

Study: CTE Found in 99% of Brains from Deceased NFL Players

All but one — a neuropathologist discovered 110 out of 111 brains donated from NFL players have CTE, a neurodegenerative brain disease caused by blows to the head.



Neuropathologist, Dr. Ann McKee, examined the brains of 111 N.F.L. players — and 110 were found to have C.T.E., the degenerative disease linked to brain trauma. REUTERS

By [Alana Winns](#) / July 26, 2017

The NFL has been hit with significant scientific evidence confirming an NFL player's chance of developing chronic traumatic encephalopathy, also known as CTE — a

degenerative disease caused by repeated blows to the head.

According to a [study](#) published Tuesday in The Journal of the American Medical Association, 202 brains from deceased football players were donated for research. Of the 202 players, 111 of them played in the NFL — and 110 of them were found to have markings of CTE.

In other words, all but one brain showed signs of having a disease that can cause a multitude of symptoms in its sufferers, including memory loss, confusion, anxiety, depression, impulsivity, dementia and sometimes suicide. Problems can arise years after trauma to the head has stopped and is typically found in aggressive contact sports such as the American staple, Football.

“There’s no question that there’s a problem in football. That people who play football are at risk for this disease,” Dr. Ann McKee, director of Boston University’s CTE Center and co-author of the new study, told CNN. “And we urgently need to find answers for not just football players, but veterans and other individuals exposed to head trauma.”

Scientifically, the disease is indicated by an abnormal tau protein in the brain that can disable neuropathways.

However, it can only be confirmed during an autopsy — something that takes place after a person has already died — causing an even bigger voice of concern.

Notable athletes who have been confirmed to have had the disease, including Bubba Smith, Ken Stabler, Dave Duerson and Kevin Turner were some who donated their brains to the study, according to CNN. Former ex-

Patriots player Aaron Hernandez, whose life ended after he was found hanging in his prison cell back in April, will have his brain [donated](#) for research as well.

According to the findings, NFL linemen made up the largest group players by a landslide — totaling 44 — who tested positive for CTE. [The New York Times](#) noted that the study's figures are hardly surprising considering “nearly half of the 22 players on the field are defensive and offensive linemen,” but also because linemen “knock heads on most plays.”

However, the disease findings didn't end there. There were confirmed cases of young players suffering from the degenerative illness as well.

A combination of 14 high school players and 48 out of the 53 college players were diagnosed as having CTE in the study, bringing the total to 177 confirmed cases out of the 202 brains researched. When Stanford researchers compiled data regarding CTE in athletes, they found that a [college offensive lineman sustained 62 blows](#) to the head in a single game, which is equivalent to driving a car into a brick wall at 30 mph.

The NFL has officially [acknowledged](#) a link between football and CTE, resulting in the league urging children to stay away from playing the sport in such an [aggressive way](#), but instead to play in a way that implements safe tackling techniques along with encouragement of flag football.

“The medical and scientific communities will benefit from this publication and the NFL will continue to work with a wide range of experts to improve the health of current and

former NFL athletes,” the NFL told CNN. They further commented that “there are still many unanswered questions relating to the cause, incidence and prevalence of long-term effects of head trauma such as CTE.”