Ministry of Health
Sultanate of Oman

Management of reactive syphilis serology in pregnancy

First Edition
2020

Directorate General for Disease Surveillance & Control

Management of reactive syphilis serology in pregnancy

Congenital syphilis is preventable with prompt action

Routine Antenatal Screening

All pregnant women at initial booking

- Check blood taken for HIV & syphilis serology
- Record test results in Green Card and Al Shifa (e.g. Reactive/Non-reactive)

If initial blood test is syphilis EIA or RPR positive

- Reflexively test sample for **TPHA** and **RPR titre;**
- If necessary, send blood sample to local lab for these tests

<u>Action based on TPHA and RPR titre results</u>
If TPHA is positive…

- **Make <u>urgent</u> eReferral to Obs & Gynae as 'walk-in' at secondary/tertiary hospital (preferably in same hospital as mother's planned delivery)**
- **Give patient a copy of the eReferral**
- **Document serological test results on Al-Shifa and mother's antenatal Green Card, e.g. TPHA Reactive or Non-reactive; RPR titre value**
- **Complete Part A of Form-Mother and send to Governorate Woman & Child Health Co-ordinator, Head of WCH (DG Health Affairs) and copy to Dept of Communicable Diseases**

If TPHA is negative…

- And RPR titre <1:4, then likely to be a biological false positive. **No further action required**

LATE BOOKERS (booking after 20w gestation) Make sure these mothers are screened for HIV & syphilis at booking. **UNBOOKED MOTHERS** Screen for HIV & syphilis on admission

N.B. RPR is the screening test in MOH facilities. VDRL and RPR titres are NOT interchangeable. Use <u>only</u> VDRL or <u>only</u> RPR titres when evaluating a patient's response to treatment.

Assessment of maternal syphilis by Obstetric Team (TPHA: POSITIVE)

- Manage as HIGH RISK Pregnancy
- Take sexual history, identify STI risk factors
- Check for previous Hx of and Rx for syphilis
- Review obstetric history (e.g. stillbirths)
- Look for symptoms & signs of infection: chancre, rash, lymphadenopathy

If maternal syphilis treatment required:

- **Complete Part B of Form-Mother and send to Governorate WCH Co-ordinator, Head of WCH (DG Health Affairs) and copy to Dept of Communicable Diseases**
- Refer Husband for testing in Health Centre and advise no sexual contact until both parties treated

A. RPR titre ≥ 1:8; TPHA positive, then code A51.9 (Early syphilis) on Al Shifa and treat:

- Benzathine penicillin 2.4 MU i/m x 1 dose if <28w gestation; or
- Benzathine penicillin 2.4 MU i/m x 2 doses one week apart if >28w gestation

B. RPR ≤ 1:4, TPHA positive, code A53.0 on Al Shifa. (Diagnosis covers late or indeterminate stage syphilis, previous Hx/Rx of syphilis with risk of re-infection; previous syphilis treatment not adequate or not documented):

- Benzathine penicillin 2.4 MU i/m weekly x 3 doses

Repeat maternal RPR titre at delivery.

See Notes if patient has penicillin allergy. Emphasise importance of completing treatments and refer to Paediatric team for post-natal assessment of child.

Flowchart for management of congenital syphilis by Paediatric Team

At delivery, take child's **VENOUS** blood. Is RPR titre fourfold higher than mother's RPR titre?

Yes → **Treatment for congenital syphilis indicated**

1. Complete **Form CS-PAEDS** and send to Governorate WCH Co-ordinator, Head of WCH (DG Health Affairs) and copy to Dept of Communicable Diseases; enter Al Shifa code for **Congenital syphilis: A50.9**

2. Benzyl penicillin G 50,000 IU (=30mg)/kg 12-hourly IV for first 7 days then increase to every 8 hours for days 8, 9, 10 (total 10 days) Infants >4w old: benzyl penicillin 50,000 IU(=30mg)/kg 6-hourly IV for 10 days

3. See Follow-up flowchart

FOR ADDITIONAL ADVICE ON MANAGEMENT, PLEASE CONTACT YOUR PAEDIATRIC INFECTIOUS DISEASES TEAM

No ↓

Child has clinical evidence of syphilis — **Yes** → Treatment for congenital syphilis indicated

No ↓

Mother adequately treated for syphilis in current pregnancy — **No** → Treatment for congenital syphilis indicated

Yes ↓

Mother treated > 28 days before delivery — **No** → Treatment for congenital syphilis indicated

Yes ↓

Mother's RPR titre at delivery is four-fold lower than before her treatment — **No** → Treatment for congenital syphilis indicated

Benzylpenicillin powder for injection 1 million IU = 600 mg

Benzathine penicillin powder for injection 2.4 million IU = 1,440 mg

Yes ↓

Mother and child likely to be followed-up over next 12 months? — **No** → **Treatment for congenital syphilis NOT indicated but risk of defaulting follow-up requires prophylactic treatment** Give a single dose of benzathine penicillin 50,000 units (= 30mg)/kg IM

Yes ↓

Treatment for CS not indicated. See Follow-up flowchart and encourage mother/child to attend

Detailed checklist for Paediatric Team

Assessment of child whose mother has reactive syphilis serology in pregnancy. Please document mother's syphilis serology results (RPR titre & TPHA) in Green Card and ensure that maternal RPR titre is repeated at delivery for comparison with infant's results.

A. **Check for physical signs of congenital syphilis in the infant**

Rash - vesicles or bullae may be present but usually maculo-papular ● Copious nasal secretions ● Haemorrhagic rhinitis (inflammation of the mucous membranes in the nasal passages) - symptoms include sneezing, nasal stuffiness, runny nose ● Oedema ● Hepatosplenomegaly ● Thrombocytopenia ● Haemolysis ● Periostitis ● Jaundice ● Non-immune hydrops ● Failure to move an extremity

B. **Perform syphilis serology and additional microbiological tests (if available)**

Neonatal serology (NOT cord blood): ask for RPR titre and TPHA. Send sample to CPHL or local reference lab. If available: syphilis IgM EIA, dark-ground microscopy or PCR of skin lesions

C. **Indications for further tests and treatment (see Flowchart)**

1. Mother has untreated or inadequately treated syphilis (e.g. treated at >28 weeks gestation but only received one dose of penicillin, or mother treated <28 days before delivery)
2. Infant has clinical signs of congenital syphilis
3. Infant's RPR titre is 4x higher than mother's (e.g. infant RPR is >1:32 when mother's is 1:8); or infant has positive EIA IgM serology
4. Infant is dark-ground or PCR positive from skin lesions/body fluids (secretions), if tests available

D. **Further tests if treatment indicated**

1. FBC, U+E, LFT, ALT/AST and HIV antibody
2. Lumbar puncture for CSF culture, WCC, protein and TPHA and RPR titre
3. Long bone X-rays for osteochondritis and periostitis and Chest X-ray for cardiomegaly
4. Cranial U/S scan
5. Ophthalmology assessment for interstitial keratitis
6. Audiology for 8th nerve deafness

Infant follow-up for syphilis by Paediatrics Team, whether treated or not

DO NOT RELY ON TPHA TITRES FOR FOLLOW-UP

A. Infant treated for congenital syphilis at birth

- ☐ Check infant has been coded as **A50.9** (congenital syphilis) on Al Shifa
- ☐ At months 1, 3, 6 and 12- check RPR titre; there should be a progressive drop in titre over time
- ☐ Review at 12 months and if final RPR shows sustained 4x drop from peak level, then discharge

B. Infant not treated for syphilis, RPR is reactive at birth but <4x mother's RPR titre

- ☐ At month 3: check RPR and if negative discharge; if still reactive repeat at 6 months
- ☐ At month 6: check RPR and if negative discharge; if still reactive repeat at 12 months
- ☐ At month 12: check RPR and if negative discharge; if still reactive discuss with paediatric ID consultant

C. Infant not treated for syphilis and RPR is non-reactive at birth

- ☐ At month 3: repeat RPR and if still negative, discharge

Management of Reactive Syphilis Serology in Pregnancy

Notes

What should I tell the mother?

Antenatal or primary health clinic: initial RPR result is positive

Explain to the mother that when she attended antenatal booking, some blood tests were done and that one of the tests shows that she probably has a blood infection, which needs to be confirmed. If this is confirmed, she will need to be referred to the obstetrics clinic for further management.

Confirmatory blood test for TPHA is negative, RPR positive and titre 1:4 or less (FALSE POSITIVE)

A negative TPHA confirmatory blood test indicates that she is not infected with syphilis. Pregnancy itself can cause this 'false positive' reaction and no further action is necessary.

Confirmatory blood test for TPHA is positive and RPR titre 1:8 or more (EARLY SYPHILIS)

The confirmatory blood test indicates that she has been infected with syphilis, a sexually transmitted infection, probably in the last two years. She will need to be referred to the obstetrics clinic. Explain that treatment is necessary and as soon as possible to treat the infection and prevent her baby from being harmed. If not treated promptly, syphilis can harm the pregnancy (leading to miscarriage or stillbirth) and the child could be born with many abnormalities (e.g. mental retardation, loss of sight/hearing, facial, skin and bone diseases, etc). For the time being, she should avoid sex and her partner needs to attend the health centre to get tested for syphilis and receive treatment. They should not have sex until both have been treated. To make sure the baby has not been harmed by syphilis, explain to the mother that the paediatric team will need to check the baby after delivery.

Confirmatory blood test for TPHA is positive, RPR positive and titre 1:4 or less (LATE SYPHILIS)

The confirmatory blood test indicates that she has been infected with syphilis, a sexually transmitted infection, at some time. Ask the patient if she has previously been treated and with what (see below). Has this been documented? If she has not been treated or there is no documentation of treatment or treatment was inadequate or there is a possibility she could be re-infected, offer her treatment explaining that this will cure her of syphilis and prevent her baby from being harmed. For the time being, she should avoid sex and her partner needs to attend the health centre to get tested for syphilis and receive treatment. They should not have sex until both have been treated. To make sure the baby has not been harmed by syphilis, explain to the mother that the paediatric team will need to check the baby after delivery.

What is considered adequate treatment for syphilis in pregnancy?

A long-acting penicillin (e.g. benzathine or procaine penicillin) is considered the only form of treatment when syphilis is treated during pregnancy:

- Benzathine penicillin 2.4 MU x 1 dose stat or 2 doses one week apart for early syphilis
- Benzathine penicillin 2.4 MU x 3 doses weekly for late latent or indeterminate syphilis
- Procaine penicillin 600,000 U i/m daily x 10 days for early syphilis
- Procaine penicillin 1.8 MU i/m daily x 17-21 days for late syphilis

Alternative adequate treatments that may have been used (when non-pregnant) include:

- Doxycycline 100mg bd x 14 days for early syphilis
- Doxycycline 200mg bd x 28 days for late syphilis

Women with a previous history of syphilis do not need to be re-treated if they have already been treated. In the absence of evidence of previous treatment or there is a significant risk of re-infection, treatment should be offered in accordance with recommendations (above).

Is it safe to use benzathine penicillin in pregnancy?

Benzathine penicillin has a good safety profile and the benefits of treatment in pregnancy and prevention of congenital syphilis outweigh the risk of adverse reactions. In a large meta-analysis study* of 1,244 pregnant women given benzathine penicillin no serious adverse reactions were reported. The same study estimates that penicillin treatment would be expected to result in an incidence of only 0 to 3 cases of anaphylaxis per 100,000 women treated (assuming no prior history of penicillin allergy).

*Galvao T et al. Safety of benzathine penicillin for preventing congenital syphilis: A systematic review. PLOSOne 2013;8:1-13

What if the patient is allergic to penicillin?

As noted above, true penicillin allergy is rare. Unfortunately, the only recommended treatments for maternal syphilis are long-acting penicillins, either benzathine or procaine penicillin. If the patient has a history of penicillin allergy, she should be referred to the nearest Infectious Diseases unit for further evaluation and, if necessary, densensitisation as an inpatient following which she should be treated with benzathine or procaine penicillin (as above).

How is the VDRL or RPR titre interpreted?

The RPR (Rapid Plasma Reagin) test is currently the preferred screening test for syphilis in MOH facilities. Both the previous VDRL (Venereal Disease Reference Laboratory) or current RPR (Rapid Plasma Reagin) tests are non-treponemal tests that are used to screen for syphilis and to assess response to treatment. They detect anticardiolipin antibodies that are produced in response to infection by syphilis. As the infection progresses, the level of these antibodies increases; just as successful treatment will result in a falling level. These changes in antibody levels can be measured semi-quantitatively as a 'titre', corresponding to the dilution of the patient's sample that can still produce a reaction. For example, a titre of 1:64 means that the patient's sample has such a high level of antibodies that it can be diluted sixty-four times and still able to produce a reaction. If confirmed by a positive specific test (TPHA), this indicates active early infection. Adequate treatment usually leads to a four- fold drop in titre from 1:64 to 1:16 or less, over a period of 2-3 months. **To be consistent, monitor treatment response with titres for the same test (i.e. if the laboratory reports an RPR titre, continue monitoring with RPR titres). RPR and VDRL titres are NOT interchangeable.**

If a mother is not treated and her child becomes vertically infected with syphilis, the child's RPR titre will rise, and in time, be at the same level or higher than their mother's. There may also be physical signs of congenital infection. However, if the mother has been adequately treated in early pregnancy, congenital syphilis is prevented. The child's RPR titre at birth will initially be at the same level as the mother's (from transplacental transfer of maternal antibodies) but over a period of 3-6 months the baby's RPR titre will gradually fall to zero/negative.

Interpretation of syphilis serology in pregnancy

Non-treponemal test (VDRL or RPR)	Treponemal test (TPHA, TPPA)	Clinical interpretation
Non-reactive (negative)	Negative	Not infected; or Incubating syphilis in a patient at risk of infection (hence the need to repeat the test later in 'at risk' pregnancies)
Non-reactive or low titre ≤ 1:4	**Positive**	Previously treated syphilis (check with patient); or Untreated late latent syphilis
Reactive and titre <1:4	Negative	False positive reaction (i.e. not infected)
Reactive and titre ≥ 1:8	**Positive**	Early untreated syphilis; or Recently treated syphilis (check with patient)

CONTACT YOUR PAEDIATRIC INFECTIOUS DISEASES TEAM FOR SPECIALIST ADVICE ON MANAGING CONGENITAL SYPHILIS

What is the diagnostic approach to congenital syphilis?

Infants born to mothers who have reactive nontreponemal (RPR) and treponemal tests (TPHA) should be evaluated with a quantitative nontreponemal test (RPR) performed on infant serum. Cord blood should not be used due to potential contamination with maternal blood. The TPHA test is often reactive in the neonate from transplacental transfer of maternal antibodies and on its own, is not a reliable indicator of congenital infection.

Infants with reactive nontreponemal (RPR) titres should be examined carefully for physical signs of congenital syphilis. If resources are available, histological examination of the placenta or umbilical cord using specific fluorescent antitreponemal antibody staining is recommended when possible. If available, darkfield microscopy and PCR of specimens from any infant lesions or exudates should be performed. Additional evaluation of the infant depends on the clinical presentation plus maternal and infant serologic results.

Infants with proven or highly probable disease based on the above information who have:

1) any abnormal physical examination findings suggestive of congenital syphilis;

2) serum RPR titre four-fold or greater than the maternal titre

   e.g. maternal RPR titre is 1:8, when child's titre is 1:32. This is a four-fold difference.

should undergo a full evaluation. This includes a full blood count (with differential and platelet count) and CSF analysis for cell count, protein, and RPR. CSF WBC >25 cells/mm3 and protein concentrations >150 mg/dL are considered compatible with congenital neurosyphilis. (Of note, higher thresholds for abnormal values of both tests may be allowable for preterm infants, and some experts recommend lower thresholds for term infants of 5 cells/mm3 and 40 mg/dL for protein.)

Other tests are ordered based on clinical findings or diagnostic considerations. Long bone radiographs (periostitis, osteochondritis) are highly sensitive for diagnosis of congenital syphilis. These may be obtained when the diagnosis is uncertain by other means or when pseudoparalysis or other extremity signs are present.

Liver function tests should be obtained for infants with jaundice or hepatosplenomegaly. Chest radiography is obtained for signs of lower respiratory tract infection (pneumonia alba). Urinalysis may be obtained for concerns about renal function but is unlikely to influence management.

Eye examination should be considered when there is other evidence of CNS or external ocular involvement. CNS imaging studies are usually needed only to evaluate the extent of severe congenital infection (e.g., evidence of hydrocephalus, microcephaly) or to help differentiate between syphilis and other congenital infections.

Infants with possible or confirmed congenital syphilis who have abnormal hearing screenings (now part of routine newborn care) should undergo auditory brain stem response testing.

When is CSF examination recommended?

Infants with no abnormal physical findings and serum nontreponemal titres that are less than four-fold higher than maternal serum titres require CSF examination as well as long bone radiographs if the mother:

1. was not treated, treated inadequately, or has no documentation of treatment;

2. was treated with a nonpenicillin regimen; or

3. received treatment with completion up to 4 weeks prior to delivery.

CSF evaluation is not mandatory if a 10 day parenteral course of penicillin is planned, but such evaluation may reveal findings that prompt closer follow-up and repeat CSF studies at 6 months of age (see follow-up below). If any part of this evaluation is not performed or cannot be interpreted, the infant should be managed as if CNS infection is present (see treatment below).

Infants with no abnormal physical findings and serum RPR titres that are less than four-fold of the maternal serum titres do not require any evaluation.

This is provided if the mother:

1. was treated with an adequate penicillin regimen during pregnancy that was completed up to 4 weeks prior to delivery and

2. has no evidence of reinfection or relapse.

This is true also for such infants born to mothers treated adequately for syphilis before pregnancy and whose RPR titres have remained low or stable during pregnancy and at delivery (i.e. RPR <1:2).

If the child has evidence of syphilis, what is the recommended treatment?

Benzyl (crystalline) penicillin G, parenterally administered, is the preferred agent for treating all stages and types of syphilis. The stage of disease and clinical manifestations determine the preparation, dosage and length of treatment.

For proven or highly probable congenital syphilis treatment should be with:

1) **For neonates:** Benzyl penicillin G 50,000 IU (=30mg)/kg 12-hourly IV for first 7 days then increase to every 8 hours for days 8, 9, 10 (total 10 days)

2) **For infants >4w old**: Benzyl penicillin G 50,000 IU(=30mg)/kg 6-hourly IV for 10 days

In general, any doses of penicillin/ampicillin administered as part of initial treatment for suspected sepsis should not be counted towards the course of penicillin for syphilis treatment.

Please discuss with your local paediatric ID team if you suspect the child has an allergic reaction to penicillin but needs treatment for suspected congenital syphilis.

What is the recommended treatment if the child has NO evidence of syphilis, but there is uncertainty about the adequacy of the mother's treatment?

Neonates who have normal physical examination (asymptomatic) and have serum RPR titres equal to or less than four-fold of the maternal titre and whose mother:

1) was not treated, inadequately treated, or has no documentation of treatment;

2) was treated with a non-penicillin regimen; or

3) received a recommended penicillin regimen before 4 weeks prior to delivery

Then the child may be treated as above for symptomatic congenital syphilis.

If such infants have any abnormal CSF or other laboratory findings or part of the recommended evaluation could not be performed or interpreted, a 10-day regimen of benzyl penicillin should be administered, as above.

Some experts recommend a full 10-day course of benzyl penicillin for those neonates born to women with untreated early syphilis at delivery because of their high risk of congenital infection even if examination and evaluation are normal.

What is the recommended treatment if the child has NO evidence of syphilis AND the mother has been adequately treated BUT serological follow-up may be difficult?

Neonates who have a normal physical examination and serum RPR titres the same or less than four-fold of the maternal titre and whose mother:

1) was treated with a recommended penicillin regimen during pregnancy with completion before 4 weeks prior to delivery and

2) has no evidence of reinfection or relapse

may be treated with a single dose of benzathine penicillin IM as above, especially where serological surveillance over the following 12 months may prove difficult for a variety of reasons. Otherwise, if the maternal RPR titre decreased four-fold or more after appropriate treatment for early syphilis or remained stably low (defined as RPR <1:2) after appropriate treatment for late syphilis, the infant may be observed without treatment if close serological follow-up is assured.

Infants born to mothers with HIV and syphilis co-infection

Please discuss these co-infection cases with the paediatric ID team at the Royal Hospital. At this time, infants born to such mothers are evaluated according to the guidelines for each individual infection. Although false-negative maternal syphilis serological results have been reported with HIV-coinfection, screening all infants born to HIV-positive mothers for syphilis with no evidence of maternal syphilis is not recommended.

Despite a lack of specific regimen for HIV pregnant woman, all should be evaluated for syphilis and receive standard therapy if infected. There is an increased risk for perinatal transmission of HIV in those who have placental inflammation from congenital infection. The neonates born to these mothers should be carefully evaluated.

What are the adverse effects associated with each treatment option?

Allergic reactions (e.g. rashes, hives, anaphylaxis) are the primary side effects that can occur with administration of antibiotics to treat syphilis.

The Jarisch-Herxheimer reaction is an acute febrile event that usually occurs within 2 to 12 hours after initiation of any therapy for syphilis. It is characterized by headache, fever, myalgia, and diaphoresis. It occurs predominately in early stages of syphilis (primary or secondary) when organism burdens are highest. It is likely due to release of treponemal endotoxin-like compounds as the microbes lyse. It is rare in newborns but has been described in later infancy and beyond.

What are the possible outcomes of syphilis?

All infants who are seroreactive (or born to mothers seroreactive at delivery), whether treated or observed, should be re-evaluated at 1, 3, 6, and 12 months of age with physical examination and RPR titres until negative. Uninfected infants and those adequately treated for congenital syphilis should demonstrate declining RPR titres by 3 months of age and should become seronegative by 6 months of age.

Infants treated beyond the neonatal period may have slower decline in titres. Titres that are stable beyond 6 months of age or increasing indicate the need for re-evaluation and retreatment with a 10-day course of parenteral penicillin G.

Infants with any findings of neurosyphilis (e.g. abnormal CSF findings or reactive RPR serology) should undergo repeat lumbar puncture for CSF evaluation every 6 months until all findings, including RPR test results, are normal or nonreactive. A reactive CSF RPR at any examination is an indication for retreatment. Failure of CSF WBC counts to decline steadily on determination or to normalize by age 2 years also is an indication for retreatment. CNS imaging studies such as magnetic resonance imaging should be considered in children with persisting CSF abnormalities.

HIV co-infection

HIV-infected infants with congenital syphilis may be at increased risk for treatment failure or development of neurosyphilis. Careful clinical and serological follow-up every 3 months, with retreatment as necessary is indicated by clinical findings and test results.

Prognosis

Congenital infection can lead to spontaneous abortion or fetal demise or stillbirth. These pregnancy complications are preventable through appropriate prenatal care. Congenital infection also can lead to premature birth and complications from this that are not directly related to syphilis.

A mother of a child is currently being treated for syphilis. The child is now 18 months old. Her antenatal booking blood tests was reported as 'RPR negative'. How should I manage this case?

- This scenario raises the possibility that she could have been infected late in pregnancy, and so serology might not have identified her condition and that the child may have congenital syphilis

- Discuss the case and refer the child to the local paediatric ID team for clinical assessment and serological tests for syphilis

References

BASHH Treatment Guidelines for syphilis including congenital syphilis (2015)

CDC STD Treatment Guidelines. Section on Congenital syphilis MMWR Recomm Rep vol. 24 (2015)

WHO guideline on syphilis screening and treatment for pregnant women (2017)

Mani SB et al. Maternal syphilis: variations in prenatal screening, treatment and diagnosis of congenital syphilis. Col Med Rev 2017;1:20-29

CONFIDENTIAL
Congenital Syphilis Surveillance Form Mother (Part A)

PART A. To be completed for a pregnant woman with initial RPR or syphilis EIA positive syphilis serology. Send to Governorate Woman & Child Health Co-ordinator by Al Barwa and
- Copy to Head of WCH (DG Health Affairs) by Al Barwa (or Fax 24946362)
- Copy to Dept of Communicable Diseases by Al Barwa (or <Fax number>)

Mother's details		Husband's details	
Name		Name	
DOB (dd/mm/yyyy)		DOB (dd/mm/yyyy)	
Mobile no.		Mobile no.	
Civil id no.		Civil id no.	
Health centre		Health centre	
Medical record no.		Medical record no.	
ANC no.			

Current gestation (wks + days): _____

Previous Livebirths _____ Miscarriages _____ Abortions _____ Stillbirths _____

	Patient's results			Husband's results		
Test	**Pos**	**Neg**	**Date**	**Pos**	**Neg**	**Date**
RPR/syphilis EIA						
TPHA						
RPR titre (e.g. 1:4, 1:8 etc)						
	☐ Not done			☐ Not done		
HIV test done?	☐ YES ☐ NO			☐ YES ☐ NO		

Actions. Tick any boxes that apply.

☐ Mother referred to Obstetrician at _____ Hospital on _____ (dd/mm/yyyy)

☐ Husband not tested or tested RPR-positive. **Refer to HIV Regional Counsellor**

Completed by (CAPITALS): _____ Signature: _____

Date: _____ Contact number: _____

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Congenital Syphilis Surveillance Form Mother (Part B)

PART B. To be completed by obstetrician at the secondary/tertiary care institution, for a pregnant woman with confirmed TPHA positive syphilis serology. Complete all sections, then after delivery send form to Governorate Woman & Child Health Co-ordinator by Al Barwa and also:

- Copy to Head of WCH (DG Health Affairs) by Al Barwa (or Fax 24946362)

- Copy to Dept of Communicable Diseases by Al Barwa (or <Fax number>)Date of ANC booking (dd/mm/yyyy): _____ ANC no: _____

Mother's name: _____

Her date of birth: _____ LMP: _____ EDD: _____

Hospital: _____ Mother's HC/hospital no. _____

Mother's Civil ID no._____ Singleton/Multiple pregnancy? _____

Current gestation (wks + days): _____ Date of clinic visit: _____

i. **Treatment options. Tick ONE box only and, if indicated, date treatment started.**

☐ Treatment not indicated

☐ *Benzathine penicillin 2.4 MU IM x 1 dose only for early syphilis before 28w gestation;

☐ *Benzathine penicillin 2.4 MU IM x 2 doses for early syphilis after 28w gestation;

☐ *Benzathine penicillin 2.4 MU IM x 3 doses for late or indeterminate stage syphilis at any gestational age

☐ *Treatment started on (dd/mm/yyyy) _____

ii. **Outcome of current pregnancy. Tick ONE box only.**

☐ Miscarriage (< 20 weeks gestation)

☐ Stillbirth (≥ 20 weeks gestation)

☐ Live birth. Please refer to paediatrician for post-natal assessment

Completed by (CAPITALS): _____ Signature: _____

Date: _____ Contact number: _____

Congenital Syphilis Surveillance Form CS-PAEDS

To be completed by Paediatric staff assessing a child/children born to a woman with positive syphilis serology. Send to Governorate Woman & Child Health Co-ordinator by Al Barwa and

- **Copy to Head of WCH (DG Health Affairs) by Al Barwa (or Fax 24946362)**
- **Copy to Dept of Communicable Diseases by Al Barwa (or <Fax number>)**

ONE form for EACH child if multiple pregnancy.

Date of clinic visit (dd/mm/yyyy): _____ANC no: _____

Mother's name: _____ Civil ID no: _____

Singleton/Multiple pregnancy? _____ Date of delivery: _____

Refer to Congenital Syphilis flowchart & notes for diagnostic criteria and management:

A. **Evaluation for congenital syphilis. Complete all relevant sections.**

Infant's RPR titre at birth: _____ Mother's RPR titre at delivery: _____

☐ No physical or serological evidence of congenital syphilis

Complete if physical signs of congenital syphilis present:

☐ Rash ☐ Rhinitis ☐ Jaundice ☐ Hepatosplenomegaly ☐ Periostitis ☐ Haemolysis

☐ Thromobocytopenia ☐ Limb immobility ☐ Other features: _____

B. **Treatment options. Tick ONE box only and complete DATE if required.**

☐ No treatment given.

☐ Prophylactic treatment (benzathine penicillin IM x 1) on (dd/mm/yyyy) _____

☐ Treatment for congenital syphilis given* and started on (dd/mm/yyyy) _____

☐ *Specify treatment, dose & duration:_____

C. Follow-up. Please tick ONE box only.

☐ Not arranged. Please explain why: _____

☐ Arranged. **Complete section D until infant has been discharged from follow-up.**

D. **Infant's RPR titre during follow-up**

	At birth	1 month	3 months	6 months	12 months
RPR titre					

Completed by (CAPITALS): _____ Signature: _____

Date: _____ Contact number: _____