

Bordetella pertussis / *parapertussis* PCR Specimen Handling and Storage

PURPOSE

- This procedure provides instructions for specimen acceptability, handling and storage
- Refer to the [Laboratory Services](#) web page for test specific patient preparation and specimen collection information.

SAMPLE

A. Acceptable specimens and transport container

Specimen type	Specimen code	Volume	Transport Containers
1 Nasopharyngeal swab	NP	1 wire NP swab	<ul style="list-style-type: none"> ▪ NP CultureSwab™ Rayon wire mini-tip swab in Liquid Stuart's, green top ▪ NP CultureSwab™ Rayon wire mini-tip swab in Amies Charcoal, green top
Nasal aspirate	NASP	1 – 2 mL (0.5 ml minimum)	<ul style="list-style-type: none"> ▪ Sterile, plastic leak proof container
Nasal washing	NW		
Bronchoscopy	BR		
Bronchial Alveolar Lavage	BAL		
Bronchial Aspirate	BASP		
Bronchial Wash	BRW		

B. Unacceptable specimens: Calcium alginate swabs, nose swabs, sputum, throat swabs

C. Transport and Storage: For additional information refer to [Laboratory Services](#) web page

Temperature	Sample Stability
Room temperature <ul style="list-style-type: none"> ▪ Bronch specimens ▪ NP swabs ▪ Nasal wash 	<ul style="list-style-type: none"> ▪ 4 hours ▪ 5 days ▪ 5 days
Refrigerated , 2 - 8° C <ul style="list-style-type: none"> ▪ Bronch specimens ▪ NP swabs ▪ Nasal apirates/washes 	<ul style="list-style-type: none"> ▪ 5 days

SAFETY CONSIDERATIONS

- Standard precautions. Refer to [MB 2.02](#) Biohazard Containment
- Use of engineering controls: Refer to [MB 3.01](#) Engineering Controls to Prevent Nucleic Acid Contamination

MATERIALS REQUIRED

Equipment	Media	Supplies
Refrigerator, 2 - 8° C	BBL CultureSwab™ Liquid Stuart's	Nitrile gloves
Storage bin	BBL CultureSwab™ Amies Charcoal	2.0 ml cryovials
	Sterile , plastic leak proof container	

PROCEDURE A: Follow the activity below for sample handling

Activity	Step	Action	Related Doc
ID Location: Microbiology	1	Verify that the patient identification on the primary container corresponds to the accompanying order	MB 1.01 Specimen Management Organizational policy 630.00 Laboratory Specimen Labeling
	2	Receive sample in Sunquest and generate label <ul style="list-style-type: none"> ▪ Sunquest location: MC ▪ Sunquest code: BORDP 	
	3	Confirm the name on the label is the same as the name on primary container	
	4	Affix LIS accession label to corresponding primary container	
Quality	4	Evaluate the quality of the specimen.	MB 1.02 Specimen Rejection Criteria
Store	5	Store specimen refrigerated at 2 - 8° C	
	6	Place specimen and label in molecular designated area	

PROCEDURE B: Follow the activity below for aliquoting samples and preventing cross-contamination

Sample Aliquots

Activity	Step	Action	Related Doc														
Identification of secondary container	1	Sample identification of all aliquots must be traceable to the primary specimen	Organizational policy 630.00 Laboratory Specimen Labeling														
	2	Confirm the name and accession number on the aliquot label is the same as on the primary container															
	3	Affix LIS aliquot label with corresponding accession number on secondary container															
Avoiding cross-contamination	4	Handle specimens to avoid cross contamination of primary sample and aliquots as follows:	Refer to assay specific procedures for additional information														
		<table border="1"> <thead> <tr> <th>Step</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>a</td> <td>Deliver primary specimens unopened to the molecular laboratory when possible or perform the following steps</td> </tr> <tr> <td>b</td> <td>Properly label secondary container with patient aliquot label</td> </tr> <tr> <td>c</td> <td>Verify name on primary and secondary container before transfer</td> </tr> <tr> <td>d</td> <td>Use sterile pipettes and technique when transferring samples</td> </tr> <tr> <td>e</td> <td>Aliquot one specimen at a time with only one tube open at a time</td> </tr> <tr> <td>f</td> <td>Never return the aliquot to the original container</td> </tr> </tbody> </table>		Step	Action	a	Deliver primary specimens unopened to the molecular laboratory when possible or perform the following steps	b	Properly label secondary container with patient aliquot label	c	Verify name on primary and secondary container before transfer	d	Use sterile pipettes and technique when transferring samples	e	Aliquot one specimen at a time with only one tube open at a time	f	Never return the aliquot to the original container
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REFERENCES

1. *B. pertussis/parapertussis* Clinical Verification and Validation Study performed at Children's Hospitals and Clinics of MN 2015
2. Andrea J. Linscott, Section editor, *Specimen Collection, Transport, and Acceptability*, 2.1. In Lynne S. Garcia (ed) *Clinical Microbiology Procedures Handbook*, Third edition 2010, American Society for Microbiology, Washington, D.C.
3. J. Michael Miller, A guide to *Specimen Management in Clinical Microbiology*, 1999, ASM Press, 1325 Massachusetts Ave NW, Washington, DC

Historical Record

Version	Written/Revised by:	Effective Date:	Summary of Revisions
1	P. Ackerman	1.23.16	Initial Version
2	P. Ackerman	07.19.16	Reformatted for CMS upload