

# TRAUMATIC BRAIN INJURY AND PSYCHOLOGICAL HEALTH RESEARCH PROGRAM



**CDMRP**  
DEPARTMENT OF DEFENSE  
CONGRESSIONALLY DIRECTED  
MEDICAL RESEARCH PROGRAMS

**MISSION:** Fund research to understand, prevent, assess, and treat psychological health conditions and/or traumatic brain injuries that accelerates solutions to improve the health, well-being, and health care of Service Members, their Families, Veterans and the American public

**Congressional Appropriations  
FY07-FY24:  
\$2.575B total**



"As a combat Veteran that has been diagnosed with multiple mental health disabilities, I think this program is impacting the military and general public greatly with innovative and 'out-of-the-box' thinking that will provide support in so many ways to the Soldiers and civilians for years to come while incorporating their Families and communities."

*1st Sgt. Tomas Cruz,  
U.S. Army Retired, One CommunityUSA,  
FY24 Programmatic Panel Member*



## SCOPE OF THE PROBLEM

**3 million**

Americans sustain a mild TBI each year<sup>1</sup>



Nearly **16% of civilians** diagnosed with TBI also received a diagnosis of **PTSD**<sup>3</sup>

**In 2020, over  
\$280B spent on mental health services**  
for civilians in the U.S.<sup>2</sup>

## RELEVANCE TO MILITARY HEALTH

- More than **468,000** U.S. Service Members diagnosed with a TBI between 2000 and 2023<sup>4</sup>
- More than **2 million** behavioral health-related medical encounters among active-duty members in 2021<sup>5</sup>



**Within 2 years of a TBI diagnosis, a cohort of Service Members also received diagnoses of:**

- Cognitive disorders
- Sleep disorders
- Posttraumatic stress disorder
- Emotional disorders
- Anxiety disorders



## PROGRAM PRIORITIES

- Understand:** Research that fills knowledge gaps in epidemiology and etiology
- Prevent and Assess:** Development of prevention, screening, diagnosis, or prognosis tools for psychological health conditions and/or TBI
- Treat:** Development of novel and repurposed interventions to improve outcomes of psychological health conditions and/or TBI

## NEW FOR FY24

- Emerging Research Topics Award:** Blast/impulse exposure and psychological/cognitive health, diagnosis and treatment of anger, risk and protective factors for harmful behaviors at the interpersonal and organizational levels, relationship between social media and mental health

<sup>1</sup> <https://pubmed.ncbi.nlm.nih.gov/31654620/>

<sup>2</sup> <https://library.samhsa.gov/sites/default/files/sma14-4883.pdf>

<sup>3</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6857464/>

<sup>4</sup> <https://www.health.mil/Military-Health-Topics/Centers-of-Excellence/Traumatic-Brain-Injury-Center-of-Excellence/DOD-TBI-Worldwide-Numbers>

<sup>5</sup> <https://www.health.mil/Reference-Center/Technical-Documents/2022/12/14/DOD-Health-of-the-Force-2021>

<sup>6</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9825245/#sup1>



## PROGRAM IMPACT AND OUTCOMES

Driving TBI and psychological health research through collaboration and partnership

DEPARTMENT  
OF DEFENSE

NATIONAL  
INSTITUTES  
OF HEALTH

DEPARTMENT  
OF VETERANS  
AFFAIRS

NON-GOVERNMENT  
ORGANIZATIONS

RESEARCHERS:  
492 UNIQUE  
ORGANIZATIONS

### ONGOING RESEARCH AIMED TO IMPROVE TBI AND/OR PSYCHOLOGICAL HEALTH OUTCOMES

- **I-HEAL** – an implementation science study to improve access and engagement in high-quality evidence-based health care services for Veterans and Service Members with TBI
- **Pregnenolone**, a neurosteroid, for the treatment of chronic TBI and co-occurring conditions such as depression, PTSD and pain – a phase 2 clinical trial
- **Brain Stimulation Treatments for PTSD** – a phase 2 clinical trial using two FDA-cleared methods to provide personalized non-invasive brain stimulation
- **A Non-Drug Treatment for Insomnia** – an intervention that combines aspects of two established approaches, mindfulness and cognitive behavioral therapy, for Service Members with TBI and co-occurring insomnia and posttraumatic stress

### RESEARCH BREAKTHROUGHS IN MILITARY MEDICINE

- **Improving Clinical Care**
  - TBI and Psychological Health Clinical Practice Guidelines and recommendations utilized by the DOD and VA
  - Improvements in the prevention and management of TBI in collegiate and professional sports
- **Accelerating the Development of FDA-Approved Products**
  - **Ahead**: wearable EEG to assess brain state following closed head injury
  - **BrainPort®**: wearable non-invasive, oral electronic vision aid
  - **i-STAT® TBI whole blood test**: rapid TBI evaluation assay
  - **Swoop® MRI**: portable magnetic resonance imaging device
  - **EYE-SYNC®**: device for identifying visual tracking impairment



Point of Contact: CDMRP Public Affairs  
[dha.detrick.cdmrp.mbx.public-affairs@health.mil](mailto:dha.detrick.cdmrp.mbx.public-affairs@health.mil)