Deployment Health Assessments

U.S. Armed Forces

February 2011

(Data through January 2011)

Armed Forces Health Surveillance Center

Report Date: March 2, 2011

Update: Deployment Health Assessments, U.S. Armed Forces, February 2011

Since January 2003, peaks and troughs in the numbers of pre- and post-deployment health assessment forms transmitted to the Armed Forces Health Surveillance Center generally corresponded to times of departure and return of large numbers of deployers. Between April 2006 and December 2010, the number of post-deployment reassessment (PDHRA) forms per month ranged from 15,600 to 46,900 (Table 1, Figure 1).

During the past 12 months, the proportions of returned deployers who rated their health as "fair" or "poor" were 8-10% on post-deployment health assessment questionnaires and 10-14% on PDHRA questionnaires (Figure 2).

In general, on post-deployment assessments and reassessments, deployers in the Army and in reserve components were more likely than their respective counterparts to report health and exposure-related concerns (Table 2, Figure 3). Both active and reserve component members were more likely to report exposure concerns three to six months after, compared to the time of return from deployment (Figure 3).

At the time of return from deployment, soldiers serving in the active component were the most likely of all deployers to receive mental health referrals; however, three to six months after returning, active component soldiers were less likely than Army Reservists to receive mental health referrals (Table 2).

Finally, during the past three years, reserve component members have been more likely than active component service members to report "exposure concerns" on postdeployment assessments and reassessments (Figure 3).

Table 1. Deployment-related health assessment forms, by month, U.S. Armed Forces, February 2010-January 2011

| | Pre-deple assess DD2 | ment | Post-depl assess DD27 | ment | Post-deployment reassessment DD2900 | | | |
|-----------|----------------------------|------|-----------------------------|------|-------------------------------------|------|--|--|
| | No. | % | No. | % | No. | % | | |
| Total | 388,881 | 100 | 406,141 | 100 | 326,087 | 100 | | |
| 2010 | | | | | | | | |
| February | 31,514 | 8.1 | 27,802 | 6.8 | 27,130 | 8.3 | | |
| March | 32,693 | 8.4 | 44,838 | 11.0 | 35,989 | 11.0 | | |
| April | 32,426 | 8.3 | 33,628 | 8.3 | 25,014 | 7.7 | | |
| May | 38,470 | 9.9 | 35,474 | 8.7 | 22,863 | 7.0 | | |
| June | 31,273 | 8.0 | 45,392 | 11.2 | 24,780 | 7.6 | | |
| July | 30,454 | 7.8 | 46,901 | 11.5 | 23,068 | 7.1 | | |
| August | 38,145 | 9.8 | 37,426 | 9.2 | 31,670 | 9.7 | | |
| September | 33,197 | 8.5 | 27,905 | 6.9 | 28,179 | 8.6 | | |
| October | 27,484 | 7.1 | 27,651 | 6.8 | 26,853 | 8.2 | | |
| November | 23,922 | 6.2 | 29,357 | 7.2 | 29,726 | 9.1 | | |
| December | 31,487 | 8.1 | 29,693 | 7.3 | 24,333 | 7.5 | | |
| 2011 | | | | | | | | |
| January | 37,816 | 9.7 | 20,074 | 4.9 | 26,482 | 8.1 | | |

Figure 2. Proportion of deployment health assessment forms with self-assessed health status as "fair" or "poor", U.S. Armed Forces, February 2010-January 2011

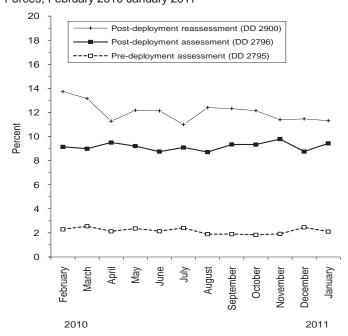
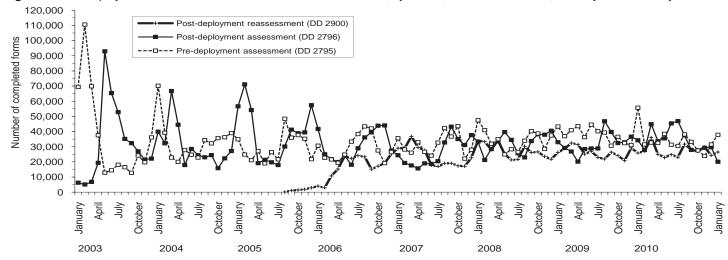


Figure 1. Total deployment health assessment and reassessment forms, by month, U.S. Armed Forces, January 2003-January 2011



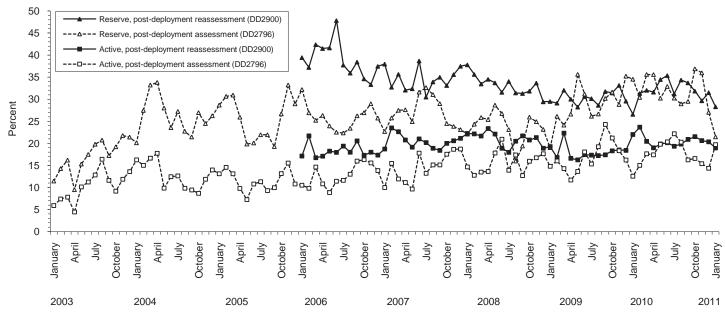
Data Source: Defense Medical Surveillance System

Table 2. Percentage of service members who endorsed selected questions/received referrals on health assessment forms, U.S. Armed Forces, February 2010-January 2011

| | Army | | Navy | | Air Force | | | Marine Corps | | | All service members | | | | |
|---|---|--|--|--|--|---|---|---|---|--|--|--|--|--|---|
| | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 |
| Active component | n= 142,912 | n= 134,160 | n= 131,586 | n= 16,127 | n= 16,419 | n= 14,790 | n= 58,518 | n= 52,511 | n= 50,656 | n= 30,727 | n= 30,982 | n= 30,649 | n= 248,284 | n= 234,072 | n= 227,681 |
| | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| General health "fair" or "poor" | 3.6 | 9.8 | 14.1 | 1.0 | 4.5 | 5.9 | 0.4 | 3.3 | 4.1 | 1.4 | 7.8 | 10.5 | 2.4 | 7.7 | 10.9 |
| Health concerns, not wound or injury | 11.9 | 26.1 | 25.3 | 3.0 | 11.8 | 15.0 | 1.4 | 5.6 | 11.0 | 2.4 | 12.1 | 19.6 | 7.7 | 18.6 | 20.7 |
| Health worse now than before deployed | na | 21.6 | 23.7 | na | 11.6 | 13.5 | na | 8.5 | 8.6 | na | 17.5 | 20.8 | na | 17.4 | 19.3 |
| Exposure concerns | na | 21.3 | 21.3 | na | 19.7 | 21.9 | na | 10.0 | 14.3 | na | 15.3 | 26.2 | na | 17.9 | 20.5 |
| PTSD symptoms (2 or more) | na | 9.2 | 11.3 | na | 5.9 | 8.3 | na | 2.6 | 2.9 | na | 8.1 | 11.2 | na | 7.4 | 9.2 |
| Depression symptoms (any) | na | 30.4 | 32.7 | na | 22.3 | 25.1 | na | 13.1 | 13.6 | na | 26.1 | 32.0 | na | 25.4 | 27.9 |
| Referral indicated by provider (any) | 5.1 | 34.6 | 29.9 | 3.3 | 21.5 | 18.4 | 2.0 | 12.6 | 7.2 | 2.0 | 21.4 | 31.6 | 3.8 | 27.0 | 24.3 |
| Mental health referral indicated ^a | 1.4 | 7.5 | 17.2 | 0.4 | 3.1 | 6.1 | 0.5 | 1.5 | 2.2 | 0.2 | 2.3 | 6.4 | 1.0 | 5.2 | 11.7 |
| Medical visit following referral ^b | 99.2 | 99.7 | 98.4 | 90.4 | 90.5 | 91.3 | 85.9 | 96.3 | 98.1 | 54.0 | 79.5 | 94.5 | 93.6 | 97.0 | 97.3 |
| | Army | | | Navy Air Force | | | | Marine Corps | | | All service members | | | | |
| | | Army | | | Navy | | | Air Forc | е | IV | larine Co | rps | All : | service mer | nbers |
| | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 |
| Reserve component | deploy | Post- deploy | | deploy | Post- deploy | | deploy | Post- deploy | Reassess | Pre- deploy | Post- deploy | Reassess | Pre- deploy | Post- deploy | Reassess |
| Reserve component | deploy DD2795 n= | Post- deploy DD2796 | DD2900 n= | deploy DD2795 n= | Post- deploy DD2796 | DD2900 n= | deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 | Pre- deploy DD2795 | Post- deploy DD2796 | Reassess DD2900 |
| Reserve component General health "fair" or "poor" | deploy DD2795 n= 59,910 | Post- deploy DD2796 n= 74,093 | DD2900 n= 68,435 | deploy DD2795 n= 4,689 | Post- deploy DD2796 n= 4,643 | DD2900 n= 5,261 | deploy DD2795 n= 15,688 | Post- deploy DD2796 n= 14,758 | Reassess DD2900 n= 14,950 | Pre- deploy DD2795 n= 2,169 | Post- deploy DD2796 n= 1,810 | Reassess DD2900 n= 6,039 | Predeploy DD2795 n= 82,456 | Post- deploy DD2796 n= 95,304 | Reassess DD2900 n= 94,685 |
| | deploy DD2795 n= 59,910 | Post-deploy DD2796 n= 74,093 | DD2900 n= 68,435 % | deploy DD2795 n= 4,689 | Post-deploy DD2796 n= 4,643 | DD2900 n= 5,261 % | deploy DD2795 n= 15,688 | Post-deploy DD2796 n= 14,758 | Reassess DD2900 n= 14,950 % | Predeploy DD2795 n= 2,169 | Post-deploy DD2796 n= 1,810 | Reassess DD2900 n= 6,039 % | Predeploy DD2795 n= 82,456 % | Post- deploy DD2796 n= 95,304 | Reassess DD2900 n= 94,685 % |
| General health "fair" or "poor" | deploy DD2795 n= 59,910 % 1.0 | Post-deploy DD2796 n= 74,093 % 11.8 | DD2900 n= 68,435 % 16.6 | deploy DD2795 n= 4,689 % 0.4 | Post-deploy DD2796 n= 4,643 % 10.2 | DD2900 n= 5,261 % 10.5 | deploy DD2795 n= 15,688 % 0.3 | Post-deploy DD2796 n= 14,758 % 5.3 | Reassess DD2900 n= 14,950 % 5.6 | Pre- deploy DD2795 n= 2,169 % | Post-deploy DD2796 n= 1,810 % 9.7 | Reassess DD2900 n= 6,039 % 10.3 | Pre-deploy DD2795 n= 82,456 % 0.8 | Post-deploy DD2796 n= 95,304 % 10.7 | Reassess DD2900 n= 94,685 % |
| General health "fair" or "poor" Health concerns, not wound or injury | deploy DD2795 n= 59,910 % 1.0 17.7 | Post-deploy DD2796 n= 74,093 % 11.8 35.4 | n= 68,435 % 16.6 43.0 | deploy DD2795 n= 4,689 % 0.4 1.7 | Post-deploy DD2796 n= 4,643 % 10.2 33.7 | n= 5,261 % 10.5 31.8 | deploy DD2795 n= 15,688 % 0.3 0.7 | Post-deploy DD2796 n= 14,758 % 5.3 9.7 | Reassess DD2900 n= 14,950 % 5.6 16.1 | Pre- deploy DD2795 n= 2,169 % 1.0 2.3 | Post-deploy DD2796 n= 1,810 % 9.7 20.1 | Reassess DD2900 n= 6,039 % 10.3 36.2 | Pre-deploy DD2795 n= 82,456 % 0.8 13.1 | Post-deploy DD2796 n= 95,304 % 10.7 31.0 | Reassess DD2900 n= 94,685 % 14.1 37.7 |
| General health "fair" or "poor" Health concerns, not wound or injury Health worse now than before deployed | deploy DD2795 n= 59,910 % 1.0 17.7 na | Post-deploy DD2796 n= 74,093 % 11.8 35.4 26.1 | n= 68,435 % 16.6 43.0 31.7 | deploy DD2795 n= 4,689 % 0.4 1.7 | Post-deploy DD2796 n= 4,643 % 10.2 33.7 20.8 | DD2900 n= 5,261 % 10.5 31.8 20.9 | deploy DD2795 n= 15,688 % 0.3 0.7 na | Post-deploy DD2796 n= 14,758 % 5.3 9.7 | Reassess DD2900 n= 14,950 % 5.6 16.1 11.5 | Pre-deploy DD2795 n= 2,169 % 1.0 2.3 na | Post-deploy DD2796 n= 1,810 % 9.7 20.1 28.3 | Reassess DD2900 n= 6,039 % 10.3 36.2 25.8 | Pre-deploy DD2795 n= 82,456 % 0.8 13.1 na | Post-deploy DD2796 n= 95,304 % 10.7 31.0 24.0 | Reassess DD2900 n= 94,685 % 14.1 37.7 27.6 |
| General health "fair" or "poor" Health concerns, not wound or injury Health worse now than before deployed Exposure concerns | deploy DD2795 n= 59,910 % 1.0 17.7 na | Post-deploy DD2796 n= 74,093 % 11.8 35.4 26.1 32.9 | n= 68,435 % 16.6 43.0 31.7 34.4 | deploy DD2795 n= 4,689 % 0.4 1.7 na | Post-deploy DD2796 n= 4,643 % 10.2 33.7 20.8 47.9 | DD2900 n= 5,261 % 10.5 31.8 20.9 36.0 | deploy DD2795 n= 15,688 % 0.3 0.7 na | Post-deploy DD2796 n= 14,758 % 5.3 9.7 13.8 17.1 | Reassess DD2900 n= 14,950 % 5.6 16.1 11.5 21.6 | Pre-deploy DD2795 n= 2,169 % 1.0 2.3 na na | Post-deploy DD2796 n= 1,810 % 9.7 20.1 28.3 24.1 | Reassess DD2900 n= 6,039 % 10.3 36.2 25.8 32.3 | Predeploy DD2795 n=82,456 % 0.8 13.1 na na | Post-deploy DD2796 n= 95,304 % 10.7 31.0 24.0 31.0 | Reassess DD2900 n= 94,685 % 14.1 37.7 27.6 32.3 |
| General health "fair" or "poor" Health concerns, not wound or injury Health worse now than before deployed Exposure concerns PTSD symptoms (2 or more) | deploy DD2795 n= 59,910 % 1.0 17.7 na na | Post-deploy DD2796 n= 74,093 % 11.8 35.4 26.1 32.9 9.7 | DD2900 n= 68,435 % 16.6 43.0 31.7 34.4 18.6 | deploy DD2795 n= 4,689 % 0.4 1.7 na na | Postdeploy DD2796 n= 4,643 % 10.2 33.7 20.8 47.9 5.8 | DD2900 n= 5,261 % 10.5 31.8 20.9 36.0 12.8 | deploy DD2795 n= 15,688 % 0.3 0.7 na na | Post-deploy DD2796 n= 14,758 % 5.3 9.7 13.8 17.1 2.9 | Reassess DD2900 n= 14,950 % 5.6 16.1 11.5 21.6 3.3 | Predeploy DD2795 n= 2,169 % 1.0 2.3 na na | Post-deploy DD2796 n= 1,810 % 9.7 20.1 28.3 24.1 10.2 | Reassess DD2900 n= 6,039 % 10.3 36.2 25.8 32.3 14.1 | Predeploy DD2795 n= 82,456 % 0.8 13.1 na na | Post-deploy DD2796 n= 95,304 % 10.7 31.0 24.0 31.0 8.4 | Reassess DD2900 n= 94,685 % 14.1 37.7 27.6 32.3 15.6 |
| General health "fair" or "poor" Health concerns, not wound or injury Health worse now than before deployed Exposure concerns PTSD symptoms (2 or more) Depression symptoms (any) | deploy DD2795 n= 59,910 % 1.0 17.7 na na na | Post-deploy DD2796 n= 74,093 % 11.8 35.4 26.1 32.9 9.7 30.2 | DD2900 n= 68,435 % 16.6 43.0 31.7 34.4 18.6 34.0 | deploy DD2795 n= 4,689 % 0.4 1.7 na na na | Post-deploy DD2796 n= 4,643 % 10.2 33.7 20.8 47.9 5.8 25.8 | DD2900 n= 5,261 % 10.5 31.8 20.9 36.0 12.8 25.4 | deploy DD2795 n= 15,688 % 0.3 0.7 na na | Post-deploy DD2796 n= 14,758 % 5.3 9.7 13.8 17.1 2.9 | Reassess DD2900 n= 14,950 % 5.6 16.1 11.5 21.6 3.3 14.4 | Predeploy DD2795 n= 2,169 % 1.0 2.3 na na na | Post-deploy DD2796 n= 1,810 % 9.7 20.1 28.3 24.1 10.2 34.4 | Reassess DD2900 n= 6,039 % 10.3 36.2 25.8 32.3 14.1 28.1 | Predeploy DD2795 n= 82,456 % 0.8 13.1 na na | Post-deploy DD2796 n= 95,304 % 10.7 31.0 24.0 31.0 8.4 27.8 | Reassess DD2900 n= 94,685 % 14.1 37.7 27.6 32.3 15.6 30.1 |
| General health "fair" or "poor" Health concerns, not wound or injury Health worse now than before deployed Exposure concerns PTSD symptoms (2 or more) Depression symptoms (any) Referral indicated by provider (any) | deploy DD2795 n= 59,910 % 1.0 17.7 na na na a.3.4 | Post-deploy DD2796 n= 74,093 % 11.8 35.4 26.1 32.9 9.7 30.2 38.4 | DD2900 n= 68,435 % 16.6 43.0 31.7 34.4 18.6 34.0 40.3 | deploy DD2795 n= 4,689 % 0.4 1.7 na na na 3.3 | Post-deploy DD2796 n= 4,643 % 10.2 33.7 20.8 47.9 5.8 25.8 31.5 | DD2900 n= 5,261 % 10.5 31.8 20.9 36.0 12.8 25.4 25.6 | deploy DD2795 n= 15,688 % 0.3 0.7 na na na 0.4 | Post-deploy DD2796 n= 14,758 % 5.3 9.7 13.8 17.1 2.9 15.4 17.1 | Reassess DD2900 n= 14,950 % 5.6 16.1 11.5 21.6 3.3 14.4 10.1 | Pre-deploy DD2795 n= 2,169 % 1.0 2.3 na na na 2.6 | Post-deploy DD2796 n= 1,810 % 9.7 20.1 28.3 24.1 10.2 34.4 39.2 | Reassess DD2900 n= 6,039 % 10.3 36.2 25.8 32.3 14.1 28.1 35.8 | Predeploy DD2795 n= 82,456 % 0.8 13.1 na na na 2.8 | Post-deploy DD2796 n= 95,304 % 10.7 31.0 24.0 31.0 8.4 27.8 34.8 | Reassess DD2900 n= 94,685 % 14.1 37.7 27.6 32.3 15.6 30.1 34.4 |

^aIncludes behavioral health, combat stress and substance abuse referrals.

Figure 3. Proportion of service members who endorsed exposure concerns on post-deployment health assessments, U.S. Armed Forces, January 2004-January 2011



Data Source: Defense Medical Surveillance System

^bRecord of inpatient or outpatient visit within 6 months after referral.