

INFECTION CONTROL SNAPSHOT

Preprocedural Mouth Rinses



Antimicrobial mouth rinses used by patients before a dental procedure are intended to reduce the number of microorganisms that might be released from the patient's mouth in the form of aerosols or spatter that subsequently can contaminate equipment, operator surfaces, and dental health-care personnel (DHCP).

Aerosol vs. Spatter

Aerosol: particles of respirable size (<10 µm) generated by both humans and environmental sources that can remain viable and airborne for extended periods in the indoor environment; commonly generated in dentistry during use of handpieces, ultrasonic scalers, and air/water syringes.

Spatter: visible drops of liquid or body fluid that are expelled forcibly into the air and settle out quickly, as distinguished from particles of an aerosol, which remain airborne indefinitely.

- No scientific evidence indicates that preprocedural mouth rinsing prevents clinical infections among DHCP or patients.
- Studies have demonstrated that a preprocedural rinse with an antimicrobial product can reduce the level of oral microorganisms for up to five hours in aerosols and spatter generated during routine dental procedures with rotary instruments (e.g., dental handpieces, ultrasonic scalers).
- Non-antimicrobial mouth rinses have little infection-control benefit because they allow oral microorganisms to return to their original levels before most dental procedures are complete.
- Preprocedural mouth rinses can be most beneficial before a procedure that requires using a prophylaxis cup or ultrasonic scaler because rubber dams cannot be used to minimize aerosol and spatter generation and, unless the provider has an assistant, high-volume evacuation is not commonly used.



?? When, Where, & How ??	Representative Chemical Classes of Antimicrobial Preprocedural Mouth Rinses
<ul style="list-style-type: none"> ■ Immediately before a dental procedure likely to release aerosols or spatter (e.g., when a rubber dam and high-volume evacuation are not used) ■ In the dental operator before beginning the dental procedure ■ Give the patient the appropriate dose in a disposable cup and instruct the patient to rinse thoroughly, then expectorate into the disposable cup or the chairside suction 	<ul style="list-style-type: none"> ■ Phenolic Related Essential Oils ■ Bis-Biguanides ■ Quaternary Ammonium Compounds ■ Oxygenating Agents ■ Halogens

Just a few things to think about

- Do you have your patients use a preprocedural mouth rinse before beginning treatment?
- If you use preprocedural mouth rinses....
 - What product do you use?
 - What procedures do you typically use it before?
 - Has a patient ever asked you why they have to rinse? How did you explain it?

If you want more info

- CDC Guidelines for Infection Control in Dental Health-Care Settings (www.cdc.gov/oralhealth).
- Miller CH, Palenik CJ. Aseptic Techniques. In: Miller CH, Palenik DJ, eds. *Infection Control and Management of Hazardous Materials for the Dental Team*, 4th ed St. Louis: Mosby: 2009:203.
- Molinari G. Antimicrobial Preprocedural Mouth Rinses. In: Molinari JA, Harte JA eds. *Cottone's Practical Infection Control in Dentistry*, 3rd ed. Baltimore: Lippincott Williams & Wilkins, 2009:141-147.
- USAF Guidelines for Infection Control in Dentistry (<http://airforcemedicine.afms.mil/decs>).

