

# Appendix 1 – Syphilis Care Plan

Care Plan for women with syphilis during pregnancy	
Mother's Details	
Name	
Address	
DOB	
NHI	
Phone number(s)	
Estimated Due Date	
Labour and birth Team Actions	
<input type="checkbox"/>	No need to contact on-call paediatric team from syphilis viewpoint ( <i>woman treated prior to current pregnancy and no risk of re-infection</i> )
<input type="checkbox"/>	Contact on-call paediatric team when baby is born
<input type="checkbox"/>	Send placenta for histology and treponemal PCR if syphilis treatment indicated for infant

Congenital Syphilis Risk – Pre-birth assessment			
Congenital syphilis unlikely		Higher risk of congenital syphilis	
<input type="checkbox"/>	Maternal treatment completed	<input type="checkbox"/>	<b>Maternal infection: partial or no treatment*</b>
<input type="checkbox"/>	Treated with penicillin	<input type="checkbox"/>	<b>Treated with non-penicillin*</b>
<input type="checkbox"/>	Treatment completed >30 days pre-delivery	<input type="checkbox"/>	<b>Treatment &lt;30 days before delivery*</b>
<input type="checkbox"/>	4x drop in RPR achieved	<input type="checkbox"/>	4x drop in RPR not achieved
<input type="checkbox"/>	Final RPR titre ≤1:4 (VDRL 1:2)	<input type="checkbox"/>	Final RPR titre >1 in 4 (VDRL >1 in 2)
		<input type="checkbox"/>	Abnormal fetal ultrasound findings
*The presence of any of the 'bold asterisk' factors above means inadequate maternal treatment & requires neonatal treatment at birth. Also, congenital syphilis can still occur despite the absence of the three 'bold' factors.			

<b>Maternal Syphilis Care</b>					
[Include stage, treatment & treatment dates, most recent RPR, whether coded or under & any concerns e.g. re-infection risk from partner, treatment late in pregnancy, etc]					
<b>STAGE</b>					
<b>Date</b>	<b>RPR</b>	<b>Treatment given</b>	<b>Batch No. &amp; expiry</b>	<b>Contact tracing</b>	<b>Comments/concerns</b>

<b>Advice to Paediatricians</b>	
<input type="checkbox"/>	Low risk: assess infant clinically; if no physical signs of syphilis check <b>'initial blood tests', OR</b>
<input type="checkbox"/>	High risk: treat infant at birth after clinical assessment, <b>'initial blood tests' and 'further tests'</b>
Please discuss all infant blood test results with Paediatric Team.	
Sexual Health Physician:	
Signed:	
Date:	

**Birth Plan Form** to be given to the woman with copies to:

- Paediatric SMO
- LMC
- LMC midwife
- Obstetric SMO
- GP

**A. Physical Signs of Early Congenital Syphilis**

- Jaundice, anaemia, generalised lymphadenopathy, hepatosplenomegaly, non-immune hydrops, pyrexia, failure to move an extremity (pseudoparalysis of Parrot), low birth weight.
- Skin rash: usually maculo-papular but almost any type of rash is possible; palms and soles may be red, mottled and swollen. Vesicles or bullae may be present.

- Condylomata lata (flat, wart-like plaques in moist areas such as perineum).
- Osteochondritis, periosteitis (elbows, knees, wrists).
- Ulceration of nasal mucosa, rhinitis ('snuffles' usually after the first week of life).

More than half of neonates with congenital syphilis are normal on initial examination.

## **B. Initial Blood Tests**

### 1) Paired venous blood samples:

- Send a neonatal venous blood sample for syphilis serology; request serum treponemal EIA + RPR + treponemal IgM (available from select NZ Laboratories). Take blood from the neonate, not the umbilical cord
- Send a maternal venous blood sample for serum RPR if no result within last 4 weeks available from the same lab

### 2) Additional Tests on Infant if Lesions Present\*

Take *T pallidum* polymerase chain reaction (PCR) test from lesions &/or nasal discharge – use viral swab (i.e. as if taking HSV PCR); (available via select NZ laboratories)

\* *lesions of congenital syphilis are infectious; manage infant with contact precautions*

## **C. Further Tests if Treatment Indicated (see below)**

- FBC, UCE, LFT, ALT/AST
- Lumbar puncture for CSF: request cell count, protein, CSF VDRL
- Long bone x-rays for osteochondritis & periostitis
- Chest x-ray for cardiomegaly
- Ophthalmology assessment for interstitial keratitis
- Audiology

## **D. Indications for Further Tests and Newborn Treatment**

- Mother inadequately treated (Sexual Health/ID consultant will advise).
- Infant has clinical signs consistent with syphilis (Paediatric team will advise).
- Infant's RPR/VDRL titre 4x mother's (e.g. mother's RPR 1:4, infant's RPR 1:16). (Sample from mother to be taken no greater than 4 weeks before that of infant)
- Infant has positive treponemal IgM test together with corroborative history, clinical signs.
- Infant has positive *T pallidum* PCR test together with corroborative history, clinical signs.
- Placental *T pallidum* PCR positive or histological evidence of congenital infection will also lead to treatment of asymptomatic infants with other normal investigations.

## **E. Treatment of Neonates and Children**

Recommended doses of benzylpenicillin (penicillin G)

- Neonate under 7 days 30 mg/kg/dose every 12 hours for 7 days AND every 8 hours thereafter for a total of 10 days
- Neonate 7–28 days 30 mg/kg/dose every 8 hours for 10 days

<b>Infant follow-up</b>					
<b>1. Proven, highly probable, congenital syphilis</b>		<b>2. Asymptomatic, possible, congenital syphilis</b>		<b>3. Congenital syphilis less likely</b>	
6 weeks		6 weeks		Month 3	
<input type="checkbox"/>	Check RPR	<input type="checkbox"/>	Check RPR	<input type="checkbox"/>	Repeat RPR and IgM to exclude late seroconversion
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	Discharge if results negative
Month 3		Month 3		<b>OR</b>	
<input type="checkbox"/>	Check RPR	<input type="checkbox"/>	Check RPR	<input type="checkbox"/>	RPR and/or IgM positive; discuss with Paediatric Team
Month 6		Month 6			
<input type="checkbox"/>		<input type="checkbox"/>	Check RPR, if negative discharge, if positive repeat at 12 months		
Month 12		Month 12			
<input type="checkbox"/>	Check RPR. Discharge if RPR has achieved sustained 4x drop from peak level	<input type="checkbox"/>	RPR negative, no further follow up OR		
		<input type="checkbox"/>	RPR still positive, discuss with Paediatric Team		
			*Note: the RPR is usually negative by six months		