



Center for Military Health Policy Research

A JOINT ENDEAVOR OF RAND HEALTH AND THE
RAND NATIONAL SECURITY RESEARCH DIVISION

Preventing Suicide Among Military Personnel Overview of RAND Study

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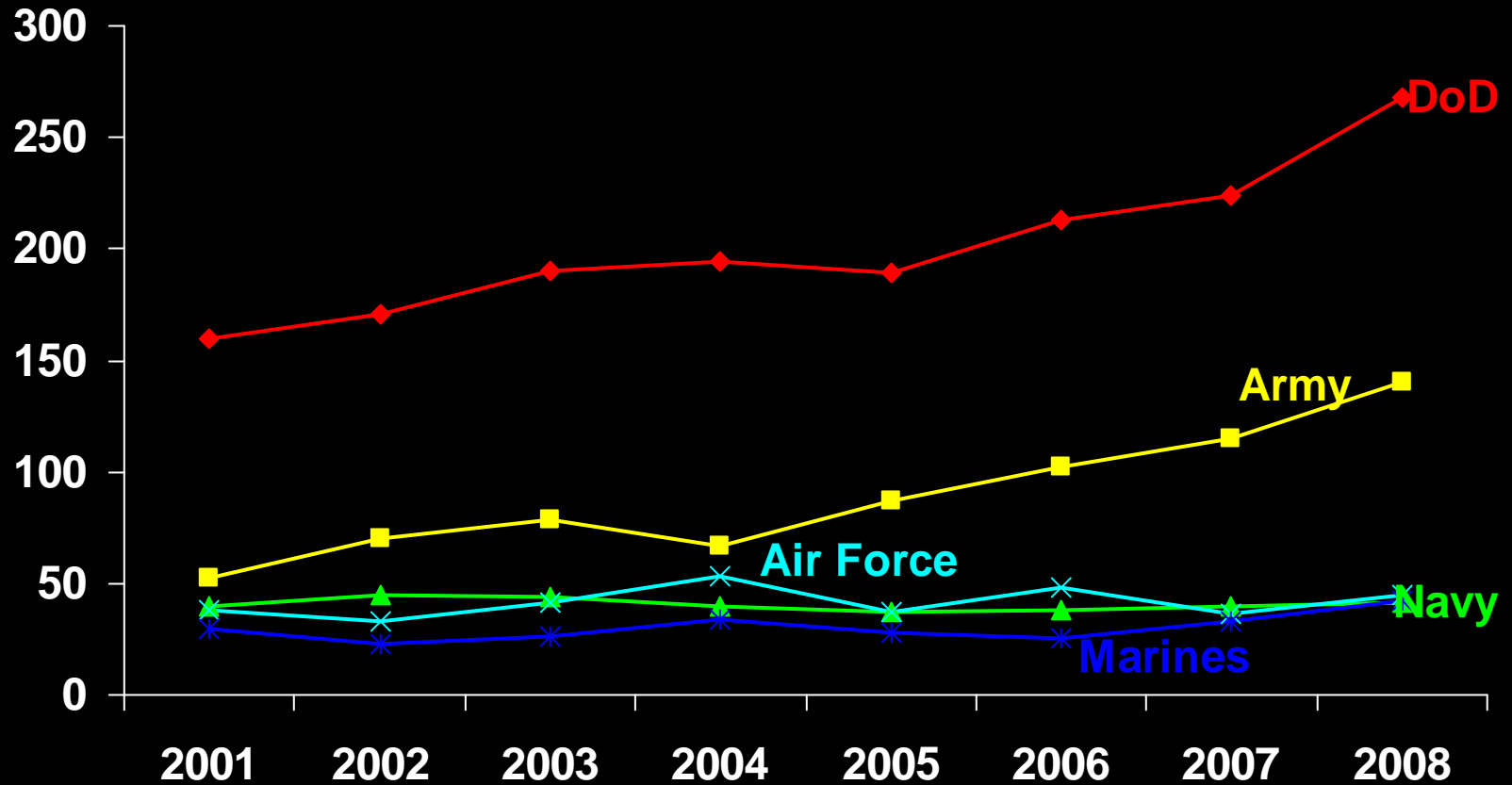
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Outline

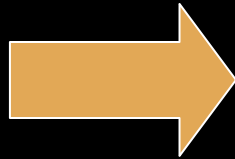
- **Suicide rates in the military**
- **Risk factors for suicide in civilian and military sector**
- **Overview of RAND Study**

Increasing Number of Suicides in DoD Cause for Concern



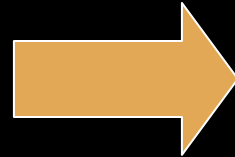
DoD Patterns of Suicide Are Similar to Those in the Civilian Population

National suicide rate is 4 to 5-times higher for males than females



In each service, suicide rate is higher among males than females

National suicide rate among non-Hispanic Whites and Native Americans is double the rate for other ethnic minorities



Same racial trends in Navy, Marines, and Army (did not have evidence on Air Force)

Similarities suggest that effective programs in civilian sector would also work in DoD

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Literature Shows Three Strong Risk Factors

Prior suicide attempts	<ul style="list-style-type: none">• ~50% of suicides occur after a first attempt• 5-15% of non-fatal attempts die by suicide
Mental Illness (MI)	<ul style="list-style-type: none">• 90% of suicides have mental disorder• 4% with depression will die by suicide• Relationships with PTSD, TBI, and comorbidity
Substance Use (SU) & Associated Disorders	<ul style="list-style-type: none">• ~40% of suicides comorbid MI & SU disorder• ~25% suicide cases intoxicated at time of death

Emerging Evidence in Other Areas

Psychological Correlates	<ul style="list-style-type: none">• Among those with MI, hopelessness predicts suicide• Some evidence for impulsivity, problem solving deficits
Genetics	<ul style="list-style-type: none">• Evidence from family, twin, & adoption studies
Neurobiology	<ul style="list-style-type: none">• Serotonin and norepinephrine getting attention
External Factors	<ul style="list-style-type: none">• Child abuse may be independent or mediated effect• Triggering events interact with underlying vulnerability
Societal Factors	<ul style="list-style-type: none">• Firearm access is correlated with suicides• Clusters among teens, maybe military personnel• Imitative suicides interact with underlying vulnerability

Epidemiology of Suicide in the DoD

- **DoD suicide rate was steadily lower than the comparable civilian population from 2001-2005 but increased in 2006, the last year of data available**
- **Increase in DoD suicide rate in 2006 almost wholly attributable to Army**
- **Similarities between those who die by suicide in DoD and civilian population suggest effective civilian programs could translate well to DoD**
- **Epidemiologic research is needed to discern whether correlates/risk factors of suicide in military are same as in civilian population**

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We Posed Three Research Questions

What are the DoD and each service doing to prevent suicides?

What is considered “state of the art” for suicide prevention?

Do DoD and service-specific approaches reflect the “state of the art”?

Recommendations for enhancing current approaches

Approach

What are the DoD and each service doing to prevent suicides?

- Reviewed materials and policy on current approaches
- Conducted key-informant interviews with stakeholders

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- Reviewed materials and policy on current approaches
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What is considered “state of the art” for suicide prevention?

- Identified and reviewed literature
- Conducted key-informant interviews with experts

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Do DoD and service-specific approaches reflect the “state of the art”?

- Identify characteristics of effective programs
- Analyze DoD programs for presence of those characteristics

Our Approach for Exploring Best Practices

Indicated Prevention

(e.g., Medical Management of Suicidality)

Attempts

Selective Prevention

(e.g., Hotlines)

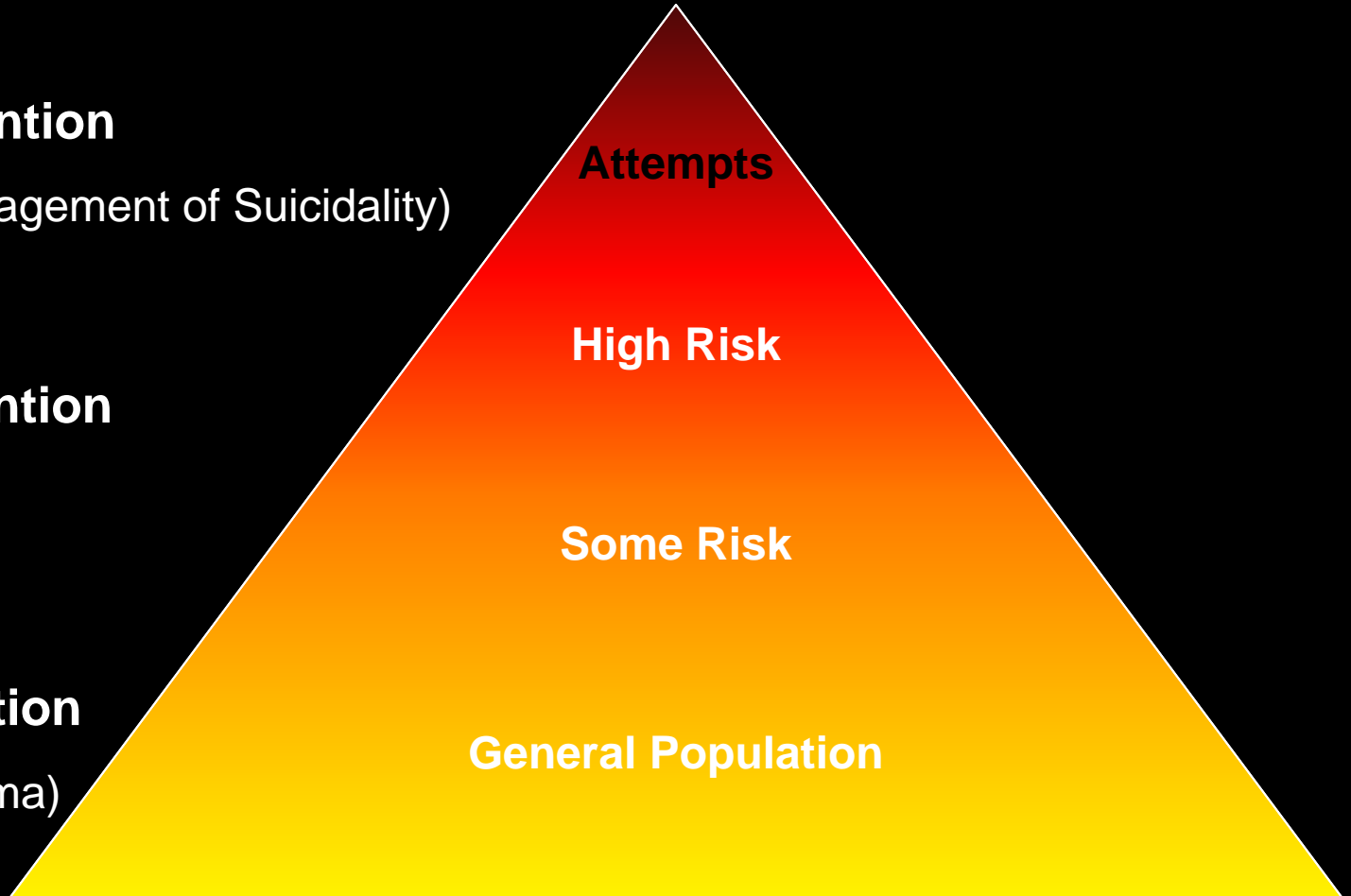
High Risk

Some Risk

Primary Prevention

(e.g., Reduce Stigma)

General Population



Our Approach for Exploring Best Practices

Indicated Prevention

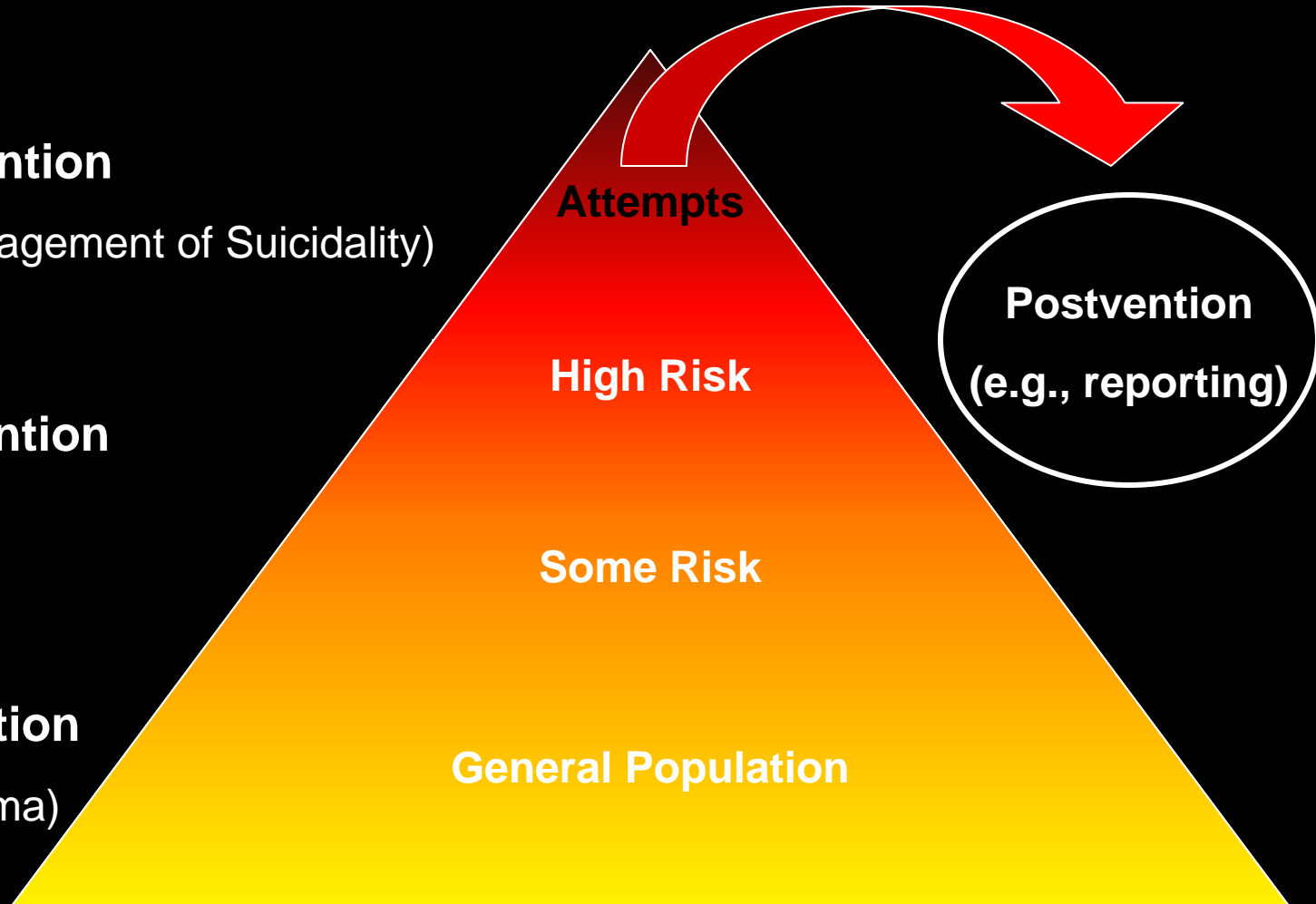
(e.g., Medical Management of Suicidality)

Selective Prevention

(e.g., Hotlines)

Primary Prevention

(e.g., Reduce Stigma)



Forthcoming RAND Report

- **Analyses of the epidemiology of suicide**
- **Characteristics of state-of-the-art prevention programs**
- **DoD suicide prevention programs & how they compare with state of the art**
- **Conclusions and Recommendations**



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