

## **COVID-19 – Collection of upper respiratory swabs for SARS-COV-2 testing in newborn infants**

*This Local Operating Procedure is developed to guide safe clinical practice in Newborn Care Centre (NCC) at The Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this Local Operating Procedure.*

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### **INTRODUCTION**

Current testing guidelines for SARS-CoV-2 is a combined nose and throat swab aiming to collect epithelial cells. The indication for a swab should be assessed according to current guidelines and case definitions in NSW Health.

#### **1. AIM**

- Successful collection of epithelial cells from nose and throat swabs

#### **2. Patient**

- Neonates

#### **3. STAFF**

- Medical and nursing staff

#### **4. EQUIPMENT**

- Pathology request
- Viral swab (with liquid medium)  
NB. Avoid swabs with gel at the bottom of the tube (gel swabs are for bacterial culture only)
- Tongue depressor
- PPE- face mask, gloves, gown and protective eye wear
- Sucrose 25% or breast milk

#### **5. CLINICAL PRACTICE**

##### **Procedure:**

1. Check the pathology request form for patients details, date of collection, clinical history, name and provider number of medical officer and the test requested – PCR for 'SARVS-CoV-2' or 'COVID19':
  - URGENT – INPATIENT (6-10 hours result) – Refer to educational notes
  - URGENT – RAPID TEST (1.5 hours result) – Refer to educational notes
2. Label viral swab tube with patient details.
3. Perform hand hygiene.
4. Don PPE.
5. Give 25% sucrose or mother's breast milk for pain relief.
6. Ensure infant is in a comfortable and secure position.
7. Moisten swab with sterile sodium chloride 0.9% if required (dry swabs are preferred).
8. Using a tongue depressor, flatten tongue and insert swab.
9. Swab tonsillar beds and back of throat, avoiding tongue.
10. Gently rotate brush tip for 3-5 seconds.
11. Using the same swab, hold with a pencil grip and insert vertically (with infant lying flat) into one nostril parallel to the palate.
12. Insert swab to 1 cm or until resistance is met and rotate swab 5 times against the nasal wall.
13. Repeat the same method for other nostril.

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14. Remove swab and insert into transport medium vial.
15. Safely remove and dispose of PPE.
16. Perform hand hygiene.
17. Double check labeling on swab and sign specimen form before placing in a red specimen bag.
18. If the result is required urgently (within 2 hours), "URGENT – RAPID TEST – APPROVED BY ID/VIROLOGY" must be written prominently on the request form. Include clinical notes stating the reason for urgency (eg. NICU inpatient) along with the name and provider number of the requesting doctor.
19. Hand deliver swab to SEALS laboratory (specimen reception, level 3 Prince of Wales Hospital) and state level of the urgency.
20. Notify Infection Control Clinical Nurse Consultant (Janelle Carlile) to assist with expediting result.

**6. DOCUMENTATION**

- eMR
- Pathology Request Form

**7. EDUCATIONAL NOTES**

- A dry swab is recommended to increase the yield of epithelial cells obtained, but may be quite irritating to neonates. Staff may opt to wet the swab with a small amount of sterile normal saline, although this is not recommended by the laboratory.
- "URGENT – INPATIENT" pathology request at the time of ordering in eMR and on the pathology request form together with clinical notes stating the reason along with the name and provider number of the requesting doctor. The test result will be ready within 6-10 hours.
- "URGENT – RAPID TEST – APPROVED BY ID/VIROLOGY":
  - Must be discussed with an Infectious Diseases Consultant at Prince of Wales Hospital or the Senior Medical Virologist (contact through switch)
  - Requests for rapid tests must be received with a request form specifically stating: "URGENT – RAPID TEST"
  - Clinical notes stating the reason for the tests (see below):
    - Where urgent initiation of non-invasive ventilation (NIV) is required
    - For urgent organ and tissue donation (donors and recipients)
    - For pregnant women requiring urgent caesarean section
  - The name and department of the Infectious Diseases Physician or Virologist who was consulted and has approved the rapid test
  - Generally expect the rapid test result within 1.5 hours
- Contact the laboratory on 9382 9133 if you have any further questions.

**8. RELATED POLICIES/PROCEDURES/CLINICAL PRACTICE LOP**

- Neonatal Medical LOP – COVID-19: Newborn infants born to women with suspected or confirmed COVID-19

**9. RISK RATING**

- High

**10. NATIONAL STANDARD**

- Standard 1 Clinical Governance
- Standard 3 Preventing and Controlling Healthcare-Associated Infections
- Standard 5 Comprehensive Care
- Standard 6 Communicating for safety

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**11. ABBREVIATIONS AND DEFINITIONS OF TERMS**

COVID-19	Coronavirus Disease 2019	PPE	Personal Protective Equipment
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2	PCR	Polymerase Chain Reaction
NCC	Newborn Care Centre		

**12. REFERENCES**

- Clinical Excellence Commission, NSW Government, Accessed: 8. September 2020  
<http://cec.health.nsw.gov.au/keep-patients-safe/C>
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<https://www.seslhd.health.nsw.gov.au/sites/default/files/documents/COVID-19June%202>
- New requirements and criteria- Requests for Urgent or Rapid SARS-CoV-2. Memorandum issued by NSW Health Pathology on 13<sup>th</sup> August 2020.  
<https://www.health.nsw.gov.au/Infectious/covid-19/communities-ofpractice/Pages/guide-rapid-prc-testing.aspx>

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