

# Dental Trauma in Children and Adolescents with Mental and Physical Disabilities

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## Introduction

Children with special needs face numerous challenges in their daily lives, and in recent years there has been increased sensitivity to these challenges. The risk of injury however has received little attention and epidemiology has not been adequately studied (5). Traumatic dental injuries, as with other oral health conditions are preventable, but preventive measures can be applied only if factors contributing to these injuries can be identified (2). It has been acknowledged that although the amount of dental disease in children with disabilities may not be markedly different from that identified in otherwise healthy children, the level of untreated disease is higher in the children with special needs and so is untreated trauma (9).



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## Abstract

**Aim:** to determine the occurrence of dental trauma in children and adolescents with a mental and/or physical disability compared to otherwise healthy children, and to assess factors associated with and mechanism of such trauma.

**Methods:** Eighty-six subjects consisting of 43 special needs and 43 otherwise healthy children between the ages of 8 and 15 years were chosen from the patient pool at Special Children's Dental Clinic within Children's Hospital, New Orleans. The study utilized a parent interview questionnaire and a clinical exam of the patient.

**Results:** Although healthy children had a higher number of injuries than children with special needs on average, the difference was not statistically significant. Neither healthy children nor children with special needs exhibited a significant correlation between the number of injuries and the size of the overjet (mm) ( $p=0.722$ ,  $0.712$ ). There was not a significant difference in the number of injuries for children with different oral profiles ( $p=0.949$ ), or adequate versus inadequate lip coverage ( $p=0.940$ ).

**Conclusion:** In this study population, the children with special needs living at home may have had the same amount of trauma as the otherwise healthy children and studies with larger sample sizes may be needed to further explore this possibility. Excessive overjet, type of facial profile, and adequacy of lip coverage did not seem to increase the amount of trauma noted in our study population.

**KEY WORDS:** Special needs, disability, trauma, injury risk

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