

TRAUMATIC BRAIN INJURY AND PSYCHOLOGICAL HEALTH RESEARCH PROGRAM



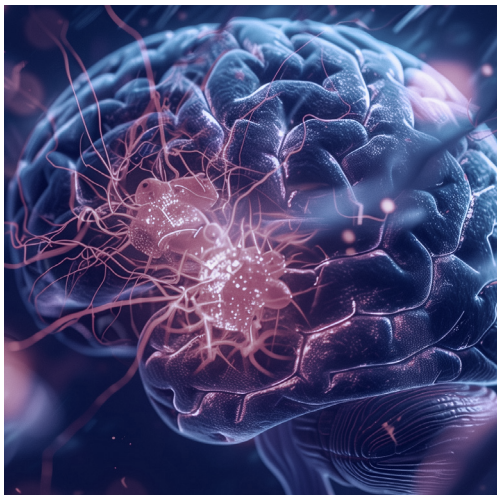
MISSION: Fund research to understand, prevent, assess, and treat psychological health conditions and/or traumatic brain injuries that accelerates solutions to improve the health, well-being, and health care of Service Members, their Families, Veterans and the American public

**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 year¹



Nearly **16%** of civilians diagnosed with TBI *also* received a diagnosis of **PTSD**³

In 2020, over

\$280B spent on mental health services for civilians in the U.S.²

RELEVANCE TO MILITARY HEALTH

- More than **468,000** U.S. Service Members diagnosed with a TBI between 2000 and 2023⁴
- More than **2 million** mental health-related medical encounters among active-duty members in 2021⁵



Within 2 years of a TBI diagnosis, a cohort of Service Members also received diagnoses of:⁶

- 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

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

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

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

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

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

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



For more information, visit: <https://cdmrp.health.mil/tbiphprp>



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



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