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## SOP: Nasopharyngeal Sample Collection

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#### 1. Purpose

This SOP describes the nasopharyngeal collection procedure for storage in the SickleInAfrica biorepository.

#### 2. Background

Nasopharyngeal swabs will be done to determine microbial colonization of the nasopharynx. The swabs will be submitted for the detection of bacterial, fungal, and viral pathogens.

#### 3. Scope

To present the procedure for collecting and handling nasopharyngeal samples in study participants.

#### 4. Equipment and reagents

1. Primeswab adult nasopharyngeal flocked tubes (2)
2. Disposable gloves
3. Vial with Primestore nucleic acid preservation media
4. Vial with STGG media
5. Kendall WEBCOL Alcohol wipes
6. Specimen transport box with ice packs
7. Specimen barcode label and forms
8. Stainless steel scissors

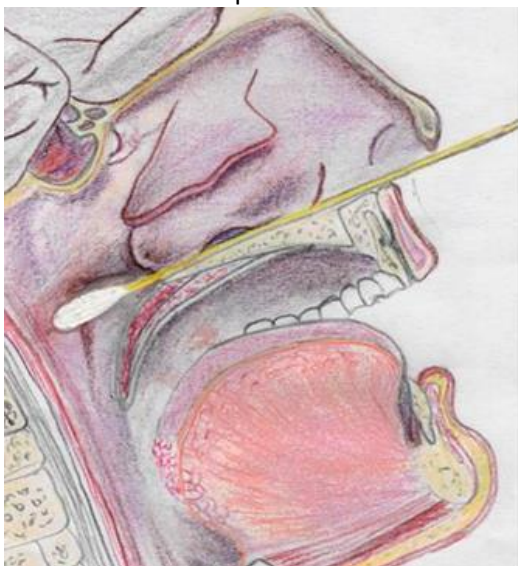
#### 5. Responsibilities

The researcher is responsible for collecting specimens and that the vials are labeled accordingly. All inventory should be maintained by the researcher.

#### 6. Procedures

1. Practice good hygiene and wash your hands.
2. Identify the participant prior to collecting the nasopharyngeal sample and explain the procedure to each participant.
3. Put on disposable gloves.
4. Sterilize scissors with the Kendall WEBCOL alcohol wipes and allow them to dry for a few seconds.

5. Open the first Primeswab flocked swab, avoid touching the cotton part of the swab.
6. Horizontally insert the swab into one nostril and gently push along the floor of the nasal passage towards the nasopharynx (do not force the swab when resistance is met). The swab would be inserted from the distance of the nose to the ear (Figure 1).
7. Rotate the flocked swab carefully and gently in a 180° manner to allow an adequate sample collection and leave the swab for 2-3 seconds to allow secretions to be absorbed.
8. Remove **flocked swab 1** from nostril 1 and immediately place it into the labeled vial containing **Primestore** (long, white/red cap). Break off the swab at the scored region without touching the shaft lower down. Reattach the cap securely (see figure 2 ) and vortex for 2 seconds.
9. Vortex the labeled vial containing **STGG media (short, orange cap)** for 2 seconds (see figure 2 for a picture of the vial)
10. Repeat steps 5 to 8 for **flocked swab 2** using a different nostril, nostril 2
11. Remove **flocked swab 2** from nostril 2 and immediately place it into the vial (short, orange cap) containing **STGG media. Remove scissors from 70% alcohol, wipe with a paper towel until completely dry, and cut swab to just below the rim of the vial.** Reattach the cap securely (see figure 2)
12. Carefully label all specimens .
13. Six barcoded stickers are printed.
14. The first sticker is placed on the sample in the Primestore media..
15. The second sticker is placed on the sample in the STGG media.
16. The third sticker is placed on the specimen requisition form.
17. The fourth and fifth stickers are placed on the carbon copies.
18. The sixthsticker is placed on the specimen tracking form.
19. Complete the specimen tracking log with the patient ID number, date, and time of specimen collection.



**Figure 1**



**Figure 2**

### **7. Transport**

Place specimens in a cooled ice box. Transfer specimens with a tracking log to the laboratory as soon as possible.

### **8. Storage**

The nasopharyngeal swab in the 3 ml universal transport medium (UTM): ≤24 h at 2-8°C (≤2 h at room temperature) until processing

Nasopharyngeal swab in 1 ml STGG Storage: <8 h at 2-8°C until freezing at -70°C

## 9. References

PERCH STUDY SOPS <https://www.jhsph.edu/ivac/wp-content/uploads/2018/05/PERCH-Laboratory-SOPs.pdf>

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