Protective Eyewear Is Not Just A Safety Option. It's A Necessity.

Protective eyewear with side shields is essential to protect providers and patients from respiratory droplets and other material that may be generated during dental procedures.

Patients must be educated on the need to wear eye protection and to request it, if not offered.



Dental practices have some unique characteristics separating them from other types of healthcare environments. Unlike other healthcare settings, invasive procedures are routine and performed daily, increasing the risk of potential adverse outcome to the provider and the patient.

Dentist and dental hygienists frequently perform numerous tasks that place them at risk for exposure to blood, saliva, and respiratory droplets. Patients are also at risk for injury if appropriate barriers, such as eye protection, are not provided and worn during these procedures.

"The oral cavity is colonized with numerous microorganisms. Oral surgical procedures present an opportunity for entry of microorganisms (i.e., exogenous and endogenous into the vascular system and other normally sterile areas of the oral cavity (e.g., bone or subcutaneous tissue); therefore, an increased potential exists for localized or systemic infection"

CDC Guidelines for Infection Control in Dental Health-care Settings 2003

Potential exposure to blood borne pathogens such as Hepatitis B, Hepatitis C and HIV are well recognized, however exposure to other viral agents such as Herpes simplex and adenovirus, as well as bacterial agents such as *pseudomonas* and *staphylococcus aureus* also present great risk.

Infectious agents are transmitted via one of three modes:

- Contact
- Droplet
- Airborne

Each of these can occur in dental practices as a result of <u>contact</u> with non-intact skin and mucous membranes; <u>droplets</u> spread via aerosolization of water from dental units; and <u>airborne</u> particles? spread via inadequate ventilation systems.

Appropriate use of personal protective equipment by both dental healthcare personnel and patients interrupts these modes of transmission of infectious agents

Unfortunately, infections are not the only risk patients may encounter while undergoing routine dental procedures. When Jenn Morrone scheduled a dental visit for a root canal she had no idea how her life would be changed forever. After numbing the area with Novocaine, the dentist, while passing an uncapped needle over her face, dropped the needle striking Jenn in the eye. Her eye subsequently became infected with *Streptococcus*, resulting in antibiotic therapy, multiple surgeries, and eventually the loss of her eye.

Jenn was not wearing eye protection because no one offered it to her and like most of us she did not realize she needed eye protection. Most individuals encountering any type of healthcare are slightly intimidated and "assume" providers will adhere to appropriate standards and protocols. They are reluctant to ask the provider if they are adhering to basic safety practices, washing their hands for example.

In recent years, hospitals have waged campaigns to educate and empower patients to ask their provider if they are using basic infection prevention practices such as hand hygiene and appropriate use of antibiotics. That same kind of empowerment must occur in dental practices and patients must be considered a member of the dental team.

"PLEASE! Don't ever let this happen to anyone again. Make sure all your patients wear ANSI-approved eye protection for any procedure." – Jenn Morrone

Every dental practice should have a designated staff member given the authority and accountability to oversee infection prevention activities within the practice setting. Infection prevention policies and procedures need to be in place addressing appropriate use of personal protective equipment by staff and patients. All staff should be educated on the fundamentals of infection prevention and empowered to educate patients. It is only when infection prevention

'Protective eyewear with solid side shields or a face shield should be worn by dental health care personnel during procedures and patient-care activities likely to generate splashes or sprays of blood or body fluids. Protective eyewear for patients shields their eyes from spatter or debris generated during dental procedures.'

As healthcare providers, the most important role we play is one of patient advocacy. We must educate our patients about safe care and practices and empower them to "speak up" if they have a question or see something they are concerned about.

It is not only our job, but our obligation to ensure our patients are safe and to never take for granted what we do and the potential impact we may have.

Author



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As the Associate Director of SPICE (Statewide Program for Infection Control & Epidemiology), Evelyn Cook is a principal lecturer at all SPICE infection control courses; consultant to all healthcare facilities (including nursing homes) in the state on infection prevention issues; and leads applied research projects in the area of infection control and epidemiology of infectious diseases.

Evelyn served previously as Nurse Clinician and Nurse Liaison with the Duke Infection Control Outreach Network (DICON) for the Department of Medicine and PDC, PLLC at Duke University Medical Center. She has served as a SPICE consultant and has provided training, education, and consultation to hospitals, long-term care facilities, and other medical facilities to prevent and control healthcare-associated infections.

Evelyn has assisted long-term care facilities in writing and developing infection prevention risk assessments, infection prevention plans, and policies specific to the long-term care setting. A Registered Nurse with National Board Certification in Infection Control, Evelyn is active in several professional organizations including the North Carolina Association for Professionals in Infection Control (President 2005-06), and the National Association for Professionals in Infection Control and Epidemiology. She was named Practitioner of the Year in 2002 by the North Carolina Association of Professionals in Infection Control.

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