For women in general, pregnancy means a unique and complex experience, composed of ambivalent experiences such as happiness/sadness and safety/insecurity. (Bondas, 2003; Bondas & Eriksson, 2001; Loren Guerrero & Millan Barreiro, 2011)

In the case of pregnant women living with HIV, ambivalence was also accompanied by anxiety and guilt because of the possibility of HIV transmission to the baby (de Faria & Piccinini, 2010).

Despite prophylactic treatment, which can significantly reduce infection risk and provide reassurance, pregnant women remained preoccupied with the potential for maternal–child transmission (Brashers, 2001).

HIV IN PREGNANCY

Objectives:

- Identify and discuss the rate of maternal-infant HIV transmission; mode of transmission; risk factors that influence transmission; and effects of pregnancy on HIV disease.
- Describe the rationale for perinatal HIV testing, the type of testing available and legal requirements for offering HIV tests to pregnant women.
- Define strategies to reduce perinatal transmission.
- Define routine care for HIV positive pregnant women.
- Describe the management of exposed infants and diagnostic screening tests for HIV exposed newborns.
- List nursing interventions which can reduce intrapartum transmission of HIV to the infant during labor and delivery.
The number of HIV-infected women giving birth in the United States and across the globe is increasing. Despite reductions in perinatal HIV transmission in the United States, gaps in HIV diagnosis and treatment persist.
**Exposure Risks**

(average, per episode, involving HIV-infected source patient)

<table>
<thead>
<tr>
<th>Type of Exposure</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percutaneous (blood)</td>
<td>0.3%</td>
</tr>
<tr>
<td>Mucocutaneous (blood)</td>
<td>0.09%</td>
</tr>
<tr>
<td>Receptive anal intercourse</td>
<td>1%</td>
</tr>
<tr>
<td>Insertive anal intercourse</td>
<td>0.06%</td>
</tr>
<tr>
<td>Receptive vaginal intercourse</td>
<td>0.1 – 0.2%</td>
</tr>
<tr>
<td>Insertive vaginal intercourse</td>
<td>0.03 – 0.14%</td>
</tr>
<tr>
<td>Receptive oral (male)</td>
<td>0.06%</td>
</tr>
<tr>
<td>Female-female orogenital</td>
<td>4 case reports</td>
</tr>
<tr>
<td>IDU needle sharing</td>
<td>0.67%</td>
</tr>
<tr>
<td>Mother to child (no prophylaxis)</td>
<td>24%</td>
</tr>
</tbody>
</table>

**DIAGNOSES OF HIV INFECTION AMONG FEMALE ADULTS AND ADOLESCENTS, BY RACE/ETHNICITY AND TRANSMISSION CATEGORY, 2015—UNITED STATES AND 6 DEPENDENT AREAS**

Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. Data for the year 2015 are preliminary and based on 6 months of reporting delay. Data have been statistically adjusted to account for missing transmission category.

- Hispanics/Latinos
- Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.
- Includes blood transfusion, perinatal exposure, and risk factor not reported or not identified.

**I TEST 2 LIVES**

CDC/ACOG Recommendations:
- All pregnant women should be tested for HIV infection
- All health care providers should recommend HIV testing to all of their pregnant patients, as early as possible
- If a patient refuses an HIV test, it should be re-offered at regular intervals throughout the pregnancy
Recommendations for HIV Screening of Pregnant Women

- Retesting in the 3rd trimester, recommended: preferably before 36 weeks for women known to be at high risk for acquiring HIV:
  - HIV+ partner, new partner,
  - STI, substance abuse,
  - High risk community

- Rapid HIV testing should be offered to all women who present in labor with no HIV test results

MNNC - 2018 - HIV & PREGNANCY

✓ Getting a test is the only way to know if you have HIV

✓ Screening test

✓ Confirmatory test

MNNC - 2018 - HIV & PREGNANCY

Recommended Testing Algorithm

MNNC - 2018 - HIV & PREGNANCY

Recommendations: Diagnostic Laboratory Testing for HIV Infection in the United States 2014, CDC.gov
Major issue: Inadequate HIV Testing in Pregnancy

- An estimated 20-30% of US women are not tested for HIV during pregnancy
- Another 15-20% receive no or minimal prenatal care, thereby allowing for potential newborn transmission

Why Aren’t All Pregnant Women Tested for HIV?

- Late entry or no prenatal care
- Patient does not feel she is at risk
- Provider does not strongly recommend testing to all women
- Language / cultural barriers

NURSING ROLE

- Locate HIV test results
- Offer / Encourage / Normalize HIV testing
- Track results and facilitate appropriate interventions
- Maintain patient confidentiality
- Provide education and optimism re: interventions and treatment
Acute HIV Infection in Pregnancy

Symptoms
- Fever, myalgia, headache
- Rash, often erythematous maculopapular urticaria
- Fatigue, anorexia
- Pharyngitis
- Generalized lymphadenopathy

Use HIV RNA PCR as well as the HIV antibody to diagnose

Acute HIV Infection in Pregnancy

Increased risk of transmission to the fetus due to:
- High viral titers in plasma and genital fluid
- Absence of immune factors that may neutralize infection

Treatment should include interventions to reduce perinatal HIV transmission
- Appropriate antiretroviral treatment / prophylaxis
- Consideration of elective Cesarean delivery

Consult with HIV expert

A Diagnosis of HIV during Pregnancy or Labor

Is difficult
Yet creates opportunity to successfully improve maternal health and reduce transmission
Impact of Pregnancy on HIV Disease

- Pregnant women experience a decline in CD-4 count, r/t hemodilution, lowest: 7th month
- Viral load/ RNA PCR stable in untreated patients
- Pregnancy does not appear to significantly accelerate HIV disease progression, time to AIDS diagnosis or maternal survival


Adverse Pregnancy Outcomes and Relationship to Untreated HIV Infection

<table>
<thead>
<tr>
<th>Adverse Pregnancy Outcome</th>
<th>Relationship to HIV Infection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stillbirth</td>
<td>Evidence of increased risk in developing countries</td>
</tr>
<tr>
<td>Perinatal/infant mortality</td>
<td>Evidence of increased risk in developing countries</td>
</tr>
<tr>
<td>Spontaneous abortion</td>
<td>Evidence of possible increased risk</td>
</tr>
<tr>
<td>Group B Strep</td>
<td>Evidence of possible increased risk</td>
</tr>
<tr>
<td>Low birth weight (&lt;2500g)</td>
<td>Evidence of possible increased risk with more advanced disease</td>
</tr>
<tr>
<td>Preterm delivery</td>
<td>Evidence of possible increased risk</td>
</tr>
<tr>
<td>Intrauterine growth restriction</td>
<td>Evidence of possible increased risk</td>
</tr>
</tbody>
</table>

A Guide to the Clinical Care of Women with HIV 2013, Anderson, HRSA

Effect of HIV and Pregnancy on Other Infections

Both HIV infection and pregnancy may affect the natural history, presentation, treatment, or significance of a number of infections, thereby causing complications in pregnancy or perinatal infection
HIV INFECTION AND PREGNANCY MAY AFFECT THE NATURAL HISTORY, PRESENTATION, TREATMENT, OR SIGNIFICANCE OF INFECTIONS CAUSING COMPLICATIONS IN PREGNANCY OR PERINATAL INFECTION

Vulvovaginal Candidiasis  > prevalence, persistence, severity

Bacterial Vaginosis (BV)
- preterm labor and birth, premature rupture of membranes, LBW,
- chorioamnionitis, amniotic fluid infection, endometritis, and HIV transmission
- prevalence, persistence, severity of BV which > as CD4+ declines

Herpes HSV shedding, >frequent, severe, prolonged > transmission
more common when CD4 declines, with no treatment, can require C/S

HIV + and Other Infections: Screen & Treat

Syphilis Alters manifestation, serologic response, response to treatment, fetus

Hepatitis B Hepatitis B viremia, increased risk for liver disease

Hepatitis C Co-infection w HIV > risk faster progression
> transmission risk for HIV
Pregnancy does not influence course of Hep C

Tuberculosis Reactivation with disease progression

Cytomegalovirus Reactivation with disease progression

Toxoplasmosis Reactivation with disease progression

Mother to Child HIV Transmission

- Rates
  Without treatment 15-33%
  With treatment <1%

- Timing
  Intrauterine 20%
  Intrapartum 80%
  Post-Partum/Breastfeeding 14-29%

The exact mechanism of mother-to-child transmission of HIV remains unknown
In Utero Transmission

- Placental breaks
- Maternal-fetal transfusion
- HIV or other infection of placenta

Interventions: Treatment, Reduce STI, smoking

Intrapartum Transmission

- Maternal virus load
  - blood (cell-associated, cell-free)
  - cervicovaginal secretions
- Duration of ruptured membranes
- Infant exposure to blood
  - mucous membranes, swallowing

- Trauma
- Maternal-fetal transfusion
- Placenta - abruption
  - chorioamnionitis
  - co-infections

Breastfeeding Transmission

- Breakdown of skin barrier
- Intercurrent infections (mastitis)
- Maternal plasma/milk viral load
- Primary infection in mother
- Mixed feedings
- Early introduction of solids
- Duration of breastfeeding
Breastfeeding and Transmission

- Among women not receiving treatment an additional 15–29% of infants will be infected if there is breastfeeding. HIV is found in breast milk, both cell-associated and cell-free.

- Recommendations:
  - Women with HIV infection in the United States should not breastfeed.
  - Women considering breastfeeding should know their HIV status.
  - Consider cultural norms in supporting the non-breastfeeding woman with HIV.

Recommendations:

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- Women considering breastfeeding should know their HIV status.
- Consider cultural norms in supporting the non-breastfeeding woman with HIV.

Factors Associated with Maternal Infant HIV Transmission

- Plasma and genital track HIV viral load
- Clinical stage: primary infection & advanced maternal disease
- Hepatitis A, B, C
- Substance abuse & cigarette smoking
- Sexually transmitted infections, including bacterial vaginitis, HSV
- Unprotected sex
Obstetrical Factors Associated with Increased Risk of Maternal Transmission

- Duration of ruptured membranes > 4 hours
- Chorioamnionitis
- Placental abruption; maternal/infant bleed
- Invasive fetal monitoring
- Vaginal delivery vs. C-section

Treatment of HIV Infection During Pregnancy

All pregnant HIV infected women should be offered highly active antiretroviral therapy to:
- Maximally suppress viral replication
- Minimize risk of development of resistant virus
- Provide pre-exposure and post exposure prophylaxis for infant

US Public Health Services Guidelines, 11/2017


- 22.6% Transmission Rate (Placbo)
- 7.6% Transmission Rate (Zidovudine Group)
- 66% reduction in risk for transmission (P < 0.001)
Suppression of HIV RNA to undetectable levels should be achieved as rapidly as possible in pregnancy.

Multiple factors must be considered when choosing an antiretroviral (ARV) drug regimen for a pregnant woman, including comorbidities, convenience, adverse effects, drug interactions, resistance testing results, pharmacokinetics (PK), and experience with use in pregnancy.

"Prescribe what she will take"

Deb Cohan, MD
HIV-RNA level and timing of ART initiation have been independently associated with perinatal transmission.

Acute HIV infection in pregnancy -> pursue strategies to accelerate viral decline.

Rate viral decline slower in acute HIV infection than chronic.

The perinatal transmission rate:
- 0.2% for women starting ART before conception
- 0.4% First trimester
- 0.9% second Trimester
- 2.2% third trimester (respectively).

Regardless of when ART was initiated, the perinatal transmission rate was higher for women with viral loads of 50 to 400 copies/mL near delivery than for those with <50 copies mL.

French Perinatal Cohort - Mandelbrot CID 2015

Adherence Issues
- Denial and fear of HIV infection
- Misinformation
- Distrust of the medical establishment
- Disclosure issues
- Lack of familial and social support
- Unstructured and chaotic lifestyle
- Pill burden
- Lack of belief in the effectiveness of ARV
- Low self-esteem
- Depression
- Alcohol and substance use
- Advanced HIV disease, illness

Perinatal Antiretroviral Exposure and Prevented Mother-to-Child HIV Infections with Antiretroviral Prophylaxis
- Between 1978 and 2010, an estimated 186,157 HIV-exposed infants and approximately 21,003 HIV-infected infants were born in the United States.
- Between 1994 and 2010, an estimated 124,342 HIV-exposed infants were born in the US, and approximately 6083 infants were perinatally infected with HIV.
- As a result of PMTCT interventions, an estimated 21,956 MTCT HIV cases have been prevented in the United States since 1994.
- Conclusion: Although continued vigilance is needed to eliminate mother-to-child HIV transmission, PMTCT interventions have prevented nearly 22,000 cases of perinatal HIV transmission in the United States since 1994.
Admission of HIV + Mother to Labor & Delivery:
- As per hospital protocol
  - Vital signs  Fetal monitoring
  - Activity  Diet
  - Lab work
  - Review need for intra partum antiretroviral medication
    (Medication indicated if patient has new infection, if viral load unsuppressed, poorly adherent or status unknown)
  - Dedicated intravenous line for AZT / Zidovudine
  - Zidovudine 2mg/kg x 1 hour followed by 1mg/kg until delivery  (Elective C/S: Give 3 hours)
  - Continue other medications
  - Maintain patient confidentiality

Recommendations For Labor & Delivery
Rupture of membranes beyond 4 hours is an increased risk for any patient with a viral load and should be avoided until necessary
- Avoid any procedure that may increase risk of fetal contact with maternal blood or vaginal secretions:
  - fetal scalp electrode
  - intra-uterine pressure catheter
  - fetal scalp pH sampling
  - use of forceps or vacuum extraction

Management of Membrane Rupture in New/Untreated Patient or patient who has a viral load
- In untreated patient, the risk of transmission with rupture of membranes (ROM) increases with time
- If labor is progressing and membranes are intact, avoid artificial ROM and invasive monitoring
- Women scheduled for Cesarean who present with premature rupture of membranes (PROM):
  - individualize management
    - Duration of rupture, progress of labor
    - HIV RNA level, current ARV regimen
What happens if an HIV-infected woman goes into labor or her water breaks before her scheduled Cesarean delivery?

- Once a woman goes into labor or her water breaks, a cesarean delivery may not reduce the risk of mother-to-child transmission of HIV.
- In this situation, the decision whether to deliver the baby by cesarean section depends on a woman’s individual circumstances.

When Is A Scheduled Cesarean Delivery Recommended To Prevent Mother-to-Child Transmission of HIV?

- When a woman has a viral load greater than 1,000 copies/mL near the time of delivery.
- When a woman’s viral load is unknown.
- In these situations, a woman with HIV should have a scheduled cesarean delivery even if she took HIV medicine during pregnancy. The cesarean delivery should be performed before a woman goes into labor and before rupture of membranes.

The risk of mother-to-child transmission of HIV is low for women who take HIV medicines during pregnancy and have a viral load of less than 1,000 copies/mL near the time of delivery. In this situation, a woman with HIV should have a vaginal delivery unless there are other medical reasons for a cesarean delivery.

ACOG Committee Opinion
Scheduled Cesarean Delivery and the Prevention of Vertical Transmission of HIV Infection

- If viral load >1,000 despite treatment, the risk of MTCT may be reduced further by scheduled C/S.
- If viral load <1,000 risk of MTCT is 2% regardless of delivery route.
- No reduction in MTCT if C/S done after labor or membrane rupture.
- Ultimate choice of method of delivery lies with patient.
ACOG Committee Opinion
Scheduled Cesarean Delivery and the Prevention of Transmission of HIV Infection

- Scheduled C/S should be performed at 38 weeks
- No amniocentesis for fetal lung profile
- Measure maternal viral load at baseline and every 3 months and use most recent values in counseling for mode of delivery

STANDARD PRECAUTIONS AND OBSTETRIC PRACTICE
Barrier devices for specific procedures recommended by hospital infection control guidelines

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Gloves</th>
<th>Facial Protection</th>
<th>Gown</th>
<th>Shoe Covers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pelvic exam</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amnionotomy</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal delivery</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cesarean delivery</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tubal ligation</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GYN surgery</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Rapid HIV Testing on Labor & Delivery
Rapid HIV Testing on L & D

- ~40% of infected infants, maternal HIV status unknown to provider prior to L&D (Lampe, CDC 2004)
- Antiretroviral therapy can reduce MTCT up to 50% even when begun during L&D.


Who are the Pregnant Women Who Will Need Rapid HIV Testing on L&D?

- Women with no or limited prenatal care
- Women who were not offered testing
- Women whose results are unavailable
- Women who declined testing previously
- Women who report new risk behavior or partner

NURSING ROLE IN RAPID TESTING

- Identify who will need test
- Provide education on role of testing
- Offer testing
- Track results and ensure follow-up
- Maintain patient confidentiality
- Provide support
Timing of Antiretroviral (ARV) Prophylaxis and Risk of Perinatal HIV Transmission

- No ARV + BF: ~25%
- In Labor: 9-13%
- Pregnancy <1%

Wade, et al. 1998 NEJM 339;1409-1412
Guay, et al. 1999 Lancet 354;795-802
Fiscus, et al. 2002 Ped Inf Dis J 21;664-668
Moodley, et al. 2003 JID 167;725-735

If the woman is not in labor, and delivery is not imminent, confirmatory testing should be conducted and the patient managed with a referral to a perinatal HIV specialist.

She will have additional testing, and initiate treatment.

Method of Delivery will be determined by her gestational age and response to treatment.
Giving + Rapid HIV Results In Labor

- “Your preliminary HIV test was positive…this means that you may have HIV infection. We always do another test to confirm a positive rapid test”
- “It is best that we start medicine to reduce the risk to your baby while we wait for the confirmatory results.”
  - Intra-partum treatment to reduce transmission to her baby
  - C-section
  - Need to postpone breastfeeding until results of confirmatory test

Intrapartum ARV Prophylaxis with a Positive Rapid Test

If test is positive, give maternal IV Zidovudine (ZDV)
Initiate 3- drug infant combination ARV prophylaxis includes ZDV, lamivudine, nevirapine
Maternal confirmatory HIV test done postpartum
If positive, continue infant combination ARV prophylaxis for 6 weeks
If negative, stop infant ARV therapy

POST-PARTUM HEMMORHAGE

- Postpartum hemorrhage consider the ARVs
  - If she is receiving a cytochrome (CYP) 3A4 enzyme inhibitor (eg, a PI), methergine is last resort due to potential for excessive vasocostriction
  - If she is receiving a CYP3A4 enzyme inducer such as NVP, EPV, or etravirine, additional uterotonic agents may be needed because of the potential for decreased methergine levels and inadequate treatment effect.
- Pre-Eclampsia and Preterm Labor
  - Do not run ART and MgSO4 in same line.
Caring For the Woman Newly Diagnosed With HIV in Labor

- Psychosocial support during labor and postpartum follow-up for mother and baby
- Support bottle-feeding decision to protect infant
- Confidentiality of results and treatment for mother and infant
- Communication and documentation of preliminary positive results
  - Delivery and newborn records
  - Communication with pediatrician
  - Plan for follow-up of confirmatory results

Care for HIV Exposed Infants

- Immediately cleanse of blood & fluids,
- Routine Vitamin K, immunizations, bathe
- Avoid breastfeeding
- HIV diagnostic testing to establish or rule out HIV infection out as early as possible: HIV DNA PCR
- CBC, ALT /AST to monitor effects of medication
- Communicate with Pediatrics: Provide maternal information/care
- Provide referral to an HIV specialist
- Refer families to support services and community resources

Treatment of the HIV Exposed Infant

Infant prophylactic medication:
Zidovudine (ZDV/AZT/Retrovir) suspension (10mg/ml)
DOSE: 2mg/kg orally q 12 hours x 4-6 weeks
Start immediately, within 6-12 hours of delivery
If mother was diagnosed on L & D
- Add 3 doses of Nevirapine
- Birth
- 48 hours after 1st dose
- 96 hours after 1st dose

US Public Health Service Guidelines, 2017
A 6-week course of combination ARV prophylaxis regimen is recommended for all infants at higher risk of HIV transmission including those born to mothers who

- have received no antepartum or intrapartum ARV drugs, intrapartum ARV drugs only,
- have received combination ARV drugs and do not have sustained viral suppression

- Zidovudine
- Lamivudine
- Nevirapine

Postpartum Maternal Care

- Support formula feeding decision
- Continue maternal ARV treatment
- Provide routine care, hygiene,
- Monitor for infection
- Maintain confidentiality
- Provide family planning info
- Provide referrals to community resources

Timing of Diagnostic Testing in Infants

- Virologic testing of HIV-exposed infant (HIV DNA PCR or HIV RNA assays)
  - 14-21 days of age
  - 2 months
  - 4-6 months
  - Some experts also recommend virologic testing at birth
- HIV antibody test
  - 12-18 months to document seroreversion in HIV-uninfected infants
  - Diagnostic test for children ≥18 months
Diagnostic Testing in Infants

Criteria for HIV+ diagnosis
- 2 positive HIV virologic tests on separate blood samples (regardless of age)
- Positive HIV antibody test with confirmatory Western blot (or IFA) at age ≥18 months

Criteria for negative HIV status
- HIV DNA negative x 2 with testing at >1 month and > 4 months of age

Case #1

- Ms. R is admitted from the ER fully dilated and pushing. This is her third baby and according to her chart, she had two prenatal visits. Her history leads you to believe that she is at risk for HIV.
- What are your next steps?

RESOURCES FOR CLINICIANS

- Offering information on AIDS treatment, prevention, and research
- Clinical guidelines for ARV treatment
- Perinatal/Mother-to-Child Transmission
- Pediatrics
- Adults and Adolescents
CASE # 2

- 24 yo G1P0 at 35 weeks has HIV, diagnosed during this pregnancy. She has been intermittently compliant with her ARVs and has never had a VL lower than 1200.
- What should her plan of care be going forward?
- Is her baby at a high risk or low risk infant?

UCSD Mother-Child-Adolescent HIV Program

Goals:
- To coordinate the delivery of comprehensive family-focused HIV care for a large, geographically and culturally diverse region
- To improve the survival and quality of life among children, adolescents and women by providing effective medical care, case management, health education, adherence, mental health counseling, peer support and clinical trial opportunities

Health Care Services: Comprehensive Coordinated and Family Centered

- Coordination of Specialty Prenatal Care
- Preconception counseling
- Diagnostic Testing for Children
- HIV Care for Infants & Children
- HIV Care at the Adolescent HIV Clinic
- Care for Women at the Fem-Owen HIV Clinic
- Developmental and mental health evaluations and interventions
Services of the UCSD Mother-Child Adolescent HIV Program are funded by:

- The Ryan White Comprehensive Family Services Branch, HIV/AIDS Bureau, Health Resources and Services Administration
- The case management program is funded, in part by the Ryan White Treatment Modernization Act Part A, San Diego County Office of AIDS Coordination
- Clinical research: The National Institutes of Health
- Generous donations from our community

WHAT ABOUT SERODISCORDANT COUPLES?

- HIV infected partner should be receiving combination antiretroviral therapy and demonstrate sustained suppression of plasma viral load below the limits of detection
- Use of antiretroviral pre-exposure prophylaxis (PrEP) for HIV-uninfected partners may reduce the risk of sexual transmission
- Couples with HIV-Infected Women, the safest conception option is artificial insemination, including the option of self-insemination with a partner’s sperm during the peri-ovulatory period
- Couples with HIV-Infected Men, the use of donor sperm from an HIV-uninfected man with artificial insemination is the safest option. Other options: sperm preparation techniques coupled with either intrauterine insemination or in vitro fertilization
- Testing every trimester using viral tests (RNA) at 36 weeks and rapid test L & D

Perinatal HIV/AIDS

- Rapid perinatal HIV consultation from practicing providers
- HIV testing in pregnancy
- Treating HIV-infected pregnant women
- Preventing transmission during labor and delivery and the post-partum period
- HIV-exposed infant care

Call for a Phone Consultation (888) 448-8765
24 hours, Seven days a week
http://nccc.ucsf.edu/clinician-consultation/perinatal-hiv-aids/
Advice from national experts in perinatal HIV care provide consultation on all levels of perinatal HIV management, including on complex and unique treatment dilemmas, to provide you the best possible information on up-to-date, high-quality care.

Consultation on complex perinatal HIV treatment issues
Addressing adherence issues
Managing HIV-positive pregnancies with late presentation to care
Safer conception options for HIV-affected couples

Referral to perinatal providers and reproductive services
Connecting HIV-infected women and exposed infants to HIV clinicians
Connecting HIV-affected couples considering conception with supportive providers

Call for a Phone Consultation
(888) 448-8765
24 hours, Seven days a week

Antiretroviral Pregnancy Registry

- A collaborative project managed by PharmaResearch Corporation on behalf of an advisory committee (specialists in OB/Gyn, ID, teratology, epidemiology, and CDC and NIH members) and sponsored by:
  - Abbott Laboratories, Agouron Pharmaceuticals, Inc.,
  - Boehringer Ingelheim Company,
  - Bristol-Myers Squibb Co., DuPont Pharmaceuticals Company,
  - GlaxoSmithKline, F. Hoffmann-LaRoche Ltd., Merck & Co., Inc.

- Purpose: To assess safety of antiretroviral drugs during pregnancy
- Telephone: (800) 258-4263 Fax: (800) 800-1052

RESOURCES

- American College of Obstetricians and Gynecologists (ACOG) Committee Opinions www.acog.org
- WomenChildrenHIV.org A comprehensive, Internet-based library of materials on mother and child HIV infection
- Treatment Guidelines: www.aidsinfo.nih.gov 11/14/17
- CDC Perinatal HIV: http://www.cdc.gov/hiv/topics/perinatal/resources/factsheets
- Perinatal Hotline Service 888-448-8765
REFERENCES

A Guide to the Clinical Care of Women with HIV, 2013. Edited by Jean R. Anderson, M.D.
Distributed by HRSA, available online at www.ask.hrsa.gov


Rapid Human Immunodeficiency Virus Testing on Labor and Delivery
Jodi Frenckridge, MD, MPH and Deborah Cohen, MD, MPH
OBSTETRICS & GYNECOLOGY VOL. 112 NO. 1 JULY 2008: 159-163

No perinatal HIV-1 transmission from women with effective antiretroviral therapy starting before pregnancy

CDC Perinatal HIV: http://www.cdc.gov/hiv/topics/perinatal/resources/factsheets

ONE TEST TWO LIVES
Prenatal HIV screening benefits mom and baby.

CDC Perinatal HIV: http://www.cdc.gov/hiv/topics/perinatal/resources/factsheets