



Ministry  
of Defence

## Annual Medical Discharges in the UK Regular Armed Forces 2009/10 - 2013/14

16 July 2015 (Revised)

### Issued By:

Defence Statistics (Health)  
Abbey Wood (North)  
Oak 0 West #6028  
Bristol  
BS34 8JH

### Enquiries

Press Office:  
020 721 83253

### Statistical Enquiries:

Head of Health  
Tel: 03067984423  
Fax: 0117 9319632  
[DefStrat-Stat-Health-PQ-FOI@mod.uk](mailto:DefStrat-Stat-Health-PQ-FOI@mod.uk)

### Internet:

<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>

### Feedback is Welcome

If you have any comments or questions about this publication or about Defence Statistics in general, you can contact us as follows:

### E-mail:

[DefStrat-Stat-Enquiries-Mailbox@mod.uk](mailto:DefStrat-Stat-Enquiries-Mailbox@mod.uk)

Would you like to be added to our contact list, so that we can inform you about updates to these statistics and consult you if we are thinking of making changes? You can subscribe to updates by emailing:

[DefStrat-Stat-Health-PQ-FOI@mod.uk](mailto:DefStrat-Stat-Health-PQ-FOI@mod.uk)

## INTRODUCTION

1. This report provides statistical information on medical discharges among UK Regular Service personnel during the five financial years 2009/10 - 2013/14. Each of the three Services are presented separately, Naval Service (includes Royal Navy and Royal Marines), Army and RAF, and information has been provided on:

- Key socio-demographic factors, Rank and training status
- The principal and contributory causes leading to discharge

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

3. Medical discharges in the UK Armed Forces involve a series of processes, at times complex, which differ in each Service to meet their specific employment requirements. Due to these differences comparisons between the single Service statistics are judged to be invalid.

4. Defence Statistics have produced this revised edition of this report to rectify errors in the previous edition. These were a result of coding errors in the spreadsheet used to generate the report and more detail can be found in paragraphs 15 and 16 and **Annex A**.

## KEY POINTS

5. For all three Services:

- The most common principal cause of medical discharge in the reporting period was musculoskeletal disorders and injuries.
- The second most common principal cause of medical discharge was Mental and behavioural disorders.

6. Across all three Services for the period 1 April 2009 to 31 March 2014, certain demographic groups were at a higher risk of being medically discharged; females and other ranks. For the Army and RAF, untrained personnel were also at a higher risk of being medically discharged.

7. The rate of medical discharges for the Army has been increasing from 2009/10 (6.1 per 1,000 personnel) to 2013/14 (22.6<sup>f,p</sup> per 1,000 personnel)

8. The rate of medical discharges in 2013/14 for the Naval Service (9.6 per 1,000 personnel) and the RAF (4.2 per 1,000 personnel) has decreased from the previous year. However, the rate of medical discharge in 2013/14 for both the Naval Service and the RAF remains higher than the rate seen in 2009/10 and 2010/11.

9. During the period 1 April 2009 to 31 March 2014, 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 into consideration (principal and contributory) for all three Services the most common cause was musculoskeletal disorders and injuries. Mental and behavioural disorders was the second most common cause of medical discharges in the Naval Service and RAF; however in the Army the second most common cause of medical discharge was factors influencing health status.

## **Background**

10. 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<sup>a</sup> 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 report focuses exclusively on medical discharges that have actually occurred. Personnel discharged under administrative categories on medical grounds are not defined as medical discharges and thus are not included in this report.

11. Medical boards that lead to medical discharge are run by consultant occupational physicians, however information is provided by a number of different clinical specialists which is taken into consideration along with an assessment of the individual's functional capacity and ability to be deployed/employed in a suitable environment. 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 when administering a medical discharge introduce a series of time lags, as well as impact on the quality of data recorded.

12. Medical Boards do not make decisions on attributability to Service. These decisions are made by administrators of the MOD pension and compensation schemes at the Defence Business Services (DBS) 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>.

13. This report has been provided in response to regular requests for information from internal stakeholders, the public and the media about UK Service personnel medically discharged from the Armed Forces.

## **Changes since the previous publication**

14. The MOD routinely receive requests, for additional statistics on medical discharge not currently covered by the Annual Medical Discharges in the UK Regular Armed Forces Official Statistic. In order to ensure that this report covers relevant topics of interest to the wider public, the latest edition includes:

- a) The number of personnel medically discharged with a particular medical condition by Service. Previous reports have currently only covered the principal condition of medical discharge; however, over half of personnel medically discharged have more than one condition (principal or contributory) affecting their ability to continue their role.
- b) The breakdown of Naval Service into Royal Navy and Royal Marines
- c) The breakdown of the proportion of more detailed specific conditions associated with discharge that are of public interest.

---

<sup>a</sup> As laid down in JSP 346 and/or the single Services retention standards for their career group.

## Changes to the revised report

15. There are two instances in which the relationship between demographic groups is altered by the revisions in this updated report:

- a) The rate of trained UK Regular Naval Service medical discharges in 2012/13 is now higher than the rate of untrained UK Regular Naval Service medical discharges.
- b) The rate of female UK Regular Army medical discharges in 2013/14 is now the same as the rate for male UK Regular Army medical discharges. In the original report, females had a rate of medical discharge 0.1 per 1,000 personnel higher than males in 2013/14.

16. All revisions from the original report have been annotated with a "r" marker. Further information on the revisions made to this report can be found in **Annex A**.

## DATA, DEFINITIONS AND METHODS

17. 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.

18. 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.

19. 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.

### **Data sources**

20. Data are compiled by Defence Statistics from two sources:

- a) 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.
- b) 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 F Med 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.

### **Population**

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

22. Defence Statistics do receive some F Med 23's for Reservist personnel, however the number and coverage is currently unknown. Therefore this report does not cover the following Reservist personnel: Naval Activated Reservists; known members of the Home Service of the Royal Irish

Regiment, mobilised Reservists, full time Reservists and the Army Reserves (previously Territorial Army) and; RAF Reservists. However, there may be a presence of a small unknown number of Reservist personnel within the medical discharge dataset which may cause a small bias in the results. This is due to the differing demographic properties (age, gender, rank, training status etc) of Reservist personnel and Regular personnel.

23. Personnel described in this report as “trainees” or “untrained” are those classified as under training or artificer candidate for Naval Service and Phase 1 and 2 training for Army and RAF.

24. 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.

25. In 2013/14, Defence Statistics did not receive the FMED 23 forms for 195 trained Regular Army personnel listed as medical discharges on JPA. In previous reports, the Army Personnel Centre (APC) have confirmed whether these cases are medical discharges and retrieved any FMED23 forms not received by Defence Statistics. This service is no longer provided by APC and we are therefore unable to determine whether these personnel have medically discharged or the principal and contributory causes for their discharge. Defence Statistics intend to update these figures by pursuing alternative lines of obtaining this information and therefore all Army figures provided for 2013/14 are provisional and have been annotated in the tables with a "p".

### ***Cause coding of medical conditions***

26. The International Classification of Diseases & Related Health Problems version 10 (ICD 10) was used to classify medical discharges. As a result of public interest some ICD-10 groups have been provided in more detail allowing the presentation of specific conditions.

27. At the point of medical board, personnel have the opportunity to withhold or give their consent to their medical information relating to the medical board being forwarded to Defence Statistics. Should they withhold their consent they will still be counted as a medical discharge as indicated on JPA, however their reason for medical discharge will not be held by Defence Statistics, therefore their principal or contributory conditions leading to medical discharge are not presented. In Tables 2, 6 and 10 these are identified by the field labelled 'Withheld Consent'.

28. There are also occasions when Defence Statistics have been unable to locate the medical documents/FMED 23s to enable the medical discharge record to be cause coded (ICD-10 Coded). In Tables 2, 6 and 10 these records are identified by the field labelled 'No Details held on principal condition for medical boarding'. For the current year (2013/14) Defence Statistics were unable to obtain 195 FMED 23 forms for Regular Army personnel. In previous years, missing Army forms have been sourced from the Army Personnel Centre (APC). However, APC were unable to provide this information for 2012/13 or 2013/14, resulting in the increase in Army medical discharges without a known cause code.

29. Principal condition is the first principal ICD 10 code on the medical discharge documents (FMED 23). Contributory cause contains all other principal conditions and any contributory conditions on the medical discharge paper (FMED 23).

30. In past reports, this publication has only included the principal condition leading to discharge i.e. the condition that had the greatest effect on their ability to continue their service. Since over 50% of Armed Forces personnel medically discharged have more than one condition affecting their ability to continue their role in the Armed Forces (both principal and contributory), the addition of contributory causes provides a more comprehensive picture.

31. The addition of contributory cause is intended to provide information on the total number of personal medically discharged from service that had their ability to perform their duties affected by specific medical conditions. It can not be used to identify the complexity of conditions for which

personnel have been medically discharged, nor to identify relationships between conditions suffered by personnel medically discharged from service (co-morbidity).

32. It should be noted that the ICD 10 code group factors influencing health status (Z00 - Z99) forms a larger proportion of contributory cause codes than principal cause codes. This is due to this category encompassing historic medical conditions that have affected an individual's ability to perform their duties.

### ***Statistical methods***

#### *Crude rates*

33. The 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<sup>b</sup>).

34. Crude rates enable comparison between groups by removing the issue of different populations at risk (group sizes). The rates in this report present the number of personnel per 1,000 on strength that are medically discharged each year. 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.

35. Crude rates do not take the changing demographic profile (e.g. the gender and age structure) into account.

36. Crude rates are presented overall and for 'ranks' and 'training status' for each individual service each year.

#### *Standardised rates*

37. Only the rates provided for the five year reporting period (as opposed to those provided for the individual years) have been standardised. Unlike crude rates, standardised rates take into account the differing demographic structure of populations. The rates have been standardised to enable comparison to rates from the most recent year.

38. An outline of how these rates are calculated is provided below:

- Gender standardised rates are presented for age groups, enabling comparisons to be made that take into account the gender profile of each age group. The chosen 'standard' population year is 2013/14.
- Age standardised rates are presented for males and females, enabling comparisons to be made that take into account the age profile of each gender. The chosen 'standard' population year is 2013/14.
- Demographic specific rates are provided for 'ranks' and 'training status' and are based on the appropriate denominator of the personnel at risk for the category being analysed (e.g. rates of discharge among Officers are based on the total Officer strength).

39. Please note that the comparison of standardised rates between this report and previous Official Statistic releases is not advisable, as the population used to standardise the rates differs between reports.

---

<sup>b</sup> The average number of Service personnel on strength in each year is calculated using the 13 month average. i.e. For RAF 13/14 the number of RAF personnel at the first of each month from April 2013 to, and including, April 2014 are summed and divided by 13.

#### *95% Confidence intervals*

40. Confidence intervals (CI) are a statistical device designed to provide a measure of the likely variation of a given statistic. They provide the range of values within which we expect to find the actual value of the variable. In this report, confidence intervals have been calculated with a probability of 95%.

#### *Z test for independent proportions*

41. The z test for independent proportions is utilised 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.

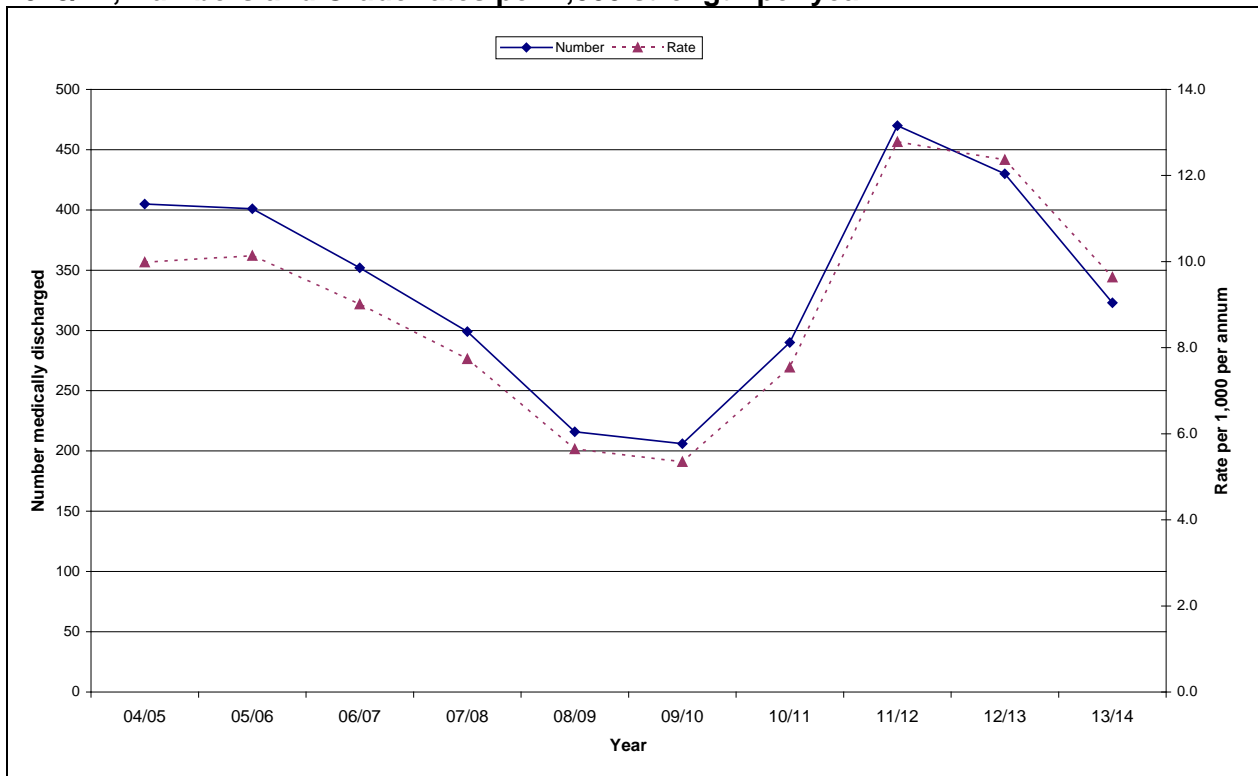
#### *Tables*

42. The tables in this report have been scrutinised to ensure individual identities have not been revealed inadvertently. In line with Defence Statistics' rounding policy for health statistics (May 2009), and in keeping with the Office for National Statistics Guidelines, all numbers less than five have been suppressed and presented as '~'. Where there is only one cell in a row or column that is less than five, the next smallest number (or numbers where there are tied values) has also been suppressed so that numbers cannot simply be derived from totals.

## FINDINGS

### Naval Service

**Figure 1: UK Regular Naval Service medical discharges, by financial year, 2004/05 - 2013/14, Numbers and Crude rates per 1,000 strength per year**



Source: FMED 23 & JPA

43. **Figure 1** shows the number and rate of personnel medically discharged from UK Regular Naval Service from 1 April 2004 to 31 March 2014, split by financial year. The graph shows a decrease in both the number and crude rate of medical discharges between 2005/06 and 2009/10. Medical discharges increased in rate from 2010/11 to 2011/12. From 2012/13 onwards both the number and rate of medical discharges has declined: however, the rate (9.6 per 1,000 personnel) remains above the level seen for the overall period (9.4 per 1,000 personnel).

44. The decrease in the number and rate between 2005/06 and 2009/10 may be partly due to the Service endeavouring to retain seriously injured personnel if there was a role for them to fulfil, or if retention was in the interest of both the individual and the Service<sup>c</sup>. The rise between 2009/10 and 2011/12 is likely to be a result of the improved management of the recovery care pathway, the completion of treatment and the restricted number of non-deployable roles available with the Naval Service.

<sup>c</sup> As personnel wounded, injured or sick and those requiring long term (greater than three months) support for medical, welfare or disciplinary reasons are assigned to a Recovery Cell, Troop or HASLER Company (Coy)

45. **Table 1** presents numbers and rates of medical discharges among UK Regular Naval Service personnel by age group, gender, rank, training status and financial year for the five-year reporting period 2009/10 - 2013/14.

**Table 1: UK Regular Naval Service medical discharges by age group<sup>1</sup>, gender<sup>1</sup>, rank<sup>1</sup> and training status<sup>1</sup>, 2009/10 - 2013/14, Numbers<sup>2</sup> and Rates<sup>3</sup> per 1,000 strength**

	All Years		2009/10		2010/11		2011/12		2012/13		2013/14	
	n	r	n	r	n	r	n	r	n	r	n	r
<b>All</b>	<b>1,719</b>	<b>9.4</b>	<b>206</b>	<b>5.3</b>	<b>290</b>	<b>7.5</b>	<b>470</b>	<b>12.8</b>	<b>430</b>	<b>12.4</b>	<b>323</b>	<b>9.6</b>
<b>Under 20</b>	<b>18</b>	<b>2.4</b>	~	2.5	~	2.1	~	1.7	~	5.9	~	1.2
<b>20-24</b>	<b>308</b>	<b>7.6</b>	48	5.4	56	6.4	83	10.2	70	9.3	51	7.2
<b>25-29</b>	<b>480</b>	<b>11.4</b>	51	6.1	77	8.9	128	14.9	104	12.5	120	14.5
<b>30-34</b>	<b>345</b>	<b>12.4</b>	29	5.7	48	9.0	100	17.6	102	17.4	66	11.1
<b>35-39</b>	<b>276</b>	<b>10.7</b>	33	5.3	58	9.9	69	13.4	75	16.8	41	10.1
<b>40-44</b>	<b>179</b>	<b>8.4</b>	24	5.6	26	5.9	54	12.0	45	10.6	30	7.8
<b>45-49</b>	<b>88</b>	<b>6.9</b>	12	4.9	16	6.3	24	9.2	25	9.8	11	4.4
<b>50+</b>	<b>25</b>	<b>5.4</b>	~	3.6	~	5.5	~	10.8	~	4.2	~	2.9
<b>Male</b>	<b>1,475</b>	<b>9.1</b>	181	5.2	243	7.0	395	11.8	377	11.9	279	9.1
<b>Female</b>	<b>244</b>	<b>14.0</b>	25	6.8	47	12.9	75	21.9	53	16.7	44	14.5
<b>Officers</b>	<b>111</b>	<b>3.1</b>	10	1.3	19	2.5	32	4.4	28	4.0	22	3.2
<b>Other ranks</b>	<b>1,608</b>	<b>11.0</b>	196	6.3	271	8.8	438	14.9	402	14.5	301	11.3
<b>Trained</b>	<b>1,577</b>	<b>9.4</b>	162	4.7	269	7.6	449	13.0	399	12.4	298	9.7
<b>Untrained</b>	<b>142</b>	<b>9.6</b>	44	11.3	21	6.6	21	9.3	31	11.9	25	8.8
<b>Royal Navy</b>	<b>1,175</b>	<b>8.2</b>	129	4.2	225	7.4	332	11.5	262	9.7	227	8.8
<b>Royal Marines</b>	<b>544</b>	<b>13.7</b>	77	9.7	65	8.0	138	17.2	168	21.6	96	12.4

Source: FMED 23 and JPA

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

<sup>2</sup>Data presented as “~” has been suppressed in accordance with Defence Statistics’ rounding policy (see paragraph 42).

<sup>3</sup>Age and gender standardised rates are presented for each age group and gender; rank and training status specific rates are presented for each rank and training status; overall crude rates are presented for each financial year (see paragraphs 33-39).

<sup>r</sup>Indicates a change in previously published data

46. During the five-year period 2009/10 - 2013/14, a total of 1,719 Naval Service personnel were medically discharged, at an overall crude rate of 9.4 per 1,000 personnel.

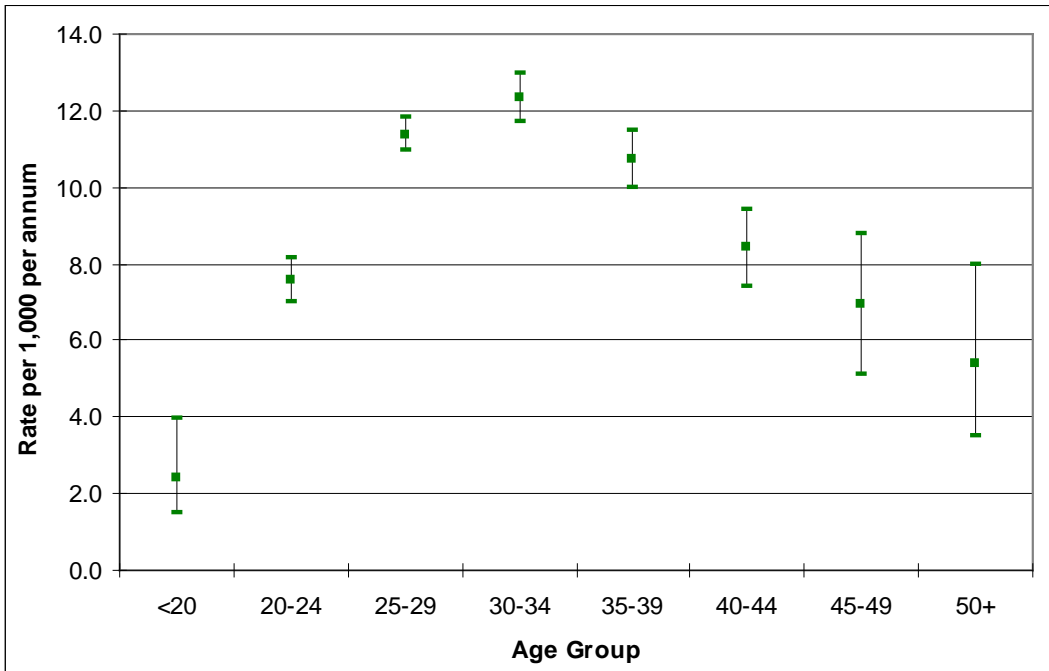
47. During the latest financial year 2013/2014 there was a drop in both the overall number and the crude rate of Naval Service personnel medically discharged from 2012/13.

48. The most noticeable changes in 2013/14 were:

- The only age group that showed an increase in the rate of medical discharge in 2013/4 was personnel aged 25-29. This was a reversal of the overall trend demonstrated in Naval Service personnel during 2013/14
- The rate of medical discharges for Royal Marines declined from 21.6<sup>r</sup> per 1,000 in 2012/13 to 12.4 per 1,000 in 2013/14; however, the rate remained higher than was seen in 2009/10 and 2010/11.

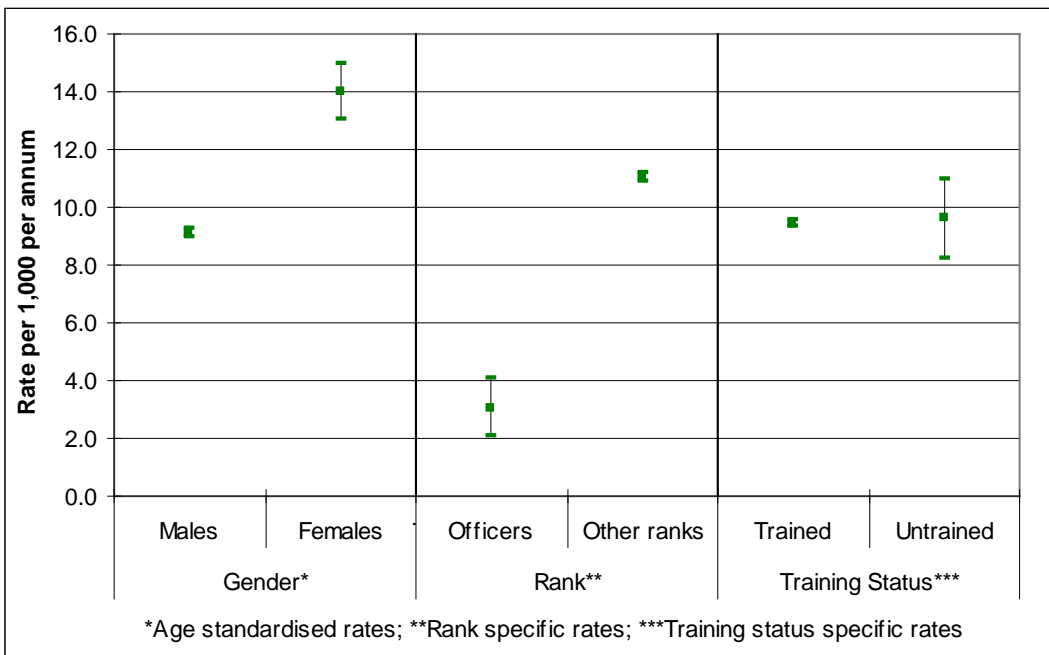


**Figure 2: UK Regular Naval Service medical discharges by age group, 2009/10 - 2013/14, Annualised gender standardised rates per 1,000 strength and 95% CI**



Source: FMED 23 & JPA

**Figure 3: UK Regular Naval Service medical discharges by gender, rank and training status, 2009/10 - 2013/14, Annualised gender standardised rates per 1,000 strength and 95% CI**



Source: FMED 23 & JPA

49. **Figure 2** shows that during the five-year period 2009/10 - 2013/14, the gender standardised rates of medical discharges for personnel aged between 25 and 39 were higher than the other age groups. The rates for those aged between 25 and 39 is thought to be the result of a number of factors:

- a) Naval Service personnel are required to be fit for service at sea, as medical conditions that could be managed on land can be more problematic at sea. It is therefore felt that, as a rule, it is only when personnel are older that the manning situation can only allow for some personnel to be retained on shore without this strict criterion, which may account for the lower medical discharge rate among these personnel.

b) The correlation between age and rank; personnel in higher ranks are more likely to be retained in a shore role than lower ranked personnel.

c) The increased skill at specialist trades that comes with time served in the Naval Service may increase the value of personnel in shore based roles, increasing the likelihood that they may be retained in service.

50. This may account for the lower medical discharge rate among personnel aged 40 and over.

51. **Figure 3** shows that during the five-year period 2009/10 - 2013/14:

- The age standardised rate of medical discharges for female personnel (14.0<sup>f</sup> per 1,000 personnel, 95%CI=13.1-15.0<sup>f</sup>) was significantly<sup>d</sup> higher than for male personnel (9.1 per 1,000 personnel, 95%CI=9.0-9.2<sup>f</sup>).
- The rank specific rate of medical discharges for Other Ranks (11.0 per 1,000 personnel, 95%CI=10.9-11.2<sup>f</sup>) was significantly<sup>e</sup> higher than for Officers (3.1 per 1,000 personnel, 95%CI=2.1-4.0).
- The training status specific rate of medical discharges showed no significant<sup>f</sup> difference for untrained personnel (9.6<sup>f</sup> per 1,000 personnel, 95%CI=8.2-11.0<sup>f</sup>) and for trained personnel (9.4 per 1,000 personnel, 95%CI=9.3-9.6<sup>f</sup>).

52. **Table 2** presents number and proportion<sup>g</sup> of medical discharges among UK Regular Naval Service personnel by principal ICD 10 cause code group and financial year for the five-year period 2009/10 - 2013/14.

---

<sup>d</sup> Tested using a z-test for proportions at a 95% confidence level

<sup>e</sup> Tested using a z-test for proportions at a 95% confidence level

<sup>f</sup> Tested using a z-test for proportions at a 95% confidence level

<sup>g</sup> As a proportion of all cause coded discharges.

**Table 2: UK Regular Naval Service medical discharges by principal ICD 10 cause code group, 2009/10 - 2013/14, Numbers<sup>1</sup> and Percentages<sup>2</sup>**

	All		2009/10		2010/11		2011/12		2012/13		2013/14	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>All Causes of medical discharge</b>	<b>1,719</b>		<b>206</b>		<b>290</b>		<b>470</b>		<b>430</b>		<b>323</b>	
<b>All Cause Coded medical discharges</b>	<b>1,716</b>	<b>100</b>	<b>205</b>	<b>100</b>	<b>290</b>	<b>100</b>	<b>469</b>	<b>100</b>	<b>429</b>	<b>100</b>	<b>323</b>	<b>100</b>
Infectious and parasitic diseases (A00 - B99)	11	<1	~	<1	~	<1	5	1	~	<1	~	<1
Neoplasms (C00 - D48)	22	1	~	<1 <sup>f</sup>	~	1	7	1	6	1	~	1
Blood disorders (D50 - D89)	13	<1	~	<1 <sup>f</sup>	~	1	~	<1	~	<1	~	<1
Endocrine, nutritional and metabolic diseases (E00 - E90)	40	2	9	4 <sup>f</sup>	5	2	8	2	9 <sup>f</sup>	2	9	3
- Of Which diabetes (E10-E14)	32	2	~	3 <sup>f</sup>	~	1	~	1	8	2	~	2
- Of which insulin-dependent (E10)	20	1	~	2 <sup>f</sup>	~	<1	~	<1	5	1	5 <sup>f</sup>	2
- Of which non-Insulin-dependent (E11)	12	<1	~	1 <sup>f</sup>	~	<1	~	<1	~	<1	~	<1
Mental and behavioural disorders (F00 - F99)	183	11	21	10 <sup>f</sup>	42	14	39	8	45	10	36	11
- Of which Mood disorders (F30 - F39)	75	4	9	4 <sup>f</sup>	17	6	16	3	18	4	15	5
- Of Which depression (F32 & F33)	67	4	8	4 <sup>f</sup>	16	6	14	3	16	4	13	4
- Of which Neurotic, stress related and somatoform disorders (F40 - F48)	80	5	7	3 <sup>f</sup>	19	7	17	4	24	6	13	4
- Of which post-traumatic stress disorder (PTSD) (F431)	35	2	~	1 <sup>f</sup>	7 <sup>f</sup>	2	6	1	14	3	~ <sup>f</sup>	2
- Of which adjustment disorder (F432)	11	<1	~	<1 <sup>f</sup>	~	1	~	<1	~	<1	~	<1
Nervous system disorders (G00 - G99)	59	3	12	6 <sup>f</sup>	11	4	17	4	11	3	8	2
- Of which epilepsy (G40)	18	1	~	2 <sup>f</sup>	~	1	5	1	5	1	~	<1
Eye and adnexa diseases (H00 - H59)	24	1	~	<1 <sup>f</sup>	~	1	7	1	7	2	~	1
- Of which blindness, low vision and visual disturbance (H53 & H54)	6	<1	0	0 <sup>f</sup>	~	<1	~	<1	~	<1	0	0
Ear and mastoid process diseases (H60 - H95)	88	5	7	3 <sup>f</sup>	5 <sup>f</sup>	2	32	7	25 <sup>f</sup>	6	19	6
- Of which hearing loss (H833 & H90 - H91)	82	5	~	3 <sup>f</sup>	~	1	30	6	23	5	18	6
- Of which noise-induced hearing loss (H833)	49	3	~	1	~	1	16	3	18	4	9	3
- Of which tinnitus (H931)	0	0	0	0 <sup>f</sup>	0	0	0	0	0	0	0	0
Circulatory system disorders (I00 - I99)	43	3	7	3	10	3	13 <sup>f</sup>	3	6 <sup>f</sup>	1	7	2
Respiratory system disorders (J00 - J99)	34	2	7 <sup>f</sup>	3 <sup>f</sup>	5	2	12	3	5 <sup>f</sup>	1	5	2
- Of which asthma (J45 & J46)	30	2	~	2	~	2	11 <sup>f</sup>	2	~	<1	~ <sup>f</sup>	2
Digestive system disorders (K00 - K93)	46	3	~	2 <sup>f</sup>	~ <sup>f</sup>	3	14	3	12	3	~	2
Skin and subcutaneous tissue diseases (L00 - L99)	45	3	6 <sup>f</sup>	3 <sup>f</sup>	7	2	14 <sup>f</sup>	3	12	3	6 <sup>f</sup>	2
Musculoskeletal disorders (M00 - M99) and injuries (S00 - T98)	996	58	116	57	166	57	262	56	256	60	196	61
- Of which Injuries and disorders of the knee <sup>3</sup>	283	16	26	13 <sup>f</sup>	43 <sup>f</sup>	15	90	19	77 <sup>f</sup>	18	47	15
- Of which knee pain (M2556)	102	6	13	6 <sup>f</sup>	13	4	31	7	25	6	20	6
- Of which back pain (M549)	140	8	20	10 <sup>f</sup>	26	9	26	6	39	9	29	9
- Of which low back pain (M544-5)	115	7	15	7	20	7	22	5	33	8	25	8
- Of which heat injury (T67)	0	0	0	0 <sup>f</sup>	0	0	0	0	0	0	0	0
- Of which cold injury (T68 & T69)	7	<1	~	2 <sup>f</sup>	~	<1	~	<1	~	<1	0	0
Genitourinary system diseases (N00 - N99)	16	<1	0	0 <sup>f</sup>	~	<1	8	2	5	1	~	<1
Pregnancy, childbirth and puerperium (O00 - O99)	0	0	0	0 <sup>f</sup>	0	0	0	0	0	0	0	0
Congenital malformations (Q00 - Q99)	11	<1	~	<1	~	<1	~	<1	~	<1	~	<1
Clinical and laboratory findings (R00 - R99)	61	4	7	3	9	3	19	4	16	4	10	3
Factors influencing health status (Z00 - Z99)	24	1	~	<1 <sup>f</sup>	6	2	6	1	8	2	~	<1
No details held on principle condition for medical boarding	2		1		0		1		0		0	
Withheld consent	1		0		0		0		1		0	

Source: FMED 23

<sup>1</sup> Data presented as “~” has been suppressed in accordance with Defence Statistics’ rounding policy (see paragraph 42).

<sup>2</sup> Data presented as “<1%” represent a value of greater than 0% but smaller than 1%

<sup>3</sup> Injuries and disorders of the knee have been compiled using ICD 10 codes M17, M22, M23, M2406, M2416, M2436, M2446, M2536, M2556, M2566, M2586, M2596, M7046, M7126, M7636, M7656, M925, S800, S820, S83, S89.

<sup>f</sup> Indicates a change in previously published data

53. During the five-year period the most common principal cause of medical discharge for the Naval Service was musculoskeletal disorders and injuries with 58% (n=996) of all cause coded medical discharges.

- Injuries and disorders of the knee accounted for 28% (n=283) of all musculoskeletal disorders and injuries and 16% of all cause coded medical discharges.
- Back pain accounted for 14% (n=140) of all musculoskeletal disorders and injuries, of which low back pain accounted for 82% (n=115).

54. Musculoskeletal injuries and disorders, as a percentage of all cause coded medical discharges, has been increasing from 2009/10 (57%); it currently accounts for 61% of all cause coded medical discharges in 2013/14.

55. The second most common cause of medical discharge was mental and behavioural disorders which accounted for 11% (n=183) of all cause coded medical discharges over the five year period. The majority of mental and behavioural disorders were the result of neurotic disorders (n=80, 44%) and mood disorders (n=75, 41%).

- Of the neurotic disorders the most common was post-traumatic stress disorder (PTSD) (n=35, 44%). PTSD accounted for 2% of all cause coded medical discharges.
- Depression accounted for 89% (n=67) of all mood disorders and 4% of all cause coded medical discharges.

56. As a percentage of all cause coded medical discharges, ear and mastoid process has increased from 3%<sup>f</sup> in 2009/10 to 6% in 2013/14. The change over this time period is likely to reflect changes in policy and practices and the work underway by the Defence Hearing Working Group.

Hearing loss accounted for 93% (n=82) of all diseases of the ear and mastoid process between 2009/10 and 2013/14, of which noise-induced hearing loss accounted for 60% (n=49).

57. **Table 3** presents the number of principal and contributory causes for medical discharges among UK Regular Naval Service personnel by ICD 10 cause code group and financial year for 2009/10 - 2013/14.

**Table 3: UK Regular Naval Service, principal and contributory<sup>1</sup> causes for medical discharges, by ICD 10 cause code group and financial year, 2009/10 - 2013/14, Numbers<sup>2,4</sup> and Percentages<sup>5</sup>**

Cause Code Groupings	All		2009/10		2010/11		2011/12		2012/13		2013/14	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>All Causes of medical discharge</b>	<b>1,719</b>		<b>206</b>		<b>290</b>		<b>470</b>		<b>430</b>		<b>323</b>	
<b>All Cause Coded medical discharges</b>	<b>1,716</b>		<b>205</b>		<b>290</b>		<b>469</b>		<b>429</b>		<b>323</b>	
Infectious and parasitic diseases (A00 - B99)	11	<1	~	<1	~	<1	5	1	~	<1	~	<1
Neoplasms (C00 - D48)	29	2	~	<1	~	1	11	2	7	2	5	2
Blood disorders (D50 - D89)	34	2	~	1	7	2	10	2	8	2	~	2
Endocrine, nutritional and metabolic diseases (E00 - E90)	70	4	14	7	10	3	13	3	17	4	16	5
- Of Which diabetes (E10-E14)	39	2	10	5	~	1	~	1	10	2	8	2
- Of which insulin-dependent (E10)	21	1	~	2	~	1	~	<1	5	1	5	2
- Of which non-Insulin-dependent (E11)	18	1	6	3	~	<1	~	<1	5	1	~	<1
Mental and behavioural disorders (F00 - F99)	280	16	33	16	54	19	75	16	61	14	57	18
- Of which Mood disorders (F30 - F39)	131	8	14	7	28	10	30	6	31	7	28	9
- Of Which depression (F32 & F33)	116	7	13	6	27	9	26	6	27	6	23	7
- Of which Neurotic, stress related and somatoform disorders (F40 - F48)	137	8	13	6	24	8	35	7	36	8	29	9
- Of which post-traumatic stress disorder (PTSD) (F431)	59	3	~	1	~	3	12	3	19	4	15	5
- Of which adjustment disorder (F432)	23	1	~	2	~	1	~	~	<1	~	~	1
Nervous system disorders (G00 - G99)	125	7	15	7	21	7	29	6	35	8	25	8
- Of which epilepsy (G40)	19	1	~	2	~	1	5	1	6	1	~	<1
Eye and adnexa diseases (H00 - H59)	38	2	~	<1	~	2	10	2	12	3	~	2
- Of which blindness, low vision and visual disturbance (H53 & H54)	13	<1	0	0	5	2	~	<1	~	<1	~	<1
Ear and mastoid process diseases (H60 - H95)	211	12	14	7	21	7	51	11	75	17	50	15
- Of which hearing loss (H833 & H90 - H91)	200	12	14	7	20	7	48	10	69	16	49	15
- Of which noise-induced hearing loss (H833)	82	5	~	1	~	3	19	4	30	7	22	7
- Of which tinnitus (H931)	92	5	~	2	~	<1	29	6	34	8	22	7
Circulatory system disorders (I00 - I99)	85	5	13	6	16	6	26	6	15	3	15	5
Respiratory system disorders (J00 - J99)	60	3	9	4	10	3	18	4	12	3	11	3
- Of which asthma (J45 & J46)	54	3	8	4	10	3	17	4	11	3	8	2
Digestive system disorders (K00 - K93)	69	4	6	3	10	3	20	4	23	5	10	3
Skin and subcutaneous tissue diseases (L00 - L99)	67	4	9	4	12	4	21	4	18	4	7	2
Musculoskeletal disorders (M00 - M99) and injuries (S00 - T98)	1,160	68	137	67	201	69	305	65	301	70	216	67
- Of which Injuries and disorders of the knee <sup>3</sup>	369	22	41	20	62	21	112	24	95	22	59	18
- Of which knee pain (M2556)	161	9	28	14	22	8	43	9	39	9	29	9
- Of which back pain (M549)	214	12	33	16	32	11	44	9	63	15	42	13
- Of which low back pain (M544-5)	181	11	27	13	24	8	38	8	54	13	38	12
- Of which heat injury (T67)	~	<1	0	0	0	0	0	0	~	<1	0	0
- Of which cold injury (T68 & T69)	14	<1	6	3	~	<1	~	<1	~	<1	~	<1
Genitourinary system diseases (N00 - N99)	27	2	~	<1	~	<1	10	2	8	2	7	2
Pregnancy, childbirth and puerperium (O00 - O99)	0	0	0	0	0	0	0	0	0	0	0	0
Congenital malformations (Q00 - Q99)	21	1	~	1	6	2	5	1	~	1	~	<1
Clinical and laboratory findings (R00 - R99)	101	6	9	4	15	5	33	7	25	6	19	6
Factors influencing health status (Z00 - Z99)	214	12	15	7	27	9	73	16	62	14	37	11
No details held on principle condition for medical boarding	2		1		0		1		0		0	
Withheld consent	1		0		0		0		1		0	

Source: FMED 23

<sup>1</sup> Personnel are only counted once per cause code grouping

<sup>2</sup> Personnel may have multiple contributory ICD 10 codes in different cause code groups associated with their medical discharge. Therefore totals may not match those provided in Tables 1-3

<sup>3</sup> Injuries and disorders of the knee have been compiled using ICD 10 codes M17, M22, M23, M2406, M2416, M2436, M2446, M2536, M2556, M2566, M2586, M2596, M7046, M7126, M7636, M7656, M925, S800, S82, S83, S89.

<sup>4</sup> Data presented as “~” has been suppressed in accordance with Defence Statistics’ rounding policy (see paragraph 42).

<sup>5</sup> Data presented as “<1%” represent a value of greater than 0% but smaller than 1%

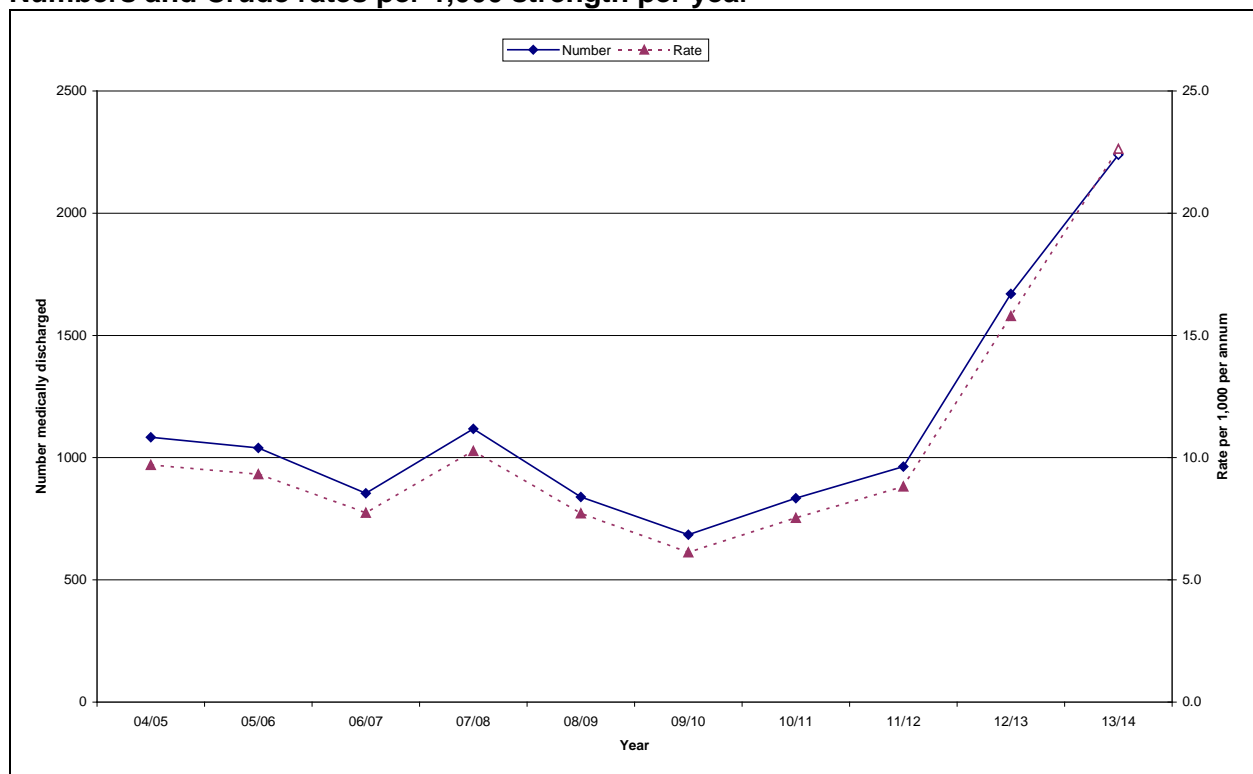
58. The most common principal and contributory cause grouping for Regular Naval Service personnel was musculoskeletal disorders and injuries (68% of all cause coded UK Regular Naval Service medical discharges between 2009/10 and 2013/14). The two most prominent ICD 10 codes within this cause grouping were low back pain (M544-5, n=181) and knee pain (M2556, n=161).

59. The second most common principal and contributory cause grouping for Regular Naval Service personnel was mental and behavioural disorders, accounting for 16% of all cause coded UK Regular Naval Service medical discharges between 2009/10 and 2013/14. The majority of mental and behavioural disorders were the result of neurotic disorders (n=137) and mood disorders (n=131).

60. The number and proportion of personnel medically discharged with a principal or contributory cause of ear and mastoid process disease has seen an increase, from 14 (7%) in 2009/10 to 50 (15%) in 2013/14. This was due to an increase in the number medical discharges with a contributory cause of hearing loss (H90-H91), noise induced hearing loss (H833) and tinnitus (H931)

## Army

**Figure 4: UK Regular Army medical discharges, by financial year, 2004/05 - 2013/14, Numbers and Crude rates per 1,000 strength per year**



Source: FMED 23 & JPA

Data for 2013/14 is provisional and subject to change

61. **Figure 4** shows the number and rate of personnel medically discharged from UK Regular Army between 1 April 2004 and 31 March 2014, by financial year. The graph shows an increase in both the number and rate of medical discharges from 2009/10 to a high point in 2013/14. The largest year on year increase in rate was seen between 2011/12 and 2012/13 (80%)<sup>i</sup>.

62. The decrease in the number and rate between 2007/08 and 2009/10 may be partly due to the Service endeavouring to retain seriously injured personnel if there is a role for them to fulfil, or if retention is in the interest of both the individual and the Service<sup>h</sup>. The rise in the last three financial years is likely to be a result of the improved management of the recovery care pathway, the completion of treatment and the restricted number of non-deployable roles available with the Army.

63. **Table 4** presents numbers and rates of medical discharges among UK Regular Army personnel by age group, gender, rank, training status and financial year for the five-year reporting period 2009/10 - 2013/14.

<sup>h</sup> In February 2010 the Army Recovery Capability (ARC) was launched. The ARC ensures that wounded, injured, or sick personnel are focussed on achieving a successful outcome that is right for the individual and right for the Army. It ensures personnel who need it, have access to the key services and resources needed to help them return to duty or make a smooth transition into an appropriately skilled civilian life. The key services and resources are available to personnel from all three Services, including mobilised reservists

**Table 4: UK Regular Army medical discharges<sup>1</sup> by age group<sup>1</sup>, gender<sup>1</sup>, rank<sup>1</sup> and training status<sup>1</sup>, 2009/10 - 2013/14, Numbers<sup>2</sup> and Rates<sup>3</sup> per 1,000 strength**

	All Years		2009/10		2010/11		2011/12		2012/13		2013/14	
	n	r	n	r	n	r	n	r	n	r	n	r
<b>All</b>	<b>6,391<sup>P</sup></b>	<b>11.9<sup>r,P</sup></b>	<b>685</b>	<b>6.1</b>	<b>834</b>	<b>7.5</b>	<b>963</b>	<b>8.8</b>	<b>1,670</b>	<b>15.8<sup>r</sup></b>	<b>2,239<sup>P</sup></b>	<b>22.6<sup>r,P</sup></b>
<b>Under 20</b>	<b>871<sup>P</sup></b>	<b>19.6<sup>r,P</sup></b>	181	15.4	164	17.4	148	17.7 <sup>r</sup>	177	22.6 <sup>r</sup>	201 <sup>P</sup>	28.2 <sup>r,P</sup>
<b>20-24</b>	<b>1,770<sup>P</sup></b>	<b>12.9<sup>r,P</sup></b>	268	9.1	324	11.2	278	9.9	486	18.3 <sup>r</sup>	414 <sup>P</sup>	17.0 <sup>r,P</sup>
<b>25-29</b>	<b>1,573<sup>P</sup></b>	<b>12.7<sup>r,P</sup></b>	119	4.8	175	7.0	199	7.9	393	15.7 <sup>r</sup>	687 <sup>P</sup>	28.6 <sup>r,P</sup>
<b>30-34</b>	<b>1,042<sup>P</sup></b>	<b>11.3<sup>P</sup></b>	48	2.8	80	4.3	154	8.0	295	15.3 <sup>r</sup>	465 <sup>P</sup>	25.4 <sup>r,P</sup>
<b>35-39</b>	<b>608<sup>P</sup></b>	<b>8.3<sup>r,P</sup></b>	38	2.3	43	2.7	94	6.4	164	11.9 <sup>r</sup>	269 <sup>P</sup>	20.7 <sup>r,P</sup>
<b>40-44</b>	<b>379<sup>P</sup></b>	<b>9.2<sup>r,P</sup></b>	22	2.8	36	4.2	65	7.3	114	13.5 <sup>r</sup>	142 <sup>P</sup>	18.6 <sup>r,P</sup>
<b>45-49</b>	<b>85<sup>P</sup></b>	<b>5.9<sup>r,P</sup></b>	~	1.4	~	1.3	16	5.2	26	8.6	35 <sup>P</sup>	12.0 <sup>r,P</sup>
<b>50+</b>	<b>63<sup>P</sup></b>	<b>7.5<sup>P</sup></b>	~	3.0	~	4.6	9	5.1	15	8.9 <sup>r</sup>	26 <sup>P</sup>	16.3 <sup>r,P</sup>
<b>Male</b>	<b>5,828<sup>P</sup></b>	<b>11.7<sup>P</sup></b>	617	6.0	750	7.3	887	8.8	1,521	15.6 <sup>r</sup>	2,053 <sup>P</sup>	22.6 <sup>r,P</sup>
<b>Female</b>	<b>563<sup>P</sup></b>	<b>13.3<sup>P</sup></b>	68	8.0	84	9.9	76	8.9	149	17.5 <sup>r</sup>	186 <sup>P</sup>	22.6 <sup>r,P</sup>
<b>Officers</b>	<b>183<sup>P</sup></b>	<b>2.5<sup>P</sup></b>	29	2.0	28	1.9	28	1.9	45	3.1	53 <sup>P</sup>	3.9 <sup>r,P</sup>
<b>Other ranks</b>	<b>6,208<sup>P</sup></b>	<b>13.4<sup>r,P</sup></b>	656	6.8	806	8.4	935	9.9	1,625	17.8 <sup>r</sup>	2,186 <sup>P</sup>	25.6 <sup>r,P</sup>
<b>Trained</b>	<b>4,160<sup>P</sup></b>	<b>8.5<sup>P</sup></b>	260	2.6	404	4.0	574	5.7	1,184	12.3 <sup>r</sup>	1,738 <sup>P</sup>	19.1 <sup>r,P</sup>
<b>Untrained</b>	<b>2,231<sup>P</sup></b>	<b>47.0<sup>r</sup></b>	425	35.4	430	48.4 <sup>r</sup>	389	41.7 <sup>r</sup>	486	52.0 <sup>r</sup>	501	62.3 <sup>r</sup>

Source: FMED 23 & JPA

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

<sup>2</sup> Data presented as “~” has been suppressed in accordance with Defence Statistics’ rounding policy (see paragraph 42).

<sup>3</sup> Age and gender standardised rates are presented for each age group and gender; rank and training status specific rates are presented for each rank and training status; overall crude rates are presented for each financial year (see paragraphs 33-39).

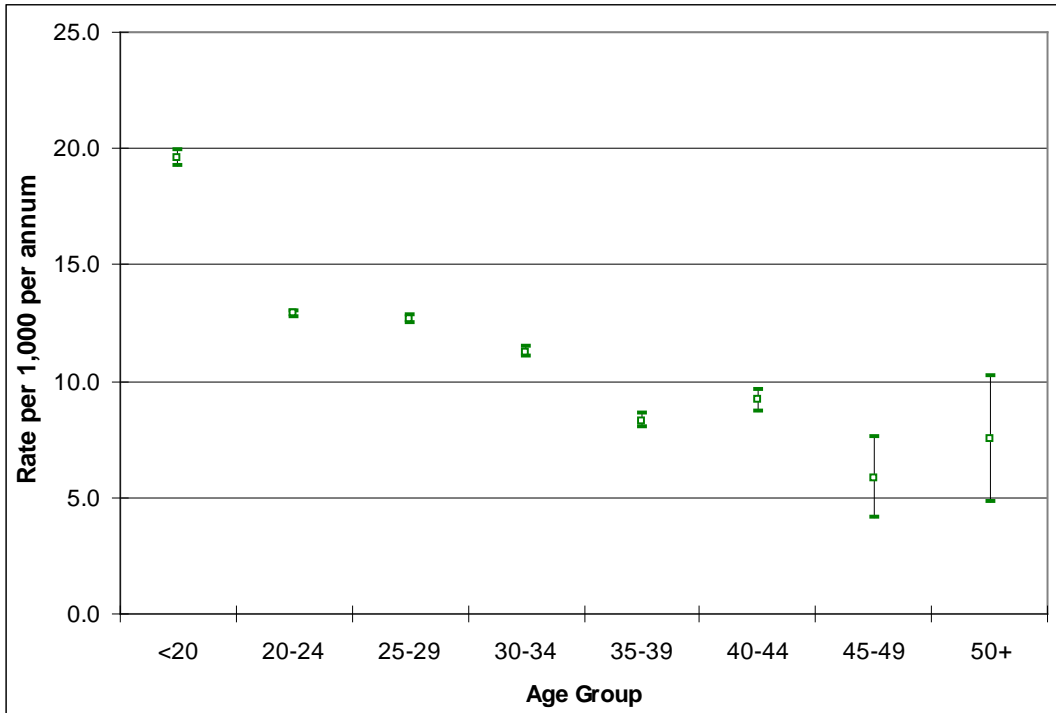
<sup>P</sup> Indicates a provisional data point (see paragraph 25)

64. During the five year reporting period 2009/10 - 2013/14, a total of 6,391<sup>P</sup> Army personnel were medically discharged, at an overall crude rate of 11.9<sup>r,P</sup> per 1,000 personnel.

65. Annual numbers and crude rates of medical discharge have continued to rise from 2009/10 (n = 685, rate = 6.1 per 1,000 strength) to the highest in 2013/14 (n = 2,239<sup>P</sup> rate = 22.6<sup>r,P</sup> per 1,000 strength). This is an increase in crude rate of 270%<sup>r,P</sup>. The largest year on year increase in the rate of medical discharges was seen from 2011/12 to 2012/13 with an increase of 80%<sup>r</sup>. This continued rise over this time period is likely to reflect changes in policy and practices in the management of the recovery pathway and the medical boarding process.

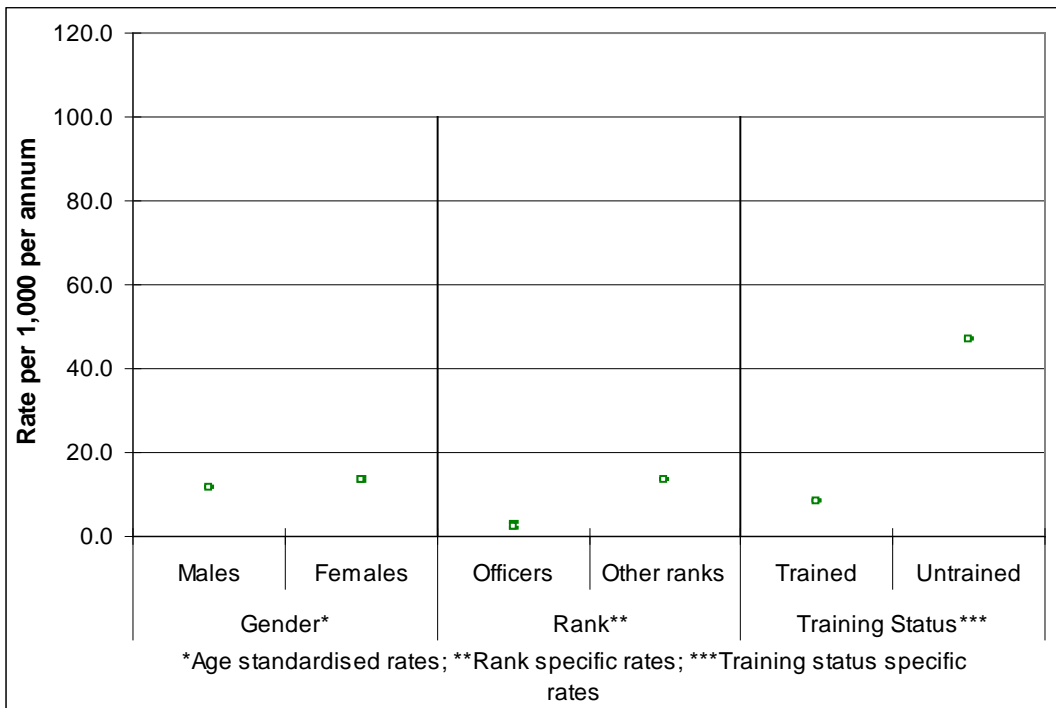
66. In line with the overall continued increase in medical discharges in 2013/14, all demographic groups with the exception of personnel aged 20 - 24 demonstrated a higher rate of medical discharge, when compared to 2009/10 - 2012/13. The demographic group which showed the biggest increase in rate from 2012/13 to 2013/14 was personnel aged 25 - 29, which saw an increase in the rate of 82%<sup>r,P</sup>.

**Figure 5: UK Regular Army medical discharges by age group, 2009/10 - 2013/14, Annualised gender standardised rates per 1,000 strength and 95% CI**



Source: FMED 23 & JPA  
Data is provisional and subject to change

**Figure 6: UK Regular Army medical discharges by gender, rank and training status, 2009/10 - 2013/14, Annualised gender standardised rates per 1,000 strength and 95% CI**



Source: FMED 23 & JPA  
Data is provisional and subject to change

67. **Figure 5** shows that during the five year reporting period 2009/10 - 2013/14, the gender standardised rates of medical discharges for personnel under 25 years old were higher than for personnel aged over 25 years old. However, gender standardised rates of medical discharges for personnel aged between 25 and 35 were higher than personnel aged 35 or over.

68. The higher rate of discharge seen amongst the younger age-groups is likely to be linked to the high rate of discharge for untrained personnel (see paragraph 70).

69. **Figure 6** shows that during the five-year period 2009/10 - 2013/14:

- The age standardised rate of medical discharges for female personnel (13.3<sup>r,p</sup> per 1,000 personnel, 95% CI=12.9-13.7<sup>p</sup>) was significantly<sup>i</sup> higher than for male personnel (11.7<sup>r,p</sup> per 1,000 personnel, 95% CI=11.7-11.8<sup>r,p</sup>).
- The rank specific rate of medical discharges for Other Ranks (13.4<sup>r,p</sup> per 1,000 personnel, 95% CI=13.3-13.4<sup>r,p</sup>) was significantly<sup>j</sup> higher than for Officers (2.5<sup>p</sup> per 1,000 personnel, 95% CI=2.0-3.1<sup>r,p</sup>).
- The training status specific rate of medical discharges for untrained personnel (47.0<sup>r,p</sup> per 1,000 personnel, 95% CI=46.8-47.2<sup>r,p</sup>) was significantly<sup>k</sup> higher than for trained personnel (8.5<sup>p</sup> per 1,000 personnel, 95% CI=8.5-8.6<sup>r,p</sup>).

70. The higher rate seen among untrained personnel is thought to reflect both the intensive physical nature of the training programmes for new Army recruits, and the demanding entry standards into the Field Army once qualified. Recruits whose fitness is found to fall below entry standards during training are readily medically discharged, whereas trained Army personnel may be retained if suitable employment can be found which is occupationally suitable for the individual's medical condition.

71. **Table 5** presents number and proportion<sup>l</sup> of medical discharges among UK Regular Army personnel by principal ICD 10 cause code group and financial year for the five-year period 2009/10 - 2013/14.

---

<sup>i</sup> Tested using a z-test for proportions at a 95% confidence level

<sup>j</sup> Tested using a z-test for proportions at a 95% confidence level

<sup>k</sup> Tested using a z-test for proportions at a 95% confidence level

<sup>l</sup> As a proportion of all cause coded discharges.



**Table 5: UK Regular Army medical discharges by principal ICD 10 cause code group, 2009/10 - 2013/14, Numbers<sup>1</sup> and Percentages<sup>2</sup>**

	All		2009/10		2010/11		2011/12		2012/13		2013/14	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>All Causes of medical discharge</b>	<b>6,391<sup>P</sup></b>		<b>685</b>		<b>834</b>		<b>963</b>		<b>1,670</b>		<b>2,239<sup>P</sup></b>	
<b>All Cause Coded medical discharges</b>	<b>6,163<sup>P</sup></b>	<b>100</b>	<b>677</b>	<b>100</b>	<b>832</b>	<b>100</b>	<b>963</b>	<b>100</b>	<b>1,648</b>	<b>100</b>	<b>2,043<sup>P</sup></b>	<b>100<sup>P</sup></b>
Infectious and parasitic diseases (A00 - B99)	49 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	8	<1	16	<1	17 <sup>P</sup>	<1 <sup>P</sup>
Neoplasms (C00 - D48)	44 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	11	1	10	<1	14 <sup>P</sup>	<1 <sup>P</sup>
Blood disorders (D50 - D89)	19 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	~	<1	9	<1	5 <sup>P</sup>	<1 <sup>P</sup>
Endocrine, nutritional and metabolic diseases (E00 - E90)	73 <sup>P</sup>	1 <sup>P</sup>	~	<1	~ <sup>f</sup>	<1	13	1	29 <sup>f</sup>	2	21 <sup>P</sup>	1 <sup>P</sup>
- Of which diabetes (E10-E14)	50 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	7	<1	21	1	15 <sup>P</sup>	<1 <sup>P</sup>
- Of which insulin-dependent (E10)	40 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	6	<1	16	<1	13 <sup>P,f</sup>	<1 <sup>P</sup>
- Of which non-Insulin-dependent (E11)	8 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	~	<1	~	<1	~ <sup>P</sup>	<1 <sup>P</sup>
Mental and behavioural disorders (F00 - F99)	821 <sup>P</sup>	13 <sup>P</sup>	102	15	128	15	124	13	188	11	279 <sup>P</sup>	14 <sup>P</sup>
- Of which Mood disorders (F30 - F39)	189 <sup>P</sup>	3 <sup>P</sup>	25	4	33 <sup>f</sup>	4	40	4	39	2	52 <sup>P</sup>	3 <sup>P</sup>
- Of which depression (F32 & F33)	143 <sup>P</sup>	2 <sup>P</sup>	17	3	25	3	28	3	32	2	41 <sup>P</sup>	2 <sup>P</sup>
- Of which Neurotic, stress related and somatoform disorders (F40 - F48)	509 <sup>P</sup>	8 <sup>P</sup>	60	9	71	9	69	7	124	8	185 <sup>P</sup>	9 <sup>P</sup>
- Of which post-traumatic stress disorder (PTSD) (F431)	299 <sup>P</sup>	5 <sup>P</sup>	26	4	33 <sup>f</sup>	4	44	5	73	4	123 <sup>P</sup>	6 <sup>P</sup>
- Of which adjustment disorder (F432)	61 <sup>P</sup>	<1 <sup>P</sup>	12	2 <sup>f</sup>	9	1	8	<1	10	<1	22 <sup>P</sup>	1 <sup>P</sup>
Nervous system disorders (G00 - G99)	216 <sup>P</sup>	4 <sup>P</sup>	31	5 <sup>f</sup>	23	3	39	4	64	4	59 <sup>P</sup>	3 <sup>P</sup>
- Of which epilepsy (G40)	80 <sup>P</sup>	1 <sup>P</sup>	11	2 <sup>f</sup>	11	1	13	1	22	1	23 <sup>P</sup>	1 <sup>P</sup>
Eye and adnexa diseases (H00 - H59)	61 <sup>P</sup>	<1 <sup>P</sup>	7	1	10	1	13	1	11	<1	20 <sup>P</sup>	<1 <sup>P</sup>
- Of which blindness, low vision and visual disturbance (H53 & H54)	29 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~ <sup>f</sup>	<1	6	<1	7	<1	8 <sup>P</sup>	<1 <sup>P</sup>
Ear and mastoid process diseases (H60 - H95)	372 <sup>P</sup>	6 <sup>P</sup>	17	3 <sup>f</sup>	37	4	66	7	101	6	151 <sup>P</sup>	7 <sup>P</sup>
- Of which hearing loss (H833 & H90 - H91)	349 <sup>f</sup>	6 <sup>P,f</sup>	17	3 <sup>f</sup>	34	4	63	7	99	6	136 <sup>P,f</sup>	7 <sup>P</sup>
- Of which noise-induced hearing loss (H833)	161 <sup>P</sup>	3 <sup>P</sup>	6	<1 <sup>f</sup>	14	2	33	3	44	3	64 <sup>P</sup>	3 <sup>P</sup>
- Of which tinnitus (H931)	11 <sup>P</sup>	<1 <sup>P</sup>	0	0	0	0	~	<1	~	<1	8 <sup>P</sup>	<1 <sup>P</sup>
Circulatory system disorders (I00 - I99)	132 <sup>P</sup>	2 <sup>P</sup>	8	1 <sup>f</sup>	26	3	22 <sup>f</sup>	2	38	2	38 <sup>P</sup>	2 <sup>P</sup>
Respiratory system disorders (J00 - J99)	76 <sup>P</sup>	1 <sup>P</sup>	16 <sup>f</sup>	2	14	2	16 <sup>f</sup>	2	18 <sup>f</sup>	1	12 <sup>P</sup>	<1 <sup>P</sup>
- Of which asthma (J45 & J46)	67 <sup>P</sup>	1 <sup>P</sup>	11 <sup>f</sup>	2	13	2	16 <sup>f</sup>	2	15 <sup>f</sup>	<1	12 <sup>P</sup>	<1 <sup>P</sup>
Digestive system disorders (K00 - K93)	116 <sup>P</sup>	2 <sup>P</sup>	8	1	11	1	17	2	35	2	45 <sup>P</sup>	2 <sup>P</sup>
Skin and subcutaneous tissue diseases (L00 - L99)	90 <sup>P</sup>	1 <sup>P</sup>	11	2	13	2	19 <sup>f</sup>	2	17	1	30 <sup>P</sup>	1 <sup>P</sup>
Musculoskeletal disorders (M00 - M99) and Injuries (S00 - T98)	3,697 <sup>P</sup>	60 <sup>P</sup>	387	57 <sup>f</sup>	496	60	552	57	1,016	62	1,246 <sup>P</sup>	61 <sup>P</sup>
- Of which Injuries and disorders of the knee <sup>3</sup>	752 <sup>P</sup>	12 <sup>P</sup>	89	13 <sup>f</sup>	135 <sup>f</sup>	16	117 <sup>f</sup>	12	182 <sup>f</sup>	11	229 <sup>P</sup>	11 <sup>P</sup>
- Of which knee pain (M2556)	303 <sup>P</sup>	5 <sup>P</sup>	42	6 <sup>f</sup>	62	7	40	4	75	5	84 <sup>P</sup>	4 <sup>P</sup>
- Of which back pain (M549)	461 <sup>P</sup>	7 <sup>P</sup>	46	7	62	7	72	7	125	8	156 <sup>P</sup>	8 <sup>P</sup>
- Of which low back pain (M544-5)	362 <sup>P</sup>	6 <sup>P</sup>	33	5	40	5	56	6	104	6	129 <sup>P</sup>	6 <sup>P</sup>
- Of which heat injury (T67)	26 <sup>P</sup>	<1 <sup>P</sup>	~	<1	5	<1	~	<1	7	<1	9 <sup>P</sup>	<1 <sup>P</sup>
- Of which cold injury (T68 & T69)	246 <sup>P</sup>	4 <sup>P</sup>	28	4 <sup>f</sup>	16	2	36	4	85	5	81 <sup>P</sup>	4 <sup>P</sup>
Genitourinary system diseases (N00 - N99)	32 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~ <sup>f</sup>	<1	7 <sup>f</sup>	<1	~ <sup>f</sup>	<1	12 <sup>P</sup>	<1 <sup>P</sup>
Pregnancy, childbirth and puerperium (O00 - O99)	0 <sup>P</sup>	0 <sup>P</sup>	0	0	0	0	0	0	0	0	0 <sup>P</sup>	0 <sup>P</sup>
Congenital malformations (Q00 - Q99)	23 <sup>P</sup>	<1 <sup>P</sup>	6	<1	~	<1	~	<1	~	<1	~ <sup>P</sup>	<1 <sup>P</sup>
Clinical and laboratory findings (R00 - R99)	201 <sup>P</sup>	3 <sup>P</sup>	37	5 <sup>f</sup>	36	4	35	4	44	3	49 <sup>P</sup>	2 <sup>P</sup>
Factors influencing health status (Z00 - Z99)	141 <sup>P</sup>	2 <sup>P</sup>	36	5 <sup>f</sup>	9	1	14	1	40	2	42 <sup>P</sup>	2 <sup>P</sup>
No details held on principle condition for medical boarding	221 <sup>P</sup>		3		1		0		22		195 <sup>P</sup>	
Withheld consent	7 <sup>P</sup>		5		1		0		0		1 <sup>P</sup>	

Source: FMED 23

<sup>1</sup> Data presented as “~” has been suppressed in accordance with Defence Statistics’ rounding policy (see paragraph 42).

<sup>2</sup> Data presented as “<1%” represent a value of greater than 0% but smaller than 1%

<sup>3</sup> Injuries and disorders of the knee have been compiled using ICD 10 codes M17, M22, M23, M2406, M2416, M2436, M2446, M2536, M2556, M2566, M2586, M2596, M7046, M7126, M7636, M7656, M925, S800, S820, S83, S89.

<sup>f</sup> Indicates a change in previously published data

<sup>P</sup> Indicates a provisional data point (see paragraph 25)

72. During the five-year period the most common cause of medical discharge for the Army was musculoskeletal disorders and injuries with 60%<sup>P</sup> (n=3,697<sup>P</sup>) of all cause coded medical discharges. Within this cause group:

- Injuries and disorders of the knee accounted for 20%<sup>P</sup> (n=752<sup>P</sup>) of all musculoskeletal disorders and injuries, of which knee pain accounted for 40%<sup>P</sup> (n=303<sup>P</sup>).
- Medical discharges for Injuries and disorders of the knee accounted for 12%<sup>P</sup> of all cause coded medical discharges. The proportion of cause coded medical discharges attributed to Injuries and disorders of the knee has fallen, from 16% in 2010/11 to 11%<sup>P</sup> in 2013/14.
- Back pain accounted for 12%<sup>P</sup> (n=461<sup>P</sup>) of all musculoskeletal disorders and injuries, of which low back pain accounted for 79%<sup>P</sup> (n=362<sup>P</sup>). Medical discharges for back pain accounted for 7% of all cause coded medical discharges.
- The number of medical discharges as a result of musculoskeletal disorders and injuries has increased by 222%<sup>P</sup> over the reporting period. In line with the percentage increase for all medical discharges, the proportion of medical discharges as a result of musculoskeletal disorders and injuries has remained stable.

73. Medical discharges attributable to cold injuries accounted for 7%<sup>P</sup> (n=246<sup>P</sup>) of all musculoskeletal disorders and injuries and 4%<sup>P</sup> of all cause coded medical discharges. Medical discharges attributable to cold injuries have increased by 189%<sup>P</sup> over the period 2009/10 - 2013/14. Less than 1%<sup>P</sup> (n=26<sup>P</sup>) of all cause coded medical discharges were attributable to heat injuries.

74. The second most common cause of medical discharge was mental and behavioural disorders with 13%<sup>P</sup> (n=821<sup>P</sup>) of all cause coded medical discharges. The majority of mental and behavioural disorders were made up by neurotic disorders (n=509<sup>P</sup>, 62%<sup>P</sup>) and mood disorders (n=189<sup>P</sup>, 23%<sup>P</sup>).

- Of the neurotic disorders the most common were post-traumatic stress disorder (PTSD) (n=299<sup>P</sup>, 59%<sup>P</sup>) and adjustment disorder (n=61<sup>P</sup>, 12%<sup>P</sup>). These disorders made up only 6%<sup>P</sup> of all cause coded medical discharges.
- Of the mood disorders, depression accounted for 76%<sup>P</sup> (n=143<sup>P</sup>) and accounted for 2%<sup>P</sup> of all cause coded medical discharges.
- Mental and behavioural disorders, as a proportion of all cause coded medical discharges, have remained stable over the period 2009/10 - 2013/14 despite the number of mental and behavioural disorders increasing by 173%<sup>P</sup>.

75. The proportion of ear and mastoid process diseases has also increased by 75%<sup>P</sup>. This change reflects changes in policy and practices and the work underway by the Defence Hearing Working Group. Hearing loss accounted for 94%<sup>r,P</sup> (n=349<sup>r,P</sup>) of all diseases of the ear and mastoid process, of these were 46%<sup>r,P</sup> were for noise-induced hearing loss. Medical discharges attributable to diseases of the ear and mastoid process accounted for 6%<sup>P</sup> (n=372<sup>P</sup>) of all cause-coded medical discharges. These have increased in 2013/14 with 151<sup>P</sup> cases compared with just 17 in 2009/10, resulting in a 788%<sup>P</sup> increase.

76. Causes of medical discharge for the Army have been scrutinised in order to identify whether any specific causes have been drivers for the 133%<sup>P</sup> increase between 2011/12 and 2013/14. All the main causes of medical discharge have increased at a similar rate; therefore the rise in total medical discharges cannot be attributed to any single principal cause code.

77. **Table 6** presents the number of principal and contributory causes for medical discharges among UK Regular Army personnel by ICD 10 cause code group and financial year for 2009/10 - 2013/14.

**Table 6: UK Regular Army, principal and contributory<sup>1</sup> causes for medical discharges, by ICD 10 cause code group and financial year, 2009/10 - 2013/14, Numbers<sup>2,4</sup> and Percentages<sup>5</sup>**

Cause Code Groupings	All		2009/10		2010/11		2011/12		2012/13		2013/14	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>All Causes of medical discharge</b>	<b>6,391<sup>P</sup></b>		<b>685</b>		<b>834</b>		<b>963</b>		<b>1,670</b>		<b>2,239<sup>P</sup></b>	
<b>All Cause Coded medical discharges</b>	<b>6,163<sup>P</sup></b>		<b>677</b>		<b>832</b>		<b>963</b>		<b>1,648</b>		<b>2,043<sup>P</sup></b>	
Infectious and parasitic diseases (A00 - B99)	70 <sup>P</sup>	1 <sup>P</sup>	~ <sup>r</sup>	<1	6 <sup>r</sup>	<1	~	1	24	1	25 <sup>P</sup>	1 <sup>P</sup>
Neoplasms (C00 - D48)	51 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	12	1	13	<1	16 <sup>P</sup>	<1 <sup>P</sup>
Blood disorders (D50 - D89)	32 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	~	<1	15	<1	7 <sup>P</sup>	<1 <sup>P</sup>
Endocrine, nutritional and metabolic diseases (E00 - E90)	168 <sup>P</sup>	3 <sup>P</sup>	7	1	25	3	31	3	55	3	50 <sup>P</sup>	2 <sup>P</sup>
- Of Which diabetes (E10-E14)	72 <sup>P</sup>	1 <sup>P</sup>	~	<1	~	<1	10	1	30	2	22 <sup>P</sup>	1 <sup>P</sup>
- Of which insulin-dependent (E10)	42 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	7	<1	17	1	13 <sup>P</sup>	<1 <sup>P</sup>
- Of which non-Insulin-dependent (E11)	25 <sup>P</sup>	<1 <sup>P</sup>	~	<1	~	<1	~	<1	10	<1	8 <sup>P</sup>	<1 <sup>P</sup>
Mental and behavioural disorders (F00 - F99)	1,127 <sup>P</sup>	18 <sup>P</sup>	126	19	151	18	167	17	278	17	405 <sup>P</sup>	20 <sup>P</sup>
- Of which Mood disorders (F30 - F39)	367 <sup>P</sup>	6 <sup>P</sup>	45	7	53	6	62	6	90	5	117 <sup>P</sup>	6 <sup>P</sup>
- Of Which depression (F32 & F33)	290 <sup>P</sup>	5 <sup>P</sup>	35	5	45	5	47	5	74	4	89 <sup>P</sup>	4 <sup>P</sup>
- Of which Neurotic, stress related and somatoform disorders (F40 - F48)	737 <sup>P</sup>	12 <sup>P</sup>	76	11	88	11	105	11	184	11	284 <sup>P</sup>	14 <sup>P</sup>
- Of which post-traumatic stress disorder (PTSD) (F431)	423 <sup>P</sup>	7 <sup>P</sup>	34	5	39	5	68	7	109	7	173 <sup>P</sup>	8 <sup>P</sup>
- Of which adjustment disorder (F432)	145 <sup>P</sup>	2 <sup>P</sup>	19	3	16	2	18	2	33	2	59 <sup>P</sup>	3 <sup>P</sup>
Nervous system disorders (G00 - G99)	378 <sup>P</sup>	6 <sup>P</sup>	44	6	48	6	67	7	113	7	106 <sup>P</sup>	5 <sup>P</sup>
- Of which epilepsy (G40)	104 <sup>P</sup>	2 <sup>P</sup>	14	2	14	2	17	2	27	2	32 <sup>P</sup>	2 <sup>P</sup>
Eye and adnexa diseases (H00 - H59)	115 <sup>P</sup>	2 <sup>P</sup>	13	2	15	2	21	2	26	2	40 <sup>P</sup>	2 <sup>P</sup>
- Of which blindness, low vision and visual disturbance (H53 & H54)	62 <sup>P</sup>	1 <sup>P</sup>	8	1	11	1	9	<1	19	1	15 <sup>P</sup>	<1 <sup>P</sup>
Ear and mastoid process diseases (H60 - H95)	572 <sup>P</sup>	9 <sup>P</sup>	30	4	51	6	89	9	170	10	232 <sup>P</sup>	11 <sup>P</sup>
- Of which hearing loss (H833 & H90 - H91)	339 <sup>P</sup>	5 <sup>P</sup>	30	4	46	6	87	9	166	10	217 <sup>P</sup>	11 <sup>P</sup>
- Of which noise-induced hearing loss (H833)	220 <sup>P</sup>	4 <sup>P</sup>	10	1	19	2	44	5	61	4	86 <sup>P</sup>	4 <sup>P</sup>
- Of which tinnitus (H931)	120 <sup>P</sup>	2 <sup>P</sup>	~	<1	~	1	14	1	41	2	52 <sup>P</sup>	3 <sup>P</sup>
Circulatory system disorders (I00 - I99)	244 <sup>P</sup>	4 <sup>P</sup>	18	3	41	5	46	5	76	5	63 <sup>P</sup>	3 <sup>P</sup>
Respiratory system disorders (J00 - J99)	125 <sup>P</sup>	2 <sup>P</sup>	20	3	16	2	23	2	36	2	30 <sup>P</sup>	1 <sup>P</sup>
- Of which asthma (J45 & J46)	110 <sup>P</sup>	2 <sup>P</sup>	14	2	14	2	22	2	32	2	28 <sup>P</sup>	1 <sup>P</sup>
Digestive system disorders (K00 - K93)	174 <sup>P</sup>	3 <sup>P</sup>	18	3	19	2	26	3	49	3	62 <sup>P</sup>	3 <sup>P</sup>
Skin and subcutaneous tissue diseases (L00 - L99)	121 <sup>P</sup>	2 <sup>P</sup>	15	2	16	2	23	2	32	2	35 <sup>P</sup>	2 <sup>P</sup>
Musculoskeletal disorders (M00 - M99) and Injuries (S00 - T98)	4,261 <sup>P</sup>	69 <sup>P</sup>	437	65	548	66	630	65	1,173	71	1,473 <sup>P</sup>	72 <sup>P</sup>
- Of which Injuries and disorders of the knee <sup>3</sup>	1,004 <sup>TP</sup>	16 <sup>P</sup>	111 <sup>r</sup>	16	168 <sup>r</sup>	20	151	16	255	15	319 <sup>TP</sup>	16 <sup>TP</sup>
- Of which knee pain (M2556)	474 <sup>P</sup>	8 <sup>P</sup>	55	8	79	9	61	6	126	8	153 <sup>P</sup>	7 <sup>P</sup>
- Of which back pain (M549)	703 <sup>P</sup>	11 <sup>P</sup>	58	9	81	10	96	10	204	12	264 <sup>P</sup>	13 <sup>P</sup>
- Of which low back pain (M544-5)	552 <sup>P</sup>	9 <sup>P</sup>	44	6	56	7	77	8	164	10	211 <sup>P</sup>	10 <sup>P</sup>
- Of which heat injury (T67)	35 <sup>P</sup>	<1 <sup>P</sup>	~	<1	7	<1	~	<1	10	<1	11 <sup>P</sup>	<1 <sup>P</sup>
- Of which cold injury (T68 & T69)	331 <sup>P</sup>	5 <sup>P</sup>	30	4	25	3	45	5	115	7	116 <sup>P</sup>	6 <sup>P</sup>
Genitourinary system diseases (N00 - N99)	73 <sup>P</sup>	1 <sup>P</sup>	7	1	8	<1	12	1	20	1	26 <sup>P</sup>	1 <sup>P</sup>
Pregnancy, childbirth and puerperium (O00 - O99)	~ <sup>P</sup>	<1 <sup>P</sup>	0	0	0	0	0	0	~	<1	0 <sup>P</sup>	0 <sup>P</sup>
Congenital malformations (Q00 - Q99)	38 <sup>P</sup>	<1 <sup>P</sup>	~	1	~	<1	~ <sup>r</sup>	1	~ <sup>r</sup>	<1	7 <sup>P</sup>	<1 <sup>P</sup>
Clinical and laboratory findings (R00 - R99)	319 <sup>P</sup>	5 <sup>P</sup>	44	6	49	6	58	6	77	5	91 <sup>P</sup>	4 <sup>P</sup>
Factors influencing health status (Z00 - Z99)	1,619 <sup>P</sup>	26 <sup>P</sup>	223	33	152	18	221	23	384	23	639 <sup>P</sup>	31 <sup>P</sup>
No details held on principle condition for medical boarding	221 <sup>P</sup>		3 <sup>r</sup>		1 <sup>r</sup>		0		22		195 <sup>P</sup>	
Withheld consent	7 <sup>P</sup>		5		1 <sup>r</sup>		0		0		1 <sup>TP</sup>	

Source: FMED 23

<sup>1</sup> Personnel are only counted once per cause code grouping

<sup>2</sup> Personnel may have multiple contributory ICD 10 codes in different cause code groups associated with their medical discharge. Therefore totals may not match those provided in Tables 1-3

<sup>3</sup> Injuries and disorders of the knee have been compiled using ICD 10 codes M17, M22, M23, M2406, M2416, M2436, M2446, M2536, M2556, M2566, M2586, M2596, M7046, M7126, M7636, M7656, M925, S800, S82, S83, S89.

<sup>4</sup> Data presented as “~” has been suppressed in accordance with Defence Statistics’ rounding policy (see paragraph 42).

<sup>5</sup> Data presented as “<1%” represent a value of greater than 0% but smaller than 1%

<sup>P</sup> Indicates a provisional data point (see paragraph 25)

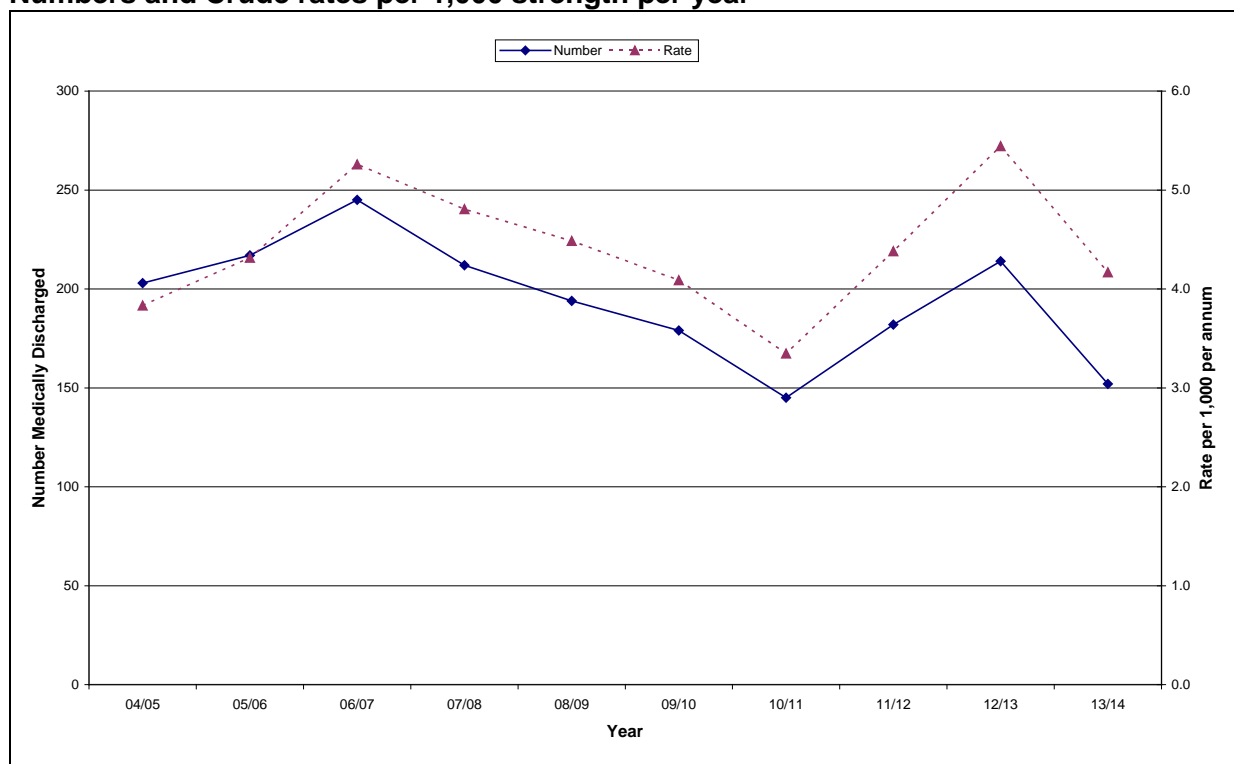
78. The most common cause grouping for Regular Army personnel was musculoskeletal disorders and injuries, accounting for 69%<sup>P</sup> of all cause coded UK Regular Army medical discharges between 2009/10 and 2013/14. The four most prominent ICD 10 codes within this cause grouping were knee pain (M2556), low back pain (M5459), cold injury (T698) and compartment syndrome (T796).

79. The second most common cause grouping for Regular Army personnel accounting for 26%<sup>P</sup> was factors influencing health status. The two most prominent ICD 10 codes within this cause grouping were other physical and mental strain related to work (Z566) and personal history of diseases of the musculoskeletal system and connective tissue (Z873).

80. The third most common cause grouping for Regular Army personnel was mental and behavioural disorders, accounting for 18%<sup>P</sup> of all cause coded UK Regular Army medical discharges between 2009/10 and 2013/14. The most common conditions within this grouping were neurotic and mood disorders which include conditions such as Post-traumatic-stress-disorder and depression.

81. The number and proportion of personnel medically discharged with a principal or contributory cause of ear and mastoid process disease has seen an increase, from 30 (4%) in 2009/10 to 232<sup>P</sup> (11%<sup>P</sup>) in 2013/14. This was due to an increase in the number medical discharges with a contributory cause of hearing loss (H919), noise induced hearing loss (H833) and tinnitus (H931).

**Figure 7: UK Regular RAF medical discharges, by financial year, 2004/05 - 2013/14, Numbers and Crude rates per 1,000 strength per year**



Source: FMED 23 & JPA

82. **Figure 7** shows the number and rate of personnel medically discharged from UK Regular RAF between 1 April 2004 and 31 March 2014, by financial year. The graph shows a decrease in both the number and rate of medical discharges between 2006/07 and 2010/11, before increasing by 48% between 2010/11 and 2012/13. For 2013/14 the numbers and rates have decreased by 29% and 25%<sup>†</sup> respectively, however the rate remains higher than the rates seen in 2004/05, 2009/10 and 2010/11.

83. The decrease in the number and rate between 2006/07 and 2010/11 may be partly due to the Service endeavouring to retain seriously injured personnel if there is a role for them to fulfil, or if retention is in the interest of both the individual and the Service<sup>m</sup>.

84. 2010/11 and 2011/12 show an increasing gap between the number of medical discharges, and the rate per 1,000 personnel. This gap has remained during 2013/14. This is a result of the reduction in manpower numbers seen within the RAF in recent years, combined with the increase in the number of medical discharges.

85. **Table 7** presents numbers and rates of medical discharges among UK regular RAF personnel by age group, gender, rank, training status and financial year for the five-year reporting period 2009/10 - 2013/14.

<sup>m</sup> As personnel wounded, injured or sick and those requiring long term (greater than three months) support for medical, welfare or disciplinary reasons are assigned to a Personnel Recovery Unit (formerly known as the Personnel Holding Flight) .

**Table 7: UK Regular RAF medical discharges<sup>1</sup> by age group<sup>1</sup>, gender<sup>1</sup>, rank<sup>1</sup> and training status<sup>1</sup>, 2009/10 - 2013/14, Numbers<sup>2</sup> and Rates<sup>3</sup> per 1,000 strength**

	All Years		2009/10		2010/11		2011/12		2012/13		2013/14	
	n	r	n	r	n	r	n	r	n	r	n	r
<b>All</b>	<b>872</b>	<b>4.3</b>	<b>179</b>	<b>4.1</b>	<b>145</b>	<b>3.3</b>	<b>182</b>	<b>4.4</b>	<b>214</b>	<b>5.6</b>	<b>152</b>	<b>4.2</b>
<b>Under 20</b>	<b>19</b>	<b>3.1</b>	<b>13</b>	<b>6.0</b>	~	2.5	<b>0</b>	<b>0.0</b>	~	3.6	<b>0</b>	<b>0.0</b>
<b>20-24</b>	<b>106</b>	<b>3.1</b>	<b>38</b>	<b>5.1</b>	<b>18</b>	<b>2.4</b>	<b>19</b>	<b>2.7</b>	~	3.6	~	1.4
<b>25-29</b>	<b>185</b>	<b>4.2</b>	<b>33</b>	<b>3.6</b>	<b>38</b>	<b>4.1</b>	<b>37</b>	<b>4.1</b>	<b>34</b>	<b>4.0</b>	<b>43</b>	<b>5.3</b>
<b>30-34</b>	<b>131</b>	<b>3.7</b>	<b>24</b>	<b>3.7</b>	<b>13</b>	<b>1.9</b>	<b>27</b>	<b>3.7</b>	<b>44</b>	<b>6.0</b>	<b>23</b>	<b>3.2</b>
<b>35-39</b>	<b>127</b>	<b>4.2</b>	<b>23</b>	<b>3.1</b>	<b>25</b>	<b>3.7</b>	<b>25</b>	<b>4.2</b>	<b>31</b>	<b>5.9</b>	<b>23</b>	<b>4.7</b>
<b>40-44</b>	<b>148</b>	<b>5.6</b>	<b>22</b>	<b>3.8</b>	<b>30</b>	<b>5.1</b>	<b>38</b>	<b>6.7</b>	<b>33</b>	<b>6.4</b>	<b>25</b>	<b>5.5</b>
<b>45-49</b>	<b>80</b>	<b>4.8</b>	<b>15</b>	<b>4.4</b>	~	2.6	<b>18</b>	<b>5.3</b>	<b>24</b>	<b>7.4</b>	~	4.5
<b>50+</b>	<b>76</b>	<b>7.6</b>	<b>11</b>	<b>5.8</b>	~	3.9	<b>18</b>	<b>8.7</b>	~	11.3	<b>16</b>	<b>8.3</b>
<b>Male</b>	<b>677</b>	<b>3.8</b>	<b>136</b>	<b>3.6</b>	<b>101</b>	<b>2.7</b>	<b>151</b>	<b>4.2</b>	<b>175</b>	<b>5.3</b>	<b>114</b>	<b>3.7</b>
<b>Female</b>	<b>195</b>	<b>7.2</b>	<b>43</b>	<b>7.2</b>	<b>44</b>	<b>7.4</b>	<b>31</b>	<b>5.4</b>	<b>39</b>	<b>7.3</b>	<b>38</b>	<b>7.6</b>
<b>Officers</b>	<b>102</b>	<b>2.2</b>	<b>15</b>	<b>1.5</b>	<b>13</b>	<b>1.3</b>	<b>26</b>	<b>2.8</b>	<b>33</b>	<b>3.8</b>	<b>15</b>	<b>1.9</b>
<b>Other ranks</b>	<b>770</b>	<b>4.9</b>	<b>164</b>	<b>4.8</b>	<b>132</b>	<b>3.9</b>	<b>156</b>	<b>4.9</b>	<b>181</b>	<b>6.1</b>	<b>137</b>	<b>4.9</b>
<b>Trained</b>	<b>784</b>	<b>4.1</b>	<b>135</b>	<b>3.4</b>	<b>128</b>	<b>3.2</b>	~	4.4	<b>201</b>	<b>5.5</b>	~	4.4
<b>Untrained</b>	<b>88</b>	<b>6.7</b>	<b>44</b>	<b>10.2</b>	<b>17</b>	<b>5.6</b>	~	5.2	<b>13</b>	<b>7.3</b>	~	1.6

Source: FMED 23 and JPA

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

<sup>2</sup>Data presented as “~” has been suppressed in accordance with Defence Statistics’ rounding policy (see paragraph 42).

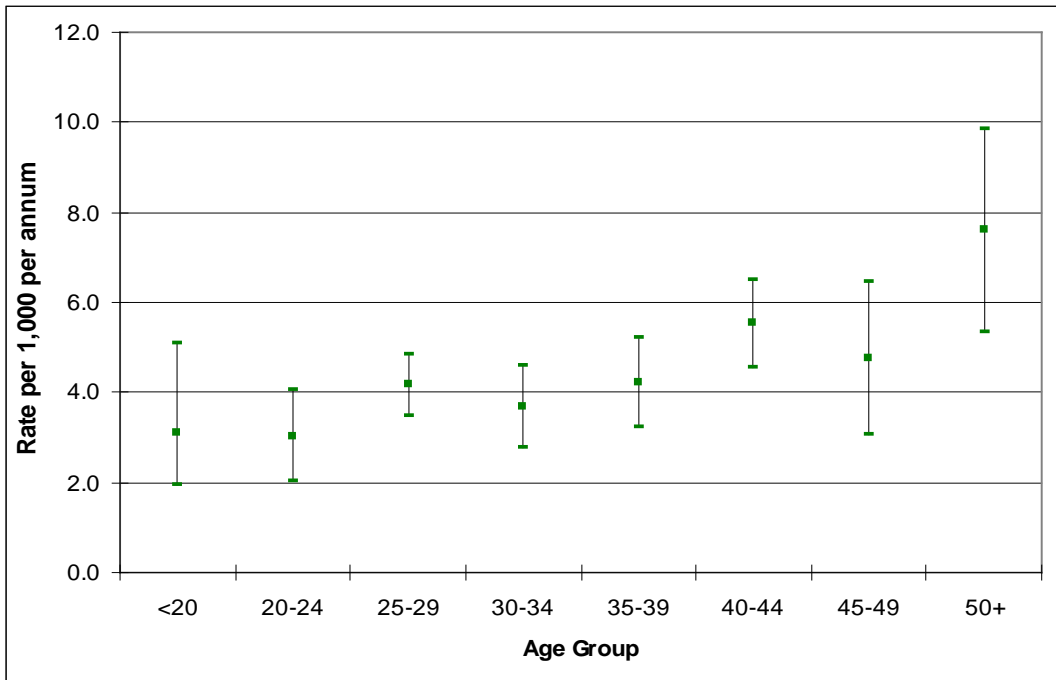
<sup>3</sup>Age and gender standardised rates are presented for each age group and gender; rank and training status specific rates are presented for each rank and training status; overall crude rates are presented for each financial year (see paragraphs 33-39).

86. During the five-year period 2009/10 - 2013/14, a total of 872 RAF personnel were medically discharged, at an overall crude rate of 4.3 per 1,000 personnel. Overall annual numbers have decreased by 15% over the reporting period.

87. The most noticeable changes in 2013/14 were:

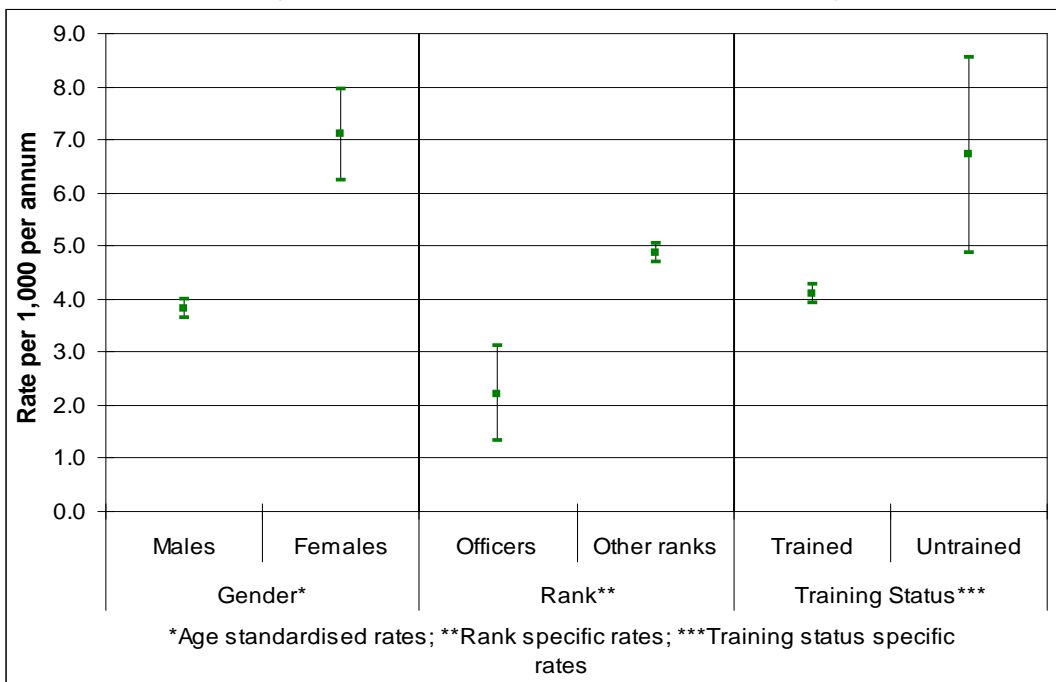
- Rates decreased for all ages groups when compared to 2012/13 with the exception of personnel aged 25-29 with an increase of 33%<sup>r</sup> from 4.0<sup>r</sup> to 5.3 per 1,000 personnel.
- Rates for Officers halved from 2012/13 (3.8<sup>r</sup> per 1,000 personnel) to 1.9<sup>r</sup> per 1,000 personnel in 2013/14.
- Rates for untrained personnel declined by 78%<sup>r</sup> from 7.3<sup>r</sup> per 1,000 personnel in 2012/13 to 1.6<sup>r</sup> per 1,000 personnel in 2013/14. This is compared with the overall rate for the time period of 6.7 per 1,000 personnel. This is a reversal of the trend seen in earlier years of the reporting period. However, this maybe due to small numbers involved.

**Figure 8: UK Regular RAF medical discharges by age group, 2009/10 - 2013/14, Annualised gender standardised rates per 1,000 strength and 95% CI**



Source: FMED 23 & JPA

**Figure 9: UK Regular RAF medical discharges by gender, rank and training status, 2009/10 - 2013/14, Annualised gender standardised rates per 1,000 strength and 95% CI**



Source: FMED 23 & JPA

88. **Figure 8** shows that during the five-year period 2009/10 - 2013/14, personnel aged 50 and over had the highest rate of medical discharge at 7.6 per 1,000. There were no significant differences between the ages groups.

89. **Figure 9** shows that during the five-year period 2009/10 - 2013/14:

- The age standardised rate of medical discharges for female personnel (7.2<sup>f</sup> per 1,000 personnel, 95%CI=6.4-8.1<sup>f</sup>) was significantly<sup>n</sup> higher than male personnel (3.8 per 1,000 personnel, 95%CI=3.7-4.0<sup>f</sup>).
- The rank specific rate of medical discharges for Other Ranks (4.9 per 1,000 personnel, 95%CI=4.7-5.1<sup>f</sup>) was significantly<sup>o</sup> higher than for Officers (2.2 per 1,000 personnel, 95%CI=1.3-3.1).
- The training status specific rate of medical discharges for untrained personnel (6.7 per 1,000 personnel, 95%CI=4.9-8.5) was significantly<sup>p</sup> higher than for trained personnel (4.1 per 1,000 personnel, 95%CI=4.0-4.3<sup>f</sup>). The higher rate seen among untrained personnel is thought to be a reflection of a demanding physical training regime.

90. **Table 8** presents number and proportion<sup>q</sup> of medical discharges among UK Regular RAF personnel by principal ICD 10 cause code group and financial year for the five-year period 2009/10 - 2013/14.

**Table 8: UK Regular RAF medical discharges by principal ICD 10 cause code group, 2009/10 - 2013/14, Numbers<sup>1</sup> and Percentages<sup>2</sup>**

	All		2009/10		2010/11		2011/12		2012/13		2013/14	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>All Causes of medical discharge</b>	<b>872</b>		<b>179</b>		<b>145</b>		<b>182</b>		<b>214</b>		<b>152</b>	
<b>All Cause Coded medical discharges</b>	<b>798</b>	<b>100</b>	<b>145</b>	<b>100</b>	<b>129</b>	<b>100</b>	<b>173</b>	<b>100</b>	<b>201</b>	<b>100</b>	<b>150</b>	<b>100</b>
Infectious and parasitic diseases (A00 - B99)	~	<1	~	<1 <sup>f</sup>	0	0	~	<1	~	<1	0	0
Neoplasms (C00 - D48)	19	2	5	3 <sup>f</sup>	~	<1	6	3	~	1	~	3
Blood disorders (D50 - D89)	~	<1	0	0	0	0	0	0	~	<1	0	0
Endocrine, nutritional and metabolic diseases (E00 - E90)	10	1	~	<1 <sup>f</sup>	~	2	~	1	~	<1	~	2
- Of Which diabetes (E10-E14)	8	1	~	<1 <sup>f</sup>	~	2	~	<1	~	<1	~	1
- Of which insulin-dependent (E10)	5	<1	~	<1	~	<1	~	<1	0	0	~	1
- Of which non-Insulin-dependent (E11)	~	<1	0	0	~	<1	0	0	~	<1	0	0
Mental and behavioural disorders (F00 - F99)	138	17	23	16 <sup>f</sup>	30	23	26	15	30	15	29	19
- Of which Mood disorders (F30 - F39)	63	8	11	8 <sup>f</sup>	14	11	9	5	16	8	13	9
- Of Which depression (F32 & F33)	56	7	11	8 <sup>f</sup>	13	10	9	5	14	7	9	6
- Of which Neurotic, stress related and somatoform disorders (F40 - F48)	59	7	8	6 <sup>f</sup>	10	8	14	8	13	6	14	9
- Of which post-traumatic stress disorder (PTSD) (F431)	14	2	~	2	~	2	~	2	~	<1	~	2
- Of which adjustment disorder (F432)	19	2	~	1 <sup>f</sup>	~	2	5	3	7	3	~	2
Nervous system disorders (G00 - G99)	56	7	11	8 <sup>f</sup>	7	5	13	8	12	6	13	9
- Of which epilepsy (G40)	6	<1	0	0	0	0	~	<1	~	2	~	<1
Eye and adnexa diseases (H00 - H59)	8	1	~	2 <sup>f</sup>	0	0	~	2	~	<1	~	<1
- Of which blindness, low vision and visual disturbance (H53 & H54)	~	<1	~	1 <sup>f</sup>	0	0	~	1	0	0	0	0
Ear and mastoid process diseases (H60 - H95)	29	4	~	<1	~	<1	6	3	10	5	11	7
- Of which hearing loss (H833 & H90 - H91)	27	3	~	<1	~	<1	6 <sup>f</sup>	3	9	4	10	7
- Of which noise-induced hearing loss (H833)	~	<1	0	0	0	0	0	0	~	<1	~	<1
- Of which tinnitus (H931)	~	<1	0	0	0	0	0	0	0	0	~	<1
Circulatory system disorders (I00 - I99)	23	3	~	3 <sup>f</sup>	~	2	9 <sup>f</sup>	5	~	1	5	3
Respiratory system disorders (J00 - J99)	6	<1	~	1 <sup>f</sup>	0	0	~	<1	0 <sup>f</sup>	0	~	2
- Of which asthma (J45 & J46)	~	<1	~	<1	0	0	~	<1	0 <sup>f</sup>	0	0	0
Digestive system disorders (K00 - K93)	16	2	~	<1	~	<1	~	2	8	4	~	2
Skin and subcutaneous tissue diseases (L00 - L99)	13	2	~	2	~	2	~	1	~	2	~	<1
Musculoskeletal disorders (M00 - M99) and Injuries (S00 - T98)	442	55	85	59 <sup>f</sup>	73	57	94	54	118	59	72	48
- Of which Injuries and disorders of the knee <sup>3</sup>	88	11	11	8 <sup>f</sup>	17	13	21	12	21	10	18	12
- Of which knee pain (M2556)	40	5	~	3 <sup>f</sup>	11	9	~ <sup>f</sup>	4	9	4	9	6
- Of which back pain (M549)	124	16	19	13 <sup>f</sup>	16	12	26	15	47	23	16	11
- Of which low back pain (M544-5)	107	13	17	12 <sup>f</sup>	12	9	21	12	42	21	15	10
- Of which heat injury (T67)	0	0	0	0	0	0	0	0	0	0	0	0
- Of which cold injury (T68 & T69)	6	<1	~	1 <sup>f</sup>	0	0	~	<1	~	1	0	0
Genitourinary system diseases (N00 - N99)	~	<1	0	0 <sup>f</sup>	~	<1	~	<1	~	<1	~	<1
Pregnancy, childbirth and puerperium (O00 - O99)	0	0	0	0	0	0	0	0	0	0	0	0
Congenital malformations (Q00 - Q99)	~	<1	~	2 <sup>f</sup>	0	0	0	0	0	0	0	0
Clinical and laboratory findings (R00 - R99)	24	3	~	1 <sup>f</sup>	6	5	6	3	7	3	~	2
Factors influencing health status (Z00 - Z99)	~	<1	0	0 <sup>f</sup>	~	2	0	0	0	0	~	<1
No details held on principle condition for medical boarding	23		23		0		0		0		0	
Withheld consent	51		11		16		9		13		2	

Source: FMED 23

<sup>1</sup> Data presented as “~” has been suppressed in accordance with Defence Statistics’ rounding policy (see paragraph 42).

<sup>2</sup> Data presented as “<1%” represent a value of greater than 0% but smaller than 1%

<sup>3</sup> Injuries and disorders of the knee have been compiled using ICD 10 codes M17, M22, M23, M2406, M2416, M2436, M2446, M2536, M2556, M2566, M2586, M2596, M7046, M7126, M7636, M7656, M925, S800, S820, S83, S89.

<sup>f</sup> Indicates a change in previously published data (see Annex A)

91. During the five-year period the most common cause of medical discharge for the RAF was musculoskeletal disorders and injuries with 55% (n=442) of all cause coded medical discharges.

- Back pain accounted for 28% (n=124) of all musculoskeletal disorders and injuries, of which low back pain accounted for 86% (n=107). RAF medical discharges for back pain accounted for 16% of all caused code medical discharges.

<sup>n</sup> Tested using a z-test for proportions at a 95% confidence level

<sup>o</sup> Tested using a z-test for proportions at a 95% confidence level

<sup>p</sup> Tested using a z-test for proportions at a 95% confidence level

<sup>q</sup> As a proportion of all cause coded discharges.

- Since 2009/10 musculoskeletal disorders and injuries, as a proportion of cause coded medical discharges has decreased and in 2013/14 accounted for 48% of all cause coded medical discharges.

92. The second most common cause of medical discharge was mental and behavioural disorders with 17% (n=138) of all cause coded medical discharges during the five-year period 2009/10 - 2013/14. The majority of mental and behavioural disorders were made up by mood disorders (n=63, 46%) and neurotic disorders (n=59, 43%).

- Of the mood disorders, depression accounted for 89% (n=56) and 7% of all cause coded medical discharges.
- Of the neurotic disorders the most common were adjustment disorder (n=19, 32%) and post-traumatic stress disorder (PTSD) (n=14, 24%).
- Mental and behavioural disorders, as a proportion of cause coded medical discharges, has decreased from 2010/11 to 2013/14.

93. **Table 9** presents numbers of principal and contributory causes for medical discharges among UK Regular RAF personnel by ICD 10 cause code group and financial year for 2009/10 - 2013/14.



**Table 9: UK Regular RAF, principal and contributory<sup>1,2</sup> causes for medical discharges, by ICD 10 cause code group and financial year, 2009/10 - 2013/14, Numbers<sup>3,4,5</sup> and Percentages**

Cause Code Groupings	All		2009/10		2010/11		2011/12		2012/13		2013/14	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>All Causes of medical discharge</b>	<b>872</b>		<b>179</b>		<b>145</b>		<b>182</b>		<b>214</b>		<b>152</b>	
<b>All Cause Coded medical discharges</b>	<b>798</b>		<b>145</b>		<b>129</b>		<b>173</b>		<b>201</b>		<b>150</b>	
Infectious and parasitic diseases (A00 - B99)	~	<1	~	<1	0	0	~	<1	~	<1	0	0
Neoplasms (C00 - D48)	28	4	~	3	~	2	8	5	7	3	5 <sup>†</sup>	3
Blood disorders (D50 - D89)	6	<1	0	0	~	<1	~	2	~	<1	~	<1
Endocrine, nutritional and metabolic diseases (E00 - E90)	36	5	~	3	~	3	6	3	15	7	6	4
- Of which diabetes (E10-E14)	14	2	~	1	~	2	~	1	~	2	~	2
- Of which insulin-dependent (E10)	7	<1	~	<1	~	2	~	<1	~	<1	~	1
- Of which non-Insulin-dependent (E11)	5	<1	~	<1	~	<1	~	<1	~	<1	~	<1
Mental and behavioural disorders (F00 - F99)	223	28	31	21	43	33	46	27	57	28	46	31
- Of which Mood disorders (F30 - F39)	117	15	17	12	21	16	23	13	32	16	24	16
- Of which depression (F32 & F33)	100	13	17	12	19	15	22	13	27	13	15	10
- Of which Neurotic, stress related and somatoform disorders (F40 - F48)	96	12	12	8	19	15	21	12	22	11	22	15
- Of which post-traumatic stress disorder (PTSD) (F431)	24	3	~	3	5	4	5	3	~	2	6	4
- Of which adjustment disorder (F432)	39	5	~	3	~	4	10	6	13	6	7	5
Nervous system disorders (G00 - G99)	93	12	15	10	12	9	24	14	20	10	22	15
- Of which epilepsy (G40)	7	<1	0	0	0	0	~	1	~	2	~	<1
Eye and adnexa diseases (H00 - H59)	16	2	6	4	~	2	~	2	~	<1	~	1
- Of which blindness, low vision and visual disturbance (H53 & H54)	7	<1	~	3	~	<1	~	1	0	0	0	0
Ear and mastoid process diseases (H60 - H95)	51	6	~	3	~	<1	9	5	23	11	14	9
- Of which hearing loss (H833 & H90 - H91)	47	6	~	2	~	<1	9	5	21	10	13	9
- Of which noise-induced hearing loss (H833)	~	<1	0	0	0	0	0	0	~	1	~	<1
- Of which tinnitus (H931)	11	1	~	1	~	<1	0	0	6	3	~	1
Circulatory system disorders (I00 - I99)	45	6	10	7	~	3	12	7	12	6	~	5
Respiratory system disorders (J00 - J99)	21	3	~	3	~	2	~	<1	7	3	7	5
- Of which asthma (J45 & J46)	17	2	~	2	~	2	~	<1	6	3	5	3
Digestive system disorders (K00 - K93)	32	4	~	2	~	2	6	3	15	7	5	3
Skin and subcutaneous tissue diseases (L00 - L99)	20	3	5	3	~	3	~	2	6	3	~	1
Musculoskeletal disorders (M00 - M99) and Injuries (S00 - T98)	507	64	96	66	84	65	107	62	135	67	85	57
- Of which Injuries and disorders of the knee <sup>3</sup>	121 <sup>†</sup>	15	18	12	21	16	29 <sup>†</sup>	17 <sup>†</sup>	31	15	22	15
- Of which knee pain (M2556)	56	7	5	3	14	11	11	6	15	7	11	7
- Of which back pain (M549)	165	21	23	16	21	16	35	20	54	27	32	21
- Of which low back pain (M544-5)	138	17	21	14	17	13	25	14	48	24	27	18
- Of which heat injury (T67)	0	0	0	0	0	0	0	0	0	0	0	0
- Of which cold injury (T68 & T69)	6	<1	~	1	0	0	~	<1	~	1	0	0
Genitourinary system diseases (N00 - N99)	10	1	0	0	~	2	~	1	~	<1	~	3
Pregnancy, childbirth and puerperium (O00 - O99)	0	0	0	0	0	0	0	0	0	0	0	0
Congenital malformations (Q00 - Q99)	6	<1	~	2	0	0	~	<1	0	0	~	1
Clinical and laboratory findings (R00 - R99)	53	7	~	3	11	9	11	6	17	8	~	7
Factors influencing health status (Z00 - Z99)	76	10	8	6	16	12	15	9	16	8	21	14
No details held on principle condition for medical boarding	23		23		0		0		0		0	
Withheld consent	51		11		16		9		13		2	

Source: FMED 23

<sup>1</sup> Personnel are only counted once per cause code grouping

<sup>2</sup> Personnel may have multiple contributory ICD 10 codes in different cause code groups associated with their medical discharge.

Therefore totals may not match those provided in Tables 1-3

<sup>3</sup> Injuries and disorders of the knee have been compiled using ICD 10 codes M17, M22, M23, M2406, M2416, M2436, M2446, M2536, M2556, M2566, M2586, M2596, M7046, M7126, M7636, M7656, M925, S800, S82, S83, S89.

<sup>4</sup> Data presented as “~” has been suppressed in accordance with Defence Statistics’ rounding policy (see paragraph 42).

<sup>5</sup> Data presented as “<1%” represent a value of greater than 0% but smaller than 1%

94. The most common cause grouping for Regular RAF personnel was musculoskeletal disorders and injuries, accounting for 64% of all cause coded UK Regular RAF medical discharges between 2009/10 and 2013/14. The two most prominent ICD 10 codes within this cause grouping were low back pain (M5459) and knee pain (M2556).

95. The second most common cause grouping for RAF personnel was mental and behavioural disorders accounting for 28% of all cause coded UK Regular RAF medical discharges between 2009/10 and 2013/14. The most prominent ICD 10 code within this cause coding group was depressive episode, unspecified (F329).

96. The number and proportion of personnel medically discharged with a principal or contributory cause of ear and mastoid process disease has seen an increase, from less than five (3%) in 2009/10 to 14 (9%) in 2013/14.

## DISCUSSION

97. Before using numbers of medical discharges to inform policy or audit, it is important to understand what is being measured. A medical discharge is an occupational health outcome resulting from the interaction between morbidity and Service manning requirements, and changes in patterns seen could result from either perspective. Statistics on medical discharges should therefore not be confused with measures of true incidence of pathology or morbidity in the Services. It is this mixed aspect that makes discussion of the patterns and trends seen in these statistics difficult.

98. An interpretation of statistics based on these discharges must also take into account the highly varied skill mix requirements of the Services to meet the UK's Defence mission. At its most simple, the requirement to deploy on sea, land, and air impose radically different assessment criteria for selecting recruits and for subsequently retaining personnel who may fall seriously ill or suffer a limiting injury. Flexibility in setting fitness levels to meet the manning requirements varies accordingly. Furthermore, as military medicine and occupational health in the Services are frequently under review, patient management and medical boarding procedures evolve, also potentially affecting the numbers and trends reported.

99. Having noted that the practices and protocols for recommending and awarding a medical discharge differ for each Service, this is particularly true for untrained personnel where there are no similarities between the single Services. This is thought to reflect several factors: differences in training regimes (including intra-Service and inter-Service differences in training course duration), different levels of fitness required by each Service, and differences in the main types of occupational roles and activities the Services aim to staff with the new recruits after initial training.

100. The numbers of medical discharges for the Army have been rising since 2010/11 with an overall rise of the period 2009/10 to 2013/14 of 227%<sup>P</sup>. However, for the Naval Service and RAF numbers have decreased from the previous reporting year 2012/13 by 25% and 24% respectively. For the Army no single principal cause code could be attributed for the rise.

101. The key trends that appeared for all three Services over the reporting period 2009/10 to 2013/14 were:

- Certain demographic groups had significantly higher rates of medical discharge such as females, other (non-Officer) ranks, while there were no specific age groups with the highest rate of medical discharge across all three Services.
- The most common principal cause of medical discharge continued to be musculoskeletal disorders and injuries. The number of Army personnel medically discharged with a principal cause of musculoskeletal disorders and injuries has increased by 222%<sup>P</sup> over the reporting period. However the proportion of all Army cause coded medical discharges with a principal cause of musculoskeletal disorders and injuries has remained stable.
- Knee pain and Back pain were the most prominent musculoskeletal disorders.
- The second most common cause of medical discharge was mental and behavioural disorders.
- Neurotic and mood disorders accounted for the majority of mental and behavioural disorders.
- The proportion of cause coded medical discharges with a principal cause of ear and mastoid process diseases has risen over the reporting period. The proportion of cause coded medical discharges with principal or contributory cause code of ear and mastoid process diseases has also risen.

102. It is Defence Statistics' aim to be able to investigate significant morbidity within the Armed Forces, comprising medical downgradings as well as medical discharges. While work continues in this area, Defence Statistics will release this report on an annual basis.

**Detail of Revisions in Revised Report**

103. In total there are 240 figures that have been revised from the original edition of the report.
104. Within the revisions there are five distinct groupings:
- a) Two revisions have been made to the number of UK Regular Army personnel with a principal cause of hearing loss; the total number for 2009/10 - 2013/14 has been revised from 346 to 349 and the number in 2013/14 has been revised from 135 to 136. This revision is the result of correcting a formula in the spreadsheet used to generate the report.
  - b) Ten revisions have been made to the number or percentage of personnel with a principal or contributory cause of injuries and disorders of the knee. This revision is the result of correcting a formula in the spreadsheet used to generate the report.
  - c) Two revisions have been made to the overall number of Army personnel with a principal or contributory cause of diabetes and of which those which are insulin dependent. This revision is the result of correcting a formula in the spreadsheet used to generate the report.
  - d) 61 revisions have been made to the suppression applied to **Tables 2, 5 and 8**. This revision is the result of correcting a formula in the spreadsheet used to generate the report.
  - e) 66 revisions have been made to the proportions of personnel medically discharged for different cause code groups in 2009/10 (**Tables 2, 5 and 8**). This revision is the result of correcting a formula in the spreadsheet used to generate the report.
  - f) The remaining 99 revisions all affect rates published within the report. This was a result of altering the code that generates the denominator data used in the calculation of rates within the report.
105. In addition, the rates presented in **Figure 4** have been revised. This revision is the result of correcting a formula in the spreadsheet used to generate the figure.