

# UK Armed Forces psychiatric morbidity: Annual Summary 2008

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## INTRODUCTION

1. This report provides statistical information on psychiatric morbidity among the UK Armed Forces in the period January to December 2008. It summarises all new referrals of Service 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. This data has previously been presented in the quarterly Armed Forces Psychiatric Morbidity Reports; however, the accumulation of a year's worth of data has allowed more detailed break downs, in particular by age and Service. In addition, this report provides a summary of the Reserves Mental Health Program (at **Annex A**) and aeromedical evacuations for psychiatric reasons (at **Annex B**).

2. DCMHs are specialised psychiatric 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.

3. A rigid pseudo-anonymisation process, and other measures preserving patient confidentiality, has enabled full verification and validation of the DCMH returns, importantly allowing identification of repeat attendances. It also ensured linkage with deployment databases was possible, so that potential effects of deployment could be measured.

4. The first report<sup>a</sup> in the quarterly series provides important background information on data governance. A summary of this, along with detail of some minor methodology changes, can be found in the section on '**Data, definitions and methods**'.

## KEY POINTS

5. During 2008, 3,189<sup>f</sup> new cases of mental disorder were identified within UK Armed Forces personnel, representing a rate of 16.2<sup>f</sup> per 1,000 strength.

6. Among the 3,189<sup>f</sup> personnel with a mental disorder, there were some statistically significant findings:

- rates for Royal Marines were lower than for other Services;
- rates for females were higher than for males;
- rates for other ranks were higher than for Officers;
- rates for the 20-24 age group were higher than all other age groups except the under 20s.

7. Rates of psychoactive substance use, including alcohol, and mood disorders, including depressive episodes, were lower in those that had deployed to the Iraq or Afghanistan theatres of operation than in those who had not deployed there. Rates of neurotic disorder, including adjustment disorders and PTSD, was higher among those deployed to the Iraq or Afghanistan theatres of operation compared with those not deployed there.

8. There were 213 first admissions to the MOD's inpatient contractor in 2008. The following results were statistically significant:

- rates for females were higher than for males;
- rates for other ranks were higher than for Officers;
- rates for personnel who had deployed to the Iraq and/or Afghanistan theatres of operation were lower than for those who had not deployed there.

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

## RESULTS

### Tri-Service

9. During 2008 a total of 4,465<sup>r</sup> UK Service personnel were recorded as having been seen for assessment as new patients at the MOD's DCMHs and overseas satellites, representing a rate for the year of 22.7<sup>r</sup> per 1,000 strength. There were 213 first admissions of UK Service personnel to the MOD's in-patient contractor.

10. **Table 1** provides details of the key socio-demographic and military characteristics of the 4,465<sup>r</sup> new attendances at the MOD's DCMHs during 2008. This includes 80<sup>r</sup> personnel whose characteristics are not known. The rates presented in table 1 are also shown in **Figures 1 to 4**.

**Table 1 - New attendances at the MOD's DCMHs: numbers and rates (per 1,000 strength) by demographic and military characteristics, 2008**

Characteristic	Strength <sup>3</sup>	All patients seen	Patients assessed with a mental disorder			Patients assessed without a mental disorder
			Number	Rate	95% CI	
<b>All</b>	197,000	4,465 <sup>r</sup>	3,189 <sup>r</sup>	16.2 <sup>r</sup>	(15.6 - 16.7)	1,276 <sup>r</sup>
<b>Service</b>						
Royal Navy	31,300	602	413	13.2	(11.9 - 14.5)	189
Royal Marines	7,800	84	61	7.8	(5.8 - 9.7)	23
Army	114,100	2,758 <sup>r</sup>	1,959 <sup>r</sup>	17.2	(16.4 - 17.9)	799
RAF	43,800	941	706	16.1	(14.9 - 17.3)	235
<b>Gender</b>						
Males	179,000	3,573 <sup>r</sup>	2,511 <sup>r</sup>	14.0	(13.5 - 14.6)	1,062
Females	18,000	812	628	34.8	(32.1 - 37.6)	184
<b>Rank</b>						
Officers	33,400	299	240	7.2	(6.3 - 8.1)	59
Other ranks	163,700	4,086 <sup>r</sup>	2,899 <sup>r</sup>	17.7	(17.1 - 18.4)	1,187
<b>Age</b>						
<20	15,700	480 <sup>r</sup>	272 <sup>r</sup>	17.4 <sup>r</sup>	(15.3 - 19.4) <sup>r</sup>	208
20-24	44,300	1,351 <sup>r</sup>	910 <sup>r</sup>	20.6 <sup>r</sup>	(19.2 - 21.9) <sup>r</sup>	441
25-29	42,200	967 <sup>r</sup>	711 <sup>r</sup>	16.9 <sup>r</sup>	(15.6 - 18.1)	256
30-34	28,300	577 <sup>r</sup>	448 <sup>r</sup>	15.9	(14.4 - 17.3) <sup>r</sup>	129
35-39	33,000	607 <sup>r</sup>	494 <sup>r</sup>	14.9	(13.6 - 16.3) <sup>r</sup>	113
40-44	18,200	263 <sup>r</sup>	197 <sup>r</sup>	10.8 <sup>r</sup>	(9.3 - 12.3) <sup>r</sup>	66
45-49	9,700	97 <sup>r</sup>	76 <sup>r</sup>	7.8 <sup>r</sup>	(6.1 - 9.6) <sup>r</sup>	21
50+	5,600	43 <sup>r</sup>	31 <sup>r</sup>	5.5 <sup>r</sup>	(3.6 - 7.5) <sup>r</sup>	12
<b>Deployment - Theatres of operation</b>						
Iraq and/or Afghanistan <sup>1</sup>	112,100	2,354	1,769	15.8	(15.3 - 16.5)	585
of which, Iraq	92,500	1,949	1,463	15.8	(15.0 - 16.6)	486
of which, Afghanistan <sup>1</sup>	44,000	861	661	15.0	(13.9 - 16.2)	200
Neither Iraq nor Afghanistan <sup>1</sup>	85,000	2,031 <sup>r</sup>	1,370 <sup>r</sup>	16.1	(15.3 - 17.0)	661
<b>Characteristics not known<sup>2</sup></b>		80 <sup>r</sup>	50 <sup>r</sup>			30 <sup>r</sup>

1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 49).  
2. Records supplied without identifiers (see paragraph 47).  
3. Strengths data rounded to the nearest 100. Strengths are a 13-month average (see paragraph 48).  
<sup>r</sup> Data revised due to improvements in data processing

11. Of the 4,465<sup>r</sup> new attendances, 3,189<sup>r</sup> (71%) were assessed with a mental disorder, representing an overall annual rate for new cases of mental disorder of 16.2<sup>r</sup> per 1,000 strength.

12. There were some statistically significant differences in the rates of mental disorder between various sub-groups of patients.

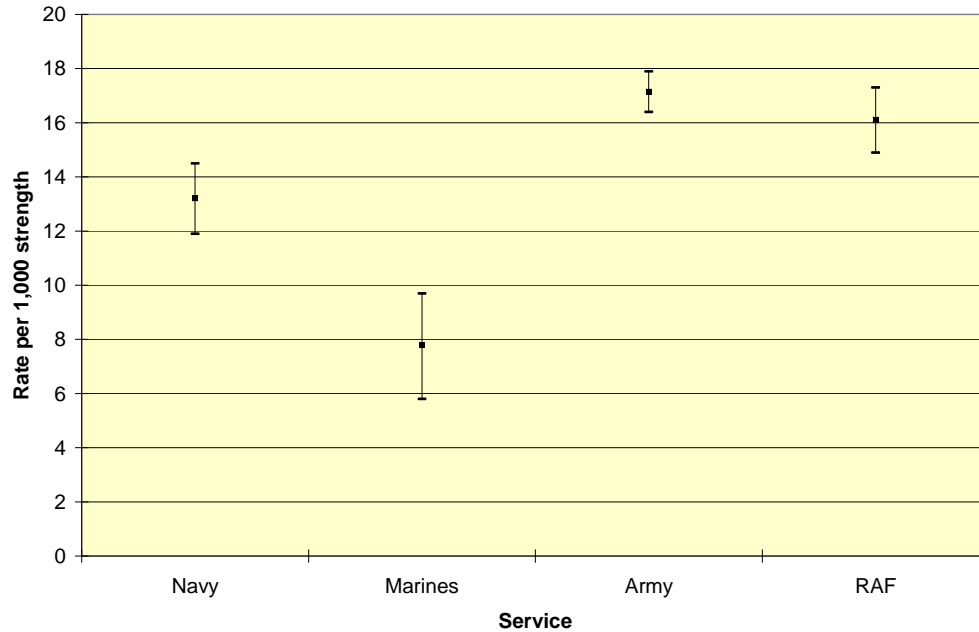
- Royal Marines had a lower rate of mental disorder at 7.8 per 1,000 strength (95% CI: 5.8-9.7, N=61) than Navy personnel at 13.2 per 1,000 strength, who in turn had lower rates than the Army and RAF personnel at 17.2 and 16.1 per 1,000 strength respectively. This is illustrated in **Figure 1**.
- Female personnel had a higher rate of mental disorder assessment at 34.8 per 1,000 strength (95%CI: 32.1-37.6, N=628), which is over double that of male personnel at 14.0 per 1,000 strength (95%CI: 13.5-14.6, N=2,511<sup>r</sup>). This is illustrated in **Figure 2**.
- Other ranks had a higher rate of mental disorder at 17.7 per 1,000 strength (95%CI: 17.1-

18.4, N=2,899<sup>f</sup>), which is over double that of officers at 7.2 per 1,000 strength (95%CI: 6.3-8.1, N=240). This is illustrated in **Figure 2**.

- Personnel in the 20-24 age group had higher rates of mental disorder at 20.6<sup>f</sup> per 1,000 strength (95%CI: 19.2-21.9<sup>f</sup>, N=910<sup>f</sup>), than all other age groups, except for the under 20s. This is illustrated in **Figure 3**.

There was no statistically significant difference between those who had deployed to the Iraq or Afghanistan theatres of operation and those who had not deployed there.

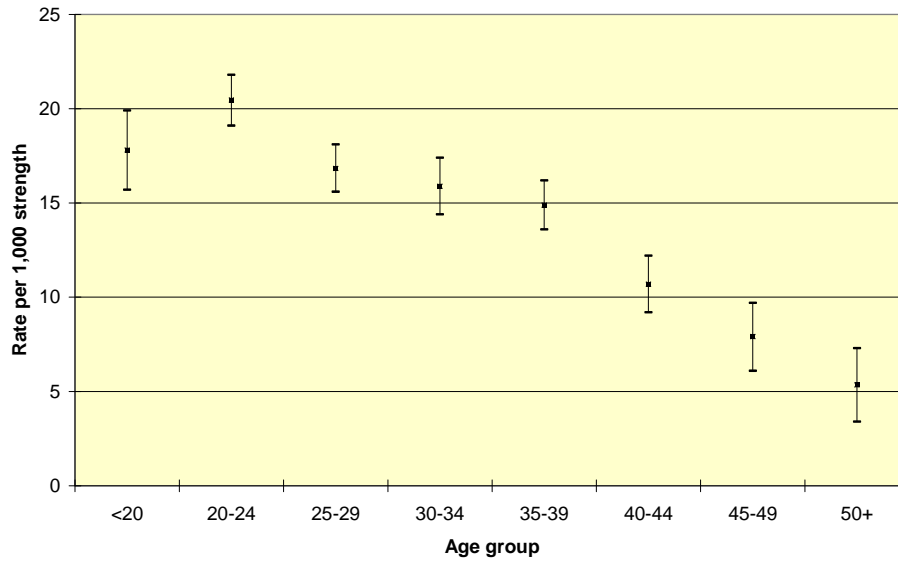
**Figure 1: Rates of new attendances at the MOD's DCMHs by Service, 2008**



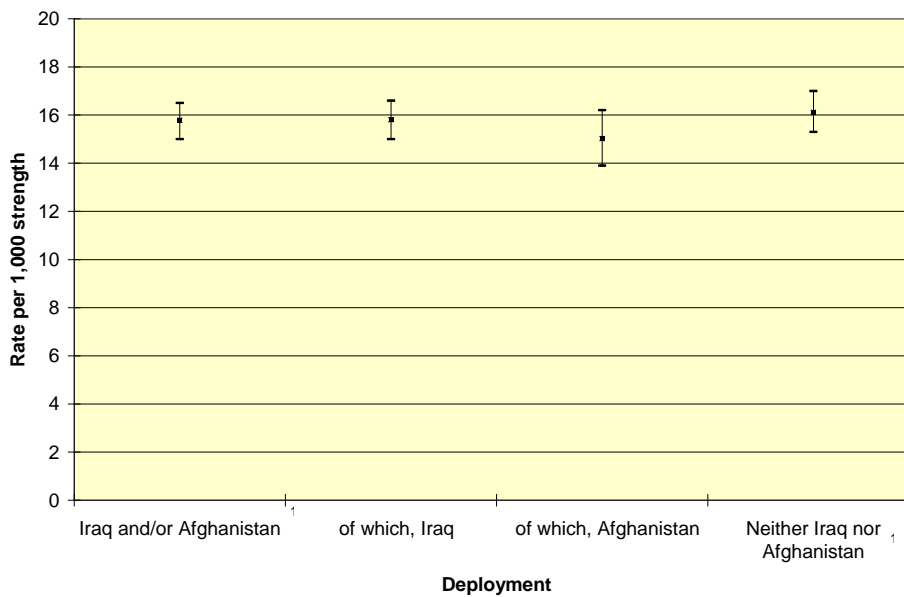
**Figure 2: Rates of new attendances at the MOD's DCMHs by Gender and Rank, 2008**



**Figure 3: Rates of new attendances at the MOD's DCMHs by age group, 2008**



**Figure 4: Rates of new attendances at the MOD's DCMHs by deployment to the Iraq and/or Afghanistan<sup>1</sup> theatres of operation, 2008**



1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 48).

13. **Table 2** provides details of the types of mental disorder by the patients' past deployment on recent operations in the Iraq or Afghanistan theatres. The rate ratios 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 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.

**Table 2 - Initial mental disorder assessments for all new cases seen at a DCMH: numbers and rate ratios, by deployment and ICD-10 classification, 2008**

ICD-10 description	All patients seen	Deployment - Theatres of operation										Not known <sup>2</sup>	
		Iraq and/or Afghanistan <sup>1</sup>			of which						Neither		Patients seen
		Patients seen	Rate ratio	95% CI	Iraq		Afghanistan <sup>1</sup>		Patients seen	Rate ratio			
All patients seen	4,465 <sup>r</sup>	2,354			1,949				861			2,031 <sup>r</sup>	80 <sup>r</sup>
All patients assessed with a mental disorder	3,189 <sup>r</sup>	1,769	1.0	(0.9 - 1.1)	1,463	1.0	(0.9 - 1.1)	661	0.9	(0.8 - 1.0)	1,370 <sup>r</sup>	50 <sup>r</sup>	
Psychoactive substance use	326	155	0.7	(0.6 - 0.9)	132	0.7	(0.6 - 0.9)	35	0.4	(0.3 - 0.6)	166	5	
of which disorders due to alcohol	310	150	0.7	(0.6 - 0.9)	127	0.7	(0.6 - 0.9)	35	0.4	(0.3 - 0.6)	156	4	
Mood disorders	734	366	0.8	(0.7 - 0.9)	314	0.8	(0.7 - 0.9)	126	0.7	(0.5 - 0.8)	362	6	
of which depressive episode	622	309	0.8	(0.6 - 0.9)	265	0.8	(0.7 - 0.9)	112	0.7	(0.6 - 0.9)	309	4	
Neurotic disorders	1,863 <sup>r</sup>	1,122	1.2	(1.1 - 1.3)	914	1.2	(1.1 - 1.3)	459	1.2	(1.1 - 1.4)	714 <sup>r</sup>	27 <sup>r</sup>	
of which PTSD	156 <sup>r</sup>	122	3.2	(2.1 - 4.8)	101	3.2	(2.1 - 4.8)	60	4.0	(2.6 - 6.2)	29	5 <sup>r</sup>	
of which adjustment disorders	1,144 <sup>r</sup>	695	1.2	(1.1 - 1.4)	560	1.2	(1.1 - 1.4)	292	1.3	(1.1 - 1.5)	430	19 <sup>r</sup>	
Other mental and behavioural disorders	266 <sup>r</sup>	126	0.7	(0.6 - 1.0)	103	0.7	(0.6 - 1.0)	41	0.6	(0.4 - 0.9)	128	12 <sup>r</sup>	
No mental disorder	1,276 <sup>r</sup>	585			486			200			661	30 <sup>r</sup>	

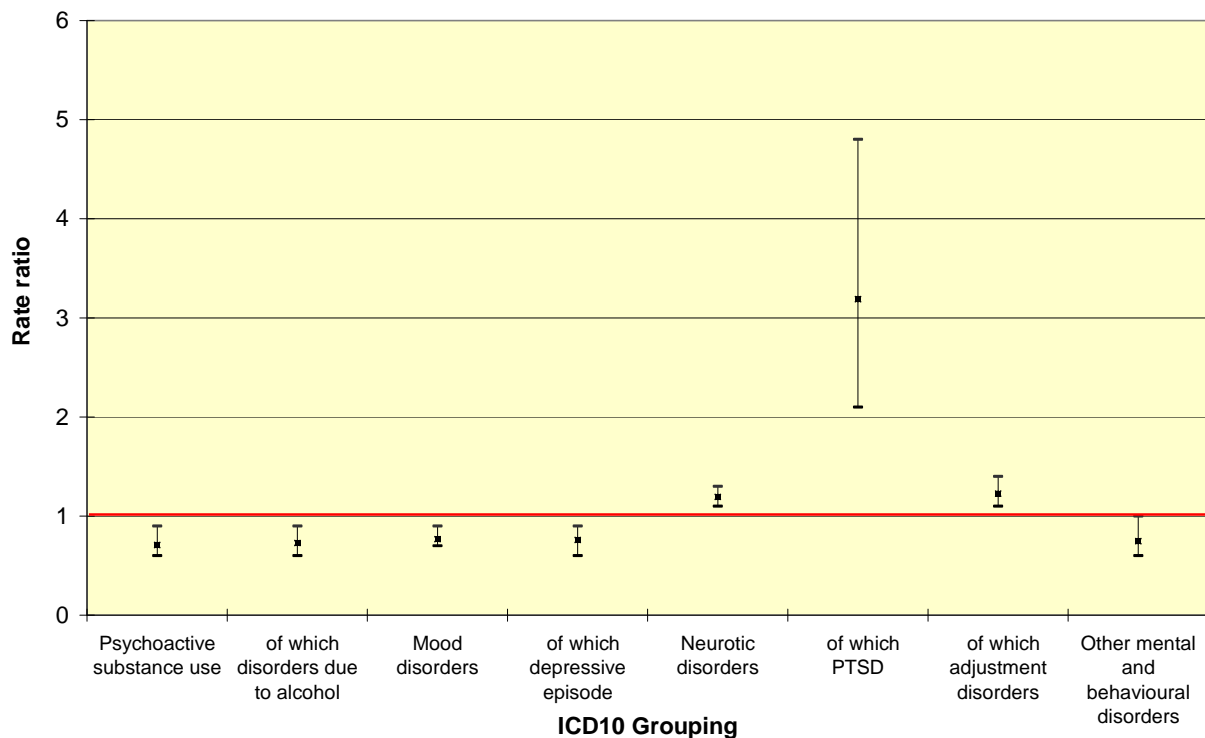
1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 49).  
2. Records supplied without identifiers (see paragraph 47).  
<sup>r</sup> Data revised due to improvements in data processing

14. During 2008 there was no difference in the overall rate of mental disorder between those deployed to the Iraq and Afghanistan theatres of operation and those not identified as having deployed there. When looking at the rates of major mental disorders, there were some statistically significant differences between those deployed to the Iraq and Afghanistan theatres of operation and those not identified as having deployed there;

- Rates of psychoactive substance use, and the subgroup disorders due to alcohol, and rates of mood disorders, and the subgroup depressive episodes, were lower in those who had deployed to the Iraq or Afghanistan theatres of operation than in those who had not deployed there.
- Rates of neurotic disorder, and the subgroups adjustment disorder and PTSD, were higher among those deployed to the Iraq or Afghanistan theatres of operation compared with those not deployed there.

15. **Figure 5** presents the rate ratios comparing personnel identified as having deployed to the Iraq and/or Afghanistan theatres of operation and those who have not been identified as having deployed to either theatre which can also be found in table 2. The rate ratio is represented as a square block on the graph with the upper and lower 95% confidence limits above and below. The bold line on the graph is at 1. A confidence interval which lies entirely below this line indicates statistically significantly lower rates in those deployed than those not deployed, whereas a confidence interval that lies entirely above the red line indicates statistically significantly higher rates in those deployed than those not deployed.

**Figure 5: Initial mental disorder assessments for all new cases seen at a DCMH: rate ratios by ICD10 groupings, 2008**



16. **Table 3** provides details of the types of presenting complaints, by ICD-10 grouping and Service, for patients seen for the first time during 2008, where information was provided.

17. Across the Services the most common mental disorders were neurotic disorders. There were some statistically significant results when comparing the rates of specific mental disorders between the Services.

- RAF personnel had a lower rate of psychoactive substance use (0.6 per 1,000 strength) than Navy or Army personnel. This is also true for the subgroup disorders due to alcohol.
- Royal Marines had a lower rate of mood disorders (0.9 per 1,000 strength) than the other Services. This is also true for the subgroup depressive episodes.
- Royal Marines had a higher rate of PTSD (2.2 per 1,000 strength) than all other Services.
- Navy personnel and Royal Marines had lower rates of adjustment disorder (3.7 and 2.3 per 1,000 strength respectively) than RAF and Army personnel.

**Table 3 - Mental disorder initial assessments for all new cases seen at a DCMH: numbers and rates (per 1,000 strength) , by service and ICD-10 classification, 2008<sup>1 2</sup>**

ICD-10 description	All			Royal Navy			Royal Marines			Army			RAF		
	Number	Rate	95% Confidence Interval	Number	Rate	95% Confidence Interval	Number	Rate	95% Confidence Interval	Number	Rate	95% Confidence Interval	Number	Rate	95% Confidence Interval
All cases seen by DCMH	4,465 <sup>r</sup>	22.7 <sup>r</sup>	(22.0 - 23.3) <sup>r</sup>	602	19.3	(17.7 - 20.8)	84	10.7	(8.4 - 13.0)	2,758 <sup>r</sup>	24.2	(23.3 - 25.1)	941	21.5	(20.1 - 22.9)
Cases of Mental Health disorder	3,189 <sup>r</sup>	16.2 <sup>r</sup>	(15.6 - 16.7)	413	13.2	(11.9 - 14.5)	61	7.8	(5.8 - 9.7)	1,959 <sup>r</sup>	17.2	(16.4 - 17.9)	706	16.1	(14.9 - 17.3)
Psychoactive substance use	326	1.7	(1.5 - 1.8)	71	2.3	(1.7 - 2.8)	9	1.1	(0.5 - 2.2)	213	1.9	(1.6 - 2.1)	28	0.6	(0.4 - 0.9)
of which disorders due to alcohol	310	1.6	(1.4 - 1.7)	70	2.2	(1.7 - 2.8)	9	1.1	(0.5 - 2.2)	200	1.8	(1.5 - 2.0)	27	0.6	(0.4 - 0.9)
Mood disorders	734	3.7	(3.5 - 4.0)	123	3.9	(3.2 - 4.6)	~	0.9	(0.4 - 1.8)	432	3.8	(3.4 - 4.1)	166	3.8	(3.2 - 4.4)
of which Depressive episode	622	3.2	(2.9 - 3.4)	114	3.6	(3.0 - 4.3)	~	0.9	(0.4 - 1.8)	353	3.1	(2.8 - 3.4)	144	3.3	(2.8 - 3.8)
Neurotic disorders	1,863 <sup>r</sup>	9.5 <sup>r</sup>	(9.0 - 9.9) <sup>r</sup>	191	6.1	(5.2 - 7.0)	42	5.4	(3.7 - 7.0)	1,139 <sup>r</sup>	10.0	(9.4 - 10.6)	464	10.6	(9.6 - 11.6)
of which PTSD	156 <sup>r</sup>	0.8	(0.7 - 0.9)	14	0.4	(0.2 - 0.8)	17	2.2	(1.3 - 3.5)	92	0.8	(0.6 - 1.0)	28	0.6	(0.4 - 0.9)
of which Adjustment disorders	1,144 <sup>r</sup>	5.8	(5.5 - 6.1)	115	3.7	(3.0 - 4.4)	18	2.3	(1.4 - 3.6)	726	6.4	(5.9 - 6.8)	266	6.1	(5.3 - 6.8)
Other mental disorders	266 <sup>r</sup>	1.4 <sup>r</sup>	(1.2 - 1.5)	28	0.9	(0.6 - 1.3)	~	0.4	(0.1 - 1.1)	175	1.5	(1.3 - 1.8)	48	1.1	(0.8 - 1.4)
No mental disorder	1,276 <sup>r</sup>	6.5	(6.1 - 6.8)	189	6.0	(5.2 - 6.9)	23	2.9	(1.9 - 4.4)	799	7.0	(6.5 - 7.5)	235	5.4	(4.7 - 6.1)

1. Service breakdowns may not add to the 'All' total as 80 records were supplied without identifiers. These records are absent from the Service breakdowns, as no Service data can be allocated (See paragraph 47).

2. Data presented as "~" has been suppressed in accordance with DASA's rounding policy (see paragraph 52).

<sup>r</sup> Data revised due to improvements in data processing

### In-patient Data

18. **Table 4** provides details of the key socio-demographic and military characteristics of the 213 new attendances at the MOD's in-patient contractor during 2008, broken down by Service.

Characteristic	Patients assessed with a mental disorder											
	All			Naval Service <sup>3</sup>			Army			RAF		
	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI
<b>First Admissions</b>	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)
<b>Gender</b>												
Males	173	1.0	(0.8 - 1.1)	37	1.0	(0.7 - 1.4)	105	1.0	(0.8 - 1.2)	31	0.8	(0.5 - 1.1)
Females	40	2.2	(1.5 - 2.9)	12	3.2	(1.7 - 5.6)	14	1.6	(0.9 - 2.8)	14	2.4	(1.3 - 4.1)
<b>Rank</b>												
Officers	18	0.5	(0.3 - 0.9)	~	1.0	(0.5 - 2.1)	~	0.4	(0.2 - 0.9)	~	0.3	(0.1 - 0.9)
Other ranks	195	1.2	(1.0 - 1.4)	~	1.3	(0.9 - 1.7)	~	1.1	(0.9 - 1.4)	~	1.2	(0.9 - 1.6)
<b>Age</b>												
<24	77	1.3	(1.0 - 1.6)	15	1.3	(0.7 - 2.2)	51	1.3	(0.9 - 1.6)	11	1.2	(0.6 - 2.2)
25-29	48	1.1	(0.8 - 1.5)	11	1.4	(0.7 - 2.5)	26	1.0	(0.7 - 1.5)	11	1.2	(0.6 - 2.1)
30-34	32	1.1	(0.7 - 1.5)	8	1.5	(0.7 - 3.1)	16	0.9	(0.5 - 1.5)	8	1.3	(0.6 - 2.6)
35-39	34	1.0	(0.7 - 1.4)	10	1.5	(0.7 - 2.7)	17	1.0	(0.6 - 1.5)	7	0.8	(0.3 - 1.7)
40+	22	0.7	(0.4 - 1.0)	5	0.6	(0.2 - 1.5)	9	0.6	(0.3 - 1.2)	8	0.7	(0.3 - 1.4)
<b>Deployment - Theatres of operation</b>												
Iraq or Afghanistan <sup>2</sup>	98	0.9	(0.7 - 1.0)	8	0.5	(0.2 - 1.0)	68	1.0	(0.7 - 1.2)	22	0.9	(0.6 - 1.4)
Of which, Iraq	80	0.9	(0.7 - 1.1)	~	0.5	(0.2 - 1.1)	56	1.0	(0.7 - 1.2)	~	0.8	(0.5 - 1.3)
Of which, Afghanistan <sup>2</sup>	35	0.8	(0.5 - 1.1)	~	0.2	(0.0 - 0.9)	23	0.8	(0.5 - 1.2)	~	1.1	(0.6 - 2.0)
Neither Iraq nor Afghanistan <sup>2</sup>	115	1.4	(1.1 - 1.6)	41	1.8	(1.3 - 2.4)	51	1.2	(0.9 - 1.5)	23	1.2	(0.8 - 1.8)

1. Data presented as "-" has been suppressed in accordance with DASA's rounding policy (see paragraph 52).

2. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 49).

3. Royal Navy and Royal Marines combined to avoid disclosure.

19. There were 213 first admissions to the MOD's inpatient contractor in 2008. The following results were statistically significant.

- Females had a higher rate of first admission at 2.2 per 1,000 strength (95% CI: 1.5-2.9, N=40) than males at 1.0 per 1,000 strength (95% CI: 0.8-1.1, N=173).
- Other ranks had a higher rate of first admission at 1.2 per 1,000 strength (95% CI: 1.0-1.4, N=195) than Officers at 0.5 per 1,000 strength (95% CI: 0.3-0.9, N=18).
- Overall, those not identified as being deployed to Iraq and/or Afghanistan theatres of operation had a higher rate of first admission at 1.4 per 1,000 strength (95%CI: 1.1-1.6, N=115) than those identified as being deployed there at 0.9 per 1,000 strength (95%CI: 0.7-1.0, N=98). When broken down by Service, however, this result only remained significant for Naval Service personnel.

20. There were no significant differences between the Services and the single Service results were broadly similar to the overall results. As many of the patient numbers are small, it is important not to draw any firm conclusions from the Service breakdowns.

### Royal Navy

21. During 2008, a total of 602 Royal Navy personnel were recorded as having been seen for assessment as new patients at the MOD's DCMHs and overseas satellites, representing a rate for the year of 19.3 per 1,000 strength.

22. **Table 5** provides details of the key socio-demographic and military characteristics of the 602 new attendances of Royal Navy personnel at the MOD's DCMHs during 2008.

**Table 5 - New attendances of Royal Navy personnel at the MOD's DCMHs: numbers and rates (per 1,000 strength) by demographic and military characteristics, 2008**

Characteristic	Strength <sup>2</sup>	All patients seen	Patients assessed with a mental disorder			Patients assessed without a mental disorder
			Number	Rate	95% CI	
<b>All</b>	31,300	602	413	13.2	(11.9 - 14.5)	189
<b>Gender</b>						
Males	27,600	430	281	10.2	(9.0 - 11.4)	149
Females	3,600	172	132	36.2	(30.0 - 42.4)	40
<b>Rank</b>						
Officers	6,800	71	57	8.4	(6.2 - 10.5)	14
Other ranks	24,400	531	356	14.6	(13.0 - 16.1)	175
<b>Age</b>						
<20	1,900	53 <sup>r</sup>	25	13.3	(8.6 - 19.6)	28 <sup>r</sup>
20-24	6,500	201 <sup>r</sup>	124	19.1	(15.8 - 22.5)	77 <sup>r</sup>
25-29	6,100	119	82	13.5	(10.6 - 16.4)	37
30-34	4,200	80 <sup>r</sup>	63 <sup>r</sup>	15.1 <sup>r</sup>	(11.4 - 18.9) <sup>r</sup>	17 <sup>r</sup>
35-39	5,800	94 <sup>r</sup>	74 <sup>r</sup>	12.7 <sup>r</sup>	(9.8 - 15.6) <sup>r</sup>	20
40+	6,800	55 <sup>r</sup>	45 <sup>r</sup>	6.6 <sup>r</sup>	(4.7 - 8.5) <sup>r</sup>	10
<b>Deployment - Theatres of operation</b>						
Iraq and/or Afghanistan <sup>1</sup>	11,500	175	131	11.4	(9.5 - 13.4)	44
Of which, Iraq	10,400	161	119	11.4	(9.3 - 13.4)	42
Of which, Afghanistan <sup>1</sup>	2,600	32	24	9.2	(5.9 - 13.6)	8
Neither Iraq nor Afghanistan <sup>1</sup>	19,800	427	282	14.3	(12.6 - 15.9)	145

1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 49).  
2. Strengths data rounded to the nearest 100. Strengths are a 13-month average (see paragraph 48).  
<sup>r</sup> Data revised due to improvements in data processing

23. Of the 602 new attendances, 413 (69%) were assessed with a mental disorder, representing an overall rate for new cases of mental disorder of 13.2 per 1,000 strength.

24. There were some statistically significant differences in the rates of mental disorder between various sub-groups of Royal Navy patients.

- Female personnel had a higher rate of mental disorder assessment at 36.2 per 1,000 strength (95%CI: 30.0-42.4, N=132), which is three and half times that of male personnel at 10.2 per 1,000 strength (95%CI: 9.0-11.4, N=281).
- Other ranks had a higher rate of mental disorder at 14.6 per 1,000 strength (95%CI: 13.0-16.1, N=356) than that of Officers at 8.4 per 1,000 strength (95%CI: 6.2-10.5, N=57).

25. **Table 6** provides details of the types of mental disorder by the patients' past deployment on recent operations in the Iraq or Afghanistan theatres. The rate ratios 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 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.

**Table 6 - Initial mental disorder assessments for all new Royal Navy cases seen at a DCMH: numbers and rate ratios, by deployment and ICD-10 classification, 2008<sup>1,2</sup>**

ICD-10 description	All patients seen	Deployment - Theatres of operation									Neither
		Iraq and/or Afghanistan <sup>3</sup>			of which						
		Patients seen	Rate ratio	95% CI	Patients seen	Rate ratio	95% CI	Patients seen	Rate ratio	95% CI	
<b>All patients seen</b>	<b>602</b>	<b>175</b>			<b>161</b>			<b>32</b>			<b>427</b>
<b>All patients assessed with a mental disorder</b>	<b>413</b>	<b>131</b>	<b>0.8</b>	<b>(0.7 - 1.0)</b>	<b>119</b>	<b>0.8</b>	<b>(0.6 - 1.0)</b>	<b>24</b>	<b>0.6</b>	<b>(0.4 - 1.0)</b>	<b>282</b>
Psychoactive substance use	71	20	0.7	(0.4 - 1.1)	20	0.7	(0.4 - 1.2)	0	0.0	-	51
<i>of which disorders due to alcohol</i>	70	20	0.7	(0.4 - 1.2)	20	0.8	(0.5 - 1.3)	0	0.0	-	50
Mood disorders	123	33	0.6	(0.4 - 0.9)	30	0.6	(0.4 - 1.0)	7	0.6	(0.3 - 1.3)	90
<i>of which depressive episode</i>	114	32	0.7	(0.4 - 1.0)	30	0.7	(0.5 - 1.1)	~	0.6	(0.2 - 1.3)	82
Neurotic disorders	191	67	0.9	(0.7 - 1.3)	59	0.9	(0.7 - 1.2)	14	0.9	(0.5 - 1.5)	124
<i>of which PTSD</i>	14	5	1.0	(0.3 - 2.9)	5	1.1	(0.4 - 3.1)	0	0.0	-	9
<i>of which adjustment disorders</i>	115	49	1.3	(0.9 - 1.9)	44	1.3	(0.9 - 1.8)	11	1.3	(0.7 - 2.4)	66
Other mental and behavioural disorders	28	11	1.1	(0.5 - 2.4)	10	1.1	(0.5 - 2.4)	~	1.3	(0.4 - 4.6)	17
No mental disorder	189	44			42			8			145

1. Data represented with a "-" symbol is not calculable.

2. Data presented as "-" has been suppressed in accordance with DASA's rounding policy (see paragraph 52).

3. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 49).

26. During 2008 the rate of mood disorders was lower in those deployed to the Iraq and/or Afghanistan theatres of operation than in those who had not deployed there (rate ratio 0.6, 95%CI: 0.4-0.9). There were no cases of psychoactive substance use or PTSD in Royal Navy personnel who had been deployed to the Afghanistan theatre of operation. It is therefore not possible to calculate a confidence interval for the rate ratio for these disorders.

### Royal Marines

27. During 2008 a total of 84 Royal Marines were recorded as having been seen for assessment as new patients at the MOD's DCMHs and overseas satellites, representing a rate for the year of 10.7 per 1,000 strength.

28. **Table 7** provides details of the key socio-demographic and military characteristics of the 84 new attendances of Royal Marines at the MOD's DCMHs during 2008. Due to the small numbers involved, gender breakdowns have been removed and broader age categories have been used to avoid publishing potentially disclosive data.

Characteristic	Strength <sup>2</sup>	All patients seen	Patients assessed with a mental disorder			Patients assessed without a mental disorder
			Number	Rate	95% CI	
<b>All</b>	7,800	84	61	7.8	(5.8 - 9.7)	23
<b>Rank</b>						
Officers	800	5	5	6.0	(1.9 - 14.0)	0
Other ranks	7,000	79	56	8.0	(5.9 - 10.1)	23
<b>Age</b>						
<24	2,800	31	25	8.8	(5.7 - 13.0)	6
25-34	2,900	40	29	9.9	(6.6 - 14.2)	11
35+	5,000	13 <sup>r</sup>	7 <sup>r</sup>	1.4 <sup>r</sup>	(0.6 - 2.9) <sup>r</sup>	6 <sup>r</sup>
<b>Deployment - Theatres of operation</b>						
Iraq and/or Afghanistan <sup>1</sup>	4,900	56	41	8.4	(5.8 - 10.9)	15
Of which, Iraq	2,900	33	25	8.6	(5.6 - 12.7)	8
Of which, Afghanistan <sup>1</sup>	3,600	43	31	8.7	(5.6 - 11.7)	12
Neither Iraq nor Afghanistan <sup>1</sup>	2,900	28	20	6.8	(4.2 - 10.5)	8
<p>1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 49).</p> <p>2. Strengths data rounded to the nearest 100. Strengths are a 13-month average (see paragraph 48).</p> <p>r. Data revised due to improvements in data processing</p>						

29. Of the 84 new attendances, 61 (73%) were assessed with a mental disorder, representing an overall rate for new cases of mental disorder in Royal Marine personnel of 7.8 per 1,000 strength.

30. There were no statistically significant differences in the rates of mental disorder between various sub-groups of Royal Marine patients. Confidence intervals for some of the sub groups are, however, very wide due to the small numbers involved.

31. **Table 8** provides details of the types of mental disorder by the patients' past deployment on recent operations in the Iraq or Afghanistan theatres. The rate ratios 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 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.

**Table 8 - Initial mental disorder assessments for all new Royal Marine cases seen at a DCMH: numbers and rate ratios, by deployment and ICD-10 classification, 2008<sup>1,2</sup>**

ICD-10 description	All patients seen	Deployment - Theatres of operation									
		Iraq and/or Afghanistan <sup>3</sup>			of which						Neither
		Patients seen	Rate ratio	95% CI	Iraq			Afghanistan <sup>3</sup>			
Patients seen	Rate ratio	95% CI	Patients seen	Rate ratio	95% CI	Patients seen	Rate ratio	95% CI	Patients seen		
<b>All patients seen</b>	<b>84</b>	<b>56</b>			<b>33</b>			<b>43</b>			<b>28</b>
<b>All patients assessed with a mental disorder</b>	<b>61</b>	<b>41</b>	1.2	(0.7 - 2.1)	<b>25</b>	1.3	(0.7 - 2.3)	<b>31</b>	1.3	(0.7 - 2.2)	<b>20</b>
Psychoactive substance use	9	~	1.2	(0.3 - 4.8)	5	1.7	(0.4 - 7.1)	~	0.8	(0.2 - 4.1)	~
<i>of which disorders due to alcohol</i>	9	~	1.2	(0.3 - 4.8)	5	1.7	(0.4 - 7.1)	~	0.8	(0.2 - 4.1)	~
Mood disorders	~	~	0.8	(0.2 - 3.6)	~	1.4	(0.3 - 6.0)	~	0.3	(0.0 - 2.6)	~
<i>of which depressive episode</i>	~	~	0.8	(0.2 - 3.6)	~	1.4	(0.3 - 6.0)	~	0.3	(0.0 - 2.6)	~
Neurotic disorders	42	31	1.7	(0.8 - 3.4)	16	1.5	(0.7 - 3.2)	27	2.0	(1.0 - 4.1)	11
<i>of which PTSD</i>	17	~	4.5	(1.0 - 19.6)	9	4.6	(1.0 - 21.1)	14	5.8	(1.3 - 25.3)	~
<i>of which adjustment disorders</i>	18	9	0.6	(0.2 - 1.5)	~	0.3	(0.1 - 1.2)	8	0.7	(0.3 - 1.9)	9
Other mental and behavioural disorders	~	0	0.0	-	0	0.0	-	0	0.0	-	~
No mental disorder	23	15			8			12			8

1. Data represented with a "-" symbol is not calculable.

2. Data presented as "-" has been suppressed in accordance with DASA's rounding policy (see paragraph 52).

3. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 49).

32. In 2008 the rate of PTSD in Royal Marine personnel was statistically significantly higher among those deployed to the Afghanistan theatre of operation compared with those not identified as having deployed there (rate ratio 5.8, 95% CI: 1.3-25.3). There were no cases of 'other mental and behavioural disorders' in Royal Marines who had been deployed to the Iraq or Afghanistan theatres of operation. It is therefore not possible to calculate a rate ratio for these disorders. There were no other statistically significant differences between those who had and had not been deployed to the Iraq or Afghanistan theatres of operation.

## Army

33. During 2008 a total of 2,758<sup>r</sup> Army personnel were recorded as having been seen for assessment as new patients at the MOD's DCMHs and overseas satellites, representing a rate for the year of 24.2 per 1,000 strength.

34. **Table 9** provides details of the key socio-demographic and military characteristics of the 2,757 new attendances of Army personnel at the MOD's DCMHs during 2008.

Characteristic	Strength <sup>2</sup>	All patients seen	Patients assessed with a mental disorder			Patients assessed without a mental disorder
			Number	Rate	95% CI	
<b>All</b>	114,100	2,758 <sup>r</sup>	1,959 <sup>r</sup>	17.2	(16.4 - 17.9)	799
<b>Gender</b>						
Males	105,600	2,389 <sup>r</sup>	1,679 <sup>r</sup>	15.9	(15.1 - 16.7)	710
Females	8,500	369	280	32.9	(29.0 - 36.7)	89
<b>Rank</b>						
Officers	15,900	130	103	6.5	(5.2 - 7.7)	27
Other ranks	98,200	2,628 <sup>r</sup>	1,856 <sup>r</sup>	18.9	(18.0 - 19.7)	772
<b>Age</b>						
<20	11,800	377 <sup>r</sup>	221 <sup>r</sup>	18.7 <sup>r</sup>	(16.2 - 21.1) <sup>r</sup>	156 <sup>r</sup>
20-24	28,100	917 <sup>r</sup>	629 <sup>r</sup>	22.4 <sup>r</sup>	(20.6 - 24.1) <sup>r</sup>	288 <sup>r</sup>
25-29	24,900	621 <sup>r</sup>	455 <sup>r</sup>	18.3 <sup>r</sup>	(16.6 - 19.9) <sup>r</sup>	166 <sup>r</sup>
30-34	17,000	340 <sup>r</sup>	261 <sup>r</sup>	15.4 <sup>r</sup>	(13.5 - 17.2) <sup>r</sup>	79 <sup>r</sup>
35-39	17,800	313 <sup>r</sup>	252	14.2	(12.4 - 15.9)	61 <sup>r</sup>
40-44	8,000	133	100	12.5	(10.0 - 14.9)	33
45-49	3,800	36 <sup>r</sup>	26 <sup>r</sup>	6.9 <sup>r</sup>	(4.5 - 10.1) <sup>r</sup>	10
50+	2,700	21 <sup>r</sup>	15 <sup>r</sup>	5.5 <sup>r</sup>	(3.1 - 9.0) <sup>r</sup>	6
<b>Deployment - Theatres of operation</b>						
Iraq and/or Afghanistan <sup>1</sup>	71,100	1,644	1,222	17.2	(16.2 - 18.1)	422
Of which, Iraq	57,800	1,341	991	17.2	(16.1 - 18.2)	350
Of which, Afghanistan <sup>1</sup>	28,100	608	468	16.6	(15.1 - 18.2)	140
Neither Iraq nor Afghanistan <sup>1</sup>	43,000	1,114 <sup>r</sup>	737 <sup>r</sup>	17.1	(15.9 - 18.4)	377

1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005.  
2. Strengths data rounded to the nearest 100. Strengths are a 13-month average.  
<sup>r</sup> Data revised due to improvements in data processing

35. Of the 2,758<sup>r</sup> new attendances, 1,959<sup>r</sup> (71%) were assessed with a mental disorder, representing an overall rate for new cases of mental disorder of 17.2 per 1,000 strength.

36. There were some statistically significant differences in the rates of mental disorder between various sub-groups of Army patients.

- Female personnel had a higher rate of mental disorder assessment at 32.9 per 1,000 strength (95%CI: 29.0-36.7, N=280), which is double that of male personnel at 15.9 per 1,000 strength (95%CI: 15.1-16.7, N=1,679<sup>r</sup>).
- Other ranks had a higher rate of mental disorder at 18.9 per 1,000 strength (95%CI: 18.0-19.7, N=1,856<sup>r</sup>), which is almost three times that of officers at 6.5 per 1,000 strength (95%CI: 5.2-7.7, N=103).
- When broken down by age, the 20-24 age group had a higher rate of mental disorder at 22.4<sup>r</sup> per 1,000 strength, than all except the under 20 age group.

37. **Table 10** provides details of the types of mental disorder by the patients' past deployment on recent operations in the Iraq or Afghanistan theatres. The rate ratios 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 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.

ICD-10 description	All patients seen	Deployment - Theatres of operation									Patients seen
		Iraq and/or Afghanistan <sup>1</sup>			of which						
		Patients seen	Rate ratio	95% CI	Iraq			Afghanistan <sup>1</sup>			
			Patients seen	Rate ratio	95% CI	Patients seen	Rate ratio	95% CI			
All patients seen	2,758 <sup>r</sup>	1,644			1,341			608			1,114 <sup>r</sup>
All patients assessed with a mental disorder	1,959 <sup>r</sup>	1,222	1.0	(0.9 - 1.1)	991	1.0	(0.9 - 1.1)	468	1.0	(0.9 - 1.1)	737 <sup>r</sup>
Psychoactive substance use	213	118	0.8	(0.6 - 1.0)	97	0.8	(0.6 - 1.0)	31	0.5	(0.3 - 0.7)	95
of which disorders due to alcohol	200	113	0.8	(0.6 - 1.0)	92	0.8	(0.6 - 1.1)	31	0.5	(0.4 - 0.8)	87
Mood disorders	432	252	0.8	(0.7 - 1.0)	216	0.9	(0.7 - 1.1)	85	0.7	(0.6 - 0.9)	180
of which depressive episode	241	205	3.4	(2.4 - 4.9)	175	3.6	(2.5 - 5.2)	74	3.1	(2.1 - 4.7)	36
Neurotic disorders	1,139 <sup>r</sup>	758	1.2	(1.1 - 1.4)	605	1.2	(1.0 - 1.3)	319	1.3	(1.1 - 1.5)	381 <sup>r</sup>
of which PTSD	92	76	2.9	(1.7 - 4.9)	64	3.0	(1.7 - 5.1)	34	3.2	(1.8 - 5.9)	16
of which adjustment disorders	726	475	1.1	(1.0 - 1.3)	365	1.1	(0.9 - 1.3)	218	1.3	(1.1 - 1.6)	251
Other mental and behavioural disorders	175	94	0.7	(0.5 - 0.9)	73	0.7	(0.5 - 0.9)	33	0.6	(0.4 - 0.9)	81
No mental disorder	799	422			350			140			377

1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 49).

38. In 2008, there were many statistically significant differences for Army personnel deployed to the Iraq or Afghanistan theatres of operation compared to those not identified as having deployed there:

- The rates of depressive episodes (rate ratio 3.4, 95% CI: 2.4-4.9) and PTSD (rate ratio 2.9, 95% CI: 1.7-4.9) were higher among those deployed to the Iraq and/or Afghanistan theatres of operation than those not identified as having deployed there.
- Rates of overall mood disorder were lower in those deployed to the Afghanistan theatre of operation than those not identified as having deployed to the Iraq and/or Afghanistan theatres of operation (rate ratio 0.7, 95% CI: 0.6-0.9).
- Rates of neurotic disorders (rate ratio 1.3 95% CI: 1.1-1.5), including PTSD (rate ratio 3.2 95% CI: 1.8-5.9) and adjustment disorders (rate ratio 1.3 95% CI: 1.1-1.6), were higher in those deployed to the Afghanistan theatre of operation than those not identified as having deployed to the Iraq and/or Afghanistan theatres of operation.
- With a rate ratio of 0.5, psychoactive substance use, including disorders due to alcohol, was lower in those deployed to the Afghanistan theatre of operation than those not identified as having deployed to the Iraq and/or Afghanistan theatres of operation.
- Other mental and behavioural disorders were lower in those deployed to the Iraq and/or Afghanistan theatres of operation than those not identified as having deployed there (rate ratio 0.7, 95% CI: 0.5-0.9).

## RAF

39. During 2008 a total of 941 RAF personnel were recorded as having been seen for assessment as new patients at the MOD's DCMHs and overseas satellites, representing a rate for the year of 21.5 per 1,000 strength.

40. **Table 11** provides details of the key socio-demographic and military characteristics of the 941 new attendances of Royal Air Force personnel at the MOD's DCMHs during 2008.

<b>Table 11 - New attendances of RAF Personnel at the MOD's DCMHs in 2008: demographic and military characteristics, numbers and rates (per 1,000 strength)</b>						
Characteristic	Strength <sup>2</sup>	All patients seen	Patients assessed with a mental disorder			Patients assessed without a mental disorder
			Number	Rate	95% CI	
<b>All</b>	43,800	941	706	16.1	(14.9 - 17.3)	235
<b>Gender</b>						
Males	38,000	672	492	12.9	(11.8 - 14.1)	180
Females	5,800	269	214	37.1	(32.1 - 42.1)	55
<b>Rank</b>						
Officers	9,800	93	75	7.6	(5.9 - 9.4)	18
Other ranks	34,000	848	631	18.6	(17.1 - 20.0)	217
<b>Age</b>						
<20	1,400	46 <sup>r</sup>	24	17.4	(11.1 - 25.8)	22 <sup>r</sup>
20-24	7,400	206	134 <sup>r</sup>	18.1 <sup>r</sup>	(15.0 - 21.1) <sup>r</sup>	72 <sup>r</sup>
25-29	9,200	202	157	17.0	(14.3 - 19.6)	45
30-34	6,100	142 <sup>r</sup>	112 <sup>r</sup>	18.3 <sup>r</sup>	(14.9 - 21.7) <sup>r</sup>	30
35-39	8,500	192 <sup>r</sup>	163 <sup>r</sup>	19.3 <sup>r</sup>	(16.3 - 22.2) <sup>r</sup>	29
40-44	5,800	92	69	11.9	(9.1 - 14.7)	23
45-49	3,400	41	33	9.6	(6.4 - 12.9)	8
50+	2,000	20	14	7.1	(3.9 - 11.9)	6
<b>Deployment - Theatres of operation</b>						
Iraq and/or Afghanistan <sup>1</sup>	24,500	479	375	15.3	(13.7 - 16.8)	104
Of which, Iraq	21,400	414	328	15.3	(13.6 - 17.0)	86
Of which, Afghanistan <sup>1</sup>	9,700	178	138	14.2	(11.9 - 16.6)	40
Neither Iraq nor Afghanistan <sup>1</sup>	19,300	462	331	17.2	(15.3 - 19.0)	131
1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005.						
2. Strengths data rounded to the nearest 100. Strengths are a 13-month average.						
<sup>r</sup> Data revised due to improvements in data processing						

41. There were some statistically significant differences in the rates of mental disorder between various sub-groups of RAF patients.

- Female personnel had a higher rate of mental disorder assessment at 37.1 per 1,000 strength (95%CI: 32.1-42.1, N=214), which is almost three times that of male personnel at 12.9 per 1,000 strength (95%CI: 11.8-14.1, N=492).
- Other ranks had a higher rate of mental disorder at 18.6 per 1,000 strength (95%CI: 17.1-20.0, N=631), which is over double that of officers at 7.6 per 1,000 strength (95%CI: 5.9-9.4, N=75).

42. **Table 12** provides details of the types of mental disorder by the patients' past deployment

on recent operations in the Iraq or Afghanistan theatres. The rate ratios 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 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.

**Table 12 - Initial mental disorder assessments for all new RAF cases seen at a DCMH: numbers and rate ratios, by deployment and ICD-10 classification, 2008<sup>1</sup>**

ICD-10 description	All patients seen	Deployment - Theatres of operation									Patients seen
		Iraq and/or Afghanistan <sup>2</sup>			of which						
		Patients seen	Rate ratio	95% CI	Iraq			Afghanistan <sup>2</sup>			
Patients seen	Rate ratio	95% CI	Patients seen	Rate ratio	95% CI	Patients seen	Rate ratio	95% CI	Patients seen		
All patients seen	941	479			414			178			462
All patients assessed with a mental disorder	706	375	0.9	(0.8 - 1.0)	328	0.9	(0.8 - 1.0)	138	0.8	(0.7 - 1.0)	331
Psychoactive substance use	28	11	0.5	(0.2 - 1.1)	10	0.5	(0.2 - 1.2)	~	0.1	(0.0 - 0.9)	17
of which disorders due to alcohol	27	~	0.5	(0.3 - 1.2)	10	0.6	(0.3 - 1.2)	~	0.1	(0.0 - 0.9)	~
Mood disorders	166	77	0.7	(0.5 - 0.9)	64	0.6	(0.5 - 0.9)	33	0.7	(0.5 - 1.1)	89
of which depressive episode	144	68	0.7	(0.5 - 1.0)	56	0.7	(0.5 - 0.9)	31	0.8	(0.5 - 1.2)	76
Neurotic disorders	464	266	1.1	(0.9 - 1.3)	234	1.1	(0.9 - 1.3)	99	1.0	(0.8 - 1.3)	198
of which PTSD	28	~	10.2	(2.4 - 43)	23	10.3	(2.4 - 43.8)	12	11.9	(2.7 - 53.3)	~
of which adjustment disorders	266	162	1.2	(1.0 - 1.6)	148	1.3	(1.0 - 1.6)	55	1.1	(0.8 - 1.5)	104
Other mental and behavioural disorders	48	21	0.6	(0.3 - 1.1)	20	0.7	(0.4 - 1.2)	~	0.4	(0.1 - 1.0)	27
No mental disorder	235	104			86			40			131

1. Data presented as "-" has been suppressed in accordance with DASA's rounding policy (see paragraph 52).  
2. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 49).

43. During 2008 there were some statistically significant differences between those deployed to the Iraq and Afghanistan theatres of operation and those not identified as having deployed there.

- Rates of mood disorders, and the subgroup depressive episodes, were lower in those who had deployed to the Iraq theatre of operation than in those who had not deployed to the Iraq and/or Afghanistan theatres of operation.
- Rates of psychoactive substance use, and the subgroup disorders due to alcohol, were lower in those who had deployed to the Afghanistan theatre of operation than in those who had not deployed to the Iraq and/or Afghanistan theatres of operation.
- The rate of PTSD was higher among those deployed to the Iraq or Afghanistan theatres of operation compared with those not deployed there (rate ratio 10.2, 95% CI: 2.4-43.0). However, it is important to note that at 28, the number of cases of PTSD was small.

#### POINTS TO NOTE

44. Interpretation of the findings in this report continues to require caution. They do not cover the full picture of all mental disorders in the UK Armed Forces. Personnel may have been seen in Primary care, who did not require, or who did not wish, onward referral to the DCMHs. It is also possible that the support through a strong culture of comradeship within the Armed Forces, may have served to minimise the number and severity of symptoms experienced by some cases. It is important therefore to view the results presented here alongside independent academic research, such as that conducted by the Kings Centre for Military Health Research, who collect subjective information on self-reported mental health, through the use of confidential surveys<sup>b</sup>.

#### DATA, DEFINITIONS AND METHODS

45. DCMH staff record the initial psychiatric 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 psychiatric assessment 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 10<sup>th</sup> edition (ICD-10).

46. A number of patients present to DCMHs with symptoms that require the treatment skills of

<sup>b</sup> 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](http://www.kcl.ac.uk/kcmhr/information/publications/publications.html).

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”.

47. As for the Quarterly reports, a range of validation and verification quality assurance procedures were applied to the data DASA received from the DCMHs. Records submitted were excluded from the main analysis if they were duplicates or repeat attendances in the same episode of care, and civilian or non-UK military personnel not covered by this report. In 2008, 80 cases were included in the analysis, but since they were supplied in fully anonymous format, could not be verified or linked to demographic or deployment data.

48. 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 13-month average of strengths figures (e.g. the strength at the first of every month between January 2008 and January 2009 divided by 13 for 2008 strengths). This estimate is in line with the method used for the 2007 annual report. 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.

49. Deployment data, used for deployment breakdowns and to calculate denominators, cover several operational deployments between November 2001 and December 2008, although person level deployment data for Afghanistan between 1 January 2003 and 14 October 2005 were not available. About 4% of the deployment records were not successfully validated against the “gold standard” personnel records held by the Service Personnel and Veterans Agency<sup>c</sup>.

50. 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. **To be accurate, 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.**

51. This report includes an additional breakdown by age. The age used is the patient’s age on the date of their first appointment.

52. In line with DASA’s latest rounding policy (May 2009) all numbers less than five have been suppressed. Where there is only 1 cell in a row or column that is less than 5, the next smallest number has also been suppressed so that numbers cannot simply be derived from totals. Where there are tied values both numbers have been suppressed.

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<sup>c</sup> It is reassuring that the research carried out by the Kings 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.<sup>4</sup>

### Annex A: Reserves Mental Health Programme

53. The Reserves Mental Health Programme (RMHP) is open to any current or former member of the UK Volunteer and Regular Reserves who has been demobilised since 1 January 2003 following an overseas operational deployment as a reservist, and who believes that the deployment may have adversely affected their mental health.

54. Under the RMHP, Defence Medical Services (DMS) liaise with the individual's GP and offer a mental health assessment at the Reserves Training and Mobilisation Centre. If diagnosed with a combat-related mental health condition, out-patient treatment is offered via one of the MOD's 15 Departments of Community Mental Health (DCMHs). If more acute cases present, the DMS will assist access to NHS in-patient care.

55. An individual who believes they are eligible, and who would like an assessment, should ask their GP for a referral. This is the preferred method of contact, to ensure that both the GP and the RMHP assessors are kept aware of all the factors affecting the individual's health. Referrals from civilian psychiatric services (such as Combat Stress) are also accepted but the patient's GP is to be kept informed. Individuals can contact the assessment centre directly, but no patient will be accepted for treatment without GP registration. **Table 13** provides a summary of the method of contact made to the RMHP since the scheme began on 6<sup>th</sup> November 2006.

	06Nov06 - 29Dec06		30Dec06 - 28Dec07		29Dec07 - 26Dec08	
	Number of calls	Percentage of calls received	Number of calls	Percentage of calls received	Number of calls	Percentage of calls received
<b>Total calls received</b>	16	100	159	100	51	100
Self Referral	7	44	86	54	42	82
GP referral	1	6	10	6	6	12
3rd Party Referral	8	50	63	40	3	6
Invalid Calls	12		42		0	

56. Despite publicised details that primary referral should be through a GP, this accounted for only 12% of calls between 29<sup>th</sup> December 2007 and 26<sup>th</sup> December 2008.

57. **Table 14** provides a summary of appointments made through the RMHP since the scheme began on 6<sup>th</sup> November 2006.

	06Nov06 - 29Dec06		30Dec06 - 28Dec07		29Dec07 - 26Dec08	
	Number	Percentage of cases assessed	Number	Percentage of cases assessed	Number	Percentage of cases assessed
<b>Cases assessed</b>	0		45	100	36	100
No mental disorder	0		12	27	8	22
Mental disorder not combat-related	0		2	4	2	6
Mental disorder combat-related	0		31	69	26	72
<b>Cases waiting to be seen at end date</b>	7		4		4	
<b>Appointments cancelled</b>	0		5		11	
<b>Did not attend</b>	0		1		0	

1. Individuals will not necessarily be seen in the same time period in which they place a call, so totals in **Tables 13** and **14** will not be comparable.

58. Of the cases assessed between 29 December 2007 and 26 December 2009, 72% were assessed as having a combat-related mental disorder and were offered mental health treatment.

59. It is important to note that whilst mobilised, Reserve personnel receive the same healthcare provision as their Regular counterparts. Any Reserve personnel identified as having a mental health condition during deployment and the pre-demobilisation period will continue to receive medical treatment from the Defence Medical Services post-deployment and should be captured in the DCMH figures earlier in this report.

60. The figures in **Tables 13** and **14** were provided in aggregated form by the RMHP practice manager and have not been validated by DASA.

## Annex B: Aeromedical Evacuations

61. Personnel are aeromedically evacuated from theatre for a range of medical conditions. **Table 15** details the number of UK Military personnel aeromedically evacuated from theatre for psychiatric reasons in 2007 and 2008.

	2007		2008	
	Afghanistan	Iraq	Afghanistan	Iraq
<b>Total number of evacuations</b>	22	35	15	26
1A - Severe Psychiatric Patient	0	0	0	~
1B - Psychiatric Patients of Intermediate Severity	5	7	~	~
1C - Mildly Disturbed Psychiatric Patients	17	28	~	16
Psychiatric Evacuation - Unknown Severity	0	0	0	~

1. Patients flown home to the UK either by the aeromed evacuation team or other flights.  
2. The numbers reported here reflect the reason for evacuation as recorded. There may be patients who are evacuated for other medical reasons who are also suffering from a mental disorder.  
3. Data presented as "~" has been suppressed in accordance with DASA's rounding policy (see paragraph 52).

62. These figures have been compiled using data from Brize Norton Aeromedical Evacuation Control Centre (AECC) and the Defence Patient Tracking System (DPTS). It is possible that some individuals have returned to the UK for psychiatric reasons without being recorded on the AECC or DPTS as psychiatry, and their details will not have been recorded centrally.

63. **Table 16** shows the first location of medical care following aeromedical evacuation from the Iraq or Afghanistan theatres of operation.

	2008	
	Afghanistan	Iraq
<b>Total number of evacuations</b>	15	26
DCMH or in-patient care contractor	6	10
Unit/Unit Primary Healthcare	9	16
<i>of which subsequently seen at a DCMH or in-patient care contractor</i>	5	6

1. The DPTS is a live system and is constantly being updated retrospectively as such the data are provisional and subject to change.  
2. These figures include Naval Service Personnel, Army Personnel including those from the Gibraltar Regiment, RAF Personnel and Reservists. These exclude Other Nations Service Personnel.

64. Of the 41 individuals aeromedically evacuated for psychiatric reasons in 2008, 66% were seen at a DCMH or by the MOD's in-patient care contractor during the care pathway that followed their evacuation.