Suicide Prevention: Valuable Information Learned from Army Surveillance and Research

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Office of the Army Surgeon General

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Director of the Division of Psychiatry and Neuroscience
Walter Reed Army Institute of Research
A Brief History of Psychological Reactions to War

- World War I—“shell shock”, over evacuation led to chronic psychiatric conditions
- World War II—ineffective pre-screening, “battle fatigue”, lessons relearned, 3 hots and a cot
- The Korean War---initial high rates of psychiatric casualties, then dramatic decrease

  *Principles of “PIES” (proximity, immediacy, expectancy, simplicity)*

- Vietnam
  - Drug and alcohol use, misconduct
  - Post Traumatic Stress Disorder identified later
- Desert Storm/Shield
  - “Persian Gulf illnesses”, medically unexplained physical symptoms
- Operations Other than War (OOTW)
  - Combat and Operational Stress Control, routine front line mental health treatment
- 9/11
  - “Therapy by walking around”
  - Increased acceptance by leadership over past eight years
Operation Enduring Freedom/Operation Iraqi Freedom

• Numerous stressors
  – Multiple and extended deployments
  – Battlefield stressors
    • IEDs, ambushes, severe sleep deprivation, direct combat, etc.
  – Medical
    • Severely wounded Soldiers, injured children, detainees

• Changing sense of mission
• Strong support of American people for Soldiers
• Major Focus of senior Army Staff
• Numerous new programs developed to support Soldiers and Families
Recent Background

• Volunteer Army
  – Know they are going to war
  – Seasoned, fatigued
  – Large Reserve Component
  – Reserve, National Guard

• Mental Health Advisory Teams (MHATs)
  – MHAT I through V, 2003 through 2007

• DoD Mental Health Task Force

• Congress provides supplemental funds to DoD in Summer 07
  – 96 M to Army for “Psychological Health”
  – Defense Center of Excellence

• Elevated suicide rate

• Wounded Soldiers

• Effects on Families
  – Continuous deployments
  – Families of deceased
  – Families of wounded
Range of Deployment-Related Stress Reactions

• Mild to moderate
  – Combat Stress and Operational Stress Reactions (Acute)
  – Post-traumatic stress (PTS) or disorder (PTSD)
  – Symptoms such as irritability, bad dreams, sleeplessness
  – Family / Relationship / Behavioral difficulties
  – Alcohol abuse
  – “Compassion fatigue” or provider fatigue
  – Suicidal behaviors

• Moderate to severe
  – Increased risk taking behavior leading to accidents
  – Depression
  – Alcohol dependence
  – Completed suicides
PTSD Diagnostic Concept

- Traumatic experience leads to:
  - Threat of death/serious injury
  - Intense fear, helplessness or horror
- Symptoms (3 main types)
  - Reexperiencing the trauma (flashbacks, intrusive thoughts)
  - Numbing & avoidance (social isolation)
  - Physiologic arousal (“fight or flight”)
- Which may cause impairment in
  - Social or occupational functioning
- Persistence of symptoms

*mTBI may be associated with PTSD, especially in the context of Blast or other weapons injury*
Behavioral Health: Where We’ve Been

- Robust surveillance in theater and upon return
  - Mental Health Advisory Teams (MHATs)
  - Post Deployment Health Assessment and Re-Assessment
- Difficulties with access to care
- Stigma about mental health care despite:
  - Chain teach on PTSD and TBI with 900,000 Soldiers in 2007
  - Beyond the Front and Shoulder to Shoulder to Shoulder in 2009
- Increasing surveillance of PTSD and TBI
- Rising suicide rate (multiple reasons: fractured relationships, alcohol abuse).
- Services to help only partially integrated
  - Numerous helping agencies, including medical, behavioral health, chaplains, Family programs
- Close collaboration with DCoE (Defense Center of Excellence)
Behavioral Health: Where We Are

• Evolving Comprehensive Behavioral Health Strategy
  – Comprehensive Soldier Fitness
  – Army’s Campaign Plan for Health Promotion, Risk Reduction & Suicide Prevention (ACPHP)
  – Child and Adolescent Center of Excellence (Madigan)
• MHAT VI pending release; will emphasize returned focus on Operation Enduring Freedom (OEF)
• Army PH spend plan
  – The Army has implemented over 45 initiatives under the categories of access to care, resiliency, quality of care, and surveillance
  – Funding: $120M obligated in FY 08, expecting $145M obligations in FY09, POM funds FY10-15
• Improved access to care
  – 48% increase in behavioral health providers since 2007
  – Number of visits has more than doubled since 2003
• Stigma reduction
  – Battlemind lifecycle products fielded to TRADOC (Basic Battlemind)
• New policies to screen for PTSD and TBI
• Extensive unit and population-based research
Behavioral Health: Where We Are Going

• Mature Behavioral Health Strategy
  – Comprehensive Soldier Fitness
  – MEDCOM Behavioral Health Campaign Plan (BHCP)
  – Army’s Campaign Plan for Health Promotion, Risk Reduction & Suicide Prevention (ACPHP)
• Continue to improve health surveillance as new issues arise
• Continue to improve access to care
  – Integrated behavioral health and primary care
  – Telemedicine implemented nationally and internationally
  – Revised force structure with increased behavioral health providers
• Reduce stigma
  – Defense Center of Excellence (DCoE) leading anti-stigma campaign: Real Warriors
• New treatments, research, and clinical guidelines for PTSD, TBI and pain management
Surveillance

• Land Combat Study
  – Surveys of infantry Brigade Combat Teams throughout deployment cycle (n>30,000).
  – Anonymous with informed consent
• Post Deployment Health Assessment (PDHA) / Post Deployment Health Re-Assessment (PDHRA) (population-based)
  – Brief validated screening survey plus primary care interview
  – Not anonymous, linked to clinical care
• Health Care Utilization Data (population-based)
  – Military Treatment Facilities
  – VA Facilities
• Mental Health Advisory Teams
• Epidemiological Consultation Teams
• Suicide numbers and cases (Army/DoD Suicide Event Report)
• DoD Mental Health Task Force
• President’s Commission on Wounded Warriors “Dole-Shalala Report”
• Rand Study: Invisible Wounds of War
• Suicide Analysis Cell
Mental Health Advisory Teams

- MHATs I through V have consistently shown that 14-20% of Soldiers from Brigade Combat Teams (BCTs) in Iraq are experiencing mental health symptoms
- MHAT I (data collection 2003)
  - First ever in theater assessment
  - Identified problems with distribution of behavioral health resources
- MHAT II (data collection 2004)
  - Mission confirmed that many of the recommended changes had been implemented
- MHAT III (data collection 2005)
  - Longer deployments and repeated deployments were associated with higher rates of mental health symptoms
- MHAT IV (data collection 2006)
  - First assessment of battlefield ethics attitudes / behaviors
  - Repeated deployments and longer deployments again confirmed to be associated with higher rates of mental health symptoms
- MHAT V (data collection 2007)
  - Included Afghanistan
  - See next slides
OIF Behavioral Health Status: Mental Health

- Reports of mental health problems did not statistically differ from 2006 to 2007.

- Rates of mental health problems are comparable to every year except 2004.
OIF Risk Factors: Multiple Deployments

- NCOs on either their second deployment to Iraq or their third/fourth deployment to Iraq report significantly lower morale than NCOs on their first deployment.

- Each deployment to Iraq puts NCOs at significantly more risk of reporting a mental health problem.
OIF Stigma and Barriers to Care

- Soldiers who screened positive for mental health problems reported significantly lower stigma about receiving care in 2007 than in 2006.
- Soldiers report higher barriers to care (not shown). The increase is likely due to the high percentage of Soldiers way from the main Forward Operating Bases (FOBs).

NS=Not significant
• The risk for reports of suicide ideation increase mid-deployment.

• Suicide rates continue to be elevated relative to historic rate of 12.36 per 100,000. Many suicides involve failed relationships.
OEF Behavioral Health Status

• Soldiers’ reports of individual morale are significantly lower than in 2005. OEF rates in 2007 are similar to OIF 2007 rates (page 12).

• Soldiers’ reports of mental health problems are significantly higher than in 2005. OEF rates in 2007 are similar to OIF 2007 rates (page 13).

• OEF Soldiers in BCTs (n=282) report higher levels of mental health problems than OIF Soldiers (not shown).
OEF Risk Factors: Combat Experiences

- A number of combat experiences significantly changed from 2005 to 2007.
- MHAT V OEF Soldiers in BCTs (n=282) reported levels of combat equal to or higher than 2006 and 2007 OIF levels.

### Percent Experienced at Least Once

<table>
<thead>
<tr>
<th>Experience</th>
<th>2006 OIF</th>
<th>2007 OIF</th>
<th>2007 OEF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving incoming artillery, rocket or mortar fire</td>
<td>82.8%</td>
<td>78.4%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Knowing someone seriously injured or killed</td>
<td>65.9%</td>
<td>72.1%</td>
<td>82.7%</td>
</tr>
<tr>
<td>Having a member of your own unit become a casualty</td>
<td>53.0%</td>
<td>55.6%</td>
<td>70.5%</td>
</tr>
</tbody>
</table>

### Significant Increases

<table>
<thead>
<tr>
<th>Experience</th>
<th>MHAT IIB (OEF)</th>
<th>MHAT V (OEF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being attacked or ambushed.</td>
<td>43.3%</td>
<td>53.0%</td>
</tr>
<tr>
<td>Being wounded/injured.</td>
<td>5.1%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Being directly responsible for the death of an enemy combatant.</td>
<td>9.0%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Had a close call, dud landed near you.</td>
<td>14.7%</td>
<td>20.6%</td>
</tr>
</tbody>
</table>

### Significant Decreases

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percent 2006</th>
<th>Percent 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeing destroyed homes and villages.</td>
<td>61.2%</td>
<td>46.5%</td>
</tr>
<tr>
<td>Disarming civilians</td>
<td>33.7%</td>
<td>20.3%</td>
</tr>
<tr>
<td>Clearing/searching homes or buildings.</td>
<td>42.7%</td>
<td>26.1%</td>
</tr>
<tr>
<td>Clearing/searching caves or bunkers.</td>
<td>34.6%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Seeing ill/injured women or children who you were unable to help.</td>
<td>43.9%</td>
<td>30.0%</td>
</tr>
</tbody>
</table>
Suicide Rates from 1990-2008

- Historically, the US Army rate has been lower than the US population rate.
- Both populations experienced a downward trend from the mid-90’s to 2001.
- From 2001 to 2006, the US population rate was steady at 1x/100k while the Army rate doubled from 10 to 20/100k.
- The U.S. population was age adjusted to the Army population by excluding those under 15 years of age and over 60 years of age, as well as adjusting the gender and age distribution within the population to a comparable Army distribution.

**Comparable civilian rates were only available from 1990-2006.

SOURCE: CDC/NCHS, National Vital Statistics System (civilian data). G1 (Army data).**
The Department of Defense has mandated annual and post-deployment screening for suicidality.

- Periodic Health Assessment (PHA): Conducted annually
- Post-deployment Health Assessment (PDHA): Conducted within 30 days of service members returning from deployment
- Post-deployment Health Re-assessment (PDHRA): Conducted within 3-6 months for service members returning from deployment

Screening is based on an interview with a behavioral health care provider using a standardized interview guide. Service members at risk will receive immediate intervention or a mental health referral.
The Department of Defense implemented the DoD Suicide Event Report (DoDSER) based on the Army Suicide Event Report (ASER), which was validated by the U.S. Army Medical Research and Materiel Command. DoDSERs are submitted for suicide behaviors that result in death, hospitalization or evacuation from theater. Data collected from standardized records (e.g., medical records, CID). Army DoDSERs due w/in 60–days. Objective, detailed, and standardized information collected: Comprehensive data (method, location, fatality)

  - Extensive risk factor data
    • Dispositional or personal
    • Historical or developmental
    • Contextual or situational
    • Clinical or symptom factors
# Common BH EPICON Themes

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>INDIVIDUAL RISK FACTORS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deployment: length, multiple, unpredictability</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Combat Intensity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Family Separation - Relationship Stress - Lack of Support</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Increased violence against persons including spouse/family</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Increased use of alcohol and drugs, and related offenses</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Previous gestures/attempts/BH contact</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Manipulating - Malingering</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Legal and Financial Issues</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>History of misconduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>SYSTEMS ISSUES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stigma: personal, peer, leadership, career</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Poor Service Delivery for dependents</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transition, Reintegration (One size fits all)</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Problems wit BH Services, FAP, ASAP</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Lack standardized screening, tracking, intervention, data collection</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Source: EPICON published reports
Prepared by: USACHPPM BSHOP
Slide 21
Stigma

- Four types of stigma generally seen: career, leadership, peer-to-peer, and personal
- Stigma was reported differently across rank groups; lower enlisted were more concerned about peer and self-perceptions, senior enlisted were most concerned about their career and perceived leadership abilities

<table>
<thead>
<tr>
<th>Career</th>
<th>Leadership</th>
<th>Peer-to-Peer</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>On permanent record, effects future promotion and employment</td>
<td>Some old school, senior NCOs, and early promoted NCOs create/maintain stigma</td>
<td>Peer stigma is the worst</td>
<td>Weak, isolated, embarrassed</td>
</tr>
<tr>
<td>End career, lose retirement</td>
<td>More stigma for senior enlisted, others think they can't lead, fear of effecting retirement</td>
<td>More stigma if never deployed</td>
<td>Profile makes them feel worthless</td>
</tr>
<tr>
<td>Lose security clearance</td>
<td>Many squad/platoon leaders don’t support</td>
<td>Treated differently, Ridiculed</td>
<td>Pride/Denial</td>
</tr>
<tr>
<td>“Boarded out” rather than rehabilitated</td>
<td>Treated differently; doubt ‘warrior’ abilities; ridicule those with a profile</td>
<td>Gossiped about/Perceived faking</td>
<td>Don’t want to be viewed as a “bad” soldier</td>
</tr>
</tbody>
</table>

Source: USACHPPM BSHOP
Prepared by: USACHPPM BSHOP
Slide 22
Resiliency Programs

• **Battlemind**
  - The US Army psychological resiliency building program. This term describes the Soldier’s inner strength to face fear and adversity during combat, with courage and speaks to resiliency skills that are developed to survive. It represents a range of training modules and tools under three categories: Deployment Cycle, Life Cycle and Soldier Support.

• **Suicide Prevention**

• **Provider Resiliency Training**

• **Reunion and Reintegration**
  - Deployment Cycle Support is in process of being upgraded.

• **Other Programs in Development**
  - New resiliency programs are being funded under congressional TBI/PH supplemental dollars

• **Warrior Adventure Quest**
Battlemind Training System: Web Page

www.battlemind.army.mil
Military Youth Coping with Separation: When Family Members Deploy

For more information and resources visit the Military Youth Deployment Support Web Site at:
www.aap.org/sections/unifserv/deployment/index.html
Mr. Poe and Friends Discuss Reunion after Deployment

"An animated multi-media deployment support toolkit for children made by military families... for military families!"

This deployment toolkit for elementary age children 6 to 11 years of age includes:
- 30 minute DVD video
- Welcome letter explaining how to use the DVD/CD
- Facilitator's guide with suggested discussion questions
- Informational handouts

This video helps families deal with deployment separation stress in healthy, positive ways. This kit covers all phases of deployment, especially family integration. Written and performed by children and their parents who have experienced deployment, it presents common memories that most families have. It is useful for proactive community family support training related to deployment separation issues. Share it with military (active duty, Reserve or National Guard) and civilian families, schools, churches, and other civilian support organizations. The main objective of this video toolkit is to develop resilient and healthy coping mechanisms children and their families, decreasing community stress and family dysfunction.

With generous support from:
- THEUS, OTFR, 1240 20th Ave. Hanaa, OH
- The American Academy of Pediatrics
- Healthy People's Coalition of Children's Fund
- U.S. Army Medical Command Center & School
- San Antonio Medical Pediatric Center
- Army Safari Healthcare and Business Administration Program
# Updates in Decompression/Reintegration

<table>
<thead>
<tr>
<th>Day -60</th>
<th>Day -30</th>
<th>Day -3</th>
<th>Day -2</th>
<th>Day -1</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

- **Redeployment Tasks**
- **In-Transit**
- **Flight Reception** Pass
- **Days 1-10 Do Not Include Weekend Days (Protected)**
- **Reintegration Tasks**

<table>
<thead>
<tr>
<th>Day O</th>
<th>Pass</th>
<th>Pass</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
<th>Day 8</th>
<th>Day 9</th>
<th>Day 10</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

- **Key Components**
  - Commander's program
  - Structured decompression / reintegration
  - Mental health risk stratification program prior to departure from theater
  - Active tracking and monitoring which involves coordination b/w BCT/Div and the local AMEDD resources.
  - Tailored to both active component and reserve

**PDHRA**
WARRIOR ADVENTURE QUEST

• WAQ utilizes high risk/extreme sports in coordination with a debriefing tool to provide Soldier/Leader/Unit mitigation and coping skills that can address unresolved transition issues and build unit cohesion and moral, contributing to combat readiness.

• WAQ is NOT specific to reintegration, it is a training tool that can be incorporated across the ARFORGEN cycle.
Reintegration and Reconstitution

- Mobilization
- Train-up/Prep
- Deployment
- Employment (Mission Execution)
- Redeployment
- Post Deployment
- Reconstitution

Manifestations
- Numbness
- Invincibility
- Inevitability

Risk/Destructive Behavior
- DWIs / DUls
- Accidents
- Marital Issues
- Suicide

Peak Stress

Time / Deployment Cycle

New Level of Normal
## Unit Resiliency Fundamentals

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Horizontal Bonding:</strong></td>
<td><strong>Trust</strong></td>
</tr>
<tr>
<td><strong>Vertical Bonding:</strong></td>
<td><strong>Trust</strong></td>
</tr>
<tr>
<td><strong>Esprit de Corps:</strong></td>
<td><strong>Sense of</strong></td>
</tr>
<tr>
<td><strong>Unit Cohesion:</strong></td>
<td><strong>Binding force which combines 3 previous concepts</strong></td>
</tr>
</tbody>
</table>

Copyright 2002 From *Black Hawk Down*, Columbia TriStar Home Entertainment

- FM 6-22.5, COSC Guide, Leaders and Warriors (DRAFT, FEB 09)
WAQ Soldier Training

WAQ Phases Review

Connect L-LAAD and WAQ Events

Warrior Adventure Quest
  - Shape Soldier Expectations
  - Review WAQ “New Normal” Model

COSC Model
  - Demonstrate Universal Applicability
  - Introduce L-LAAD

Combat and Operational Stress Control (COSC)
  - Define Key Terms

Resiliency Foundation
  - Review Battlemind
  - Introduce Comprehensive Soldier Fitness
Suicide in the Army

• Suicide rates are increasing in all components of the US Army, across all age groups, and in both male and female Soldiers
• PDHA/PDHRA does not serve as an optimal way to identify and intervene
  – Need to develop tools for suicide risk assessment
  – Improve suicide assessment training for providers
• The suicide rate among Soldiers who have deployed to OIF/OEF is higher than for Soldiers who have never deployed.
• A comprehensive approach to suicide prevention is required which includes identification and treatment of high risk individuals as well as risk mitigation efforts in the Army population
Risk Factors for Suicide in Army Personnel

• Major Psychiatric Illness Not a Significant Contributor
  – Adjustment disorders, substance abuse common
• Relationships
• Legal/Occupational Problems
• Substance Abuse
• Pain/Disability
• Weapons
  – 70% with firearm
• Recent Trends
  – Older, higher rank, more females
## Army Suicides: 2001 through 31 JULY 2009

<table>
<thead>
<tr>
<th></th>
<th>2001-2009†</th>
<th>Overall ARMY‡</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NUMBER OF SUICIDES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td><strong>%</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td>MALE</td>
<td>774</td>
<td>94.7</td>
</tr>
<tr>
<td>FEMALE</td>
<td>43</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>AVERAGE AGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged 18-25</td>
<td>365</td>
<td>44.7</td>
</tr>
<tr>
<td>Aged 25-35</td>
<td>287</td>
<td>35.1</td>
</tr>
<tr>
<td>Aged 36-60</td>
<td>165</td>
<td>20.2</td>
</tr>
<tr>
<td><strong>RACE-ETHNICITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>615</td>
<td>75.3</td>
</tr>
<tr>
<td>African American</td>
<td>104</td>
<td>12.7</td>
</tr>
<tr>
<td>Hispanic and Other</td>
<td>98</td>
<td>12.0</td>
</tr>
<tr>
<td><strong>MARITAL STATUS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINGLE</td>
<td>365</td>
<td>44.7</td>
</tr>
<tr>
<td>MARRIED</td>
<td>423</td>
<td>51.8</td>
</tr>
<tr>
<td>DIV/SEP/WIDOWED</td>
<td>29</td>
<td>3.5</td>
</tr>
</tbody>
</table>

† Through 31 July 2009; ‡ Based on 2008 figures; * p<.05; ** p<.01; ***p<.001

Source: ABHIDE

Prepared by: USACHPPM BSHOP
## Estimated Rate of Suicide by Army Functional Group, 2004-2009

<table>
<thead>
<tr>
<th>Functional Group</th>
<th># Suicides (N=508)</th>
<th>% of Suicides</th>
<th>Population 2004-July 2009</th>
<th>Estimated Rate per 100,000*</th>
<th>99% Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OVERALL</strong></td>
<td>508</td>
<td>100</td>
<td>2,831,568</td>
<td>18.1</td>
<td>18.07-18.13</td>
</tr>
<tr>
<td>Maneuver, Fire &amp; Effects</td>
<td>267</td>
<td>52.6</td>
<td>1,226,517</td>
<td>21.8</td>
<td>21.75-21.86</td>
</tr>
<tr>
<td>Force Sustainment</td>
<td>118</td>
<td>23.2</td>
<td>708,260</td>
<td>16.7</td>
<td>16.65-16.75</td>
</tr>
<tr>
<td>Operations Support</td>
<td>70</td>
<td>13.8</td>
<td>559,224</td>
<td>12.5</td>
<td>12.46-12.54</td>
</tr>
<tr>
<td>Special Branches</td>
<td>36</td>
<td>7.1</td>
<td>212,933</td>
<td>16.9</td>
<td>16.81-16.99</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
<td>3.3</td>
<td>106,574</td>
<td>16.0</td>
<td>15.87-16.13</td>
</tr>
</tbody>
</table>

* Based on number of individuals, not person-years; significantly greater than average

Source: ABHIDE

Prepared by: USACHPPM BSHOP
US ARMY Suicides: Method of Death

Source: ABHIDE

Prepared by: USACHPPM BSHOP
ARMY Suicide Rate Trends, by Age Group

Source: ABHIDE
Prepared by: USACHPPM BSHOP
Army Suicide Rate Trends, by Rank

Source: ABHIDE

Prepared by: USACHPPM BSHOP
ARMY Suicide Rate Trends, by Component

Source: ABHIDE; Not Available for 2009

Prepared by: USACHPPM BSHOP
US Army Suicides by Place of Death, 2001-2009

Source: G-1 and AFHSC
† OEF/OIF
‡ Africa, Cyprus, Germany, Kosovo, South Korea, Cuba, Italy, Belgium, Djibouti, Mexico, Poland, Thailand, Uzbekistan
US Army Suicides: Mental Health Trends, 2001-2008

- Suicide: Any Mental Disorder
- Suicide: Mood Disorders
- ARMY Any MH
- ARMY Mood

Source: ABHIDE & DMED
Prepared by: USACHPPM BSHOP
Burden of Injuries and Diseases
U.S. Army active duty, 2007

Medical Encounters/ Individuals Affected

*Includes all ICD-9 codes groups with less than 50,000 medical encounters

Source: Defense Medical Surveillance System, Jul08
Past Suicide Mitigation Approaches

• Analysis of Incident Suicides
  – DOD Suicide Event Report (DODSER)
  – Epidemiologic Consultations (EPICONS)
• Clinical interventions to identify and treat high risk individuals
  – PDHA/PDHRA Screening
  – Respect.mil training for providers
• Training Soldiers, Leaders and Family Members to recognize and respond
  – ASSIST
  – ACE
  – Battlemind
  – Beyond the Front
  – Stand-Down Training
Suicide Awareness Training

• State-of-the-art universal suicide prevention effort involving a multidisciplinary approach.

• The Army’s suicide awareness and training efforts represent several components
  – An educational program based on the “ACE” acronym that provides Soldiers behavioral-based training to help a fellow Soldier in need
  – An interactive training video entitled, “Beyond the Front” in which Soldiers experience firsthand the impact their actions can have when assisting a Soldier who is suicidal. All Soldiers received this training Feb-March 2009.
  – “Shoulder to Shoulder” chain teach March to July 2009.

• New Army Suicide Prevention Task Force
• Pending DoD Suicide Prevention Task Force
“The Army’s charter is more about holistically improving the physical, mental, and spiritual health of our Soldiers and their families than solely focusing on suicide prevention. If we do the first, we are convinced that the second will happen.”

GEN Peter W. Chiarelli, VCSA, 29 March 2009
Behavioral health care providers and key unit members play an active role in the management and treatment of suicidal Soldiers.

- Improve suicide assessment and evaluation (primary care, behavioral health clinic, VA).
  - Establish best clinical practices and standards of care
  - Train behavioral health and medical care providers at all levels
  - Conduct routine reviews and audits to ensure compliance
- Improve engagement and retention in behavioral health care employing motivational interviewing techniques.
- Involve close family members and friends where ever possible.
- Inform and educate unit leaders as appropriate.
- Enhanced focus on postvention efforts (maintain vigilance post crisis), including cases of completed suicides.
Adapt evidence-based treatments for suicidality among Soldiers.

• Two generally accepted psychotherapeutic approaches for treating suicidal patients:
  
  – Cognitive behavioral therapy (based on social learning theory that focuses on changing distorted beliefs and cognitions about self and the world).
  
  – Dialectical behavioral therapy (a cognitive behavioral approach that includes social skills and problem solving).
  
• Treat the underlying behavioral health disorder.
Population-Based Strategies for Suicide Mitigation

• The best evidence-based suicide mitigation strategies are optimal identification of high-risk groups and treatment of suicidal individuals

• “Gatekeeper” strategies, which identify high risk individuals, may decrease suicides if identification leads to appropriate clinical management or reduction of stress

• Recent literature suggests interventions which decrease risk-factors in the population may impact suicide rates

• Current Army suicide mitigation programs focus on identification/treatment of high risk individuals, not groups.

• Incorporating strategies to mitigate risk-factors in the general Army population and among specific high risk groups may decrease risk for suicide in the population
Multi-dimensional Suicide Prevention Strategy

Strategic Analysis Cell
NIMH Study
EPICON Investigations

Suicide Risk Factor Assessment

Identification of High Risk Individuals

Population-Based Strategies

↓ Untreated/Undertreated BH
↓ Stigma to Seeking Care
↓ Alcohol/Drug abuse
↓ Relationship/Family Problems
↓ Legal/Financial Issues
↑ Resilience

Treatment
ACE
ASSIST
Beyond the Front
Battlemind
Respect.mil
Causal Factors

- Multiple individual, unit, and community factors appear to have converged to shift the population risk to the right

- This would put more Soldiers in the Very High Risk category making clustering more likely

**Facts**

**Individual**
- Criminality/Misconduct
- Alcohol / Drugs
- BH Issues (untreated/under-treated)

**Unit**
- Turnover
- Leadership (Stigma)
- Training / Skills

**Environment**
- Turbulence
- Family Stress / Deployment
- Community
- Stigma
Factors to Consider

• While it is important to identify and help individual Soldiers, the biggest impact will come from programs that shift the overall population risk back to the left.

• Effective medical treatment can prevent individuals from increasing in risk or decrease their risk, but it cannot shift overall population risk very much.

**Army Campaign Plan:**
- Health Promotion, Risk Reduction, and Suicide Prevention
- Increase Resiliency
- Decrease Alcohol/Drug Abuse
- Decrease Untreated/Undertreated BH
- Decrease Stigma to Seeking Care
- Decrease Relationship/Family Problems
- Decrease Legal/Financial Issues

**Installation:**
- Reintegration (Plus)
  - Mobile Behavioral Health Teams
  - Mental Toughness Training
  - Resiliency Training
  - Military Family Life Consultants
  - Decompression Reintegration
  - Warrior Adventure Quest
- Consistent Stigma Reduction themes

Number / Severity of Risk Factors

Population Interventions
Continuing Challenges

• Array of services
• Stigma
• Increasing number of Soldiers with mTBI and PTSD
• Shortage of Providers
• Remote locations
• High OPTEMO
• Public Perceptions
• Suicide rate
• Lack of providers who accept TRICARE
• Provider fatigue
• Warrior Transition Office Soldiers
• Reintegration
• Guard/Reserve Soldiers
• Pain Control

Way Ahead

• Integration of services
• Policy changes, education
• Integration with primary care, other portals of care
• Grow number of providers
• Tele-Behavioral Health
• Optimal Reintegration
• Strategic communication
• Re-engineered suicide prevention
• Actively recruit providers to TRICARE
• Provider resiliency training
• Mental health organic in WTUs
• Enhanced reintegration strategies
• Mental health organic in Guard/Reserve
• Updated Clinical Practice Guidelines in Pain