

## ECG – PERFORMING AN ECG

*This LOP 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 Operations Procedure (LOP). Using this document outside the Royal Hospital for Women or its reproduction in whole or part, is subject to acknowledgement that it is the property of NCC and is valid and applicable for use at the time of publication. NCC is not responsible for consequences that may develop from the use of this document outside NCC.*

### INTRODUCTION

For clinical reasons a formal ECG is sometimes required on a neonate. The ECG can be performed by medical or nursing/midwifery staff.

#### 1. AIM

- To use the ECG machine correctly on a neonate

#### 2. PATIENT

- Newborns

#### 3. STAFF

- Medical and nursing/midwifery staff

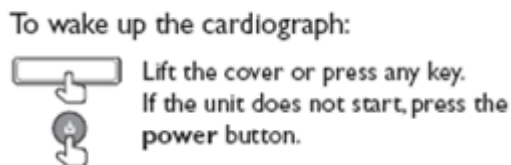
#### 4. EQUIPMENT

- ECG machine
- ECG dots and leads
- Pacifier (if parents have consented)
- Swaddle

#### 5. CLINICAL PRACTICE

##### Procedure:

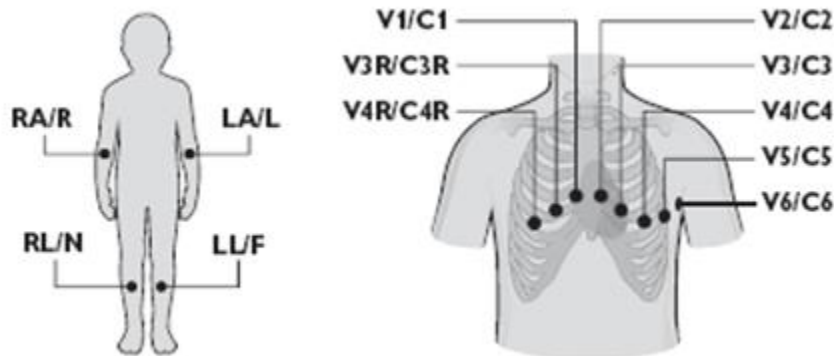
1. Confirm that the infant is to have ECG.
2. Discuss procedure with parent/s.
3. Place infant in a warm environment for the procedure.
4. Provide comfort.
5. Switch on ECG machine: press power button.



6. Place ECG dots on chest as follows:
  - a. Place V1 on the right sternal edge of chest (between nipple and sternum).
  - b. V2 to V6 run in an arc around left nipple.
  - c. Place V2 left side of sternum opposite V1.
  - d. Place V3 midclavicular between 4th and 5th rib.
  - e. Place V4 between 5th and 6th rib.
  - f. Place V5 at same level as V4.
  - g. Place V6 level with V3 approximately.

**ECG – PERFORMING AN ECG cont'd**

- Place 4 limb leads (See diagram below).  
NB. Ignore V3R and V4R in diagram.



- Wait for an all green trace then press ECG to record.

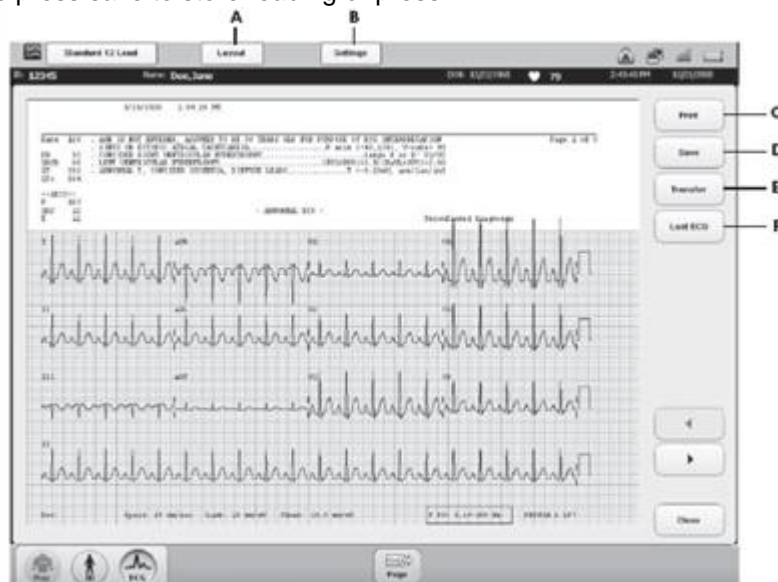


Any disconnected leads are indicated with a red X mark.



When lit, press to take ECG. Press twice rapidly to take STAT or urgent ECG (button does not have to be lit).

- At end of procedure press save to store reading or press PRINT.



- Remove all dots and tapes with adhesive removers.
- Dress and settle the infant.
- Stick patient ID label on ECG printout and note date and time.
- Consult with medical officer on the ECG.
- Document in the baby's notes that the ECG has been attended.

**NEONATAL SERVICES DIVISION**

Approved by Quality & Patient Care Committee  
August 2018

**ECG – PERFORMING AN ECG**

**6. DOCUMENTATION**

- eMR nursing notes
- Neonatal observation chart
- NICUS database

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

- N/A

**8. RISK RATING**

- Low

**9. NATIONAL STANDARD**

- Standard 1 Clinical Governance
- Standard 5 Comprehensive Care

**10. ABBREVIATIONS AND DEFINITIONS OF TERMS**

ECG	Electrocardiograph	NCC	Newborn Care Centre
LOP	Local Operations Procedure		

**11. REFERENCES**

- Phillips Medical Systems (2009). PageWriter TC50 Cardiograph Quick Help Guide.
- Venkatesh P. (2007) "Pediatric Electrocardiogram. The basics." Pediatric Oncall Volume 4, Issue 3, p4.

**12. AUTHOR:**

Primary	3/5/2011	J Blaeck (CNS), C Cluff (CNS)
Revised	26/9/2014	J Blaeck (CNS)
	17/7/2018	J Blaeck (NUM)