MONITORING HEAT STERILIZATION

INTRODUCTION

This document provides general information about the monitoring of health sterilization in dental facilities in Indiana.

This information is provided for educational purposes only. The Oral Health Program (OHP) at the Indiana State Department of Health (ISDH) cannot provide legal opinions on the interpretation of guidelines, laws, and rules and regulations. Dental professionals are responsible for understanding and applying these as they pertain to the practice of dentistry in Indiana.

BACKGROUND

Heat sterilization procedures are required to be monitored in dental facilities in Indiana. Indiana Administrative Code lists four monitoring activities. The dental facility needs to document all four of these monitoring activities by keeping adequate and accurate records.

This documentation shall be made available for inspection by the Indiana State Department of Health upon request. It is the policy of the Oral Health Program at the Indiana State Department of Health that these records should be maintained a minimum of 3 years.

BIOLOGICAL INDICATORS

A dental facility is required to use a biological indicator to monitor heat sterilization. The biological indicator needs to be run in a test cycle, incubated in a culture, and the results read. Most dentists send biological indicators to a vendor for incubation in a culture and the reading of the results. (Note: It is possible to do this in a dental facility with the appropriate equipment.)

A vendor who processes biological indicators usually provides the needed documentation, which includes the date the test cycle was run in the dental facility, the date the vendor received the biological indicator, and the date the results of the culture of the biological indicator were posted.

NOTES

- 1. Indiana Administrative Code requires that a test cycle of an autoclave was run with a biological indicator (spore strip) within 7 days prior to a sterilization cycle to help assure that the autoclave is functioning properly.
- 2. Following the test cycle with a spore strip, the spore strip needs to be sent to the vendor as soon as it is dry; that is, within approximately 24 hours of the test cycle.
- 3. The vendor then places the spore strip in a culture and incubates it. The vendor then reads the results of the culture and posts the results for the dental facility. A dental facility should access these results as soon as possible.
- 4. The result indicates only whether a specific autoclave was functioning properly at the specific day and time of the test cycle (PASS) or was not functioning properly (FAIL).
- 5. An autoclave can become dysfunctional at any time.
- 6. A dental facility should have a protocol in place to address the possibility of an autoclave failing a test cycle.

STERILIZATION CYCLE, CHEMICAL INDICATOR, and MAINTENANCE

The other three required monitoring activities listed below also need to be conducted and documented. One way of documenting these other three monitoring activities is with a log. The ISDH OHP has developed an example of such a log that may be used by a dental facility, using a separate log for each autoclave.

Each time an entry is made to this log (or any log a dental facility chooses to use), it should be documented with the **INITIALS** of the staff member recording the entry, and the **TIME**, and **DATE** (month, day, year) of the entry. All three of these monitoring activites need to be recorded in this log in the following manner, or in a similar manner in whatever log a dental facility chooses to use.

Sterilization Cycle

Each time a sterilization cycle is run it should be recorded.

Record a check ($\sqrt{ }$) in the log to indicate a sterilization cycle was run.

Chemical Indicator(s)

Each time a sterilization cycle is run one or more chemical indicators should be placed in the autoclave.

NOTE: Some autoclave packages have a chemical indicator imbedded in them.

Record P in the log if ALL chemical indicators used during the sterilization cycle passed or F in the log if ANY chemical indicator failed.

Maintenance

Record check $(\sqrt{})$ in the log to indicate maintenance occurred and describe the type of maintenance (routine or otherwise) in the log notes.