Incidence of Concussion Following NFL &Idquo;Lowering the Helmet to Initiate Contact" Penalties

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INTRODUCTION: The enforcement of penalties for 'Lowering the Helmet to Initiate Contact' increased each year with defensive players most penalized and offensive players most likely to suffer concussion injuries in this retrospective, descriptive, epidemiological study.

METHODS:

Online databases were used to review all "Lowering the Helmet" penalties within the National Football League (NFL) from 2018 to 2020, game logs were used to identify players involved, and NFL injury reports were reviewed for each player involved in the respective penalty. Player position and concussion incidence were recorded for each instance. RESULTS:

For the 2018, 2019 and 2020 seasons, the "lowering the Helmet" penalty was enforced 16, 31, and 40 times, respectively. Of the 87 instances, 81 were initiated by the defensive player (56 involving the Defensive Back position), 5 the offensive player, and 1 on special teams. The incidence of concussion was 3.4% (3/87) with one occurring each year and all concussions occurring in the offensive player.

DISCUSSION AND CONCLUSION:

Enforcement of "Lowering the Helmet" penalties increased from 2018 to 2020 with defensive players most likely to initiate the penaltied contact, an incidence of concussion in 3.4% of the penalties, and concussion most likely to occur in the offensive player. While this incidence of concussions is higher than previously reported outcomes, it is not as high as expected considering the high impact nature of these collisions. However further education into tackling technique and adoption will benefit long-term understanding of this penalty effect on player safety.