# Mouthguard Use by School Aged-Children: A Survey

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### **Background:**

- Sports injuries account for up to 40 percent of all dental injuries in children.<sup>1</sup>
- The AAPD encourages dentists to play an active role in educating the public on the use of mouthguards for prevention of dental injuries.<sup>2</sup>
- Studies show that children in the age range from seven to eleven years of age are more susceptible to sports-related injuries than any other age group.<sup>3</sup>
- There are three different types of mouthguards available for athletes to wear<sup>4</sup>:
  - Custom-made mouthguard
  - o Boil-and-bite mouthguard
  - Stock mouthguard
- Several studies have emphasized the benefits of mouthguards for the prevention of dental injuries, yet many young athletes still choose not to use mouthguards.<sup>5</sup>

### **Objective:**

• The purpose of this study is to investigate the reported use of mouthguards by athletes and identify specific factors that influence the use of mouthguards.

## **Materials and Methods:**

- IRB approval was obtained.
- A 15-question written survey was administered to the parents/guardians of school-aged children who reported participating in sports.
- The study population consisted of 93 parent/child dyads.
  - o 60 males (66%)
  - o 31 females (34%)
- Ages ranged from 6-17 years old
- Average age of 11 years old
- Survey questions included the sport(s) the child participated in, if a mouthguard was worn, and specific reasons that impacted if a mouthguard was utilized or not.
- Specific factors impacting mouthguard use included cost, social pressure, comfort, performance, coach requirement, and dentist recommended, as well as the level of importance of each.

### **Results:**

- The sport with the highest reported use of mouthguards was football (81%), followed by wrestling (41%), basketball (16%), and soccer (11%).
- Parents/guardians ranked "required by coach" was the strongest factor in determining mouthguard use (73%).
- The second strongest factor was "recommended by dentist" at 70%.
- Eighty-eight percent strongly agreed/agreed "mouthguards play an important role in protecting against dental trauma injuries".
- Eighty percent reported they are more likely to have their child wear a mouthguard after completing this survey.
- Bivariate analysis was performed.
  - Odds ratio of 6.37
  - Male athletes are roughly 6 times more likely to wear a mouth guard than female athletes

### **Conclusion:**

- Children are more likely to wear mouthguards in sports when it is required by the coach and/or recommended by a dentist.
- It is imperative to educate coaches and dentists on the use of mouthguards in schoolaged children for the prevention of dental injuries.

#### **References:**

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