

THE UNIVERSITY OF TOLEDO MEDICAL CENTER STERILE PROCESSING DEPARTMENT PROCEDURE

**SUBJECT: DAILY FUNCTION TESTS FOR LEAKS
AND VACUUM (BOWIE-DICK TEST)**

PROCEDURE NO: SP3-8

PROCEDURE STATEMENT

Sterile Processing and the OR will run daily function tests in all Steam, Hi-Vac sterilizers when in use.
Reference: AAMI ST79:2017

PURPOSE OF PROCEDURE

To provide a daily operational check of mechanical air removal for high vacuum steam sterilizers.

PROCEDURE

1. A: SPD will run a daily Bowie-Dick Test immediately after running a leak test on all sterilizers in spd and OR. The George Isaac Surgery Center will perform these tests Sunday through Thursday.

The Leak test will be run as an empty load. The sterilizer cycle will be set on (Leak Test.)

The range of acceptable leakage is 0.0mm up to 0.9mm of pressure.

The leak test will be considered a failure if the rate of leakage is 1.0mm of pressure or over.

The sterilizer will be taken out of service and Biomedical Engineering will be notified.

The sterilizer will be checked and repairs will be made.

The Bowie-Dick test will be run as an empty load. The sterilizer will be set on (Dart Test.)

2. Place the Bowie Dick/Dart test pack on the bottom shelf of the sterilizer immediately above the drain. *SP only: Prepare cycle record in SPM.*
3. Run cycle. When complete, remove and open the test pack from the sterilizer. Interpret the results as follows:
 - A. Satisfactory: A complete and even color change of the chemical indicator from yellow to black.
 - B. Unsatisfactory: A distinct lack of color change or an incomplete or uneven color change on the sheet.
4. SPD: Optically scan the test card and Cycle printout into the Computerized Sterilization management system
5. OR/ George Isaac: Attach tapes and test sheet to back of the Daily Biological test record and log as required.
6. If the first test fails, check the drain for debris and the sterilizer for correct settings. Run another test. If the second test fails, notify the supervisor on duty or designated person on duty. Remove the sterilizer from service and contact Biomedical Engineering.
7. Once these tests are complete, run the daily BI test. See Procedure SP7-2.

Reviewed/Revised

1999, 2002, 2005, 2006, 2007, 2008, 2009, 2010, 2014, 2016, 4/2018, 1/2020