## Processing Sterile Site or Respiratory Specimens if a Biological Safety Cabinet is Unavailable – Medical Center

#### Introduction

Standard practice dictates the use of a biological safety cabinet for processing of higher risk sterile site and respiratory specimens. The risk, however is lower for processing specimens as compared to working directly with colonies grown on cultures or specimens concentrated through centrifugation.

### Scope

This procedure is intended for use only in an emergency when a biological safety cabinet is unavailable and proper Person Protective Equipment [PPE] are used.

### **Policy**

- Plating or preparation of a Gram stain of sterile site or respiratory specimens will be performed on a bench top without the use of a biological safety cabinet only when the cabinet is unavailable.
- The local laboratory will determine if this procedure will be utilized. If not, the specimens will be routed to the Regional Reference Laboratory Bacteriology department for processing. Adherence to transport time and temperature must be followed [refer to Medical Center Plating Chart or LabNet for complete information].
- A Bacteriology Manager will be contacted prior to sending unplated specimens to the Regional Reference Laboratory as respiratory specimens cannot be set-up without a Q-Score [the exception is the Neutropenic Patient procedure]

### **Equipment**

- Gloves
- Lab Coat
- Face shield
- N-95 Respirator

NOTE: Individuals must be medically cleared and fit tested before donning any respirator.

## Safety Precautions

Refer to the Safety Manual for general safety requirements.

# Processing Sterile Site or Respiratory Specimens if a Biological Safety Cabinet is Unavailable – Medical Center, continued

Plating or preparing gram stain at the workbench Ensure that the workbench area is secure and that no other personnel walk or perform other activities which might cause air disturbance within <u>6 feet</u> of the area where the plating or preparation of the gram stain slide is taking place.

## Centrifugation

Sterile site or respiratory specimens [such as bronchial lavage] gram stains require cytocentrifugation. Cytocentrifucation should only be performed inside a Biological Safety Cabinet [BSC].

| If                       | Then  |
|--------------------------|---|
| if he BSC is unavailable | Centrifuge the specimen in a sterile capped conical centrifuge tube at 1500xg for 15 minutes. After centrifugation, remove the supernatant leaving ~0.5 ml in |
|                          | the bottom of the centrifuge tube. Resuspend the pellet and use for media inoculation and Gram stain preparation.   |
|                          | NOTE: this method is slightly less sensitive than cytocentrifuge but is an acceptable method when a STAT Gram stain is required.                              |

## Transport to the Regional Reference Laboratory

Refer to the Medical Center Media Plating Chart or LabNet for transportation requirements.

## **BSC Repair**

Ensure the Biological Safety Cabinet is functioning optimally [as soon as possible] in order to return to standard practice. Refer to the BSC Certification Report provided by the vendor [e.g. CEPA].

## **Controlled Documents**

• Medical Center Media Plating Chart

SCPMG Laboratory Systems Preanalytical Processing Reference

## **Processing Sterile Site or Respiratory Specimens if a Biological Safety Cabinet is Unavailable – Medical Center,**

continued

Non-Controlled Documents • BSC Certification Report [e.g. CEPA]

• LabNet

**Authors** Richard Weier

Susan Novak

Reformatted by Rebecca Rosser

Kaiser Permanente Medical Care Program California Division – South

**CLIA Laboratory Director** 

SCPMG Laboratory Systems Preanalytical Processing Reference

## 

Kaiser Permanente Medical Care Program California Division – South SCPMG Laboratory Systems Preanalytical Processing Reference

# Processing Sterile Site or Respiratory Specimens if a Biological Safety Cabinet is Unavailable – Medical Center, continued

# HISTORY PAGE

| Type<br>of Change:<br>New Major,<br>Minor | Description of Change(s) | Quality<br>Systems<br>Leader/Date | Operations Director, Area Laboratory Review/Date | CLIA<br>Director<br>Review/Date | Date<br>Change<br>Implemented |
|---|--------------------------|-----------------------------------|--|---------------------------------|-------------------------------|
| New                                       |                          |                                   |  |                                 | 9/26/2016                     |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |
|   |                          |                                   |  |                                 |                               |

Page 5 of 5

## Signature Manifest

Document Number: SCPMG-PPP-0128

Revision: 01

Title: Processing Sterile Site or Respiratory Specimens if a Biological Safety Cabinet is Unavailable – Medical

Center

All dates and times are in Pacific Standard Time.

## Processing Sterile Site or Respirat

## **Final Approval**

| Name/Signature              | Title                        | Date                     | Meaning/Reason |  |
|-----------------------------|------------------------------|--------------------------|----------------|--|
| Darryl Palmer-Toy (T188420) | SCPMG Laboratory Sys Med Dir | 12 Sep 2016, 03:49:22 PM | Approved       |  |

## **Set Effective Date**

| Name/Signature           | Title             | Date                     | Meaning/Reason |  |
|--------------------------|-------------------|--------------------------|----------------|--|
| Rebecca Rosser (K053260) | RRL ED CONSULTANT | 26 Sep 2016, 11:19:01 AM | Approved       |  |