

NFL KICKOFFS:

The Physics of the most dangerous play in the NFL.



1600 LBS



Force generated by a 200 LB player during a tackle.

[Source: Timothy Gay](#)

23.1 MPH



(Raheem Mostert)

Fastest speed recorded by a ball carrier in 2020.

[Source: NFL](#)

5X

NFL Research shows that concussions were five times more likely to occur on kickoffs than any other play. Modern players are bigger, faster, and stronger than ever, and they often collide at full speed during kickoffs.

[Source: ESPN](#)

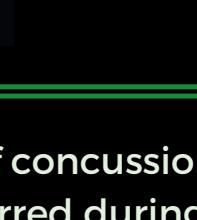
49% BIGGER



The average weight comparison between lineman blockers and smaller players trying to make a tackle.

[Source: PFF](#)

51% STRONGER



The average bench press comparison between lineman blockers and smaller players trying to make a tackle.

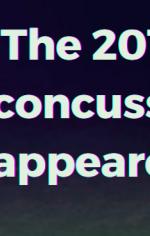


Two-thirds of concussions suffered during kickoffs occurred during wedge blocks. Wedge blocks often involve two 300-lb linemen double-teaming smaller players.

[Source: ESPN](#)

In response to the statistics about concussions on kickoffs, the NFL made changes in 2018 that fundamentally changed how kickoffs were covered and returned.

- Kickoff teams were no longer given a running start
- Receiving teams could not block until the ball hit the ground or was touched
- Dangerous double-teaming wedge blocks were banned



35% DECREASE IN CONCUSSIONS ON KICKOFFS

The 2018 rule change resulted in a 35% decrease in concussions on kickoffs for the 2018 season and appeared to have made kickoffs somewhat safer.

