

## Federal Sterilizer Monitoring Guidelines for Dentistry

### Centers for Disease Control & Prevention (CDC)

MMWR December 19, 2003 / 52(RR17); 1-61.

#### F. Sterilization Monitoring

1. Use mechanical, chemical, and biological monitors according to the manufacturer's instructions to ensure the effectiveness of the sterilization process (IB) (248,278,279).
2. Monitor each load with mechanical (e.g., time, temperature, and pressure) and chemical indicators (II) (243,248).
3. Place a chemical indicator on the inside of each package. If the internal indicator is not visible from the outside, also place an exterior chemical indicator on the package (II) (243,254,257).
4. Place items/packages correctly and loosely into the sterilizer so as not to impede penetration of the sterilant (IB) (243).
5. Do not use instrument packs if mechanical or chemical indicators indicate inadequate processing (IB) (243,247,248).
6. Monitor sterilizers at least weekly by using a biological indicator with a matching control (i.e., biological indicator and control from same lot number) (IB) (2,9,243,247,278,279).
7. Use a biological indicator for every sterilizer load that contains an implantable device. Verify results before using the implantable device, whenever possible (IB) (243,248).
8. The following are recommended in the case of a positive spore test:
  - a. Remove the sterilizer from service and review sterilization procedures (e.g., work practices and use of mechanical and chemical indicators) to determine whether operator error could be responsible (II) (8).
  - b. Retest the sterilizer by using biological, mechanical, and chemical indicators after correcting any identified procedural problems (II).
  - c. If the repeat spore test is negative, and mechanical and chemical indicators are within normal limits, put the sterilizer back in service (II) (9,243).
9. The following are recommended if the repeat spore test is positive:
  - a. Do not use the sterilizer until it has been inspected or repaired or the exact reason for the positive test has been determined (II) (9,243).
  - b. Recall, to the extent possible, and reprocess all items processed since the last negative spore test (II) (9,243,283).
  - c. Before placing the sterilizer back in service, re-challenge the sterilizer with biological indicator tests in three consecutive empty chamber sterilization cycles after the cause of the sterilizer failure has been determined and corrected (II) (9,243,283).
10. Maintain sterilization records (i.e., mechanical, chemical, and biological) in compliance with state and local regulations (IB) (243).



## American Dental Association (ADA)

### ADA Statement on Infection Control in Dentistry

Twenty-five years ago the ADA Foundation's Health Screening Program helped identify HBV as an occupational hazard in dentistry. The ADA responded by being the first to recommend that dentists follow standard infection control procedures. The ADA subsequently worked with the Centers for Disease Control and Prevention (CDC) to develop CDC's own infection control recommendations for dentistry, which were issued in 1993. Since then, both the ADA and CDC have updated and supplemented their recommendations from time to time to reflect new scientific knowledge and growing understanding of the principles of infection control.

In December 2003, the CDC published a major consolidation and update of its infection control recommendations for dentistry.<sup>1</sup> Although the procedures recommended in the 2003 document are for the most part unchanged, the new document does incorporate relevant recommendations that were previously scattered throughout several other CDC publications and contains an extensive review of the science related to dental infection control.

The 2003 CDC Guidelines are a comprehensive and evidence-based source for infection control practices relevant to the dental office that have been developed for the protection of dental care workers and their patients. The ADA urges all practicing dentists, dental auxiliaries and dental laboratories to employ appropriate infection control procedures as described in the 2003 CDC Guidelines, and to keep up-to-date as scientific information leads to improvements in infection control, risk assessment and disease management in oral health care.

The ADA has long advocated the use of infection control procedures in dental practice and provided dentists with resources to help them understand and implement them. In addition to the online resources available at ADA.org, the Association has a number of publications that provide detailed information about infection control and treatment of patients with infectious diseases. These include *Dental Management of the HIV-Infected Patient* and ADA Catalog products, including the *Effective Infection Control* training DVD (P692), the *ADA Regulatory Compliance Manual* and the *OSHA Training for Dental Professionals* DVD (P889).

Centers for Disease Control and Prevention. Guidelines for Infection Control in Dental Health-Care Settings – 2003. MMWR 2003;52(No. RR-17)

*Adopted March 2004*



## Organization for Safety and Asepsis Procedures (OSAP) Infection Control Guidelines: September, 1997

### 9. Sterilization Monitoring

The use and functioning of heat sterilizers should be biologically monitored at least weekly, or more often if the practice demands it, with appropriate spore tests. Place the spore strips or vials inside a pouch, bag, pack or cassette, and include this package as part of the normal load through a normal sterilizer cycle. Always use a control spore strip or vial (not heat processed but otherwise treated identically to the test strips or vials) with each spore test performed.

Additionally, chemical indicators should be used on the inside of each package during every sterilizer load. Accurate records of sterilization monitoring must be maintained. A chemical indicator from inside each pack may be initialed and dated for each day of patient care and kept in a file. The weekly spore test for each heat sterilization unit may be kept in the same file. Biologically monitor whenever there is a change in packaging, following equipment repair; retest after failure and when training new employees.

### Association for the Advancement of Medical Instrumentation (AAMI) Steam Sterilization and Sterility Assurance, 7.5.4 Test Frequency.

"Biological indicators must be used no less than weekly for each sterilizer and, preferably, should be used for each load. More frequent testing should be carried out on an as needed basis (I.E., after major sterilizer repairs, when evaluating sterilization of new products, when implantable or intravascular materials are sterilized, etc.)".

### Association of Perioperative Registered Nurses (AORN) Recommended Practices, Sterilization & Disinfection, 1987.

"For routine monitoring should be used weekly, and as needed; each load of implantables."

### Veteran's Administration (VA)

VA Manual G1, MP-2, 1985 and MP-2,  
Sub-chapter E, Change 159, June 22, 1983.

"Must be sterilized no less than weekly, each load of implantables or intravascular materials, following major sterilizer repairs, new products or packaging material."