

WHAT IS A CONCUSSION?



A CONCUSSION IS AN INJURY TO THE BRAIN



A concussion is classified as a type of mild traumatic brain injury (mTBI) and occurs when the brain is jostled back and forth within the skull, either through a blow or strike to the head, face and neck. They can also occur indirectly through hits to the body.

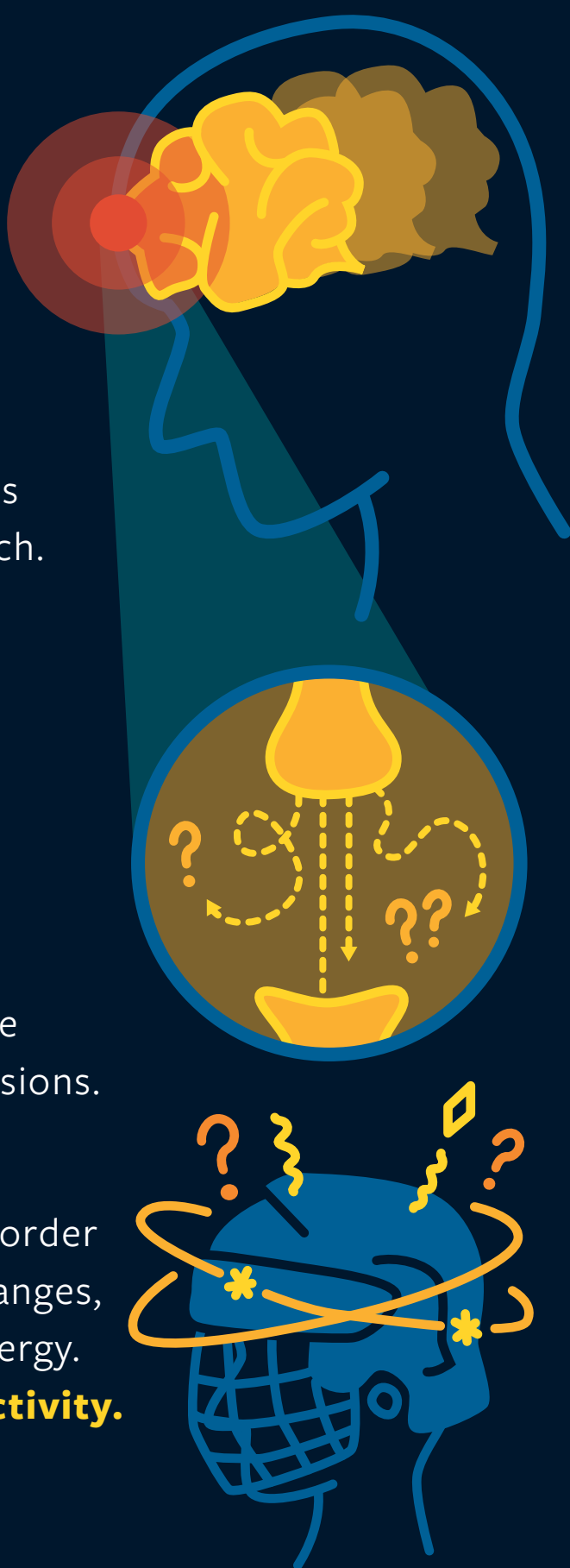
WHAT HAPPENS TO YOUR BRAIN?

Following the impact, **your brain moves rapidly, back and forth, inside the skull.** These rapid movements disrupt cell membranes and cause the brain tissue to stretch.

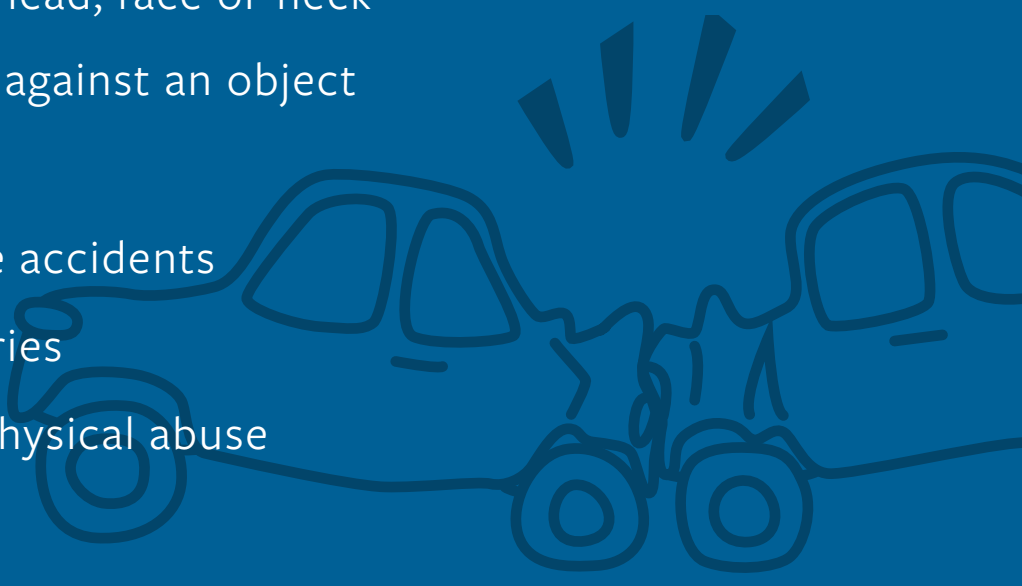
Concussions are considered a functional injury because there are no structural changes seen.

However, **concussions result in microstructural damage** to nerve tracts and impaired neurotransmissions.

The brain requires extra energy in order to repair these microstructural changes, but is unable to get the needed energy. **This results in altered neural activity.**



HOW DO THEY OCCUR?

- Blows to the head, face or neck
 - Striking head against an object
 - Falls
 - Motor vehicle accidents
 - Sporting injuries
 - Assault and physical abuse
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SOURCES

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