

MEDICAL BREAKTHROUGHS **RESEARCH SUMMARY**

TOPIC: VETERANS AND TRAUMATIC BRAIN INJURY: HEALING HEADACHES
REPORT: MB #5108

BACKGROUND: Traumatic brain injury (TBI), a form of acquired brain injury, occurs when a sudden trauma causes damage to the brain. TBI can result when the head suddenly and violently hits an object, or when an object pierces the skull and enters brain tissue. There were over 64,000 TBI-related deaths in the United States in 2020. That's about 176 TBI-related deaths every day. Research shows that falls lead to nearly half of the TBI-related hospitalizations, firearm-related suicide is the most common cause of TBI-related deaths in the United States, motor vehicle crashes and assaults are other common ways a person may get a TBI.

(Sources: [https://www.ninds.nih.gov/health-information/disorders/traumatic-brain-injury#:~:text=Traumatic%20brain%20injury%20\(TBI\)%2C,skull%20and%20enters%20brain%20tissue.](https://www.ninds.nih.gov/health-information/disorders/traumatic-brain-injury#:~:text=Traumatic%20brain%20injury%20(TBI)%2C,skull%20and%20enters%20brain%20tissue.)

https://www.cdc.gov/traumaticbraininjury/get_the_facts.html)

DIAGNOSING: Moderate to severe traumatic brain injuries can include any of the signs and symptoms of mild injury may appear within the first hours to days after a head injury. Some physical symptoms include loss of consciousness from several minutes to hours, persistent headache or headache that worsens, dilation of one or both pupils of the eyes, and/or clear fluids draining from the nose or ears.

(Source: <https://www.mayoclinic.org/diseases-conditions/traumatic-brain-injury/symptoms-causes/syc-20378557>)

NEW TECHNOLOGY: A therapeutic method for harnessing the body's immune system to protect against brain damage was published in May by researchers from the Babraham Institute's Immunology research program. The collaboration between Professor Adrian Liston of Babraham Institute in England and Professor Matthew Holt of University of Porto produced a targeted delivery system for boosting the numbers of specialized anti-inflammatory immune cells specifically within the brain to restrict brain inflammation and damage. Their brain-specific delivery system protected against brain cell death following brain injury, stroke and in a model of multiple sclerosis.

(Source: <https://www.sciencedaily.com/releases/2022/05/220526112749.htm>)

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com