

MALAYSIAN NATIONAL NEONATAL REGISTRY (CRF 10)

Centre Name: _____ _____ _____ Date of Admission: <input type="text"/> / <input type="text"/> / <input type="text"/> (dd/mm/yy)	<input type="radio"/> New Case <input type="radio"/> Readmission <input type="checkbox"/> Transfer from, if relevant: _____	MNNR No. (Office use): <input type="text"/> / <input type="text"/> Centre: <input type="text"/>
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Admitted to neonatal ward: Yes → (Proceed to complete all sections in this CRF) No → (Proceed to complete [Sections 1, 2, 4(No. 45) and 5])

Instruction: Where check boxes are provided, check (✓) one or more boxes. Where radio buttons are provided, check (✓) one box only.

SECTION 1 : PATIENT PARTICULARS & MATERNAL HISTORY

1. Name of mother: *			
2. Name of baby (optional):			
3. RN of baby: *			
4a. Mother's I/C number: *	MyKad: <input type="text"/> - <input type="text"/> - <input type="text"/>		
	Other ID document No: <input type="text"/>		
	Specify document type (if others):	<input type="radio"/> Passport <input type="radio"/> Armed Force ID <input type="radio"/> Driver's License <input type="radio"/> Old IC <input type="radio"/> Hospital RN <input type="radio"/> Father's I/C <input type="radio"/> Work Permit number <input type="radio"/> Police ID Card <input type="radio"/> Immigration permit <input type="radio"/> Others, specify: _____	
4b. Child's I/C number:	MyKid: <input type="text"/> - <input type="text"/> - <input type="text"/>		
5a. Date of birth of baby: * (dd/mm/yyyy)	<input type="text"/> / <input type="text"/> / <input type="text"/>	5b. Time of birth: (24-hour format) (mandatory for death cases)	<input type="text"/> (enter the best estimated time of birth if the exact time is unknown)
6. Ethnic group of mother: *	<input type="radio"/> Malay <input type="radio"/> Indian <input type="radio"/> Bumiputra Sabah, specify: _____ <input type="radio"/> Other Malaysian <input type="radio"/> Chinese <input type="radio"/> Orang Asli <input type="radio"/> Bumiputra Sarawak, specify: _____ <input type="radio"/> Non-citizen, specify country: _____		
7. Maternal age: *	<input type="text"/> (years)		
8. GPA: (current pregnancy before delivery of this child)	* Gravida: <input type="text"/>	* Parity: <input type="text"/>	* Abortion: <input type="text"/>
9. Maternal diabetes (including gestational diabetes): *	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		
10. Maternal hypertension, chronic pregnancy induced:	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		
11. Maternal chorioamnionitis:	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		

SECTION 2 : BIRTH HISTORY

12. Antenatal steroid: *	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		
13. Intrapartum antibiotic: *	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		
14. Birth weight: *	<input type="text"/> (grams)		
15a. Gestation: *	<input type="text"/> (weeks)	15b. Gestational age based on: (if patient died)	<input type="radio"/> LMP <input type="radio"/> Ultrasound <input type="radio"/> Neonatal assessment <input type="radio"/> Unknown
16. Growth status: *	<input type="radio"/> SGA <input type="radio"/> AGA <input type="radio"/> LGA		
17. Gender: *	<input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Ambiguous/ Indeterminate		
18. Place of birth: *	<input type="radio"/> Inborn: <input type="radio"/> Home <input type="radio"/> Health clinic <input type="radio"/> Government hospital with specialist → <input type="radio"/> District <input type="radio"/> General; <input type="radio"/> Outborn → <input type="radio"/> Government hospital without specialist <input type="radio"/> Private hospital/ maternity home >50 beds <input type="radio"/> University hospital <input type="radio"/> Alternative Birthing Centre <input type="radio"/> Private hospital/ maternity home <50 beds with specialist <input type="radio"/> Urban <input type="radio"/> Rural; <input type="radio"/> Private hospital/ maternity home <50 beds without specialist <input type="radio"/> Enroute/ During transport <input type="radio"/> Others, specify: _____ <input type="radio"/> Unknown		
19. Multiplicity: *	<input type="radio"/> Singleton <input type="radio"/> Twin <input type="radio"/> Triplet <input type="radio"/> Others, specify: _____		
20. Final mode of delivery: *	<input type="radio"/> Vaginal delivery → <input type="radio"/> SVD <input type="radio"/> Breech <input type="radio"/> Others, specify: → _____ <input type="radio"/> Instrumental → <input type="checkbox"/> Vacuum <input type="checkbox"/> Forcep <input type="radio"/> Unknown <input type="radio"/> Caesarean section → <input type="radio"/> Elective <input type="radio"/> Emergency		
21. Apgar score at 1 min and 5 min (1-10) : *	a) Score at 1 min: <input type="text"/> <input type="checkbox"/> Unknown	b) Score at 5 min: (Please score even if the baby is intubated) <input type="text"/> <input type="checkbox"/> Unknown	
22. Initial resuscitation : *	a) Oxygen:	<input type="radio"/> Yes <input type="radio"/> No	
	b) Bag-mask vent:	<input type="radio"/> Yes <input type="radio"/> No	
	c) Endotracheal tube vent:	<input type="radio"/> Yes <input type="radio"/> No	
23. Admission temperature: *	<input type="text"/> (°C)		

SECTION 3 : NEONATAL EVENT

24. Respiratory support: *	<input type="radio"/> Yes → <input type="checkbox"/> CPAP <input type="checkbox"/> Conventional ventilation <input type="checkbox"/> HFOV <input type="checkbox"/> Nitric oxide <input type="checkbox"/> Nasal CPAP before ETT ventilation: <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> No
25. Total duration of ventilatory support: * (Do not count the days on CPAP only)	<input type="text"/> <input type="text"/> <input type="text"/> (days)
26. Surfactant: *	<input type="radio"/> Yes → <input type="radio"/> < 1 hr <input type="radio"/> 1- 2 hrs <input type="radio"/> > 2 hrs <input type="radio"/> No
27. Post natal steroid for CLD: *	<input type="radio"/> Yes <input type="radio"/> No
28. Parenteral nutrition: *	<input type="radio"/> Yes <input type="radio"/> No

SECTION 4 : PROBLEMS / DIAGNOSES

29. Respiratory :	<input type="checkbox"/> Meconium aspiration syndrome <input type="checkbox"/> Pulmonary haemorrhage <input type="checkbox"/> Pneumonia <input type="checkbox"/> Transient tachypnoea of newborn <input type="checkbox"/> Pulmonary interstitial emphysema <input type="checkbox"/> Unknown												
30. RDS:	<input type="radio"/> Yes <input type="radio"/> No												
31. Pneumothorax: *	<input type="radio"/> Yes → <input type="checkbox"/> Pneumothorax developed during mechanical ventilation: <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> No												
32. Supplemental oxygen at: *	a) Day 28: <input type="radio"/> Yes <input type="radio"/> No b) 36 weeks corrected age : <input type="radio"/> Yes <input type="radio"/> No												
33. Cardiovascular: *	PPHN: <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown												
34. PDA: *	<input type="radio"/> Yes → <table border="1"> <tr> <td>a) ECHO done:</td> <td><input type="radio"/> Yes</td> <td><input type="radio"/> No</td> </tr> <tr> <td>b) Indomethacin/Ibuprofen:</td> <td><input type="radio"/> Yes</td> <td><input type="radio"/> No</td> </tr> <tr> <td>c) Ligation:</td> <td><input type="radio"/> Yes</td> <td><input type="radio"/> No</td> </tr> </table> <input type="radio"/> No	a) ECHO done:	<input type="radio"/> Yes	<input type="radio"/> No	b) Indomethacin/Ibuprofen:	<input type="radio"/> Yes	<input type="radio"/> No	c) Ligation:	<input type="radio"/> Yes	<input type="radio"/> No			
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b) Indomethacin/Ibuprofen:	<input type="radio"/> Yes	<input type="radio"/> No											
c) Ligation:	<input type="radio"/> Yes	<input type="radio"/> No											
35. NEC (Stage 2 and above): *	<input type="radio"/> Yes → <input type="checkbox"/> Surgical treatment: <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> No												
36. ROP: Retinal Exam Done: *	<input type="radio"/> Yes (If yes, worst stage of ROP): → <table border="1"> <tr> <td>a) Date of first screening:</td> <td><input type="text"/> / <input type="text"/> / <input type="text"/> (dd/mm/yy)</td> </tr> <tr> <td>b) Post conceptional age at screening:</td> <td><input type="text"/> (autocalculate)</td> </tr> <tr> <td>c)</td> <td><input type="radio"/> No ROP <input type="radio"/> Stage 1 <input type="radio"/> Stage 2 <input type="radio"/> Stage 3 <input type="radio"/> Stage 4 <input type="radio"/> Stage 5</td> </tr> <tr> <td>d) Laser therapy:</td> <td><input type="radio"/> Yes <input type="radio"/> No</td> </tr> <tr> <td>e) Cryotherapy:</td> <td><input type="radio"/> Yes <input type="radio"/> No</td> </tr> <tr> <td>f) Vitrectomy:</td> <td><input type="radio"/> Yes <input type="radio"/> No</td> </tr> </table> <input type="radio"/> No → <input type="checkbox"/> Appointment given: <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not applicable	a) Date of first screening:	<input type="text"/> / <input type="text"/> / <input type="text"/> (dd/mm/yy)	b) Post conceptional age at screening:	<input type="text"/> (autocalculate)	c)	<input type="radio"/> No ROP <input type="radio"/> Stage 1 <input type="radio"/> Stage 2 <input type="radio"/> Stage 3 <input type="radio"/> Stage 4 <input type="radio"/> Stage 5	d) Laser therapy:	<input type="radio"/> Yes <input type="radio"/> No	e) Cryotherapy:	<input type="radio"/> Yes <input type="radio"/> No	f) Vitrectomy:	<input type="radio"/> Yes <input type="radio"/> No
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b) Post conceptional age at screening:	<input type="text"/> (autocalculate)												
c)	<input type="radio"/> No ROP <input type="radio"/> Stage 1 <input type="radio"/> Stage 2 <input type="radio"/> Stage 3 <input type="radio"/> Stage 4 <input type="radio"/> Stage 5												
d) Laser therapy:	<input type="radio"/> Yes <input type="radio"/> No												
e) Cryotherapy:	<input type="radio"/> Yes <input type="radio"/> No												
f) Vitrectomy:	<input type="radio"/> Yes <input type="radio"/> No												
37. IVH: *	<input type="radio"/> Yes If yes, worst grade : → <input type="radio"/> Grade 1 <input type="radio"/> Grade 2 <input type="radio"/> Grade 3 <input type="radio"/> Grade 4 <input type="checkbox"/> VP shunt / reservoir insertion <input type="radio"/> No <input type="radio"/> Not applicable (term infant) <input type="checkbox"/> Ultrasound not done												
38. Central venous line:	<input type="radio"/> Yes <input type="radio"/> No												
39. Catheter associated infection:	<input type="radio"/> Yes <input type="radio"/> No												
40. Catheter associated ischaemic event:	<input type="radio"/> Yes → <input type="radio"/> Vasospasm <input type="radio"/> Gangrene <input type="radio"/> Organ dysfunction <input type="radio"/> No												

SECTION 4 : PROBLEMS / DIAGNOSES (cont.)

41. Seizures:	<input type="radio"/> Yes <input type="radio"/> No		
42. Confirmed sepsis:	<input type="radio"/> Yes → <input type="radio"/> No	I) For first episode: <input type="radio"/> On or before day 3 of life <input type="radio"/> After day 3 of life II) Type of organism: (can tick more than one) <input type="checkbox"/> Group B Streptococcus <input type="checkbox"/> Fungal <input type="checkbox"/> Acinetobacter <input type="checkbox"/> MRSA <input type="checkbox"/> Staphylococcus aureus <input type="checkbox"/> Others, specify: <input type="checkbox"/> CONS <input type="checkbox"/> Klebsiella <input type="checkbox"/> ESBL organisms <input type="checkbox"/> Pseudomonas	
43. Neonatal meningitis:	<input type="radio"/> Yes <input type="radio"/> No		
44. HIE (≥ 36 weeks):	<input type="radio"/> None <input type="radio"/> Mild <input type="radio"/> Moderate <input type="radio"/> Severe		
45. Congenital anomalies:			
45a. Major congenital anomalies:		45b. Types of abnormalities (Check all that are present. Applies to all including 'known syndromes', 'not a recognised syndrome' or 'isolated major abnormality')	
<input type="radio"/> Yes → <input type="radio"/> No → (Proceed to No.46):			
<input type="radio"/> Syndrome (known) <input type="checkbox"/> Down <input type="checkbox"/> Edward <input type="checkbox"/> Patau <input type="checkbox"/> Others, specify (Please refer to ICD 10): <div style="border: 1px solid black; height: 40px; width: 100%;"></div> <input type="radio"/> Not a recognised syndrome <input type="radio"/> Isolated major abnormality	<input type="checkbox"/> CVS → <input type="radio"/> Cyanotic <input type="radio"/> Acyanotic <input type="checkbox"/> ECHO done <input type="checkbox"/> CNS → <input type="radio"/> Hydrocephalus <input type="radio"/> Hydrancephaly <input type="radio"/> Holoprosencephaly <input type="radio"/> Others (Refer to ICD 10): <input type="checkbox"/> Neural Tube Defect → <input type="checkbox"/> Spina bifida <input type="checkbox"/> Anencephaly <input type="checkbox"/> Encephalocoele <input type="checkbox"/> Others (Refer to ICD 10):	<input type="checkbox"/> Skeletal dysplasia <input type="checkbox"/> Respiratory <input type="checkbox"/> GIT <input type="checkbox"/> Hydrops <input type="checkbox"/> Renal <input type="checkbox"/> Cleft → <input type="radio"/> Lip <input type="radio"/> Palate <input type="radio"/> Lip and palate <input type="checkbox"/> Others, specify: <input type="checkbox"/> None of the above	
46. Inborn Errors of Metabolism (IEM):	<input type="radio"/> Yes → <input type="radio"/> No	Specify diagnosis:	

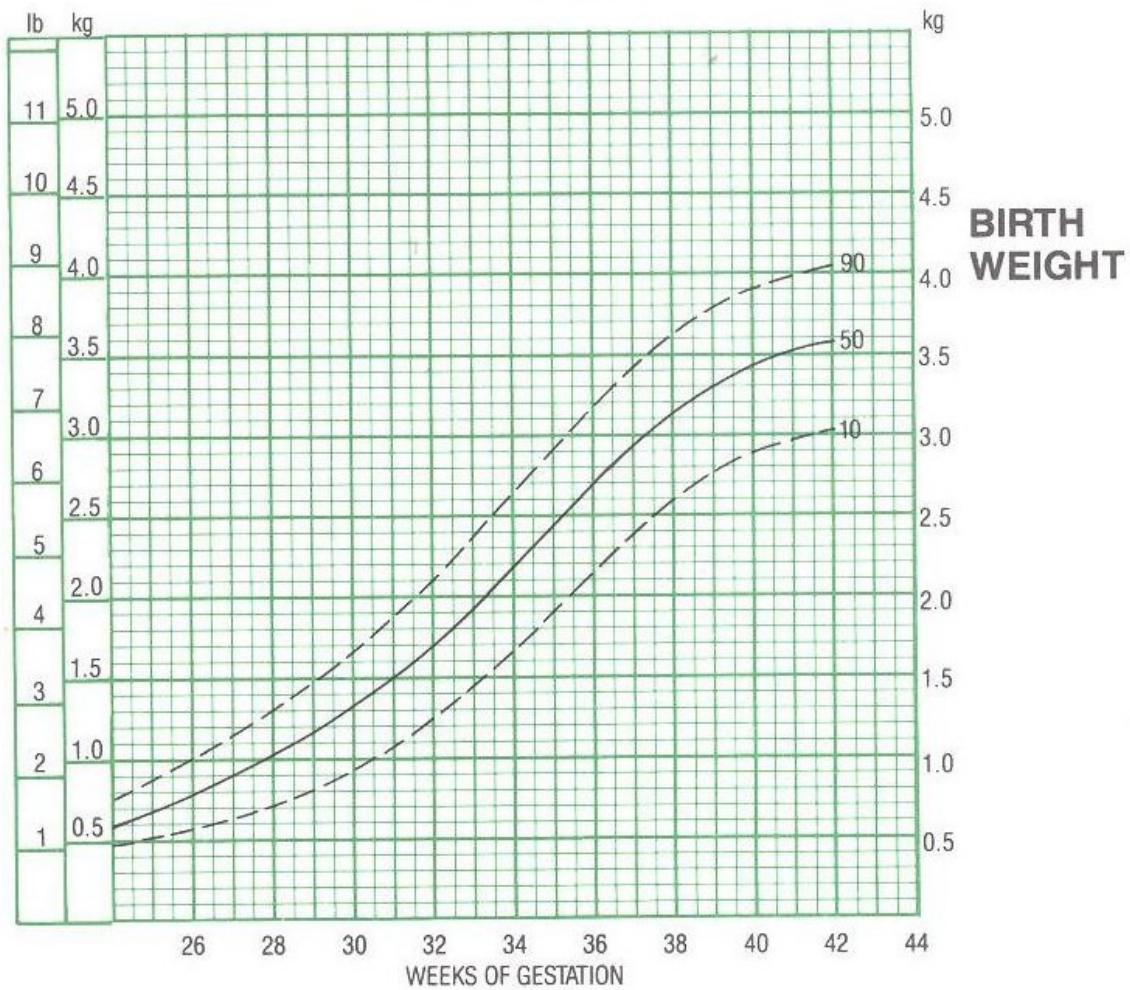
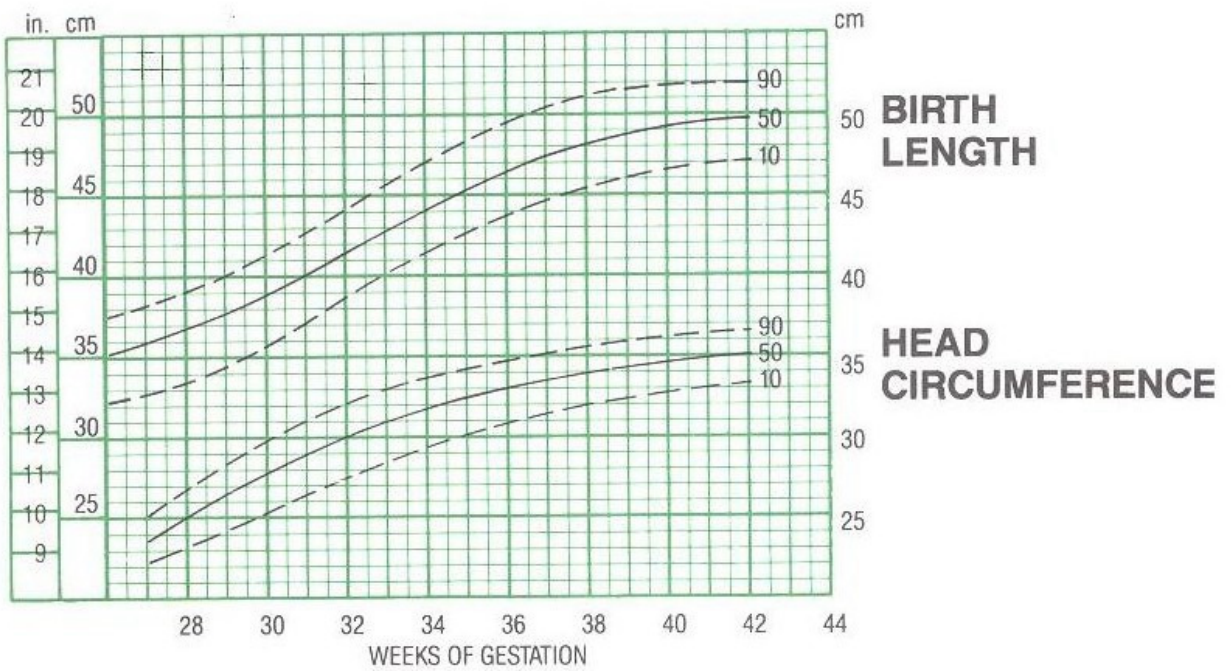
SECTION 5 : OUTCOME

47a. Date of discharge / transfer/ death: (dd/mm/yy)	<input type="text"/> / <input type="text"/> / <input type="text"/>	47b. Time of death: (24-hour format) (mandatory for death cases)	<input type="text"/> : <input type="text"/> : <input type="text"/> (enter the best estimated time of death if the exact time is unknown)
48. Weight and growth status on discharge / death:	a) Weight:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> (grams)	
	b) Growth status:	<input type="radio"/> SGA <input type="radio"/> AGA <input type="radio"/> LGA	
49. Feeding at discharge / death:	<input type="radio"/> Never fed <input type="radio"/> Human milk only <input type="radio"/> Formula only <input type="radio"/> Human milk with formula <input type="radio"/> No data / Unknown		
50. Total duration of hospital stay (Neonatal / Paeds Care):	<input type="text"/> <input type="text"/> <input type="text"/> (in completed days)	(autocalculate)	
51. Outcome:			
<input type="radio"/> Alive → Place discharged to:			
<input type="radio"/> Home <input type="radio"/> Social welfare home <input type="radio"/> Other non Paeds Ward <input type="radio"/> Still hospitalized as of 1st birthday <input type="radio"/> Transfer to other hospitals →			
a) Name of hospital:		b) Reason for transfer:	
		<input type="radio"/> Growth / Stepdown care <input type="radio"/> Acute medical / diagnostic services <input type="radio"/> Social/ Logistic reason <input type="radio"/> Lack of NICU bed <input type="radio"/> Others, specify: <input type="radio"/> Chronic/Palliative care <input type="radio"/> Surgery	
c) Post transfer disposition: (Please fill this section if place transferred is not part of the NNR Network)		<input type="radio"/> Home <input type="radio"/> Transferred again to another hospital <input type="radio"/> Death <input type="radio"/> Readmitted to your hospital	
<input type="radio"/> Dead → a) Died within 12 Hours of admission: (autofill)			
<input type="radio"/> Yes <input type="radio"/> No			
b) Place of death:			
<input type="radio"/> Labour room/OT <input type="radio"/> Neonatal unit <input type="radio"/> In transit <input type="radio"/> Others, specify:			

Name : _____ Signature : _____

Date : / / (dd/mm/yy)

INTRAUTERINE GROWTH CURVES (COMPOSITE MALE / FEMALE) (APPENDIX 2)



Data Source: W.H. Kitchen et al Revised intrauterine growth curves for an Australian hospital population. Aust. Paediatr. J. (1983) 19:157-161.