



# **Re-Deployment Psychological Screening of 1ID Soldiers Deployed to Kosovo**

Prepared by the U.S. Army Medical Research Unit-Europe



## Purpose

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- To present findings from the re-deployment psychological screening of 1ID soldiers deployed to Kosovo in support of Task Force Falcon.



# Outline

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- Summary of Findings
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## Summary of Findings

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- 3,520 1ID soldiers were screened for psychological problems prior to re-deploying from Kosovo in April-June 2000.
- Screening results demonstrated that the force is basically healthy and that the screening procedure effectively identified those soldiers in need of follow-up.
- 28.3 percent (n=991) exceeded criteria on the primary screen and 12.4 percent (n=397) were referred for follow-up services
- Junior-ranking soldiers reported higher rates of distress on the screening than NCOs and Officers, but rates of referral for Jr. Enlisted and NCOs were similar.
- Both married and single soldiers receiving a mental health referral reported the highest rates of family problems.
- 50 percent of the soldiers who exceeded criteria on the Acute Stress Disorder Scale required home station referral.
- The longer junior-enlisted and NCOs were deployed, the more likely they were to report family separation stress.



## **Medical Surveillance Program: Background & Objectives**

- USAMRU-E has been conducting psychological screening in the Balkan region and Germany since 1996.

**1996-1999 Bosnia Re-Deployment Psychological Screening – USAREUR/CONUS**

**1998 Army Garrison Screening Study - USAREUR**

**1999 Albania Post-Deployment Screening – 1<sup>st</sup> AD**

**1999 Air Force Garrison Screening Study - USAFE**

**APR 2000 Kosovo Re-Deployment Screening – 1st ID**

**APR 2000 Kosovo Pre-Deployment Screening – 1<sup>st</sup> AD**

**SEP 2000 Kosovo Post-Deployment Screening – 1<sup>st</sup> ID**

**SEP 2000 Kosovo Pre-Deployment, rotation 2 – 1<sup>st</sup> AD**

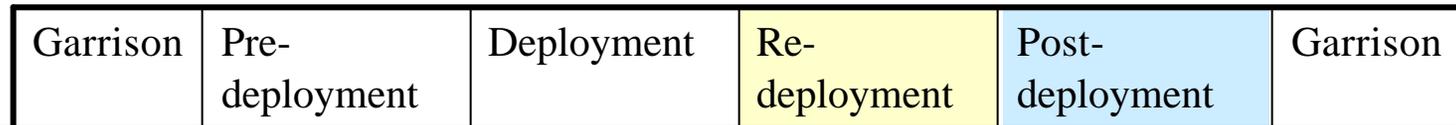
**OCT 2000 Kosovo Re-Deployment Screening – 1<sup>st</sup> AD**

- Objectives of Psychological Screening:
  - Provide pro-active mental health outreach to deploying force.
  - Identify deployment mental health issues for interventions with the deploying force.
  - Provide commanders with information on the mental health of the deploying force.
  - Establish a reference database for comparison to future operations and follow-on operations.
  - Project patient load for deployed mental health assets.
  - Monitor the health of the deploying force.



## The Deployment Cycle

- Studies conducted by USAMRU-E have screened soldiers in garrison, at pre-deployment as they prepared to deploy, at re-deployment just prior to return, and at post-deployment several months later.
- Results from these studies of deployment are beginning to indicate a pattern of psychological effects on soldiers that differs depending on the deployment phase.
- These different phases are defined as the deployment cycle.

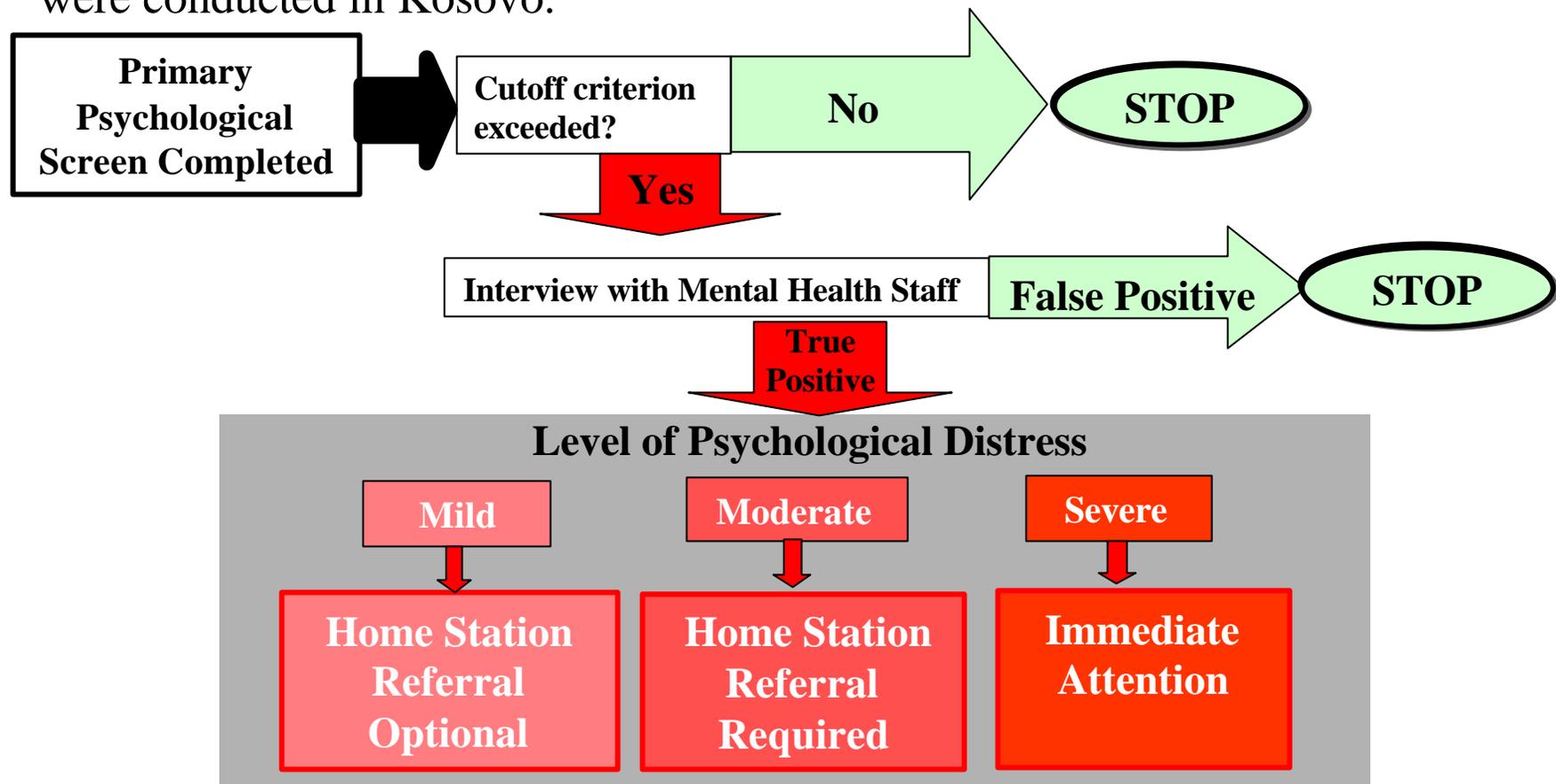


- This current report examines the 1ID during the **re-deployment** phase of the deployment cycle.
- Soldier well-being in the 1ID **post-deployment** phase will be examined after final data collection.



# Psychological Screening Scoring Flowchart

- The 11D plan was to implement the screening program at Camp Able Sentry, Macedonia (CAS).
- Early on in the process, survey administration, scoring and most interviews were conducted in Kosovo.





## Screening Instruments

### Acute Stress Disorder Scale (ASD)

**Purpose:** Measures acute stress disorder symptoms.

**Description:** 20-item scale with items rated on a 5-point scale. Reliability = .94\*

**Sample Items:** “Had upsetting memories of the stressful event(s)”; “Felt as if the stressful event(s) hadn’t happened or wasn’t real.”

### Family Stress

**Purpose:** Measures stress from family separation.

**Description:** 2 items rated on a 5-point scale. Reliability = .85\*

**Items:** “Stress from missing family events while deployed” and “Stress from news about my family while deployed.”

### Thoughts of harming self or others

**Purpose:** Measures intent to harm self or others.

**Description:** 2 items rated on a 5-point scale. Reliability = .32\*\*

**Items:** “Felt like hurting myself” and “Felt like hurting other people.”

### CUTOFF CRITERIA

Soldiers exceeded criteria if 6 or more items were endorsed “often” or “very often” or respondent reported a positive response to thoughts of harm.

\*Cronbach’s  $\alpha$

\*\* The harm items are not a scale but a measure of two different constructs.

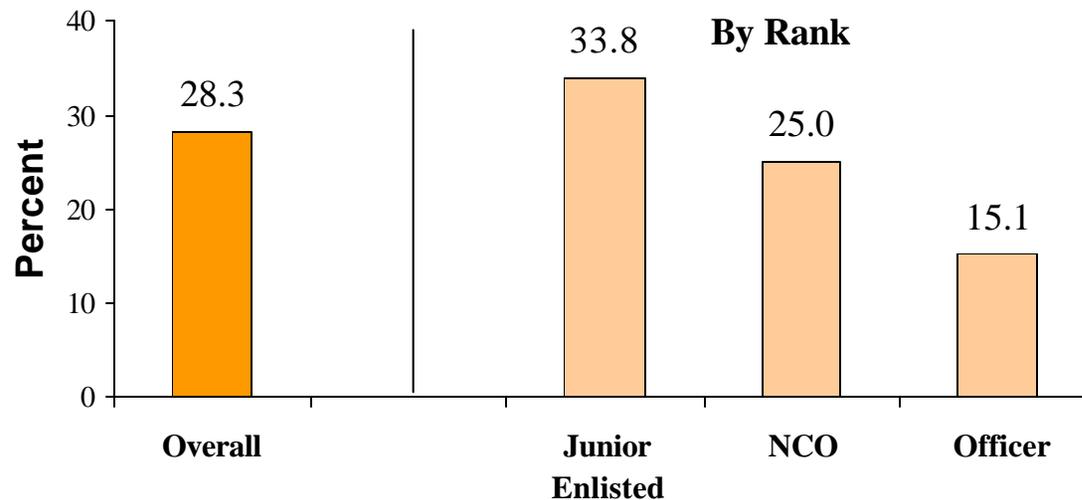


# Psychological Screening Rates

Rank		
J. Enlisted	51.6%	(n=1,743)
NCO	36.6%	(n=1,236)
Officer	11.9%	(n=401)

- 28.3 percent (n=991) of the 3,520 soldiers re-deploying from Kosovo exceeded criteria on the primary screen.
- Those with higher rank were less likely to exceed criteria on the primary screen  $\chi^2$  (2, N=3,364)=66.73, p,< .001.

**Percent who Exceeded Criteria on the Psychological Screen**



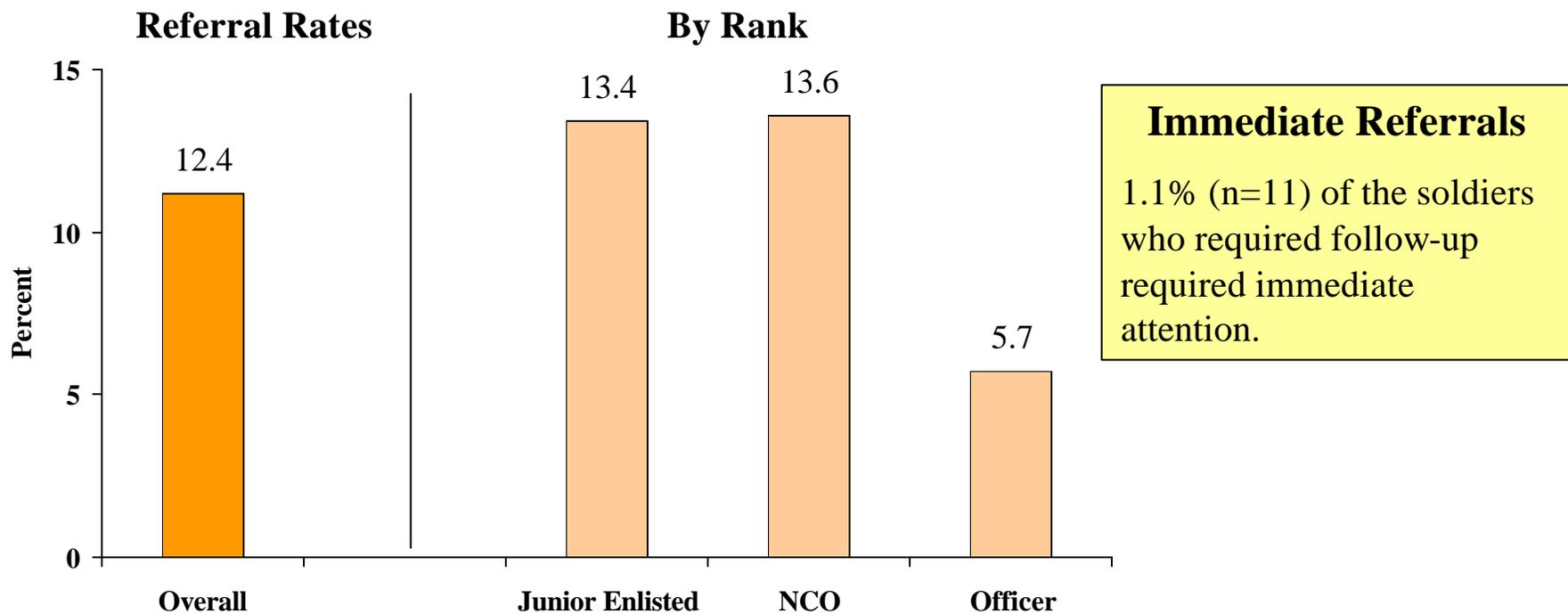
**Of the total sample:**

0.9% exceeded criteria on Acute Stress Disorder  
 26.3% reported some thoughts of harm  
 11.5% reported family separation stress



## Psychological Screening Referral Rates

- Of the total screened population, 12.4 percent (n=397) of soldiers required further follow-up.
- Of the soldiers who exceeded primary screen criteria and were interviewed by mental health staff, 38.5 percent (n=386) required home station referral.
- There were no differences in referral rates for junior-enlisted soldiers and NCOs  $\chi^2 (2, N=3,063)=17.32, p < .001$ .

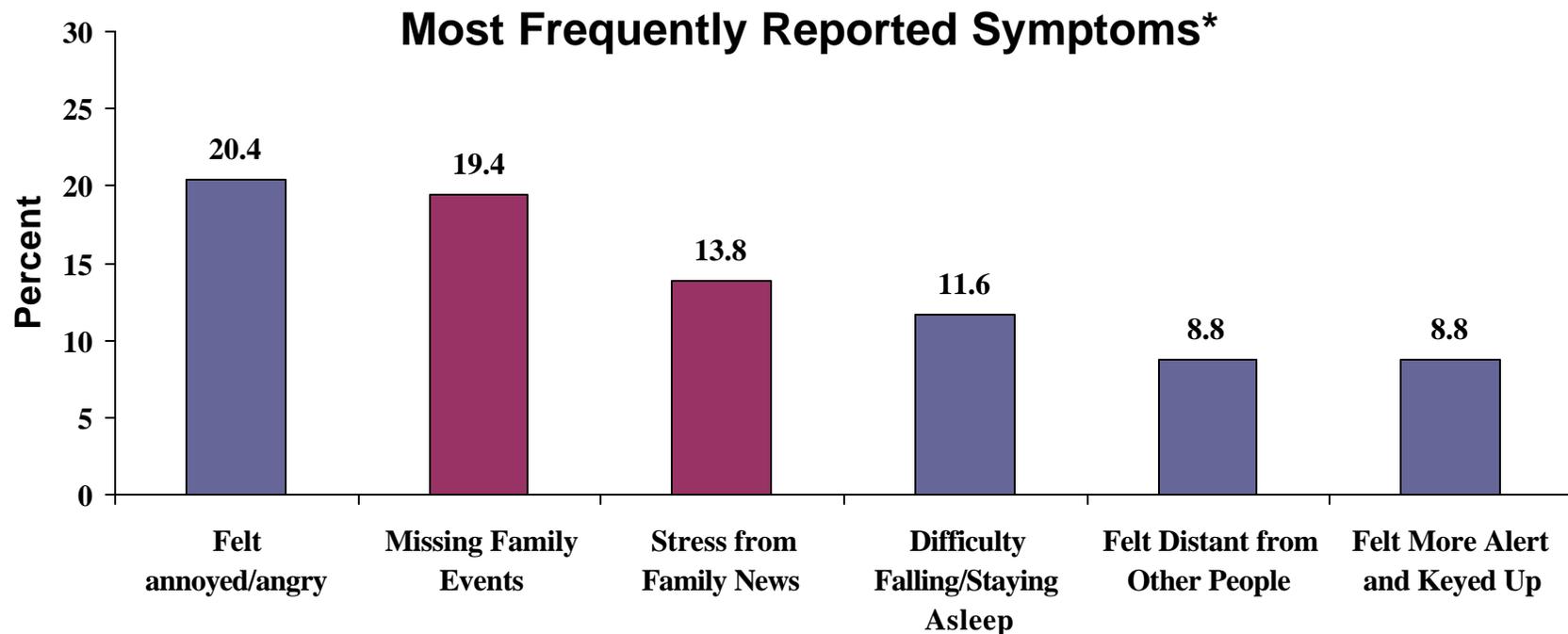




## Psychological Screening: Top 6 Most Reported Symptoms

- 20.4 percent of soldiers surveyed reported feeling annoyed or angry in the past few days.
- Two of the symptoms most frequently reported by soldiers related to family stress.

Gender		
Female	8.2%	(n=287)
Male	90.8%	(n=3196)



\*Symptoms rated “often” or “very often”



## Psychological Screening: Acute Stress (1 of 2)

- 0.9 percent (n=32) of the 3,520 soldiers exceeded criteria on the Acute Stress Disorder (ASD) scale.
- Of the soldiers who exceeded criteria on the ASD scale, 50% of them required home station referral.

### Acute Stress Disorder was indicated by:

- 6 of the 20 items endorsed on the ASD scale

*AND*

-reported exposure to traumatic event

*AND*

-Reported feeling horrified by the event

### Over 60% of the soldiers who exceeded criteria on the ASD reported that they:

- felt annoyed or angry (87.5%)
- felt distant from other people (71.9%)
- suddenly felt like I was going through the stressful event(s) all over again (62.6%)
- had difficulty concentrating (62.5%)
- tried to avoid activities or situations that reminded me of the stressful events(s) (62.5%)



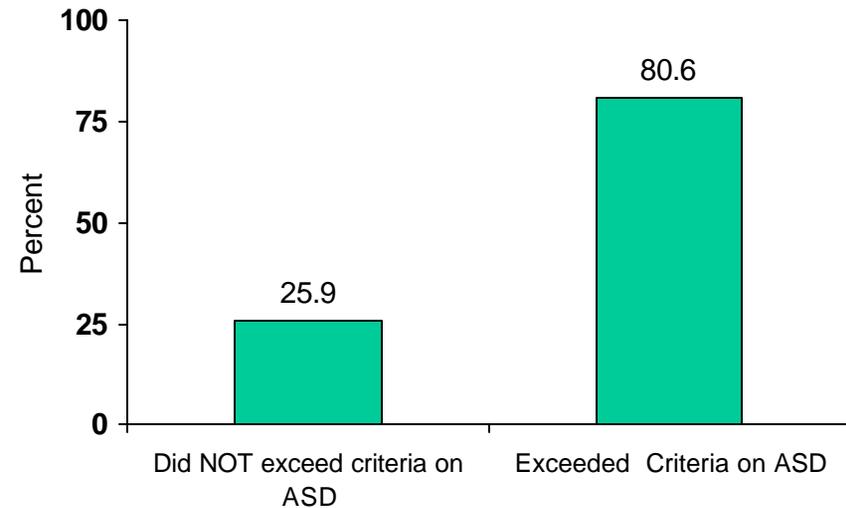
## Psychological Screening: Acute Stress (2 of 2)

- Soldiers who exceeded criteria on the Acute Stress Disorder (ASD) Scale were more likely to report thoughts of harm than soldiers who did not exceed criteria on the ASD,  $\chi^2 (1, N = 3,493) = 47.46, p < 0.001$ .

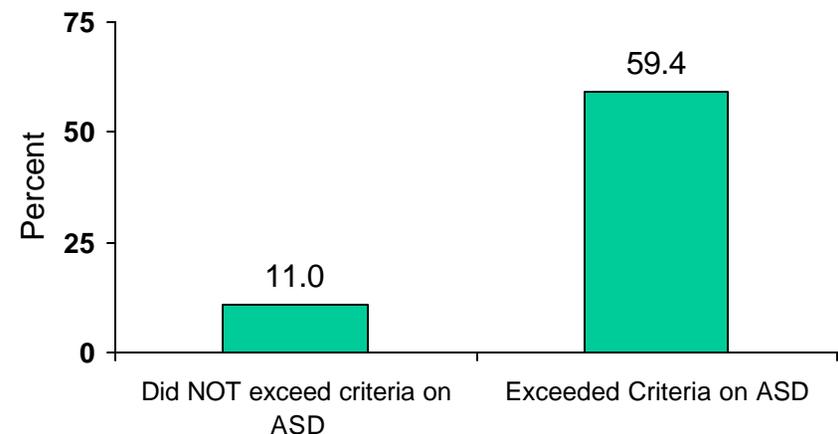
### ASD and Demographic Considerations

- No rank differences
  - No gender differences
  - No marital status differences
- Soldiers who exceeded criteria on the ASD were more likely to report family separation stress than soldiers who did not exceed criteria on the ASD,  $\chi^2 (1, N = 3,493) = 73.04, p < 0.001$ .

### ASD and Thoughts of Harm



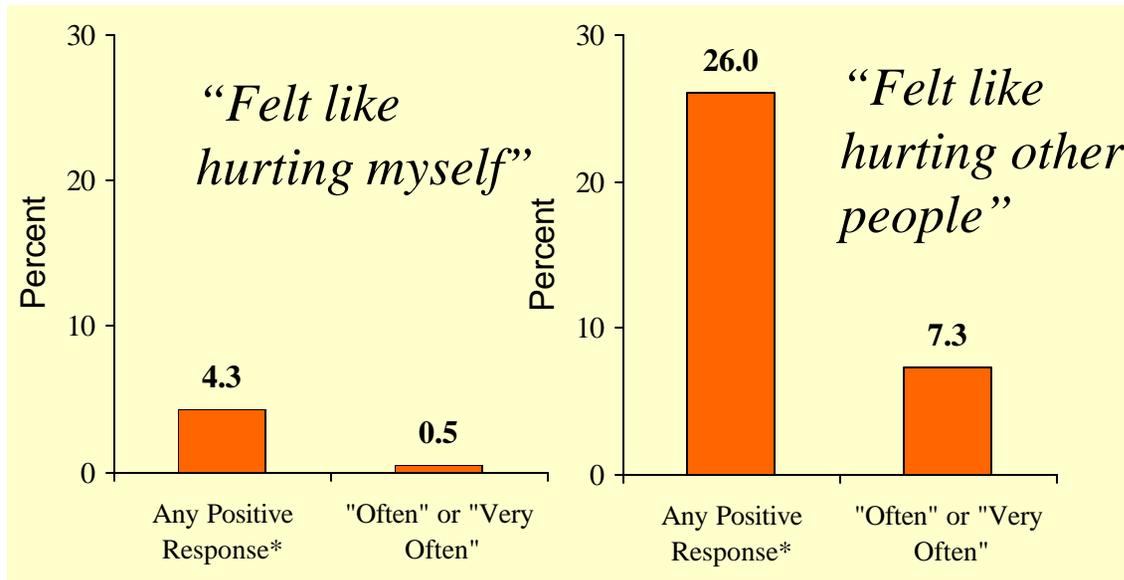
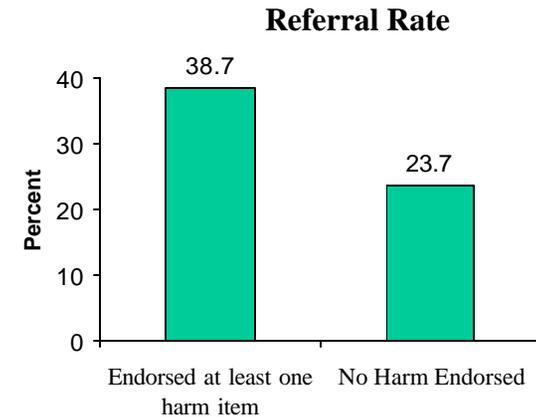
### ASD and Family Stress





# Psychological Screening: Thoughts of Harm

- About one-fourth (26.4%) of the sample reported some type of thoughts of harm\*.
- Soldiers who endorsed one of the “thoughts of harm” items were more likely to be referred than soldiers who endorsed no “thoughts of harm” items  $\chi^2(1, N = 978) = 5.31, p < 0.05$ .



• 7.3 percent (n=254) of soldiers reported that they *often* or *very often* felt like hurting other people.

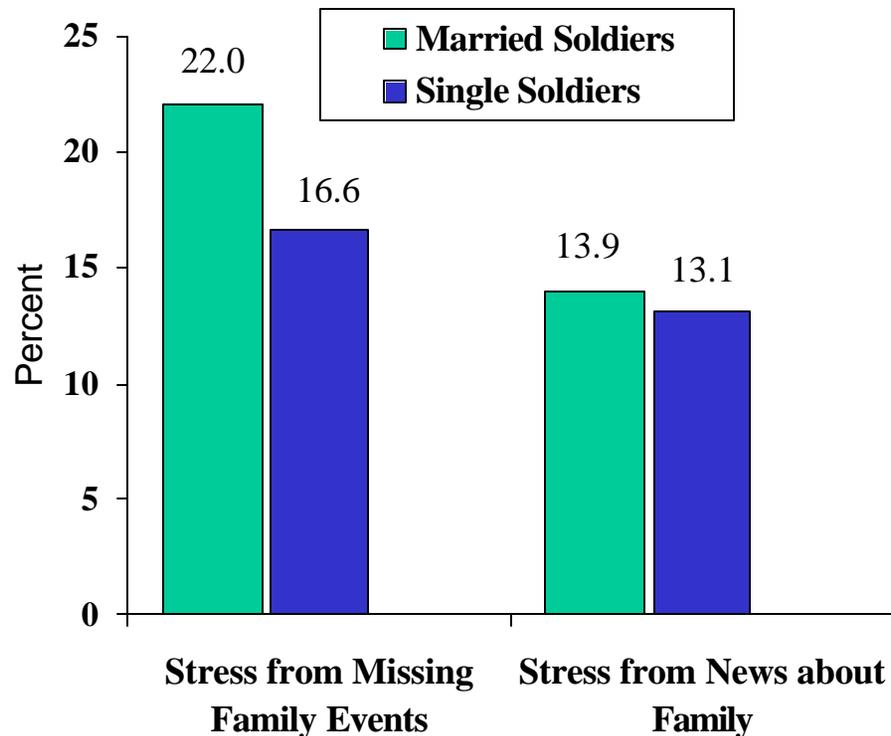
• 17 soldiers (0.5%) reported that they *often* or *very often* felt like hurting themselves.

\*"Rarely," "Sometimes," "Often," or "Very often."



## Psychological Screening: Family Stress (1 of 2)

- 11.5 % of the soldiers reported some family separation stress<sup>1</sup>.
- Single and married soldiers reported similar rates of experiencing family separation stress while they were deployed.



Marital Status	
Married	50.7% (n=1,757)
Single (Never Married)	40.9% (n=1,418)
Separated, Divorced or Widowed	8.3% (n=292)

- Married male soldiers (12.3%) were more likely to report family stress than married female soldiers (4.5%)  $\chi^2 (1, N = 1,729) = 4.8, p < 0.05$ .

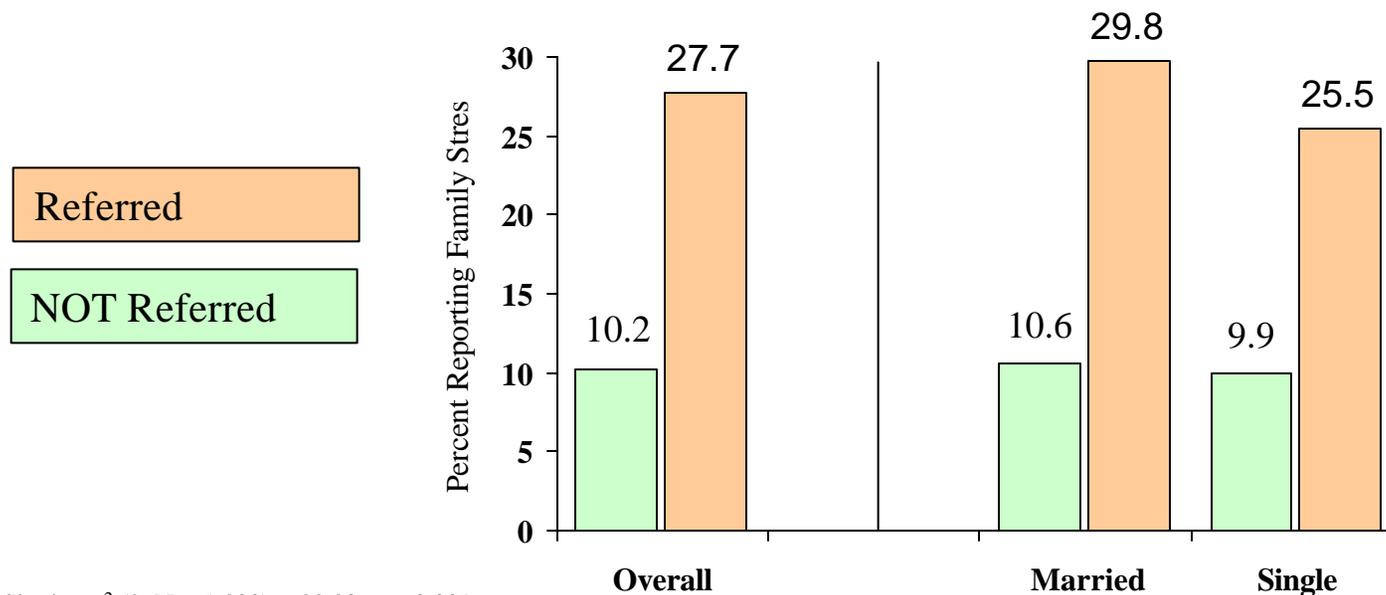
<sup>1</sup>Family stress was indicated by endorsing “often” or “very often” on both family stress items.



## Psychological Screening: Family Stress (2 of 2)

- 27.7 percent (n=106) of all referred soldiers reported experiencing family-related stress.
- Overall, both married and single soldiers who were referred reported the highest rates of family stress  $\chi^2 (2, N = 3,175) = 96.86, p < 0.001$ .

Of the 11 soldiers (0.3%) who required immediate referrals, none reported high family stress.



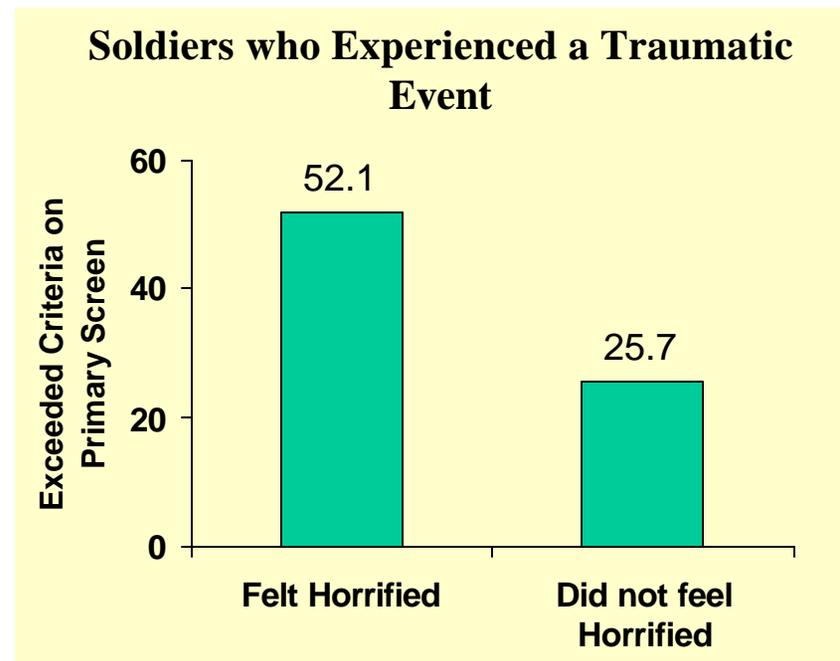
Single:  $\chi^2 (2, N = 1,300) = 33.38, p < 0.001$

Married:  $\chi^2 (2, N = 1,561) = 53.27, p < 0.001$



## Psychological Screening: Traumatic Exposure

- 289 soldiers (8.3 percent of the sample) reported experiencing or witnessing something on the deployment that was traumatic.
- Of the soldiers who experienced a traumatic incident, 38.8% felt horrified by this event.
- Exposure to a traumatic event and how soldiers felt about it affected the primary screen rates.
- For example, soldiers who witnessed an event and were horrified were more likely to exceed criteria on the primary screen than those who witnessed an event, but were not horrified,  $\chi^2 (2, N = 286) = 23.84, p < 0.001$ .





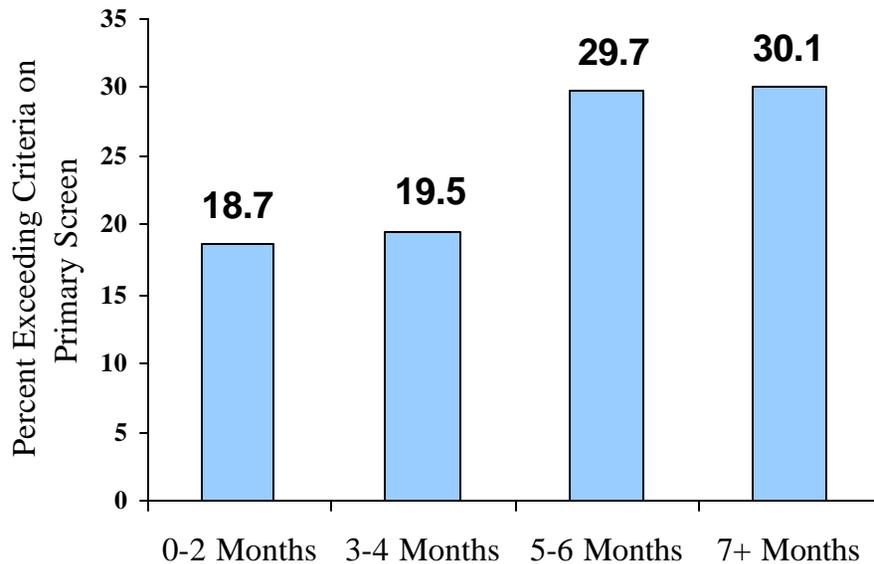
# Deployment Length

## Deployment Length

0 to 2 months:	3.0% (n=107)
3 to 4 months:	12.7% (n=447)
5 to 6 months:	15.3 % (n=540)
7+ months:	66.3% (n=2,334)

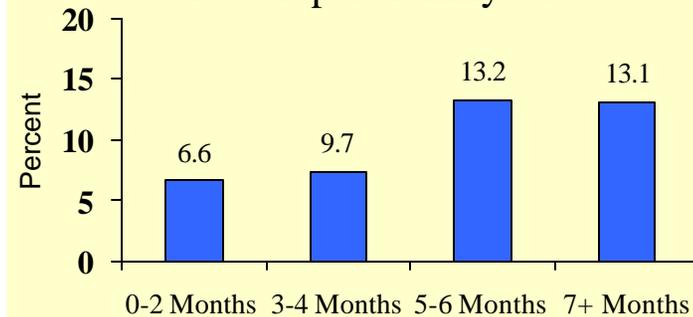
- Soldiers, regardless of rank, who were deployed for a longer period of time reported higher rates on the primary screen  $\chi^2 (3, N = 3,412) = 26.0, p < 0.01$ .

## Deployment Length



## Family Stress\*

The longer junior enlisted and NCOs were deployed, the more likely they were to report family stress.



\* $\chi^2 (3, N = 2,925) = 13.1, < .005$

**Note:** The relationship between deployment length and family stress was not found for officers.



# Psychological Screening: The Deployment Cycle

- Using data from several different studies of psychological screening across the deployment cycle, a pattern of psychological well-being is emerging.
- Rates of exceeding primary screen criteria were dependent on when the screening occurred during the deployment cycle.
- Specifically, soldiers in garrison and preparing for deployment reported higher rates of distress than soldiers returning from deployment.

Garrison	Pre-deployment	Deployment	Re-deployment	Post-deployment	Garrison
Highest rates on primary screen	Elevated rates on scales (highest on alcohol)	No Data Available	Mixed results: Bosnia-low rates Kosovo-high rates*	Relatively low rates on all scales but alcohol problems	Highest rates on primary screen

**\*Note:** The Kosovo re-deployment screening included new survey items focused on Acute Stress Disorder and family separation stress. Comparisons with the Bosnia screening may not be appropriate. Re-deployment screening has just been completed in Kosovo with the IAD using the new survey and will be included in future analyses for the re-deployment phase.



## Conclusions/Recommendations

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- Approximately one quarter (28.3%) of the soldiers in the redeployment phase reported symptoms requiring a secondary screening by mental health staff.
- A small percentage of soldiers who were exposed to a traumatic event reported severe acute stress symptoms, with half of these soldiers requiring home station referrals.
- High rates of family separation stress were reported for both single and married soldiers, with more than one quarter of these soldier referred for home station follow-up.
- Findings from the re-deployment screening suggest a focus on education and interventions about family separation stress, anger management, and reactions to traumatic events.
- Screening issues that still need to be addressed:
  - Continue development of screening scale content
  - Training in psychological triage
  - Evaluation of screening program effectiveness



## Point of Contact

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# KOSOVO REDEPLOYMENT SURVEY

ver: 27 July 00  
Z-982



<b>SOCIAL SECURITY NUMBER:</b> (for survey use only) 0 ○ 0 ○ 0 ○    0 ○ 0 ○ 0 ○    0 ○ 0 ○ 0 ○ 1 ○ 1 ○ 1 ○    1 ○ 1 ○ 1 ○    1 ○ 1 ○ 1 ○ 2 ○ 2 ○ 2 ○    2 ○ 2 ○ 2 ○    2 ○ 2 ○ 2 ○ 3 ○ 3 ○ 3 ○    3 ○ 3 ○ 3 ○    3 ○ 3 ○ 3 ○ 4 ○ 4 ○ 4 ○    4 ○ 4 ○ 4 ○    4 ○ 4 ○ 4 ○ 5 ○ 5 ○ 5 ○    5 ○ 5 ○ 5 ○    5 ○ 5 ○ 5 ○ 6 ○ 6 ○ 6 ○    6 ○ 6 ○ 6 ○    6 ○ 6 ○ 6 ○ 7 ○ 7 ○ 7 ○    7 ○ 7 ○ 7 ○    7 ○ 7 ○ 7 ○ 8 ○ 8 ○ 8 ○    8 ○ 8 ○ 8 ○    8 ○ 8 ○ 8 ○ 9 ○ 9 ○ 9 ○    9 ○ 9 ○ 9 ○    9 ○ 9 ○ 9 ○			<b>TODAY'S DATE:</b> _____ Month/Day/Year		In total, how many <b>deployments</b> have you completed that lasted more than 30 days? (not including training exercises or unaccompanied tours)  0 ○            0 ○ 1 ○            1 ○ 2 ○            2 ○ 3 ○            3 ○ 4 ○            4 ○ 5 ○            5 ○ 6 ○            6 ○ 7 ○            7 ○ 8 ○            8 ○ 9 ○            9 ○
<b>RANK:</b> E ○    1 ○ O ○    2 ○ W ○    3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○			<b>YOUR UNIT:</b> Platoon: _____ Company: _____ Battalion: _____		
How many <b>months</b> have you been in Theater on this deployment? less than 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ○ 11 ○ 12 or more ○			<b>MARITAL STATUS:</b> Single (Never Married) ○ Married ○ Separated ○ Divorced ○ Widowed ○		
			<b>GENDER:</b> Female ○    Male ○		
			Did you <b>experience or witness</b> something on this deployment that was traumatic for you?    yes ○    no ○		
			Did that traumatic event make you <b>feel</b> horrified, helpless or afraid? not applicable    yes    no ○            ○            ○		

The following problems relate to highly stressful events you may have experienced during your deployment to Kosovo. Thinking about the past days or weeks, how often (if at all) have you experienced these problems?

	NOT AT ALL	RARELY	SOMETIMES	OFTEN	VERY OFTEN
1. Had upsetting memories of the stressful event(s)	○	○	○	○	○
2. Had upsetting dreams of the stressful event(s)	○	○	○	○	○
3. Suddenly felt like I was going through the stressful event(s) all over again	○	○	○	○	○
4. Felt upset because something reminded me of the stressful event(s)	○	○	○	○	○
5. Tried not to think or have feelings about the stressful event(s)	○	○	○	○	○
6. Tried to avoid activities or situations that reminded me of the stressful event(s)	○	○	○	○	○
7. Couldn't remember certain things about the stressful event(s)	○	○	○	○	○
8. Had a physical reaction (such as hands sweating, heart pounding, dizziness) when something reminded me of the stressful event(s)	○	○	○	○	○
9. Wasn't as interested in things that used to be important to me	○	○	○	○	○
10. Felt distant from other people	○	○	○	○	○
11. Didn't feel things as intensely as I used to	○	○	○	○	○
12. Felt hopeless about the future	○	○	○	○	○
13. Had difficulty falling or staying asleep	○	○	○	○	○
14. Felt annoyed or angry	○	○	○	○	○
15. Had difficulty concentrating	○	○	○	○	○
16. Felt more alert and keyed up than usual	○	○	○	○	○
17. Got suddenly scared or startled	○	○	○	○	○
18. Felt as if the stressful event(s) hadn't happened or it wasn't real.	○	○	○	○	○
19. Felt as if I were in a daze.	○	○	○	○	○
20. Felt detached from myself, as if in a dream.	○	○	○	○	○
21. Felt like hurting myself.	○	○	○	○	○
22. Felt like hurting other people.	○	○	○	○	○
23. Stress from missing family events while deployed.	○	○	○	○	○
24. Stress from news about my family while deployed.	○	○	○	○	○

COMPLETED BY STAFF ONLY:    NFA ○    C-HS ○    C-I ○