UK Regular RAF medical discharges by demographics¹, numbers² and rates per 1,000 personnel

1 April 2021 to 31 March 2022

| · | , | 2021/22 | |
|---|-----|---------|---|
| - | n | rate | Rate of UK regular RAF personnel medically discharged |
| Number of UK regular RAF personnel medically discharged | | | |
| | 168 | 5.0 | |
| Age | | | |
| Aged under 20 | 8 | 6.6 | |
| Aged 20-24 | 25 | 4.5 | |
| Aged 25-29 | 32 | 5.4 | |
| Aged 30-34 | 25 | 4.3 | |
| Aged 35-39 | 24 | 4.3 | |
| Aged 40-44 | 29 | 6.8 | |
| Aged 45-49 | 10 | 4.1 | |
| Aged 50 and over | 15 | 6.2 | |
| Gender | | | |
| Male | 126 | 4.5 | |
| Female* | 42 | 8.3 | |
| Rank | | | |
| Officer | 20 | 2.5 | |
| Other Rank* | 148 | 5.9 | |
| Training Status | | | |
| Trained | 127 | 4.3 | |
| Untrained* | 41 | 11.3 | |

Figures 17 to **20** present RAF medical discharges for each demographic group between 2017/18 and 2021/22 with possible explanations for the differences observed.

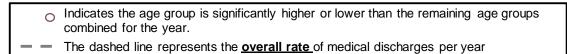
¹ As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

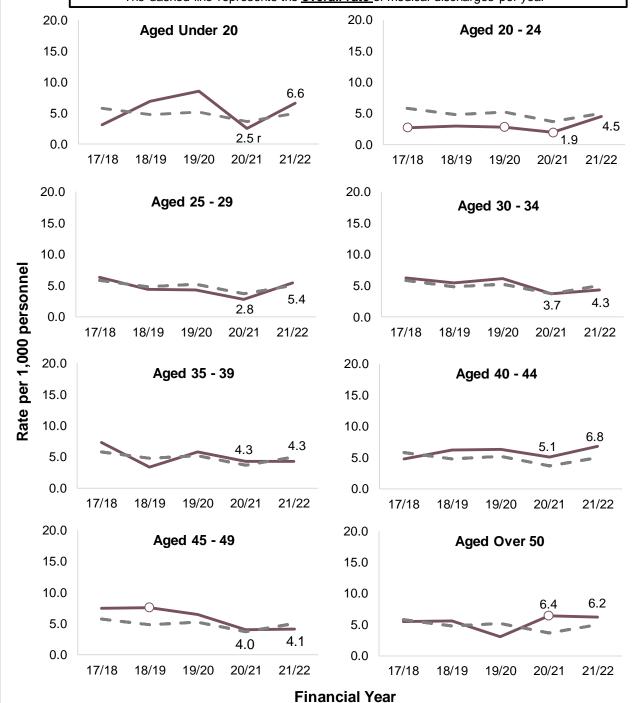
^{+/-} Age groups found to be at a statistically significantly higher (+) or lower (-) risk than the remaining age groups combined using a z-test for a single proportion at a 95% confidence level.

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

Figure 17: UK Regular RAF medical discharges by age group¹ and financial year², rates per 1,000 personnel

1 April 2017 and 31 March 2022





Source: DMICP, FMed 23 and JPA

In 2021/22, there were no significant differences in rates of medical discharge among 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.

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

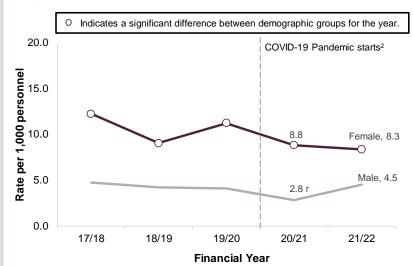
² March 2020 - start of COVID-19 pandemic.

r indicates a revision to previously published data.

RAF Continued

Figure 18: UK Regular RAF medical discharges by gender¹ and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



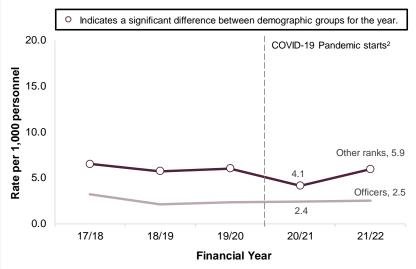
Females had **significantly higher** rates of medical discharge than males for all years presented.

The higher rate of medical discharges in female personnel may be due to their higher risk of sustaining Musculoskeletal Disorders and Injuries⁴, and higher presentation of mental health disorders⁸ (the leading two causes of medical discharge).

Source: DMICP, FMed 23 and JPA

Figure 19: UK Regular RAF medical discharges by rank¹ and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



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.

 $^{^{\}rm 1}$ As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

² March 2020 - start of COVID-19 pandemic.

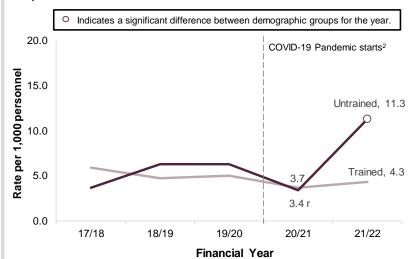
r indicates a revision to previously published data.

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

² March 2020 - start of COVID-19 pandemic.

Figure 20: UK Regular RAF medical discharges by training status¹ and financial year, rates per 1,000 personnel

1 April 2017 and 31 March 2022



Source: DMICP, FMed 23 and JPA

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 increase in untrained medical discharges.

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 97 untrained RAF personnel were medically discharged, compared to 711 trained personnel.

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

² March 2020 - start of COVID-19 pandemic.

^r indicates a revision to previously published data.

RAF Continued

Causes of Medical Discharges

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.

Please note that due to COVID-19 limiting access to places of work, Defence Statistics Health were not able to access all of the paperwork confirming cause of medical discharge for RAF personnel in part of 2019/20 and 2020/21 – 2021/22. During this time period DMICP was used as the primary source, therefore, cause information for these years should be considered **provisional and subject to change**.

In 2021/22, the two most common principal causes of medical discharges in the RAF were Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders.

43% of medical discharges (approx. 1 in 2) were due to Mental and Behavioural Disorders.

35% of medical discharges (approx. 1 in 3) 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 2021/22 and the total for the latest five year period, 2017/18 – 2021/22. 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).

Table 6: UK Regular RAF medical discharges by principal ICD-10 cause code group¹ and financial year, numbers and percentages²

1 April 2017 and 31 March 2022

| 1 April 2017 and 31 March 2022 | | | Total -2021/22 | 2021/22 | | 1/22 |
|---|------------|--------|-------------------|----------|--------|----------|
| | n | | % | n | | % |
| All medical discharges | 808 | | | 168 | | |
| All cause coded medical discharges | 807 | | 100 | 167 | | 100 |
| Infectious and parasitic diseases | 0 | р | 0 | 0 | р | 0 |
| Neoplasms | 19 | р | 2 | 5 | р | 3 |
| Blood disorders | ~ | р | <1 | 0 | р | 0 |
| Endocrine, nutritional and metabolic diseases | 6 | р | <1 | ~ | р | <1 |
| - Of which diabetes | ~ | р | <1 | 0 | р | 0 |
| - Of which insulin-dependent | ~ | р | <1 | 0 | р | 0 |
| - Of which non-insulin-dependent | ~ | р | <1 | 0 | р | 0 |
| Mental and behavioural disorders | 321 | р | 40 | 72 | р | 43 |
| - Of which mood disorders | 133 | p p | 16 | 34 | p p | 20 |
| Of which depression Of which neurotic, stress related and somatoform | 119 165 | р | 15 20 | 31 31 | р | 19 19 |
| - Of which post-traumatic stress disorder (PTSD) | 75 | p | 9 | 15 | p | 9 |
| - Of which adjustment disorder | 24 | р | 3 | ~ | р | 2 |
| Nervous system disorders | 37 | р | 5 | ~ | р | 4 |
| - Of which epilepsy | ~ | р | <1 | 0 | р | 0 |
| Eye and adnexa diseases | 6 | р | <1 | ~ | р | 2 |
| - Of which blindness, low vision and visual disturbance | 0 | р | 0 | 0 | р | 0 |
| Ear and mastoid process diseases | 9 | р | 1 | ~ | р | <1 |
| - Of which hearing loss | 6 | р | <1 | 0 | р | 0 |
| Of which noise-induced hearing loss | ~ | р | <1 | 0 | р | 0 |
| - Of which tinnitus | ~ | р | <1 | 0 | р | 0 |
| Circulatory system disorders | 14 | р | 2 | ~ | р | 1 |
| Respiratory system disorders | ~ | р | <1 | 0 | р | 0 |
| - Of which asthma | 0 | р | 0 | 0 | р | 0 |
| Digestive system disorders | 17 | р | 2 | 6 | р | 4 |
| Skin and subcutaneous tissue diseases | 11 | р | 1 | ~ | р | 2 |
| Musculoskeletal disorders and Injuries | 328 | р | 41 | 59 | р | 35 |
| - Of which injuries and disorders of the knee ³ | 67 | р | 8 | 10 | р | 6 |
| - Of which knee pain | 36 | р | 4 | 5 | р | 3 |
| - Of which back pain | 72 | p p | 9 | 14 | p p | 8 |
| Of which low back pain Of which injuries and disorders of the ankle and foot⁴ | 64 | р | 8 | 14 | р | 8 |
| Of which heat injury | 26 0 | р | 0 | 5 | р | 3 0 |
| - Of which cold injury | 9 | р | 1 | 0 | р | 0 |
| Genitourinary system diseases | 8 | р | <1 | ~ | р | <1 |
| Pregnancy, childbirth and puerperium | 0 | р | 0 | 0 | р | 0 |
| Congenital malformations | ~ | р | <1 | 0 | р | 0 |
| Clinical and laboratory findings | 24 | р | 3 | 7 | р | 4 |
| External Causes of Morbidity and Mortality | 0 | p | 0 | 0 | p | 0 |
| | | р | _ | _ | р | _ |
| Factors influencing health status | ~ | ۲ | <1 | 0 | ۲ | 0 |
| No details held on principal condition for medical boarding | 1 | | | 1 | | |
| Withheld consent | 0 | | | 0 | | |

¹ Each cause of discharge category has been compiled using ICD-10 codes, please see the methodology section on page 35 for specific codes.

² Data presented as "<1%" represent a percentage greater than 0% but smaller than 1%.

[~] In line with JSP 200 on statistical disclosure, figures less 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

P Figures for cause information between 2019/20 – 2021/22 are provisional. Please see background quality report for more information.

RAF Continued

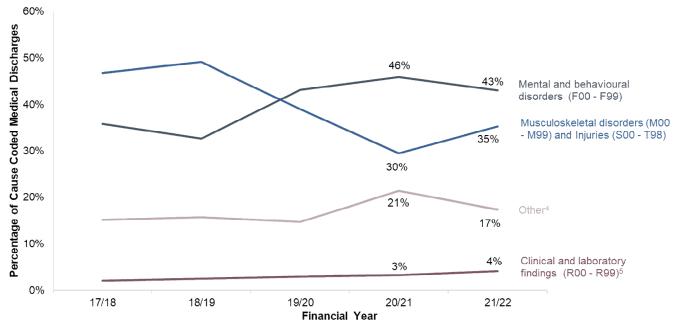
Figure 21 shows the main principal cause coded medical discharges between 2017/18 and 2021/22.

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, from 2019/20, Mental and Behavioural Disorders has been the largest principal cause of RAF medical discharges. Over the last five years, both Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders have accounted for 81% of all 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^{1,2,3}

1 April 2017 and 31 March 2022



Source: DMICP, FMed 23 and JPA

Figure 22 shows the proportions of cause coded medical discharges by principal ICD-10 cause code groups in 2021/22.

The majority of medical discharges as a result of Mental and Behavioural Disorders were due to Mood Disorders (n = 34, 47%), and Neurotic, Stress and Somatoform Disorders (n = 31, 43%). Neurotic Disorders were the most prevalent mental disorder assessed at MOD specialist health services (DCMHs) in $2021/22^8$.

Post-Traumatic Stress Disorder (PTSD) accounted for approximately one in three Mental and Behavioural Disorder medical discharges whereas a PTSD diagnosis only accounted for less than one in 20 assessments at MOD specialist mental health services⁸. 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 = 29). 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 populations⁹.

¹ Figures for cause information between 2019/20 – 2021/22 are provisional. Please see background quality report for more information.

² Percentages are calculated from only personnel who have a principal condition recorded.

³ Due to rounding, percentages might not add to 100%.

⁴ Includes 13 cause code groups; each accounting for a maximum of 5% of all RAF cause coded medical discharges

⁵ Clinical and Laboratory Findings include symptoms and abnormal clinical findings - such as irregular heartbeat and abdominal pain

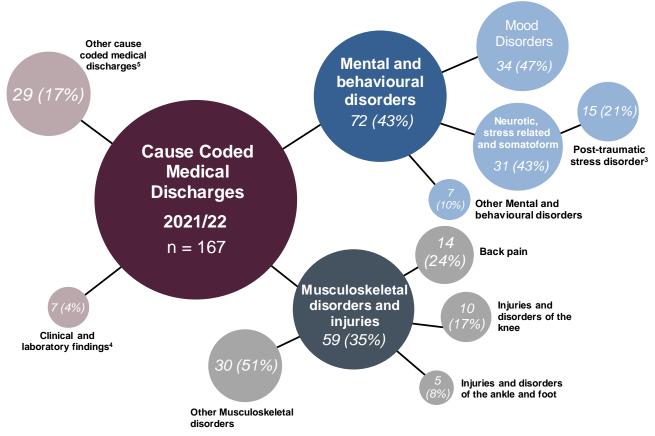
⁻ which are ill-defined and may not have a diagnosis that can be elsewhere classified.

RAF Continued

The remaining discharges due to Musculoskeletal Disorders and Injuries (n = 30) were distributed across a range of disorders and injuries, however 12% (n = 7) were linked to the Hip, Groin & Thigh.

Figure 22: UK Regular RAF medical discharges by principal ICD-10 cause code group, numbers and percentages^{1,2}

1 April 2021 to 31 March 2022



Source: DMICP, FMed 23 and JPA

When considering both the principal and contributory causes of discharge in 2021/22:

- Mental and Behavioural Disorders were present in over half of discharges (n = 91, 54%)
- Musculoskeletal Disorders and Injuries were present in over half of discharges (n = 92, 55%).
- Nervous System Disorders and Circulatory system disorders were the joint third most common cause of discharge (n = 9, 5%).

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**).

¹ Figures for cause information in 2021/22 is provisional. Please see background quality report for more information.

² Due to rounding, percentages might not add to 100%.

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

⁴ 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.

⁵ Includes 9 cause code groups; each accounting for a maximum of 4% of all RAF cause coded medical discharges

Glossary

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 10th 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 Queen'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

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 FMed 23s. FMed 23s are official medical documents used to record all medical board proceedings.
- Where paper versions of the FMed 23 form were not available to Defence Statistics Health, records were queried first in the electronic medical record (DMICP) and then with single service representatives. Due to COVID-19 limiting access to place of work, Defence Statistics Health were not able to access the FMed 23s paperwork for part of 2019/20, and in 2020/21 2021/22. During this time period DMICP was used as the primary source, therefore, cause information for these years should be considered provisional and subject to change. When access to the office is no longer limited, Defence Statistics Health will assess the methodology with the potential to revise the cause information using FMed 23 as the primary source.

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. As a result of public interest, some ICD-10 groups were provided in more detail allowing the presentation of specific conditions, ICD-10 codes are listed below:

- Injuries and disorders of the knee have been compiled using ICD-10 codes M17, M22, M23, S800, S810, S82, S83, S89 as well as any of the following that have a 6 as the fifth digit: M00 to M13, M19, M21, M24 to M25, M62, M66, M70 to M73, M76 to M91 and M94. Please note, where an ICD-10 code ends with a fifth digit of '6', it is not possible to distinguish between the knee, tibia/fibula and therefore figures may be an over-estimate.
- Injuries and disorders of the ankle and foot have been compiled using ICD-10 codes M201-M206, M670, M926, M927, S90-S99, S828, T250 as well as any of the following that have a 7 as the fifth digit: M00 to M13, M17, M19, M21 to M25, M62, M65, M66, M70 to M73, M76 to M91 and M94.

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 Scheme¹⁰ and annual reports on War Pension Scheme¹¹.

Crude rates enable comparison between groups by removing the issue of different populations (group sizes). The rates in this bulletin present the number of medical discharges per 1,000 personnel. As the size of the UK armed forces varies through time, this is a more accurate means of comparing the proportion of personnel medically discharged from service in different years than utilising counts of the personnel medically discharged. Rates enable comparison between groups by removing the issue of different populations (group sizes).

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 less than 5. 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

Symbols

- ~ Data has been suppressed due to Statistical Disclosure Control (greater than zero, fewer than 5).
- ^p Indicates provisional data.
- ^r 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 2021, the following revisions have been made:

- The rates of army medical discharges for all years presented have been updated. This was due to an undercount in the army strength numbers from which the rates were calculated. This had no significant impact on findings presented in previous reports.
- In 2019/20 and 2020/21, a small number of personnel (n = 7, 0.3%) 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.

Revised figures have been represented with an 'r'. Where figures previously marked as provisional have been revised and updated, and are still provisional, they have been marked as 'p' rather than as revised 'r'.

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 2021/22, **328** Royal Navy personnel were medically discharged, a rate of **12** per 1,000. This was significantly higher compared to last year (9 per 1,000).

During 2021/22 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 and aged 35-39 years
- Females
- Other ranks
- Trained

Table A2.1: UK Regular Royal Navy medical discharges by demographics¹, numbers² and rates per 1,000 personnel

1 April 2021 to 31 March 2022

| | | | 2021/22 | |
|------------|------------------------------|-----|---------|--|
| | | n | rate | Rate of UK regular Royal Navy personnel medically discharged |
| Number of | f UK regular Royal Navy | | 1410 | medically discharged |
| | medically discharged | | | |
| | | 328 | 12.0 | |
| Age | | | | |
| Α | ged under 20 ⁻ | 4 | 2.4 | |
| Ą | ged 20-24 ⁻ | 43 | 7.5 | |
| Ą | ged 25-29 | 62 | 11.8 | |
| Ą | ged 30-34+ | 75 | 16.6 | |
| Ą | ged 35-39+ | 73 | 18.6 | |
| Ą | ged 40-44 | 36 | 13.2 | |
| Ą | ged 45-49 | 25 | 14.3 | |
| Ą | ged 50 and over ⁻ | 10 | 5.8 | |
| Gender | | | | |
| M | lale | 255 | 10.7 | |
| Fe | emale* | 73 | 21.8 | |
| Rank | | | | |
| 0 | fficer | 21 | 3.4 | |
| 0 | ther Rank* | 307 | 14.5 | |
| Training S | Status | | | |
| Tr | rained* | 321 | 13.7 | |
| Ui | ntrained | 7 | 1.8 | |

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

² 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.

⁺i^CAge 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 Continued

Causes of Medical Discharge

Table A2.2: UK Regular Royal Navy medical discharges by principal ICD-10 cause code group¹ and financial year, numbers and percentages²

1 April 2017 and 31 March 2022

| | 5 Year Total 2017/18-2021/22 | | 20 | 21/22 |
|--|---------------------------------|-------|-----|-----------------|
| | n | % | n | % |
| All medical discharges | 1,363 | | 328 | |
| All cause coded medical discharges | 1,362 | 100 | 328 | 100 |
| Infectious and parasitic diseases | 0 P | 0 | 0 | p 0 |
| Neoplasms | 17 P | 1 | 10 | p 3 |
| Blood disorders | ~ P | | | ^p <1 |
| Endocrine, nutritional and metabolic diseases | 31 P | 2 | 16 | ^p 5 |
| - Of which diabetes | 25 ^p | 2 | 15 | ^p 5 |
| - Of which insulin-dependent | 11 ^p | <1 | 5 | ^p 2 |
| - Of which non-insulin-dependent | 12 ^p | | | ^p 2 |
| Mental and behavioural disorders | 397 p | 29 | 107 | p 33 |
| - Of which mood disorders | 144 P | 11 | 38 | ^p 12 |
| - Of which depression | 127 ^p | 9 | 33 | ^p 10 |
| Of which neurotic, stress related and somatoform | 219 ^p | 16 | 0. | ^p 17 |
| Of which post-traumatic stress disorder (PTSD) | 103 ^p | 8 | 24 | p 7 |
| - Of which adjustment disorder | 28 ^p | _ | | ^p 1 |
| Nervous system disorders | 65 ^p | 5 | • • | p 3 |
| - Of which epilepsy | 8 ^p | | | ^p <1 |
| Eye and adnexa diseases | 10 P | | | ^p <1 |
| - Of which blindness, low vision and visual disturbance | ~ P | | | p 0 |
| Ear and mastoid process diseases | 27 P | 2 | | p 2 |
| - Of which hearing loss | 20 ^p | | | ^p <1 |
| Of which noise-induced hearing loss | 0 p | | 0 | p 0 |
| - Of which tinnitus | ~ P | | | ^p <1 |
| Circulatory system disorders | 39 ^p | | | ^p 5 |
| Respiratory system disorders | 22 P | _ | | P 1 |
| - Of which asthma | 15 P | | | ^p <1 |
| Digestive system disorders | 54 P | • | | p 5 |
| Skin and subcutaneous tissue diseases | 45 P | _ | _ | p 3 |
| Musculoskeletal disorders and Injuries | 584 P | .0 | | p 34 |
| - Of which injuries and disorders of the knee | 122 P | | | p 8 |
| - Of which knee pain | 57 ^p | | | ^p 3 |
| - Of which back pain | 128 ^p | | | p 8 |
| - Of which low back pain | 118 ^p | | | p 8 |
| - Of which injuries and disorders of the ankle and foot | 51 ^p | | | ^p 3 |
| - Of which heat injury | ~ P | _ `' | | ^p <1 |
| - Of which cold injury | 9 P | , , , | | p <1 |
| Genitourinary system diseases | 11 P | | _ | p <1 |
| Pregnancy, childbirth and puerperium | 0 P | | | p 0 |
| Congenital malformations | 6 P | | | p <1 |
| Clinical and laboratory findings | 44 P | | • | p 2 |
| External Causes of Morbidity and Mortality | ~ P | | | p <1 |
| Factors influencing health status | 5 P | | | ^p <1 |
| No details held on principal condition for medical boarding | 1 P | | | р |
| Withheld consent | 0 | | 0 | |

¹ Each cause of discharge category has been compiled using ICD-10 codes, please see the methodology section on page 35 for specific codes.

² 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 less 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.

P Figures for cause information between 2019/20 – 2021/22 are provisional. Please see background quality report for more information.

Royal Marines

Demographic Risk Groups

In 2021/22, **156** Royal Marines personnel were medically discharged, a rate of **23** per 1,000. This was significantly higher compared to last year (16 per 1,000).

During 2021/22 the rate of medical discharge was significantly higher for regular Royal Marines personnel within the following specific demographic groups (**Table A3.1**):

- Aged under 20 years
- Other ranks
- Untrained personnel

Table A3.1: UK Regular Royal Marines medical discharges by demographics¹, numbers² and rates per 1,000 personnel

1 April 2021 to 31 March 2022

| | 2 | 2021/22 | |
|---|-----|---------|---|
| | n | rate | Rate of UK regular Royal Marines personnel medically discharged |
| Number of UK regular Royal Marines personnel medically discharged | | | |
| | 156 | 23.3 | |
| Age | | | |
| Aged under 20 ⁺ | 18 | 63.2 | |
| Aged 20-24 | 36 | 25.1 | |
| Aged 25-29 | 34 | 21.2 | |
| Aged 30-34 | 26 | 19.1 | |
| Aged 35-39 | 19 | 20.7 | |
| Aged 40-44 | 14 | 26.3 | |
| Aged 45-49 | 6 | 18.9 | |
| Aged 50 and over | 3 | 12.3 | |
| Gender | | | |
| Male | 156 | 23.7 | |
| Female | 0 | 0.0 | |
| Rank | | | |
| Officer | 7 | 8.4 | |
| Other Rank* | 149 | 25.4 | |
| Training Status | | | |
| Trained | 88 | 15.0 | |
| Untrained* | 68 | 80.4 | |

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

² 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.

^{*} 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 code¹ group and financial year, numbers and percentages²

1 April 2017 and 31 March 2022

| | | 5 Year Total 2017/18-2021/22 | | 2 | 202 | 1/22 |
|---|-----|---------------------------------|-----|-----|-----|------|
| | n | | % | n | | % |
| All medical discharges | 697 | | | 156 | | |
| All cause coded medical discharges | 696 | | 100 | 155 | | 100 |
| Infectious and parasitic diseases | 0 | р | 0 | 0 | р | 0 |
| Neoplasms | 6 | р | <1 | ~ | р | 2 |
| Blood disorders | ~ | р | <1 | 0 | р | 0 |
| Endocrine, nutritional and metabolic diseases | 10 | р | 1 | ~ | р | 1 |
| - Of which diabetes | 6 | р | <1 | ~ | р | <1 |
| - Of which insulin-dependent | 6 | р | <1 | ~ | р | <1 |
| - Of which non-insulin-dependent | 0 | р | 0 | 0 | р | 0 |
| Mental and behavioural disorders | 74 | р | 11 | 20 | р | 13 |
| - Of which mood disorders | 13 | р | 2 | ~ | р | 3 |
| - Of which depression | 11 | р | 2 | ~ | р | 3 |
| - Of which neurotic, stress related and somatoform | 53 | р | 8 | 11 | р | 7 |
| Of which post-traumatic stress disorder (PTSD) | 44 | р | 6 | 9 | р | 6 |
| Of which adjustment disorder | ~ | р | <1 | 0 | р | 0 |
| Nervous system disorders | 20 | р | 3 | 7 | р | 5 |
| - Of which epilepsy | 0 | р | 0 | 0 | р | 0 |
| Eye and adnexa diseases | ~ | р | <1 | ~ | р | <1 |
| - Of which blindness, low vision and visual disturbance | ~ | р | <1 | 0 | р | 0 |
| Ear and mastoid process diseases | 55 | р | 8 | 9 | р | 6 |
| - Of which hearing loss | 46 | р | 7 | 9 | р | 6 |
| Of which noise-induced hearing loss | 11 | р | 2 | ~ | р | 1 |
| - Of which tinnitus | 7 | р | 1 | 0 | р | 0 |
| Circulatory system disorders | 11 | р | 2 | ~ | р | 3 |
| Respiratory system disorders | 8 | р | 1 | ~ | р | <1 |
| - Of which asthma | 6 | р | <1 | ~ | р | <1 |
| Digestive system disorders | 11 | р | 2 | ~ | р | <1 |
| Skin and subcutaneous tissue diseases | ~ | р | <1 | ~ | р | <1 |
| Musculoskeletal disorders and Injuries | 470 | р | 68 | 101 | р | 65 |
| - Of which injuries and disorders of the knee | 117 | р | 17 | 29 | р | 19 |
| - Of which knee pain | 56 | р | 8 | 13 | р | 8 |
| - Of which back pain | 70 | р | 10 | 11 | р | 7 |
| - Of which low back pain | 66 | р | 9 | 11 | р | 7 |
| Of which injuries and disorders of the ankle and foot | 49 | р | 7 | 9 | р | 6 |
| - Of which heat injury | 5 | р | <1 | ~ | р | <1 |
| - Of which cold injury | 13 | р | 2 | ~ | р | <1 |
| Genitourinary system diseases | ~ | р | <1 | 0 | р | 0 |
| Pregnancy, childbirth and puerperium | 0 | р | 0 | 0 | р | 0 |
| Congenital malformations | ~ | р | <1 | 0 | р | 0 |
| Clinical and laboratory findings | 17 | р | 2 | 5 | р | 3 |
| External Causes of Morbidity and Mortality | 0 | р | 0 | 0 | р | 0 |
| Factors influencing health status | ~ | р | <1 | 0 | р | 0 |
| No details held on principal condition for medical boarding | 1 | р | | 1 | р | |
| Withheld consent Source: DMICP, FMed 23 and JPA | 0 | | | 0 | | |

¹ Each cause of discharge category has been compiled using ICD-10 codes, please see the methodology section on page 35 for specific codes.

² 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 less 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.

P Figures for cause information between 2019/20 – 2021/22 are provisional. Please see background quality report for more information.

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