

NFL Kickoffs

The Evolution of the Most Exciting and Dangerous Play in the NFL

Have recent rule changes made kickoffs safer?

Topics Covered in this Presentation

1. Why are kickoffs so dangerous?
2. Timelines for the rule changes
3. What were the effects of the rule changes?
4. How were the 2018 rule changes different from prior changes?
5. Future options – Can kickoffs be replaced?

What makes kickoffs dangerous?

In a word –
physics.

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



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

What are wedge blocks, and why are they so unsafe?

Wedge blocks are a type of double-teaming block.

49% BIGGER



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

Source: PFR

51% STRONGER



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



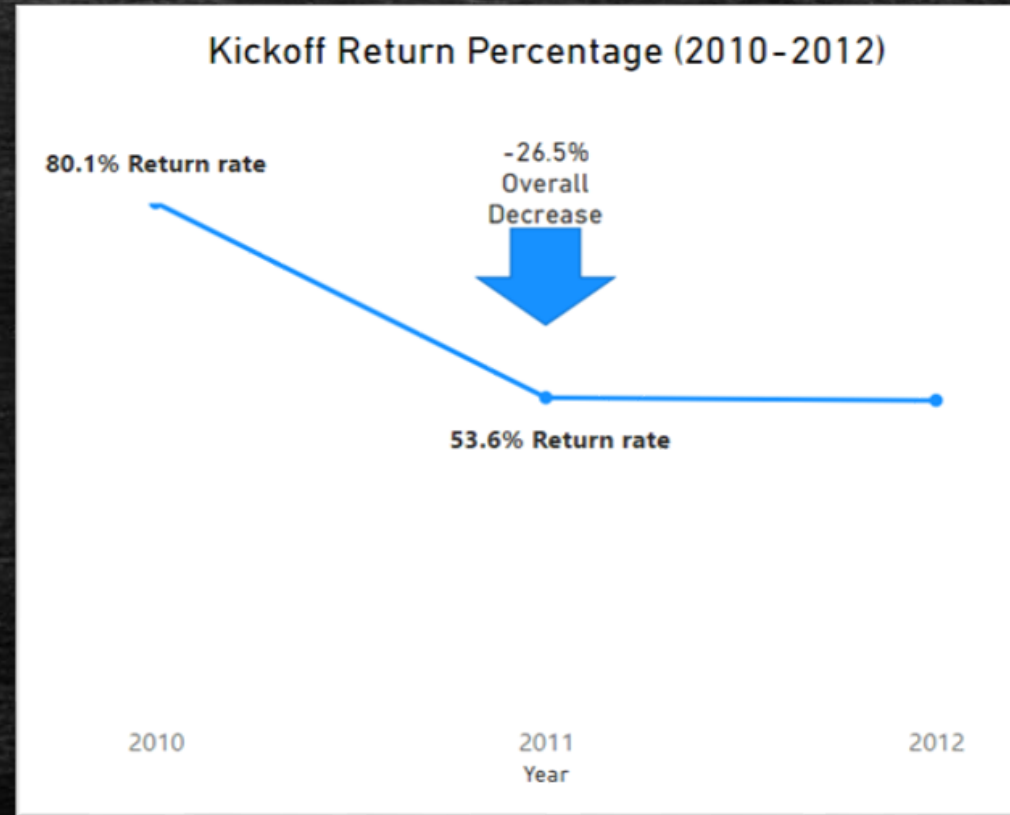
Two-thirds of concussions suffered during kickoffs occurred during wedge blocks. Wedge blocks often involve two 300-lb linemen double-teaming smaller players.

Source: ESPN

2011: Changing the kickoff rules

The Good:

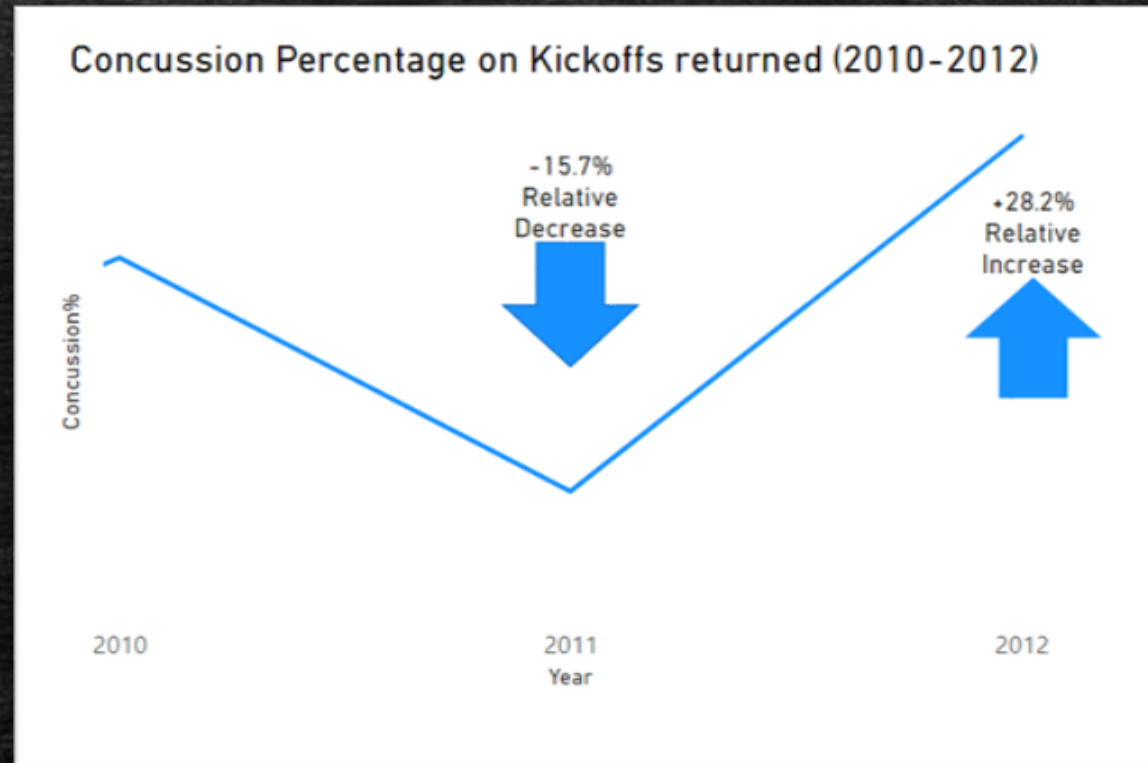
Kickoff return rates drop.



2011: Changing the kickoff rules

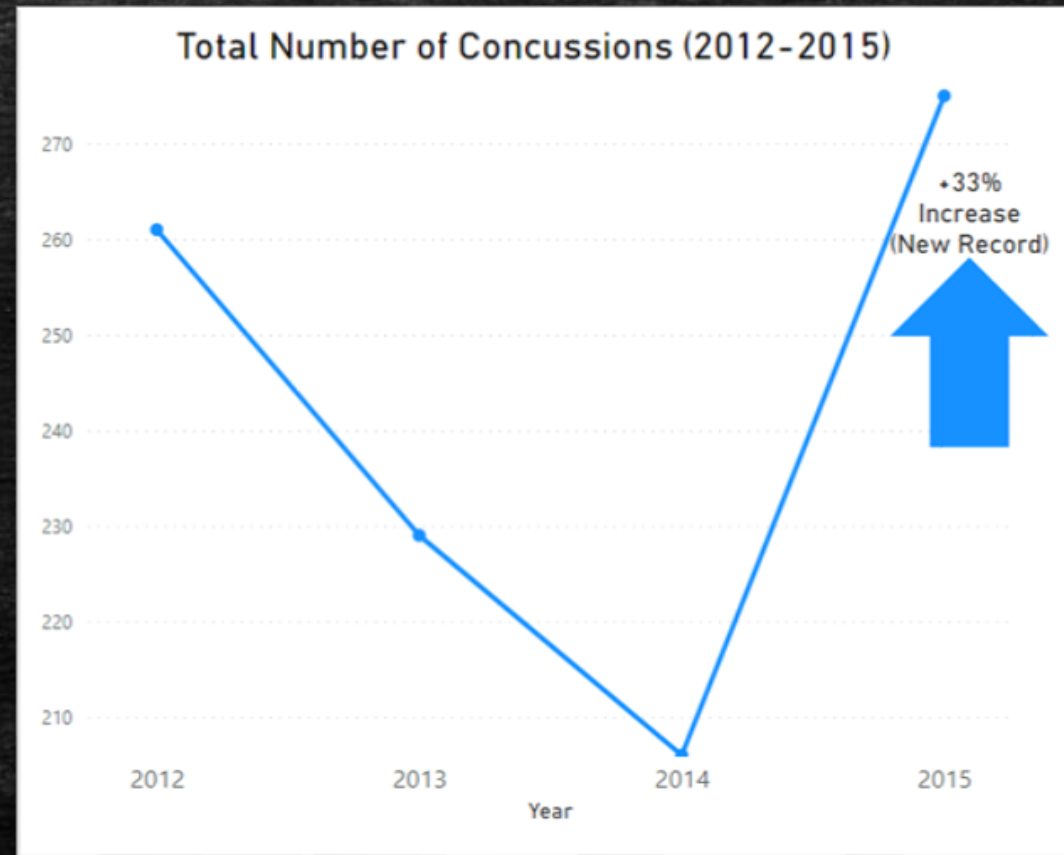
The Bad:

After an initial decline, the concussion rate on returned kicks exceeded prior levels.



2015: League-wide concussions surge

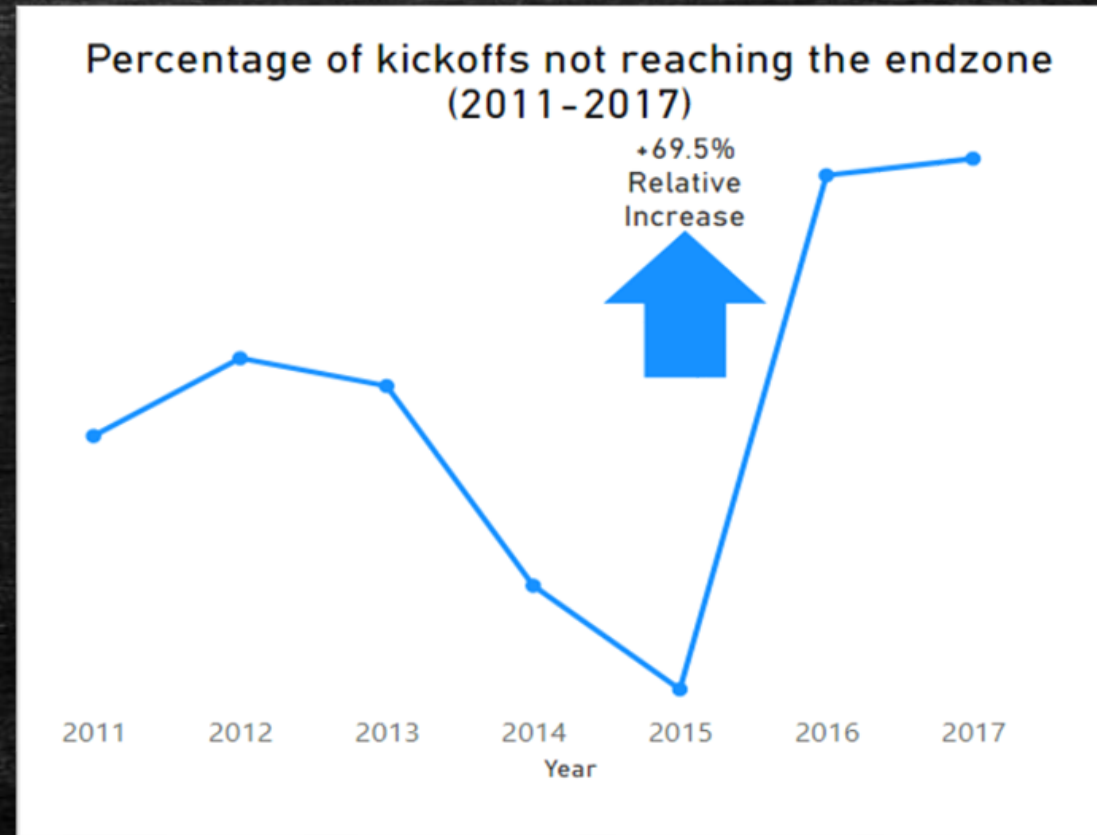
Documented
concussions surge
33% to a new record



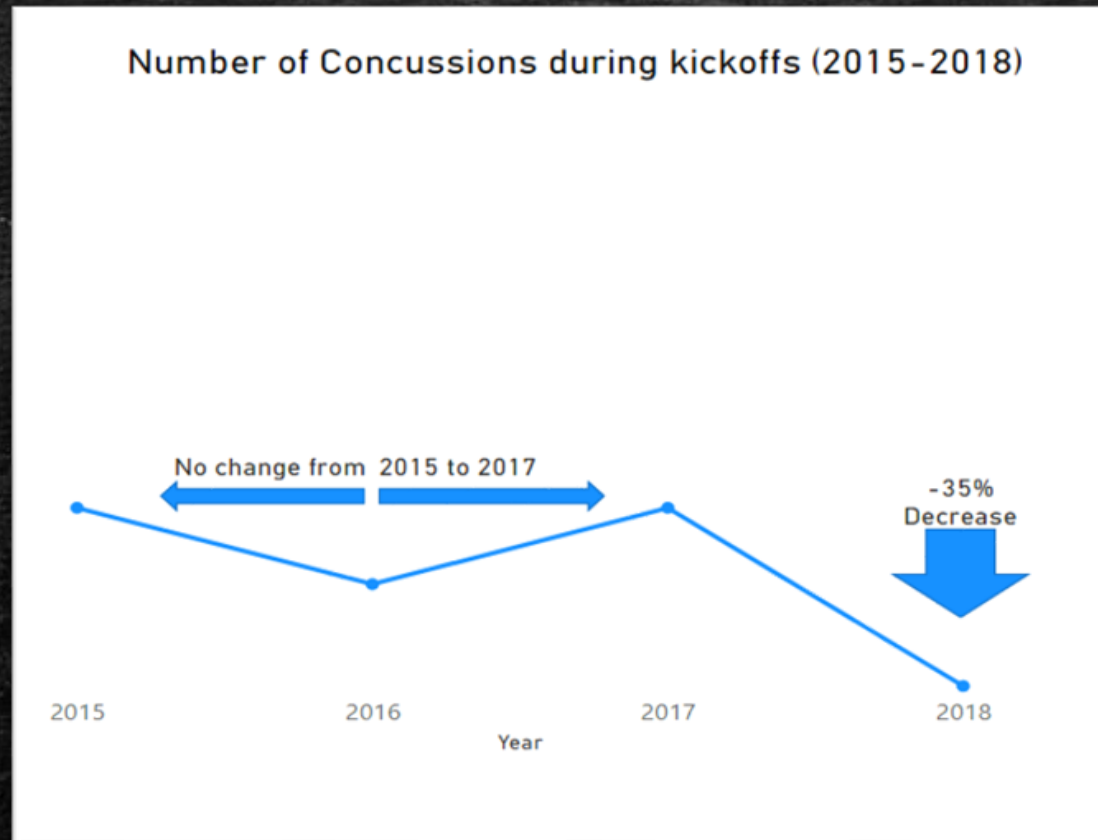
2016: Another change to kickoff rules

The new rule moved touchbacks out to the 25-yard line.

Rather than surrender 5 additional yards, kicking teams purposely kicked short of the endzone.

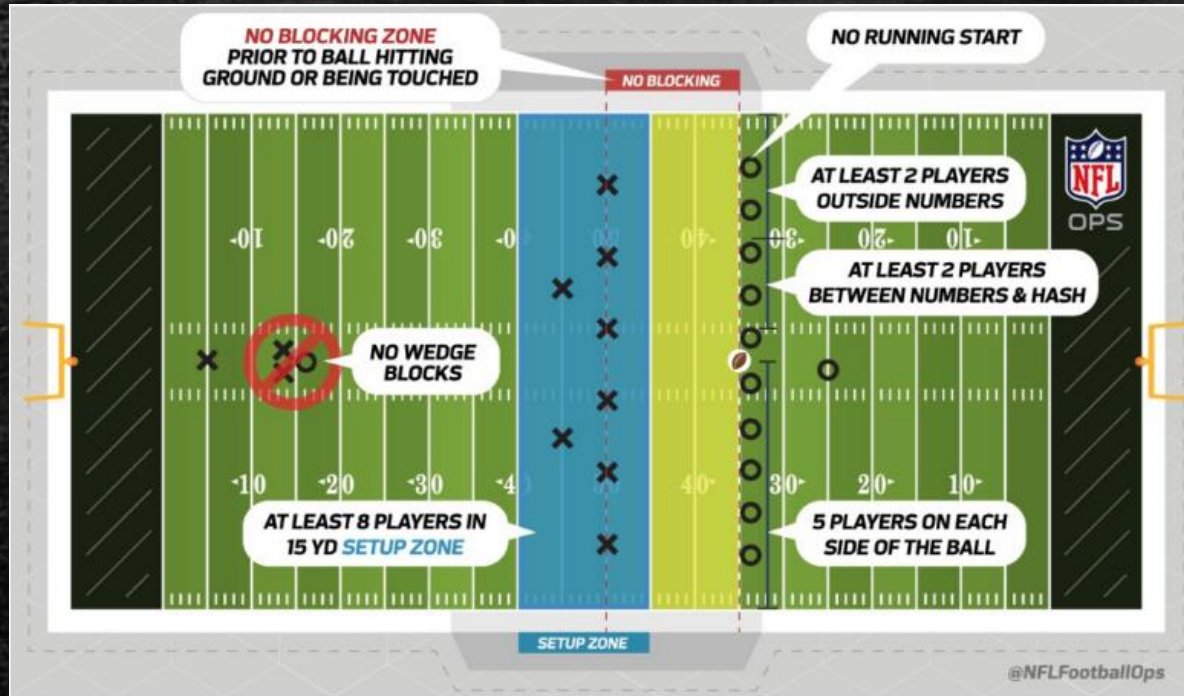


2016 Rules changes had mixed results



The initial reduction in concussions on kickoffs was reversed a year later. 2018 rule changes were more effective.

How were the 2018 Rule Changes different?



The 2018 Rule changes addressed the physics behind kickoffs.

Future options – Can kickoffs be replaced?

NFL Commissioner Roger Goodell has previously mentioned replacing kickoffs with punts, but this idea is novel and has almost no chance of happening.

Sources

1. Higgins, M. (2017, November 14). *Football Physics: The Anatomy of a Hit*. Popular Mechanics.
<https://www.popularmechanics.com/adventure/sports/a2954/4212171/>.
2. *NGS: NFL Next Gen Stats*. Next Gen Stats. (n.d.).
<https://nextgenstats.nfl.com/stats/top-plays/fastest-ball-carriers/2020/REG/all>.
3. Seifert, K. (2018, November 15). *The NFL's rule tweaks are saving the kickoff from extinction*. ESPN. https://www.espn.com/blog/nflnation/post/_id/287320/the-nfl-rule-tweaks-saving-kickoff-from-extinction.
4. *Football: NFL Combine Results*. Stathead.com. (n.d.).
<https://stathead.com/football/nfl-combine-results.cgi>.
5. Operations, N. F. L. F. (2018, May 22). *Here's a summary of all the changes to the @NFL kickoff rule for 2018 - see how they compare to the previous rule*. [pic.twitter.com/4R4aK5sZwK](https://twitter.com/NFLFootballOps/status/999055932360445952). Twitter.
<https://twitter.com/NFLFootballOps/status/999055932360445952>.