## IT CAN HAPPEN ANYWHERE, ANYTIME, TO ANYONE

Every five seconds, a man, woman, or child suffers a traumatic brain injury (TBI) in the U.S. In fact, TBI is the leading cause of death among adolescents.

Whether from a fall, a car accident, or a sports injury, traumatic brain injuries can produce persistent problems.

Let's do something about it.



#### DID YOU KNOW



#### 2.5 MILLION PEOPLE

sustain a TBI in the U.S. every year

#### **\$76.5 BILLION**

annual cost to U.S. society for care and lost productivity due to brain injury

#### 1.4 TIMES HIGHER

rate that female athletes suffer concussions compared to male athletes

#### **7-10 DAYS**

amount of time that it takes 80-90% of concussed patients to recover

#### 70% OF TBI PATIENTS

complain of sleep disturbances

#### 4.2% SERVICE MEMBERS

suffer from a TBI

# IMPROVING OUTCOMES

For over 30 years, Brain Trauma Foundation has conducted innovative clinical research and developed evidence-based guidelines that improve outcomes for the millions of people who suffer from traumatic brain injuries (TBI) every year.

From concussion to coma, we better educate and train professionals who encounter TBI in situations ranging from athletic arenas to hospitals to battlefields.

#### WHAT WE DO EVERY DAY



RESEARCH: Our cutting edge field research contributes to scientific and medical understanding of TBI



GUIDE: We develop, maintain, and disseminate guidelines that improve medical treatment of TBI



INNOVATE: Our research and development improves the tools and technologies that aid in TBI diagnosis



EDUCATE: We focus on educating the public on the prevention, diagnosis, and management of TBI



TRAIN: From the ambulance to the athletic arena, we train professionals who encounter TBI

#### CONCUSSION UNPACKED

#### Concussion is serious.

The most underreported and under diagnosed brain injury by far is concussion. Concussion accounts for over 90% of TBI, with millions of cases every year.

Despite this epidemic, there is <u>no universally accepted</u> <u>definition of concussion</u>, how to diagnose it, or how to treat it.

Brain Trauma Foundation is working to change that.
Using the most current evidence available, we developed the boundaries for defining concussion, which is now accepted by leading organizations such as the NCAA.
Our definition states that a concussion is:

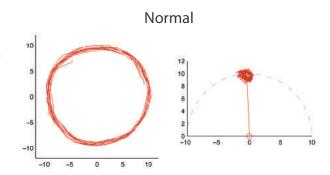
- a change in brain function
- following an external force to the head
- which may be accompanied by temporary loss of consciousness
- but is identified in awake individuals
- with measures of neurologic and cognitive dysfunction

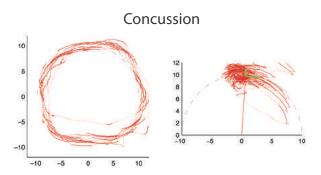


#### The first objective and quantifiable evaluation of visual attention.

There is no single measure or protocol to diagnose a concussion. Brain Trauma Foundation believes that medical professionals should use a combination of attention, balance, and memory tests when evaluating a concussed patient. However, many of these rely on symptoms. We have changed that by developing a measure of attention via eye-tracking goggle technology. This revolutionary test measures a person's ability to pay attention by tracking eye movements while following a target moving in a circle.

EXAMPLES
OF EYE
TRACKING
RESULTS:









### COMA GUIDELINES

In the days and hours following initial impact, a significant portion—if not the majority—of brain damage occurs in coma patients. That's why best practices are so important.

Brain Trauma Foundation collaborates with medical experts and organizations across the nation and around the world to develop and update best practice guidelines for coma. These essential guidelines dictate the care patients should receive whether in an ambulance, emergency room, combat, or beyond.

When trauma centers implement the BTF guidelines, there are significant improvements in patient outcomes. Over a 10-year period, New York state saw coma-related deaths drop by nearly 50%.

"All of us are at risk for a serious head injury. A close friend of mine was in a coma after an accident and was fortunate to be admitted to a hospital that followed the Brain Trauma Foundation best practice guidelines. She has since made a full recovery. I joined BTF's board to express my

appreciation and give support to their excellent and vital work."

- SARAH JESSICA PARKER

## **WE NEED YOUR HELP**

#### WHY DONATE?



We've come a long way – but there's so much more work to do.

With your support Brain Trauma Foundation can improve
the outcomes of TBI patients.

Together we can make a difference!

braintrauma.org

#### PARTNERS

