

Alberta Health Services Sexually Transmitted Infections Services
Syphilis Management in Obstetrical Units

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August 5, 2022

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Syphilis Management in Obstetrical Units**

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This resource has been prepared by the Provincial STI Services Program

Contact

For more information, please contact:

STI Centralized Services toll-free at 1-855-945-6700 (option 4)

Introduction

Alberta is experiencing a resurgence of infectious syphilis with historical high rates. The number of women diagnosed with infectious syphilis in pregnancy has increased significantly, resulting in infants being born with congenital syphilis and infant deaths. Due to the increased incidence of infection in the population, departments may encounter mothers and infants who require management of syphilis prior to discharge from hospital.

Background and Objectives

The [Alberta Prenatal Screening Guidelines for Select Communicable Diseases](#) requires all pregnant patients be screened for syphilis during the first trimester and again at the time of delivery. If there is on-going risk, patients should be re-screened throughout pregnancy.

Use the prenatal requisition, accessible on line: <https://www.albertahealthservices.ca/frm-21151.pdf> and indicate the Expected Date of Delivery and click appropriate box, e.g., "Syphilis re-screen" on the requisition or choose "at delivery" if appropriate.

Monthly screening (syphilis EIA, anti-HIV antibody) of pregnant patients with a recent diagnosis of infectious syphilis and pregnant patients at ongoing risk is appropriate.

At or following delivery:

- Collect syphilis serology in 1 gold top vacutainer

Note:

- All pregnant patients must have a syphilis rescreen at or following delivery, even if they had one done very recently, regardless of previous syphilis test results.
- Any patient having a miscarriage or delivering a stillborn infant, regardless of gestational age, should be screened for syphilis.

The number of women diagnosed with infectious syphilis in pregnancy has increased significantly, resulting in infants being born with congenital syphilis and infant deaths.

STI Services Follow-Up of Syphilis Cases

All reactive syphilis results are sent to STI Centralized Services to ensure patients receive appropriate follow-up. A Partner Notification Nurse is assigned to each syphilis case to ensure treatment according to guidelines is provided, the patient has adequate serological response to treatment, and that sexual partners or infants receive testing and treatment as required. All reactive serology drawn following delivery will be received and followed by STI Services to ensure continuity of care upon discharge.

Management of Pregnant Patients with Reactive Syphilis Serology or Symptomatic

A. New reactive serology

All pregnant patients with **newly** reactive syphilis serology (previous syphilis EIA negative or no previous syphilis serology) or significant **increase in RPR** titer (four-fold rise in dilutions compared with previous bloodwork) should be managed in conjunction with STI Centralized Services (toll free at 1-855-945-6700 (option 4) during business hours). If the baby has already been born and you require assistance after hours, please page the Pediatric Infectious Disease physician on call through the switch board of the University of Alberta Hospital for northern Alberta (780-407-8822) and the Alberta Children's Hospital for southern Alberta (403-955-7211).

B. Known reactive serology

Pregnant patients with previously reactive syphilis serology, and known to the STI Centralized Services prior to delivery, will have a **Post-Natal Recommendation letter** for mother and infant follow-up. This letter is sent to Pediatric Infectious Disease and the responsible Family Physician/obstetrician. Consult STI Centralized Services to obtain a copy of this letter.

C. Pregnant patients who are symptomatic

Common symptoms of syphilis include:

- Anogenital / perioral chancre or ulcer
- Regional lymphadenopathy
- Rash
- Fever & Malaise
- Temporary alopecia

Patients who present with symptoms suggestive of syphilis should be tested immediately:

- Collect syphilis serology (**syphilis EIA, anti-HIV antibody**) as described above
- Ulcers:
 - Swab any suspicious ulcers, skin lesions or serous exudate and send for syphilis and HSV PCR (Polymerase Chain Reaction) testing. This is collected in:
 - Red top Universal Transport Medium.
 - Use the Culture and Serology Requisition: <http://www.albertahealthservices.ca/frm-ch-0039.pdf>
- Placenta and Umbilical cord:
 - Swab placenta / umbilical cord or submit a piece of tissue and send for syphilis PCR testing. This is collected in:
 - Red top Universal Transport Medium.
 - Use the Culture and Serology Requisition Bacteriology Culture and Serology Requisition: <http://www.albertahealthservices.ca/frm-ch-0039.pdf>
 - Send placenta for pathologic examination and indicate on the pathology requisition that syphilis is suspected.

Treatment of Syphilis in Pregnant Patients / After Delivery

Treatment recommendations can be found in the [Alberta Treatment Guidelines for Sexually Transmitted Infections \(STI\) in Adolescents and Adults \(2018\)](#).

Preferred treatment for infectious syphilis is **Long-Acting benzathine penicillin G-2.4 million units (Bicillin L-A) IM as a single dose**.

Due to the large volume, this dose is divided into **2 injections** in the left and right ventral gluteal muscles.

Bicillin L-A is a special access drug that is not typically stocked on units. Consult with your hospital pharmacy to obtain access to this drug.

ATTENTION: Long-acting benzathine penicillin G (Bicillin L-A) is often confused with short acting benzathine penicillin G. Short acting benzathine penicillin G is not an effective substitute for the treatment of syphilis. Please ensure you are administering the correct medication.

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- Please consult STI Centralized Services for treatment recommendations. For consultation after hours, please call Infectious Diseases on call.
- Once treatment is administered, complete the [Notification of STI form](#) and fax to STI Centralized Services 780-670-3624. Please collect sexual partner information and include on the Notification of STI form. It is imperative that all partners be treated due to the risk of reinfection. Management of partners will be arranged by STI Centralized Services and the local STI Partner Notification Nurse.

Management of Infant Born to Patient with Confirmed or Presumptive Syphilis

Please consult STI Centralized Services for guidance on management of infants born to patients with reactive syphilis serology. Not all infants born to a patient with reactive syphilis serology require testing and/or treatment.

- Review **Post-natal Recommendation letter** from STI Centralized Services.
- Call STI Centralized Services to obtain a copy of the letter (toll free at 1-855-945-6700 (option 4) during business hours).

Some infants may require transfer to NICU for ongoing management and care. Please consult Pediatric Infectious Disease for infants born to a patient with:

- A new diagnosis of syphilis or syphilis re-infection during pregnancy (regardless of whether patient received treatment in pregnancy),
- A new diagnosis of syphilis at delivery (i.e., first reactive serology or four-fold rise in RPR dilutions at delivery),
- Clinical symptoms suggestive of syphilis at delivery (i.e., chancre or syphilitic rash).

Guidance on Infection Prevention and Control (IPC) for infants with congenital syphilis can be found at [IPC Diseases and Conditions Table Recommendations for Management of Patients Acute Care](#)

The Pediatric Infectious Disease physician on call can be paged through the switch board of the University of Alberta Hospital for northern Alberta (780-407-8822) and the Alberta Children's Hospital for southern Alberta (403-955-7211).

**PRIOR TO DISCHARGE OF ANY INFANT, ENSURE MATERNAL
SYPHILIS SEROLOGY AT DELIVERY HAS BEEN COMPLETED.**

Contributors

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