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A pneumatic ram slams into a Riddell Axiom football helmet during a test at Biocore (a subsidiary of Exos), which ranks helmets in terms of safety for the National Football League. Such testing has driven a wave of innovation in the design of helmets, which now exploit new concepts and materials to absorb shocks with unprecedented effectiveness. See page 544. Credit: Ben Huddleston for Exos

**ON THE PODCAST**

Engineering safer football helmets, and the science behind drug overdoses

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