

# Study finds youth football players have significant differences in head impact exposure

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A study of 97 youth football players ages 9-13 years who participated in different age- and weight- based levels over four seasons of play found that that youngsters experienced a total of 40,538 head impacts. Measures of linear head acceleration and the number of impacts per player in competition versus practice sessions differed significantly depending on the youngsters' age/weight level, as reported in the study published in *Journal of Neurotrauma*.

Joel Stitzel, PhD, Wake Forest School of Medicine, Winston-Salem, NC and coauthors from Wake Forest School of Biomedical Engineering and Sciences and University of Texas Southwestern, Dallas, TX present their findings in the article entitled "Head Impact Exposure in Youth Football: Comparing Age and Weight Based Levels of Play." The researchers emphasize that the significant increases seen in the magnitudes of [head impact](#) from one level to the next suggest that all [youth](#) athletes should not be evaluated as one group when assessing head impact exposure and injury risk. The data obtained from this type of study can be useful for designing evidence-based interventions.

"As controversy rages in relation to the damaging consequences of [youth football](#), this study is particularly timely. It forces us to recalibrate our understanding of youth head impact exposure not only in practice and game day settings but also in the context of the athlete's age," says John T. Povlishock, PhD, Editor-in-Chief of *Journal of Neurotrauma* and Professor, Medical College of Virginia Campus of Virginia Commonwealth University, Richmond.

**More information:** Mireille E. Kelley et al, Head Impact Exposure in Youth Football: Comparing Age- and Weight-Based Levels of Play, *Journal of Neurotrauma* (2017). [DOI: 10.1089/neu.2016.4812](https://doi.org/10.1089/neu.2016.4812)

Provided by Mary Ann Liebert, Inc

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