STERILE DENTAL INSTRUMENTS must be supplied for each patient, at each appointment, and processed in a consistent manner every time. Each step of instrument processing must be completed per accepted guidelines and recommendations that satisfy applicable regulatory agencies and be performed in a safe manner. In addition, dental personnel who clean, inspect, package, sterilize, and store instruments often have a myriad of other clinical responsibilities; instrument processing is only a fraction of one’s job! The entire process may seem daunting.

The question remains, how do busy dental personnel learn the proper methods of instrument processing?

Fortunately, manufacturers’ instructions for reprocessing dental instruments are provided for each reusable instrument or device. These instructions should be detailed, easy to understand, and posted near the reprocessing area. Fortunately, instrument processing recommendations have been made available to dental personnel in the Centers for Disease Control and Prevention’s (CDC) Guidelines for Infection Control in Dental Health-Care Settings—2003.1

A more recent CDC document provides the “CliffsNotes” version of infection prevention to use as a reference, introduction, and/or review. The 2016 Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care is based on the 2003 Guidelines. The Summary is not considered a replacement for these more extensive guidelines, and readers are urged to consult the full document for additional background, rationale, and scientific evidence behind each recommendation.2

It is important to note that many regulatory agencies base their infection control policies and protocol upon CDC Guidelines. Thus, clinicians should be familiar with CDC Guidelines and other regulatory agencies that may impact infection control in their practice. These may include Occupational Health and Safety Administration (OSHA), state boards, and Centers for Medicare and Medicaid Services (CMS), among others.

Unfortunately, dental personnel may also use outdated or noncredible sources for their instrument processing policies and procedures. And unfortunately, protocol provided in a verbal manner exclusively may be inaccurate, miss important details, and may vary from person to person. (It is important to note that a written infection prevention program is recommended by CDC and required by OSHA.) In these scenarios, quality assurance is compromised, and the delivery of nonsterile instruments for patient care may occur. In addition, these situations may also lead to instrument processing myths.

A myth is typically based upon storytelling, fables, rumors, and popular beliefs. Credible information regarding instrument processing, however, is based upon scientific evidence, review by authorities on infection control from CDC and other public health agencies, academia, and professional organizations. This article will address several common instrument processing myths. In each myth, CDC Guidelines and key elements will be discussed. The myth will be either validated or dismissed.

### Myth No. 1

**It is best to maximize the capacity of loose instruments in pouches to save time and resources.**

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**Not true!**

The CDC states that items to be sterilized should be arranged to permit free circulation of the sterilizing agent (e.g., steam, chemical vapor, or dry heat).12 Thus, an instrument pouch that is overfilled may compromise sterilization. In addition, overfilled pouches increase the occurrence of an instrument poking through the packaging, and causing a sharps injury. The use of sterilization cassettes, however, increases staff safety and facilitates flow of the sterilant within the instrument package as instruments are held in
Instrument processing is the most important component of an infection prevention program. It is a complex process that requires specialized equipment, adequate space, qualified personnel, and routine monitoring for quality assurance. As dental personnel process instruments for safe patient care, it is important that they receive education and training from credible sources regarding the entire instrument processing protocol including transport, cleaning, packaging, sterilization, and storage.

CDC Guidelines continue to be the gold standard for infection control in the dental setting. Clinicians should also consult the manufacturer’s instructions for reprocessing dental instruments for each reusable instrument or device. Another excellent resource for clinicians is the Organization for Safety, Asepsis and Prevention (OSAP). OSAP offers an extensive online collection of resources, publications, FAQs, checklists, and toolkits that help dental professionals deliver credible information about instrument processing—and avoid the myths! 

**REFERENCES**


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