

Standard Operating Procedure

Biological Indicator Testing

Date 4/30/2012

Applicable to: Perioperative Services

Team Members Performing: Instrument Processing Staff

I. Purpose:

Provide guidance for using biological indicators for steam, hydrogen peroxide plasma and ethylene oxide (EtO) sterilization. Biological indicators (BI) are used to monitor the success of the sterilization process.

II. Procedure:

A. Testing the Control BI

1. Daily preparation of biological incubator begins by incubating an unprocessed control BI.
 - A control BI tests the viability of the biological spores and the effectiveness of the biological indicator.
2. The control and processed BI should have the same lot number.
3. The control BI should have a “C” written on the cap to indicate that it is a control BI.
4. Before incubating prepare the BI according to manufacture recommendations.
5. A control BI should have a positive result.
6. Document results of the control BI.

B. Testing the processed BI

1. Place biological indicator inside the sterilizer chamber prior to starting the sterilization cycle.
 - Steam – place above the drain

- Hydrogen peroxide plasma- place in the rear of sterilization chamber
 - Ethylene oxide – place in the center of the load
2. Once the sterilization cycle has finished allow the BI to cool.
 3. Before incubating prepare the BI according to manufacture recommendations.
 4. Place a load sticker on each processed BI ampule. Ampule load number should be the same as the sterilization load number.
 5. Place BI in incubator well and document the following:
 6. BI lot number
 7. Incubation start time
 8. Allow the BI to incubate for the required amount of time to receive accurate results.
 9. Once results have been read document the following:
 10. BI results
 11. Incubation end time
 12. If BI results are negative, the sterilization process is considered a success and the load can be released for use.
 13. If the BI results are positive the sterilization process is considered a failure and the load must remain quarantined. ***See Policy # AS 201170-400.25, Load Retrieval Systems for Positive Biological Indicators.***