

## Making Sense of... CTE

### Overview:

- CTE, or Chronic Traumatic Encephalopathy, is a degenerative brain disease found in those who sustain repetitive blows to the head. In recent years, CTE has been a major topic of debate in the NFL, due to the violent nature of the sport.
- To date, CTE is only detectable posthumously through analysis of brain tissue, and living people concerned with their own status can only watch for symptoms (depression, aggression, suicidal behavior, and memory loss) and have scans conducted that show brain changes.
- A recent study of 202 donated brains from former football players found almost 90% had signs of CTE, and of those who had played in the NFL, 110 of 111 had the disease.<sup>1</sup>
- As an issue of risk, CTE has also been cited as a concern for many besides football players, including soldiers, soccer players, and others exposed to repetitive head trauma.
- Doctors in NY and at BU may have discovered a way to diagnose CTE in living brains. By using a “tau tracer”-- a substance that binds to the protein tau, which develops in a distinct way in CTE patient brains – on a patient while they receive a PET scan, doctors suspect that they can better compare living and deceased brains, and thus diagnose and treat patients.
- The doctors caution treatment would still be both imperfect and expensive, but this method of diagnosis will be available in five years, which would allow for clinical trials of new medications.

### Required Reading (Source bias rating via [AllSides Bias Rating™](#) when available):

- [The Future of Detecting Brain Damage in Football](#), The Atlantic (leans left)
- [FAQ About CTE](#), Boston University CTE Research Center
- [What Football Does to the Brain, According to a Major Study](#), PBS (leans left)
- [Youth Football is Linked to Later-Life Emotional and Cognitive Problems](#), WBUR
- [NFL Exec Bombshell Admission: Yes, a Football-Brain Damage Link](#), NY Post (leans right)
- [Breakthrough May Lead to Ability to Diagnose CTE in Living Football Players](#), Washington Post (leans left)
- [Titans and Concussions: Polling an Entire NFL Locker Room on the League’s Biggest Issue](#), Tennessean

### Questions for discussion:

- Who is affected by CTE and this latest news on CTE research?
- Who/what are the stakeholders in this research, and what are the competing interests at play?
- Is CTE a public health issue? If so, where does the responsibility lie for advancing treatment?
- Can you think of any intersections with issues of equity when it comes to this disease?
- What do you see as the next steps for educating the public on CTE? Who are the best messengers and why?

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<sup>1</sup> One limitation of this study, as with many studies of CTE, is that the brains donated aren’t at random; they are often given because of suspicion that the person had CTE.

- Who do you think the public would view as experts in this conversation? What role would these experts play in bringing CTE into the public spotlight?
- What role might dialogue and deliberation play in the public conversation about CTE?
- What role could Tufts University play in serving to elucidate public knowledge about CTE and the risks associated with it?