



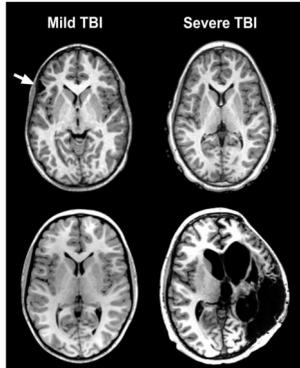
## MONTHLY MENTAL HEALTH NEWSLETTER

Presented by the Gwinnett County Sheriff's Office Mental Health Task Force

This Issue:

### Traumatic Brain Injury (TBI)

### What is TBI?



Traumatic brain injury (TBI) happens when a sudden, external, physical assault damages the brain. It is one of the most common causes of disability and death in adults. TBI is a broad term that describes a vast array of injuries that happen to the brain. The damage can be *focal* (confined to one area of the brain) or *diffuse* (happens in more than one area of the brain). The severity of a brain injury can range from a mild concussion to a severe injury that results in coma or even death.

### Brain injury may happen in one of two ways:

#### Closed brain injury

Closed brain injuries happen when there is a non-penetrating injury to the brain with no break in the skull. A closed brain injury is caused by a rapid forward or backward movement and shaking of the brain inside the bony skull that results in bruising and tearing of brain tissue and blood vessels. Closed brain injuries are usually caused by car accidents, falls, and increasingly, in sports. Shaking a baby can also result in this type of injury (called shaken baby syndrome).

#### Penetrating brain injury

Penetrating, or open head injuries happen when there is a break in the skull, such as when a bullet pierces the brain.

### What are the possible results of brain injury / TBI?

**Cognitive deficits** (Coma, Confusion, Information processing deficits, decreased awareness of self or others, and other possible cognitive impairments)

**Motor deficits** (May include paralysis/weakness, poor balance, decreased endurance, tremors, problems swallowing)

**Perceptual or sensory deficits** (Changes in vision, taste, smell, hearing, and touch are just a few of a number of possible deficits in this category)

**Communication and language deficits** (Along with several other possibilities these deficits may include, difficulty speaking and understanding speech, forming sentences, choosing the right words or reading)

**Functional deficits** (Impaired ability with activities of daily living (ADLs), such as dressing, bathing, eating, operating machinery etc.)

**Social difficulties** (Impaired social abilities, inability to read social cues, make friends or sustain relationships are included in these difficulties)

**Regulatory disturbances** (May include loss of bladder or bowel control, fatigue, dizziness, headaches, changes in sleep and/or eating patterns)

**Personality or psychiatric changes** (apathy, decreased motivation, emotional lability, irritability, anxiety, depression, temper flare-ups, and aggression are included in this area of change)

### What is primary and secondary brain injury?

**Primary brain injury** refers to the sudden and profound injury to the brain that is considered to be more or less complete at the time of impact. This happens at the time of the car accident, gunshot wound, or fall.

**Secondary brain injury** refers to the changes that evolve over a period of hours to days after the primary brain injury. It includes an entire series of steps or stages of cellular, chemical, tissue, or blood vessel changes in the brain that contribute to further destruction of brain tissue.

#### Traumatic Epilepsy

Epilepsy can happen with a brain injury, but more commonly with severe or penetrating injuries. While most seizures happen immediately after the injury, or within the first year, it is also possible for epilepsy to surface years later.

#### REFERENCES

The G.C.S.O. Mental Health Task Force encourages you to utilize sources such as the *Substance Abuse and Mental Health Services Administration (SAMHSA)* to learn more about this and other important mental health topics. [www.samhsa.gov](http://www.samhsa.gov)

The following sources were used in the creation of this Mental Health Newsletter;

[www.samhsa.gov](http://www.samhsa.gov)

<https://www.mayoclinic.org>

<https://www.ninds.nih.gov>

GCSO Mental Health Task Force

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