Perinatal HIV Prevention Protocols for the Province of Saskatchewan

HIV Rounds

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Saskatchewan

Introduction

Objectives - Participants will be able to:

1. Describe the standards of care for women living with HIV during labour, birth and immediate postpartum period
2. Discuss implications for implementation of these standards at the local and regional level

The Goal

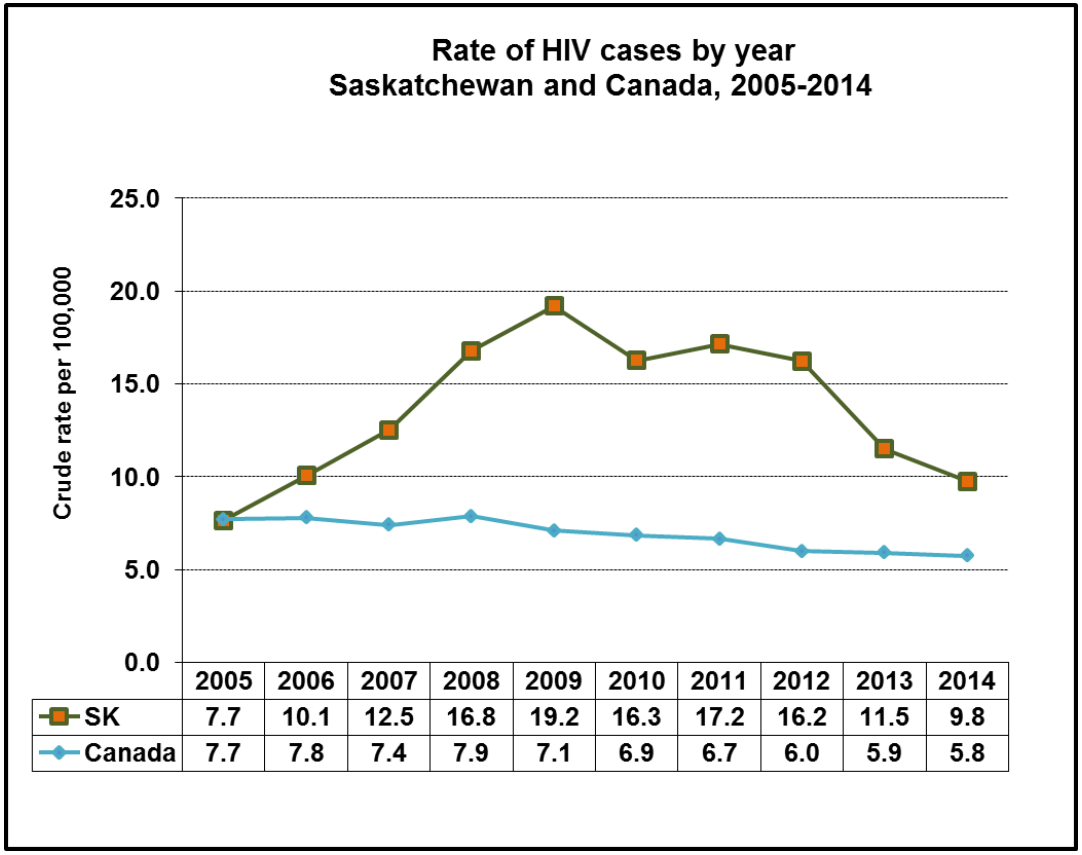
Zero mother-to-child transmission of HIV

Outline

- Background
  - Overview of HIV epidemiology in Saskatchewan
  - Saskatchewan's HIV Strategy 2010-14
- Development of Perinatal HIV Prevention Protocols
- Overview of Perinatal HIV Prevention Protocols and Resources
- Review recommendations for best practice in caring for women in labour and care for the newborn
- Facilities with obstetrical services and capacity
- Next steps for implementation
  - In health care facilities with obstetrical services
  - In health care facilities without obstetrical services

Epidemiology of HIV in Saskatchewan

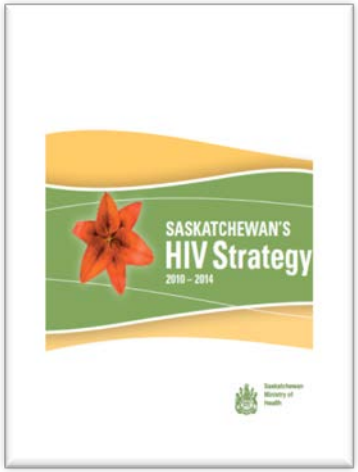
- SK HIV rate over twice the national rate 2007 – 2013; 2014 SK HIV rate just over 1.5 fold the national rate
- New cases of HIV in Saskatchewan peaked in 2009 (199 new cases), but have since declined
- Saskatchewan is unique from the rest of Canada:
  - Injection drug use is the highest self-reported risk factor for acquiring HIV infection
  - Women of childbearing age (15-45 years) are disproportionately affected (approx. 25% of all new cases in 2013 and 2014)



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
SK	7.7	10.1	12.5	16.8	19.2	16.3	17.2	16.2	11.5	9.8
Canada	7.7	7.8	7.4	7.9	7.1	6.9	6.7	6.0	5.9	5.8

Sources: SK Ministry of Health/Public Health Agency of Canada

Saskatchewan's HIV Strategy 2010-14



Approximately $4M/year investment since 2010-11

One of the key outcomes:

No Perinatal Transmission of HIV

- From 2003 to 2010, there were 9 perinatal cases of HIV transmission reported in the province
- Between 2006 – 2011, there were 6 perinatal cases of HIV transmission reported representing 21% of all of Canada's perinatal transmission
- **Improvements in HIV testing, treatment and support** led to no further perinatal transmission from 2011 to 2014
- The **infant formula program** has been integral in preventing transmission of HIV through breastfeeding

Professional Practice Guidelines

"Women with no prenatal care and unknown HIV status should be offered testing when admitted to hospital for labour and delivery. Women at high risk for HIV and with unknown status should be offered HIV prophylaxis in labour, and HIV prophylaxis should be given to the infant post partum."

Society of Obstetricians and Gynecologists of Canada

Clinical Practice Guidelines

HIV Screening in Pregnancy,

December 2006

Professional Practice Guidelines

- Overview of the evidence and best practice.
- Recommendations relating to care of pregnant woman with HIV and prevention of perinatal HIV transmission.
- 24 recommendations for antenatal and intrapartum care
  - Intravenous zidovudine (ZDV) should be initiated as soon as labour onset until delivery, in combination with an oral combination antiretroviral regimen, regardless of mode of delivery, current antiretroviral regimen, or viral load. (III-B)

  - HIV-exposed newborns should receive antiretroviral therapy for 6 weeks to prevent vertical transmission of HIV. (I-A)

Society of Obstetricians and Gynecologists of Canada

Clinical Practice Guidelines

Care of Pregnant Women Living With HIV and Interventions to Reduce Perinatal Transmission

August 2014

Professional Practice Guidelines

- HIV testing should be offered routinely to all women as early as possible during pregnancy; testing repeated later in pregnancy if suspected ongoing exposure to HIV infection.

- Physicians caring for pregnant women must ensure that the HIV status of the mother is available to the team caring for her at the moment of delivery. *Failure to ensure availability of this information dramatically increases the risk of neonatal HIV acquisition* and sometimes results in unnecessary exposure of the newborn to antiretrovirals (empirical infant therapy is sometimes started in very high-risk situations pending test results).

- *All provinces and territories must ensure that they have comprehensive, accessible programs for HIV testing in pregnancy that result in informed testing of women and provide appropriate follow-up and care for HIV-infected women and their children.* These programs must be evaluated for their effectiveness, including the prevention of perinatally acquired HIV infection.

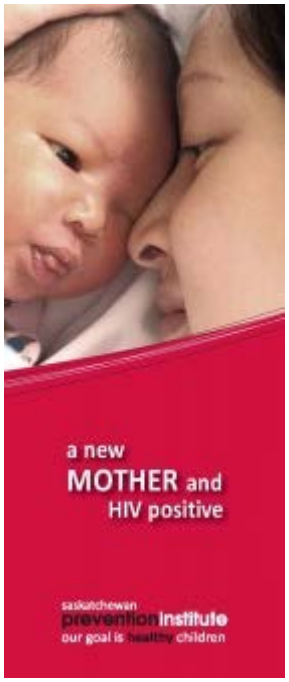
Testing for HIV infection in pregnancy

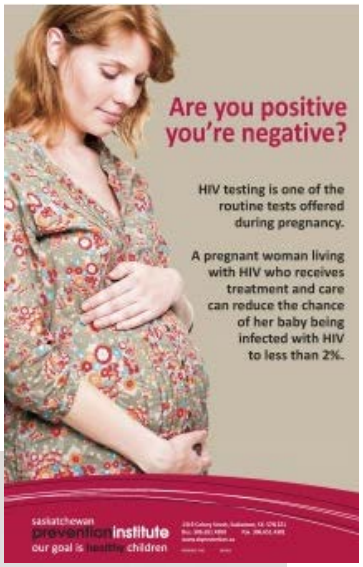
Canadian Pediatric Society Position Statement, (Re-affirmed - Feb. 2015)

A Multifaceted Approach to Perinatal HIV

HIV and Pregnancy Advisory Committee (Saskatchewan Prevention Institute)

- Interprofessional, Multi-sectorial Advisory Committee
- Environmental scans & literature reviews
- E-Learning events
- Hope for the Future: Having a Healthy Pregnancy while Living With HIV DVD
- Grand Rounds
- Posters, brochures, information for women and professionals





A Saskatchewan Scenario

What Do You Think?

We know that…..

- An HIV-infected woman may present at any hospital ER or labour suite in the province
- HIV status may, or may not be immediately available to the physician or other health care providers attending the birth
- For various reasons, women may, or may not be forthcoming in divulging their HIV status or risk factors to the obstetrical centers, increasing difficulties in decision-making
- The perinatal transmission rate of HIV without preventive measures is between 20% and 35% ***(U.S. Centers for Disease Control and Prevention)***
- Approximately 15,000 births in Saskatchewan hospitals annually (***Acute & Emergency Services Branch, 2014***)

We also know that…..

- Women whose HIV status is unknown includes:
  - ~ 2-5% of pregnant women who opt out of HIV testing during prenatal care
  - women who receive “anonymous” HIV testing
  - women who have no or limited prenatal care
  - women who have ongoing risks for acquiring HIV (after testing negative)

Perinatal HIV Prevention Protocol

Drafting Process

HIV Provincial Leadership Team and Ministry of Health:

- Develop a HIV & Pregnancy Advisory Committee (led by the Saskatchewan Prevention Institute, chaired by Dr. J. Opondo).
- Mandate to developing standardized practices / tools / resources for professionals and the public care and tools that can be used across the province when delivering babies to women living with HIV.

Orders and existing resources reviewed and modified:

- Provincial – Tertiary centres (Saskatoon, Regina)
- National - Northern Alberta, and CATIE (MaterniKit), British Columbia

Sub-committee developed drafts. Members included:

- Nicole Kimball, Nurse, Positive Living Program, Saskatoon Health Region
- Roxanne Laforge, RN, Perinatal Education Program, University of Saskatchewan
- Ellen Kachur, Pharmacist, Humboldt
- Shannon Stone, Pharmacist, Positive Living Program, Saskatoon Health Region
- Mike Stuber, Pharmacist, HIV Provincial Leadership Team
- Jackie Eaton, Saskatchewan Prevention Institute

Perinatal HIV Prevention Protocol

Drafting Process

- Drafts of the Maternal (L&D) and Infant orders were shared with the HIV and Pregnancy Advisory Committee in November 2013
- Final drafts then reviewed by:
  - Dr. Ben Tan, Pediatric Infectious Diseases, Saskatoon Health Region & Positive Living Program Team
  - Della Magnusson, Nurse Practitioner, Westside Community Clinic
  - Dr. Steven Sanche, Infectious Diseases Specialist, Director Positive Living Program, Saskatoon Health Region
  - Dr. Athena McConnell, Pediatric Infectious Diseases Specialist, Saskatoon Health Region
  - Dr. Johnmark Opondo, Medical Health Officer, HIV Provincial Leadership Team
- Dr. Ben Tan shared the final algorithm draft with neonatology, HIV, obstetric, and pediatric specialists from Saskatoon and Prince Albert and forwarded to Dr. Stuart Skinner, Infectious Diseases Specialist, in Regina to share.

Perinatal HIV Prevention Protocol

Drafting Process

- External review completed by Dr. Mona Loutfy (Infectious Diseases Specialist) and Logan Kennedy (Registered Nurse) - Ontario
- Further expert review completed:
  - Dr. Ben Tan (Infectious Disease Specialist)
  - Nicole Kimball (Registered Nurse, Positive Living Program)
  - Mike Stuber (Clinical Pharmacist)
  - Dr. Lexi Regush (Obstetrician)

Perinatal HIV Prevention Protocols and Resources
Health Care Providers

Mother

- Guidelines for Maternal/Newborn Assessment and Care. Includes:
  - Care for pregnant women living with HIV intrapartum & postpartum
  - Care of the infant, including feeding
  - Referral and phone numbers

- Care Pathways developed to assist in clinical decision-making for women:
  - HIV positive (status known) – consideration of adequacy of ARV, viral load
  - HIV status unknown and *HIV POC/STAT testing available*
  - HIV status unknown and *HIV POC/STAT testing **NOT** available*

- Physician pre-printed order templates
  - Addresses the clinical scenarios addressed above
  - Includes specific interventions for management in labour, postpartum care, infant feeding, discharge planning and referral.

Perinatal HIV Prevention Protocols and Resources

Health Care Providers (cont'd)

Infant

- Physician pre-printed order templates
- Infant HIV referral form
- Discharge instructions:
  - Staff review with infant care giver prior to discharge
  - Ensure caregiver knows how to correctly mix and store formulation
- Infant Formula Program policy and procedures

Infant Caregiver

- Frequently Asked Questions about HIV, Pregnancy & Babies
- Discharge instructions

www.skhiv.ca


SK HIV COLLABORATIVE
An online tool for accessing current HIV/AIDS related information and resources for Saskatchewan
contact@hivplt.ca
Search site
HOME
Routine Testing
Map of Services
Care Providers
Pregnancy
Risk Reduction
Events
Working together to address HIV/AIDS in our province and build healthier communities
Quick Links
Saskatchewan HIV Testing Policy
Perinatal HIV Prevention Protocols
Infant Formula Program
HIV Strategy Coordinators
Community Based Organizations
HIV Grand Rounds
Training and Education
HIV/AIDS Annual Reports for SK
Background:
Saskatchewan has seen a substantial increase in new cases of HIV since 2003. As of 2010, the province has the highest rates in Canada.
Update:
The purpose of the Saskatchewan HIV Collaborative is to provide:
Advice and direction on addressing target populations with common needs, behaviours and risk factors across a broad spectrum of communicable diseases

Key Messages of the Perinatal HIV Prevention Protocols

Best Practices

Risk Assessment is Critical!

Care Pathways provide direction in:

- Assessing risk factors for mom's presenting in labour
- When to implement HIV Prevention Protocols, including Pre-printed Orders for mother and infant
  - Known HIV positive status prior to labour and birth
  - HIV status unknown - STAT / POC testing available
  - HIV status unknown – no STAT or POC testing available
  - HIV negative on previous test but has ongoing risk factors

Women Assessed as High Risk

- Self-identifies as being at high risk of HIV
- Sex partner of a person who is HIV positive
- Ongoing injection drug use or sex with a person using injection drugs
- Diagnosis of a sexually transmitted infection during pregnancy
- From a population with a high prevalence of HIV (e.g., recent incarceration, recent immigrant or refugee from an HIV endemic country)
- http://www.cfenet.ubc.ca/sites/default/files/uploads/docs/guidelines/BC_HIV_in_pregnancy_guidelines.pdf

Applying the Prevention Protocols

- Assess risk factors, including current medication use, most recent viral load and questions that assist in follow-up with the Infectious Diseases Specialist.
  - Referral to Infectious Diseases Specialist on Call – Saskatoon or Regina
- Maternal Pathways summarize approaches to maternal – newborn care:
  - Known HIV positive status
  - Unknown with ability to rapidly test HIV status
  - Unknown without the ability to rapidly test
- Decisions regarding route of delivery (**vaginal vs. caesarean birth**) and location is based on risk factors, viral load and obstetrical indications.

Confidentiality & Privacy of Information

- Critical!
- Ensure confidentiality of maternal HIV status
- Obtain and document verbal consent from mother to share information about delivery, viral load, and HIV medications with Pediatric HIV specialists for follow up baby care.
- **Mother should be informed:**
  - **Disclosure of HIV status to public health is required** for follow-up and to facilitate postpartum community care.

Best Practices- Labour & Birth

- Continue current antenatal HIV antiretroviral regime throughout labour and beyond
- Initiate IV zidovudine:
  - With rupture of membranes
  - Onset of labour – spontaneous, induced, preterm
  - At least 3 hrs. prior to planned Caesarean section
  - Any situation where delivery anticipated.
  - During labour and delivery to the mother as per the algorithm
- Loading dose and continuous infusion dosage/kg as per Pre-printed Orders
  - If labour stops and infusion D/C x ≥ 6 hrs., re-administer loading dose and resume infusion when labour resumes

Best Practices- Labour & Birth

- Avoid any invasive monitoring during L & D unless absolutely necessary:
  - internal fetal scalp electrode, intrauterine pressure catheter, fetal scalp sampling.
- Avoid if possible, unless obstetrical benefits exceed risks:
  - artificial rupture of membranes, forceps, vacuum extractor and episiotomy
- Standard GBS prophylaxis applies as indicated
- Use standard universal precautions using gown, gloves, mask, and eye protection at delivery

Best Practices- Postpartum & Newborn

- Bathe the infant as soon as possible once stable and prior to IM injections
- Limit blood sampling unless required for urgent medical reasons
- Isolation of mother / baby not required for infection control
- Initiate antiretroviral medications to baby
  - Support the mother / caregiver in independent administration of medication to infant for accurate technique
  - Discharge instructions discussed with the mother / caregiver

Best Practices – Infant feeding

- Breastfeeding is contraindicated for women with confirmed HIV or until unknown status is confirmed:
  - Patient teaching re: formula feeding
  - Consider pharmacological/non-pharmacological options for lactation suppression and comfort
  - Initiate referral to the Saskatchewan Infant Formula Program and ensure access to adequate amount of formula prior to discharge

Saskatchewan Infant Formula Program

- Eligibility - Infants born to women who are HIV positive from birth to 1 year of age unless the child is in the care of Child and Family Services. Infants who transition from Child and Family Services back to mother/caregiver up until 1 year of age will become eligible.
- Inclusive of all infants, regardless of provincial or federal benefits status.
- Up to 4 cases of formula / month
- Referral can be made by health care professionals, nurses, physicians or by the individual as a self-referral.
- **Website provides information about eligibility, referral mechanism, patient education, billing and accountability** **www.skhiv.ca**

- Health care providers play an important role in helping women and families understand the importance of safe infant nutrition:
  - Want to do the best for their child
  - May be scrutinized by others for not breastfeeding

MATERNAL NEWBORN Care Pathway

HIV status unknown or at risk* and HIV STAT or Point of Care Test is NOT AVAILABLE

In all high risk cases, contact the Infectious Disease Specialist on call

Woman presents in labour:
Consider asking "Do you believe you have been at risk of being exposed to HIV during this pregnancy?"

ASSESS RISK

- Self-identifies as being at high risk of HIV without confirmed serology
- Sex partner of a person who is HIV positive
- Ongoing injection drug use or sex with a person using injection drugs
- Diagnosis of a sexually transmitted infection during pregnancy
- From a population with a high prevalence of HIV (e.g., recent incarceration, recent immigrant or refugee from an HIV endemic country)
  http://www.cfenet.ubc.ca/sites/default/files/uploads/docs/guidelines/BC_HIV_in_pregnancy_guidelines.pdf

Confirm history of HIV testing in pregnancy when assessing risk.

High HIV Risk

- Prepare woman for transport
- Contact Infectious Disease Specialist/Obstetrics on-call
  - Discuss referral to facility with obstetrics program where STAT or HIV Point of Care Testing and medications are available
  - Case by case judgement is required as to most appropriate and closest referral center

Low HIV Risk

For the mother:
- Vaginal delivery
- No intrapartum ZDV

For the newborn:
- No postpartum ZDV or NVP

***ZDV** = zidovudine*
***NVP** = nevirapine,*

*** Prenatal HIV test was:**
1. Not done/ no prenatal care (HIV status unknown throughout) OR
2. Negative early in pregnancy, but has ongoing risk factors for HIV between the last negative test and the onset of labour (status unknown at labour)

Where Babies Are Born in SK

Facilities with Obstetrical Services
Capacity to provide STAT / Point of Care Testing
Medications for Rx Mom and Infant in stock

Sun Country:

- **St. Joseph's (Estevan)**

Cypress:

- **Cypress Regional Hospital (Swift Current)**

RQHR:

- **Regina General**
- **All Nations Healing Hospital (Fort Qu'Appelle)**

Sunrise:

- **Yorkton Regional Health Centre**

Five Hills Health Region:

- **Moose Jaw Union Hospital**

Saskatoon Health Region:

- **Royal University Hospital**

PAPHR:

- **Victoria Hospital (PA)**

Prairie North:

- **Battlefords Union Hospital**
- **Northwest Health Facility (Meadow Lake)**

Where Babies Are Born in SK
But what about?

- Facilities with Obstetrical Services but lack capacity at present time.
- Facilities providing obstetrical services on an urgent, emergent basis.

Capacity being:

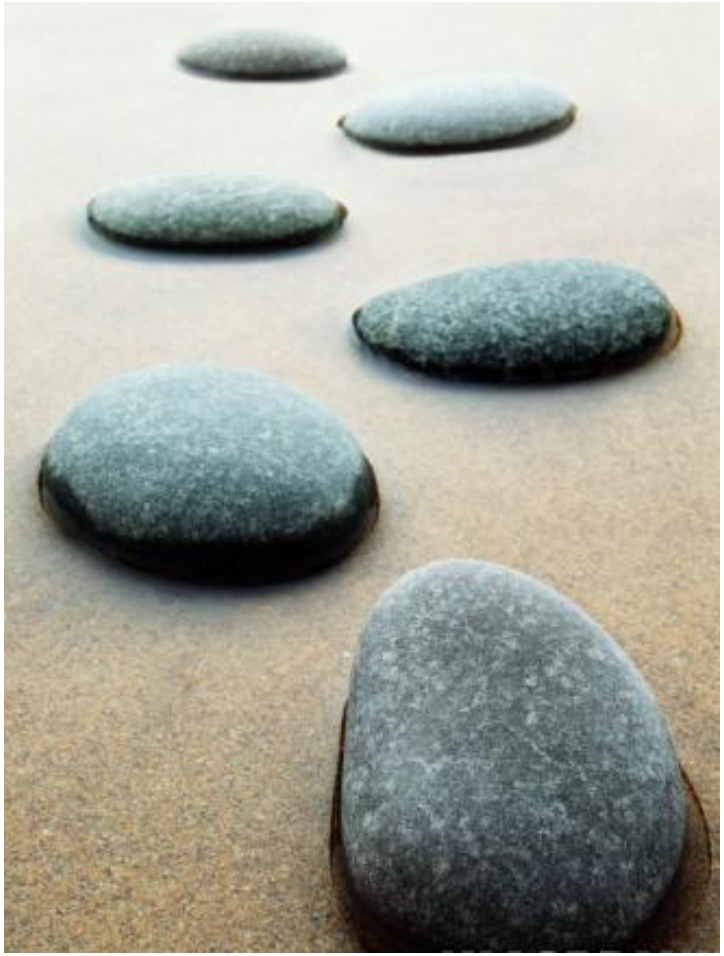
- Ability to do STAT or POC testing for HIV
- Ability to administer required medications on site and in a timely manner

Goal: Zero mother-to-child transmission of HIV

"The right care, provided by the right providers,
to the right patient, in the right place, at the right time,
resulting in optimal quality care."

Canadian Medical Association 2013

Next Steps?



Discussion

Resources

- Provincial HIV Website http://www.skhiv.ca/
  - Perinatal HIV Prevention Protocol for Saskatchewan
  - Infant Formula Program
  - SK Routine Testing Policy & Testing Resource Kit
  - Contact information for regional HIV Strategy Coordinators
- Saskatchewan Prevention Institute http://www.skprevention.ca/
  - "Hope for the Future: Having a Healthy Pregnancy While Living with HIV"
  - Informational materials for women with HIV
  - HIV / AIDS and Pregnancy: A Guide to Care (For Healthcare Providers)
- MaterniKit – a CATIE resource - pregnancy planning to post partum http://www.catie.ca/en/resources/maternikit
- Society of Obstetricians & Gynaecologists, Guidelines for the care of Pregnant Women Living with HIV and Interventions to Reduce Perinatal Transmission
  J Obstet Gynaecol Can 2014; 36 (8 eSuppl A): S1 – S46

  http://sogc.org/wp-content/uploads/2014/08/August2014-CPG310-ENG-online-Complete-REV.pdf

Questions

- Additional questions can be sent to contact@hivplt.ca

saskatchewan.ca