

## NeoCol: Standard Operating Procedure (SOP) for Maternal Vagino-rectal Swabs v1.0

### Purpose:

The purpose of this SOP is to describe the standard procedures involved in obtaining Maternal Vagino-rectal swabs according to the NeoCOL study protocol.

### Principal:

Vagino-rectal swabs collect a sample of the bacteria that colonise the vagina & lower gastrointestinal tract of a mother at birth. The samples can then be analysed to determine which species are present and assess whether they carry antibiotic resistance genes. This information can then be compared to the colonisation information from their infants to better understand transmission dynamics. Recto-vaginal should be ideally collected prior to birth and any healthcare worker physical examination. *Three* swabs will be collected: one for multidrug resistant organism culture (ESBL/CRE), one for GBS culture and one for genetics.

### Responsibility:

This SOP applies to any clinical staff who are taking vagino-rectal swabs from mothers for the NeoCOL study. It is the responsibility of those users to follow the guidelines when collecting swabs for the study.

### Safety Requirements:

Gloves should be worn during swab collection. Standard clinical hand hygiene practices should be followed before, and after sample collection. Handle all specimens with care and treat them as potentially infectious material.

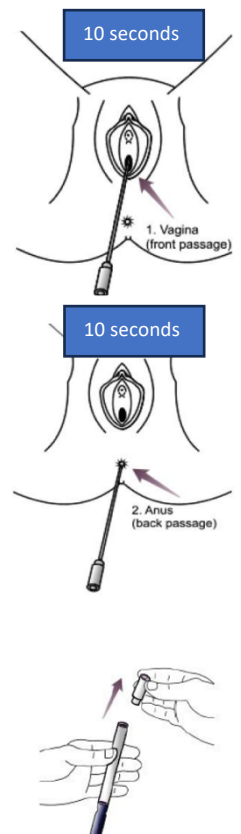
### Materials:

- Non-Sterile gloves
- 1x Sterile swab plus container with amies medium (*MDR culture*)
- 1x Flocculated sterile swab plus container with amies medium (*GBS culture*)
- 1x Dry swab (*Genetics*)
- 1x Cryogenic tube (*Genetics*)
- 3x Cryogenic specimen labels
- Plastic zip lock bag for specimen transport

### Procedure:

Explain the procedure to the mother and obtain verbal consent.

1. Label each of the specimen containers according to the label coding system (see appendix).
2. Position the mother in the lithotomy position.
3. Perform hand hygiene and put on gloves.
4. Open the sterile swab packages and remove the swab, being careful not to touch the top of the swab to yourself or any other surfaces.
5. Insert the tip of the swab *4 cm* into the lower *vagina first* and rotate for *10 seconds without* use of a speculum.
6. Then insert the same swab *1 cm* into the anus and rotate for *10 seconds*. Note: A visibly soiled swab is best.
7. Remove the swab and place the swab into the appropriate labelled transport container, and place into the plastic ziplock bag.
8. Repeat for the *second* and *third* swabs (may be done in any order).
9. For the genetic swabs:
  - a. After collection, place the tip of the swab directly into the cryogenic tube.
  - b. With clean scissors, carefully cut the shaft of the swab, so that the swab is able to fit inside the cryogenic tube and the lid can be closed. Be careful not to touch the tip of the swab on yourself or any surface.



10. Transport the swab samples to the laboratory for processing and storage within 30 minutes:
11. Document the samples in the NeoCOL Sample Collection Log.
12. Dispose of any waste as per hospital guidelines.

**Appendix: Specimen Labelling Code**

Site	Participant Number	Mother/Child	Timepoint (day)	Sample Type
A Philippine General	001 – 999	M Mother	00, 03, 07, 10, 14, 21...	B gBs swab (group B streptococcus)
B Cipto Mangunkusumo		C Child		M Mdr swab (multidrug resistant)
C Hasan Sadikin				G Genetic swab
D Soetomo				S Stool

Eg. **B020C07M**: Cipto Mangunkusumo Hospital, Participant 020, Child, Day 07, MDR swab

**References**

- Monash Women’s Hospital: GBS Screening Information Sheet. [Online.](#)
- Filkins L, Hauser J, Robinson-Dunn B, Tibbetts R, Boyanton B,. Guidelines for the Detection and Identification of Group B Streptococcus, American Society for Microbiology, (2021),
- CHAIN Rectal Collection SOP v1.04 accessed on 5<sup>th</sup> May 2023. [Online.](#)]

**Document History**

Version	Author(s)	Approved by	Update Reason	Date	SOP No:
1.0	B. Dickson	P. Williams	New document	11 JUL 2023	NeoCOL_SOP02

**Site Training Record**

Trainee Name	Read/Understand SOP (Tick)	Access to SOP (Tick)	Trainee Signature	Date	Trainers Initials