



**ARMY MEDICINE**  
Serving To Heal...Honored To Serve

# Care Following Traumatic Brain Injury

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## Military and Veterans Affairs Resources in NC

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Unclassified



# Introduction

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Military and VA Resources in NC



# Disclaimer



- The views presented herein are those of the presenter and do not reflect the official policy of the Department of the Army, Department of Defense, or the U.S. Government.



# Background



- Traumatic Brain Injury (TBI) is a disruption of brain function resulting from a blow or jolt to the head or a penetrating head injury
- Categorized as mild (mTBI), moderate, severe or penetrating
- The majority of TBIs in the DoD are mTBI, also known as concussion
- Most individuals who sustain a concussion recovery fully and quickly
- Symptoms may be physical, cognitive and/or behavioral



# DoD Definition of Traumatic Brain Injury (TBI)



**A disruption of brain function resulting from a blow or jolt to the head or a penetrating head injury indicated by new onset or worsening of at least one of the following:**

Loss of consciousness (LOC)

Post-traumatic amnesia (PTA)

- Loss of memory for events immediately before or after injury

Alteration of consciousness (AOC)

- Change in mental status at the time of injury such as confused, disoriented, or slow thinking

Neurological deficits that may or may not be temporary

- Weakness, loss of balance, change in vision, paralysis, etc.

Intracranial lesion

***OSD/HA MEMO OCT 1, 2007***



# Scope of TBI across DoD

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# TBI in DoD 2000-2013



## DoD Numbers for Traumatic Brain Injury Total Worldwide TBI Diagnoses

No. of cases

35,000

30,000

25,000

20,000

15,000

10,000

5,000

'00

'01

'02

'03

'04

'05

'06

'07

'08

'09

'10

'11

'12

'13

Calendar year

Source: Defense Medical Surveillance System (DMSS), Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Center (AFHSC)

Prepared by MHS Office of Strategic Communications

2000-2013



# Incidence by Service



## DoD Numbers for Traumatic Brain Injury Worldwide - Incidence by Armed Forces Branch

No. of cases

25,000

20,000

15,000

10,000

5,000

0

'00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13

Calendar year

Army Navy Air Force Marines

Source: Defense Medical Surveillance System (DMSS), Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Center (AFHSC)

Prepared by MHS Office of Strategic Communications

2000-2013





# Incidence by Severity



## DoD Numbers for Traumatic Brain Injury Worldwide - Incidence by Severity

No. of cases

30,000

25,000

20,000

15,000

10,000

5,000

0

'00

'01

'02

'03

'04

'05

'06

'07

'08

'09

'10

'11

'12

'13

Calendar year

Mild

Moderate

Severe

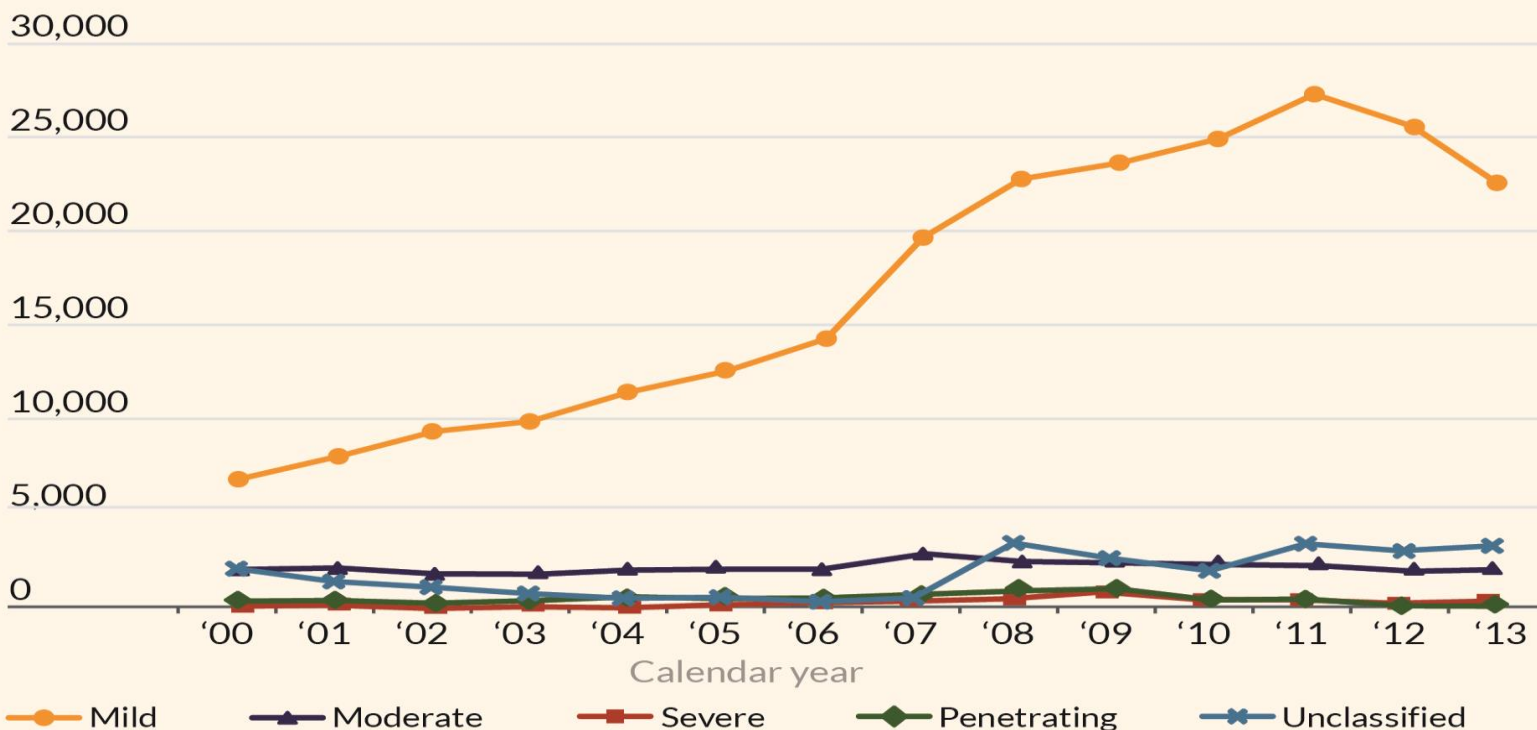
Penetrating

Unclassified

Source: Defense Medical Surveillance System (DMSS), Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Center (AFHSC)

Prepared by the Defense and Veterans Brain Injury Center (DVBIC)

2000-2013





# Army

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# Department of the Army Concussion/mTBI Strategy



- **Goal:** A cultural change following concussive events
- **Vision:** Every Warrior treated appropriately to minimize concussive injury and maximize recovery
- **Mission:** Produce an educated force trained and prepared to provide early recognition, treatment & tracking of concussive injuries in order to protect Warrior health

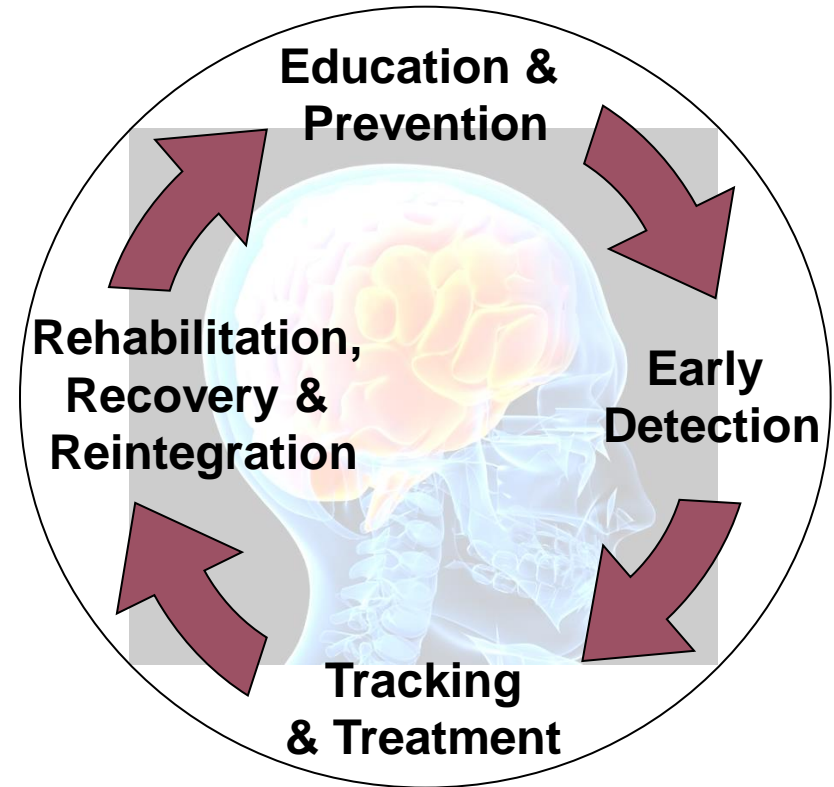


Image courtesy of OTSG



# Department of Brain Injury Medicine Womack Army Medical Center, Ft. Bragg



- **Concussion Care Clinic (acute injury)**
  - Patient education and immediate symptom management
- **Comprehensive Brain Injury Team (chronic symptoms)**
  - Multidisciplinary evaluations including medical, neuropsychological, psychological, physical therapy/vestibular, neuro-optometry, occupational therapy
- **Intrepid Spirit (National Intrepid Center of Excellence satellite)**
  - Projected opening Fall 2015
  - Integrated care for complex patients involving TBI, behavioral health and pain

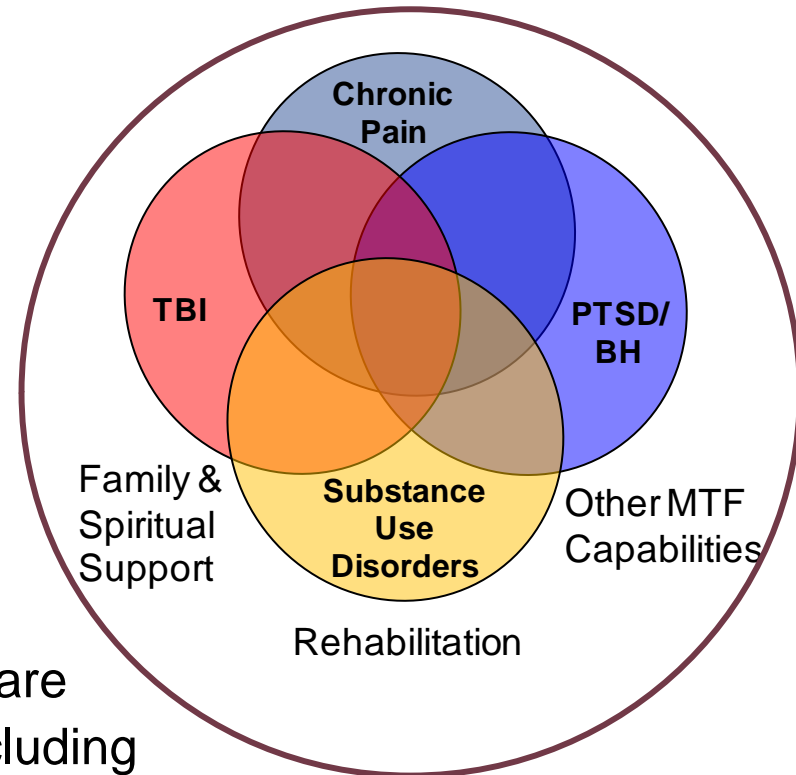


# Mission and Vision



**Mission:** Through the establishment of a new care model including enhanced case management, an arena intake and an intensive outpatient rehabilitation, the Intrepid Spirits will:  
provide evidence-based interdisciplinary assessment and intensive outpatient care for SMs with complex medical conditions with the goal of fostering optimal outcomes.

**Vision:** To lead the nation and set the definitive standard for the provision of interdisciplinary, integrated, and holistic assessment and intensive outpatient healthcare for SMs with complex medical conditions, including TBI, trauma related disorders, PTSD and other mood disorders, chronic pain, and related conditions.





# Department of Brain Injury Medicine Womack Army Medical Center, Ft. Bragg



- Screening and administrative services
  - Annual training (Soldiers and healthcare providers)
  - Post-deployment assessments and screening
  - Open access
  - Integrated disability evaluation system with VA



# **Department of the Navy/ United States Marine Corps**

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# Naval Hospital Camp Lejeune



- NICOE Intrepid Spirit Concussion Recovery Center
  - Opened 2013
  - Acute care of mTBI
  - Multidisciplinary evaluation and treatment of chronic mTBI-related symptoms





# **United States Air Force**

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# Seymour Johnson Air Force Base



- 4<sup>th</sup> Medical Group
  - Primary Care Services
  - Mental Health Services
  - Behavioral Health Optimization Program
  - Civilian care under TRICARE



# Department of Veterans Affairs

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# Department of Veterans Affairs



- Acute and chronic care services
- Strong nationwide network for intensive rehab services
- Rehabilitation services
- Vocational Rehabilitation and Employment services



# Partners

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# Partners



- UNC Medical Center/ civilian trauma centers
- Defense Centers of Excellence for TBI/Psychological Health (DCOE)
- Defense and Veterans Brain Injury Center (DVBIC)
- National Intrepid Center of Excellence (NICoE)
- Brain Injury Association of North Carolina



# Summary

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# Questions

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