

# Status of Department of Defense Funded Suicide Research

Peter M. Gutierrez, Ph.D. (moderator), Diana J. Fitek,  
Ph.D., Thomas Joiner, Ph.D., Dave Jobes, Ph.D.,  
Marjan Holloway, Ph.D., and M. David Rudd, Ph.D.



**Dr. Diana J. Fitek**  
**Portfolio Manager – Suicide, Substance  
Abuse & Violence Prevention**  
**U.S. Army Medical Research and  
Materiel Command**  
**Military Operational Medicine Research  
Program**  
**Fort Detrick, MD**

The views expressed in this presentation are those of the author and do not represent the official policy or position of the U.S. Army Medical Command or the Department of Defense



# Scope of the Problem: Suicide in the Military

- Historically, military suicide rates were *below* civilian rate of 11 per 100,000
- Multiple hypotheses to explain this pattern
- Absence of standardized data collection on suicides
- Available suicide prevention programs and treatments were not evidence-based
- As suicide rate approached and exceeded civilian rate, the surveillance data and research needed to develop interventions had yet to begin
- CY2010 Suicide Rates (DoDSER)

Air Force	Army	Marine Corps	Navy
15.5	21.7	17.2	11.1

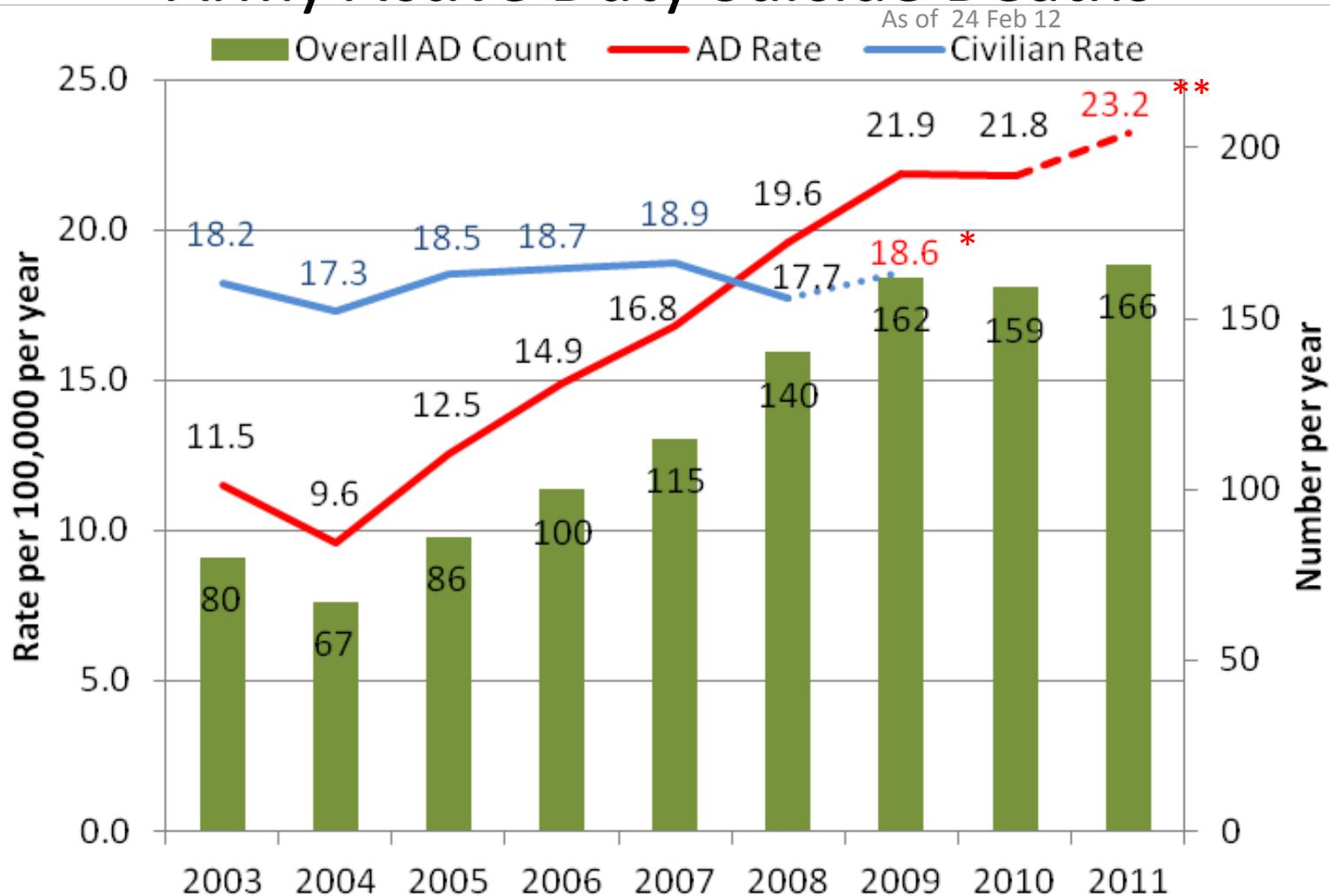


# Missed Opportunities to Intervene?

- Recent failure in spousal or intimate relationship, *often in month prior to suicide*
- Occupational and/or legal problems
- History of behavioral health disorder, substance abuse (misuse of prescription medication), prescribed psychotropic medication, *accessed outpatient behavioral health services in month prior to suicide*
- *Communicated suicide ideation to spouse, friend or other family members*

(DoDSER, 2010)

# Army Active Duty Suicide Deaths

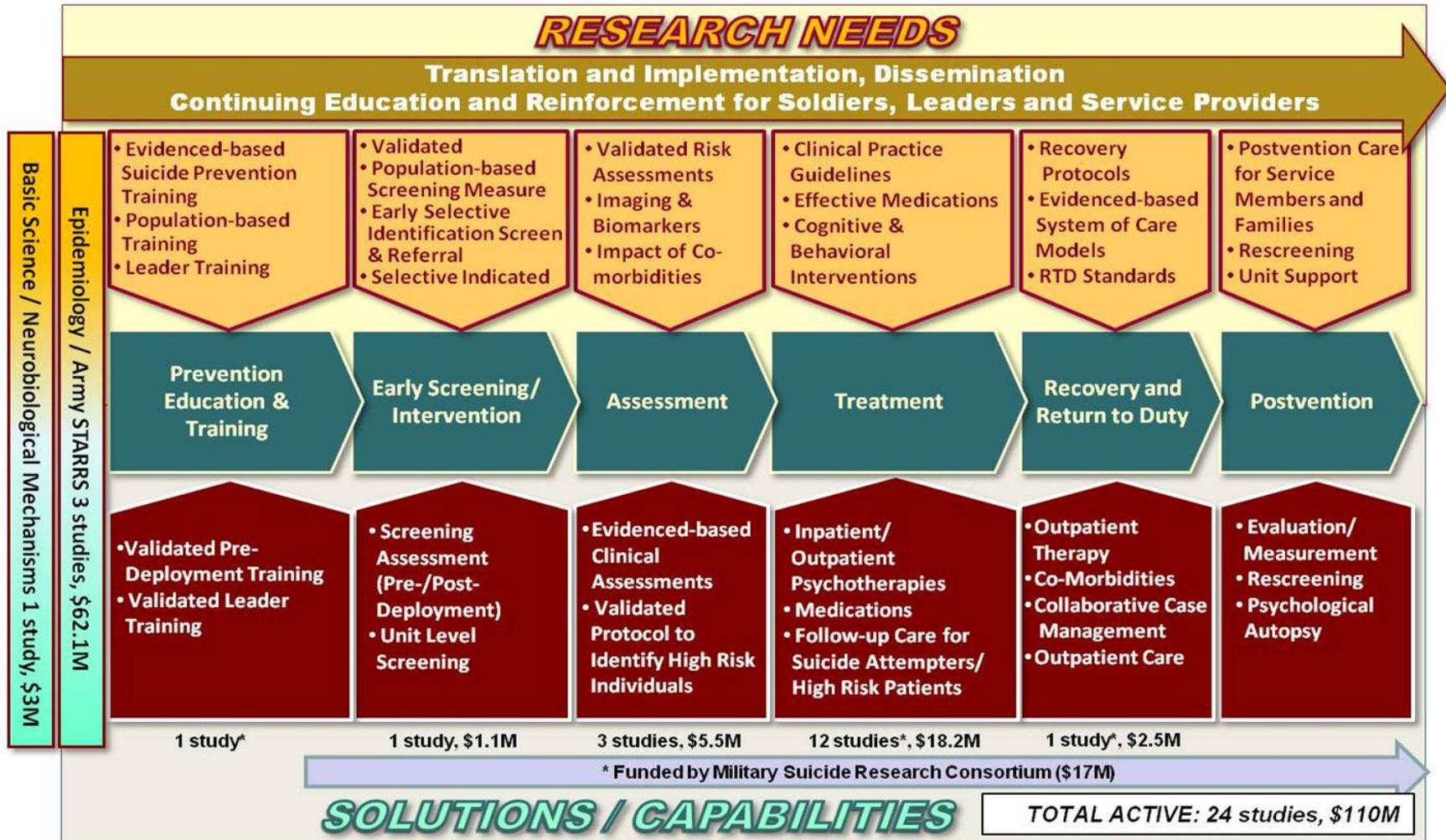


\* = Preliminary Civilian Rate NOT CDC OFFICIAL (as of 16 March 2011 update)

\*\*= HP&RR TF Estimated NOT ARMY OFFICAL: is based on an Active Duty Army strength of 715,662 (as of 1 Oct 11)



# Suicide Continuum of Care Determines Research Approach





# Research Investment along Continuum of Care

**\$67.5M: Epidemiology/Basic Sciences** – Army STARRS, Hill (risk factors), Reger (role of deployment on suicidality), Cooper (epidemiology of medication abuse and overdose), O'Connor (Study to Examine Psychological Processes in Suicidal Ideation and Behavior [STEPPS])

**\$4.9M: Prevention, Education & Training** – Bernert (behavioral intervention for insomnia), Cerel (understanding resilience during suicide bereavement), Comtois (caring texts), Allen (training family members to assist servicemembers in help-seeking), Renshaw (promoting resilience among family members of high-risk servicemembers)

**\$1.1M: Early Screening & Intervention** – Vannoy (development and validation of a theory-based screening process for suicide risk)



# Research Investment along Continuum of Care

**\$5.5M: Assessment** – Jobs (Collaborative Assessment and Management of Suicide), Joiner (Optimizing Screening and Risk Assessment for Suicide Risk in the U.S. Military), FAMILONI (use of thermal imaging to assess and optimize level of physiologic arousal during treatment)

**\$21.1M: Treatment** – Brenner (Window to Hope), Bryan (brief interventions), Bush (Virtual Hope Box), Schmidt (reducing anxiety sensitivity), George (high-dose left prefrontal TMS), Goodman (DBT), Gutierrez (blister packaging for medication adherence), Holloway (PACT, safety planning), Kubek (intranasal delivery of biodegradable neuropeptide nanoparticles), Rudd (brief CBT)

**\$2.5M: Recovery** – Luxton (caring letters intervention)

**\$2.0M: Postvention** – Stanley, Brown & Holloway (management of suicide-related events during deployment)



# Largest Investments: How Are they Different?

## Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS)

- \$62.1M (\$50M Army, \$12.1M NIMH)
- Co-PIs Robert Ursano, MD (USUHS) and Murray Stein, MD, MPH (UCSD)
- 4 major studies
  - Historical Data Study
  - All Army Study
  - New Soldier Study
  - Soldier Health Outcomes Study
- Studies Army exclusively
- Retrospective and prospective epidemiological studies
- Data informs development of interventions

## Military Suicide Research Consortium

- \$17M (funded by Defense Health Program)
- Co-led by Peter Gutierrez, PhD (Denver VA MIRECC) and Thomas Joiner, PhD (FSU)
- 7 currently funded studies, additional proposals under consideration
- Studies may involve any service and/or veterans
- Focus on interventions (prevention, screening, assessment, treatment, recovery and postvention)



## Suicide: Challenges/Successes

- Omega-3 and Tau protein—how relevant are they?
- Importance of establishing and maintaining relationship with command of possible study site
- Multi-site studies needed, complicates an already lengthy IRB approval process
- Army STARRS and MSRC



# Suicide: The Way Ahead



- Theory-driven, evidence-based treatment studies (in/out patient)
- Research to examine the effects of brief interventions to reduce suicide behavior, problem drinking, and other outcomes (e.g., accidents, homicide, intimate partner violence, etc.)
- Basic science to validate underlying psychological and bio-psychological theories of suicide
- Combined psychotherapy and pharmacotherapy treatment studies
- Validate suicide prevention training (universal, at-risk populations)
- Validate objective suicide screening measure(s) for field and clinic use



## How to apply for DoD research funding:

[https://www.usamraa.army.mil/pages/baa\\_forms/index.cfm](https://www.usamraa.army.mil/pages/baa_forms/index.cfm)

<http://www.grants.gov> (Search by CFDA number 12.420)

<https://momrp.amedd.army.mil/>

<http://cdmrp.army.mil/>

[http://www.tatrc.org/about\\_funding.html](http://www.tatrc.org/about_funding.html)



**COL Carl A. Castro**  
**Research Area Director**  
Military Operational Medicine Research Program  
Fort Detrick, MD 21702  
301.619.7301  
[Carl.Castro@us.army.mil](mailto:Carl.Castro@us.army.mil)

**Diana J. Fitek, Ph.D.**  
**Portfolio Manager**  
Suicide, Substance Abuse & Violence  
Prevention  
Military Operational Medicine Research  
Program  
Fort Detrick, MD 21702  
301.619.7765  
[Diana.J.Fitek@us.army.mil](mailto:Diana.J.Fitek@us.army.mil)