

# UK Armed Forces Mental Health: Annual Summary & Trends Over Time, 2007/08 - 2015/16

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This annual statistical bulletin provides statistical information on mental health in the UK Armed Forces for the period 1 April 2007 to 31 March 2016. It summarises all initial assessments for a new episode of care of Service personnel at MOD specialist mental health services (Departments of Community Mental Health (DCMH) for outpatient care and all admissions to the MOD's in-patient care contractor) by financial year.

This is the second report in this annual series to provide figures for the number of UK Armed Forces personnel assessed at a MOD DCMH and/or to be admitted to one of the MOD's in-patient care providers in addition to the number of new episodes of care. This report presents nine-year trend information on demographic groups at risk and comparisons to mental health in the UK population.

All tables provided in previous releases of this report have been updated with 2015/16 data and are available in the separate Excel file at https://www.gov.uk/government/collections/defence-mental-health-statistics-index.

# **Key Points and Trends**

Assessments for mental disorders at MOD Specialist mental health services have risen steadily from 1.8% of UK Armed Forces personnel in 2007/08, to 3.2% in 2015/16. It is unclear what proportion of this rise is due to the success of anti-stigma campaigns, changes in detection rates and referral behaviour and what is a true rise in mental health disorders.

Although the absolute numbers and rates of mental disorder among UK Armed Forces personnel assessed at MOD Specialist mental health services has increased over time, findings of significantly higher presentations in certain demographic groups between 2007/08 and 2015/16 remained broadly similar:

- **Army** and **RAF** personnel the lower rates of mental disorder seen among Royal Marines may be the due to the recruitment selection process, support received as a result of tight unit cohesion and high levels of preparedness for combat;
- **Females** this is replicated in the UK civilian population and may be a result of females being more likely to report mental health problems than males;
- Other Ranks higher educational attainment and socio-economic background are associated with lower levels of mental health disorder and this may explain differences in the rates between officers and other ranks;
- Personnel aged between 20 and 44 years of age

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Background Quality Report: <a href="https://www.gov.uk/government/statistics/mental-health-in-the-uk-armed-forces-background-quality-report">www.gov.uk/government/statistics/mental-health-in-the-uk-armed-forces-background-quality-report</a>

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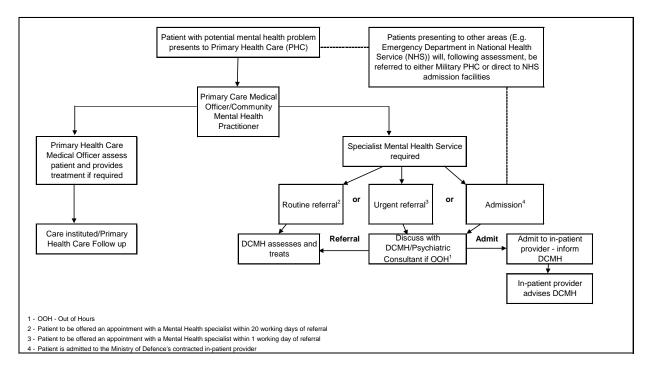
# Supplementary tables containing:

- all data presented in this publication
- figures presenting UK Armed Forces personnel PTSD by gender and Psychoactive Substance Misuse due to alcohol by gender.
- tables presenting UK Armed Forces personnel by assignment type Regular, Reservist and Other.
- updated tables from previous reports presenting numbers, rates and 95% confidence intervals on new episodes of care
- information relating to aeromedical evacuations from Iraq and Afghanistan for psychiatric reasons; Field Mental Health Team assessments, assessments for mental disorders at Defence Medical Rehabilitation Centre; Reservist Mental Health Program; Medical discharges for mental and behavioural reasons and Armed Forces Compensation Scheme awards for mental disorders

can be found at: https://www.gov.uk/government/collections/defence-mental-health-statistics-index

#### Introduction

- 1. Assessment and care-management within the Armed Forces for personnel experiencing mental health problems is available at three levels :
  - In Primary Health Care (PHC), by the patient's own Medical Officer (MO).
  - In the community through specialists in military Departments of Community Mental Health (DCMH).
  - In hospitals, either the NHS or the contracted In-Patient Service Provider (ISP).
- 2. The level of care a patient may require is determined by a number of factors, including the severity of symptoms and the degree of risk posed by the patient's current condition. The following diagram shows the pathways into mental health services in the Armed Forces:

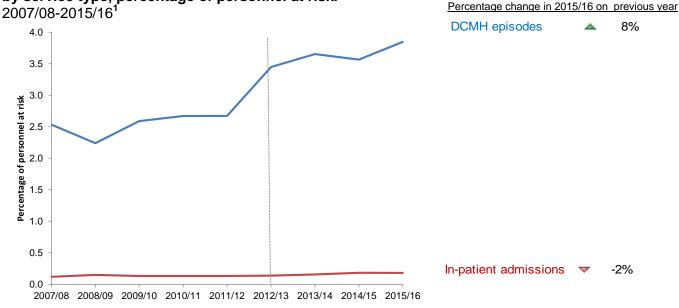


- 3. This report summarises all attendances for a new episode of care of Armed Forces personnel at MOD Specialist mental health services (MOD's DCMH for outpatient care, and all admissions to the MOD's in-patient care contractor) only. It therefore captures patients referred to the Specialist Mental Health Service and does not represent the totality of mental health problems in the Armed Forces as some patients can be treated wholly within the primary care setting by their GP or medical officer.
- 4. DCMH are specialised psychiatric services based on community mental health teams closely located with primary care services at sites in the UK and abroad. All UK based and aero-medically evacuated Service personnel based overseas requiring in-patient admission are treated by one of eight NHS trusts in the UK which are part of a consortium headed by the SSSFT NHS Foundation trust; UK based Service personnel from British Forces Germany are treated at Gilead IV hospital, Bielefield under a contract with SSAFA through the Limited Liability Partnership. When presenting inpatient data in this report, the data include returns from both contract providers.

## Results: Trends in UK Armed Forces mental health initial assessments 2007/08 - 2015/16

5. UK Armed Forces personnel may access specialist mental health care as an outpatient at a MOD Department of Community Mental Health (DCMH) and/or as an in-patient at a MOD in-patient care provider. Clinician's record the patient's initial mental health assessment based on the presenting signs and symptoms. A number of patients are assessed by clinician's as having no specific and identifiable mental disorder.

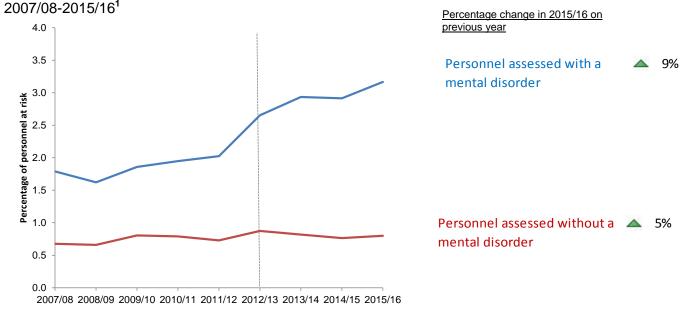
Figure 1 : UK Armed Forces personnel presenting at MOD Specialist Mental Health Services by service type, percentage of personnel at risk.



Source: DS Database and DMICP

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76)
- 6. There was a rising trend in the rate of UK Armed Forces personnel seen at MOD Specialist Mental Health services since 2007/08, with a 8% statistically significant increase seen in the latest year.
- 7. Possible explanations for the rise in 2015/16 may be the successful effect of campaigns run by the MOD to reduce stigma resulting in an increase in mental health awareness among Armed Forces personnel, Commanding Officers and clinician's in the primary care setting leading to greater detection rates and referrals to specialist care.
- 8. The number of personnel admitted to a MOD in-patient provider **remains low at 0.2%** of all Armed Forces personnel in 2015/16.

Figure 2: UK Armed Forces personnel presenting at MOD Specialist Mental Health services by initial assessment, percentage of personnel at risk.



- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76)
- 9. In recent years, an increasing proportion of personnel seen at MOD Specialist Mental Health services were assessed by clinicians as having a mental health disorder, thus requiring the treatment skills and services of MOD mental health clinicians, reasons for this increase have been explored in paragraph 7.

Table 1: UK Armed Forces personnel presenting at MOD Specialist Mental Health Services by Service provider, initial assessment, numbers and percentage population at risk. 2007/08-2015/16<sup>1</sup>

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13 <sup>1</sup>	2013/14	2014/15	2015/16
Number of personnel	n	n	n	n	n	n	n	n	n
Personnel with an initial assessment with MOD Mental									1
Health Services <sup>2</sup>	5,118	4,556	5,318	5,440	5,302	6,507	6,521	6,059	6,364 <sup>r</sup>
At a DCMH	5,033	4,418	5,231	5,349	5,205	6,434	6,429	5,943	6,255 <sup>r</sup>
At a MOD in-patient provider	236	293	266	266	257	257	275	305	292
Personnel assessed with a mental disorder <sup>3</sup>	3,557	3,199	3,753	3,902	3,944	4,952	5,165	4,858	5,147 <sup>r</sup>
Personnel assessed without a mental disorder <sup>3</sup>	1,343	1,303	1,626	1,584	1,419	1,631	1,440	1,274	1,300 <sup>r</sup>
Missing mental disorder information 4	256	138	68	86	10	14	41	32	21
Percentage of personnel at risk.	%	%	%	%	%	%	%	%	%
Personnel with an initial assessment with MOD Mental									
Health Services <sup>2</sup>	2.6	2.3	2.6	2.7	2.7	3.5	3.7	3.6	3.9
At a DCMH	2.5	2.2	2.6	2.7	2.7	3.4	3.7	3.6	3.8
At a MOD in-patient provider	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Personnel assessed with a mental disorder <sup>3</sup>	1.8	1.6	1.9	1.9	2.0	2.7	2.9	2.9	3.2
Personnel assessed without a mental disorder <sup>3</sup>	0.7	0.7	0.8	0.8	0.7	0.9	0.8	0.8	0.8
Missing mental disorder information ⁴	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

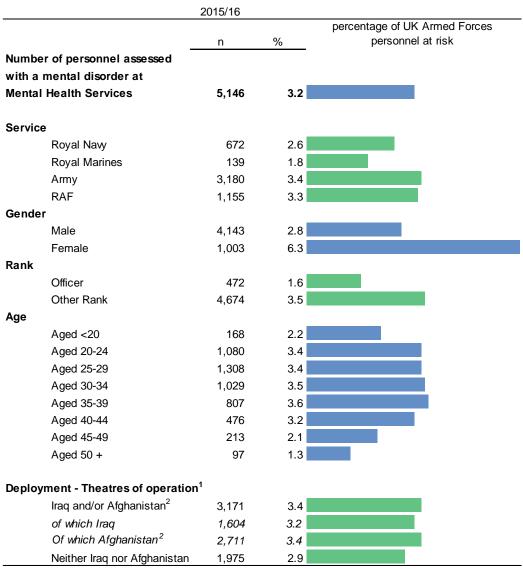
- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Please note, an individual may have had contact at both DCMH and In-patient provider.
- 3. Clinician's initial assessment based on presenting symptoms (paragraphs 71 and 72)
- 4. Initial diagnosis not available (See BQR)
- 5. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)
- 6. r marker denotes changes to previously published information (see BQR)

- 10. In 2015/16, **3.2%** of UK Armed Forces personnel were assessed with a mental disorder within specialised psychiatric services. This is lower than the rate of **3.5%** within the UK general population (based on access to NHS secondary mental health services in 2014/15 (latest data available) (www.hscic.gov.uk/mhsds).<sup>1</sup>
- 11. Comparisons with the UK general population are difficult for a number of reasons. Due to the nature of the role UK Armed Forces personnel undertake, in particular access to weapons; a patient's medical officer may refer at an earlier stage to specialised mental health services compared to the UK general population. In addition, the source of the UK general population statistic for mental ill-health also covers services such as Adult Learning Disability and Autistic Spectrum services which are not directly relevant to the Armed Forces population.
- 13. The lower rates seen among UK Armed Forces personnel accessing specialist mental health services compared to the UK general population may be due to the structure within the military; tight unit cohesion plays a vital role in maintaining good mental health as well as helping to identify early signs of mental ill-health.
- 14. The rigorous selection of fit people into the Armed Forces may help to prevent those with more serious mental disorders joining the Services. In addition, Armed Forces personnel who have a mental disorder which prevents continued Service in the military environment may be considered for medical discharge, thus more severe cases of mental health requiring in-patient admission may not remain in the Armed Forces population; this is different to the UK general population.

<sup>&</sup>lt;sup>1</sup> UK general population aged 16-59 years accessing NHS secondary mental health services in 2014/15 was used as a comparison against

15. The analysis in this section presents the number of UK Armed Forces personnel assessed with a mental health disorder at MOD specialist mental health services by demographic groups: Service; Gender; Officer/Other Rank; Age Group and deployment status. Table 2 presents the findings for 2015/16 collectively.

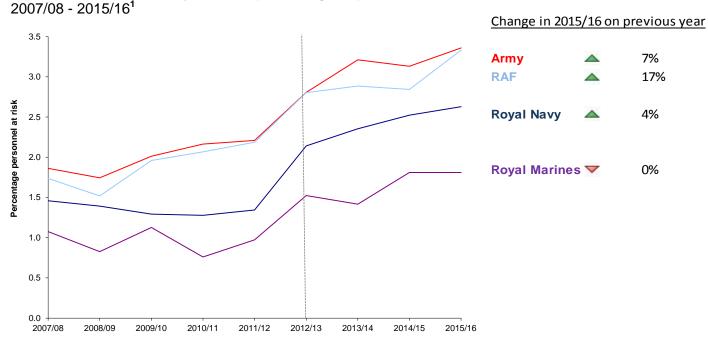
Table 2: UK Armed Forces personnel assessed with a mental disorder at MOD Specialist Mental Health Services by demographics, number and percentage of personnel at risk. 2015/16



- 1. Deployment to the wider theatre of operation (see BQR)
- 2. Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see BQR).
- 3. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)
- 4. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- Numbers within demographic groups may not sum the total as personnel who have more than one episode of care in a year and change age group, rank or deployment status will be counted once in each sub-category.

- 16. Table 2 shows significant differences in the rate of presentations for mental disorders within specific demographic groups :
  - Lower in Royal Marines
  - Higher in females
  - Higher in Other Ranks
  - Higher in personnel aged between 20 and 44 years
- 17. Although there was an overall increase in the presentations for mental disorders at MOD Specialist Mental Health services in 2015/16, higher rates of presentation among certain demographic groups between 2007/08 and 2015/16 have remained broadly similar to those seen in Table 2. Figures 3-6 present mental disorders among each demographic group since 2007/08 along with possible explanations for the differences observed.

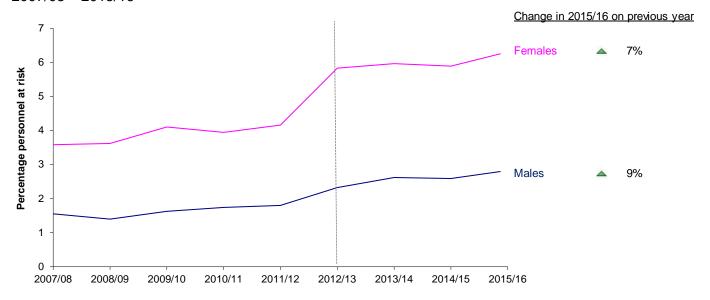
Figure 3: UK Armed Forces personnel assessed with a mental disorder at MOD Specialist Mental Health Services by Service, percentage of personnel at risk.



- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76)
- 3. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 18. The RAF had a statistically significant increase (17%) in the number of personnel assessed as having a mental disorder in 2015/16 compared to last year (Figure 3). The RAF have seen an increase of 92% between 2007/08 and 2015/16, the highest of each of the Services.
- 19. The reasons for the significant increase seen in mental disorders among RAF personnel in 2015/16 are unclear. It is possible that greater mental health awareness through anti-stigma campaigns have contributed to this rise, this may also explain the 7% rise in Army personnel, although the rise in Army personnel were not statistically significant.
- 20. Royal Marines had significantly lower rates of mental ill health than the Army and RAF. The Royal Marines undergo rigorous training to ensure only the 'elite' go forward as Royal Marines (thus

the selection process removes those that may be more susceptible to mental health problems). The tight unit cohesion that exists amongst the elite forces further supports the 'healthy worker' effect (personal communication with Def Prof Mental Health) and may also influence the lower rates of mental ill health in this Service. In addition, high levels of preparedness may serve to lessen the impact of operational deployment experiences on mental ill health among the Royal Marines (Sundin et al., 2010).

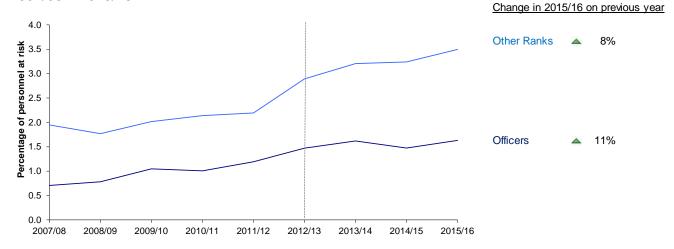
Figure 4: UK Armed Forces personnel assessed with a mental disorder at MOD Specialist Mental Health Services by gender, percentage of personnel at risk 2007/08 – 2015/16<sup>1</sup>



- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76)
- 3. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 21. Rates of mental disorders in **females were significantly higher than males** across all years presented (Figure 4). This finding was replicated in the civilian population where females are more likely to report mental ill health than males. A study following up the mental health of adults suggested that this is because females are likely to have more interactions with health professionals (Better or Worse; a follow up study of the mental health of adults in Great Britain London, National Statistics, 2003). MOD has not investigated whether females in the UK Armed Forces have more interactions with health professionals than their male colleagues.
- 22. Although females have consistently higher rates of mental ill-health compared to males, only males have seen a significant increase in the percentage of personnel who presented to MOD Specialist Mental Health services in the latest year (9%). Since reporting began in 2007/08 males have also seen a bigger increase in the percentage of personnel presenting overall compared to females (82% and 76% respectively).

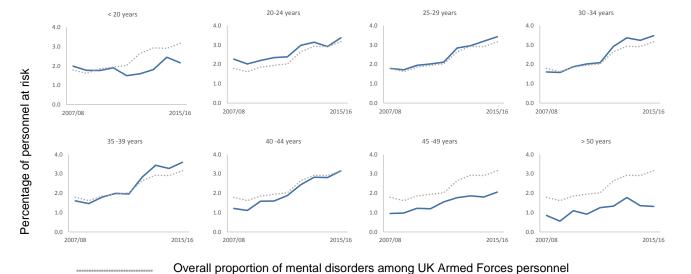
Figure 5: UK Armed Forces personnel assessed with a mental disorder at MOD Specialist Mental Health Services by Officer/Other Rank, percentage of personnel at risk.

 $2007/08 - 2015/16^{1}$ 



- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76).
- 3. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 23. Other Ranks had consistently higher rates of mental ill health compared to Officers in the UK Armed Forces for all years presented (Figure 5). The differences between Other Ranks and Officers may be due to educational and/or socio-economic background, where both higher educational attainment and higher socio-economic background are associated with lower levels of mental ill health disorder (Meltzer et al., 2003). The majority of Officers (with the exception of those promoted from the Ranks) are recruited as graduates of the higher education system, whilst the majority of Other Ranks are recruited straight from school and often from the inner cities (particularly for the Army).
- 24. Whilst Other Ranks had consistently higher rates of mental ill health; Officers have seen a higher increase in the percentage of personnel who presented to MOD Specialist Mental Health services compared to Other Ranks (131% and 79% respectively) over the presented time period. A possible explanation of the increase in presentations could be due to MOD's commitment to anti-stigma campaigns and increase in mental health awareness.

Figure 6 : UK Armed Forces personnel assessed with a mental disorder at MOD Specialist Mental Health Services by Age group, percentage of personnel at risk 2007/08 - 2015/16

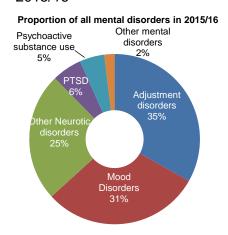


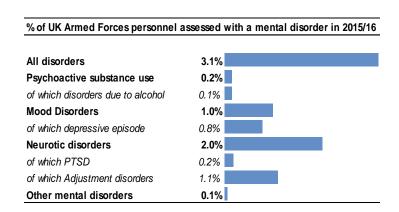
- 1. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76).
- 2. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 25. Rates of mental disorders were **highest among those aged between 20-44 years** compared to those aged under 20 years and 45 years and over (Figure 6). The reasons for this are unclear.
- 26. A number of the age groups saw an increase in the percentage of presentations which was greater than that seen in the UK Armed Forces as a whole, for example personnel aged 40-44 had a 160% increase in the percentage of presentations to MOD Specialist Mental Health services in 2015/16 compared to the start of reporting in 2007/08. The reasons for this are unclear.

#### Results: Trends UK Armed Forces mental disorders at MOD DCMH 2007/08 - 2015/16

27. Clinician's at MOD Specialist Mental Health services record the patient's initial mental health assessment based on the presenting signs and symptoms, categorizing to World Health Organisation's International Statistical Classification of Diseases and Health-Related Disorders 10th edition (ICD-10) mental disorders. A patient admitted to a MOD in-patient provider will be discharged to the care of a DCMH and therefore the data in this section presents the number of personnel assessed at a MOD DCMH by mental disorder.

Figure 7: UK Armed Forces personnel mental disorders at initial assessment at MOD DCMH. 2015/16<sup>1</sup>



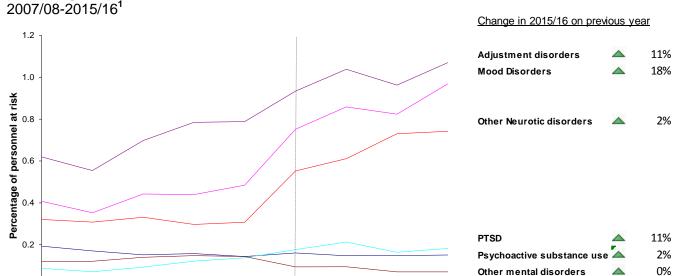


Source: DS Database and DMICP

- 1. Percentages in doughnut may not sum 100% due to some personnel presenting with more than one disorder and thus are counted within each disorder they have presented with.
- 2. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 3. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76)
- 28. **Adjustment Disorders** were the most prevalent mental disorder among UK Armed Forces personnel in 2015/16, accounting for around 35% of all mental disorders in the Armed Forces (Figure 7). Rates of this disorder were significantly higher than all other mental disorders in each year since 2007/08 (Figure 8).
- 29. The finding that Neurotic Disorders (Adjustment, PTSD and Other Neurotic Disorders) were the most prevalent mental disorders among UK Armed Forces personnel is consistent with that seen in the UK general population. However, there were differences in the specific types of Neurotic Disorders most commonly seen within the Armed Forces and civilian population. In the UK general population, Mixed Anxiety and Depression and Anxiety disorders were the most common Neurotic disorders (Better or Worse; a follow up study of the mental health of adults in Great Britain London, National Statistics, 2003), whereas Adjustment disorder was the most common in the UK Armed Forces. Adjustment disorder is a short term condition occurring when a person is unable to cope with or adjust to a particular source of stress such as a major life change, loss or event. The higher rates of adjustment disorders seen in the UK Armed Forces compared to the UK general population may reflect the impact of Service life with routine postings every few years and operational tours. Another possible explanation is a clinician's diagnostic habit to assess Armed Forces personnel with a condition which is less prognostically serious (personal correspondence with DCA Psychiatry, 2014). There may also exist a diagnostic bias among clinicians treating personnel who have been previously deployed as having an adjustment disorder resulting in other conditions being undercounted.

- 30. The proportion of mental disorder assessments for Mood Disorders has increased since 2007/08, (Figure 8), accounting for between 22% to 31% of all mental disorders in each year. Conversely, the proportion of mental disorder assessments for Psychoactive substance misuse due to alcohol fell from 10% to 5% of all mental disorders.
- 31. Despite media attention focusing on prevalence of **PTSD** and **Psychoactive substance misuse due to alcohol** in the Armed Forces, Figure 7 shows that these disorders remain **a rare event** (0.2% and 0.1% respectively).

Figure 8 : UK Armed Forces personnel by mental disorder at initial assessment at MOD DCMH, percentage of personnel at risk.



2009/10

2008/09

1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).

2013/14

2014/15

2015/16

2. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76).

2012/13

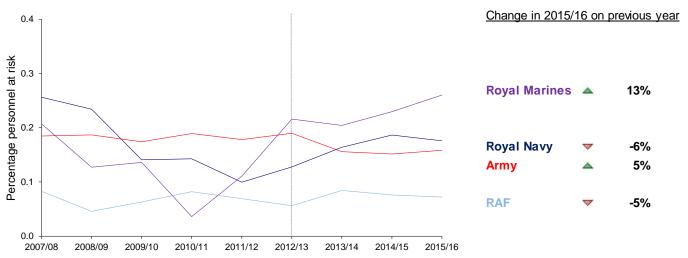
3. Excludes personnel where Initial diagnosis was not supplied (See BQR)

2011/12

2010/11

- 32. In 2015/16 there was a significant increase in the proportion of personnel assessed as having an adjustment disorder or mood disorder, compared to the previous year. Possible reasons for this increase have been explored in paragraph 7.
- 33. Some disorders showed a greater increase in the proportion of personnel presenting to MOD DCMH over the time period presented. Mood disorders, adjustment disorder and other neurotic disorders had the highest increase in the percentage of personnel presenting (137%, 73% and 131% respectively)
- 34. The percentage of UK Armed Forces who had an initial assessment for PTSD remained low at around 0.2% in 2015/16. In the latest year the percentage of personnel presenting increased by 11% however this increase was not significant. Figure 10, below, presents the differences in the percentage of Armed Forces personnel within each Service assessed with PTSD.
- 35. Conversely psychoactive substance misuse due to alcohol and other mental health disorders showed a decline in presentations since reporting began in 2007/08 (-22% and -41% respectively). Defence Statistics will continue to monitor factors that may be influencing this change. There are some differences in the percentage of Armed Forces personnel within each Service assessed with psychoactive substance misuse due to alcohol (Figure 9).

Figure 9 : UK Armed Forces personnel with an initial assessment at the MOD's DCMH, for psychoactive substance misuse due to alcohol, by Service, percentage personnel at risk.  $2007/08 - 2015/16^1$ 



- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76).
- 3. Excludes personnel where Initial diagnosis was not supplied (See BQR)

36. Despite the overall low number of initial assessments for Psychoactive Substance Misuse for Alcohol, there were differences between the Services. Rates for alcohol misuse decreased among Royal Navy, Army and RAF personnel since 2007/08, however a different pattern was seen among the Royal Marines, with an overall increase of 26% since the start of the period presented.

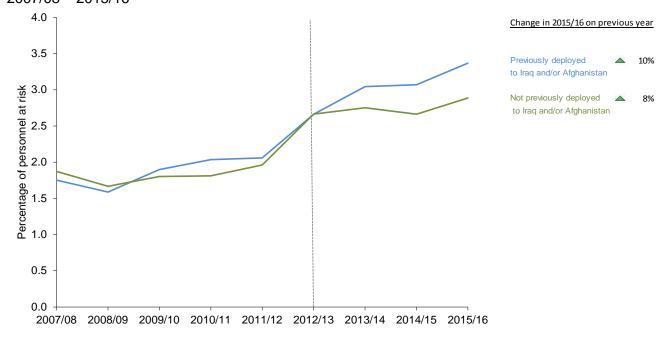
Figure 10: UK Armed Forces personnel with an initial assessment at the MOD's DCMH, for PTSD by Service, percentage personnel at risk.  $2007/08 - 2015/16^1$ 



- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76).
- 3. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 37. The Army and Royal Marines had the highest proportion of personnel assessed with PTSD during the nine year period. Figure 12 shows that deployment is a key factor for PTSD in the UK Armed Forces, of which both Services routinely deploy and thus it is reasonable to expect the rate of PTSD to be higher in these Services.
- 38. In latest year the Royal Navy had the highest percentage increase compared to the previous year for personnel presenting with PTSD. Caution should be exercised when interpreting these findings due to the small number of personnel presenting with PTSD within these demographic groups.
- 39. Despite the increase in the rates of personnel assessed with PTSD over time, rates remain low at 0.2% of UK Armed Forces personnel in 2015/16.

Results: Differences in mental disorders among those previously deployed to Iraq/Afghanistan compared to those not previously deployed there

Figure 11 : UK Armed Forces personnel assessed with a mental disorder at MOD Specialist Mental Health Services by Deployment Status<sup>2,3</sup>, percentage of personnel at risk.  $2007/08 - 2015/16^1$ 



Source: DS Database, DMICP, SSSFT and BFG

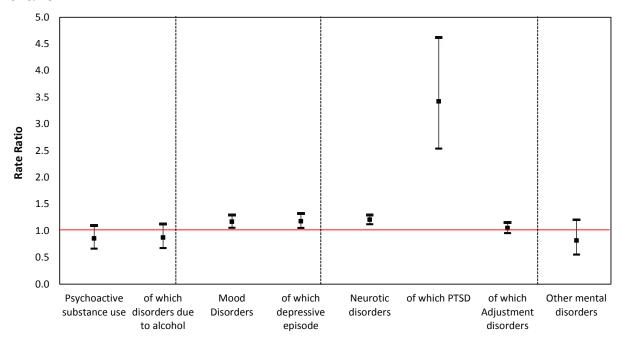
- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Deployment to the wider theatre of operation (see BQR)
- 3. Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see BQR).
- 4. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76).
- 5. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 40. Since 2007/08 the percentage of UK Armed Forces personnel who were identified as having a mental health disorder and were previously deployed to Iraq and/or Afghanistan increased by 92% compared to 54% of personnel who were identified as not having previously deployed.
- 41. In four of the last nine years<sup>2</sup> (2010/11; 2013/14; 2014/15 and 2015/16) the difference between those identified as having previously deployed was significantly higher than those who were identified as not having previously deployed. In 2015/16, **3.4%** of personnel who were identified as having previously deployed to Iraq and/or Afghanistan were assessed as having a mental disorder compared to **2.9%** identified as not having previously deployed there. This difference was statistically significant.
- 42. There were significant differences in the rate ratios for specific mental disorders. The rate ratios (RR) presented provide a comparison of cases seen between personnel identified as having deployed to a theatre and those who have not been identified as having deployed to either theatre. A rate ratio less than 1 indicates lower rates in those deployed than those not deployed, whereas a rate ratio

<sup>2</sup> 2011/12 was previously reported as having a significant difference between those identified as having previously deployed and those identified as not previously deployed. Due to a revision this is no longer the case.

greater than 1 indicates higher rates in those deployed than those not deployed. If the 95% confidence interval does not encompass the value 1.0, then this difference is statistically significant.

- 43. When looking at the specific mental disorders in 2015/16, there were some statistically significant differences between those deployed to the Iraq and/or Afghanistan theatres of operation and those not identified as having previously deployed there:
  - Rates of PTSD were higher in those who had previously deployed to Iraq and/or Afghanistan than those not deployed there (Figure 12). For each separate deployment this represents an increase risk for PTSD of 230%(r) for Service personnel previously deployed to Iraq and 270% for Service personnel previously deployed to Afghanistan.
  - Rates of Depressive episodes were higher in those previously deployed to Iraq and/or Afghanistan than those not previously deployed there (Figure 12).

Figure 12: UK Armed Forces personnel seen at the MOD's DCMH's, for Iraq and/or Afghanistan by mental disorder. Rate Ratio, 95% Confidence Interval. 2015/16



Source: DS Database and DMICP

1. Deployment to the wider theatre of operation (see BQR)

2. Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see BQR).

Number of new episodes of care at MOD specialist services in 2007/08 – 2015/16

44. Personnel may have more than one episode of care in a year. To understand clinical activity and prevalence of mental health disorders assessed at MOD specialist mental health services, it is important to present the total number of new episodes of care. This is of particular use to MOD's policy areas and other internal users of this bulletin.

Table 3: UK Armed Forces new episodes of care at MOD Specialist Mental Health Services by Service provider, initial assessment, numbers and percentage personnel at risk. 2007/08-2015/16<sup>1</sup>

	2007/08	2008/09	2009/10 <sup>1</sup>	2010/11	2011/12	2012/13 <sup>1</sup>	2013/14	2014/15	2015/16
Number of new episodes of care									
New episodes of care at MOD Mental Health Services <sup>2</sup>	5,277	4,716	5,735	5,886	5,708	7,002	7,129	6,574	7,022 <sup>r</sup>
At a DCMH	5,037	4,418	5,443	5,582	5,404	6,700	6,804	6,210	6,686 <sup>r</sup>
At a MOD in-patient provider	240	298	292	304	304	302	325	364	336
Episodes assessed with a mental disorder 3	3,674	3,272	4,002	4,190	4,261	5,338	5,624	5,246	5,669 <sup>r</sup>
Episodes assessed without a mental disorder <sup>3</sup>	1,346	1,303	1,662	1,603	1,437	1,649	1,459	1,292	1,332 <sup>r</sup>
Missing mental disorder information <sup>4</sup>	257	141	71	93	10	15	46	36	21
Percentage of personnel at risk									
New episodes of care at MOD Mental Health Services <sup>2</sup>	2.7	2.4	2.8	2.9	2.9	3.8	4.1	3.9	4.3
At a DCMH	2.5	2.2	2.7	2.8	2.8	3.6	3.9	3.7	4.1
At a MOD in-patient provider	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Episodes assessed with a mental disorder <sup>3</sup>	1.8	1.7	2.0	2.1	2.2	2.9	3.2	3.1	3.5
Episodes assessed without a mental disorder <sup>3</sup>	0.7	0.7	0.8	0.8	0.7	0.9	0.8	0.8	0.8
Missing mental disorder information 4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: DS Database, DMICP, SSSFT, BFG

45. As seen in the rate of personnel presenting for assessment at MOD Specialist Mental Health services (Table 1), there was a significant (7%) rise in the rate of new episodes of care between 2014/15 and 2015/16. Possible explanations for changes over time are the same as described in the first section of this bulletin.

Number of UK Armed Forces personnel assessed at MOD specialist services in 2015/16

- 46. Table 1 and Table 3 show, in 2015/16, **6,362** UK Armed Forces personnel had **7,020** new episodes of care at MOD specialist mental health services. There were 6,684 new episodes at MOD DCMH and 336 new episodes at a MOD In-patient providers
- 47. Breaking this information into initial assessments for mental health disorders at a MOD DCMH during 2015/16, there were :
  - 3,204 personnel with 3,357 new episodes of care for Neurotic Disorders.
    - Of which, 1,739 personnel with 1,791 new episodes of Adjustment Disorder.
    - Of which, 297 personnel with 326 new episodes of PTSD.

<sup>1.</sup> Dotted lines represent changes in methodology. April 2007- Jun 2009 new attendances, July 2009 to date new episodes of care and 2012/13 revised methodology to include electronic patient record data source (paragraph 73).

<sup>2.</sup> Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)

<sup>3.</sup> Clinician's initial assessment based on presenting symptoms (paragraphs 71 and 72)

<sup>4.</sup> Excludes personnel where Initial diagnosis was not supplied (See BQR)

<sup>5.</sup> r denotes a change to previously published information (See BQR)

- 1,574 personnel with 1,648 new episodes of care of Mood Disorder.
  - Of which, 1,251 personnel with 1,304 episodes of Depressive episodes.
- 246 personnel with 257 new episodes of Psychoactive Substance Misuse..
  - Of which, 240 personnel with 251 episodes of Psychoactive Substance Misuse due to alcohol.
- 102 personnel with 104 new episodes of Other Mental Disorders.
- 48. More detailed tables presenting episodes of care data and rates per 1,000 personnel at risk and 95% Confidence Intervals are available in Excel tables at <a href="https://www.gov.uk/government/collections/defence-mental-health-statistics-index">https://www.gov.uk/government/collections/defence-mental-health-statistics-index</a>.

# Annex A1: Royal Navy personnel presenting at MOD Specialist Mental Health Services 2007/08-2015/16

- 49. The overall percentage of personnel with mental ill health among Royal Navy personnel presenting at MOD Specialist Mental Health Services increased by 4% in 2015/16 compared to the previous year. This is lower than the overall 9% increase seen the UK Armed Forces as a whole over the same time period.
- 50. There were statistically significant higher presentations in certain demographic groups in line with the findings for the UK Armed Forces as a whole :
  - Females
  - Other ranks
  - Personnel aged 25-39 years
- 51. Previous deployment to Iraq or Afghanistan was not a predictor of mental disorders in the Royal Navy.
- 52. In line with the Armed Forces as a whole, Neurotic Disorders were the most prevalent condition among Royal Naval personnel assessed with a mental disorder.
- 53. Rates per 1,000 personnel at risk and 95% Confidence Intervals are available in Excel tables at https://www.gov.uk/government/collections/defence-mental-health-statistics-index.

Table A1.1 : Royal Navy personnel assessed at MOD Specialist Mental Health Services, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Number of initial				
Royal Navy	assessments	n	%		
2007/08	706	461	1.5		
2008/09	651	434	1.4		
2009/10	638	404	1.3		
2010/11	659	394	1.3		
2011/12	609	392	1.3		
2012/13	836	586	2.1		
2013/14	849	617	2.4		
2014/15	819	649	2.5		
2015/16	818	672	2.6		

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).

Table A1.2: Royal Navy personnel assessed at MOD Specialist Mental Health Services, by gender, numbers and percentage personnel at risk.

	М	ale		Fer	nale	
	Number of initial	Of which mental disorders		Number of initial	Of wh men disord	tal
Royal Navy	assessments	n	%	assessments	n	%
2007/08	526	331	1.2	180	130	3.6
2008/09	463	287	1.0	188	147	4.0
2009/10	476	290	1.1	162	114	3.1
2010/11	499	285	1.0	160	109	3.0
2011/12	465	301	1.2	144	91	2.7
2012/13	636	428	1.8	200	158	5.0
2013/14	682	498	2.1	167	119	4.0
2014/15	635	493	2.2	184	156	5.2
2015/16	640	515	2.3	178	157	5.2

Source: DS Database, DMICP, SSSFT and BFG

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73)
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).

Table A1.3: Royal Navy personnel assessed at MOD Specialist Mental Health Services, by rank, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Off	icer		Othe	r Rank	
	Number of initial	Of which mental disorders		Number of initial	Of w mer disor	ital
Royal Navy	assessments	n	%	assessments	n	%
2007/08	66	55	8.0	640	406	1.6
2008/09	80	62	0.9	571	372	1.5
2009/10	71	52	0.8	567	352	1.4
2010/11	76	52	0.8	583	342	1.4
2011/12	77	56	0.8	532	336	1.5
2012/13	105	76	1.2	731	510	2.4
2013/14	109	77	1.2	740	540	2.7
2014/15	120	87	1.4	699	562	2.9
2015/16	125	98	1.6	693	574	3.0

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73)
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).
- 3. Numbers within rank groups may not sum the total as personnel who have more than one episode of care in a year and change rank group will be counted once in each sub-category.

Table A1.4: Royal Navy personnel assessed at MOD Specialist Mental Health Services with a mental health disorder, by Age group, numbers and percentage personnel at risk.

	2007	08	2008/	09	2009/	10	2010	/11	2011	/12	2012	/13	2013	14	2014	15	2015/	/16
Royal Navy	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Under 20	40	2.1	27	1.4	26	1.5	20	1.4	8	1.0	8	1.7	~	0.6	8	1.2	8	0.9
20 - 24	127	1.9	126	2.0	109	1.7	103	1.6	81	1.4	139	2.7	106	2.2	105	2.3	103	2.4
25 - 29	99	1.7	87	1.4	97	1.5	92	1.4	108	1.7	150	2.4	172	2.8	193	3.2	179	3.0
30 - 34	59	1.3	65	1.6	53	1.3	53	1.2	63	1.4	108	2.3	138	2.9	127	2.7	159	3.3
35 - 39	82	1.4	78	1.4	58	1.1	67	1.3	63	1.4	76	2.0	91	2.7	91	2.8	99	3.0
40 - 44	36	1.0	32	8.0	41	1.1	41	1.1	45	1.2	73	2.0	63	1.9	74	2.5	63	2.2
45 - 49	~	8.0	~	8.0	15	0.6	16	0.7	21	0.9	25	1.1	38	1.7	42	1.9	45	2.1
50+	~	0.3	~	0.2	7	0.7	5	0.5	5	0.5	8	0.8	~	1.0	13	1.0	16	1.1

Source: DS Database, DMICP, SSSFT and BFG

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73)
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).
- 3. Numbers within age groups may not sum the total as personnel who have more than one episode of care in a year and change age group will be counted once in each sub-category.
- 4. In line with the JSP 200 directive on statistical disclosure control, figures have been suppressed. Please see Background Quality Report for more information.

Table A1.5 : Royal Navy personnel assessed at MOD Specialist Mental Health Services, by Deployment Status<sup>1,2</sup>, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Iraq and/or A	Afghanista	an <sup>1,2</sup>	Ir	aq		Afgha	nistan²		Neither	Operation	
	Number of initial	Of wh ment disord	tal	Number of initial	Of which mental disorders		Of which Number of mental initial disorders		Number of initial	Of which me		
Royal Navy	assessments	n	%	assessments	n	%	assessments	n	%	assessments	n	%
2007/08	169	121	1.1	156	112	1.1	19	15	0.7	538	341	1.7
2008/09	214	157	1.3	194	140	1.3	49	37	1.3	437	277	1.4
2009/10	211	152	1.3	174	123	1.2	68	52	1.5	427	252	1.3
2010/11	213	137	1.1	178	112	1.1	64	42	1.1	446	257	1.4
2011/12	214	148	1.2	168	117	1.2	83	60	1.3	395	244	1.4
2012/13	259	196	1.7	199	157	1.7	111	85	1.8	579	391	2.4
2013/14	291	225	2.1	221	171	2.1	128	99	2.1	558	392	2.5
2014/15	268	224	2.3	184	151	2.1	145	126	2.7	552	426	2.7
2015/16	273	242	2.7	187	167	2.5	147	129	3.0	545	430	2.6

- 1. Deployment to the wider theatre of operation (see BQR)
- 2. Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see BOR)
- 3. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)
- 4. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 5. Numbers within deployment groups may not sum the total as personnel who have more than one episode of care in a year and change deployment status will be counted once in each sub-category.

Table A1.6: Royal Navy personnel seen at the MOD's DCMH by mental disorder, numbers and percentage personnel at risk.

Royal Navy	2007	/08	2008	/09	2009	/10	2010	/11	2011	/12	2012	/13 <sup>1</sup>	2013/	14	2014/	15	2015/	/16
ICD-10 description	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
All cases seen by DCMH	691	2.2	633	2.0	627	2.0	645	2.1	598	2.1	829	3.0	840	3.2	805	3.1	807	3.2
Cases of Mental Health disorder	445	1.4	415	1.3	394	1.3	386	1.3	381	1.3	577	2.1	609	2.3	635	2.5	660	2.6
Psychoactive substance use	85	0.3	73	0.2	47	0.2	47	0.2	32	0.1	36	0.1	43	0.2	49	0.2	45	0.2
of which disorders due to alcohol	81	0.3	73	0.2	44	0.1	44	0.1	29	0.1	35	0.1	43	0.2	48	0.2	45	0.2
Mood disorders	123	0.4	115	0.4	131	0.4	121	0.4	121	0.4	207	8.0	211	0.8	218	0.8	223	0.9
of which depressive episode	116	0.4	106	0.3	125	0.4	113	0.4	114	0.4	188	0.7	197	0.8	205	0.8	192	0.8
Neurotic disorders	207	0.7	194	0.6	194	0.6	201	0.7	212	0.7	321	1.2	337	1.3	366	1.4	384	1.5
of which PTSD	13	0.0	13	0.0	19	0.1	20	0.1	21	0.1	38	0.1	28	0.1	32	0.1	48	0.2
of which adjustment disorders	133	0.4	103	0.3	117	0.4	137	0.4	136	0.5	168	0.6	186	0.7	205	0.8	192	0.8
Other mental and behavioural disorders	30	0.1	33	0.1	26	0.1	22	0.1	23	0.1	17	0.1	20	0.1	9	0.0	17	0.1
No mental disorder	216	0.7	218	0.7	239	0.8	266	0.9	221	0.8	256	0.9	239	0.9	175	0.7	158	0.6
No Initial assessment provided	30																	

Source : DS Database and DMICP

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73)
- 2. Clinician's initial assessment based on presenting symptoms (paragraphs 71 and 72)
- 3. Initial diagnosis not available (See BQR)
- 4. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)
- 5. Some personnel may present with more than one disorder within the year, thus the sum of each disorder will not equal to the sum of all personnel seen by a DCMH.

# Annex A2 : Royal Marine personnel presenting at MOD Specialist Mental Health Services 2007/08-2015/16

- 54. The overall percentage of personnel with mental ill health among Royal Marine personnel presenting to MOD Specialist Mental Health Services remained the same in 2015/16 compared to the previous year. This is in contrast to the overall 9% increase seen in 2015/16 for the UK Armed Forces as a whole for the same time period.
- 55. The small numbers in each demographic group result in wide confidence intervals around rates of mental disorders among Royal Marines and therefore, interpretation of statistically significant differences must be treated with caution.
- 56. Previous deployment to Iraq or Afghanistan was a predictor of mental disorders in the Royal Marines in three of the last nine years (2009/10, 2014/15 and 2015/16)
- 57. Unlike for the overall UK Armed Forces, there was no significant difference among Royal Marines year on year between males and females; rank or age group.
- 58. In line with the Armed Forces as a whole, Neurotic Disorders were the most prevalent condition among Royal Marines assessed with a mental disorder.
- 59. Rates per 1,000 personnel at risk and 95% Confidence Intervals are available in Excel tables at <a href="https://www.gov.uk/government/collections/defence-mental-health-statistics-index">https://www.gov.uk/government/collections/defence-mental-health-statistics-index</a>.

Table A2.1 : Royal Marine personnel assessed at MOD Specialist Mental Health Services, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Number of initial	Of wh men disor	tal
Royal Marines	assessments	n	%
2007/08	124	83	1.1
2008/09	85	65	0.8
2009/10	125	91	1.1
2010/11	100	63	0.8
2011/12	119	79	1.0
2012/13	152	120	1.5
2013/14	165	111	1.4
2014/15	174	142	1.8
2015/16	164	139	1.8

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).

Table A2.2: Royal Marine personnel assessed at MOD Specialist Mental Health Services, by gender, numbers and percentage personnel at risk.

	M	ale		Fer	n ale	
	Number of initial	men	of which mental disorders Number of		of wi men disor	ital
Royal Marines	assessments	n	%		n	%
2007/08	118	~	1.0	6	~	3.3
2008/09	~	~	0.8	~	~	2.2
2009/10	~	~	1.1	~	~	1.1
2010/11	100	63	0.8	0	0	0.0
2011/12	~	~	1.0	~	~	1.0
2012/13	144	113	1.5	8	7	7.0
2013/14	159	~	1.4	6	~	3.8
2014/15	164	133	1.7	10	9	8.2
2015/16	158	134	1.8	6	5	4.5

Source: DS Database, DMICP, SSSFT and BFG

- Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).
- 3. In line with the JSP 200 directive on statistical disclosure control, figures have been suppressed. Please see Background Quality Report for more information.

Table A2.3: Royal Marine personnel assessed at MOD Specialist Mental Health Services, by rank, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Off	icer		Othe	r Rank	
	Number of initial	of wi mer disor	ital	Number of initial	of wi mer disor	ntal
Royal Marines	assessments	n	%	assessments	n	%
2007/08	8	7	0.8	116	76	1.1
2008/09	6	6	0.7	79	59	0.8
2009/10	8	7	0.8	117	84	1.2
2010/11	7	~	0.3	93	~	0.8
2011/12	9	~	0.5	110	~	1.0
2012/13	10	10	1.2	142	110	1.6
2013/14	8	5	0.6	157	106	1.5
2014/15	6	6	0.7	168	136	1.9
2015/16	12	10	1.2	152	129	1.9

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).
- 3. Numbers within rank groups may not sum the total as personnel who have more than one episode of care in a year and change rank status will be counted once in each sub-category.
- 4. In line with the JSP 200 directive on statistical disclosure control, figures have been suppressed. Please see Background Quality Report for more information.

Table A2.4: Royal Marine personnel assessed at MOD Specialist Mental Health Services with a mental health disorder, by age group, numbers and percentage personnel at risk.

	2007	/08	2008	/09	2009	/10	2010	/11	2011	/12	2012	/13	2013	/14	2014	/15	2015	/16
Royal Marines	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Under 20	~	0.5	2	0.3	26	4.3	2	0.4	0	-	~	1.1	5	1.5 <sup>r</sup>	~	0.7 <sup>r</sup>	~	0.3
20 - 24	29	1.3	23	1.0	109	4.7	20	0.8	29	1.2	31	1.3	27	1.2	33	1.5	25	1.3
25 - 29	20	1.1	20	1.0	97	4.8	13	0.6	16	0.7	31	1.5	25	1.1	39	1.7	34	1.5
30 - 34	16	1.6	11	1.1	53	5.2	13	1.2	14	1.2	30	2.5	21	1.7	35	2.7	33	2.5
35 - 39	9	0.9	6	0.6	58	6.4	8	0.9	13	1.6	12	1.6	16	2.3	16	2.3	25	3.5
40 - 44	~	0.6	~	0.3	41	6.1	~	0.4	~	1.0	~	1.0	13	2.2	9	1.5	17	3.0
45 - 49	~	0.7	~	0.3	15	4.4	~	1.2	~	0.3	7	2.0	~	1.7	7	1.9	5	1.4
50+	0	-	0	-	7	4.8 <sup>r</sup>	0	-	0	-	0	-	~	0.7 <sup>r</sup>	~	0.6 <sup>r</sup>	~	0.3

Source: DS Database, DMICP, SSSFT and BFG

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph76).
- 3. Numbers within age groups may not sum the total as personnel who have more than one episode of care in a year and change age group will be counted once in each sub-category.
- 4. In line with the JSP 200 directive on statistical disclosure control, figures have been suppressed. Please see Background Quality Report for more information.
- 5. Table revised and republished due to errors with numbers presented. These numbers can be identified with revision markers ('r').

Table A2.5 : Royal Marine personnel assessed at MOD Specialist Mental Health Services, by Deployment Status<sup>1,2</sup>, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Iraq and/or A	fghanista	an <sup>1,2</sup>	lr	aq		Afgha	nistan²		Neither (	Operation	
	Number of initial	of wh men disore	tal	Number of initial		tal	Number of initial	of wh men disord	tal	Number of initial	of wh ment disord	tal
Royal Marines	assessments	n	%	assessments	n	%	assessments	n	%	assessments	n	%
2007/08	79	60	1.3	44	31	1.0	58	44	1.4	45	23	0.8
2008/09	55	44	0.9	29	23	0.8	44	35	0.9	30	21	0.7
2009/10	100	75	1.4	41	32	1.2	91	69	1.6	25	16	0.6
2010/11	73	47	0.9	34	21	0.8	65	43	1.0	27	16	0.5
2011/12	91	65	1.1	32	24	0.9	87	62	1.2	28	14	0.6
2012/13	106	87	1.7	52	42	1.9	95	77	1.7	47	33	1.2
2013/14	113	74	1.5	53	32	1.6	101	68	1.6	52	37	1.2
2014/15	129	104	2.3	43	32	1.8	122	98	2.4	45	38	1.1
2015/16	108	92	2.3	43	38	2.3	95	79	2.2	56	47	1.3

- 1. Deployment to the wider theatre of operation (see BQR)
- 2. Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see BQR).
- 3. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)
- 4. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 5. Numbers within deployment groups may not sum the total as personnel who have more than one episode of care in a year and change deployment status will be counted once in each sub-category.

Table A2.6: Royal Marine personnel seen at the MOD's DCMH, by mental disorder, numbers and percentage personnel at risk.

Royal Marines	2007	/08	2008	/09	2009/	10	2010	0/11	2011/	12	2012/	13 <sup>1</sup>	2013/	14	2014/	15	2015/	16
ICD-10 description	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
All cases seen by DCMH	124	1.6	85	1.1	122	1.5	98	1.2	117	1.4	150	1.9	161	2.1	169	2.2	162	2.1
Cases of Mental Health disorder	83	1.1	65	0.8	88	1.1	62	0.7	77	0.9	118	1.5	108	1.4	136	1.7	137	1.8
Psychoactive substance use	17	0.2	10	0.1	~	0.1	~	0.0	~	0.1	~	0.2	16	0.2	~	0.2	20	0.3
of which disorders due to alcohol	16	0.2	10	0.1	~	0.1	~	0.0	~	0.1	~	0.2	16	0.2	~	0.2	20	0.3
Mood disorders	14	0.2	~	0.1	14	0.2	8	0.1	~	0.1	28	0.4	24	0.3	28	0.4	38	0.5
of which depressive episode	11	0.1	~	0.1	12	0.1	8	0.1	~	0.1	24	0.3	20	0.3	22	0.3	32	0.4
Neurotic disorders	47	0.6	43	0.5	64	0.8	50	0.6	58	0.7	70	0.9	64	0.8	88	1.1	80	1.0
of which PTSD	22	0.3	17	0.2	16	0.2	9	0.1	9	0.1	17	0.2	16	0.2	18	0.2	21	0.3
of which adjustment disorders	18	0.2	19	0.2	42	0.5	38	0.5	42	0.5	32	0.4	36	0.5	46	0.6	27	0.4
Other mental and behavioural disorders	5	0.1	~	0.0	~	0.0	~	0.0	~	0.0	~	0.1	6	0.1	~	0.0	~	0.0
No mental disorder	~	0.5	20	0.3	34	0.4	36	0.4	40	0.5	34	0.4	56	0.7	34	0.4	28	0.4
No Initial assessment provided	~																	

Source : DS Database and DMICP

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Some personnel may present with more than one disorder within the year, thus the sum of each disorder will not equal to the sum of all personnel seen by a DCMH.
- 3. Clinician's initial assessment based on presenting symptoms (paragraphs 71 and 72)
- 4. Initial diagnosis not available (See BQR)
- 5. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 78)
- 6. In line with the JSP 200 directive on statistical disclosure control, figures have been suppressed. Please see Background Quality Report for more information.

# Annex A3: Army personnel presenting at MOD Specialist Mental Health Services 2007/08-2015/16

- 60. The overall percentage of personnel with mental ill health among Army personnel presenting to MOD Specialist Mental Health Services, increased by 7% in 2015/16 compared to the previous year. This is lower than the overall 9% increase seen the UK Armed Forces as a whole for the same time period.
- 61. There were statistically significant higher presentations in certain demographic groups in line with the findings for the UK Armed Forces as a whole :
  - Females
  - Other ranks
  - Those aged between under 20 and 44 years of age
  - Previous deployment to Iraq or Afghanistan was a predictor of mental disorders five of the last nine years (2010/11; 2011/12; 2013/14; 2014/15 and 2015/16)
- 62. In line with the Armed Forces as a whole, Neurotic Disorders were the most prevalent condition among Army personnel assessed with a mental disorder.
- 63. Rates per 1,000 personnel at risk and 95% Confidence Intervals are available in Excel tables at <a href="https://www.gov.uk/government/collections/defence-mental-health-statistics-index">https://www.gov.uk/government/collections/defence-mental-health-statistics-index</a>.

Table A3.1 : Army personnel assessed at MOD Specialist Mental Health Services, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Number of initial	of wh men disord	tal
Army	assessments	n	%
2007/08	2,987	2,135	1.9
2008/09	2,883	1,998	1.7
2009/10	3,287	2,381	2.0
2010/11	3,422	2,538	2.2
2011/12	3,352	2,556	2.2
2012/13	4,092	3,150	2.8
2013/14	4,146	3,377	3.2
2014/15	3,855	3,057	3.1
2015/16	4,044	3,180	3.4

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).

Table A3.2 : Army personnel assessed at MOD Specialist Mental Health Services by gender, numbers and percentage personnel at risk.

	М	ale		Fei	male	
	Number of initial	of whi ment disord	al	Number of initial	of wh ment disord	tal
Army	assessments	n	%	assessments	n	%
2007/08	2,601	1,842	1.7	386	293	3.4
2008/09	2,481	1,702	1.6	402	296	3.5
2009/10	2,828	2,016	1.8	459	365	4.1
2010/11	2,986	2,191	2.0	436	347	3.9
2011/12	2,884	2,171	2.0	468	385	4.3
2012/13	3,490	2,643	2.6	602	507	5.7
2013/14	3,538	2,859	3.0	608	518	6.1
2014/15	3,269	2,567	2.9	586	490	6.0
2015/16	3,472	2,706	3.1	572	474	6.0

Source: DS Database, DMICP, SSSFT and BFG

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).

Table A3.3 : Army personnel assessed at MOD Specialist Mental Health Services by rank, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Of	ficer		Othe	r Rank	
	Number of initial	Of wi men disor	tal	Number of initial	Of wh men disord	tal
Army	assessments	n	%	assessments	n	%
2007/08	119	98	0.6	2,868	2,037	2.1
2008/09	145	116	0.7	2,738	1,882	1.9
2009/10	189	156	1.0	3,098	2,225	2.2
2010/11	181	147	0.9	3,241	2,391	2.4
2011/12	208	178	1.1	3,144	2,378	2.4
2012/13	261	221	1.4	3,831	2,929	3.0
2013/14	276	233	1.6	3,870	3,144	3.5
2014/15	249	198	1.4	3,606	2,859	3.4
2015/16	239	212	1.5	3,805	2,968	3.7

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).
- 3. Numbers within rank groups may not sum the total as personnel who have more than one episode of care in a year and change rank status will be counted once in each sub-category.

Table A3.4: Army personnel assessed at MOD Specialist Mental Health Services with a mental health disorder, by age group, numbers and percentage personnel at risk.

	2007/	08	2008/	09	2009/	10	2010/	11	2011/	12	2012/	13	2013/	14	2014/	15	2015/	16
Army	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Under 20	233	1.9	229	1.9	229	1.9	194	2.1	120	1.4	128	1.6	138	1.9	164	2.6	128	2.2
20 - 24	696	2.5	629	2.2	731	2.5	802	2.8	780	2.8	885	3.3	857	3.5	731	3.3	798	3.8
25 - 29	479	1.9	461	1.8	524	2.1	579	2.3	599	2.3	763	3.0	788	3.2	778	3.4	831	3.7
30 - 34	274	1.6	270	1.6	344	1.9	411	2.2	434	2.2	607	3.1	689	3.7	595	3.4	577	3.5
35 - 39	292	1.6	247	1.4	316	1.8	325	2.0	309	2.0	442	3.1	493	3.7	439	3.4	479	3.7
40 - 44	109	1.4	109	1.3	160	1.7	159	1.6	211	2.0	229	2.3	278	3.1	240	3.0	262	3.4
45 - 49	32	0.9	36	0.9	51	1.2	50	1.1	69	1.5	83	1.8	87	1.9	74	1.6	87	1.9
50+	20	0.8	19	0.7	34	1.1	31	1.0	46	1.4	38	1.2	70	2.1	50	1.5	43	1.3

Source: DS Database, DMICP, SSSFT and BFG

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).
- 3. Numbers within age groups may not sum the total as personnel who have more than one episode of care in a year and change age group will be counted once in each sub-category.

Table A3.5 : Army personnel assessed at MOD Specialist Mental Health Services, by Deployment Status<sup>1,2</sup>, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Iraq and/or A	Afghanista	an <sup>1,2</sup>	Ir	aq		Afgha	nistan²		Neither	r Operation		
	Number of initial	Of wh ment disord	tal	Number of initial	Of wh men disord	tal	Number of initial	Of wh men disore	tal	Number of initial		tal	
Army	assessments	n	%	assessments	n	%	assessments	n	%	assessments	n	%	
2007/08	1,724	1,301	1.9	1,520	1,156	2.0	399	300	1.5	1,264	835	1.8	
2008/09	1,729	1,238	1.7	1,408	994	1.7	664	506	1.7	1,154	760	1.8	
2009/10	2,064	1,554	2.0	1,495	1,107	2.0	1,085	851	2.1	1,224	827	2.0	
2010/11	2,278	1,777	2.3	1,402	1,104	2.1	1,586	1,241	2.4	1,144	761	2.0	
2011/12	2,261	1,798	2.3	1,308	1,061	2.2	1,693	1,341	2.3	1,091	758	2.0	
2012/13	2,741	2,192	2.9	1,427	1,159	2.7	2,270	1,814	2.9	1,378	970	2.7	
2013/14	2,871	2,428	3.4	1,397	1,204	3.2	2,489	2,088	3.4	1,281	954	2.8	
2014/15	2,537	2,133	3.3	1,174	1,017	3.2	2,252	1,887	3.3	1,318	924	2.8	
2015/16	2,435 <sup>r</sup>	2,060	3.5	1,126	958	3.3	2,176 <sup>r</sup>	1,835	3.6	1,610	1,120	3.1	

- 1. Deployment to the wider theatre of operation (see BQR)
- 2. Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see BQR).
- 3. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)
- 4. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 5. Numbers within deployment groups may not sum the total as personnel who have more than one episode of care in a year and change deployment status will be counted once in each sub-category.
- 6. Table revised and republished due to errors with numbers presented. These numbers can be identified with revision markers ('r').

Table A3.6 : Army personnel seen at the MOD's DCMH, by mental disorder, numbers and percentage personnel at risk.

Army	2007	/08	2008	/09	2009	/10	2010	/11	2011	/12	2012/	13 <sup>1</sup>	2013/	14	2014/	15	2015/1	6
ICD-10 description	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
All cases seen by DCMH	2,932	2.6	2,783	2.4	3,230	2.7	3,354	2.9	3,276	2.8	4,036	3.6	4,078	3.9	3,773	3.9	3,962	4.2
Cases of Mental Health disorder	2,084	1.8	1,951	1.7	2,341	2.0	2,472	2.1	2,480	2.1	3,093	2.8	3,310	3.1	2,975	3.0	3,099	3.3
Psychoactive substance use	236	0.2	228	0.2	220	0.2	231	0.2	209	0.2	225	0.2	170	0.2	153	0.2	155	0.2
of which disorders due to alcohol	212	0.2	214	0.2	206	0.2	222	0.2	206	0.2	213	0.2	164	0.2	148	0.2	150	0.2
Mood disorders	477	0.4	408	0.4	518	0.4	549	0.5	561	0.5	828	0.7	948	0.9	824	0.8	964	1.0
of which depressive episode	377	0.3	342	0.3	462	0.4	508	0.4	493	0.4	666	0.6	768	0.7	643	0.7	757	0.8
Neurotic disorders	1,224	1.1	1,160	1.0	1,430	1.2	1,537	1.3	1,552	1.3	1,970	1.8	2,140	2.0	1,946	2.0	1,985	2.1
of which PTSD	117	0.1	81	0.1	126	0.1	191	0.2	220	0.2	254	0.2	306	0.3	204	0.2	208	0.2
of which adjustment disorders	768	0.7	697	0.6	895	0.8	986	0.8	979	0.8	1,100	1.0	1,226	1.2	1,046	1.1	1,127	1.2
Other mental and behavioural disorders	147	0.1	155	0.1	198	0.2	199	0.2	180	0.2	117	0.1	116	0.1	90	0.1	56	0.1
No mental disorder	725	0.6	832	0.7	928	0.8	915	0.8	831	0.7	981	0.9	813	0.8	848	0.9	907 <sup>r</sup>	1.0
No Initial assessment provided	123		, The state of the								,		•					

Source: DS Database and DMICP

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Some personnel may present with more than one disorder within the year, thus the sum of each disorder will not equal to the sum of all personnel seen by a DCMH.
- 3. Clinician's initial assessment based on presenting symptoms (paragraphs 71 and 72)
- 4. Initial diagnosis not available (See BQR)
- 5. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)
- 6. Table revised and republished due to errors with numbers presented. These numbers can be identified with revision markers ('r').

# Annex A4 RAF personnel presenting at MOD Specialist Mental Health Services 2007/08-2015/16

- 64. The overall percentage of personnel with mental ill health among RAF personnel presenting to MOD Specialist Mental Health Services, increased by 17% in 2015/16 compared to the previous year. This is significantly higher than the overall 9% increase seen in the UK Armed Forces as a whole for the same time period.
- 65. There were statistically significant higher presentations in certain demographic groups in line with the findings for the UK Armed Forces as a whole :
  - Females
  - Other ranks
- 66. Previous deployment to Iraq or Afghanistan was not a predictor of mental disorders among RAF personnel. There were also no specific age groups at risk of mental disorder among the RAF.
- 67. In line with the Armed Forces as a whole, Neurotic Disorders were the most prevalent condition among RAF personnel assessed with a mental disorder.
- 68. Rates per 1,000 personnel at risk and 95% Confidence Intervals are available in Excel tables at https://www.gov.uk/government/collections/defence-mental-health-statistics-index.

Table A4.1 : RAF personnel assessed at MOD Specialist Mental Health Services, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Number of initial	of which mental disorders
RAF	assessments	n %
2007/08	1,136	775 1.7
2008/09	879	664 1.5
2009/10	1,258	870 2.0
2010/11	1,259	907 2.1
2011/12	1,222	917 2.2
2012/13	1,427	1,096 2.8
2013/14	1,362	1,060 2.9
2014/15	1,211	1,010 2.8
2015/16	1,336	1,155 3.3

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).

Table A4.2 : RAF personnel assessed at MOD Specialist Mental Health Services, by gender, numbers and percentage personnel at risk.

	N	lale		Fe	male	
	Number of initial	of which disor		Number of initial	of which disor	
RAF	assessments	n	%	assessments	n	%
2007/08	812	552	1.4	324	223	3.8
2008/09	621	456	1.2	258	208	3.6
2009/10	858	585	1.5	400	285	4.7
2010/11	870	618	1.6	389	289	4.8
2011/12	860	621	1.7	362	296	5.1
2012/13	982	748	2.2	445	348	6.4
2013/14	939	706	2.2	423	354	7.0
2014/15	857	703	2.3	354	307	6.3
2015/16	930	788	2.6	406	367	7.6

Source : DS Database, DMICP, SSSFT and BFG

Table A4.3 : RAF personnel assessed at MOD Specialist Mental Health Services, by rank, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Of	ficer		Othe	r Rank	
	Number of initial	of which disor		Number of initial	of which disor	
RAF	assessments	n	%	assessments	n	%
2007/08	115	77	8.0	1,021	698	2.0
2008/09	96	77	0.8	783	587	1.7
2009/10	170	138	1.4	1,088	732	2.1
2010/11	178	138	1.4	1,081	769	2.3
2011/12	187	157	1.6	1,035	760	2.3
2012/13	202	157	1.8	1,225	939	3.1
2013/14	205	172	2.1	1,157	888	3.1
2014/15	196	162	2.0	1,015	848	3.1
2015/16	192	152	1.9	1,144	1,003	3.7

<sup>1.</sup> Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).

<sup>2.</sup> Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).

<sup>1.</sup> Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).

<sup>2.</sup> Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).

<sup>3.</sup> Numbers within rank groups may not sum the total as personnel who have more than one episode of care in a year and change rank status will be counted once in each sub-category.

Table A4.4: RAF personnel assessed at MOD Specialist Mental Health Services with a mental health disorder, by age group, numbers and percentage personnel at risk.

	2007/	08	2008	/09	2009	/10	2010	/11	2011	/12	2012	/13	2013	/14	2014	/15	2015	/16
RAF	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Under 20	42	4.2	23	1.5	32	1.5	32	2.0	29	3.1	8	1.4	8	1.6	17	2.8	31	4.4
20 - 24	169	2.2	118	1.6	151	2.0	143	1.9	148	2.1	162	2.6	182	3.2	128	2.5	154	3.2
25 - 29	150	1.6	159	1.7	184	2.0	194	2.1	195	2.2	264	3.1	223	2.8	241	3.1	264	3.5
30 - 34	117	1.8	102	1.7	150	2.3	158	2.2	175	2.4	228	3.1	235	3.2	230	3.3	260	3.8
35 - 39	163	1.8	148	1.8	167	2.2	180	2.7	138	2.3	158	3.0	175	3.6	175	3.4	204	3.7
40 - 44	70	1.2	62	1.1	103	1.8	126	2.1	126	2.2	166	3.1	143	3.0	124	2.9	134	3.4
45 - 49	40	1.2	42	1.2	58	1.6	58	1.6	77	2.2	73	2.1	64	1.9	64	1.9	76	2.4
50+	24	1.2	11	0.6	27	1.3	25	1.1	33	1.4	44	1.9	39	1.7	32	1.4	38	1.6

Source: DS Database, DMICP, SSSFT and BFG

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Percentages are based on the calculation of the absolute number and are presented to 1dp (See paragraph 76).
- 3. Numbers within age groups may not sum the total as personnel who have more than one episode of care in a year and change age group will be counted once in each sub-category.

Table A4.5 : RAF personnel assessed at MOD Specialist Mental Health Services, by Deployment Status, numbers and percentage personnel at risk.

2007/08 - 2015/16

	Iraq and/or	Afghanist	an <sup>1,2</sup>	lı	raq		Afgha	anistan²	Neither Operation				
	Number of initial	of which mental disorders		Number of initial	of which mental disorders		Number of initial	of which mental disorders		Number of initial	of whic menta disorde	ı	
RAF	assessments	n	%	assessments	n	%	assessments	n	%	assessments	n	%	
2007/08	496	352	1.5	451	322	1.5	116	82	1.0	640	423	2.0	
2008/09	467	365	1.5	403	317	1.5	185	146	1.4	412	299	1.6	
2009/10	632	486	1.9	529	412	1.9	300	226	1.8	626	384	2.1	
2010/11	686	536	2.0	528	418	2.0	370	286	1.8	573	371	2.2	
2011/12	702	530	1.9	517	388	1.9	469	361	1.9	520	387	2.6	
2012/13	892	707	2.7	591	477	2.7	661	526	2.6	542	394	3.1	
2013/14	906	700	2.7	558	437	2.7	722	550	2.6	456	360	3.3	
2014/15	844	718	2.9	464	403	2.8	735	621	2.9	368	293	2.8	
2015/16	889 <sup>r</sup>	778 <sup>r</sup>	3.4	503 <sup>r</sup>	442 <sup>r</sup>	3.3	760	668	3.3	448	378	3.3	

- 1. Deployment to the wider theatre of operation (see BQR)
- Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see BQR).
- 3. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)
- 4. Excludes personnel where Initial diagnosis was not supplied (See BQR)
- 5. Numbers within deployment groups may not sum the total as personnel who have more than one episode of care in a year and change deployment status will be counted once in each sub-category.
- 6. Table revised and republished due to errors with numbers presented. These numbers can be identified with revision markers ('r').

Table A4.6 : RAF personnel seen at the MOD's DCMH, by mental disorder, numbers and percentage personnel at risk.

RAF	2007	/08	2008	/09	2009	/10	2010	/11	2011	/12	2012	/13 <sup>1</sup>	2013/	14	2014/	15	2015/	16
ICD-10 description	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
All cases seen by DCMH	1,121	2.5	859	2.0	859	1.9	1,242	2.8	1,252	3.0	1,214	3.1	1,419	3.9	1,351	3.8	1,351	3.9
Cases of Mental Health disorder	760	1.7	649	1.5	853	1.9	902	2.1	910	2.2	1,088	2.8	1,050	2.9	995	2.8	1,143	3.3
Psychoactive substance use	38	0.1	21	0.0	28	0.1	36	0.1	31	0.1	22	0.1	31	0.1	27	0.1	26	0.1
of which disorders due to alcohol	37	0.1	20	0.0	28	0.1	36	0.1	29	0.1	22	0.1	31	0.1	27	0.1	25	0.1
Mood disorders	181	0.4	158	0.4	230	0.5	202	0.5	256	0.6	339	0.9	328	0.9	303	0.9	349	1.0
of which depressive episode	160	0.4	142	0.3	216	0.5	191	0.4	243	0.6	230	0.6	262	0.7	239	0.7	270	0.8
Neurotic disorders	507	1.1	426	1.0	547	1.2	599	1.4	562	1.3	704	1.8	681	1.9	667	1.9	755	2.2
of which PTSD	16	0.0	26	0.1	26	0.1	24	0.1	19	0.0	21	0.1	25	0.1	20	0.1	20	0.1
of which adjustment disorders	276	0.6	259	0.6	352	0.8	411	0.9	379	0.9	442	1.1	379	1.0	307	0.9	393	1.1
Other mental and behavioural disorders	34	0.1	44	0.1	57	0.1	75	0.2	74	0.2	38	0.1	26	0.1	16	0.0	28	0.1
No mental disorder	290	0.6	210	0.5	405	0.9	364	0.8	318	0.8	353	0.9	327	0.9	210	0.6	195	0.6
No Initial assessment provided	290																	

Source : DS Database and DMICP

- 1. Dotted lines represent 2012/13 revised methodology to include electronic patient record data source (paragraph 73).
- 2. Some personnel may present with more than one disorder within the year, thus the sum of each disorder will not equal to the sum of all personnel seen by a DCMH.
- 3. Clinician's initial assessment based on presenting symptoms (paragraphs 71 and 72)
- 4. Initial diagnosis not available (See BQR)
- 5. Percentages are based on the calculation of the absolute number and are presented to 1dp (paragraph 76)

**Admissions** In-patient admissions to the MOD mental health in-patient care providers.

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

**Assessed without a mental disorder** A number of patients present to DCMH with symptoms that require the treatment skills of DCMH staff, whilst not necessarily having a specific and identifiable mental disorder as defined under ICD-10.

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

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

FTRS (Full-Time Reserve Service) are personnel who fill Service posts for a set period on a full-time basis while being a member of one of the Reserve Services, either as an ex-regular or as a volunteer. An FTRS reservist on:

**Full Commitment (FC)** fulfils the same range of duties and deployment liability as a regular Service person;

**Limited Commitment (LC)** serves at one location but can be detached for up to 35 days a year; **Home Commitment (HC)** is employed at one location and cannot be detached elsewhere.

Each Service uses FTRS personnel differently:

- The Naval Service predominantly uses FTRS to backfill gapped regular posts. However, they do have a small number of FTRS personnel that are not deployable for operations overseas. There is no distinction made in terms of fulfilling baseline liability posts between FTRS Full Commitment (FC), Limited Commitment (LC) and Home Commitment (HC).
- The Army employ FTRS(FC) and FTRS(LC) to fill Regular Army Liability (RAL) posts as a substitute for regular personnel for set periods of time. FTRS(HC) personnel cannot be deployed to operations and are not counted against RAL.
- The RAF consider that FTRS(FC) can fill Regular RAF Liability posts but have identified separate liabilities for FTRS(LC) and FTRS(HC).

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

**Joint Personnel Administration (JPA)** is the system used by the Armed Forces to deal with matters of pay, leave and other personnel administrative tasks. JPA replaced a number of single-Service IT systems and was implemented in April 2006 for RAF, November 2006 for Naval Service and April 2007 for Army.

International Statistical Classification of Diseases and Health-Related Disorders 10<sup>th</sup> edition (ICD-10) is the standard diagnostic tool for epidemiology, health management and clinical purposes. The following ICD 10 Chapters have been included in this report:

- F10 F19 Mental and behavioural disorders due to psychoactive substance misuse, including alcohol. A wide variety of disorders that differ in severity (from uncomplicated intoxication and harmful use to obvious psychotic disorders and dementia), but that are all attributable to the use of one or more psychoactive substances (which may or may not have been medically prescribed).
- F30 F39 Mood affective disorders, including depressive episodes. Disorders in which the fundamental disturbance is a change in affect or mood to depression (with or without associated anxiety) or to elation. The mood change is usually accompanied by a change in the overall level of activity; most of the other symptoms are either secondary to, or easily understood in the context of, the change in mood and activity. Most of these disorders tend to be recurrent and the onset of individual episodes can often be related to stressful events or situations.
- F40 F49 Neurotic Stress related and somatoform disorders, including PTSD and Adjustment disorders. This includes mental disorders characterized by anxiety and avoidance behaviour, with symptoms distressing to the patient, intact reality testing, no violations of gross social norms, and no apparent organic aetiology.
- F00 F09, F20 F29 and F50 F99 are presented as 'Other mental health disorders'. This includes, disorders grouped together on the basis of their having in common a demonstrable etiology in cerebral disease, brain injury, or other insult leading to cerebral dysfunction; schizophrenia and eating disorders.

**In-patient services** are provided through eight NHS trusts in the UK which are part of a consortium headed by the South Staffordshire and Shropshire NHS Foundation Trust (SSSFT) and at Gilhead IV Hospital, Bielefield, Germany under a contract with Guys and St Thomas Hospital in the UK up until April 2013 and from this date the Soldiers, Sailors, Airmen and Families Association (SSAFA) through the Limited Liability Partnership.

**Mental disorder** Patients assessed by clinicians at a MOD DCMH or in-patient provider with a mental and behavioural disorder categorised under Chapter V in ICD-10.

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

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

**Mobilised Reservists** are Volunteer or Regular Reserves who have been called into permanent service with the Regular Forces on military operations under the powers outlined in the Reserve Forces Act 1996. Call-out orders will be for a specific amount of time and subject to limits (e.g. under a call-out for warlike operations (Section 54), call-out periods should not exceed 12 months, unless extended.)

**MOD Specialist Mental Health Services** encompass the delivery of care through MOD's DCMH for outpatient care, and all admissions to the MOD's in-patient care contractor. It does not cover mental health care for patients treated wholly in the primary care setting by GPs.

**New episodes of care** New patients; or patients who have been seen at a DCMH but were discharged from care and have been referred again. This represents the level of clinical activity/prevalence and does not represent the number of personnel assessed as an individual may have more than one episode of care.

**Non Regular Permanent Staff (NRPS)** are members of the Army Volunteer Reserve Force employed on a full time basis. The NRPS comprises Commissioned Officers, Warrant Officers, Non Commissioned Officers and soldiers posted to units to assist with the training, administrative and special duties within the Army Reserve. Typical jobs are Permanent Staff Administration Officer and Regimental Administration Officer. Since 2010, these contracts are being discontinued in favour of FTRS (Home Commitment) contracts. NRPS are not included in the Future Reserves 2020 Volunteer Reserve population as they have no liability for call out.

**Number of Personnel** represents the number of individuals with an initial assessment at MOD Specialist Services. An individual may have more than one episode of care but the individual will only be counted once in the number of personnel.

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

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

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

**OPLOC** was the single Service Operation Location Tracking system used to identify personnel deployed to Iraq and Afghanistan prior to April 2007.

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

**Personnel at Risk** is defined as the number of serving UK Armed Forces personnel eligible for mental healthcare. This includes regular UK Armed Forces personnel, Ghurkhas, Military Provost Guard Staff, mobilised reservists, Full Time Reserve Service personnel and Non-regular Permanent Staff.

**Rate Ratio** (RR) provides a comparison of cases seen between personnel identified as having deployed to a theatre and those who have not been identified as having deployed to either theatre.

**Routine Referrals** from a GP or Medical Officer (MO) are seen at a DCMH within 20 working days of referral.

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

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

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

**SSAFA** is the Soldiers, Sailors, Airmen and Families Association providing in-patient care through the Limited Liability Partnership to personnel from British Forces Germany.

**SSSFT** is the South Staffordshire and Shropshire NHS Foundation Trust which heads up the consortium providing in-patient care through eight NHS trusts in the UK.

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

**UK Regulars** are full time Service personnel, including Nursing Services, but excluding FTRS personnel, Gurkhas, Naval activated Reservists, mobilised Reservists, Military Provost Guarding Service (MPGS) and Non Regular Permanent Service (NRPS). Unless otherwise stated, includes trained and untrained personnel.

**Urgent Referrals** from a GP or Medical Officer (MO) are seen at a DCMH within one working day of referral.

#### **Data, Definitions and Methods**

#### Data Sources

69. Defence Statistics receive data from DCMH and in-patient providers for all UK regular Armed Forces personnel from the following sources :

#### DCMH

- Between 01 January 2007 and 30 June 2014, the report captures data provided by DCMHs to Defence Statistics in monthly returns.
- For the period 01 April 2012 to 30 June 2014, new episodes of care data was also sourced from the electronic patient record held in Defence Medical Information Capability Program (DMICP) in addition to those provided by DCMH in monthly returns.
- Since 01 July 2014, DMICP was the single source of DCMH new episodes of care data.

### In-patient

 Since January 2007, SSSFT and Gilead IV hospital Bilefield have submitted relevant in patient records.

# Data Coverage

- 70. The data in this report include regular UK Armed Forces personnel, Ghurkhas, Military Provost Guard Staff, mobilised reservists, Full Time Reserve Service personnel and Non-regular Permanent Staff as all of these individuals are eligible for assessment at a DCMH.
- 71. DCMH staff record the initial mental health assessment during a patient's first appointment, based on presenting complaints. The information is provisional and final diagnoses may differ as some patients do not present the full range of symptoms, signs or clinical history during their first appointment. The mental health assessment of condition data were categorised into three standard groupings of common mental disorders used by the World Health Organisation's International Statistical Classification of Diseases and Health-Related Disorders 10th edition (ICD-10).
- 72. A number of patients present to DCMH with symptoms that require the treatment skills of DCMH staff, whilst not necessarily having a specific and identifiable mental disorder. In the Results section, these cases are referred to as "assessed without a mental disorder".

#### Methodology

- 73. Due to the methodology changes implemented in July 2009 and in July 2013, when looking at trends over time for new episodes of care across the series of published reports, it is advisable to note:
  - Prior to 2009/10, only an individual's first attendance at a DCMH or an in-patient provider were included in the data submitted by DCMHs to Defence Statistics.
  - Since 2009/10, the report captures all new episodes of care provided by DCMH to Defence Statistics in monthly returns.
  - Since 2012/13, the report captures all new episodes of care recorded in the MOD patient electronic record in addition to monthly submissions provided by DCMH to Defence Statistics.
- 74. Changes made to the methodology in July 2009 and July 2013 can be read in more detail in the Background Quality Report (BQR) published at www.gov.uk/government/publications/mod-national-and-official-statistics-by-topic.

#### Rates

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

#### Percentage

- 76. Previous publications of this report have provided rates alongside numbers to provide context and comparison between groups. This information is still available in the Excel file accompanying the release of this report, however, due to user feedback, this publication now provides a focus on the percentage of the population at risk. This is calculated in the same way as the rate per 1,000 but multiplying by 100 instead of 1000, ie The number of events (ie. mental disorders) is then divided by the number of personnel at risk per annum and multiplied by 100 to calculate the percentage of personnel affected.
- 77. In order to understand if a difference in rates is statistically significant, 95% confidence intervals are used. Statistical significance indicates that a finding is not due to chance. The 95% confidence interval for a rate provides the range of values within which we expect to find the real value of the indicator under study, with a probability of 95%. If a 95% confidence interval around a rate excludes the comparison value, then a statistical test for the difference between the two values would be significant at the 0.05 level. If two confidence intervals do not overlap, a comparable statistical test would always indicate a statistically significant difference. The rates and confidence intervals presented have been rounded to 1 decimal place and therefore when small numbers are presented the rate may lie towards one end of the confidence interval instead of more centrally between the lower and upper confidence interval.
- 78. The information presented in this publication has been structured to release information into the public domain in a way that contributes to the MOD accountability to the British public but which doesn't risk breaching individual's rights to medical confidentiality. In line with JSP 200 (April 2016), and in keeping with the Office for National Statistics Guidelines, all numbers less than five have been suppressed and presented as '~' to prevent the inadvertent disclosure of individual identities. 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.

#### Strengths and weaknesses of the data presented in this report

- 79. A key strength of this report is the presentation of the number of Service personnel who have been seen for a new episode of care at a DCMH or in-patient facility, as reported by clinician's. The inclusion in this report of new episodes of care direct from the legal electronic patient record improves the robustness and integrity of the underlying data. As the data is held in a pseudo-anonymised format in the DMICP data warehouse, patient consent is not an issue. A further strength is the use of the pseudo-anonymised patient identifier to enable DS to validate data therefore improving accuracy and enabling linkage to deployment records to identify any effect of deployment on mental health in the Armed Forces. In addition, the tables in this report have been scrutinised to ensure individual identities have not been revealed inadvertently.
- 80. Users should be aware that this report does not include information on patients seen only by their GP or Medical Officer. Mental disorder types reported here are the clinician's initial assessment during a patient's first appointment at a DCMH, based on presenting complaints, therefore final diagnosis may differ as some patients do not show full range of symptoms, signs or clinical history during their first appointment. It should also be noted that the clinician's primary diagnosis is reported here, however patients can present with more than one disorder. Changes in methodology in 2009/10

and 2012/13 also make it difficult to compare new episodes of care data over time. A further weakness of data in this report is that with any new data collection system, there is a training burden; user inexperience with the new mental health templates in DMICP may have affected coverage and accuracy. In addition, DMICP is a live system and extracts for this report are taken six weeks after the end of the reporting period. Therefore any amendments to records or late data entries may be excluded from this report.

81. More detailed information on the data, definitions and methods used to create this report can be found in the Background Quality Report (BQR) published at www.gov.uk/government/publications/mod-national-and-official-statistics-by-topic.

#### References

- a) <a href="http://www.mind.org.uk/mental\_health\_a-z/8105\_mental\_health\_facts\_and\_statistics">http://www.mind.org.uk/mental\_health\_a-z/8105\_mental\_health\_facts\_and\_statistics</a>. [Accessed 03/10/2013]
- b) Sundin J., Jones N., Greenberg N., Rona R., Hotopf M., Wessely S., and Fear N. (2010) Mental Health among commando, airborne and other UK Infantry personnel Occupational Medicine, 60, 552-559.
- c) Singleton N, Lewis G (2003). Better or Worse: A longitudinal study of the mental health of adults living in private households in Great Britain, *Her Majesty's Stationery Office (HMSO): London.*
- d) Meltzer H, Singleton N, Lee A et al (2002). The social and economic circumstances of adults with mental disorders, *Her Majesty's Stationery Office (HMSO): London*.

#### **Further Information**

# **Symbols**

~ In line with JSP 200 (April 2016) to ensure individuals are not inadvertently identified suppression methodology has been applied to reduce the risk of disclosure, numbers fewer than five have been suppressed and presented as '~'. Where there was only one cell in a row or column that was fewer than five, the next smallest number has also been suppressed so that numbers cannot simply be derived from totals.

# Revisions

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

i. Where number of figures updated in a table is small, figures will be updated and those which have been revised will be identified with the symbol "r". An explanation for the revision will be given in the footnotes to the table.

ii. Where the number of figures updated in a table is substantial, the revisions to the table, toghether with the reason for the revisions will be identified in the commentary at the beginning of the revelevant chapter / section, and in the commentary above the affected tables. Revisions will not be identified by the symbol "r" since where there are a large number of revisions in a table this could make them more difficult to read.

#### June 2017 revision

2014/15 and 2015/16 rate ratios of mental disorders for personnel previously deployed to Iraq
An error was identified in 2014/15 and 2015/16 published rate ratios of mental disorders for personnel deployed to Iraq compared to personnel who had not previously deployed to Iraq or Afghanistan.

#### Extent of Error

- a. In 2014/15 the increased risk of UK Armed Forces personnel developing PTSD if previously deployed to Iraq was 170% and not 40% as originally published. (Quoted in paragraph 39 of 'UK Armed Forces Mental Health: Annual Summary & Trends Over Time, 2007/08 2014/15' and Table 12 in the supplementary People Excel files).
- b. In 2015/16 the increased risk of UK Armed Forces personnel developing PTSD if previously deployed to Iraq was **230**% and not **80**% as originally quoted. (Quoted in paragraph 43 of 'UK Armed Forces Mental Health: Annual Summary & Trends Over Time, 2007/08 2015/16' and Table 12 in the supplementary People Excel files).

#### **Impact**

c. This revisions to the rate ratios for mental disorders does not change the overall finding that rates of PTSD were significantly higher in 2014/15 and 2015/16 among those previously deployed to Iraq compared to those not previously deployed to Iraq and/or Afghanistan. The impact is on the extent of this increased risk among a sub population of UK Armed Forces personnel which is of high interest.

#### Cause of error

- d. The numbers of mental disorders among personnel previously deployed to Iraq presented in the published supplementary People Excel files were correct, however the problem occurred due to a processing error where the incorrect strength was used to calculate the rate ratios.
- e. A review of quality procedures will now be carried out to mitigate risk of future errors.

## 2014/15 and 2015/16 Royal Marine Age Rates

- a) The error affects information provided in the 2014/15 and 2015/16 bulletins in Table A2.4 and the equivalent table within the supplementary excel tables for 'People' published alongside the reports.
- b) The 2009/10; 2013/14 and 2014/15 rates of mental disorder among Royal Marines aged over 50 years of age and to the 2013/14 and 2014/15 rates of mental disorder among Royal Marines aged under 20 years have been revised.
- c) The revisions are minor and do not impact the significance findings of the report.
- d) The errors occurred due to a processing error within the workings files in Microsoft excel where the incorrect strength was used to calculate the rates for these age groups.

#### **Contact Us**

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https://www.gov.uk/make-a-freedom-of-information-request/the-freedom-of-information-act

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