NOCSAE 2025 Winter Meeting Recap: First-Ever Youth Football Helmet Standard, New Pneumatic Ram Specifications and More

OVERLAND PARK, KS (April 24, 2025) — The National Operating Committee on Standards for Athletic Equipment (NOCSAE) voted to finalize the world's first performance standard for youth football helmets at the NOCSAE Winter Standards Committee Meeting in February. The Standards Committee also reviewed final steps for manufacturing and distribution of NOCSAE's Generation III Headforms and approved modifications to equipment standards for baseball, football and softball. In addition, the NOCSAE Scientific Advisory Committee (SAC) will make recommendations for potential updates to pneumatic ram specifications.

Youth Football Helmet Standard Finalized

The NOCSAE performance standard for youth football helmets (ND006-23m25a) is designed specifically for players below the high school level. The new standard directly addresses unique risk exposures for youth football players which differ significantly from those at or above the high school level. The primary differences in exposure at the youth level include the frequency, type, location and magnitude of head impacts. All these factors are influenced by player age, size, speed and coordination.

The standard is the result of more than 10 years of scientific research, testing and analysis led and funded by NOCSAE to establish sufficient data and youth-specific testing criteria. To allow time for manufacturers to develop youth helmets that meet the standard, the NOCSAE Standards Committee set an effective date of March 1, 2027, for ND006-23m25a.

Learn more about the standard on our website.

Generation III Headform Availability and Distribution

NOCSAE helped to pioneer the development of variable mass biofidelic headforms, which accurately simulate the biomechanics of a human head. These headforms account for impedance and harmonics resulting from real impacts, enabling more precise testing of helmets and projectiles. Over the last few years, NOCSAE has been working to develop its third generation Headform, redesigned with enhanced biofidelity and testing capabilities.

In 2024, the NOCSAE technical director worked with third-party labs to validate the response of NOCSAE's Gen III medium headform and execute consistent updates to the small and large headforms. The molds received their final modifications in November and all three sizes have now been successfully manufactured and tested.

NOCSAE is currently working to distribute the small, medium and large headforms to helmet manufacturers across the country. NOCSAE anticipates that all helmet manufacturers should receive Gen III Headforms by Spring 2025.

Scientific Advisory Committee Report

Dr. Robert Cantu, MA, MD, FACS, FACSM, FAANS, NOCSAE vice president, chair of the NOCSAE Scientific Advisory Committee (SAC) and representative of the American College of Sports Medicine provided an overview of potential updates for the current pneumatic ram test specifications. Before the NOCSAE Gen III Headforms are fully integrated in test procedures, the SAC has determined this is an optimal time to consider refinements to test criteria. The SAC also noted their responsibility to only recommend injury thresholds that improve helmet performance without forcing a specific design and preserve the feasibility of compliance.

While no decisions have been made, potential refinements include:

- Updating pass/fail requirements for a new Severity Index (SI).
- Creating a new Combined Probability (CP) metric to replace the SI in pneumatic ram testing.
- Updating impact locations to more accurately reflect the most frequent on-field impacts.
- Adding an impact location that primarily engages the faceguard.

Standards Updates

The Standards Committee advanced the following revisions and modifications at the Winter Standards Meeting. Detailed information for each standard is available on NOCSAE's website in the NOCSAE Standards Library.

Revisions: *Effective February 2025.*

Testing Requirements for Football Faceguard Recertification [ND089-24a]

• Revision: Removed the drop test requirements for recertification.

Modifications: *Effective immediately.*

Standard Performance Specification for Newly Manufactured Football Helmets [ND002-17m24a]

 Modifications include correcting Table 1 section references for high temperature testing.

Standard Performance Specification for Newly Manufactured Baseball/Softball Catcher's Helmets [ND024-24m24a]

- Modification #1: Adjusting ambient temperature tolerance from ±3° F to ±5° F
- Modification #2: Adjusting Table 2
- Modification #3: Adjusting numbering in Section 9

Standard Performance Specification for Newly Manufactured Baseball/Softball Batter's Helmet Mounted Face Protector [ND072-21m24a]

 Modification: Re-adding footnote indicating compliance criteria for limited contact area (Level 2).

The NOCSAE Standards Committee serves as a consensus body in accordance with <u>ANSI Due Process</u> Requirements for standards development organizations.

Information about all NOCSAE standards and future Standards Committee meetings is available at nocsae.org. Interested parties are invited to submit comments and questions to NOCSAE Executive Director John Parsons at jparsons@nocsae.org. The next NOCSAE Standards Committee Meeting will be held in Kansas City on July 25, 2025.

About NOCSAE

Our mission is to commission research, establish standards for athletic equipment and encourage the dissemination of research findings on sports injury and prevention.

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About NOCSAE

NOCSAE, the National Operating Committee on Standards for Athletic Equipment, is an independent and nonprofit standards development body with the mission to enhance athletic safety through scientific research and the creation of performance standards for athletic equipment. Formed in 1970, NOCSAE is a leading force in the effort to improve athletic equipment and, as a result, reduce injuries. NOCSAE efforts include the development of performance and test standards for football helmets, gloves and facemasks, baseball and softball batter's and catcher's helmets, baseballs and softballs, ice hockey helmets, soccer shin guards, lacrosse helmets and facemasks, and polo helmets. NOCSAE is comprised of a board of directors representing stakeholders from several groups — including consumer and end users, equipment manufacturers and reconditioners, athletic trainers, coaches, equipment managers, and academic and sports medicine associations. These diverse interests have joined forces to arrive at a common goal of reducing sports-related injuries. NOCSAE is a nonprofit, charitable organization supported by individuals and organizations with an interest in athletics. For more information, please visit www.nocsae.org.