

# WHAT IS SLEEP DISORDER?

Sleep disorders are conditions that result in changes in the way that you sleep.
A sleep disorder can affect your overall health, safety, and quality of life. Sleep deprivation can affect your ability to drive safely and increase your risk of other health problems.

#### **KEY FACT**

Likelihood of clinical insomnia increased by **50%** in those with mTBI.

#### SLEEP DISRUPTIONS

- Endocrine Dysfunction
- Chronic Pain
- Post-Traumatic Stress
- Brain Injury history
- Restless Leg Syndrome

#### **MILITARY EXPOSURES**

- OPTEMPO
- Chronic Stress
- Brain Injury History
- Post-Traumatic Stress
- Time zone changes

# COMMONS SLEEP DISORDERS IN THE VETERAN COMMUNITY

Three out of four (75%) post-9/11 veterans report at least one issue with their sleep. That number increases if the veteran has suffered a brain injury and/or was diagnosed with a mental health condition (anxiety, chronic stress, Post-Traumatic Stress).

For the brain to maintain functioning at the highest level possible, it requires sleep.

A DoD study showed that **56%** of service members reported getting less sleep than required to perform their military duties.

Inadequate sleep negatively impacts the service member's military effectiveness; demonstrating reduced ability to execute complex tasks, communicate effectively, maintain vigilance, and sustain proper alertness required to carry out duties.



# **SLEEP**

#### **SLEEP AND TBI**

Sleep deprivation may account for the link between TBI and depression symptoms among service members.

- The number of TBIs an individual has suffered increased the rate of sleep disorders by 50%.
- Blast injuries are more commonly associated with insomnia and anxiety compared to blunt trauma injuries.
- Of those deployed that experienced an mTBI, 77% reported sleep disorders.

#### **SLEEP AND PTS**

Sleep deprivation is a core symptom of PTSD and a factor that can exacerbate PTSD daytime symptoms, such as hypervigilance and irritability.

- Service members with insomnia prior to trauma exposure are more likely to develop PTSD following the exposure, indicating that disturbed sleep increases vulnerability to PTSD,
- Studies show that insomnia and recurrent nightmares are independently associated with a number of negative sequelae, including suicidal ideation and behavior, over and above the effects of PTSD and depression,

### **Did You Know?**

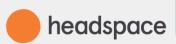
During sleep, neurons cease firing at their normal "awake" rate and allow the brain to open (approx. 60% more) to allow cerebrospinal fluid (CSF) to enter the "relaxed brain" and rid it of its toxins, specifically the amyloid-beta and tau proteins.

This makes sleep an important and necessary regenerative process, especially if you suffer from a brain injury.

### **RECOMMENDATIONS & RESOURCES**

## Ways to improve sleep:

- Set a schedule: Sleep/wake at the same time daily.
- Exercise 20-30 min/day.
- Avoid caffeine and nicotine after 4pm.
- Avoid alcohol.
- Create a room for sleep:
  - No cell phones/TV or blue light
  - Cool room, ideal temp. 60-65 degrees
- Below are cell phone applications that assist with sleep:









#### **ARTICLES**

- What's Really Keeping You Up At Night? - Havok Journal, December 10, 2020
- The Complete Guide to Optimal Health - Havok Journal, March 3, 2021

#### PODCASTS

- Joe Rogan Experience #1109: Matthew Walker, "Why We Sleep: Unlocking the Power of Sleep and Dreams"
- Groundtruth Podcast #4:
   Delta Operator Chris VanSant,
   Mastering Sleep