

BETTER LABORATORY PERFORMANCE

TOP-PERFORMING GROUP



Prohibited Helmets³

Rawlings Impulse	Schutt Air XP
Rawlings Impulse+	Schutt Air XP Pro
Rawlings Tachyon	Schutt Vengeance Z10 (204100)
Rawlings Quantum	SG Varsity
Rawlings Quantum+	SG 2.0
Riddell VSR-4	

¹New model
²Results shown are for a helmet with interior padding customized for the testing headform. Actual performance and ranking may vary since these helmets are customized for each player's head shape.
³These helmets have been prohibited for all NFL players.
 Note: Existing models worn by less than 1% of NFL players are greyed out.



2019 HELMET LABORATORY TESTING PERFORMANCE RESULTS

THE NFL, IN COLLABORATION WITH THE NFLPA, THROUGH THEIR RESPECTIVE APPOINTED BIOMECHANICAL EXPERTS, COORDINATED EXTENSIVE LABORATORY RESEARCH TO EVALUATE WHICH HELMETS BEST REDUCE HEAD IMPACT SEVERITY. THE RESULTS OF THOSE TESTS, WHICH ARE SUPPORTED BY ON-FIELD PERFORMANCE, ARE SET FORTH ON THIS POSTER.

The helmet models are listed in order of their performance in the laboratory testing, with a shorter bar representing better performance. The rankings are based exclusively on the ability of the helmet to reduce head impact severity measures in laboratory testing. Issues with helmet fit, retention, and long-term durability are not addressed in these rankings. Helmets in the Top-Performing Group perform well, with no statistical difference in performance from the three top-ranked helmets. The information presented here is based solely upon the results of this research and the expert opinions of the scientists involved.

The laboratory test conditions were intended to represent potentially concussive head impacts in the NFL. The results of this study should not be extrapolated to collegiate, high school, or youth football.