Microcephaly in children < 12months old Australian Paediatric Surveillance Unit If you have any questions about this form please contact the APSU (02) 9845 3005; SCHN-APSU@health.nsw.gov.au	*APSU Office Use Only*	
	Study ID #:	
	Month/Year Report:	
Instructions: Please answer each question by ticking the appropriate box or writing your response in the space provided. DK=Don't Know; NA = Not Applicable; OFC = Occipito-Frontal Circumference	*Version 2: 29.06.2016*	

REPORTING CLINICIAN'S DETAILS **1.** APSU Dr Code/Name: __ __ ___ __ /_____ **2**. Date questionnaire completed: __ _/__ __/__ __ __ __

PATIENT DETAILS

3. First 2 letters of first name: __ __ **4.** First 2 letters of surname: __ __ **5.** Date of Birth: __ __ / __ __ / __ __ __ __

6. Sex: ☐ Male ☐ Female **7.** Postcode of family: __ __ __ __ **8.** Racial Background *(select all that apply)*: ☐ Aboriginal ☐ Caucasian ☐ Pacific Islander ☐ Torres Strait Islander ☐ African ☐ Asian ☐ DK ☐ Other *(specify):* _____

9. Country of birth of the child: ☐ Australia ☐ Other *(specify)*: _____

10. Did you make the diagnosis of microcephaly? ☐ Yes ***(please go to Q11)*** ☐ No – if this patient is primarily cared for by another physician who you believe could provide additional details, please write their name below and return this form to the APSU. If no other report is received for this child we will contact you for further information. Physician's Name:_____
Clinic/hospital:_____

PARENTS' DETAILS

11. Mother's age at the time of child's birth: __ __ (years) **or** ☐DK

12. Mother's country of birth: ☐ Australia ☐Other *(specify):*_____ **13.** Mother's racial background: ☐ Caucasian ☐ Aboriginal ☐ Pacific Islander ☐ Torres Strait Islander ☐ African ☐ Asian ☐DK ☐ Other *(specify):*_____

14. Father's country of birth: ☐ Australia ☐Other *(specify):*_____ **15.** Father's racial background: ☐ Caucasian ☐ Aboriginal ☐ Pacific Islander ☐ Torres Strait Islander ☐ African ☐ Asian ☐DK ☐ Other *(specify):*_____

CLINICAL FEATURES

16. Date of microcephaly diagnosis: ☐ antenatally *(specify)*:_____ *(wks)* ☐ at birth ☐ other date: __ __ /__ __ /__ __ __ __

17. Was the child born at: ☐ full term ☐ premature ☐ DK **(i).** If premature, please provide gestational age_____(*weeks*)

18. Please specify the following measurements **at birth**:

(i) Occipito-Frontal Head Circumference (OFC): _____(cm) _____ (%ile) ☐ DK

(ii) Birth Weight: _____ (kg) _____(%ile) ☐ DK **(iii)** Birth Length: _____ (cm) _____ (%ile) ☐ DK

19. If microcephaly was diagnosed **after birth** and **before 12 months of age** please provide:

(i) Date when OFC measured: ___/___/___ ☐ DK **(ii)** (OFC): _____(cm) _____ (%ile) ☐ DK

20. Which growth charts/calculators were used for OFC measurements? ☐ Integrowth Charts ☐ CDC Growth Charts ☐ WHO Child Growth Standards ☐ None ☐ DK ☐Other:_____

21. Has the child had unexplained deficit in length or weight (≤10th percentile) at any time after birth? ☐ Yes ☐ No ☐ DK

If Yes, please specify: **(i)** Age _____ (months) **(ii)** Weight:_____ (kg) _____ (%ile) ☐DK **(iii)** Height:_____(cm) _____ (%ile) ☐ DK

22. Does the child have any other congenital anomalies? ☐No ☐ DK ☐ Yes *(specify):*_____

PREGNANCY & FAMILY HISTORY

23. Did the mother have antenatal screening for: ☐ Rubella ☐ Varicella ☐ Syphillis ☐ HIV ☐ Toxoplasmosis ☐ Cytomegalovirus ☐ HSV ☐ Other *(specify)*: _____

24. (i) ***If Yes,*** were any of these test positive? ☐ Yes ☐ No ☐ DK **(ii)** ***If Yes,*** *which ones?* ☐ Rubella ☐ Varicella ☐ Syphillis ☐ HIV ☐ Toxoplasmosis ☐ Cytomegalovirus ☐ HSV ☐ Other *(specify)*: _____

Is there a history during pregnancy for this child of :

25. Maternal phenylketonuria? ☐ Yes ☐ No ☐ DK

26. Poorly controlled maternal diabetes? ☐ Yes ☐ No ☐ DK **27.** Pre-eclempsia placental insufficency? ☐ Yes ☐ No ☐ DK

28. Expsoure to alcohol in pregnancy? ☐ Yes ☐ No ☐ DK

If yes, At any time during pregnancy, was alcohol consumption reported at the following levels:

(i) 7 or more standard drinks per week: ☐ Yes ☐ No ☐ DK

(ii) 5 or more standard drinks on any one occasion: ☐ Yes ☐ No ☐ DK

29. Is there a history of exposure to drugs (illicit, prescribed or over the counter) in pregnancy? ☐ Yes ☐ No ☐ DK ***If yes,*** which drugs?

(i) Cigarettes: ☐ Yes ☐ No ☐ DK **(iv)** Amphetamines: ☐ Yes ☐ No ☐ DK

(ii) Marijuana: ☐ Yes ☐ No ☐ DK **(v)** Cocaine: ☐ Yes ☐ No ☐ DK

(iii) Heroin: ☐ Yes ☐ No ☐ DK **(vi)** Phenytoin or Valproate: ☐ Yes *(specify):*_____ ☐ No ☐DK

(vii) Other drugs ☐ Yes *(specify):*_____ ☐ No ☐ DK

30. Severe deprivation including malnutrition in the mother during pregnancy? ☐ Yes ☐ No ☐ DK

31. Were there any other complications during pregnancy for this child? ☐ Yes ☐ No ☐ DK **If Yes,** *specify*:_____
_____

32. Were there any complications during previous pregnancies? ☐ No previous pregnancies ☐ Miscarriage ☐ Stillbirth ☐ Other *(specify)*: _____ ☐ DK

33. Has a sibling of this child been diagnosed with microcephaly? ☐ No siblings ☐ Yes ☐ No ☐ DK

34. Is there a history of congenital abnormalities or genetic disorders in this family? ☐ Yes ☐ No ☐ DK ***If yes***, please specify:_____

_____

FEATURES & INVESTIGATIONS FOR THE INFANT

35. Has the child had: **(i)** Chromosomal microarray analysis ☐ No ☐ DK ☐ Yes; ***Results***:_____

(ii) Karyotype testing: ☐ No ☐ DK ☐ Yes; ***Results:***_____

36. Are there any signs or symptoms of clinically significant neurological/CNS abnormality? ☐ Yes ☐ No ☐ DK ***If yes, which?*:**

☐ seizure disorder ☐ abnormal reflexes ☐ muscle spasticity ☐ joint contracture ☐ flaxicity/floppiness ☐ lethargy ☐ apnoea

☐ irritability ☐ Other neurological abnormality *(specify)*: _____

37. Was CNS imaging performed? ☐ No ☐ DK ☐ Yes; ***If yes, which?*** ☐ CT ☐ MRI ☐ US ☐ Other *(specify)*: _____

38. Was a clinically significant structural CNS abnormality detected? ☐ No ☐ DK ☐ Yes *(specify):* _____

_____

39. Is there evidence of severe CNS trauma, ischaemic or haemorrhagic stroke prenatally or in the neonatal period? ☐ Yes ☐ No ☐ DK

40. Is there evidence of severe deprivation including malnutrition in the infant? ☐ Yes ☐ No ☐ DK

41. Has this child been tested for any of the following congenital infections? ☐ Rubella ☐ Varicella ☐ Syphillis ☐ HIV

☐ Toxoplasmosis ☐ Cytomegalovirus ☐ HSV ☐ Zika ☐ Other *(specify)*:_____

42. ***If Yes,*** were any of these tests positive? ☐ Yes ☐ No ☐ DK **(ii).** ***If Yes,*** *which ones?* ☐ Rubella ☐ Varicella ☐ Syphillis ☐ HIV

☐ Toxoplasmosis ☐ Cytomegalovirus ☐ HSV ☐ Zika ☐ Other *(specify)*: _____

TRAVEL HISTORY FOR MOTHER & PARTNER

43. Did the mother or her sexual partner travel outside Australia during pregnancy or in the 3 months before pregnancy?

	Travelled outside Australia?	**If yes:** To which countries? *(please list all)*	When? *(dates if possible)*
Mother	☐ Yes ☐ No ☐ DK		
Partner (3 months before & during pregnancy)	☐ Yes ☐ No ☐ DK		

44. Did the mother or partner have any illness during or since returning from travels? ☐ Yes ☐ No ☐ DK ***If yes,*** which symptoms?

	Fever	Rash	Conjunctivitis	Myalgia	Headache	Arthralgia/Arthritis	Other *(specify)*:
Mother	☐	☐	☐	☐	☐	☐	☐
Partner	☐	☐	☐	☐	☐	☐	☐

45. Was Zika virus infection ever considered as a possible cause of microcephaly in this child? ☐ Yes ☐ No ☐ DK

46.(i) If yes, was the infant tested for evidence of past/current Zika virus infection? ☐ Yes ☐ No ☐ DK ***If Yes,*** result: _____

(ii) If yes, was the mother tested for evidence of past/current Zika virus infection? ☐ Yes ☐ No ☐ DK ***If Yes***, result: _____

(iii) If yes, has the mother's sexual partner (3 months before pregnancy and during pregnancy) been tested for evidence of past/current Zika virus infection? ☐ Yes ☐ No ☐ DK If Yes, result: _____

(iv) Has the child been reported to a public health unit? ☐ Yes ☐ No ☐ DK ***If Yes,*** which unit?_____

INFANT OUTCOMES (Developmental Milestones)

47. Is the child still alive? ☐ Yes ☐ No **If No**, date of death ___/___/___ ***If NO, please got to Q52***

48. Has the child reached all developmental milestones for their age? ☐ Yes ☐ No ☐ DK ***If no***, which milestones are delayed *(e.g. Fine/Gross motor, growth retardation, intellectual disability)*? _____

49. Does the child have cerebral palsy? ☐ Yes ☐ No ☐ DK

50. Does the child have a hearing impairment? ☐ No ☐ DK ☐ Not tested ☐ Yes *(specify)*:_____

51. Does the child have a vision impairment? ☐ No ☐ DK ☐ Not tested ☐ Yes *(specify)*:_____

CAUSES OF MICROCEPHALY

52. What are the most likely reasons for the microcephaly in this child? *(please tick all that apply)*

☐ Chromosomal syndrome *(specify)*:	☐ Maternal phenylketonuria
☐ Single gene defects *(specify)*:	☐ Poorly controlled maternal diabetes
☐ Neural tube defects *(specify)*:	☐ Severe CNS trauma, ischaemic or haemorrhagic stroke
☐ Exposure to teratogens in pregnancy (e.g. alcohol, drugs and other toxins	☐ Severe deprivation including malnutrition, or placental insufficiency
☐ Congenital or neonatal infection *(specify)*: ☐ Toxoplasmosis ☐ Rubella ☐ Cytomegalovirus ☐ HSV ☐ Syphilis ☐ HIV ☐ Varicella ☐ Zika virus ☐ Other infection *(specify)*:	
☐ Cause currently unknown	

53. If the cause is known/suspected, has this been confirmed (e.g. by laboratory testing, imaging, genetic testing)? ☐ Yes ☐ No ☐ DK

Thank you for your help with this research project. Please return this questionnaire to the APSU in the reply-paid envelope or fax to 02 9845 3082. Australian Paediatric Surveillance Unit, Kids Research Institute, Locked Bag 4001, Westmead NSW 2145. This study is supported by a grant from the Australian Department of Health. This study has been approved by a Human Research Ethics Committee properly constituted under NHMRC guidelines.