

PROGRAM Standard Operating Procedure – Laboratory Services	
Title: MIC70200 – Dispensette Sterility Test	Policy Number:
Program Name: Laboratory Services	
Applicable Domain: Lab, DI and Pharmacy Services	
Additional Domain(s):	
Effective Date:	Next Review Date:
Issuing Authority: Director of Health Services	Date Approved:
Accreditation Canada Applicable Standard:	

GUIDING PRINCIPLE:

The dispensette and saline used to perform testing with the Vitek 2 instrument and manual susceptibility testing are prone to contamination and need to be checked weekly to ensure accurate patient results are obtained.

PURPOSE/RATIONALE:

To check the sterility of the saline used to prepare organisms for Vitek 2 and manual susceptibility testing.

SCOPE/APPLICABILITY:

This procedure applies to Medical Laboratory Technologists (MLTs) and Medical Laboratory Assistants (MLAs) using the saline dispensette for Vitek 2 and manual susceptibility testing.

REAGENTS and/or MEDIA:

- Thioglycolate broth (THIO)
- Sterile saline (0.45%)

SUPPLIES:

- Dispensette mounting tool
- Sterile water
- Sterile swabs
- Towel

EQUIPMENT

- Dispensette
- Steris steam autoclave and supplies

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SPECIAL SAFETY PRECAUTIONS:

Containment Level 2 facilities, equipment, and operational practices for work involving infectious or potential infectious materials or cultures.

- Ensure that appropriate hand hygiene practices be used.
- Lab gown must be worn when performing activities with potential pathogens.
- Gloves must be worn when direct skin contact with infected materials is unavoidable.
- Eye protection must be used when there is a known or potential risk of exposure of splashes.
- All procedures that may produce aerosols, or involve high concentrations or large volumes should be conducted in a biological safety cabinet (BSC).
- The use of needles, syringes and other sharp objects should be strictly limited.

All patient specimens are assumed to be potentially infectious. Routine Practices must be followed. Since viable micro-organisms are used, all cultures must be handled with appropriate precautions. All equipment in contact with cultures should be decontaminated by appropriate methods.

PROCEDURE INSTRUCTIONS:

Step	Action
Weekly dispensette sterility test	
1	A standing order has been set up in the LIS: <ul style="list-style-type: none"> • Patient last name: TEST • Patient first name: MICRO STERILITY • CXENV will be automatically ordered • Collect, receive and plate order • In Micro OE comment, state source of saline-Vitek Dispensette
2	Label 1 Thioglycolate broth tube and dispense 3mL of saline into the tube.
3	Place broth in the Saline Sterility rack in the O ₂ incubator.
4	Read broth daily for 3 days and observe for signs of growth.

INTERPRETATION OF RESULTS:

Step	Action
1	If THIO broth remains clear (no growth): <ul style="list-style-type: none"> • Record "No Growth" results daily in LIS • After 3 days, report "No Growth After 3 Days" and finalize
2	If THIO broth turns cloudy (growth): <ul style="list-style-type: none"> • Record "Cloudy-AUTOCLAVE dispenser ^CLAVE" • Result ^CLAVE with date dispensette was autoclaved and initials • Report "Cloudy-AUTOCLAVE dispenser" and finalize • Discard saline bottle and follow instructions below to clean the dispensette • Assemble new dispensette, which are stored under the Vitek 2

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SALINE DISPENSETTE PARTS:




1. Piston

2. Volume adjustment knob




3. Discharge tube

4. Discharge tube screw cap


CLEANING THE DISPENSETTE:

Step	Action
1	It is important that the dispensette is cleaned before it is autoclaved to prevent damage from occurring.
2	Remove the dispensette from saline bottle and screw onto a bottle of sterile water. Rinse the dispensette several times by completely filling and emptying it.
3	Remove dispensette from sterile water and discharge any remaining liquid.
4	Pull out the telescopic filling tube: 

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5	<p>Use mounting tool to unscrew the filing valve:</p> 
6	<p>Loosen piston. Hold the housing securely and unscrew the piston completely by turning it to the right. Carefully pull out the piston. Do not remove the housing!</p> 
7	<p>Clean piston and cylinder with a gauze and sterile swab. If necessary remove deposits at the edge of the glass cylinder taking care not to scratch the interior of the cylinder.</p> 
8	<p>Flush all parts with sterile water and allow parts to dry.</p>
9	<p>Insert the piston completely into the cylinder.</p>

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10	<p>Check that the filling valve is securely seated and tightened using the mounting tool.</p> 
11	Reassemble the dispensette.
12	Place dispensette and mounting tool on a towel. Ensure parts do not come into contact with metallic surfaces.
13	Autoclave in the Steris steam autoclave at 250°F for 50 minutes.
14	After cycle is complete, allow dispensette to cool for approximately 2 hours.
15	Inspect all parts for any damage.
16	Once dispensette is cooled and inspected for damage, place back into box.

REFERENCES:

1. Brand. (2016-02). *Dispensette User Manual*, 9974 90

APPROVAL:

 Date

REVISION HISTORY:

REVISION	DATE	Description of Change	REQUESTED BY
1.0	22 Nov 17	Initial Release	L. Steven
2.0	06 Oct 19	Updated to reflect new steam autoclave	L. Steven
3.0	18 May 21	Procedure reviewed and added to NTHSSA policy template	L. Steven

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