Why Use A Preprocedural Rinse?

The bioaerosols generated during dental procedures pose a potential risk for the spread of infections to dental personnel and patients.[1,2]

What generates an aerosol?

- Ultrasonic Scalers
- Dental Handpieces
- Air Polishing Devices
- 3 Way Syringes [1,2]

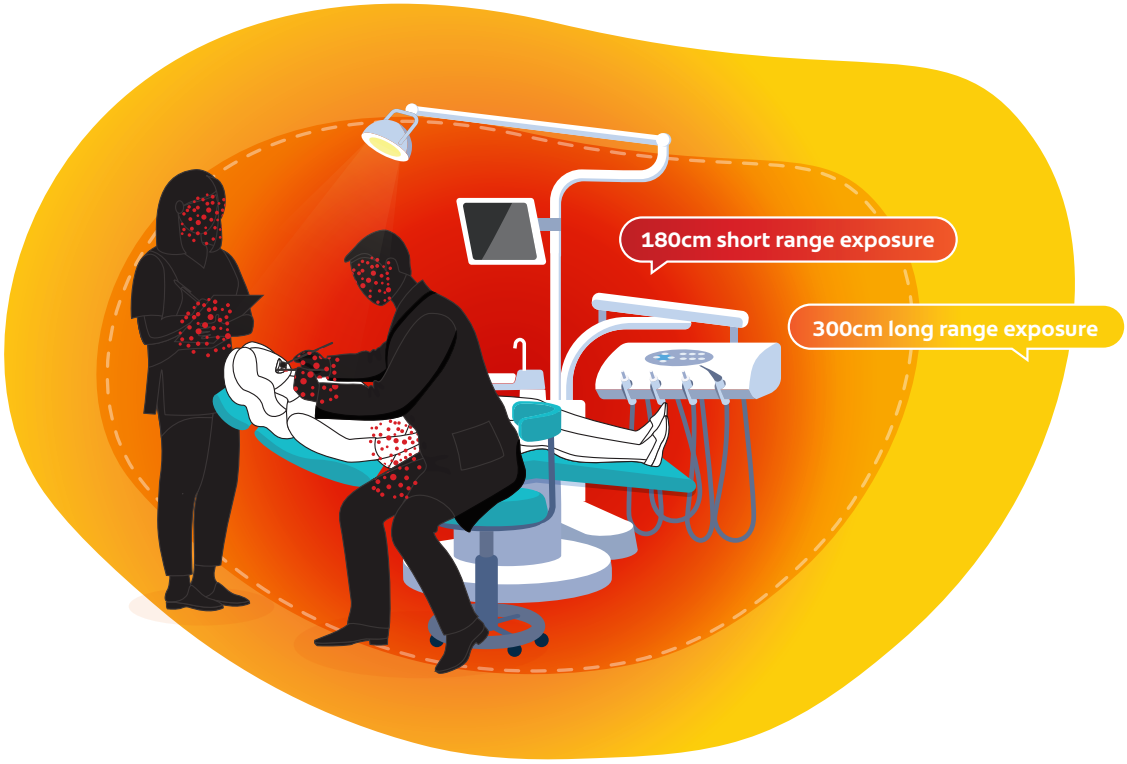
Infectious aerosols can contain

- Common Oral Bacteria
- Pathogenic Bacteria
- Viruses
- Other Infectious Agents[1]

Aerosols can stay suspended in the air for up to four hours after dental procedures and can travel distances of up to three metres from the original source.

This can result in dental personnel being exposed, as infected aerosols can linger past when protective equipment is removed. [1,2]

How aerosols spread in the dental surgery



Patterns of bacterial splatter and aerosol can be used to understand how a virus can spread during dental procedures. Even when a high-volume suction is used, there can be positive contamination. [3]

The most heavily contaminated areas are an operator's face (this may be possible even under the visor and mask), arm nearest the patient, and the patient's body. The assistant's face and arm are also often in the contamination zone. [3]

When an effective preprocedural rinse is used, there is a mean reduction in the number of colony forming units of 64.8% when compared with control.[1]

(1) V. Costa Marui, M.L.S Souto, E.S. Rovai, G.A. Romito, L. Chambrone, C.M. Pannuti, (2019) Efficacy of preprocedural mouth rinses in the reduction of microorganisms in aerosol: A systematic review, The Journal of American Dental Association (JADA), Vol 150 (12) (2) S.K. Harrell, J. Molinari (2004). Cover Story, JADA, Vol 135. (3) N. Innes, I.G. Johnson, W. Al-Yaseen, R. Harris, R. Jones, S. KC, S. McGregor, M. Robertson, W.G. Wade, J.E. Gallagher (2020) A systematic review of droplet and aerosol generation in dentistry, Elsevier Public Health Emergency Collection