Annual Medical Discharges in the UK Regular Armed Forces

1 April 2011 – 31 March 2016

This bulletin provides statistical information on medical discharges among UK Regular Service personnel during the five financial years 2011/12 - 2015/16. Information has been provided on:

- Key socio-demographic factors, rank and training status
- The principal cause leading to discharge

Time series graphs have also been included presenting the overall number and rates per 1,000 personnel at risk of medical discharges for the last ten years, to help assess the impact of changes in policy and practices.

Each of the three Services are presented separately as comparisons between the Services are considered invalid as practices and protocols for recommending and awarding a medical discharge differ. This is particularly true for untrained personnel where there are no similarities between the single Services.

All tables provided in previous releases of this bulletin have been updated with 2015/16 data and are available in the separate Excel files at https://www.gov.uk/government/collections/medical-discharges-among-uk-service-personnel-statistics-index.

Key Points and Trends

In 2015/16 the rate of medical discharge in the Naval Service significantly increased to 13.6 per 1,000 personnel at risk compared to the previous year. By contrast the rate for the Army fell significantly to 19.8 per 1,000 personnel at risk. There was no significant difference in the RAF rate of medical discharge which was 4.2 per 1,000 personnel at risk in the latest year.

In line with previous years, for all three Services in 2015/16:

- The most common principal cause of medical discharge was Musculoskeletal Disorders and Injuries.
- The second most common principal cause of medical discharge was Mental and Behavioural Disorders.

In 2015/16, there was a statistically significant increase in the proportion of personnel medically discharged with a principal cause of Mental and Behavioural Disorders among Naval Service and Army personnel.

Across each of the three Services in 2015/16, females were at a higher risk of being medically discharged than males. Other Ranks and untrained personnel were at a higher risk of being medically discharged in the Naval Service and Army compared to Officers and trained personnel. Neither Army females nor untrained Naval Service personnel were at higher risk of medical discharge in past reporting years.

In 2015/16, over 50% of personnel leaving the UK Regular Armed Forces on a medical discharge had more than one condition leading to discharge. Taking all causes (principal and contributory) into consideration, Musculoskeletal Disorders and Injuries remains the most common cause of medical discharge for all three of the Services, followed by Mental and Behavioural Disorders. This is in line with the findings for previous years.

Contents

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

Introduction

This bulletin has been published to provide both the Ministry of Defence (MOD) and the general public with information on the number and rate of personnel that leave the Service as a result of a medical discharge and the causes behind these discharges. It has been produced in response to the increased public interest in medical discharges from the UK 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.

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[2] the board will recommend a medical discharge. 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 bulletin focuses exclusively on medical discharges that have actually occurred; medically downgraded personnel that are retained in service or exit the forces for any other reason are excluded.

Please note, Army cause code data for 2013/14, 2014/15 and 2015/16 are provisional. Naval Service and RAF cause code data for 2015/16 are also provisional. This is a result of Defence Statistics (Health) not receiving all trained Army discharge paperwork which confirms the cause information for the discharge. In 2015/16, this issue was extended to include both Naval Service and RAF data. See 'Further Information' at the end of this bulletin.

> ### Medical Discharge
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> When a medical condition or fitness issue affects an individual's ability to perform their duties and no alternative role can be found to suit their reduced functionality, they may be medically discharged. These 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.

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[2] As laid down in JSP 346 and/or the single Services retention standards for their career group.

Executive Summary

During 2015/16 the rates of medical discharge in each of the UK Regular Services were:

- 13.6 per 1,000 personnel in the Naval Service[3] (significant increase compared to previous year)
- 19.8 per 1,000 personnel in the Army (significant decrease compared to previous year)
- 4.2 per 1,000 personnel in the RAF

For each of the Services, changes in policy and practices influenced the rate of medical discharge. All three Services currently operate a retention positive employment policy, seeking to keep personnel in Service wherever a job exists that can be performed with the limitations imposed by the individual's illness or injury.

Whilst this policy of increased retention has resulted in falls in the rate of medical discharge in both the Army and the RAF, the rate of discharge in the Naval Service rose in 2015/16 by 20%. This may be a result of limited numbers of ashore roles suitable for ill or injured personnel and the increase of availability of Naval Service medical boards for personnel with medical conditions that preclude further employment in the UK Armed Forces.

In 2015/16 certain demographic groups were significantly more likely to medically discharge:

- Females for each of the three Services
- Other Ranks for Naval Service and Army only
- Untrained for the Naval Service and Army only

Possible explanations for the higher rates among these demographic groups are explored in the single Service sections of this bulletin.

The significantly higher rates of discharge in 2015/16 among untrained Naval Service personnel and female Army personnel were not seen in previous years. The reasons for this are unclear and Defence Statistics will continue to monitor this to see if the trend continues.

For each of the Services, the most common and second most common principal cause of medical discharge since 2011/12 were Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders respectively. This finding is likely to be due to the physical demands of the role of the UK Armed Forces and difficulty 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. The Canadian military[4] also report Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders as their two most common reasons for medical release, however, Mental and Behavioural Disorders were responsible for a larger proportion of personnel released from the Canadian military than from the UK Armed Forces.

The proportion of medical discharges with a principal cause of Mental and Behavioural Disorders in the Naval Service and Army significantly increased in 2015/16. Possible explanations for this rise include:

- An increase in awareness regarding mental ill-health issues following the success of anti-stigma campaigns in recent years.
- An increase in the rate of personnel with Mental and Behavioural Disorders presenting at specialist care providers.

Between 1 April 2011 and 31 March 2016, over 50% of personnel leaving the UK Regular Armed Forces on medical discharge had more than one cause identified. Taking all causes into consideration (principal and contributory) the most common cause, across all three Services, was Musculoskeletal Disorders and Injuries.

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[3] Includes Royal Navy and Royal Marines
[4] Poisson, R. (2015). The imperative of military medical research and the duty to protect, preserve, and provide advanced evidence-informed care [online], Journal of Military, Veteran and Family Health; 1(1) available at http://jmvfh.utpjournals.press/doi/pdf/10.3138/jmvfh.2014-11 accessed on 28 June 2016
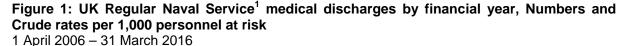
Naval Service

Trends in Medical Discharges 2006/07 to 2015/16

Figure 1: UK Regular Naval Service[1] medical discharges by financial year, Numbers and Crude rates per 1,000 personnel at risk
1 April 2006 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Naval Service includes Royal Navy and Royal Marines.
[2] Operation TELIC is the name for UK operations in Iraq which began March 2003 and closed on 21 May 2011.
[3] 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 for Naval Service personnel fluctuated over the period presented to a rate of 13.6 per 1,000 personnel at risk in 2015/16. The decrease in the rate between 2006/07 and 2009/10 was partly due to the Naval Service endeavouring to retain personnel if there was a role for them to fulfil, and if retention was in the interest of both the individual and the Service. In addition manpower shortages within the Naval Service resulted in an increase in suitable roles.

The rise in the rate of discharge between 2009/10 and 2011/12 may be a result of the improved management of the recovery care pathway[5], the completion of treatment of personnel injured on operations and the restricted number of non-deployable roles available in the Naval Service.

The fall in the rate of medical discharge in 2013/14 is believed to be the result of both a reduction in the capacity of Naval Service Medical Boards due to a lack of administrative support and an elevated appetite in the Naval Service to retain permanently downgraded personnel as a result of reductions in manpower following the Strategic Defence and Security Review (SDSR).

An increase in the capacity of Naval Service Medical boards and the reduction of any backlog of personnel awaiting a formal medical board may have contributed to the significant increase in medical discharge rates seen in 2014/15 and 2015/16 **(Figure 1)**.

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[5] https://www.gov.uk/government/collections/uk-armed-forces-recovery-capability-wounded-injured-and-sick-in-the-recovery-pathway-statistics

Demographic Risk Groups 2011/12 to 2015/16

Table 1: UK Regular Naval Service[1] medical discharges by age group[2], gender[2], rank[2] and training status[2], Numbers and Rates per 1,000 personnel at risk
1 April 2015 – 31 March 2016

	2015/16		Rate of UK Regular Naval Service personnel medically discharged
	n	r	
Number of UK Regular Naval Service personnel medically discharged	**442**	**13.6**	
Age			
Aged Under 20	6	5.4	
Aged 20-24	67	10.7	
Aged 25-29+	133	16.2	
Aged 30-34+	125	20.5	
Aged 35-39+	57	14.3	
Aged 40-44	36	11.0	
Aged 45-49	13	5.5	
Aged 50 +	5	3.9	
Gender			
Male	368	12.5	
Female*	74	24.3	
Rank			
Officer	27	4.0	
Other Rank*	415	16.1	
Training Status			
Trained	376	12.7	
Untrained*	66	21.9	
Service			
Royal Navy	286	11.5	
Royal Marines*	156	20.5	

Source: DMICP, FMED 23 and JPA
[1] Includes Royal Navy and Royal Marines.
[2] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.
+ Groups found to be at a significantly higher than average risk using a z-test for a single proportion at a 95% confidence level.
* Groups found to be at a significantly higher risk using a z-test for proportions at a 95% confidence level.

In 2015/16, significantly higher rates of medical discharge for regular Naval Service personnel were seen within specific demographic groups (**Table 1**):

- Personnel aged 25-39 years
- Females
- Other Ranks
- Untrained personnel
- Royal Marines

The lower rate of medical discharges among certain demographic groups may be due to their role requirements. Officers and older personnel with a longer length of Service may have more opportunities to be placed in an ashore role. There are complexities of retaining personnel with medical needs in on-board ship roles. It is easier to deliver medical care and access necessary treatment when ashore.

The reasons for the significantly[6] higher rate of medical discharges among female Naval Service personnel are unknown.

In 2015/16, the rate of medical discharge for untrained personnel was significantly higher than for trained personnel. This was likely to be the result of policy changes where Phase 1 trainees with emergent medical conditions are able to be discharged earlier from the Naval Service (see page 10 for further information).

The demographic groups that displayed a high rate of medical discharge in 2015/16 were consistent with results seen in the recovery pathway[7,8] which found that female, Other Ranks and personnel aged 25-34 had higher proportions of personnel under the care of the Naval Service recovery capability.

Figures 2-6 present the Naval Service medical discharges by demographic group since 2011/12 with possible explanations for the differences observed.

A number of the age groups presented different trends to those seen in the Naval Service for the overall rate of medical discharge in the latest year. Medical discharges among personnel aged 20-24 years increased by 52% in 2015/16 compared to an overall rise in Naval Service medical discharges of 20%. In contrast, discharges among those aged 25-29 years increased by just 3%. The reasons for this are unclear **(Figure 2)**.

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[6] Tested using a z-test for proportions at a 95% confidence level
[7] https://www.gov.uk/government/collections/uk-armed-forces-recovery-capability-wounded-injured-and-sick-in-the-recovery-pathway-statistics
[8] Recovery is the non-medical care for those who are wounded, injured or sick

Figure 2: UK Regular Naval Service[1] medical discharges by age group[2] and financial year, Rates per 1,000 personnel at risk
1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Includes Royal Navy and Royal Marines.
[2] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

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Figure 3: UK Regular Naval Service[1] medical discharges by gender[2] and financial year, Rates per 1,000 personnel at risk

1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Includes Royal Navy and Royal Marines.
[2] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

For each of the years presented, with the exception of 2014/15, the rate of medical discharges was significantly higher among females compared to males. The reason for the larger increase seen among female medical discharges compared to males in 2015/16 is unclear **(Figure 3)**.

Figure 4: UK Regular Naval Service[1] medical discharges by rank[2] and financial year, Rates per 1,000 personnel at risk

1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Includes Royal Navy and Royal Marines.
[2] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

For each of the years presented the rate of medical discharges among Other Ranks was significantly higher than Officers. The rate of discharge among Other Ranks since 2014/15 has increased at a greater rate than for Officers. This may be a result of a saturation of limited deployability "ashore" roles for Other Ranks personnel **(Figure 4)**.
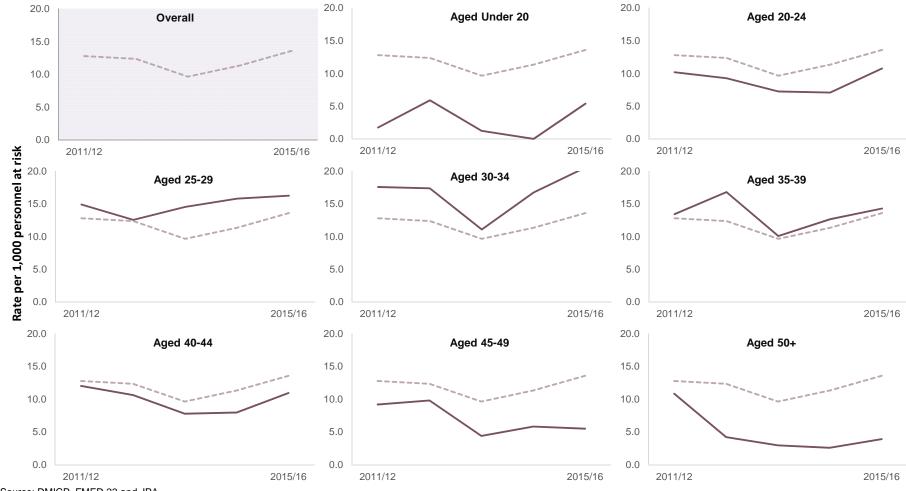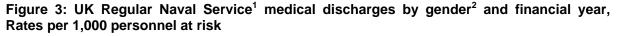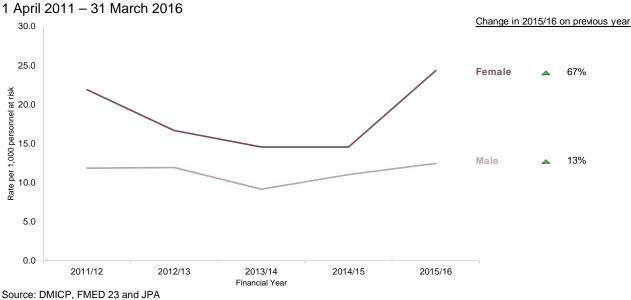
Figure 5: UK Regular Naval Service[1] medical discharges by training status[2] and financial year, Rates per 1,000 personnel at risk
1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Includes Royal Navy and Royal Marines.
[2] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.
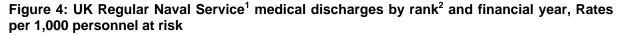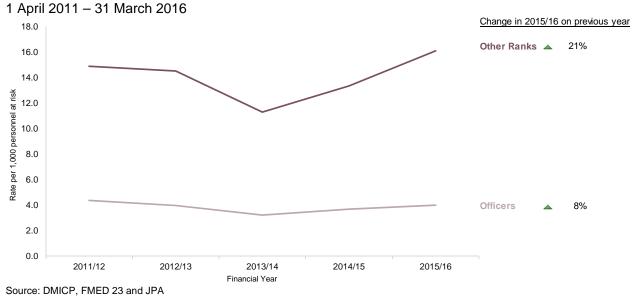
Between 2011/12 and 2014/15 there was no significant difference in the rate of medical discharges among trained and untrained personnel. In 2015/16, the rate of medical discharges among untrained personnel rose by 108% and the rate was significantly higher compared to the rate among trained personnel **(Figure 5)**.

The increase in the rate of medical discharge among untrained personnel (108%) in 2015/16 was likely to be the result of policy changes where Phase 1 trainees with emergent medical conditions are discharged earlier from the Naval Service. In 2015/16 the rise was due to a combination of Naval Service Phase 1 trainees being discharged through the standard Medical Board of Service (MBOS) route and those being discharged earlier under the new policy not requiring MBOS. So this is unlikely to represent a true increase, rather it reflects the change in policy to decrease the time taken to medically discharge a Naval Service Phase 1 trainee.

Figure 6: UK Regular Naval Service medical discharges by Royal Marines/Royal Navy[1] and financial year, Rates per 1,000 personnel at risk
1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

Throughout the period presented, the rate of medical discharge among Royal Navy personnel was relatively stable at around 11 per 1,000 personnel at risk. By contrast, the rate of medical discharges for Royal Marines fluctuated, with a peak of 21.6 per 1,000 personnel in 2012/13 and a low of 12.4 per 1,000 personnel in 2013/14. The fall in the rate of medical discharge in 2013/14 is believed to be the result of both a reduction in the capacity of Naval Service Medical Boards due to a lack of administrative support **(Figure 6)**.

The higher rate of medical discharge among Royal Marines is likely to be due a number of factors:

- Less availability of roles within the Royal Marines for personnel with limited deployabililty compared to the Royal Navy
- Royal Marines injured on operations discharged during 2011/12 and 2012/13.

Causes of Medical Discharges 2011/12 to 2015/16

When a member of the Naval Service is medically discharged, the medical reason for the discharge is recorded and categorised using a coding system known as ICD-10 (see glossary). **Table 2** shows this information by principal ICD-10 cause code group (the chapter within which the condition is categorised) and financial year for the five-year period 2011/12 - 2015/16.

Principal cause is the main medical cause of the discharge.

Contributory causes include any other conditions identified that would result in a medical discharge

Table 2: UK Regular Naval Service[1] medical discharges by principal ICD-10 cause code group and financial year, Numbers[2] and Percentages[3]
1 April 2011 – 31 March 2016

	All n	All %	2011/12 n	%	2012/13 n	%	2013/14 n	%	2014/15 n	%	2015/16 n	%
All medical discharges	**2,039**		**470**		**430**		**323**		**374**		**442**	
All cause coded medical discharges	**2,031** p	**100** p	**469**	**100**	**429**	**100**	**323**	**100**	**374**	**100**	**436** p	**100** p
Infectious and parasitic diseases (A00 - B99)	10 p	<1 p	5	1	~	<1	~	<1	0	0	~ p	<1 p
Neoplasms (C00 - D48)	25 p	1 p	7	1	6	1	~	1	~	1	~ p	<1 p
Blood disorders (D50 - D89)	8 p	<1 p	~	<1	~	<1	~	<1	~	<1	0 p	0 p
Endocrine, nutritional and metabolic diseases (E00 - E90)	37 p	2 p	8	2	9	2	9	3	6	2	5 p	1 p
- Of which diabetes (E10-E14)	*31* p	*2* p	*7*	*1*	*8*	*2*	*7*	*2*	*~*	*2*	*~* p	*<1* p
- Of which insulin-dependent (E10)	*23* p	*1* p	*~*	*<1*	*5*	*1*	*5*	*2*	*~*	*2*	*~* p	*<1* p
- Of which non-insulin-dependent (E11)	*8* p	*<1* p	*~*	*<1*	*~*	*<1*	*~*	*<1*	*0*	*0*	*0* p	*0* p
Mental and behavioural disorders (F00 - F99)	232 p	11 p	39	8	45	10	36	11	40	11	72 p	17 p
- Of which mood disorders (F30 - F39)	*93* p	*5* p	*16*	*3*	*18*	*4*	*15*	*5*	*19*	*5*	*25* p	*6* p
- Of which depression (F32 & F33)	*75* p	*4* p	*14*	*3*	*16*	*4*	*13*	*4*	*14*	*4*	*18* p	*4* p
- Of which neurotic, stress related and somatoform disorders (F40 - F48)	*106* p	*5* p	*17*	*4*	*24*	*6*	*13*	*4*	*16*	*4*	*36* p	*8* p
- Of which post-traumatic stress disorder (PTSD) (F431)	*46* p	*2* p	*6*	*1*	*14*	*3*	*5*	*2*	*5*	*1*	*16* p	*4* p
- Of which adjustment disorder (F432)	*8* p	*<1* p	*~*	*<1*	*~*	*<1*	*~*	*<1*	*0*	*0*	*~* p	*<1* p
Nervous system disorders (G00 - G99)	57 p	3 p	17	4	11	3	8	2	5	1	16 p	4 p
- Of which epilepsy (G40)	*14* p	*<1* p	*5*	*1*	*5*	*1*	*~*	*<1*	*~*	*<1*	*~* p	*<1* p
Eye and adnexa diseases (H00 - H59)	28 p	1 p	7	1	7	2	~	1	7	2	~ p	<1 p
- Of which blindness, low vision and visual disturbance (H53 & H54)	*6* p	*<1* p	*~*	*<1*	*~*	*<1*	*0*	*0*	*~*	*<1*	*~* p	*<1* p
Ear and mastoid process diseases (H60 - H95)	111 p	5 p	32	7	25	6	19	6	14	4	21 p	5 p
- Of which hearing loss (H833 & H90 - H91)	*102* p	*5* p	*30*	*6*	*23*	*5*	*18*	*6*	*~*	*4*	*~* p	*4* p
- Of which noise-induced hearing loss (H833)	*54* p	*3* p	*16*	*3*	*18*	*4*	*9*	*3*	*~*	*2*	*~* p	*<1* p
- Of which tinnitus (H931)	*~* p	*<1* p	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*~* p	*<1* p
Circulatory system disorders (I00 - I99)	42 p	2 p	13	3	6	1	7	2	6	2	10 p	2 p
Respiratory system disorders (J00 - J99)	36 p	2 p	12	3	~	1	~	2	~	1	10 p	2 p
- Of which asthma (J45 & J46)	*33* p	*2* p	*11*	*2*	*~*	*<1*	*5*	*2*	*~*	*1*	*9* p	*2* p
Digestive system disorders (K00 - K93)	67 p	3 p	14	3	12	3	8	2	14	4	19 p	4 p
Skin and subcutaneous tissue diseases (L00 - L99)	53 p	3 p	14	3	12	3	6	2	11	3	10 p	2 p
Musculoskeletal disorders (M00 - M99) and injuries (S00 - T98)	1,215 p	60 p	262	56	256	60	196	61	248	66	253 p	58 p
- Of which injuries and disorders of the knee [4]	*347* p	*17* p	*90*	*19*	*77*	*18*	*47*	*15*	*71*	*19*	*62* p	*14* p
- Of which knee pain (M2556)	*116* p	*6* p	*31*	*7*	*25*	*6*	*20*	*6*	*16*	*4*	*24* p	*6* p
- Of which back pain (M549)	*164* p	*8* p	*26*	*6*	*39*	*9*	*29*	*9*	*31*	*8*	*39* p	*9* p
- Of which low back pain (M544-5)	*138* p	*7* p	*22*	*5*	*33*	*8*	*25*	*8*	*24*	*6*	*34* p	*8* p
- Of which injuries and disorders of the ankle and foot [5]	*125* p	*6* p	*28*	*6*	*26*	*6*	*17*	*5*	*25*	*7*	*29* p	*7* p
- Of which heat injury (T67)	*0* p	*0* p	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0* p	*0* p
- Of which cold injury (T68 & T69)	*14* p	*<1* p	*~*	*<1*	*~*	*<1*	*0*	*0*	*~*	*<1*	*10* p	*2* p
Genitourinary system diseases (N00 - N99)	17 p	<1 p	8	2	5	1	~	<1	~	<1	~ p	<1 p
Pregnancy, childbirth and puerperium (O00 - O99)	0 p	0 p	0	0	0	0	0	0	0	0	0 p	0 p
Congenital malformations (Q00 - Q99)	9 p	<1 p	~	<1	~	<1	~	<1	0	0	~ p	<1 p
Clinical and laboratory findings (R00 - R99)	60 p	3 p	19	4	16	4	10	3	7	2	8 p	2 p
Factors influencing health status (Z00 - Z99)	24 p	1 p	~	1	8	2	~	<1	~	2	~ p	<1 p
No details held on principle condition for medical boarding	7 p		1		0		0		0		6 p	
Withheld consent	1 p		0		1		0		0		0 p	

Source: DMICP, FMED23 and JPA
[1] Includes Royal Navy and Royal Marines.
[2] ~ In line with JSP 200 on statistical disclosure, figures less than five have been suppressed. Please see background quality report for more information.
[3] Data presented as "<1%" represent a percentage of cause coded medical discharges of greater than 0% but smaller than 1%.
[4] Injuries and disorders of the knee have been compiled using ICD-10 codes, please see annex for specific codes.
[5] Injuries and disorders of the ankle and foot have been compiled using ICD-10 codes, please see annex for specific codes.
p Indicates a provisional data point.

Figure 7: UK Regular Naval Service[1] medical discharges by principal ICD-10 cause code group, Numbers[2] and Percentages[2,3]
1 April 2015 – 31 March 2016

Other cause coded medical discharges[4]
55 (13%)

Musculoskeletal disorders and injuries
253 (58%)

Cause Coded Medical Discharges 2015/16

n = 436

Mental and behavioural disorders
72 (17%)

Nervous system disorders
16 (4%)

Disgestive system disorders
19 (4%)

21 (5%)
Ear and mastoid process diseases

Source: DMICP, FMED23 and JPA
[1] Includes Royal Navy and Royal Marines.
[2] Please note: all data is provisional.
[3] Due to rounding, percentages might not add to 100%.
[4] Includes 13 cause code groups; each accounting for a maximum of 2% of all Naval Service cause coded medical discharges

In line with previous years, in 2015/16 the most common principal cause of medical discharge was Musculoskeletal Disorders and Injuries (n=253[p], 58%[p]) and the second highest cause of medical discharge was Mental and Behavioural Disorders (n=72[p], 17%[p]). This finding is consistent with the Canadian military[4], however Mental and Behavioural Disorders were responsible for a larger proportion of personnel released from the Canadian military than the UK Armed Forces **(Figure 7)**.

When considering both the principal and contributory cause of discharge in the Naval Service in 2015/16:

- Musculoskeletal Disorders and Injuries remained the most common cause, accounting for slightly under two thirds of all cause coded discharge (n=282[p], 65%[p]).
- Mental and Behavioural Disorders remained the second highest cause (n = 97[p], 22%[p]).
- Factors Influencing Health Status (n = 39[p], 9%[p]) was the third highest cause. Factors influencing health are usually secondary to the main condition and therefore more likely to be listed as a contributory cause and not as a principal cause of discharge.

These findings are consistent over the five year period presented in this bulletin.
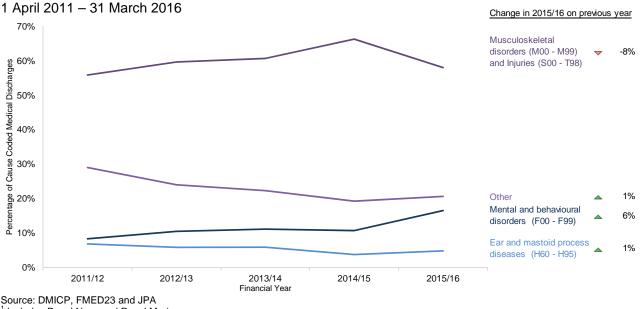
Figure 8: UK Regular Naval Service[1] medical discharges by principal ICD-10 cause code group and financial year, Percentage of all medical discharges
1 April 2011 – 31 March 2016

Source: DMICP, FMED23 and JPA
[1] Includes Royal Navy and Royal Marines.

Throughout the period presented, Musculoskeletal Disorders and Injuries were the largest cause of principal cause coded Naval Service medical discharges, accounting for between 56% and 66% of all medical discharges. The proportion of discharges for this cause fell by 8%[p] in 2015/16 compared to the previous year **(Figure 8)**.
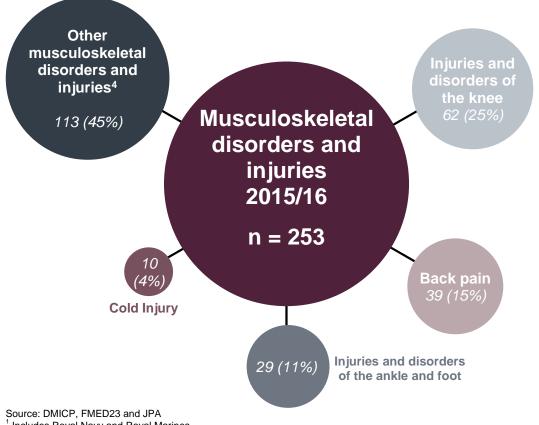
The proportion of discharges for Mental and Behavioural Disorders saw a statistically significant increase to 17%[p] in 2015/16 compared to the previous year. This was primarily driven by an increase in the proportion of discharges for neurotic disorders. Presentations of Naval Service personnel at MOD Specialist Mental Health Services have also increased in recent years and this may in part be the result of an increase in awareness of mental health due to the success of anti-stigma campaigns.

The percentage of medical discharges for Ear and Mastoid Process Diseases in 2015/16 (5%[p], n=21[p]) remained the same as was seen in 2014/15. Of these in 2015/16:

- Hearing loss accounted for 81%[p] of all Ear and Mastoid Process Disease discharges (n=17[p])
- Noise-induced hearing loss accounted for 14%[p] of all Ear and Mastoid Process Diseases (n = fewer than five[p])

Figures 9 and 10 present a further breakdown of the two main causes of Naval Service medical discharges in 2015/16 to provide more insight into the injuries/conditions which have led to Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders discharges.

Figure 9: UK Regular Naval Service[1] medical discharges with a principal ICD-10 cause code of Musculoskeletal Disorders and Injuries, Numbers[2] and Percentages[2,3] of medical discharges for Musculoskeletal Disorders and Injuries
1 April 2015 – 31 March 2016

Source: DMICP, FMED23 and JPA
[1] Includes Royal Navy and Royal Marines.
[2] Please note: all data is provisional.
[3] Due to rounding, percentages might not add to 100%.
[4] Includes all other Musculoskeletal Disorders and Injuries; including heat injury.

Of the Naval Service personnel discharged with a principal cause of Musculoskeletal Disorders and Injury in 2015/16 **(Figure 9)**:

- 25%[p] (n=62[p]) had a principal cause of an injury or disorder of the knee.
- 15%[p] (n=39[p]) had a principal cause of back pain.

These findings were consistent over the five year period 2011/12 to 2015/16.

The higher prevalence of injuries and disorders of the knee is likely to be a result of the physical activity required in many portions of the Naval Service; training on uneven ground carrying heavy loads, adopting firing positions, climbing ladders and working on a moving platform aboard ship.

Figure 10: UK Regular Naval Service[1] medical discharges with a principal ICD-10 cause code of Mental and Behavioural Disorders, Numbers[2] and Percentages[2,3] of medical discharges for Mental and Behavioural Disorders
1 April 2015 – 31 March 2016

Source: DMICP, FMED23 and JPA
[1] Includes Royal Navy and Royal Marines.
[2] Please note: all data is provisional.
[3] Due to rounding, percentages might not add to 100%.
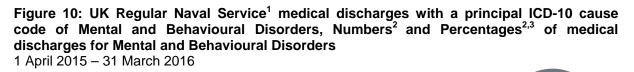[4] Includes all other Mental and Behavioural Disorders not classified as mood disorders or neurotic, stress related and somatoform disorders.

The majority of medical discharges for Mental and Behavioural Disorders in 2015/16 were the result of neurotic disorders (n=36[p], 50%[p]) and mood disorders (n=25[p], 35%[p]) **(Figure 10)**.

- Of the 36[p] medical discharges for Neurotic disorders, 16[p] were for Post-Traumatic Stress Disorder (PTSD). PTSD accounted for 4%[p] of all cause coded medical discharges.
- Of the 25 medical discharges for Mood disorders, the most common was depression (n=18[p]). Depression accounted for 4%[p] of all cause coded medical discharges.

These findings were broadly comparable to initial assessments seen at MOD Specialist Mental Health Services with Neurotic and Mood disorders being the most prevalent disorders among serving Naval Service personnel[9].
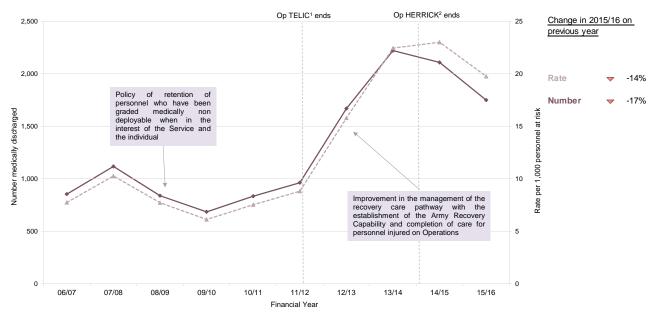
Further information on the medical discharges of Royal Navy and Royal Marines personnel, can be found in the supporting Excel tables to this report.

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[9] Please see the "UK armed forces mental health annual statistics: financial year 2015/16" Official Statistic publication
https://www.gov.uk/government/collections/defence-mental-health-statistics-index

Army

Trends in Medical Discharges 2006/07 to 2015/16

Figure 11: UK Regular Army medical discharges by financial year, Numbers and Crude rates per 1,000 personnel at risk
1 April 2006 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Operation TELIC is the name for UK operations in Iraq which began March 2003 and closed on 21 May 2011.
[2] Operation HERRICK is the name for UK operations in Afghanistan which began 1 April 2006 and ended on 30 November 2014.

Between 2009/10 and 2014/15 the rate of medical discharge in the UK Regular Army more than trebled. In 2015/16 the rate of discharge fell significantly by 14% to 19.8 per 1,000 personnel at risk compared to the previous year; however the rate remained higher than any seen prior to 2013/14.

The fall in the rate of medical discharge between 2007/08 and 2009/10 is believed to be the result of the Service endeavouring to retain personnel who have been graded Medically Non Deployable (Permanent) if in the best interests of both the individual and the service.

The rise seen between 2010/11 and 2013/14 is likely to be the result of the improved management of the recovery care pathway with the establishment of the Army Recovery Capability (ARC) to manage the transition of ill and injured personnel either back to active service or a return to civil life. Additionally, it may also be the result of the completion of treatment of injured personnel and an increased restriction of non-deployable roles within the Army **(Figure 11)**.

Demographic Risk Groups 2011/12 to 2015/16

Table 3: UK Regular Army medical discharges by age group[1], gender[1], rank[1] and training status[1], Numbers and Rates per 1,000 personnel at risk
1 April 2015 – 31 March 2016

	2015/16		Rate of UK Regular Army personnel medically discharged
	n	r	
Number of UK Regular Army personnel medically discharged	**1,750**	**19.8**	
Age			
Aged Under 20[+]	147	25.1	
Aged 20-24[+]	484	23.2	
Aged 25-29[+]	456	20.6	
Aged 30-34[+]	336	20.8	
Aged 35-39	189	15.2	
Aged 40-44	99	14.8	
Aged 45-49	~	9.4	
Aged 50 +	~	7.7	
Gender			
Male	1,566	19.4	
Female*	184	24.0	
Rank			
Officer	47	3.7	
Other Rank*	1,703	22.5	
Training Status			
Trained	1,356	16.8	
Untrained*	394	50.0	

Source: DMICP, FMED 23 and JPA
[1] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.
[2] ~ In line with JSP 200 on statistical disclosure, figures less than five have been suppressed. Please see background quality report for more information.
[+] Groups found to be at a significantly higher than average risk using a z-test for a single proportion at a 95% confidence level.
* Groups found to be at a significantly higher risk using a z-test for proportions at a 95% confidence level.

In 2015/16, significantly higher rates of medical discharges for regular Army personnel were seen within specific demographic groups (**Table 3**):

- Personnel under 35 years of age
- Females
- Other Ranks
- Untrained personnel

The fall in the rate of medical discharge as age increases and the significantly lower rates seen among Officers are thought to be the result of two issues:

- Older personnel are more likely to be assigned less physically demanding roles
- Current Army policy is to retain personnel at Major and above in staff roles and thus Officers are more likely to be employed in or can be reassigned to duties that can be continued with certain injuries and illnesses.

In previous years, there was no statistically significant difference between the rate of medical discharge among Army males and females. In 2015/16, 24.0 per 1,000 female personnel at risk

were medically discharged and this was a statistically significantly higher rate than males. The reasons for this change are unclear and Defence Statistics will continue to monitor future data to see if the trend continues.

The significantly higher rate of discharge among untrained personnel may reflect the intensive physical nature of the training programmes for Army recruits.

The groups at higher risk of medical discharge in 2015/16 were consistent with results seen in the recovery pathway[10],[11] which found females and Other Ranks had higher proportions of personnel under the care of the Army Recovery Capability (ARC).

Figures 12-15 present Army medical discharges for each demographic group since 2011/12 with possible explanations for the differences observed.

The rate of Army medical discharges fell among all age groups in 2015/16 compared to the previous year, with the exception of those aged 20-24 years where the rate increased by 33%. The reasons for this are unclear and Defence Statistics will continue to monitor this for any emerging trends **(Figure 12)**.

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[10] https://www.gov.uk/government/collections/uk-armed-forces-recovery-capability-wounded-injured-and-sick-in-the-recovery-pathway-statistics
[11] Recovery is the non-medical care for those who are wounded, injured or sick
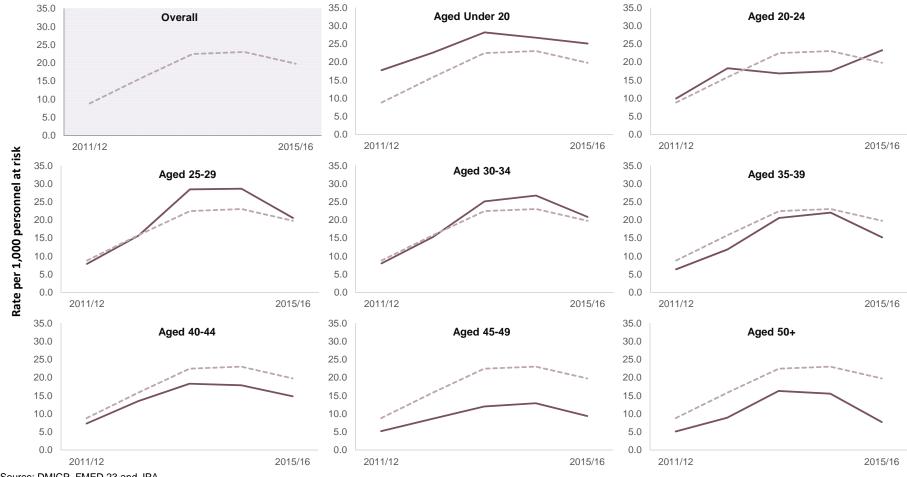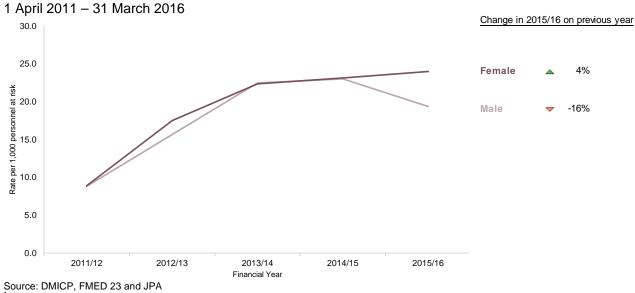
Figure 12: UK Regular Army medical discharges by age group[1] and financial year, Rates per 1,000 personnel at risk
1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

Figure 13: UK Regular Army medical discharges by gender[1] and financial year, Rates per 1,000 personnel at risk
1 April 2011 – 31 March 2016

Change in 2015/16 on previous year

Female ▲ 4%

Male ▼ -16%

Source: DMICP, FMED 23 and JPA
[1] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

There were no significant differences[12] between rates of medical discharged among males and females between 2011/12 and 2014/15, however, the rate of medical discharge for females was found to be significantly[14] higher than for males in the latest year. The reasons for this are currently unclear **(Figure 13)**.

Figure 14: UK Regular Army medical discharges by rank[1] and financial year, Rates per 1,000 personnel at risk
1 April 2011 – 31 March 2016

Change in 2015/16 on previous year

Other Ranks ▼ -14%

Officers ▼ -14%

Source: DMICP, FMED 23 and JPA
[1] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

Rates of medical discharge among Other Ranks were significantly higher than for Officers throughout the period presented. The increase in the rate of discharge for Other Ranks between 2011/12 and 2013/14 is likely to be driven by the improvement of the management of the recovery care pathway as discussed at the beginning of this section **(Figure 14)**.

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[12] Tested using a z-test for proportions at a 95% confidence level

Figure 15: UK Regular Army medical discharges by training status[1] and financial year, Rates per 1,000 personnel at risk

1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA

[1] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.
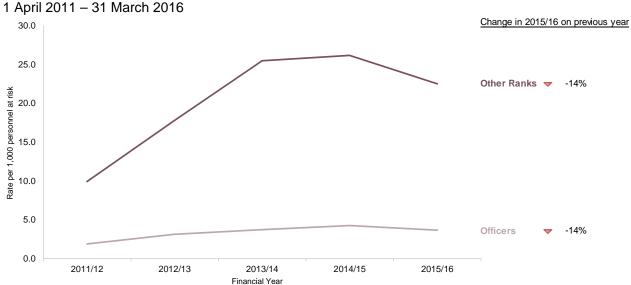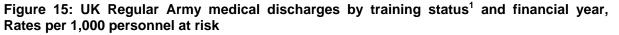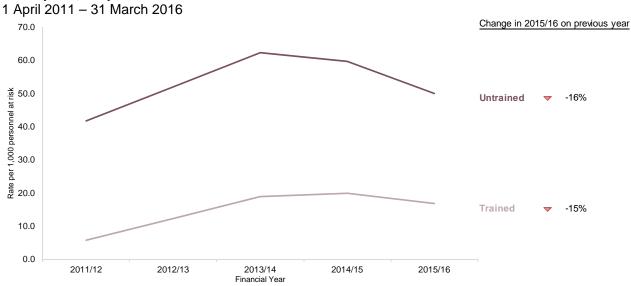
Rates of medical discharge were significantly higher among Army untrained personnel compared to trained personnel throughout the period presented. Possible explanations for this difference are explained at the beginning of this section **(Figure 15)**.

Causes of Medical Discharges 2011/12 to 2015/16

When a member of the Army is medically discharged, the medical reason for the discharge is recorded and categorised using a coding system known as ICD-10 (see glossary). **Table 4** shows this information by principal ICD-10 cause code group (the chapter within which the condition is categorised) and financial year for the five-year period 2011/12 - 2015/16.

Principal cause is the main medical cause of the discharge.

Contributory causes include any other conditions identified that would result in a medical discharge.

Table 4: UK Regular Army medical discharges by principal ICD-10 cause code group and financial year, Numbers[1] and Percentages[2]
1 April 2011 – 31 March 2016

	All		2011/12		2012/13		2013/14		2014/15		2015/16	
	n	%	n	%	n	%	n	%	n	%	n	%
All medical discharges	8,714		963		1,670		2,222		2,109		1,750	
All cause coded medical discharges	8,085 [p]	100 [p]	963	100	1,648	100	2,043 [p]	100 [p]	1,736 [p]	100 [p]	1,695 [p]	100 [p]
Infectious and parasitic diseases (A00 - B99)	55 [p]	<1 [p]	~	<1	16	<1	17 [p]	<1 [p]	9 [p]	<1 [p]	~ [p]	<1 [p]
Neoplasms (C00 - D48)	65 [p]	<1 [p]	11	1	10	<1	14 [p]	<1 [p]	14 [p]	<1 [p]	16 [p]	<1 [p]
Blood disorders (D50 - D89)	23 [p]	<1 [p]	~	<1	9	<1	~ [p]	<1 [p]	~ [p]	<1 [p]	~ [p]	<1 [p]
Endocrine, nutritional and metabolic diseases (E00 - E90)	91 [p]	1 [p]	13	1	29	2	21 [p]	1 [p]	17 [p]	<1 [p]	11 [p]	<1 [p]
- Of which diabetes (E10-E14)	62 [p]	<1 [p]	~	<1	21	1	15 [p]	<1 [p]	11 [p]	<1 [p]	~ [p]	<1 [p]
- Of which insulin-dependent (E10)	47 [p]	<1 [p]	6	<1	16	<1	13 [p]	<1 [p]	7 [p]	<1 [p]	5 [p]	<1 [p]
- Of which non-insulin-dependent (E11)	8 [p]	<1 [p]	~	<1	~	<1	~ [p]	<1 [p]	~ [p]	<1 [p]	0 [p]	0 [p]
Mental and behavioural disorders (F00 - F99)	1,236 [p]	15 [p]	124	13	188	11	279 [p]	14 [p]	282 [p]	16 [p]	363 [p]	21 [p]
- Of which mood disorders (F30 - F39)	297 [p]	4 [p]	40	4	39	2	52 [p]	3 [p]	61 [p]	4 [p]	105 [p]	6 [p]
- Of which depression (F32 & F33)	235 [p]	3 [p]	28	3	32	2	41 [p]	2 [p]	52 [p]	3 [p]	82 [p]	5 [p]
- Of which neurotic, stress related and somatoform disorders (F40 - F48)	809 [p]	10 [p]	69	7	124	8	185 [p]	9 [p]	204 [p]	12 [p]	227 [p]	13 [p]
- Of which post-traumatic stress disorder (PTSD) (F431)	533 [p]	7 [p]	44	5	73	4	123 [p]	6 [p]	137 [p]	8 [p]	156 [p]	9 [p]
- Of which adjustment disorder (F432)	81 [p]	1 [p]	8	<1	10	<1	22 [p]	1 [p]	17 [p]	<1 [p]	24 [p]	1 [p]
Nervous system disorders (G00 - G99)	251 [p]	3 [p]	39	4	64	4	59 [p]	3 [p]	50 [p]	3 [p]	39 [p]	2 [p]
- Of which epilepsy (G40)	82 [p]	1 [p]	13	1	22	1	23 [p]	1 [p]	12 [p]	<1 [p]	12 [p]	<1 [p]
Eye and adnexa diseases (H00 - H59)	62 [p]	<1 [p]	13	1	11	<1	20 [p]	<1 [p]	10 [p]	<1 [p]	8 [p]	<1 [p]
- Of which blindness, low vision and visual disturbance (H53 & H54)	26 [p]	<1 [p]	6	<1	7	<1	8 [p]	<1 [p]	~ [p]	<1 [p]	~ [p]	<1 [p]
Ear and mastoid process diseases (H60 - H95)	477 [p]	6 [p]	66	7	101	6	151 [p]	7 [p]	97 [p]	6 [p]	62 [p]	4 [p]
- Of which hearing loss (H833 & H90 - H91)	438 [p]	5 [p]	63	7	99	6	136 [p]	7 [p]	89 [p]	5 [p]	51 [p]	3 [p]
- Of which noise-induced hearing loss (H833)	196 [p]	2 [p]	33	3	44	3	64 [p]	3 [p]	38 [p]	2 [p]	17 [p]	1 [p]
- Of which tinnitus (H931)	28 [p]	<1 [p]	~	<1	~	<1	8 [p]	<1 [p]	6 [p]	<1 [p]	11 [p]	<1 [p]
Circulatory system disorders (I00 - I99)	159 [p]	2 [p]	22	2	38	2	38 [p]	2 [p]	25 [p]	1 [p]	36 [p]	2 [p]
Respiratory system disorders (J00 - J99)	86 [p]	1 [p]	16	2	18	1	12 [p]	<1 [p]	18 [p]	1 [p]	22 [p]	1 [p]
- Of which asthma (J45 & J46)	73 [p]	<1 [p]	16	2	15	<1	12 [p]	<1 [p]	11 [p]	<1 [p]	19 [p]	1 [p]
Digestive system disorders (K00 - K93)	152 [p]	2 [p]	17	2	35	2	45 [p]	2 [p]	27 [p]	2 [p]	28 [p]	2 [p]
Skin and subcutaneous tissue diseases (L00 - L99)	107 [p]	1 [p]	19	2	17	1	30 [p]	1 [p]	25 [p]	1 [p]	16 [p]	<1 [p]
Musculoskeletal disorders (M00 - M99) and injuries (S00 - T98)	4,917 [p]	61 [p]	552	57	1,016	62	1,246 [p]	61 [p]	1,087 [p]	63 [p]	1,016 [p]	60 [p]
- Of which injuries and disorders of the knee [3]	903 [p]	11 [p]	117	12	182	11	229 [p]	11 [p]	196 [p]	11 [p]	179 [p]	11 [p]
- Of which knee pain (M2556)	350 [p]	4 [p]	40	4	75	5	84 [p]	4 [p]	73 [p]	4 [p]	78 [p]	5 [p]
- Of which back pain (M549)	596 [p]	7 [p]	72	7	125	8	156 [p]	8 [p]	148 [p]	9 [p]	95 [p]	6 [p]
- Of which low back pain (M544-5)	494 [p]	6 [p]	56	6	104	6	129 [p]	6 [p]	127 [p]	7 [p]	78 [p]	5 [p]
- Of which injuries and disorders of the ankle and foot [4]	491 [p]	6 [p]	66	7	93	6	141 [p]	7 [p]	100 [p]	6 [p]	91 [p]	5 [p]
- Of which heat injury (T67)	22 [p]	<1 [p]	~	<1	7	<1	9 [p]	<1 [p]	~ [p]	<1 [p]	~ [p]	<1 [p]
- Of which cold injury (T68 & T69)	357 [p]	4 [p]	36	4	85	5	81 [p]	4 [p]	65 [p]	4 [p]	90 [p]	5 [p]
Genitourinary system diseases (N00 - N99)	43 [p]	<1 [p]	7	<1	6	<1	12 [p]	<1 [p]	9 [p]	<1 [p]	9 [p]	<1 [p]
Pregnancy, childbirth and puerperium (O00 - O99)	0 [p]	0 [p]	0	0	0	0	0 [p]	0 [p]	0 [p]	0 [p]	0 [p]	0 [p]
Congenital malformations (Q00 - Q99)	27 [p]	<1 [p]	5	<1	6	<1	~ [p]	<1 [p]	~ [p]	<1 [p]	8 [p]	<1 [p]
Clinical and laboratory findings (R00 - R99)	223 [p]	3 [p]	35	4	44	3	49 [p]	2 [p]	49 [p]	3 [p]	46 [p]	3 [p]
Factors influencing health status (Z00 - Z99)	111 [p]	1 [p]	14	1	40	2	42 [p]	2 [p]	8 [p]	<1 [p]	7 [p]	<1 [p]
No details held on principle condition for medical boarding	628 [p]		0		22		178 [p]		373 [p]		55 [p]	
Withheld consent	1 [p]		0		0		1 [p]		0 [p]		0 [p]	

Source: DMICP, FMED23 and JPA

[1] ~ In line with JSP 200 on statistical disclosure, figures less than five have been suppressed. Please see background quality report for more information.

[2] Data presented as "<1%" represent a percentage of cause coded medical discharges of greater than 0% but smaller than 1%.
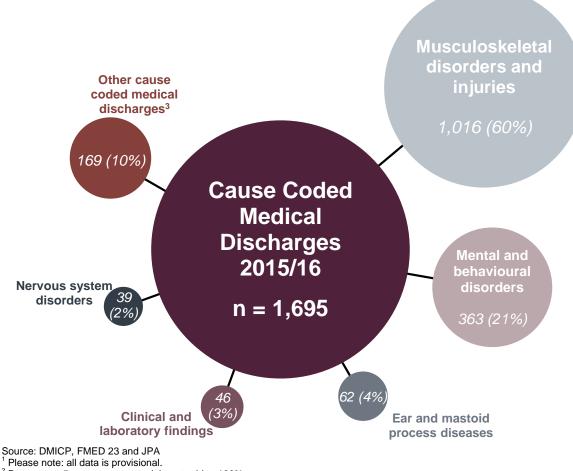
[3] Please see annex for specific ICD-10 codes for injuries and disorders of the knee.

[4] Please see annex for specific ICD-10 codes for injuries and disorders of the ankle and foot.

[p] Indicates a provisional data point.

Figure 16: UK Regular Army medical discharges by principal ICD-10 cause code group, Numbers[1] and Percentages[1,2]
1 April 2015 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Please note: all data is provisional.
[2] Due to rounding, percentages might not add to 100%.
[3] Includes 13 cause code groups; each accounting for a maximum of 2% of all Army cause coded medical discharges.
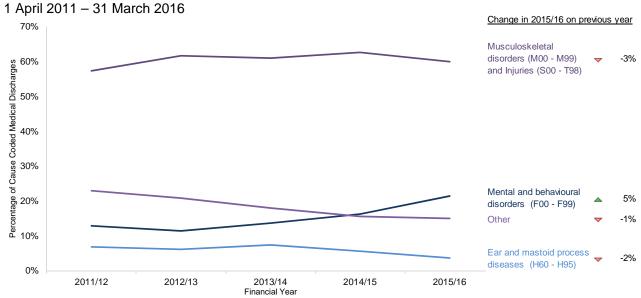
In line with previous years, the most common principal cause of medical discharge in 2015/16 was Musculoskeletal Disorders and Injuries (n=1,016[p], 60%[p]) and the second highest cause of medical discharge was Mental and Behavioural Disorders (n=363[p], 21%[p]). This finding is consistent with the Canadian military[4], however Mental and Behavioural Disorders were responsible for a larger proportion of personnel released from the Canadian military than the UK Armed Forces **(Figure 16).**

When considering both the principal and contributory cause of discharge in 2015/16:

- Musculoskeletal Disorders and Injuries remained the most common cause, accounting for over two thirds of all cause coded discharge (n=1,194[p], 71%[p]).
- Mental and Behavioural Disorders remained the second highest cause (n = 524[p], 31%[p]).
- Factors Influencing Health Status (n = 472[p], 28%[p]) was the third highest cause. Factors influencing health are usually secondary to the main condition and therefore more likely to be listed as a contributory cause and not as a principal cause of discharge.

These findings were consistent over the five year period from 2011/12 to 2015/16.

Figure 17: UK Regular Army medical discharges by principal ICD-10 cause code group and financial year, Percentage of all medical discharges
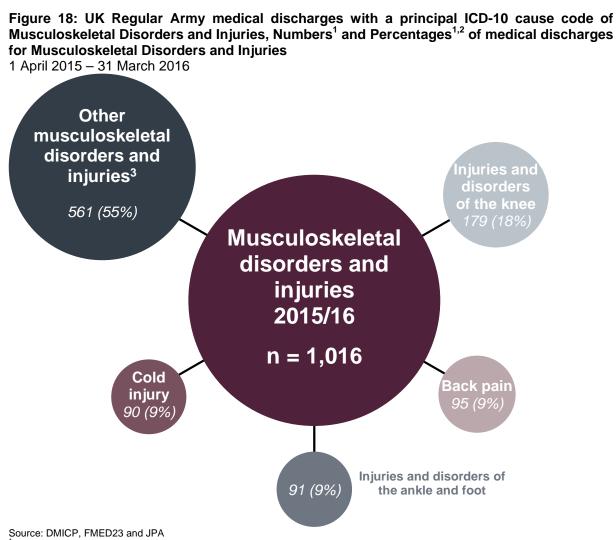1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA

Throughout the period presented Musculoskeletal Disorders and Injuries were the largest cause of principal cause coded Army medical discharges, accounting for around 60% of all medical discharges **(Figure 17)**.

Since 2012/13, the proportion of medical discharges for Mental and Behavioural Disorders has risen year on year. In 2015/16, the increase in the proportion of mental health related discharges was statistically significant compared to the previous year. Presentations of Army personnel at MOD Specialist Mental Health Services have also increased in recent years and this may in part be the result of an increase in awareness of mental health due to the success of anti-stigma campaigns.

Figures 18 and 19 present a further breakdown of the two main causes of Army medical discharges in 2015/16 to provide more insight into the injuries/conditions which have led to Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders discharges.

Figure 18: UK Regular Army medical discharges with a principal ICD-10 cause code of Musculoskeletal Disorders and Injuries, Numbers[1] and Percentages[1,2] of medical discharges for Musculoskeletal Disorders and Injuries
1 April 2015 – 31 March 2016

Source: DMICP, FMED23 and JPA
[1] Please note: all data is provisional.
[2] Due to rounding, percentages might not add to 100%.
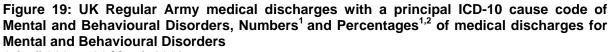[3] Includes all other musculoskeletal disorders and injuries; including heat injury.

Of the Army personnel discharged with a principal cause of Musculoskeletal Disorders and Injuries in 2015/16 **(Figure 18)**:

- 18%[p] (n=179[p]) had a principal cause of an injury or disorder of the knee.
- 9%[p] (n=95[p]) had a principal cause of back pain.
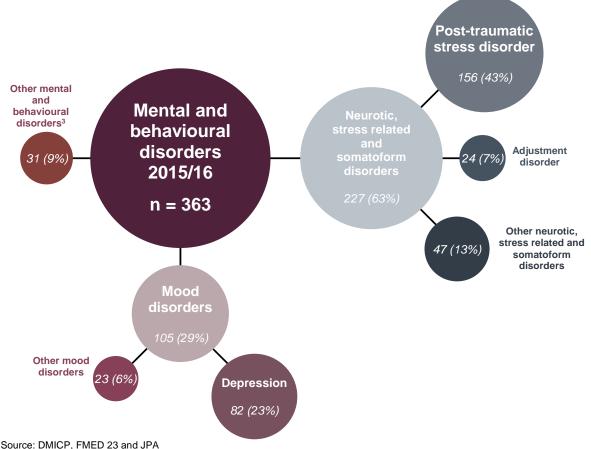- 9%[p] (n=91[p]) had a principal cause of injury or disorder of the ankle and foot.

These findings were broadly consistent over the five year period 2011/12 to 2015/16.

The high prevalence of personnel medically discharged for injuries and disorders of the knee 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 also the leading cause of disability in the UK and global populations[13].

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[13] Hoy D, March L, Brooks P, Blyth F, Woolf A, Bain C, Williams G, Smith E, Vos T, Barendregt J, Murray C, Burstein R, Buchbinder R. (2014). The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Annals of the Rheumatic Diseases*. 73 (6), 968-74.

Figure 19: UK Regular Army medical discharges with a principal ICD-10 cause code of Mental and Behavioural Disorders, Numbers[1] and Percentages[1,2] of medical discharges for Mental and Behavioural Disorders
1 April 2015 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Please note: all data is provisional.
[2] Due to rounding, percentages may not add to 100%.
[3] Includes all other Mental and Behavioural Disorders not classified as mood disorders or neurotic, stress related and somatoform disorders.

The majority of medical discharges for Mental and Behavioural Disorders in 2015/16 were the result of neurotic disorders (n=227[p], 63%[p]) and mood disorders (n=105[p], 29%[p]) **(Figure 19)**.
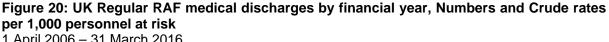
- Of the 227[p] medical discharges for neurotic disorders, 156[p] were for post-traumatic stress disorder (PTSD). PTSD accounted for 9%[p] of all cause coded Army medical discharges.
- Of the 105[p] medical discharges for mood disorders, the most common was depression (n=82[p]). Depression accounted for 5%[p] of all cause coded Army medical discharges.

These findings are broadly comparable to initial assessments seen at MOD Specialist Mental Health services with neurotic and mood disorders being the most prevalent disorders among serving Army personnel[14].
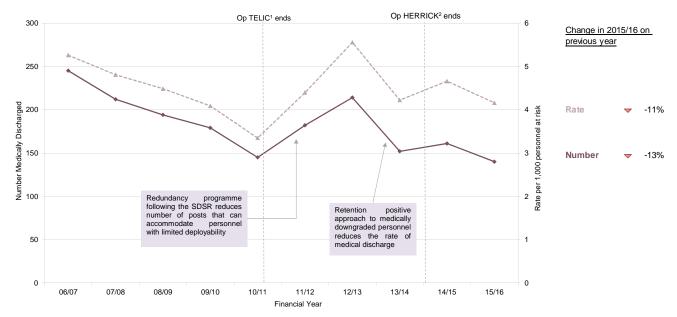
Further information on the principal and contributory causes of medical discharge in the UK Regular Army can be found in the supporting Excel tables to this report.

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[14] Please see the "UK armed forces mental health annual statistics: financial year 2015/16" Official Statistic publication
https://www.gov.uk/government/collections/defence-mental-health-statistics-index

RAF

Trends in Medical Discharges 2006/07 to 2015/16

Figure 20: UK Regular RAF medical discharges by financial year, Numbers and Crude rates per 1,000 personnel at risk
1 April 2006 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Operation TELIC is the name for UK operations in Iraq which began March 2003 and closed on 21 May 2011.
[2] 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 discharge for RAF personnel fluctuated over the past 10 years with a rate of 4.2 per 1,000 personnel at risk in 2015/16. The changes in rates over the period presented in **Figure 20** were primarily due to changes in retention policy. The increase in the rate of discharge between 2010/11 and 2012/13 was the result of the last major round of redundancies in the RAF following the Strategic Defence and Security Review (SDSR). The declining trend in rates since 2013/14 was the result of the current "retention positive" policy of the RAF, endeavouring to find roles for medically downgraded personnel wherever possible.

Demographic Risk Groups 2011/12 to 2015/16

Table 5: UK Regular RAF medical discharges by age group[1], gender[1], rank[1] and training status[1], Numbers[2] and Rates per 1,000 personnel at risk
1 April 2015 – 31 March 2016

	2015/16		
	n	r	Rate of UK Regular RAF personnel medically discharged
Number of UK Regular RAF personnel medically discharged	**140**	**4.2**	▉
Age			
Aged Under 20	~	2.8	
Aged 20-24	15	3.2	
Aged 25-29	24	3.2	
Aged 30-34	32	4.7	
Aged 35-39	22	4.1	
Aged 40-44	18	4.8	
Aged 45-49	~	4.8	
Aged 50 +	~	7.0	
Gender			
Male	110	3.8	
Female*	30	6.4	
Rank			
Officer	24	3.2	
Other Rank	116	4.4	
Training Status			
Trained	135	4.3	
Untrained	5	2.2	

Source: DMICP, FMED 23 and JPA
[1] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.
[2] ~ In line with JSP 200 on statistical disclosure, figures less than five have been suppressed. Please see background quality report for more information.
* Groups found to be at a significantly higher risk using a z-test for proportions at a 95% confidence level.

In 2015/16, significantly higher rates of medical discharges for Regular RAF personnel were seen among RAF females compared to males (**Table 5**):

Whilst rates of discharge increase with age, and higher rates were seen among Other Ranks and Trained personnel, there were no statistically significant differences among these groups. This may be the result of the small numbers in some of these demographic groups making it less likely to detect significant differences at the 95% confidence level.

The reasons for the significantly higher rate of medical discharges among female RAF personnel are unknown.

This finding is replicated in analysis of the recovery pathway[15,16] where there was a significantly higher proportion of female RAF personnel compared to males.

Figures 21-24 present RAF medical discharges for each demographic group since 2011/12 with possible explanations for the differences observed.

The overall rate of medical discharge among RAF personnel fell by 11% in 2015/16 compared to the previous year. In contrast, the rate of discharge among personnel aged 25-29 years and 35-39 years decreased by 37% and 33% respectively and personnel aged under 20 years and over 50 years increased by 49% and 31% respectively. It is difficult to interpret these differences due to the small number of medical discharges in each age group **(Figure 21)**.

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[15] https://www.gov.uk/government/collections/uk-armed-forces-recovery-capability-wounded-injured-and-sick-in-the-recovery-pathway-statistics
[16] Recovery is the non-medical care for those who are wounded, injured or sick
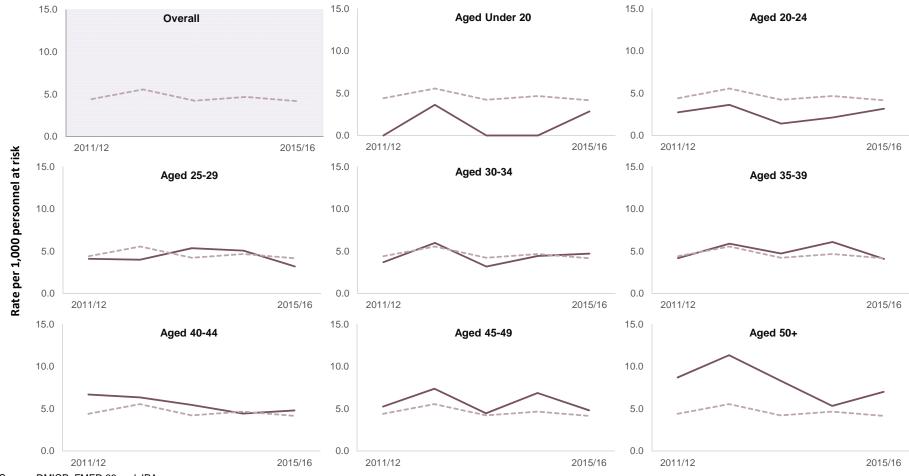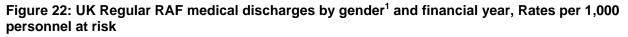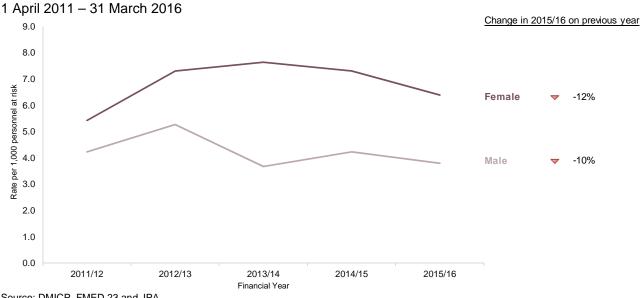
Figure 21: UK Regular RAF medical discharges by age group[1] and financial year, Rates per 1,000 personnel
1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA
1 As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.
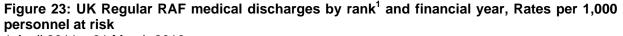
Figure 22: UK Regular RAF medical discharges by gender[1] and financial year, Rates per 1,000 personnel at risk
1 April 2011 – 31 March 2016

Change in 2015/16 on previous year

Female ▼ -12%

Male ▼ -10%

Source: DMICP, FMED 23 and JPA
[1] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

Since 2013/14, the rate of medical discharges was significantly higher for females than for males. Prior to this, there was no significant difference[17] between male and female discharges in the RAF (**Figure 22)**.

Figure 23: UK Regular RAF medical discharges by rank[1] and financial year, Rates per 1,000 personnel at risk
1 April 2011 – 31 March 2016

Change in 2015/16 on previous year

Other Ranks ▼ -14%

Officers ▲ 8%

Source: DMICP, FMED 23 and JPA
[1] As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.

For each of the years between 2011/12 and 2014/15, the rate of medical discharges among Other Ranks was significantly higher than for Officers. However, in 2015/16 the difference in the rate of discharge was no longer significant. **(Figure 23**). The reasons for the rising rate of RAF Officer discharges in recent years are unclear.

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[17] Tested using a z-test for proportions at a 95% confidence level

Figure 24: UK Regular RAF medical discharges by training status[1] and financial year, Rates per 1,000 personnel at risk
1 April 2011 – 31 March 2016

Source: DMICP, FMED 23 and JPA
1 As recorded on the Joint Personnel Administration System (JPA) at the time of discharge.
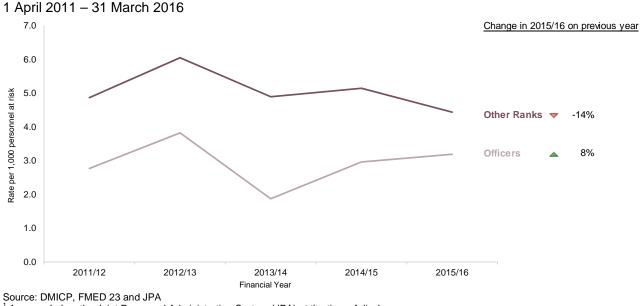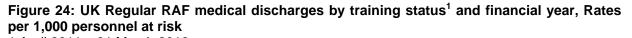
There was no significant difference in the rate of medical discharges between trained and untrained RAF personnel in the period presented with the exception of 2014/15, when the rate among trained personnel was significantly higher than untrained personnel. The fluctuation shown in the rate of discharge among the untrained population may be a result of the small numbers involved; in total over the five year period from 2011/12 to 2015/16 only 34 untrained RAF personnel were medically discharge, compared to 815 trained personnel **(Figure 24)**.

Figures 27 and 28 present a further breakdown of the two main causes of RAF medical discharges in 2015/16 to provide more insight into the injuries/conditions which have led to Musculoskeletal Disorders and Injuries and Mental and Behavioural Disorders discharges.

Causes of Medical Discharges 2011/12 to 2015/16

When a member of the RAF is medically discharged, the medical reason for the discharge is recorded and categorised using a coding system known as ICD-10 (see glossary). **Table 6** shows this information by principal ICD-10 cause code group (the chapter within which the condition is categorised) and financial year for the five-year period 2011/12 - 2015/16.

Principal cause is the main medical cause of the discharge.

Contributory causes include any other conditions identified that would result in a medical discharge

Table 6: UK Regular RAF medical discharges by principal ICD-10 cause code group and financial year, Numbers[1] and Percentages[2]
1 April 2011 – 31 March 2016

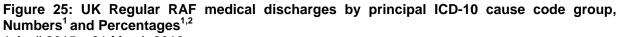|	All		2011/12		2012/13		2013/14		2014/15		2015/16	
	n	%	n	%	n	%	n	%	n	%	n	%
All medical discharges	849		182		214		152		161		140	
All cause coded medical discharges	806 [p]	100 [p]	173	100	201	100	150	100	146	100	136 [p]	100 [p]
Infectious and parasitic diseases (A00 - B99)	~ [p]	<1 [p]	~	<1	~	<1	0	0	0	0	0 [p]	0 [p]
Neoplasms (C00 - D48)	19 [p]	2 [p]	6	3	~	1	~	3	~	3	~ [p]	1 [p]
Blood disorders (D50 - D89)	~ [p]	<1 [p]	0	0	~	<1	0	0	0	0	0 [p]	0 [p]
Endocrine, nutritional and metabolic diseases (E00 - E90)	8 [p]	<1 [p]	~	1	~	<1	~	2	~	<1	0 [p]	0 [p]
- Of which diabetes (E10-E14)	5 [p]	<1 [p]	~	<1	~	<1	~	1	0	0	0 [p]	0 [p]
- Of which insulin-dependent (E10)	~ [p]	<1 [p]	~	<1	0	0	~	1	0	0	0 [p]	0 [p]
- Of which non-insulin-dependent (E11)	~ [p]	<1 [p]	0	0	~	<1	0	0	0	0	0 [p]	0 [p]
Mental and behavioural disorders (F00 - F99)	160 [p]	20 [p]	26	15	30	15	29	19	37	25	38 [p]	28 [p]
- Of which mood disorders (F30 - F39)	67 [p]	8 [p]	9	5	16	8	13	9	11	8	18 [p]	13 [p]
- Of which depression (F32 & F33)	58 [p]	7 [p]	9	5	14	7	9	6	9	6	17 [p]	13 [p]
- Of which neurotic, stress related and somatoform disorders (F40 - F48)	78 [p]	10 [p]	14	8	13	6	14	9	20	14	17 [p]	13 [p]
- Of which post-traumatic stress disorder (PTSD) (F431)	25 [p]	3 [p]	~	2	~	<1	~	2	8	5	9 [p]	7 [p]
- Of which adjustment disorder (F432)	23 [p]	3 [p]	5	3	7	3	~	2	6	4	~ [p]	1 [p]
Nervous system disorders (G00 - G99)	55 [p]	7 [p]	13	8	12	6	13	9	8	5	9 [p]	7 [p]
- Of which epilepsy (G40)	6 [p]	<1 [p]	~	<1	~	2	~	<1	0	0	0 [p]	0 [p]
Eye and adnexa diseases (H00 - H59)	7 [p]	<1 [p]	~	2	~	<1	~	<1	~	<1	~ [p]	<1 [p]
- Of which blindness, low vision and visual disturbance (H53 & H54)	~ [p]	<1 [p]	~	1	0	0	0	0	0	0	~ [p]	<1 [p]
Ear and mastoid process diseases (H60 - H95)	39 [p]	5 [p]	6	3	10	5	11	7	~	3	~ [p]	5 [p]
- Of which hearing loss (H833 & H90 - H91)	36 [p]	4 [p]	6	3	9	4	10	7	~	3	~ [p]	4 [p]
- Of which noise-induced hearing loss (H833)	~ [p]	<1 [p]	0	0	~	<1	~	<1	0	0	0 [p]	0 [p]
- Of which tinnitus (H931)	~ [p]	<1 [p]	0	0	0	0	~	<1	0	0	~ [p]	<1 [p]
Circulatory system disorders (I00 - I99)	22 [p]	3 [p]	9	5	~	1	5	3	~	<1	~ [p]	3 [p]
Respiratory system disorders (J00 - J99)	~ [p]	<1 [p]	~	<1	0	0	~	2	0	0	0 [p]	0 [p]
- Of which asthma (J45 & J46)	~ [p]	<1 [p]	~	<1	0	0	0	0	0	0	0 [p]	0 [p]
Digestive system disorders (K00 - K93)	20 [p]	2 [p]	~	2	8	4	~	2	6	4	0 [p]	0 [p]
Skin and subcutaneous tissue diseases (L00 - L99)	9 [p]	1 [p]	~	1	~	2	~	<1	~	1	0 [p]	0 [p]
Musculoskeletal disorders (M00 - M99) and injuries (S00 - T98)	426 [p]	53 [p]	94	54	118	59	72	48	76	52	66 [p]	49 [p]
- Of which injuries and disorders of the knee [3]	86 [p]	11 [p]	21	12	21	10	18	12	15	10	11 [p]	8 [p]
- Of which knee pain (M2556)	40 [p]	5 [p]	7	4	9	4	9	6	9	6	6 [p]	4 [p]
- Of which back pain (M549)	122 [p]	15 [p]	26	15	47	23	16	11	19	13	14 [p]	10 [p]
- Of which low back pain (M544-5)	108 [p]	13 [p]	21	12	42	21	15	10	17	12	13 [p]	10 [p]
- Of which injuries and disorders of the ankle and foot [4]	29 [p]	4 [p]	7	4	10	5	~	2	5	3	~ [p]	0 [p]
- Of which heat injury (T67)	0 [p]	0 [p]	0	0	0	0	0	0	0	0	0 [p]	0 [p]
- Of which cold injury (T68 & T69)	5 [p]	<1 [p]	~	<1	~	1	0	0	0	0	~ [p]	<1 [p]
Genitourinary system diseases (N00 - N99)	~ [p]	<1 [p]	~	<1	~	<1	~	<1	~	<1	~ [p]	<1 [p]
Pregnancy, childbirth and puerperium (O00 - O99)	0 [p]	0 [p]	0	0	0	0	0	0	0	0	0 [p]	0 [p]
Congenital malformations (Q00 - Q99)	~ [p]	<1 [p]	0	0	0	0	0	0	0	0	~ [p]	<1 [p]
Clinical and laboratory findings (R00 - R99)	26 [p]	3 [p]	6	3	7	3	~	2	~	3	6 [p]	4 [p]
Factors influencing health status (Z00 - Z99)	~ [p]	<1 [p]	0	0	0	0	~	<1	0	0	~ [p]	<1 [p]
No details held on principle condition for medical boarding	15 [p]		0		0		0		12		3 [p]	
Withheld consent	28 [p]		9		13		2		3		1 [p]	

Source: DMICP, FMED23 and JPA
[1] ~ In line with JSP 200 on statistical disclosure, figures less than five have been suppressed. Please see background quality report for more information.
[2] Data presented as "<1%" represent a percentage of cause coded medical discharges of greater than 0% but smaller than 1%.
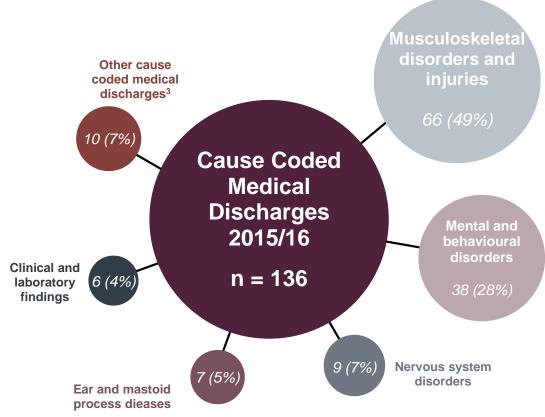[3] Please see annex for specific ICD-10 codes for injuries and disorders of the knee.
[4] Please see annex for specific ICD-10 codes for injuries and disorders of the ankle and foot.
[p] Indicates a provisional data point.

Figure 25: UK Regular RAF medical discharges by principal ICD-10 cause code group, Numbers[1] and Percentages[1,2]
1 April 2015 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Please note: all data is provisional.
[2] Due to rounding, percentages might not add to 100%.
[3] Includes 13 cause code groups; each accounting for a maximum of 3% of all RAF cause coded medical discharges

In line with previous years, in 2015/16 the most common principal cause of medical discharge was Musculoskeletal Disorders and Injuries (n=66[p], 49%[p]) and the second highest cause of medical discharge was Mental and Behavioural Disorders (n=38[p], 28%[p]). This finding is consistent with the Canadian military[4], however Mental and Behavioural Disorders were responsible for a larger proportion of personnel released from the Canadian military than the UK Armed Forces **(Figure 25).**

When considering both the principal and contributory cause of discharge in 2015/16:

- Musculoskeletal Disorders and Injuries remained the most common cause, accounting for over two thirds of all cause coded discharge (n=82[p], 60%[p]).
- Mental and Behavioural Disorders remained the second highest cause (n = 60[p], 44%[p]).

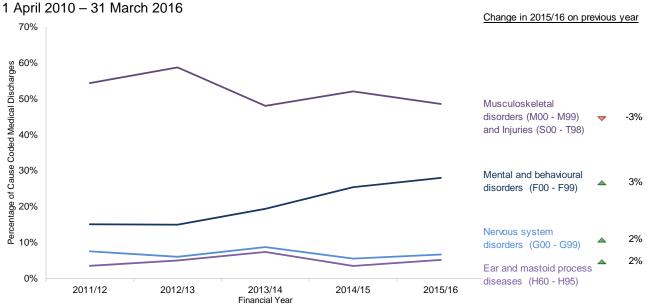These findings were consistent over the five year period, 2011/12 to 2015/16.

Figure 26: UK Regular RAF medical discharges by principal ICD-10 cause code group and financial year, Percentage of all medical discharges
1 April 2010 – 31 March 2016
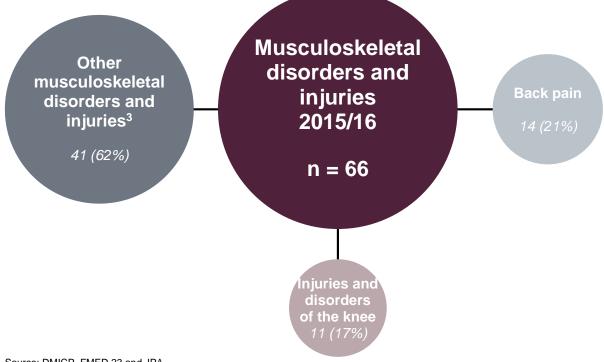
Change in 2015/16 on previous year

Musculoskeletal disorders (M00 - M99) and Injuries (S00 - T98)   ▽ -3%

Mental and behavioural disorders (F00 - F99)   ▲ 3%

Nervous system disorders (G00 - G99)   ▲ 2%

Ear and mastoid process diseases (H60 - H95)   ▲ 2%

Source: DMICP, FMED 23 and JPA

Throughout the period, Musculoskeletal Disorders and Injuries was the largest cause of principal cause coded RAF medical discharges, accounting for around 53% of all medical discharges **(Figure 26)**.

Since 2012/13 the proportion of medical discharges for Mental and Behavioural Disorders has increased from 15% to 28%[p] whilst the proportion of Musculoskeletal Disorders and Injuries has fallen from 59% to 49%[p]. Please note the increase in the proportion of medical discharges for Mental and Behavioural Disorders in 2015/16 was not statistically significant when compared to the previous year. Possible explanations for the changing proportions in these causes of medical discharges include:

- The retention of personnel in a limited deployability role wherever feasible.
- An increase in awareness of mental health issues in recent years following the success of anti-stigma campaigns. There was also a rise in the rate of RAF personnel presenting to MOD Specialist Mental Health Services over the same period.

Figure 27: UK Regular RAF medical discharges with a principal ICD-10 cause code of Musculoskeletal Disorders and Injuries, Numbers[1] and Percentages[1,2] of medical discharges for Musculoskeletal Disorders and Injuries
1 April 2015 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Please note: all data is provisional.
[2] Due to rounding, percentages might not add to 100%.
[3] Includes all other Musculoskeletal Disorders and Injuries; including injuries and disorders of the ankle and foot, cold injury and heat injury.

Of the personnel discharged with a principal cause of Musculoskeletal Disorders and Injuries in 2015/16 **(Figure 27)**:

- 21%[p] (n=14[p]) had a principal cause of back pain, the majority of which were for pain in the lower back (n=13[p]).
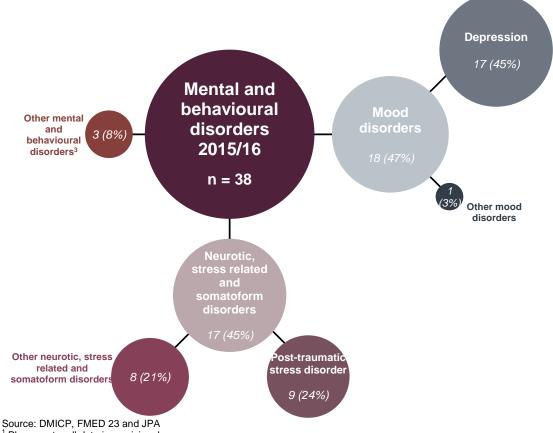- 17%[p] (n=11[p]) had a principal cause of an injury or disorder of the knee.

These findings are consistent over five year period between 2011/12 and 2015/16.

The high prevalence of personnel medically discharged for back pain and injuries and disorders of the knee may be the result of the physical activity required of many RAF personnel, such as training on hard ground carrying heavy loads. Back pain is also the leading cause of disability in the UK and global populations[18].

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[18] Hoy D, March L, Brooks P, Blyth F, Woolf A, Bain C, Williams G, Smith E, Vos T, Barendregt J, Murray C, Burstein R, Buchbinder R. (2014). The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Annals of the Rheumatic Diseases.* 73 (6), 968-74.

Figure 28: UK Regular RAF medical discharges with a principal ICD-10 cause code of Mental and Behavioural Disorders, Numbers[1] and Percentages[1,2] of medical discharges for Mental and Behavioural Disorders
1 April 2015 – 31 March 2016

Source: DMICP, FMED 23 and JPA
[1] Please note: all data is provisional.
[2] Due to rounding, percentages might not add to 100%.
[3] Includes all other Mental and Behavioural Disorders not classified as mood disorders or neurotic, stress related and somatoform disorders.

The majority of medical discharges for Mental and Behavioural Disorders in 2015/16 were the result of Mood disorders (n=18[p], 47%[p]) and Neurotic disorders (n=17[p], 45%[p]) **(Figure 28)**.

- Of the 18[p] medical discharges for Mood disorders, the most common was depression (n=17[p]). Depression accounted for 13%[p] of all cause coded medical discharges.
- Of the 17[p] medical discharges for Neurotic disorders, nine[p] were for Post-Traumatic Stress Disorder (PTSD). PTSD accounted for 7%[p] of all cause coded medical discharges.

These findings were broadly comparable to initial assessments seen at MOD Specialist Mental Health Services with Neurotic and Mood disorders being the most prevalent disorders among serving RAF personnel[19].

Further data on the principal and contributory causes of medical discharge in the UK Regular RAF can be found in the supporting Excel tables to this report.

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[19] Please see the "UK armed forces mental health annual statistics: financial year 2015/16" Official Statistic publication
https://www.gov.uk/government/collections/defence-mental-health-statistics-index

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 Sources

1. Data are compiled by Defence Statistics from three sources:

    - Medically discharged personnel are identified in monthly downloads taken from the Joint Personnel Administration System (JPA). JPA is used to hold the administration data for all Regular Forces. The number of Service personnel in each year is also taken from the monthly downloads from JPA.

    - The principal and contributory causes of medical discharge are taken from F Med 23's. F Med 23's are official medical documents used to record all medical board proceedings. Defence Statistics are supplied FMed 23's by the single Service medical boards and code them into the medical discharge database. If consent for Defence Statistics to hold the information is not given the individual appears in the database with no clinical information recorded.

    - Where paper versions of the FMed 23 form have not been made available to Defence Statistics, the electronic version as recorded on the Defence Medical Information Capability Programme (DMICP) has been utilised.

Data Coverage

2. This bulletin covers Regular Service personnel (trained and untrained). Royal Navy and Royal Marines personnel are recorded as Naval Service personnel; Army Regular personnel include Ghurkha Regiments and Military Provost Guard Service (MPGS).

3. This bulletin focuses exclusively 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 are excluded.

4. Note that untrained personnel are sometimes discharged under administrative categories, albeit on medical grounds. These discharges usually concern individuals who have failed their initial training for medical reasons, or who at their initial medical failed to disclose medical reasons which may later affect their application and training. As these cases are not defined as medical discharges they are not included in this report.

5. Time series graphs present the overall number and crude rates per 1,000 personnel at risk of medical discharges for the last ten years, to help assess the impact of changes in policy and practices. For presentational purposes, demographic and cause information is presented for the last five years only.

6. Any trends in the statistics presented within this report do not directly reflect actual occupational health morbidity within the Armed Forces. Medical discharge data are presented by year of medical discharge, and not year of injury / onset of condition that led to medical discharge. Therefore any trends identified may only be corresponding directly to changes in boarding practice, retention policies or changes to continuing employment standards.

7. 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 process.

8. This report only focuses on medical causes for medical discharges. Medical boards are not called upon to decide possible causes for the medical conditions. Therefore the report does not offer analysis of external causes of injury related conditions or illnesses such as exposure to hazardous substances.

9. Medical Boards do not make decisions on attributability to Service. These decisions are made by administrators of the MOD pension and compensation schemes at Vets-UK, previously Service Personnel and Veterans' Agency (SPVA). Defence Statistics produce bi-annual reports on the Armed Forces Compensation Scheme and annual reports on War Pension Scheme which can be found at https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics.

Methodology

Rates

10. Rates enable comparison between groups by removing the issue of different populations at risk (group sizes). The rates in this bulletin present the number of medical discharges per 1,000 personnel. As the size of the 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

11. All the rate data provided in this bulletin are calculated in the form of crude rates. Crude rates are calculated by dividing the number of events (in this case medical discharges for each year) by the population at risk (in this case the average number of Service personnel on strength in each year).

12. The z test for independent proportions is used to evaluate if two rates are different to a statistically significant degree. The confidence level to which this test has been run in this report is 95%: this means that if the test determines two populations to have different medical discharge rates, this will be true in greater than 95% of cases.

13. In order to identify age groups with a significantly higher than average rate of medical discharge, Z tests for a single proportion were performed comparing each age group to the average rate of discharge. In some cases, Defence Statistics have also performed Z tests for two proportions between specific age groups to provide greater clarity on the relationship between age and rate of discharge.

Glossary

Army The British Army consists of the General Staff and the deployable Field Army and the Regional Forces that support them, as well as Joint elements that work with the Royal Navy and Royal Air Force. Its primary task is to help defend the interests of the UK.

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

Contributory Condition/Cause See principal condition/cause

Downgrading 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. The patient may be downgraded (and placed on restricted duties or on sick leave as appropriate) to allow for treatment, recovery and rehabilitation.

FMed 23 is the form completed whenever a medical board is held for a member of the UK Armed Forces.

Gurkhas are recruited and employed in the British and Indian Armies under the terms of the 1947 Tri-Partite Agreement (TPA) on a broadly comparable basis. They remain Nepalese citizens but in all other respects are full members of HM Forces. Since 2008, Gurkhas are entitled to join the UK Regular Forces after 5 years of service and apply for British citizenship.

Joint Personnel Administration (JPA) is the system used by the 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 RAF, November 2006 for Naval Service and April 2007 for Army.

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.

Medical Discharges are the result of a number of specialists (medical, occupational, psychological, personnel, etc.) coming to the conclusion that an individual is suffering from a medical condition that pre-empts their continued service in the Armed Forces. Statistics based on these discharges do not represent measures of true morbidity or pathology. At best they indicate a minimum burden of ill-health in the Armed Forces. Furthermore, the number and diversity of processes involved with administering a medical discharge introduce a series of time lags, as well as impact on the quality of data recorded.

Military Provost Guard Service (MPGS) provides trained professional soldiers to meet defence armed security requirements in units of all three Services based in Great Britain. MPGS provide armed guard protection of units, responsible for control of entry, foot and mobile patrols and armed response to attacks on their unit.

Ministry of Defence The Ministry of Defence (MOD) is the United Kingdom government department responsible for the development and implementation of government defence policy and is the headquarters of the British Armed Forces. The principal objective of the MOD is to defend the United Kingdom and its interests. The MOD also manages day to day running of the armed forces, contingency planning and defence procurement.

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. UK Forces are deployed to Afghanistan in support of the UN authorised, NATO led International

Security Assistance Force (IASF) mission and as part of the US-led Operation Enduring Freedom (OEF).

Operation TELIC is the name for UK operations in Iraq which started in March 2003 and finished on 21 May 2011. UK Forces were deployed to support the Government's objective to remove the threat that Saddam Hussein posed to his neighbours and his people and, based on evidence available at the time, disarm him of his weapons of mass destruction. The Government also undertook to support the Iraqi people in their desire for peace, prosperity and freedom.

Other Ranks Other Ranks are members of the Royal Marines, Army and Royal Air Force who are not Officers but Other Ranks include Non-Commissioned Officers.

Principal Condition/Cause of Discharge
Principal condition/cause
The principal condition is the first principal ICD-10 code on the medical discharge documents (FMED 23).

Contributory condition/cause
Contributory cause contains all other principal conditions and any contributory conditions on the medical discharge paper (FMED 23).

Recovery Pathway is the generic term used to describe the route through the events and actions that are taken by, or on behalf of, medically downgraded Service personnel, to aid them either transition to civil life. Recovery in this context does not refer to medical treatment for an injury or illness, but to the development of psychological and sociological tools to aid the patient to aid their transition to civil life or a return to duty.

Royal Air Force (RAF). The Royal Air Force (RAF) is the aerial defence force of the UK.

Royal Marines (RM) Royal Marines are sea-going soldiers who are part of the Naval Service. RM Officer ranks were aligned with those of the Army on 1 July 1999.

Royal Navy (RN) The sea-going defence forces of the UK but excludes the Royal Marines and the Royal Fleet Auxiliary Service (RFA).

Strategic Defence and Security Review (SDSR). Following the May 2010 General Election, the new Coalition Government started work on a Strategic Defence and Security Review. This was the first defence review for 12 years, the last having taken place in 1998. Unlike previous Strategic Defence Reviews, the review was widened to include security matters and was to be overseen by the new National Security Council and developed alongside a new National Security Strategy and a Comprehensive Spending Review.

Strength is defined as the number of serving UK Armed Forces personnel.

Trained in this report are those that have completed training or artificer candidacy for Naval Service and those that have completed both Phase 1 and 2 training for Army and RAF.

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 reports produced by the Ministry of Defence.

Untrained personnel or "trainees" in this report are those classified as under training or artificer candidate for Naval Service and Phase 1 and 2 training for Army and RAF Trained personnel are defined as those who have complete both

Further Information

Symbols
~ Data has been suppressed due to Statistical Disclosure Control (greater than zero, fewer than 5).
r Revised
p Provisional

Provisional Data
In 2013/14 and 2014/15, Defence Statistics (Health) did not receive all trained Army FMED 23 discharge paperwork which confirms the cause information for the discharge. In 2015/16, this issue was extended to include both Naval Service and RAF data. Therefore, Army cause code data for 2013/14 2014/15 and 2015/16 are provisional. Naval Service and RAF cause code data for 2015/16 are also provisional. Defence Statistics (Health) aim to release a revised edition of this bulletin with updated cause code information in due course. All provisional data points in this bulletin have been indicated by a "p". Please see the Annual Medical Discharges in the UK Regular Armed Forces Background Quality Report[20] for further information.

Disclosure Control
In line with JSP 200 (April 2016), the suppression methodology has been applied to ensure individuals are not inadvertently identified dependent on the risk of disclosure. Numbers 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. If a disclosure control method has been applied to a table, the method is stated in the footnotes. For further information on statistical disclosure control see Background Quality Report.

Revisions

There are no planned revisions of this bulletin. Amendments to figures for earlier reports may be identified during the bi-annual and/or annual compilation of this bulletin. This will be addressed in one of two ways:

- 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 the section below.
- 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.

The revision to **Table 4** (principal causes of medical discharges in the Army) was the result of a processing error during production of the 2014/15 report. There have also been minor revisions to the Excel tables provided as an annex to this bulletin as a result of this same error. These have been indicated using an "r" marker. None of these revisions alter the conclusions made within the 2014/15 report.

Since the last report, Defence Statistics have received updated information on the number of trained Army personnel medically discharged in 2013/14 and 2014/15. This has resulted in changes to some figures that had previously been marked as provisional.

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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[20] https://www.gov.uk/government/statistics/uk-service-personnel-medical-discharges-background-quality-report

Contact Us

Defence Statistics welcome feedback on our statistical products. If you have any comments or questions about this publication or about our statistics in general, you can contact us as follows:

Defence Statistics (Health)   Telephone: 030 6798 4423
                                       Email: DefStrat-Stat-Health-PQ-FOI@mod.uk

If you require information which is not available within this or other available publications, you may wish to submit a Request for Information under the Freedom of Information Act 2000 to the Ministry of Defence. For more information, see:
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Other contact points within Defence Statistics are:

Defence Expenditure Analysis	030 6793 4531	DefStrat-Econ-ESES-DEA-Hd@mod.uk
Price Indices	030 6793 2100	DefStrat-Econ-ESES-PI-Hd@mod.uk
Naval Service Manpower	023 9254 7426	DefStrat-Stat-Navy-Hd@mod.uk
Army Manpower	012 6488 6175	DefStrat-Stat-Army-Hd@mod.uk
RAF Manpower	014 9449 6822	DefStrat-Stat-Air-Hd@mod.uk
Tri-Service Manpower	020 7807 8896	DefStrat-Stat-Tri-Hd@mod.uk
Civilian Manpower	020 7218 1359	DefStrat-Stat-Civ-Hd@mod.uk
Health Information	030 6798 4423	DefStrat-Stat-Health-Hd@mod.uk

If you wish to correspond by mail, our postal address is:
        Defence Statistics (Branch)
        Ministry of Defence, Main Building
        Floor 3 Zone K
        Whitehall
        London
        SW1A 2HB

For general MOD enquiries, please call: 020 7218 9000

For press enquiries, please call our Press Office: 020 7218 3253