Biological Monitor

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www.biologicalmonitoring.com

Sterilization Monitoring—Two is Better Than One

There is only one purpose for monitoring a sterilization process—to confirm that conditions necessary for sterilization have been achieved. The use of biological indicators are the accepted means for determining whether conditions for sterilization are present.

If sterilization monitoring is desirable, then obtaining the highest level of assurance should be equally desirable. Dental office staff are barraged with a bewildering number of monitoring services and products. Often the choice of monitoring systems is made by price without regard for the quality of information delivered.

A study of historical sterilization monitoring data, revealed that mixed biological indicator results (i.e., one positive test strip and one negative test strip) occurred 48.7 percent of the time. In other words, nearly one-half of all positive tests indicated that the conditions for sterilization were present in some areas of the chamber but not throughout the entire chamber. These results suggest that non-uniform conditions often exist inside sterilization chambers.

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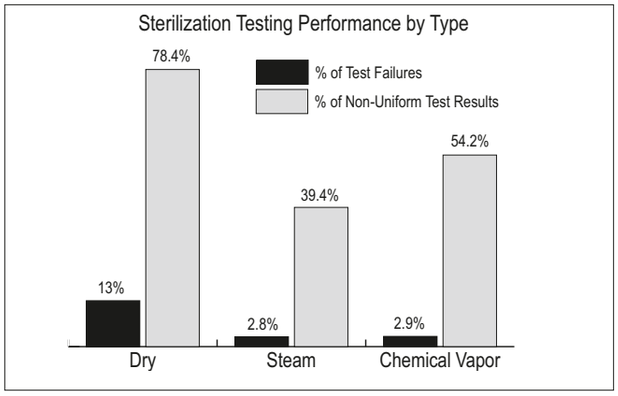
The study also revealed that all sterilizers suffer some level of non-uniformity but the degree of non-uniformity is not the same for all sterilization processes. Dry heat sterilization exhibited a higher failure rate (13%) compared to steam (2.8%) or unsaturated chemical vapor sterilization (2.9%). The data confirmed that dry heat sterilization experienced a higher percentage of mixed results (78.4% of the time one strip failed and one passed) as compared to 54.2 percent for chemical vapor and 39.4 percent for steam sterilizers.



What does this information suggest?

This information suggests that sterilization monitoring systems and products based on a single test strip are not likely to provide as complete a picture of the conditions present in a sterilization process as a two test strip system.

While some monitoring services have eliminated a control strip as part of the system to reduce cost, scientists have learned that the use of a control is not only good practice but helps prevent misinterpretation of test results. For example, failure of a control strip to grow casts doubt on the validity of the results of the accompanying test strips. Control strips retained at a lab and incubated with test strips received from a dental office, provide little scientific value. Many lab services promise that a control strip is used when culturing processed test strips. However, control strips that have not experienced the same conditions (i.e., storage, return mail) as the test strips, cannot provide a true scientific control.

Sterilization monitoring is cheap insurance.

So keep in mind:

1. Two strip systems are more accurate than single strip system.
2. A control strip helps to eliminate potential misinterpretations of results.
3. Regardless of what system you choose, regular testing of your sterilization process is the most important factor. The CDC and ADA recommend weekly spore testing.

Practical Practice Corner

Inquisitive Minds Want to Know: What are the CDC Guidelines for DUWL Safety?

In the last issue of Biological Monitor, we invited you to contact us regarding any questions or comments you may have on the subject of DUWL safety. I received several inquiries and the most frequently asked question was:

- What are the CDC Guidelines for DUWL safety?
- How can I get a copy?

The CDC Guidelines for DUWL safety is a section within the Guidelines for Infection Control in Dental Health-Care Settings – 2003 (pages 28-31). The publication states the clinical implications of DUWL biofilm and water quality along with strategies to improve, maintain, and monitor dental unit water including delivery of surgical irrigation and special considerations of dental handpieces and saliva ejectors.

To request copies, contact CDC's Division of Oral Health by:

- E-mail: oralhealth@cdc.gov
- Telephone: 770-488-6054
- Fax: 770-488-6080

The guidelines are also downloadable at **www.cdc.gov/mmwr/PDF/RR/RR5217.pdf**.

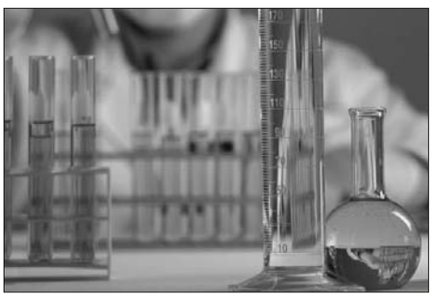
In addition to the CDC Guidelines, I strongly recommend that every dental office have a copy of *From Policy to Practice: OSAP's Guide to the Guidelines*. This publication is a valuable and user-friendly tool to navigating through all of your dental office infection control safety concerns. For more information regarding OSAP contact: www.osap.org.

Practical Practice is Brought to You By...

Annamaria Phillips
Annamaria Phillips is the owner of Optbridge, LLC. Nationally known, Annamaria presents seminars and staff training on OSHA compliance, infection controls and communication. Annamaria can be reached at (303) 840-2808.

Send your questions or comments to **customerservice@confirmmonitoring.com** or Biological Monitoring Service, PO Box 4758, Englewood CO 80155.

DUWL Testing Service



Regular testing of DUWLs is an important step toward ensuring compliance with the new CDC guidelines. In response to customer requests, Biological Monitoring Service (BMS) is now offering a mail-in dental unit waterline testing service.The service provides microbial counts up to 20,000 CFU/mL and a pass/fail result based on a standard of 500 CFU/mL.

You collect water from each dental unit in a separate test vial. You then pack the sample in the styrofoam mailer with a refrigerant pack and ship it via USPS Express Mail. Upon receipt, BMS processes the samples according to the Standard Methods for the Examination of Water and Wastewater, 20th Edn., 1998.

The DUWL testing kit includes a refrigerant pack, collection vials, a styrofoam mailer, and an optional pre-paid Express Mail postage. • A certificate, suitable for framing and display is provided. • Results are available seven days from receipt. • Test failures are immediately phoned to your office. • Complete test results are faxed to your office.

Item #	# of Test Kits	Vials Per Kit	Pricing	Description
90401	1	4	$95	1 Styrofoam mailer, return postage paid
90404	4	4	$ 370	4 Styrofoam mailers, return postage paid
90604	4	6	$ 460	4 Styrofoam mailers, return postage paid

Best Wishes

The owners and staff of Biological Monitoring Services wish to extend their **best wishes for a happy, healthy and prosperous 2005.**

We thank you for the support and confidence you have placed in our organization.