Wake Forest Baptist Medical Center	**CP 20 - Fluid Specimen Handling and Processing**	**Dept:**	Central Processing Lab
		Effective Date:	August 7, 2017
		Revised Date:	January 11, 2019
		Contact:	Central Processing Lab Section Manager
CLIA Medical Director Signature: Gregory Pomper, MD (Signature on file)		**Approved Date:**	1/11/2019

1) General Procedure Statement:

a. **Purpose**: To provide laboratory testing personnel with guidelines for processing fluid samples sent to the laboratory for testing.

b. **Responsible Department/Scope:**

i. Procedure owner/Implementer: Central Processing
ii. Procedure prepared by: Jennifer Hausman
iii. Who performs procedure: Central Processing Team Members

2) Procedure:

a. **Specimen Orders Accessioning**

i. Fluid specimens are delivered to the laboratory

ii. Verify the specimens are labeled appropriately with two unique identifiers

iii. Determine the Fluid Specimen Type

1. Body Fluid – Peritoneal, Pleural, Ascites, Pericardial, etc.
2. Bronchial Alveolar Lavage (BAL)
3. Cerebral Spinal Fluid (CSF)
4. Synovial Fluid

iv. Look up the patient's orders in Order Inquiry

1. Select the "Current" tab to view orders
2. Determine if Cytology has been ordered on the specimen
    a. If Cytology is ordered and no requisition was sent with the specimen
        - Select the Cytology order in Order Inquiry

- Click on the "Order Number" hyperlink at the bottom of the screen
- Scroll down to "Reprint Inpatient Order Requisition"
- Click on the hyperlink
- Right Click
- Select Print

b. Do NOT select Cytology orders and complete the Beaker collection process

3. Verify which clinical lab **fluid orders** are associated with the specimen
   a. If the same test has been ordered multiple times,
      - Select the order and review the Comment section on the report at the bottom of the screen.
      - Determine if the order is for your current specimen and/or if the patient has multiple fluid specimens
   b. Review all Unlisted Lab orders for tests on the fluid
4. Perform the collection process in Beaker for all Beaker Clinical Lab orders not already accessioned

   Note: Already accessioned orders should not appear under the "Current" tab, but are viewable under "All Labs" tab

   a. Select the fluid orders for the specimen
      - Chemistry, Hematology, Microbiology, & Sendouts
   b. Click "Collect Specimens"
   c. Click "Print Labels"
   d. Enter the collection information
   e. Close the Collection screen
5. Using the "Receiving" activity, receive the Chemistry, Hematology, & Sendout samples by scanning the barcodes
6. Highlight all received samples and enter a Lab Comment
   a. If cytology orders were placed, enter "Sample sent to Cytology"
      - Smart phrase .cyto converts to "Sample sent to Cytology"
   b. If no cytology orders were placed, enter "No Cytology Order"
      - Smart phrase .nocyto converts to "No Cytology Order"
7. Place all labels and requisitions in the biohazard bag with the specimen
8. Place samples for the Spin person to pick up

b. **Specimen Aliquoting and Distribution**

i. Determine if the fluid has been sufficiently aliquoted by the collecting location

1. For specimens not sufficiently aliquoted by the collection location

a. Label the appropriate tube type for each section / test

- Microbiology – Deliver labels with sample in the original container after aliquots for other sections have been removed using sterile technique
- Chemistry – Urine Chemistry Tube; min. volume 0.5ml; label with Beaker label
- Hematology – Urine Chemistry Tube; min. volume 0.5ml; label with Beaker label
- Sendouts – Provide Sendouts with labels. Sendouts will return labeled containers with minimum volume requirements
- Cytology – Original container or urine cup; min. volume 0.5ml, prefer as much as possible; label with taglets containing patient name and MRN; keep requisition with aliquot

Note: If insufficient volume for minimum volumes listed, testing priority by the Ordering Provider may be required. Work with the lab sections to determine if a smaller volume is acceptable.

b. Create aliquots for all testing under the biosafety cabinet using sterile technique

c. Initial the label of each aliquot you created

d. For large volume fluids, create an extra aliquot in urine cup or chemistry tube, label with the fluid type, and store in the extra rack or hold bin of the Spin refrigerator

e. For small volume fluids, store the remaining volume in the extra rack or hold bin of the Spin refrigerator

- Exception: If the original container is sent to Micro, they will retain the remaining sample

f. Deliver labeled aliquots, additional labels, and requisitions, as applicable, to the appropriate testing sections

Note: Cytology requisition must accompany Cytology aliquot

2. For specimens aliquoted by the collecting location

    a. Deliver specimen, labels, and requisitions, as applicable, to the appropriate lab section for testing

3) Review/Revision/Implementation:

All procedures must be reviewed at least every 2 years.

- All new procedures and procedures that have major revisions must be signed by the Department Chairman.

- All reviewed procedures and procedures with minor revisions can be signed by the designated section medical director.

4) Related Procedures: N/A

5) References: N/A

6) Attachments:

A. Fluid Specimen Test Reference CP 20 Fluid Specimen Test Reference Document.pdf

- Commonly ordered fluid tests, but not all inclusive of available fluid orders

7) Revised/Reviewed Dates and Signatures:

Review Date	Revision Description	Signature
7/31/17	Original Document	Jennifer A. Hausman
10/30/18		Jennifer A. Hausman
1/11/19	Update for processing/aliquotting of specimens in Central Processing biosafety cabinet; added comments for Cytology orders	Jennifer A. Hausman, MLS(ASCP)SBB^{CM}

Attachment A: Fluid Specimen Test Reference

Fluid Specimen Test Reference		
Fluid Type	**Test Name**	**Test Mnemonic**
Cerebral Spinal Fluid (CSF)	Cell Count w/Diff	LAB212
	CSF Glucose	LAB185
	CSF Protein	LAB195
	CSF Lactate	LAB2771
	CSF LDH	LAB2772
	Chloride, CSF	LAB2767
	Culture, CSF/BF	LAB2639
	Enterovirus PCR	LAB3176
	HSV 1 and 2 PCR	LAB3191
	Varicella Zoster PCR	LAB3572
	CMV DNA PCR, Qualitative	LAB3171
	EBV PCR (Quantitative)	LAB3577
	Adenovirus Qualitative PCR	LAB3566
	Meningitis-Encephalitis (ME) Panel CSF HOLD	LAB4718
	Meningitis-Encephalitis (ME) Panel	LAB4594
	Multiple Sclerosis Panel 2 (Sendout)	LAB4559
	VDRL, CSF (Sendout)	LAB2780
	Pyruvic Acid, CSF (Sendout)	LAB4436
	Unlisted Labs (Research, Sendouts) - Must review all orders for testing on CSF	LAB3053
	Specimen for Flow (Non-Blood)	LAB4721
	Cerebrospinal Fluid - Cytology	LAB3362

Fluid Type	Test Name	Test Mnemonic
Bronchial Alveolar Lavage (BAL)	Bronchial Alveolar Lavage Cell Count and Diff	LAB3074
	Aspergillus Galactomannan, BAL (Sendout)	LAB4295
	Legionella DNA PCR, Qual (Sendout)	LAB4560
	Culture, Resp Quant	LAB2682
	Pneumocystis Direct (PNDFA)	LAB2680
	Respiratory Virus Panel	LAB3202
	Acid Fast Culture	LAB2629
	Fungal Culture	LAB240
	HSV PCR Non-Blood (Herpes Simplex Virus)	LAB3191
	CMV PCR (Qualitative) (Cytomegalovirus)	LAB3171
	Specimen for Flow (Non-Blood)	LAB4721
	Bronchoalveolar Lavage - Cytology	LAB3361
	Bronchial Washing - Cytology	LAB3360
	Bronchoalveolar Lavage for Quantitation of Lipid Laden Macrophages - Cytology	LAB3742
Synovial (Joint) Fluid	Synovial Fluid Exam (Cell Count w/Diff, Crystals, & Mucin Clot)	LAB3155
	Synovial Fluid Cell Count	LAB3152
	Synovial Fluid Crystals	LAB3153
	Synovial Fld / Mucin Clot Test	LAB3154
	Chemistry Tests - See Body Fluid Specimen Type: Synovial	
	Culture, CSF/BF	LAB2639
	Specimen for Flow (Non-Blood)	LAB4721
	Synovial Fluid - Cytology	LAB3739

Fluid Type	Test Name	Test Mnemonic
Body Fluid Specimen Type MUST Match - Peritoneal - Pleural - Ascites - Pericardial - Synovial	Body Fluid Cell Ct w/Diff	LAB210
	Protein, Fluid	LAB196
	Glucose Body Fluid	LAB186
	Albumin, Fluid	LAB177
	Amylase Body Fluid	LAB178
	Lipase Body Fluid	LAB2773
	CEA, Fluid	LAB3777
	Triglyceride, Fluid	LAB3775
	Cholesterol Fluid	LAB3773
	Creatinine, Fluid	LAB65
	Chloride, Fluid	LAB183
	LDH Body Fluid	LAB188
	Potassium Body Fluid	LAB193
	Sodium Body Fluid	LAB197
	Lactic Acid, Fluid	LAB3774
	Uric Acid, Fluid	LAB3812
	Culture, CSF/BF	LAB2639
	Culture, Peritoneal Fluid	LAB2679
	Specimen for Flow (Non-Blood)	LAB4721
	Peritoneal Fluid - Cytology	LAB3367
	Pleural Fluid - Cytology	LAB3368
	Pericardial Fluid - Cytology	LAB3366
	Miscellaneous Body Cavity Fluid - Cytology	LAB3735