

PROGRAM Standard Operating Procedure – Laboratory Services	
Title: MIC71100 – BACTEC FX Maintenance	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 BACTEC FX Instrument is used with BACTEC culture vials to detect sepsis and bacteremia in patients. Maintenance is performed to ensure accuracy and precision of the various components of the BACTEC FX Instrument.

PURPOSE/RATIONALE:

This standard operating procedure describes the daily, monthly and as-required maintenance requirements for the BACTEC FX.

SCOPE/APPLICABILITY:

This procedure applies to Medical Laboratory Technologists (MLTs) processing specimens using the BACTEC FX Instrument.

REAGENTS and/or MEDIA:

- BACTEC Plus Aerobic/F Culture Vials (**blue top**)
- BACTEC Lytic/10 Anaerobic/F Culture Vials (**purple top**)
- BACTEC Peds Plus/F Culture Vials (**pink top**)

EQUIPMENT

- BACTEC FX instrument

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.


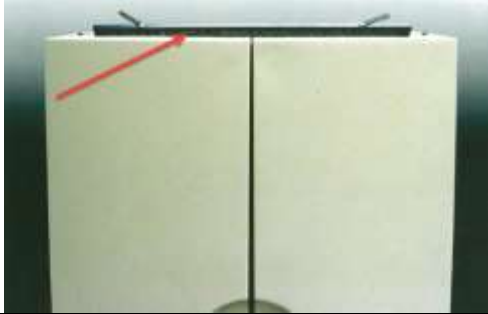
QUALITY CONTROL:

- Refer to MIC60010-Microbiology Quality Control for quality control procedures
- Record all actions and results of maintenance checks on MIC71110-Maintenance Record-BACTEC FX

PROCEDURE INSTRUCTIONS:

Step	Action
Daily BACTEC FX Maintenance	
1	<p>Record drawer A & B digital temperatures (status screen):</p> <ul style="list-style-type: none"> • In the maintenance tab, view the temperature displayed below the Drawer Temperature and Status
2	<p>Record drawer A & B internal temperatures and station indicators:</p> <ul style="list-style-type: none"> • In the maintenance tab, open drawer A (drawer on left side) and tap Station LEDs • Tap the Red button and view the drawer. All the stations should glow red. Wait 5 seconds, lights will turn off • Repeat for both the yellow and green buttons • Press the on/off button on the temperature probe to turn it on. Record the internal temperature • Turn the probe off before closing the drawer • Close Drawer and repeat process for Drawer B
3	<p>Check the Alarm function:</p> <ul style="list-style-type: none"> • Tap the Alarm button on the maintenance tab
4	<p>Check system status indicators:</p> <ul style="list-style-type: none"> • Tap the Status/Yellow button on the maintenance tab • Both handles should glow the three status colors

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Step	Action
Monthly BACTEC FX Maintenance	
1	<p>Change silver air filter:</p> <ul style="list-style-type: none"> • Lift the left access panel • Remove filter and install backup • Rinse filter with tap water and place on towel to dry 
2	<p>Change black air filter:</p> <ul style="list-style-type: none"> • Use a stool to reach the black air filter at the top of the instrument • Remove the filter and install backup • Rinse filter with tap water and place on towel to dry 
3	<p>Clean exterior components:</p> <ul style="list-style-type: none"> • Clean exterior of the BACTEC FX instrument, computer and keyboard with a 10% bleach solution • Using 70% isopropyl alcohol, wipe the instrument surfaces • Repeat a second time with a new gauze square

Step	Action
As-Required BACTEC FX Maintenance	
1	<p>Blocking stations:</p> <ul style="list-style-type: none"> • Stations should be blocked if either station indicator fails to light during daily maintenance or if the station does not correctly detect vial removals and insertions: <ul style="list-style-type: none"> ➢ From the test display, tap the Block/Unblock button ➢ The Block/Unblock display appears ➢ Tap the station to block in the display ➢ Repeat for any additional stations to be blocked ➢ Remove any vial from the station ➢ Insert a station plug

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CROSS-REFERENCES:

- MIC71110-Maintenance Record-BACTEC FX

REFERENCES:

1. Becton Dickinson and Company. (2011/02). *BD BACTEC FX Instrument User Manual*, 8005110

APPROVAL:

Date

REVISION HISTORY:

REVISION	DATE	Description of Change	REQUESTED BY
1.0	06 Nov 17	Initial Release	L. Steven
2.0	29 Mar 19	Updated to reflect removal of DVD updating in EpiCenter	L. Steven
3.0	18 Jun 21	Procedure reviewed and added to NTHSSA policy template	L. Steven