# UK Armed Forces mental health:
## Presenting complaints at MOD Departments of Community Mental Health
## April - June 2010 Revised Edition

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**INTRODUCTION**

1. This report provides statistical information on mental health in the UK Armed Forces for the period January 2007 to June 2010. Between the dates 1 January 2007 and 30 June 2009, this report summarises all new referrals of UK Armed Forces personnel to the MOD's Departments of Community Mental Health (DCMHs) for outpatient care, and new admissions to the MOD's in-patient care contractor. From the date 1 July 2009 onwards, it summarises all **new episodes of care** of UK Armed Forces personnel at the MOD's Departments of Community Mental Health (DCMHs) for outpatient care, i.e. new patients, or patients who have been seen at a DCMH but were discharged from care and have been referred again, and **all** admissions to the MOD's in-patient care contractor. This data updates previous reports and includes previously unpublished data for April - June 2010.

2. DCMHs are specialised mental health services based on community mental health teams closely located with primary care services at sites in the UK and abroad. **Information on patients only seen in the primary care system is not currently available.** To ensure these statistics pick up all **new episodes of care**, DASA have made some changes to data collection and validation from 1 July 2009 onwards. From this date, DASA have also included data from four mental health posts located in medical centres, attached to a DCMH, staffed by psychiatrists and mental health nurses and operating in the same way as a DCMH; seeing and treating personnel referred with suspected mental health disorders. Throughout this report the term DCMH includes these four mental health posts. Details of these changes can be found in the section on **'Points to note'**.

3. A rigid pseudo-anonymisation process, and other measures preserving patient confidentiality, has enabled full verification and validation of the DCMH returns. It has also ensured linkage with deployment databases was possible, so that potential effects of deployment could be measured. The first report[a] in this series provides important background information on data governance. A summary of this, along with detail of some minor methodology changes, can be found later in the section on **'Data, definitions and methods'**.

**KEY POINTS**

***Initial Assessments at MOD DCMHs***

4. During the three-month period April – June 2010, 940 new episodes of care for mental disorder were identified within UK Armed Forces personnel, representing a rate of 4.7 per 1,000 strength. This is lower than the rate of 5.3 per 1,000 strength in January – March 2010.

5. For the 940 personnel assessed under a new episode of care with a mental disorder, there were some statistically significant findings:
- Rates for Army and RAF personnel were significantly higher than for Royal Navy and Royal Marines personnel.
- Rates for Other ranks were significantly higher than for Officers.
- Rates for females were significantly higher than for males.

These findings are broadly consistent with previous reports.

6. Comparing those deployed on Op TELIC and/or Op HERRICK and those not deployed to either operation:
- There was no significant difference in the rate of overall mental disorder.
- The rate of neurotic disorder was significantly higher among those who had deployed on Op HERRICK.
- The rate of PTSD was significantly higher among those who had deployed. However, PTSD remained a rare condition, affecting 0.3 per 1,000 strength (N=61) during this three-month period.

***Admissions to the MOD's In-patient Contractor***

During the three-month period April - June 2010, 61 patients were admitted to the MOD's in-patient care contractor representing a rate of 0.3 per 1,000 strength. 48 of these patients had been seen at a DCMH at some point prior to their admission.

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[a] UK Armed Forces psychiatric morbidity: Assessment of presenting complaints at MOD DCMHs and association with deployment on operations in the Iraq or Afghanistan theatres of operation January – March 2007.

## RESULTS

### *Initial Assessments at MOD DCMHs*

7. During the three-month period April - June 2010, a total of 1,337 UK Service personnel were recorded as having been assessed for a new episode of care at the MOD's DCMHs, representing a rate for the period of 6.6 per 1,000 strength[b].

8. **Table 1** provides details of the key socio-demographic and military characteristics of the 1,337 new episodes of care at the MOD's DCMHs during April - June 2010.

**Table 1: New episodes of care at the MOD's DCMHs by demographic and military characteristics, 1 April – 30 June 2010, numbers and rates per 1,000 strength.**

| Characteristic | Strength[3] | All patients seen | Patients assessed with a mental disorder | | | Patients assessed without a mental disorder |
|---|---|---|---|---|---|---|
| | | | Number | Rate | 95% CI | |
| **All** | **202,100** | **1,337** | **940** | **4.7** | **(4.4 - 4.9)** | **397** |
| **Service** | | | | | | |
| Royal Navy | 31,300 | 148 | 91 | 2.9 | (2.3 - 3.5) | 57 |
| Royal Marines | 8,200 | 18 | 12 | 1.5 | (0.8 - 2.6) | 6 |
| Army | 118,200 | 839 | 597 | 5.1 | (4.6 - 5.5) | 242 |
| RAF | 44,500 | 332 | 240 | 5.4 | (4.7 - 6.1) | 92 |
| **Gender** | | | | | | |
| Males | 182,500 | 1,096 | 759 | 4.2 | (3.9 - 4.5) | 337 |
| Females | 19,600 | 241 | 181 | 9.2 | (7.9 - 10.6) | 60 |
| **Rank** | | | | | | |
| Officers | 40,200 | 113 | 93 | 2.3 | (1.8 - 2.8) | 20 |
| Other ranks | 161,900 | 1,224 | 847 | 5.2 | (4.9 - 5.6) | 377 |
| **Deployment - Theatres of operation[1]** | | | | | | |
| **Op TELIC and/or Op HERRICK[2]** | **122,000** | **776** | **579** | **4.7** | **(4.4 - 5.1)** | **197** |
| of which, Op TELIC | 89,100 | 530 | 395 | 4.4 | (4.0 - 4.9) | 135 |
| Op HERRICK[2] | 72,100 | 465 | 351 | 4.9 | (4.4 - 5.4) | 114 |
| **Neither Op TELIC nor Op HERRICK** | **80,100** | **561** | **361** | **4.5** | **(4.0 - 5.0)** | **200** |

1. *Deployment to the wider theatre of operation (see paragraph 36).*
2. *Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 37).*
3. *Strengths data rounded to the nearest 100, so subtotals may not sum to the total. Strengths are a four-month average (see paragraph 34).*

9. Of the 1,337 new episodes of care, 940 (70%) were assessed with a mental disorder, representing an overall rate for new episodes of care for mental disorder of 4.7 per 1,000 strength. There were 397 patients who were recorded as having no mental disorder at their initial assessment.

10. There were some statistically significant differences in the initial assessment rates between various sub-groups of the patients seen during April - June 2010.

- Army personnel and RAF personnel had a significantly higher rate of mental disorder (5.1 per 1,000 strength, 95% CI: 4.6-5.5, N=597, and 5.4 per 1,000 strength, 95% CI: 4.7-6.1, N=240 respectively) than Royal Navy personnel and Royal Marine personnel (2.9 per 1,000 strength, 95% CI: 2.3-3.5, N=91, and 1.5 per 1,000 strength, 95% CI: 0.8-2.6, N=12 respectively).
- Female personnel had a significantly higher rate of mental disorder at 9.2 per 1,000 strength (95% CI: 7.9-10.6, N=181) than male personnel at 4.2 per 1,000 strength (95% CI: 3.9-4.5, N=759).
- Other ranks had a significantly higher rate of mental disorder at 5.2 per 1,000 strength (95% CI: 4.9-5.6, N=847) than Officers at 2.3 per 1,000 strength (95% CI: 1.8-2.8, N=93).

11. **Tables 2, 3, 4, 5, 6, 8, 9** and **10** contain comparisons of data across the last five published quarters. However, due to the introduction of the revised methodology, interpretation of these figures requires caution. As part of the data validation process, prior to 1 July 2009 DASA identified individuals who had previously attended a DCMH and removed them from the analysis. This method of analysis has been revised, and figures for 1 July 2009 onwards now include repeat attendances if they are classified by the DCMH as a new episode of care. This has resulted in an increase in recorded numbers from July 2009 onwards. Proportions across the quarters, however, have remained broadly the same, suggesting that the revised methodology has not altered the pattern of findings.

[b] Using a four-month average of regular and mobilised reserves strength from 1 April to 31 July 2010 (see paragraph 34).

12. **Tables 2, 3, 4,** and **5** compare the number of new attendances at the DCMHs (January 2007 and June 2009), and the number of new episodes of care at the DCMHs (July 2009 and June 2010) who were assessed with a mental disorder.

**Table 2: Attendances at the MOD's DCMHs, 1 January 2007 – 30 June 2010, numbers and rates per 1,000 strength.**

| | All patients seen | Patients assessed with a mental disorder | | | Patients assessed without a mental disorder | Presenting complaint information not provided |
|---|---|---|---|---|---|---|
| | | Number | Rate | 95% CI | | |
| **2007** | 5,649 | 3,920 | 19.6 | (19.0 - 20.2) | 1,353 | 376 |
| **2008** | 4,465 | 3,189 | 16.2 | (15.6 - 16.7) | 1,276 | 0 |
| **2009** | 5,100 | 3,543 | 17.7 | (17.1 - 18.2) | 1,557 | 0 |
| **2010 (to date)** | 2,873 | 2,008 | 9.9 | (9.5 - 10.4) | 865 | 0 |
| **April - June 2009** | 1,033 | 738 | 3.7 | (3.4 - 4.0) | 295 | 0 |
| **July - September 2009** | 1,411 | 987 | 4.9 | (4.6 - 5.2) | 424 | 0 |
| **October - December 2009** | 1,472 | 1,020 | 5.0 | (4.7 - 5.3) | 452 | 0 |
| **January - March 2010** | 1,536 | 1,068 | 5.3 | (5.0 - 5.6) | 468 | 0 |
| **April - June 2010** | 1,337 | 940 | 4.7 | (4.4 - 4.9) | 397 | 0 |

**Table 3: Attendances at the MOD's DCMHs by Service, 1 January 2007 – 30 June 2010, numbers and rates per 1,000 strength.**

| | Service | | | | | | | | | | | | Not known[2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Royal Navy | | | Royal Marines | | | Army | | | RAF | | | |
| | Patients assessed with a mental disorder | | | | | | | | | | | | |
| Date | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number |
| 2007[1] | 511 | 16.1 | (14.7 - 17.5) | 89 | 11.6 | (9.2 - 14.0) | 2,318 | 20.1 | (19.3 - 20.9) | 847 | 18.8 | (17.5 - 20.0) | 271 |
| 2008 | 413 | 13.2 | (11.9 - 14.5) | 61 | 7.8 | (5.8 - 9.7) | 1,959 | 17.2 | (16.4 - 17.9) | 706 | 16.1 | (14.9 - 17.3) | 50 |
| 2009 | 413 | 13.3 | (12.0 - 14.5) | 97 | 12.1 | (9.7 - 14.5) | 2,244 | r19.1 | (18.3 - 19.9) | 779 | 17.6 | (16.4 - 18.9) | 10 |
| 2010 (to date) | 194 | 6.2 | (5.3 - 7.1) | 32 | 3.9 | (2.6 - 5.3) | 1,269 | 10.7 | (10.1 - 11.3) | 513 | 11.5 | (10.5 - 12.5) | 0 |
| April - June 2009 | 94 | 3.0 | (2.4 - 3.6) | 15 | 1.9 | (1.1 - 3.1) | 468 | r4.0 | (3.6 - 4.4) | 154 | 3.5 | (2.9 - 4.1) | 7 |
| July - September 2009 | 106 | 3.4 | (2.8 - 4.1) | 31 | 3.9 | (2.5 - 5.2) | 619 | 5.3 | (4.9 - 5.7) | 231 | 5.2 | (4.6 - 5.9) | 0 |
| October - December 2009 | 101 | 3.2 | (2.6 - 3.9) | 27 | 3.3 | (2.2 - 4.9) | 648 | 5.4 | (5.0 - 5.9) | 244 | 5.5 | (4.8 - 6.2) | 0 |
| January - March 2010 | 103 | 3.3 | (2.7 - 3.9) | 20 | 2.5 | (1.5 - 3.8) | 672 | 5.7 | (5.2 - 6.1) | 273 | 6.1 | (5.4 - 6.9) | 0 |
| April - June 2010 | 91 | 2.9 | (2.3 - 3.5) | 12 | 1.5 | (0.8 - 2.6) | 597 | 5.1 | (4.6 - 5.5) | 240 | 5.4 | (4.7 - 6.1) | 0 |

1. *As 376 records have been excluded for lack of ICD-10 information, these data represent a minimum (see paragraph 33).*
2. *Records supplied without identifiers (see paragraph 32).*
3. *'r' indicates a change to previously published data.*

**Table 4: Attendances at the MOD's DCMHs by gender and rank, 1 January 2007 – 30 June 2010, numbers and rates per 1,000 strength.**

| | Gender | | | | | | Rank | | | | | | Not known[2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Males | | | Females | | | Officers | | | Other Ranks | | | |
| | Patients assessed with a mental disorder | | | | | | | | | | | | |
| Date | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number |
| 2007[1] | 3,065 | 16.9 | (16.3 - 17.5) | 700 | 38.4 | (35.5 - 41.2) | 251 | 7.3 | (6.4 - 8.2) | 3,514 | 21.2 | (20.5 - 21.9) | 271 |
| 2008 | 2,511 | 14.0 | (13.5 - 14.6) | 628 | 34.8 | (32.1 - 37.6) | 240 | 7.2 | (6.3 - 8.1) | 2,899 | 17.7 | (17.1 - 18.4) | 50 |
| 2009 | 2,833 | 15.6 | (15.0 - 16.1) | 700 | r37.9 | (35.1 - 40.7) | 339 | r10.1 | (9.0 - 11.2) | 3,194 | r19.1 | (18.5 - 19.8) | 10 |
| 2010 (to date) | 1,580 | 8.6 | (8.2 - 9.0) | 428 | 22.8 | (20.6 - 25.0) | 194 | 5.7 | (4.9 - 6.5) | 1,814 | 10.8 | (10.3 - 11.3) | 0 |
| April - June 2009 | 581 | 3.2 | (2.9 - 3.5) | 150 | r8.2 | (6.9 - 9.5) | 76 | 2.3 | (1.8 - 2.8) | 655 | r3.9 | (3.6 - 4.2) | 7 |
| July - September 2009 | 792 | 4.4 | (4.1 - 4.7) | 195 | 10.6 | (9.1 - 12.0) | 98 | 2.9 | (2.3 - 3.5) | 889 | 5.3 | (5.0 - 5.7) | 0 |
| October - December 2009 | 833 | 4.5 | (4.2 - 4.8) | 187 | 10.0 | (8.5 - 11.4) | 87 | 2.6 | (2.0 - 3.1) | 933 | 5.5 | (5.2 - 5.9) | 0 |
| January - March 2010 | 821 | 4.5 | (4.2 - 4.8) | 247 | 13.1 | (11.5 - 14.8) | 101 | 3.0 | (2.4 - 3.6) | 967 | 5.7 | (5.4 - 6.1) | 0 |
| April - June 2010 | 759 | r4.1 | (3.8 - 4.4) | 181 | r9.6 | (8.2 - 11.0) | 93 | r2.7 | (2.2 - 3.3) | 847 | r5.0 | (4.7 - 5.4) | 0 |

1. *As 376 records have been excluded for lack of ICD-10 information, these data represent a minimum (see paragraph 33).*
2. *Records supplied without identifiers (see paragraph 32).*
3. *'r' indicates a change to previously published data.*

**Table 5: Attendances at the MOD's DCMHs by deployment[1], 1 January 2007 – 30 June 2010, numbers and rates per 1,000 strength.**

| | Deployment - Theatres of operation | | | | | | | | | | | | Not known[4] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Op TELIC and/or Op HERRICK[3] | | | *of which* *Op TELIC* | | | *Op HERRICK[3]* | | | Neither | | | |
| | Patients assessed with a mental disorder | | | | | | | | | | | | |
| **Date** | **Number** | **Rate** | **95% CI** | **Number** | **Rate** | **95% CI** | **Number** | **Rate** | **95% CI** | **Number** | **Rate** | **95% CI** | **Number** |
| **2007[2]** | 1,898 | 18.1 | (17.3 - 19.0) | *1,725* | *18.8* | *(17.9 - 19.7)* | *375* | *12.5* | *(11.2 - 13.8)* | 1,867 | 19.6 | (18.7 - 20.5) | 271 |
| **2008** | 1,769 | 15.8 | (15.0 - 16.5) | *1,463* | *15.8* | *(15.0 - 16.6)* | *661* | *15.0* | *(13.9 - 16.2)* | 1,370 | 16.1 | (15.3 - 17.0) | 50 |
| **2009** | 2,151 | r18.2 | (17.4 - 19.0) | *1,648* | *r17.9* | *(17.0 - 18.7)* | *1,049* | *r18.1* | *(17.0 - 19.2)* | 1,382 | r16.8 | (15.9 - 17.7) | 10 |
| **2010 (to date)** | 1,241 | 10.2 | (9.7 - 10.8) | *863* | *9.6* | *(9.0 - 10.3)* | *744* | *10.7* | *(9.9 - 11.4)* | 767 | 9.5 | (8.8 - 10.2) | 0 |
| **April - June 2009** | 427 | r3.6 | (3.3 - 4.0) | *328* | *r3.5* | *(3.2 - 3.9)* | *201* | *3.6* | *(3.1 - 4.1)* | 304 | 3.7 | (3.3 - 4.1) | 7 |
| **July - September 2009** | 628 | 5.3 | (4.9 - 5.7) | *489* | *5.3* | *(4.8 - 5.8)* | *299* | *5.0* | *(4.4 - 5.6)* | 359 | 4.4 | (3.9 - 4.9) | 0 |
| **October - December 2009** | 603 | 5.0 | (4.6 - 5.4) | *431* | *4.7* | *(4.3 - 5.2)* | *333* | *5.2* | *(4.6 - 5.7)* | 417 | 5.0 | (4.6 - 5.5) | 0 |
| **January - March 2010** | 662 | 5.5 | (5.1 - 5.9) | *468* | *5.2* | *(4.7 - 5.7)* | *393* | *5.8* | *(5.3 - 6.4)* | 406 | 5.0 | (4.5 - 5.4) | 0 |
| **April - June 2010** | 579 | 4.7 | (4.4 - 5.1) | *395* | *4.4* | *(4.0 - 4.9)* | *351* | *4.9* | *(4.4 - 5.4)* | 361 | 4.5 | (4.0 - 5.0) | 0 |

1. *Deployment to the wider theatre of operation (see paragraph 36).*
2. *As 376 records have been excluded for lack of ICD-10 information, these data represent a minimum (see paragraph 33).*
3. *Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 37).*
4. *Records supplied without identifiers (see paragraph 32).*
5. *'r' indicates a change to previously published data.*

13. **Table 2** shows that the overall rate of patients assessed with a mental disorder was significantly lower during the period April – June 2010 at 4.7 per 1,000 strength (95% CI: 4.4-4.9, N=940) than the period January – March 2010 at 5.3 per 1,000 strength (95% CI: 5.0-5.6, N=1,068). This result should be interpreted with caution as there is fluctuation between the quarters. This finding was the result of a decrease in the number of female patients being assessed with a mental disorder during the latest quarter.

14. **Tables 3** and **4** show that over the last four quarters, the following trends have remained consistent:

- Rates were higher among Army and RAF personnel compared to Royal Navy and Royal Marines personnel. During the last two quarters this difference was statistically significant.
- Females had significantly higher rates than males.
- Other ranks had significantly higher rates than Officers.

15. Of the 940 patients initially assessed as having a new episode of mental disorder 579 were identified as having deployed on Op TELIC and/or Op HERRICK, representing a rate of 4.7 per 1,000 strength. 361 patients were not identified as having deployed to either of these operational theatres, representing a rate of 4.5 per 1,000 strength. **Table 5** shows that there was no statistical difference in the rate of DCMH attendances between the two groups and that the rates over time have been consistent.

### *Initial mental disorder assessment*

16. **Table 6** (see page 5) provides details of the types of presenting complaints, by ICD-10 grouping, for the 940 patients seen for a new episode of care during April - June 2010 and assessed with a mental disorder. The table also includes data for the previous four quarters.

17. In line with previous reports, neurotic disorders were the most common initial assessment for patients with a mental disorder. The rate of neurotic disorders was 2.9 per 1,000 strength (95% CI: 2.6-3.1, N=579) which is statistically significantly higher than rates of any other mental disorder groupings. Rates of post-traumatic stress disorder (PTSD) remained low at a rate of 0.3 per 1,000 strength. For all major mental health groupings, rates for April - June 2010 were broadly consistent with previous quarters.

18. **Table 7** (see page 6) provides details of the types of mental disorder by the patients' past deployment on operations Op TELIC and/or Op HERRICK. The rate ratios presented provide a comparison of cases seen between new episodes of care for attendees 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 greater than 1 indicates higher rates in those deployed than those not deployed. This difference is statistically significant if 1.0 is not contained within the 95% Confidence Interval.

**Table 6: Initial mental disorder assessments for all new episodes of care seen at a DCMH by ICD-10 grouping, 1 January 2007 to 30 June 2010, numbers and rates per 1,000 strength.**

| | ICD-10 description | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Psychoactive substance use | | | *of which disorders due to alcohol* [1] | | | Mood disorders | | | *of which depressive episode* | | | Neurotic disorders | | | *of which PTSD* | | | *of which adjustment disorders* | | | Other mental disorders | | |
| | Patients assessed with a mental disorder | | | | | | | | | | | | | | | | | | | | | | | |
| Date | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI |
| 2007 [1] | 435 | 2.2 | (2.0 - 2.4) | *308* | *1.5* | *(1.4 - 1.7)* | 897 | 4.5 | (4.2 - 4.8) | *738* | *3.7* | *(3.4 - 4.0)* | 2,340 | 11.7 | (11.2 - 12.2) | *180* | *0.9* | *(0.8 - 1.0)* | *1,384* | *6.9* | *(6.6 - 7.3)* | 248 | 1.2 | (1.1 - 1.4) |
| 2008 | 326 | 1.7 | (1.5 - 1.8) | *310* | *1.6* | *(1.4 - 1.7)* | 734 | 3.7 | (3.5 - 4.0) | *622* | *3.2* | *(2.9 - 3.4)* | 1,863 | 9.5 | (9.0 - 9.9) | *156* | *0.8* | *(0.7 - 0.9)* | *1,144* | *5.8* | *(5.5 - 6.1)* | 266 | 1.4 | (1.2 - 1.5) |
| 2009 | 330 | 1.6 | (1.5 - 1.8) | *312* | *1.6* | *(1.4 - 1.7)* | 827 | 4.1 | (3.8 - 4.4) | *756* | *3.8* | *(3.5 - 4.0)* | 2,115 | 10.5 | (10.1 - 11.0) | *172* | *0.9* | *(0.7 - 1.0)* | *1,264* | *6.3* | *(6.0 - 6.6)* | 271 | 1.4 | (1.2 - 1.5) |
| 2010 (to date) | 153 | 0.8 | (0.6 - 0.9) | *144* | *0.7* | *(0.6 - 0.8)* | 472 | 2.3 | (2.1 - 2.5) | *436* | *2.2* | *(2.0 - 2.4)* | 1,234 | 6.1 | (5.8 - 6.4) | *123* | *0.6* | *(0.5 - 0.7)* | *770* | *3.8* | *(3.5 - 4.1)* | 149 | 0.7 | (0.6 - 0.9) |
| April - June 2009 | 83 | 0.4 | (0.3 - 0.5) | *76* | *0.4* | *(0.3 - 0.5)* | 139 | 0.7 | (0.6 - 0.8) | *126* | *0.6* | *(0.5 - 0.7)* | 442 | 2.2 | (2.0 - 2.4) | *31* | *0.2* | *(0.1 - 0.2)* | *295* | *1.5* | *(1.3 - 1.6)* | 74 | 0.4 | (0.3 - 0.5) |
| July - September 2009 | 80 | 0.4 | (0.3 - 0.5) | *77* | *0.4* | *(0.3 - 0.5)* | 229 | 1.1 | (1.0 - 1.3) | *205* | *1.0* | *(0.9 - 1.2)* | 596 | 3.0 | (2.7 - 3.2) | *42* | *0.2* | *(0.1 - 0.3)* | *372* | *1.9* | *(1.7 - 2.0)* | 82 | 0.4 | (0.3 - 0.5) |
| October - December 2009 | 77 | 0.4 | (0.3 - 0.5) | *73* | *0.4* | *(0.3 - 0.4)* | 286 | 1.4 | (1.2 - 1.6) | *266* | *1.3* | *(1.2 - 1.5)* | 602 | 3.0 | (2.7 - 3.2) | *60* | *0.3* | *(0.2 - 0.4)* | *359* | *1.8* | *(1.6 - 2.0)* | 55 | 0.3 | (0.2 - 0.3) |
| January - March 2010 | 75 | 0.4 | (0.3 - 0.5) | *72* | *0.4* | *(0.3 - 0.4)* | 260 | 1.3 | (1.1 - 1.4) | *237* | *1.2* | *(1.0 - 1.3)* | 655 | 3.2 | (3.0 - 3.5) | *62* | *0.3* | *(0.2 - 0.4)* | *396* | *2.0* | *(1.8 - 2.1)* | 78 | 0.4 | (0.3 - 0.5) |
| April - June 2010 | 78 | 0.4 | (0.3 - 0.5) | *72* | *0.4* | *(0.3 - 0.4)* | 212 | 1.0 | (0.9 - 1.2) | *199* | *1.0* | *(0.8 - 1.1)* | 579 | 2.9 | (2.6 - 3.1) | *61* | *0.3* | *(0.2 - 0.4)* | *374* | *1.9* | *(1.7 - 2.0)* | 71 | 0.4 | (0.3 - 0.4) |

*1. Specific data for disorders due to alcohol is not available for the period January - March 2007.*

**Table 7: Initial mental disorder assessments for all new episodes of care seen at a DCMH by deployment[1] and ICD-10 grouping, 1 April – 30 June 2010, numbers and rates per 1,000 strength.**

| | | Deployment - Theatres of operation | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Op TELIC and/or Op HERRICK[2] | | | *of which* | | | | | | |
| | | | | | *Op TELIC* | | | *Op HERRICK[2]* | | | Neither |
| ICD-10 description | All patients seen | Patients seen | Rate ratio[3] | 95% CI | Patients seen | Rate ratio[3] | 95% CI | Patients seen | Rate ratio[3] | 95% CI | Patients seen |
| **All patients seen** | **1,337** | **776** | | | ***530*** | | | ***465*** | | | **561** |
| **All patients assessed with a mental disorder** | **940** | **579** | 1.1 | (0.9 - 1.2) | ***395*** | *1.0* | *(0.9 - 1.1)* | ***351*** | *1.1* | *(0.9 - 1.3)* | **361** |
| **Psychoactive substance use** | **78** | **43** | **0.8** | **(0.5 - 1.3)** | ***28*** | ***0.7*** | ***(0.4 - 1.2)*** | ***26*** | ***0.8*** | ***(0.5 - 1.4)*** | **35** |
| of which disorders due to alcohol | 72 | 40 | 0.8 | (0.5 - 1.3) | *27* | *0.8* | *(0.5 - 1.3)* | *23* | *0.8* | *(0.5 - 1.4)* | 32 |
| **Mood disorders** | **212** | **120** | **0.9** | **(0.7 - 1.1)** | ***95*** | ***0.9*** | ***(0.7 - 1.2)*** | ***58*** | ***0.7*** | ***(0.5 - 1.0)*** | **92** |
| of which Depressive episode | 199 | 113 | 0.9 | (0.7 - 1.1) | *90* | *0.9* | *(0.7 - 1.3)* | *54* | *0.7* | *(0.5 - 1.0)* | 86 |
| **Neurotic disorders** | **579** | **382** | **1.3** | **(1.1 - 1.5)** | ***251*** | ***1.1*** | ***(1.0 - 1.4)*** | ***244*** | ***1.4*** | ***(1.1 - 1.7)*** | **197** |
| of which PTSD | 61 | 48 | 2.4 | (1.3 - 4.5) | *23* | *1.6* | *(0.8 - 3.1)* | *38* | *3.2* | *(1.7 - 6.1)* | 13 |
| of which Adjustment disorders | 374 | 244 | 1.2 | (1.0 - 1.5) | *164* | *1.1* | *(0.9 - 1.4)* | *154* | *1.3* | *(1.0 - 1.7)* | 130 |
| **Other mental disorders** | **71** | **34** | **0.6** | **(0.4 - 1.0)** | ***21*** | ***0.5*** | ***(0.3 - 0.9)*** | ***23*** | ***0.7*** | ***(0.4 - 1.2)*** | **37** |
| No mental disorder | 397 | 197 | | | *135* | | | *114* | | | 200 |

1. *Deployment to the wider theatre of operation (see paragraph 36).*
2. *Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 37).*
3. *Rate ratio compares personnel identified as deployed to these theatres of operation with those not identified as deployed to either theatre of operation (see paragraph 37).*

2. **Table 7** shows that during April – June 2010 there was no significant difference in the overall rates of mental disorder in those deployed on Op TELIC and/or Op HERRICK compared to those not deployed there. However, there were several significant differences in the rates between individual mental health disorders:

   a. The rate of neurotic disorder, including the sub-category of PTSD, was significantly higher in those deployed on Op TELIC and/or Op HERRICK compared to those not deployed there. The rate remains significantly higher when broken down into those who deployed on Op HERRICK compared to those not deployed there.

   b. The rate of 'other mental disorders' was significantly lower in those deployed on Op TELIC than those not deployed there.

### *Admissions to the MOD's In-patient Contractor*

3. During the three-month period April – June 2010, there were 61 admissions of Service personnel to the MOD's in-patient contractor which corresponds to a rate of 0.3 per 1,000 strength.

4. Of the 61 personnel admitted during April – June 2010, 48 had been seen at a DCMH between January 2007 and the date of their admission. The remaining 13 patients were admitted to the in-patient contractor without DASA's records showing that they had been seen at a DCMH. They are likely to have been emergency admissions.

5. **Tables 8, 9** and **10** (see page 7) provide details of all new admissions to the MOD's in-patient care contractor between January 2007 and June 2009 and all admissions for new episodes of care to the MOD's in-patient care contractor between July 2009 and June 2010.

**Table 8: Admissions to the MOD's in-patient contractor by Service, 1 January 2007 – 30 June 2010, numbers and rates per 1,000 strength.**

| | All first admissions | | | Service | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naval Service[1] | | | Army | | | RAF | | |
| | Patients assessed with a mental disorder | | | | | | | | | | | |
| Date | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI |
| 2007 | 247 | 1.2 | (1.1 - 1.4) | 42 | 1.1 | (0.7 - 1.4) | 165 | 1.4 | (1.2 - 1.6) | 40 | 0.9 | (0.6 - 1.2) |
| 2008 | 213 | 1.1 | (0.9 - 1.2) | 49 | 1.3 | (0.9 - 1.6) | 119 | 1.0 | (0.9 - 1.2) | 45 | 1.0 | (0.7 - 1.3) |
| 2009 | 231 | 1.2 | (1.0 - 1.3) | 45 | 1.1 | (0.8 - 1.5) | 143 | 1.2 | (1.0 - 1.4) | 43 | 1.0 | (0.7 - 1.3) |
| 2010 (to date) | 130 | 0.6 | (0.5 - 0.8) | 26 | 0.7 | (0.4 - 1.0) | 84 | 0.7 | (0.6 - 0.9) | 20 | 0.4 | (0.3 - 0.7) |
| April - June 2009 | 51 | 0.3 | (0.2 - 0.3) | 14 | 0.4 | (0.2 - 0.6) | 29 | r0.2 | (0.2 - 0.4) | 8 | 0.2 | (0.1 - 0.4) |
| July - September 2009 | 66 | 0.3 | (0.2 - 0.4) | 12 | 0.3 | (0.2 - 0.5) | 40 | 0.3 | (0.2 - 0.4) | 14 | 0.3 | (0.2 - 0.5) |
| October - December 2009 | 57 | 0.3 | (0.2 - 0.4) | 11 | 0.3 | (0.1 - 0.5) | 32 | 0.3 | (0.2 - 0.4) | 14 | 0.3 | (0.2 - 0.5) |
| January - March 2010 | 69 | 0.3 | (0.3 - 0.4) | 15 | 0.4 | (0.2 - 0.6) | 43 | 0.4 | (0.3 - 0.5) | 11 | 0.2 | (0.1 - 0.4) |
| April - June 2010 | 61 | 0.3 | (0.2 - 0.4) | 11 | 0.3 | (0.1 - 0.5) | 41 | 0.3 | (0.2 - 0.5) | 9 | 0.2 | (0.1 - 0.4) |

1. *Royal Navy and Royal Marines combined to protect patient confidentiality.*
2. *'r' indicates a change to previously published data.*

**Table 9: Admissions to the MOD's in-patient contractor by gender and rank, 1 January 2007 – 30 June 2010, numbers and rates per 1,000 strength.**

| | Gender | | | | | | Rank | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Males | | | Females | | | Officers | | | Other Ranks | | |
| | Patients assessed with a mental disorder | | | | | | | | | | | |
| Date | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI |
| 2007 | 206 | 1.1 | (1.0 - 1.3) | 41 | 2.2 | (1.6 - 2.9) | 18 | 0.5 | (0.3 - 0.8) | 229 | 1.4 | (1.2 - 1.6) |
| 2008 | 173 | 1.0 | (0.8 - 1.1) | 40 | 2.2 | (1.5 - 2.9) | 18 | 0.5 | (0.3 - 0.9) | 195 | 1.2 | (1.0 - 1.4) |
| 2009 | 196 | 1.1 | (0.9 - 1.2) | 35 | 1.9 | (1.3 - 2.5) | 19 | 0.6 | (0.3 - 0.9) | 212 | 1.3 | (1.1 - 1.4) |
| 2010 (to date) | 106 | 0.6 | (0.5 - 0.7) | 24 | 1.2 | (0.8 - 1.9) | 11 | 0.3 | (0.1 - 0.5) | 119 | 0.7 | (0.6 - 0.9) |
| April - June 2009 | 45 | 0.2 | (0.2 - 0.3) | 6 | r0.3 | (0.1 - 0.7) | ~ | 0.1 | (0.0 - 0.2) | ~ | 0.3 | (0.2 - 0.4) |
| July - September 2009 | 54 | 0.3 | (0.2 - 0.4) | 12 | 0.7 | (0.3 - 1.1) | 6 | 0.2 | (0.1 - 0.4) | 60 | 0.4 | (0.3 - 0.5) |
| October - December 2009 | 47 | 0.3 | (0.2 - 0.3) | 10 | 0.5 | (0.3 - 1.0) | 7 | 0.2 | (0.1 - 0.4) | 50 | 0.3 | (0.2 - 0.4) |
| January - March 2010 | 56 | 0.3 | (0.2 - 0.4) | 13 | 0.7 | (0.4 - 1.2) | 7 | 0.2 | (0.1 - 0.4) | 62 | 0.4 | (0.3 - 0.5) |
| April - June 2010 | 50 | 0.3 | (0.2 - 0.3) | 11 | 0.6 | (0.3 - 1.0) | ~ | 0.1 | (0.0 - 0.3) | ~ | 0.3 | (0.3 - 0.4) |

1. *Data presented as "~" has been suppressed in accordance with DASA's rounding policy (see paragraph 40).*
2. *'r' indicates a change to previously published data.*

**Table 10: Admissions to the MOD's in-patient contractor by deployment[1], 1 January 2007 – 30 June 2010, numbers and rates per 1,000 strength.**

| | Deployment - Theatres of operation | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Op TELIC and/or Op HERRICK[2] | | | *of which* | | | | | | Neither | | |
| | | | | *Op TELIC* | | | *Op HERRICK*[2] | | | | | |
| | Patients assessed with a mental disorder | | | | | | | | | | | |
| Date | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI | Number | Rate | 95% CI |
| 2007 | 123 | 1.2 | (1.0 - 1.4) | *111* | *1.2* | *(1.0 - 1.4)* | *33* | *1.1* | *(0.7 - 1.5)* | 124 | 1.3 | (1.1 - 1.5) |
| 2008 | 98 | 0.9 | (0.7 - 1.0) | *80* | *0.9* | *(0.7 - 1.1)* | *35* | *0.8* | *(0.5 - 1.1)* | 115 | 1.4 | (1.1 - 1.6) |
| 2009 | 134 | 1.1 | (0.9 - 1.3) | *113* | *1.2* | *(1.0 - 1.5)* | *52* | *0.9* | *(0.7 - 1.1)* | 97 | 1.2 | (0.9 - 1.4) |
| 2010 (to date) | 66 | 0.5 | (0.4 - 0.7) | *53* | *0.6* | *(0.4 - 0.8)* | *35* | *0.5* | *(0.3 - 0.7)* | 64 | 0.8 | (0.6 - 1.0) |
| April - June 2009 | 25 | 0.2 | (0.1 - 0.3) | *20* | *0.2* | *(0.1 - 0.3)* | *7* | *0.1* | *(0.0 - 0.3)* | 26 | 0.3 | (0.2 - 0.5) |
| July - September 2009 | 37 | 0.3 | (0.2 - 0.4) | *30* | *0.3* | *(0.2 - 0.4)* | *19* | *0.3* | *(0.2 - 0.5)* | 29 | 0.4 | (0.2 - 0.5) |
| October - December 2009 | 37 | 0.3 | (0.2 - 0.4) | *33* | *0.4* | *(0.2 - 0.5)* | *14* | *0.2* | *(0.1 - 0.4)* | 20 | 0.2 | (0.1 - 0.4) |
| January - March 2010 | 38 | 0.3 | (0.2 - 0.4) | *30* | *0.3* | *(0.2 - 0.5)* | *23* | *0.3* | *(0.2 - 0.5)* | 31 | 0.4 | (0.2 - 0.5) |
| April - June 2010 | 28 | 0.2 | (0.2 - 0.3) | *23* | *0.3* | *(0.2 - 0.4)* | *12* | *0.2* | *(0.1 - 0.3)* | 33 | 0.4 | (0.3 - 0.6) |

1. *Deployment to the wider theatre of operation (see paragraph 36).*
2. *Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 37).*

6. Overall rates of admission remained consistent with previous quarters:
   a. There were no significant differences in admission rates between Services.
   b. There were no significant differences in admission rates between males and females.
   c. There were no significant differences in admission rates between Officers and Other Ranks.
   d. There were no significant differences in admission rates between those deployed on Op TELIC and/or Op HERRICK and those who had not been deployed.

**POINTS TO NOTE**

7. Interpretation of the findings in this report continues to require caution. The data contained within this report covers the activity of the formal professional mental health services in the Armed Forces and as such, does not represent the totality of mental health problems in the UK Armed Forces. These figures report only attendances for new episodes of care, not all those who were receiving treatment in the time period.

8. Mental health problems are present in both civilian and military populations and result from multi-factorial issues. The Surgeon General's Department (SGD) and Joint Medical Command (JMC) are striving to minimise the stigma associated with mental illness and foster the appropriate understanding, recognition and presentation for management of these issues in UK Armed Forces personnel. Stigma concerning mental health issues is, however, deeply embedded in both military and civilian populations and it will take time produce attitudinal cultural change.

9. Some mental health problems will be resolved through peer support and individual resources; patients presenting to the UK Armed Forces' mental health services will have undergone a process that begins with the individual's identification of a problem and initial presentation to primary care or other agencies such as the padres or Service social workers. A proportion of mental health issues will have been resolved at these levels without the need for further referral. The diagnostic breakdown in this report is based upon initial assessments at DCMHs, which may be subject to later amendment. For epidemiological information on mental health problems in the UK Armed Forces, reference should be made to the independent academic research conducted by the King's Centre for Military Health Research (KCMHR). This research, conducted on a large and representative sample of the UK Armed Forces population, provides a reliable overview of mental health in the UK Armed Forces[c].

**DATA, DEFINITIONS AND METHODS**

10. To ensure these statistics pick up all new episodes of care, DASA have made some changes to data collection and validation from July 2009 onwards. Prior to July 2009, we identified individuals who had previously attended a DCMH and removed them from the analysis. Following discussions with mental health professionals, DASA have reviewed the methodology and have expanded our data collection in order to more effectively capture the overall burden of mental health in the UK Armed Forces, including the effect of deployment on those who might have previously been seen for an unrelated mental health condition. We now include all new episodes of care, including both first referrals and patients who were seen at a DCMH previously, were discharged from care and have been referred again for a new episode of care.

11. From July 2009 onwards, DASA have also included data from four mental health posts located in medical centres, attached to a DCMH, staffed by mental health nurses and operating in the same way as a DCMH; seeing and treating personnel referred for specialist care with suspected mental health disorders. Throughout this report the term DCMH included these four mental health posts.

12. As a result of the change in methodology, recorded numbers for Q3 2009 onwards have increased from previous quarters. This increase should be treated with caution, however, as is clear by comparison to the figures produced using the previous methods, that this increase is due to the change in the methodology used and not an increase in the number of Armed Forces personnel in attendance at a DCMH (see UK Armed Forces mental health reports July – September 2009 and October – December 2009 for methodology comparisons). Importantly, the patterns and main trends have remained the same and high profile findings such as rates of PTSD and substance abuse have not significantly changed.

13. 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).

14. A number of patients present to DCMHs with symptoms that require the treatment skills of DCMH staff, whilst not necessarily having a specific and identifiable mental disorder. In the **Findings** section, these cases are referred to as "assessed without a mental disorder".

[c] Their findings are published in the peer-reviewed medical literature and are freely available in the public domain at URL:http://www.kcl.ac.uk/kcmhr/information/publications/publications.html.

15. Following a range of validation and verification quality assurance procedures, some of the records submitted were excluded from the main analysis. These records were duplicates and repeat attendances in the same episode of care, and civilian or non-UK military personnel not covered by this report. Eight cases were included in the analysis, but since they were supplied in fully anonymous format, could not be verified or linked to personnel data. Duplicate records for patients whose care had been transferred between clinicians or between DCMHs within a single episode of care were removed from the analysis.

16. During 2007, DCMH staff were not required to complete ICD-10 information in their monthly returns and DASA received 376 records that did not have information regarding a specific mental disorder. We were therefore unable to ascertain whether these individuals had a mental disorder or not, and these records have been excluded from tables analysing 'patients assessed with a mental disorder'. From 2008 onwards, DCMH staff were unable to return records without completing ICD-10 information, so this data is present for all later years.

17. In order to calculate the rates in this report, an estimate of person time at risk is required for the denominator value. The estimate was calculated using a four-month average of strengths figures (e.g. the strength at the first of every month between April and July 2010 divided by four for Q2 2010). This estimate is in line with the method used for the annual reports. Strengths figures include regulars (including Gurkhas and 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. The strengths figures for June 2009 have been updated due to a processing error in the original report released in September 2009. This has resulted in some revisions made, annotated with 'r' in this report.

18. DASA maintains a database of individual deployment records from November 2001. Data prior to April 2007 was derived from the single services Operation Location tracking (OPLOC) systems[d] and data since April 2007 is obtained from the Joint Personnel Administration (JPA) system. The data covers deployments on Operation TELIC (Iraq) (2003-2009) and Operation HERRICK (Afghanistan) (2001-present).

19. The deployment data presented in this report represent deployments to the theatre of operation and not deployment to a specific country ie. Deployment to the Iraq theatre of operation includes deployment to other countries in the Gulf region such as Kuwait and Oman. Therefore, this data cannot be compared to data on personnel deployed to a specific country such as Iraq.

20. Deployment markers were assigned using the criteria that an individual was recorded as being deployed to the Iraq and/or Afghanistan theatres of operation if they had deployed to these theatres prior to their appointment date. Person level deployment data for Afghanistan was not available between 1 January 2003 and 14 October 2005. Therefore, it is possible that some UK Armed Forces personnel who were deployed to Afghanistan during this period and subsequently attended a DCMH have not been identified as having deployed to Afghanistan in this report. **Please note: this report compares those who had been deployed before their first appointment with those who have not been identified as having deployed before their first appointment.**

21. Operation TELIC is the name for UK operations in Iraq which started in March 2003 and finished in July 2009. UK Forces were deployed to Iraq to support the Government's objective to remove the threat that Saddam posed to his neighbours and his people and, based on the 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, freedom and good government.

22. 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 (ISAF) mission and as part of the US-led Operation Enduring Freedom (OEF).

23. In line with DASA's rounding policy (May 2009) all numbers fewer than five have been suppressed. Where there is only one cell in a row or column that is fewer than five, the next smallest number has also been suppressed so that numbers cannot be derived from totals. Where there are equal values, both numbers have been suppressed.

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[d] Around 4% of data obtained prior to April 2007 could not be fully validated for a number of reasons including data entry errors, personnel not recording on the system in the theatre of operation, records of contractors or personnel from other Government Departments. However research carried out by the King's Centre for Military Health Research on a large Tri-Service sample of personnel deployed during the first phase of Op TELIC in 2003, who were identified from DASA's deployment database, reported a cohort error rate of less than 0.5 per cent[4]

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