



Standard Practice for Care and Use of Athletic Mouth Protectors¹

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1. Scope

1.1 This practice covers the care and use of intraoral mouth protectors as protective equipment for sports.

1.2 Mouth protectors, as described herein, refer to either Type I, Type II, or Type III mouth protectors as classified in Section 3.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Terminology

2.1 *Definitions of Terms Specific to This Standard:*

2.1.1 *mouth protector*—a resilient device or appliance placed inside the mouth (or inside and outside), to reduce mouth injuries, particularly to teeth and surrounding structures.

3. Classification

3.1 Mouth protectors covered by this practice shall be of the following types and classes:

3.1.1 *Type I—Thermoplastic Type:*

3.1.1.1 *Class 1—Vacuum-formed.*

3.1.1.2 *Class 2—Mouth-formed.*

3.1.2 *Type II—Thermosetting Type:*

3.1.2.1 *Class 1—Mouth-formed.*

3.1.3 *Type III—Stock type.*

4. Significance and Use

4.1 Intra-oral mouth protectors have been found usable and effective in all physical sports activities where mouth hazard exists.

4.2 Considerable evidence indicates that the use of mouth protectors reduces forces which cause concussions, neck injuries, and jaw fractures.²

¹ This practice is under the jurisdiction of ASTM Committee F08 on Sports Equipment and Facilities and is the direct responsibility of Subcommittee F08.53 on Headgear.

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² Hickey, J. C., Morris, A. L., Carlson, L. D., and Steard, T. E., "The Relation of Mouth Protectors to Cranial Pressure and Deformation," *Journal of the American Dental Association*, No. 74, 1967, p. 735.

5. Design Considerations

5.1 For maximum protection, cushioning, and retention (that is, to reduce the chance of dislodgement), the protector should cover all the remaining teeth of one arch, customarily the upper, less the third molar (except with a prognathic lower jaw). Research shows that a properly fitted and shaped mouth protector essentially eliminates breathing interferences.

5.2 The imprint of the opposing arch is seldom recommended, since it is difficult to attain its proper position, does not add significantly to protection, and can be uncomfortable.

5.3 The strap-attached type of mouth protector is recommended in situations when fit and retention are not critical.

6. Special Limitations

6.1 The fitting of mouth protectors is best accomplished under the supervision or direction of a dentist.

6.2 Players wearing orthodontic appliances or having mouth malformations (abnormalities) should be provided with a mouth protector only under the supervision of a dentist.

6.3 Players wearing removable partial dentures should remove them before being provided with a mouth protector.

6.4 Players wearing complete dentures should be fitted with a mouth protector (with or without the denture in place) as decided and supervised by a dentist.

6.5 If the changing dentition, due to the age of the player, is judged to be a problem, the use of a thermally moldable mouth protector, which can be repeatedly reformed, is recommended, or a new custom protector made.

7. General Recommendations

7.1 *Cleaning*—Always wash daily in cold or lukewarm water. The use of a cleaning agent containing an antimicrobial agent is recommended.

7.2 *Storage and Shipping*—Avoid excessive heat or cold. Custom-made protectors should be shipped or stored on a gypsum (usually dental stone or high-strength stone) model of the athlete's teeth.

7.3 *Mouth-Forming*—For forming the thermally moldable variety, have the protector wet (do not insert in the mouth dry).

7.4 *Use*—Players should be instructed to use mouth protectors when engaged in any physical sport activity where the hazard of mouth injury exists.