



## **POSITION STATEMENT AND RECOMMENDATIONS FOR MOUTHGUARD USE IN SPORTS**

### **National Federation of State High School Associations (NFHS) Sports Medicine Advisory Committee (SMAC)**

- Prior to implementation of the NFHS mouthguard rule an athlete participating in contact sports had a 10% chance of sustaining a significant oral-facial injury each season and better than a 50% chance during their secondary school careers.
- Multiple studies by the American Dental Association, the American Academy of Pediatric Dentistry, the American Academy of Sports Dentistry convincingly show the reduction of oral-facial injuries with the use of mouthguards.
- Properly fitted mouthguard use has been shown to reduce the oral-facial injury rate significantly in sports where it has been mandated. For example, prior to the use of properly fitted mouthguards and facemasks, over 50% of football players' injuries were oral-facial. They now represent less than 1% of injuries. NFHS currently mandates the use of mouthguards in football, field hockey, ice hockey, lacrosse and wrestling (for wrestlers wearing braces).
- Intra-oral mouthguards should include an occlusal (protecting and separating the biting surfaces) and a labial (protecting the teeth and supporting structures) and cover all of the upper teeth. Mouthguards which cover the lower rather than the upper teeth may be used if recommended by a dentist for a specific student-athlete. It is recommended that mouthguards be properly fitted and not be altered to decrease protection. It is recommended that the mouthguard be properly fitted by: (1) being constructed from a model made from an impression of the individual's teeth or (2) being constructed and fitted to the individual by impressing the teeth into the mouthguard itself. Mouthguards used in wrestling must be designed to cover upper and lower orthodontic appliances. Mouthguards must be of any visible color other than clear or white to allow for easy rule enforcement by officials (except Wrestling).
- The Sports Medicine Advisory Committee of the NFHS recommends to all NFHS sports rules committees that they consider a rule for the use of properly fitted unaltered mouthguards for participation in any sport where there is potential for oral-facial injury from body contact.
- Current research does not support the use of mouthguards in reducing the occurrence of Mild Traumatic Brain Injury (Head Trauma/Concussion). The Sports Medicine Advisory Committee of the NFHS encourages further research in this important area.
- A properly fitted and unaltered mouthguard has been shown to not impede communication, breathing, or create any hazards to the airway or oral cavity. Below are shown the types of mouthguards, which comply with NFHS rules and the relative advantages, and disadvantages of each.

**TYPE OF MOUTHGUARD****ADVANTAGES****DISADVANTAGES****Boil and Bite**

Inexpensive  
Form fitted

Deteriorate over time  
May not last entire season  
Pressure on cheeks and gums if  
not fitted well

**Custom fit**

Most accurate fit  
Most comfortable  
Most protection

Most expensive  
Several trips to dentist required

**Stock**

Easily fits over  
orthodontic appliances

Poor fit or easily dislodged

**References:**

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