# Personal Protective Equipment: A First (and Second) Priority in Pediatric Dentistry

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Keeping patients safe during dental procedures is paramount to dental providers, and it's even more important when treating young children. We asked Dr. Yepes for his best practices in pediatric patient care — including recommendations on pediatric patient eye safety and behavioral management.

Dr. Juan Yepes holds degrees in both dentistry and medicine from Javeriana University in Bogota, Colombia. He currently serves as an Associate Professor in Pediatric Dentistry at Indiana University School of Dentistry and Riley Hospital for Children. His research and teaching interests focus on oral medicine, oral radiology, and oral pathology in children.

#### **Safety Eyewear**

# Q: What actions need to be taken to achieve 100% compliance in safety eyewear for pediatric patients?

**Dr. Yepes:** Recently, a colleague who typically provided patient safety eyewear experienced an uncooperative 3-year-old who "decided" not to wear it. While my colleague applied silver diamine fluoride (SDF) for active caries management, the material ended up in the child's eyes. The dentist immediately applied an eyewash and took the child to the emergency room. Fortunately, there was no damage.

Hopefully, educating the dental community about how compromising on safety precautions can lead to unfortunate experiences will motivate them to be more diligent. In addition, choosing tinted eyewear that is comfortable and stress-relieving for both dental professionals and their patients will help enforce the measure. With all patients, and especially pediatric patients, if the eyewear isn't comfortable and doesn't stay in place, it becomes a burdensome step in the appointment. Letting our patients know we provide optimal protection for safety and infection prevention for them, including comfortable filtered eyewear, demonstrates best practices.

#### Q: What safety eyewear considerations and recommendations are important for children?

**Dr. Yepes:** There are several very critical considerations. First, because pediatric patients are more sensitive to light, they can benefit from colored filters that reduce the intensity of harsh lights in a dental setting. The blue light that is used in dental procedures can also be harmful to a patient's eyesight, and there are specialty eyewear products on the market designed with red or orange filters that will block blue light wavelengths of 385-495 nanometers. Second, there are obviously many potentially dangerous objects around the eyes of a child in the dental operatory, including sharp, metallic hand instruments; other metallic projectile objects; and fluids like silver diamine, fluoride, etch, bonding, composites, sealants, etc. It takes only one motion for one of these objects and/or fluids to get in the eyes of a child — with potentially serious consequences. Safety must be a priority in the dental office, and providing eyewear protection, in my opinion, should be mandatory for all patients.



## Q: Why is safety eyewear an important aspect of personal protective equipment (PPE)?

**Dr. Yepes:** I can't emphasize how critical and important the use of eyewear in dentistry is. It does not matter the age of the patient, and it does not matter the length of the procedure — safety eyewear must be in place always. It is the standard of care.

#### Q: How could proper safety eyewear benefit pediatric patients in the long term?

**Dr. Yepes:** From my perspective, safety eyewear in pediatric patients is not just a mandatory PPE, but it is also a fundamental component of behavior management. Yes: behavior management. As a pediatric dentist active in clinical practice, I understand that safety eyewear is part of the toolbox of behavior management in children. It protects against the headlight (many patients find that disturbing), but it also gives us the opportunity to tell the patient, "Don't move. Keep your sunglasses." And definitely, in some patients, that works. They don't move.

#### <u>Isolation</u>

#### Q: Why is isolation in pediatric patients considered an important prevention measure?

**Dr. Yepes:** Just as safety glasses are used to protect the eyes, isolation<sup>1</sup> can protect the esophagus and airways. This protection can include preventing the aspiration of small instruments or restorative debris, as well as preventing accidental soft tissue damage.

In addition, it can improve access and clear management of the operative area and can help with moisture control, thus improving efficiency. An added benefit is patient comfort. Furthermore, isolation is critical in pediatric dentistry (and dentistry in general), because proper isolation facilitates the work in a dry environment — a requirement for most dental materials. Also, isolation helps increase the efficiency of nitrous oxide by increasing the effective pool of nitrous available for the patient to inspire. Definitively, isolation is a critical component of the majority (if not all) treatments that we provide to children and adolescents.

#### <u>Summary</u>

While some of these best practices have evolved over the years, some things remain the same: It is the provider's responsibility to keep on top of new safety standards and implement those standards into their practices. Establishing a culture of safety in the pediatric dental office must be a commitment of every dental practice.

## **References**

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We want to thank Dr. Yepes for answering our questions, and we invite you to evaluate our safety and protection solutions. For more information, visit palmerohealth.com, call 800-344-6424 or email customerservice@palmerohealth.com.

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Juan F. is board-certified by the American Boards of Pediatric Dentistry, Oral Medicine, and Dental Public Health. He is an active member of the American Academy of Pediatric Dentistry, American Academy of Oral Medicine, American Academy of Oral and Maxillofacial Radiology, American Association of Public Health Dentistry, Indiana Dental Association, and American Dental Association. Juan F. is a fellow in dental surgery from the Royal College of Surgeons at Edinburgh. He is a member of the editorial board of the journals *Pediatric Dentistry and Oral Surgery, Oral Medicine, Oral Pathology,* and *Oral Radiology*. He has many years of experience in medicine, medically compromised children and dental protocols, and diagnosis and radiology in children and shares these experiences in outstanding lectures.

