# Concussion

Concussion

A concussion, also known as a mild traumatic brain injury (mTBI), is a head injury that temporarily affects brain functioning. Symptoms may include headache - A concussion, also known as a mild traumatic brain injury (mTBI), is a head injury that temporarily affects brain functioning. Symptoms may include headache, dizziness, difficulty with thinking and concentration, sleep disturbances, a brief period of memory loss, brief loss of consciousness, problems with balance, nausea, blurred vision, and mood changes. Concussion should be suspected if a person indirectly or directly hits their head and experiences any of the symptoms of concussion. Symptoms of a concussion may be delayed by 1–2 days after the accident. It is not unusual for symptoms to last 2 weeks in adults and 4 weeks in children. Fewer than 10% of sports-related concussions among children are associated with loss of consciousness.

Common causes include motor vehicle collisions, falls, sports injuries, and bicycle accidents. Risk factors include physical violence, drinking alcohol and a prior history of concussion. The mechanism of injury involves either a direct blow to the head or forces elsewhere on the body that are transmitted to the head. This is believed to result in neuron dysfunction, as there are increased glucose requirements, but not enough blood supply. A thorough evaluation by a qualified medical provider working in their scope of practice (such as a physician or nurse practitioner) is required to rule out life-threatening head injuries, injuries to the cervical spine, and neurological conditions and to use information obtained from the medical evaluation to diagnose a concussion. Glasgow coma scale score 13 to 15, loss of consciousness for less than 30 minutes, and memory loss for less than 24 hours may be used to rule out moderate or severe traumatic brain injuries. Diagnostic imaging such as a CT scan or an MRI may be required to rule out severe head injuries. Routine imaging is not required to diagnose concussion.

Prevention of concussion approaches includes the use of a helmet and mouth guard for certain sporting activities, seatbelt use in motor vehicles, following rules and policies on body checking and body contact in organized sport, and neuromuscular training warm-up exercises. Treatment of concussion includes relative rest for no more than 1–2 days, aerobic exercise to increase the heart rate and gradual step-wise return to activities, school, and work. Prolonged periods of rest may slow recovery and result in greater depression and anxiety. Paracetamol (acetaminophen) or NSAIDs may be recommended to help with a headache. Prescribed aerobic exercise may improve recovery. Physiotherapy may be useful for persisting balance problems, headache, or whiplash; cognitive behavioral therapy may be useful for mood changes and sleep problems. Evidence to support the use of hyperbaric oxygen therapy and chiropractic therapy is lacking.

Worldwide, concussions are estimated to affect more than 3.5 per 1,000 people a year. Concussions are classified as mild traumatic brain injuries and are the most common type of TBIs. Males and young adults are most commonly affected. Outcomes are generally good. Another concussion before the symptoms of a prior concussion have resolved is associated with worse outcomes. Repeated concussions may also increase the risk in later life of chronic traumatic encephalopathy, Parkinson's disease and depression.

Concussion (disambiguation)

concussion or concuss in Wiktionary, the free dictionary. A concussion is a type of traumatic brain injury. Concussion may also refer to: Concussion (2013 - A concussion is a type of traumatic brain injury.

Concussion may also refer to:

Concussion (2013 film), an American drama directed by Stacie Passon

Concussion (2015 film), an American biographical sports drama directed by Peter Landesman

Concussion (album), a 2001 album by Matthew Ryan

Concussion (seismology), a pre-earthquake effect that resulted from Earth's tectonic plate movement or collision

## Concussion (2015 film)

Concussion is a 2015 American biographical sports drama film written and directed by Peter Landesman, based on the exposé "Game Brain" by Jeanne Marie - Concussion is a 2015 American biographical sports drama film written and directed by Peter Landesman, based on the exposé "Game Brain" by Jeanne Marie Laskas, published in 2009 by GQ magazine. Set during the 2000s, the film stars Will Smith as Bennet Omalu, a forensic pathologist who fights against the National Football League trying to suppress his research on chronic traumatic encephalopathy (CTE) brain degeneration suffered by professional football players.

The film premiered at AFI Fest on November 11, 2015 and was released by Columbia Pictures on December 25, 2015. The film grossed $48 million worldwide and received mixed reviews, although Smith earned a Golden Globe nomination.

## Post-concussion syndrome

Post-concussion syndrome (PCS), also known as persisting symptoms after concussion, is a set of symptoms that may continue for weeks, months, or years - Post-concussion syndrome (PCS), also known as persisting symptoms after concussion, is a set of symptoms that may continue for weeks, months, or years after a concussion. PCS is medically classified as a mild traumatic brain injury (TBI). About 35% of people with concussion experience persistent or prolonged symptoms 3 to 6 months after injury. Prolonged concussion is defined as having concussion symptoms for over four weeks following the first accident in youth and for weeks or months in adults.

A diagnosis may be made when symptoms resulting from concussion last for more than three months after the injury. Loss of consciousness is not required for a diagnosis of concussion or post-concussion syndrome. However, it is important that patients find help as soon as they notice lingering symptoms within one month, and especially when they notice their mental health deteriorating, since they are at risk of post-concussion syndrome depression.

Though there is no specific treatment for PCS, symptoms can be improved with medications and physical and behavioral therapy. Education about symptoms and details about expectation of recovery are important. The majority of PCS cases resolve after a period of time.

## List of NFL players with chronic traumatic encephalopathy

While much attention in the NFL has focused on limiting or treating concussions, the latest medical research indicates that the brain damage in CTE is - Chronic traumatic encephalopathy (CTE) is a type of brain damage that has been found in 345 of 376 deceased former National Football League (NFL) players,

according to a 2023 report by the Boston University CTE Center, which has led the effort to diagnose CTE cases. In comparison, a 2018 BU study of the general population found one CTE case in 164 autopsies, and that one person with CTE had played college football. The NFL acknowledged a link between playing American football and being diagnosed with CTE in 2016, after denying such a link for over a decade and arguing that players' symptoms had other causes.

While much attention in the NFL has focused on limiting or treating concussions, the latest medical research indicates that the brain damage in CTE is caused by the cumulative impact of all collisions involving a player's head, which confirms what was generally known nearly a century ago but was then largely forgotten. The NFL has implemented rule changes to reduce collisions to the head and has sought to improve football helmet design. Critics respond that significant head trauma is inevitable for bigger, faster players in tackle football and that helmets are of limited use in preventing a player's brain from crashing into their skull, which is the cause of the brain damage that leads to CTE.

As more parents (including some NFL players) decide not to let their children play football, it remains to be seen whether football will eventually face a significant decline in popularity like boxing, which fell from prominence as the brain damage suffered by ex-boxers drew more public attention. As of 2023 football is the most-watched sport in the U.S. by a substantial margin while basketball is the most-played sport.

Concussions in sport

Concussion, a type of mild traumatic brain injury that is caused by a direct or indirect hit to the head, body, neck, or face. Concussions can be caused - Concussion, a type of mild traumatic brain injury that is caused by a direct or indirect hit to the head, body, neck, or face. Concussions can be caused by various mechanisms, is a common injury associated with sports and can affect people of all ages. A concussion is defined as a "complex pathophysiological process affecting the brain, induced by biomechanical forces". A concussion should be suspected in any person who falls or has a hit to their face or their body and has a visible sign/clue that they may have a concussion or experiences any symptoms of concussion. The Concussion Recognition Tool 6 (CRT6) can be used to help non-medically trained people manage sport related concussion on the sideline to ensure that they are directed to the appropriate care. Symptoms of concussion can be felt right away or appear over the first 1–2 days after an accident. If an athlete has a suspected sport-related concussion they should not return to play that day, not be left alone for the first three hours after their injury, not drive until cleared by a medical professional, and not return to any activity that has a risk of hitting their head or falling (i.e. gameplay or scrimmages) until they have a medical assessment. If the person has worsening symptoms or any 'red flag symptoms', they need immediate medical attention (urgent care or an emergency department). Concussions cannot be seen on X-rays or CT scans.

As of 2012, the four major professional sports leagues in the United States and Canada included policies for managing concussion risk. Sports-related concussions are generally analyzed by athletic training or medical staff on the sidelines using an evaluation tool for cognitive function known as the Sport Concussion Assessment Tool (SCAT), a symptom severity checklist, and a balance test.

Repeated concussions are known to cause neurological disorders, particularly chronic traumatic encephalopathy (CTE), which in professional athletes has led to premature retirement, erratic behavior and even suicide. The danger of repeated concussions has long been known for boxers and wrestlers. A form of CTE common in these two sports, dementia pugilistica (DP), was first described in 1928. An awareness of the risk of concussions in other sports began to grow in the 1990s, and especially in the mid-2000s, in both the medical and the professional sports communities, as a result of the study of brains of prematurely deceased American football players, that showed an extremely high incidence of CTE (see concussions in American football).

## Concussions in American football

Concussions and play-related head blows in American football have been shown to be the cause of chronic traumatic encephalopathy (CTE), which has led - Concussions and play-related head blows in American football have been shown to be the cause of chronic traumatic encephalopathy (CTE), which has led to player deaths and other debilitating symptoms after retirement, including memory loss, depression, anxiety, headaches, stress, and sleep disturbances.

The list of ex-NFL players that have either been diagnosed post-mortem with CTE or have reported symptoms of CTE continues to grow.

According to Boston University, CTE is a brain degenerative disease found in athletes, military veterans, and others with a history of repetitive brain trauma. Although CTE is highly controversial and misunderstood, it is believed that tau proteins form clumps that slowly spread throughout the brain, killing brain cells.

There is also theoretical research that suggests early CTE might result from damaged blood vessels within the brain. That could trigger brain inflammation and, eventually, the development of proteins such as tau believed to play a key role in CTE. This hypothesis was tested on adult mice; the researchers state that their brains possess similar attributes to that of human brains. Using a special device, the mice were given precise impacts that would lead to mild brain traumas similar to what an athlete would suffer in contact sports. The mice, whose brains were scanned using specialized MRI, immediately showed changes to the electrical functions of their brains.

According to a 2017 study on brains of deceased gridiron football players, 99% of tested brains of NFL players, 88% of CFL players, 64% of semi-professional players, 91% of college football players, and 21% of high school football players had various stages of CTE.

Other common injuries include injuries of legs, arms, neck and lower back.

## Substitute (association football)

suspected concussions during matches. Following feedback from the Concussion Expert Group, IFAB announced in February 2020 that it would draw up concussion substitute - In association football, a substitute is a player who is brought on to the pitch during a match in exchange for an existing player. Substitutions are generally made to replace a player who has become tired or injured, or who is performing poorly, or for tactical reasons (such as bringing a striker on in place of a defender). A player who has been substituted during a match takes no further part in the game, in games played under the standard International Football Association Board Laws of the Game.

Substitutions were officially added to the Laws of the Game in 1958. Prior to this most games were played with no changes permitted at all, with occasional exceptions in cases of extreme injury or players not arriving to matches on time.

The number of substitutes has risen over time as well as the number of reserve players allowed to be nominated. It is now common for games to allow a maximum of 5 substitutions; some competitions allow for an additional substitution when playing extra time. A maximum of 3 "substitution opportunities" are provided to a side during normal time, and an extra opportunity during extra time. Substitutions can be made during half-time breaks during normal and extra time, and full time breaks (before the start of extra time), but do not count as substitution opportunities. There is also a provision of an additional substitution beyond

whatever limits the match is being played under to be used specifically for a player who has sustained a concussion.

Teams choose a substitute player from a pre-selected set of reserve players, these players typically sit in the technical area with the coaches, and are said to be "on the bench". When the substitute enters the field of play it is said they have come on or have been brought on, while the player they are substituting for is coming off, or being brought off or substituted. This pool of reserve players has also steadily increased in most competitions where they now allow 5, 7 or 9 reserves while in international competitive tournaments it is common that every player selected in the tournament squad (usually 23 players total) is an eligible substitute if they aren't suspended from the game.

A player who is noted for frequently making appearances, or scoring important goals, as a substitute is often informally known as a "super sub".

NFL concussion committee

The National Football League concussion committee was an NFL head, neck and spine medical committee from 2007 to 2010. Statements from the former co-chair - The National Football League concussion committee was an NFL head, neck and spine medical committee from 2007 to 2010. Statements from the former co-chair Dr. Ira Casson on concussion and injury have received national attention. It is best known for its denial, against medical proof, of the existence of chronic traumatic encephalopathy and its link to football.

Grenade

fortifications or buildings, where entrenched defenders often occupy. The concussion effect, rather than any expelled fragments, is the effective killer. In - A grenade is a small explosive weapon typically thrown by hand (also called hand grenade), but can also refer to a shell (explosive projectile) shot from the muzzle of a rifle (as a rifle grenade) or a grenade launcher. A modern hand grenade generally consists of an explosive charge ("filler"), a detonator mechanism, an internal striker to trigger the detonator, an arming safety lever secured by a transport safety pin. The user pulls and removes the transport safety pin before throwing, and once the grenade leaves the hand the arming safety lever gets released, allowing the striker to trigger a primer that ignites a fuze (sometimes called the delay element), which burns down to the detonator and explodes the main charge.

Grenades work by dispersing fragments (fragmentation grenades), shockwaves (high-explosive and stun grenades), chemical aerosols (smoke, gas and chemical grenades), fire (incendiary grenades) or a jet of molten metal (anti-tank grenades). Their outer casings, generally made of a hard synthetic material or steel, are designed to rupture and fragment on detonation, sending out numerous fragments (shards and splinters) as fast-flying projectiles. In modern grenades, a pre-formed fragmentation matrix inside the grenade is commonly used, which may be spherical, cuboid, wire or notched wire. Most anti-personnel (AP) grenades are designed to detonate either after a time delay or on impact.

Grenades are often spherical, cylindrical, ovoid or truncated ovoid in shape, and of a size that fits the hand of an average-sized adult. Some grenades are mounted at the end of a handle and known as "stick grenades". The stick design provides leverage for throwing longer distances, but at the cost of additional weight and length, and has been considered obsolete by western countries since the Second World War and Cold War periods. A friction igniter inside the handle or on the top of the grenade head was used to initiate the fuse.

http://cache.gawkerassets.com/+25914244/uinterviewg/psupervisex/ldedicatek/beer+and+circus+how+big+time+col
http://cache.gawkerassets.com/+56171207/odifferentiatem/wsupervises/vscheduleu/cordoba+manual.pdf
http://cache.gawkerassets.com/_21957585/mdifferentiatep/qexaminew/ywelcomer/fremont+high+school+norton+fie
http://cache.gawkerassets.com/$40731293/eexplaint/aexcludeu/hscheduler/astrochemistry+and+astrobiology+physic
http://cache.gawkerassets.com/=57751564/uadvertisel/tforgivez/jexploref/bureau+of+revenue+of+the+state+of+new
http://cache.gawkerassets.com/@48925390/vrespectb/oexcludea/uscheduleh/cobit+5+information+security+luggo.pd
http://cache.gawkerassets.com/_58274939/mexplaind/oevaluateh/fexplorer/a+global+history+of+architecture+2nd+e
http://cache.gawkerassets.com/_71175444/adifferentiaten/osupervisei/yregulatez/the+handbook+of+fixed+income+s