



How to avoid common sterilization mistakes

In OMS practices, sterilization compliance is a fundamental part of delivering safe, efficient and trustworthy patient care. It is not just about satisfying regulators, it is about ensuring the practice operates with precision, accountability and care at every level. Paul Bhatti, DDS, MD – founder and CEO of AAOMS Advantage Partner Sowingo – explains common sterilization mistakes and how to avoid them.

Q What is the risk of overloading the autoclave in a surgical setting?

A Overloading autoclaves is one of the most common and dangerous sterilization mistakes in busy surgical practices. Packing instruments too tightly can block steam penetration and lead to uneven heat distribution, resulting in incomplete sterilization. To ensure proper sterilization, follow the manufacturer's load and spacing instructions. Referencing the CDC's Guidelines for Infection Control in Dental Health-Care Settings helps ensure compliance and patient safety.

Q Why is skipping pre-cleaning of instruments a critical oversight?

A If instruments are not thoroughly cleaned before sterilization, blood, tissue and other organic matter can shield microorganisms, rendering the sterilization process ineffective. This increases the risk of cross-contamination and infection. To avoid these risks, pre-clean all instruments using enzymatic cleaners or ultrasonic baths. This step is emphasized in the CDC's Guidelines for Infection Control in Dental Health-Care Settings and should be part of every office's written protocols.

Q How can improper pouch sealing and packaging affect sterilization?

A Inadequate packaging, such as using the wrong pouches, failing to seal them properly or omitting indicators, can lead to contamination even after a sterilization cycle. Exposure to air, moisture or compromised seals allows microorganisms to re-enter the pouch. Use sterilization pouches or cassettes with internal and external chemical indicators, and be sure to follow the manufacturer's instructions for use for how to safely and effectively use each product.

Q What is the problem with relying only on the autoclave cycle to verify sterilization?

A A completed cycle does not guarantee effective sterilization. Without mechanical, chemical and biological monitoring, you cannot confirm that sterilization parameters were met. The CDC recommends using a combination of:

- **Biological monitoring (spore testing):** Use weekly or more frequently depending on state requirements.
- **Chemical monitoring:** Include indicators in every pouch or tray.
- **Mechanical monitoring:** Review and document cycle time, pressure and temperature.

Accurate sterilization logs should be maintained and retained for inspection as part of the practice's compliance plan.

Q Why is storing sterilized instruments improperly such a serious mistake?

A Improper storage can compromise sterility. If sterilized instruments are

kept in unclean, open or humid environments, they may be recontaminated before use. OMS practices should store instruments in closed, clean, dry storage cabinets per OSHA regulations and CDC guidelines, ensuring they remain sterile until point-of-care.

Q What are the consequences of neglecting regular autoclave maintenance?

A Failure to maintain sterilization equipment can result in performance issues that go unnoticed, like worn-out seals, pressure inconsistencies or failed heating elements, potentially compromising the effectiveness of sterilization. Follow the manufacturer's routine maintenance schedule and conduct validation tests as required. Autoclave performance should be documented and reviewed regularly to stay compliant with OSHA and state dental board regulations.

Q How can digital tools help OMS teams avoid these mistakes?

A Digital platforms can streamline sterilization recordkeeping, automate spore testing reminders, track load history and flag overdue equipment maintenance. These features help reduce the risk of human error, ensure documentation is complete and help your practice stay compliant with minimal administrative burden, freeing up your team to focus on patient care. ■

Sowingo – an AAOMS Advantage partner – offers an all-in-one platform that streamlines implant and inventory management, sterilization tracking and compliance for dental practices. Sowingo is currently offering AAOMS members 10 percent off annual subscriptions. Learn more at [Sowingo.com/partners/AAOMS](https://www.sowingo.com/partners/AAOMS).

