

TML\MSH Microbiology Department Policy & Procedure Manual	Policy # MI\RESP\02\04\v02	Page 1 of 2
Section: Respiratory Tract Culture Manual	Subject Title: Bronchial Brush Specimens	
Issued by: LABORATORY MANAGER	Original Date: September 25, 2000	
Approved by: Laboratory Director	Revision Date: April 6, 2005	

BRONCHIAL BRUSH SPECIMENS

I. Introduction

Protected brush specimens are obtained free of oral contamination. However, some studies have shown that quantitative cultures are necessary to distinguish pathogens from nonpathogens. These studies have demonstrated that colony counts of $>1 \times 10^6/L$ ($>100/ml$) i.e. growing more than 10 colonies on a plate streaked with a 0.01 ml loop may be significant.

II. Specimen Collection and Transport

See [Pre-analytical Procedure - Specimen Collection QPCMI02001](#)

III. Reagents / Materials / Media

See [Analytical Process - Bacteriology Reagents_Materials_Media List QPCMI10001](#)

IV. Procedure

A. Processing of Specimens

See [Specimen Processing Procedure QPCMI06003](#)

a) Direct Examination: Not indicated.

b) Culture:

<u>Media</u>	<u>Incubation</u>	
Blood Agar (BA)	CO ₂ ,	35°C x 48 hours
Haemophilias Isolation Medium (HI)	CO ₂ ,	35°C x 48 hours
MacConkey Agar (MAC)	CO ₂ ,	35°C x 48 hours

If *B. cepacia* is required or specimen is from a patient with Cystic Fibrosis, **add**:

Of Base, Colistin, Bacitracin & Lactose Agar (OCBL)	O ₂ ,	35°C x 5 day
Keep the BA, HI and MAC plates	CO ₂ ,	35°C x 5 days

TML\MSH Microbiology Department Policy & Procedure Manual	Policy # MI\RESP\02\04\v02	Page 2 of 2
Respiratory Tract Culture Manual		

B. Interpretation of cultures:

Examine BA, HI and MAC after 24 and 48 hours incubation. Examine OCBL daily for 5 days. Identify with quantitation growth of any potential pathogens, including yeast.

V. Reporting

If the brush is received in <1 mL of fluid, report in the “Test Comment” field of the LIS as “Brush received in wrong volume of fluid”.

If a dry brush is received, report in the “Test Comment” field of the LIS as “Dry brush received”.

Issue a preliminary report after 18-24 hours incubation.

Negative Report: “No growth”
“No *B. cepacia* isolated” if *B. cepacia* culture is requested.

Positive Report: **Note:** Do not quantitate isolates on brushes received dry or in wrong volume of fluid.

Report all isolates quantitatively: <math><1 \times 10^6/L</math> if <math><10</math> colonies
>1 x 10⁶/L if ≥10 colonies

All potential pathogens in any number with appropriate susceptibilities.

“>1 x 10⁶/L or <math><1 \times 10^6/L</math> Commensal flora, including (list all organisms).”

VI. References

P.R. Murray, E.J. Baron, M.A. Pfaller, R.H. Tenover, R.M. Tenover. 2003. Manual of Clinical Microbiology, 8th ed. ASM Press, Washington, D.C.

H.D. Izenberg. 2003. Respiratory Tract Cultures, 3.11.1.1 – 3.11.3.1 in Clinical Microbiology Procedures Handbook, 2nd ed. Vol.1 ASM Press, Washington, D.C.