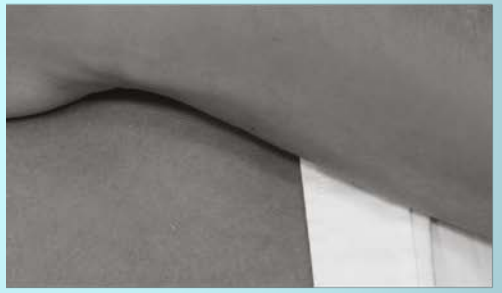
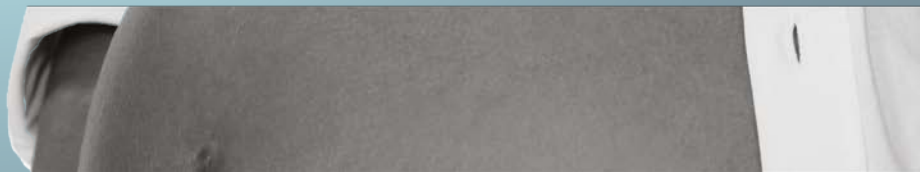
What's New

In The 2016 Perinatal HIV Treatment Guidelines?



Provided by CDC's Elimination of Perinatal HIV Transmission Stakeholders Group



Guidelines for our Online Meeting Room

- You will be listening to today's webinar through your phone line
  - Dial 1-855-702-5382,
    enter participant code 596-825-4701#
- Your phone line will be muted
  - Enter questions and comments into the chat room
- Meeting evaluation & materials
  - Evaluation link and PDF of slides will be sent via email to all registrants. Please respond!

https://aidsinfo.nih.gov/guidelines/html/3/perinatal-guidelines/0

Today's Presenters

Judy Levison, MD, MPH
Professor
Department Obstetrics and Gynecology
Baylor College of Medicine

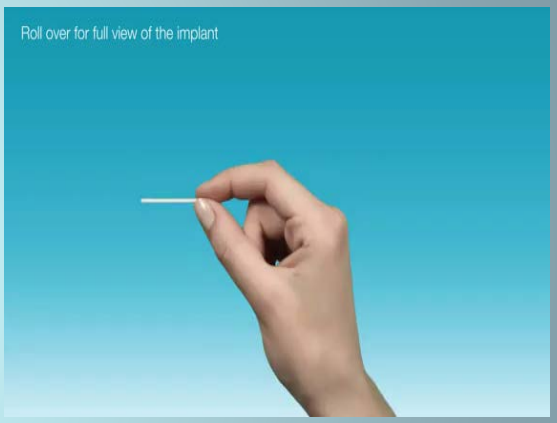
Lisa Rahangdale, MD, MPH
Associate Professor,
Department of Obstetrics & Gynecology
UNC School of Medicine

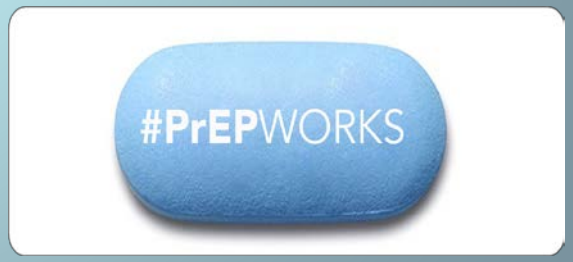
Ratings

- **Of Recommendations:**
  - A = Strong
  - B = Moderate
  - C = Optional
- **Of Evidence:**
  - I = One or more randomized trials with clinical outcomes and/or validated laboratory endpoints
  - II = One or more well-designed, nonrandomized trials or observational cohort studies with long-term clinical outcomes;
  - III = Expert opinion

1. Preconception Counseling and Care for HIV-Infected Women of Childbearing Age

- Updates on drug interactions between ARVs and Hormonal Contraception
  - EFV: COC, implants:
    - Higher pregnancy rates and lower hormonal levels but clinical significance unclear
- Serodiscordant couples: Counsel about PreP





2. General Principles: Initiation of prenatal care

- Initiate ART as early in pregnancy as possible.
- Discuss key intrapartum and postpartum topics:
  - Mode of delivery
  - Maternal lifelong HIV therapy
  - Postpartum contraception
  - Infant feeding, infant antiretroviral (ARV) prophylaxis and timing of infant diagnostic testing and neonatal circumcision.
- Screen for intimate partner violence
- Refer sexual partners for HIV testing and ARV prophylaxis

3. Teratogenicity

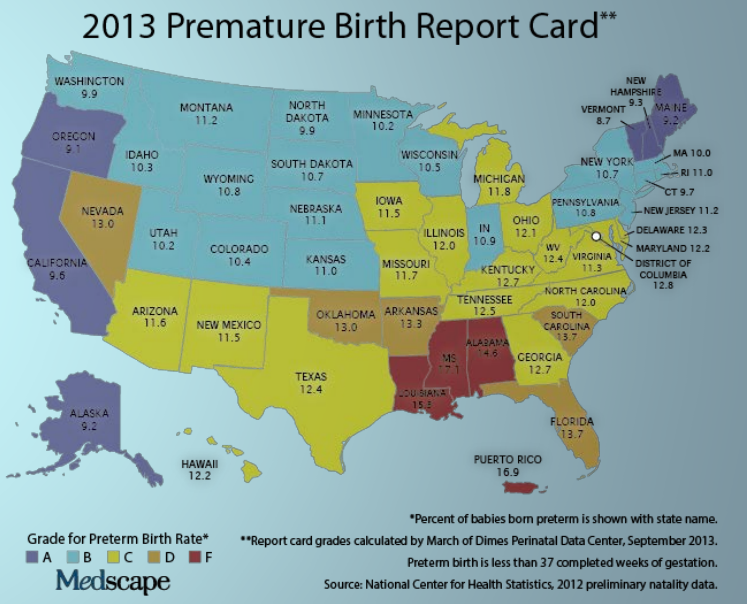
- ART during pregnancy generally does not increase the risk of birth defects
  - Based on the preponderance of studies indicating no difference in rates of birth defects for first-trimester compared with later ARV

3. Teratogenicity

- No restriction on efavirenz use before 8 wks gestation
  - Women who become pregnant on suppressive efavirenz-containing regimens should continue their current regimens.
  - Risks of neural tube defects after first trimester efavirenz exposure are not greater than those in the general population.

4. Combination Antiretroviral Drug Regimens and Pregnancy Outcome

- Update includes new studies; content reorganized: 1986-2015 (Europe, N and S America, Africa)
- Summarizes data on ARVs and association with preterm birth, low birth weight (<2500g), small for gestational age (<10%), & stillbirth
  - Preterm Birth: RR/OR 1.2 – 3.4, but none control for all factors associated with PTB; ?PI's
  - However, HIV treatment should **NOT** be withheld due to concern for adverse pregnancy outcomes.



http://www.medscape.com/viewarticle/813632

5. Use of Antiretroviral Drugs during 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 (AIII).

“Prescribe what she will take”

- Deb Cohan, MD

5. Use of Antiretroviral Drugs during Pregnancy

- Prescribe the same drugs as in non-pregnant woman as long as appropriate drug exposure is achieved in pregnancy (unless there are known adverse effects for mother or child) (AII).
- Women who present for obstetric care on fully suppressive ARV regimens should continue their current regimens unless the regimen includes didanosine, stavudine, or full-dose ritonavir (AII).

6. What to Start: Initial Combination Regimens for Antiretroviral-Naive Pregnant Women (Table 6)

Preferred	Alternative
2 NRTI backbone ABC/3TC TDF/FTC (coformulated) or TDF/3TC	**2 NRTI backbone** ZDV/3TC (2/2 twice a day dosing)
Plus	
Boosted PI ATV/r DRV/r	**Boosted PI** LPV/r
or	
INSTI RAL	
	or
	NNRTI EFV (2/2 side effects of nausea and HA) RPV

More on what to start

- Limited data in pregnancy on
  - COBI
  - DTG
  - EVG/COBI/TDF/FTC
  - FPV
  - MVC
  - EVG/COBI/TAF/FTC (Genvoya)
- No data in pregnancy
  - TAF/FTC
  - RPV/TAF/FTC (Odefsey)

7. Pharmacokinetic and Toxicity Data (Table 8)

- Addition of formulations
  - (FTC/TAF/RPV) Odefsey
  - (FTC/TAF/EVG/COBI) Genvoya
- RPV PK variable in pregnancy; monitor VL
- If using DRV/r, then 600/100 mg twice a day

8. If ARV naïve

- NO AZT monotherapy
- Start early: Although most perinatal transmission events occur late in pregnancy or during delivery, early initiation of ART reduces perinatal transmission.

8. If ARV naïve

- French Perinatal Cohort *(Mandelbrot CID 2015)*:
  - The perinatal transmission rate increased from 0.2% for women starting ART before conception to 0.4%, 0.9% and 2.2% for those starting in the first, second or 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.

9. HIV-Infected Pregnant Women Who Are Currently Receiving Antiretroviral Drugs

- Continue effective ART (don’t fix it if it ain’t broken)
- Lots of new drugs.

Please report all women on ART in pregnancy to the Antiretroviral Pregnancy Registry

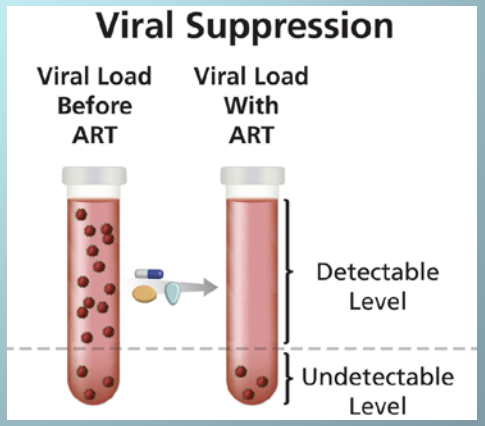
http://www.apregistry.com/

10. Antiretroviral Drug Resistance and Resistance Testing in Pregnancy

- PREVIOUSLY – The Perinatal Guidelines provided guidance for situations in which women stop their ART regimen postpartum.
- NOW – ART regimens, once initiated should not be discontinued.

11. Lack of Viral Suppression

- Suppression of HIV RNA to undetectable levels should be achieved as rapidly as possible in pregnancy;
  - HIV-RNA level and timing of ART initiation have been independently associated with perinatal transmission. (French Perinatal Cohort - Mandelbrot CID 2015)
- Acute HIV infection in pregnancy -> pursue strategies to accelerate viral decline
  - Rate viral decline slower in acute HIV infection than chronic



https://aidsinfo.nih.gov/education-materials/glossary/1650/viral-suppression

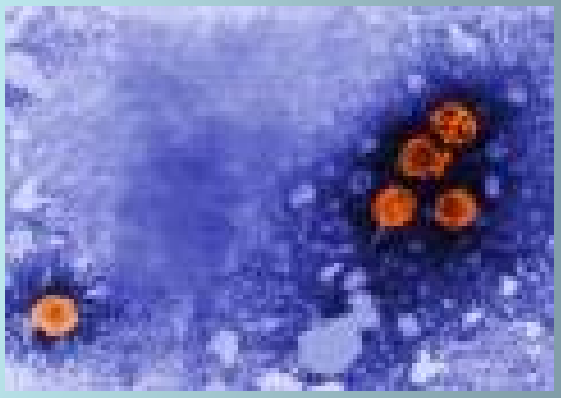
11. Lack of Viral Suppression

- Raltegravir:
  - Rate of viral decline 2 log copies/mL decrease per 2 week therapy
  - Suggested in women with high viral loads or resistance issues
    - No clinical trials, only case series
  - 2 reports of elevates transaminase levels, with normalization after discontinuation

https://aidsinfo.nih.gov/drugs/420/raltegravir/0/patient21

12. Special Populations: HIV/Hepatitis B Virus Coinfection

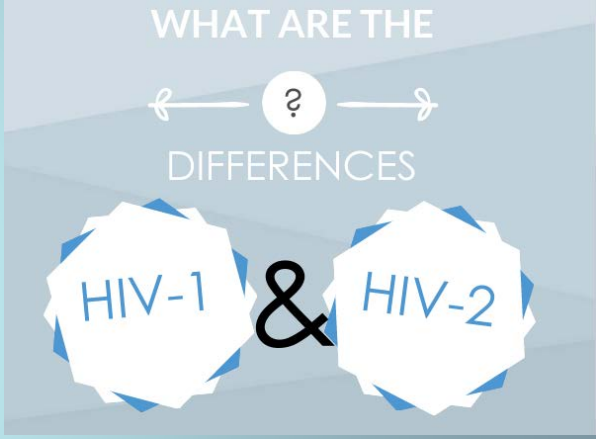
- Screen all HIV+ pregnant women ASAP for hepatitis B virus (HBV)
  - HIV/HBV-coinfected pregnant women should have a regimen including tenofovir plus lamivudine or emtricitabine.
- Continue anti-HBV medications after pregnancy



http://www.cdc.gov/vaccines/vpd-vac/hepb/photos.htm

13. HIV-2 Infection and Pregnancy

- Treat HIV-1 and HIV-2 coinfection as per guidelines for HIV-1 mono-infection, but use ARV drugs to which HIV-2 is sensitive.
  - AVOID NNRTI's, enfurvitide
  - 2 NRTIs and boosted-PI or an integrase strand transfer inhibitor
  - No randomized clinical trials have been performed to address when to start treatment or what is the optimal treatment for HIV-2 mono-infection.
    - Recommend continue treatment postpartum
  - Infant needs 6 weeks AZT

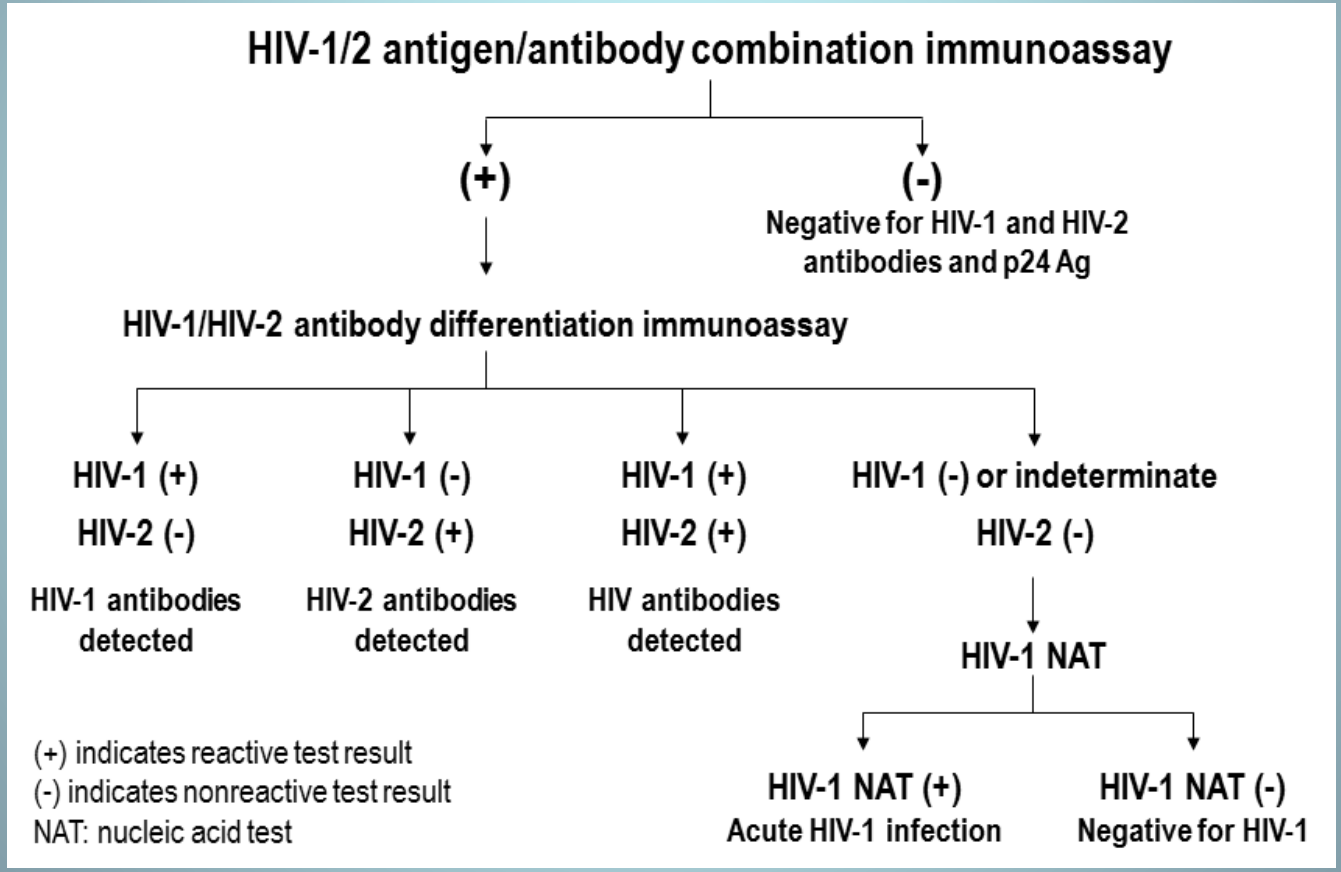


14. Pregnancy in Women with Perinatal HIV Infection

- No differences in care during pregnancy
  - Similar risks of perinatal transmission
- ART regimens selection:
  - Resistance testing
  - Prior ART history
  - Minimization of pill burden
  - Same guiding principles as heavily ART-experienced adults

- May need to use drugs with limited experience in pregnancy due to extensive resistance.

A review of the HIV laboratory testing algorithm



https://stacks.cdc.gov/view/cdc/23446

15. Intrapartum Antiretroviral Therapy/Prophylaxis Care

- Women who present in labor with unknown HIV status should undergo expedited antigen/antibody HIV testing (AII).
  - If the results are positive, an HIV-1/HIV-2 antibody differentiation test should be done as soon as possible and maternal (IV zidovudine)/infant(combination antiretroviral [ARV] prophylaxis) ARV drugs should be initiated pending results of the differentiation test (AII).
  - If the maternal HIV differentiation test is positive, infant ARV drugs should be managed as discussed in the Infant Antiretroviral Prophylaxis section (AI).
  - If the maternal HIV differentiation test is negative and acute HIV infection has been excluded with a negative HIV RNA test, the maternal and infant ARV drugs should be stopped (AIII).

15. Intrapartum Antiretroviral Therapy/Prophylaxis Care

- Women with positive initial testing should not initiate breastfeeding until HIV infection is definitively ruled out *(see Postpartum Care)* (AII).

16. Transmission and Mode of Delivery

- In women with HIV RNA levels ≤1000 copies/mL, if scheduled cesarean delivery or induction is indicated, it should be performed at the standard time for obstetrical indications.
- In women with an HIV RNA >1,000 copies/mL or unknown HIV RNA level who present in spontaneous labor or with ruptured membranes, there is insufficient evidence to determine whether cesarean reduces the risk of perinatal HIV transmission. Individualize!
- In women on ART with HIV RNA ≤1,000 copies/ml, duration of ruptured membranes is not associated with an increased risk of perinatal transmission, and vaginal delivery is recommended (BII).

17. Other Intrapartum Management Considerations

- Artificial rupture of membranes (ROM) performed in the setting of ART and virologic suppression is not associated with increased risk of perinatal transmission and can be performed for standard obstetric indications (BII).
- If spontaneous ROM occurs before or early during the course of labor, interventions to decrease the interval to delivery (e.g., administration of oxytocin) can be considered based on obstetric considerations in HIV-infected women with viral suppression. Artificial ROM should be avoided unless there is a clear obstetric indication in women with detectable viral loads.

More on intrapartum management

- Avoid
  - AROM in the setting of viremia (BIII)
  - Routine use of scalp electrode (BIII)
  - Operative forceps or vacuum (BIII) “only if clear obstetric indications”
  - Episiotomy (BIII)

18. Postpartum Care

- Women with a positive rapid HIV antibody test during labor should not breastfeed unless a confirmatory HIV test is negative.
- The mother should receive infant AZT prior to discharge because outpatient pharmacies may not stock zidovudine for neonatal administration. Special hospital programs may need to be established to support this.

More on postpartum care

- Offer PrEP if uninfected partner.

http://blog.thestigmaproject.org/

19. Infant Antiretroviral Prophylaxis

- The Panel recommends a 4-week zidovudine prophylaxis regimen for full-term infants when the mother has received a standard combination ART regimen during pregnancy with sustained viral suppression.

- Initiate as soon as possible after birth.

Infant prophylaxis

- The Panel recommends a 6-week course of combination ARV prophylaxis regimen 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, or who have received combination ARV drugs and do not have sustained viral suppression.

More on infant prophylaxis:

- The Panel was unable to reach clear consensus on the specific ARV prophylaxis regimen in these infants, but options are listed in an update of Table 7. Neonatal Dosing for Prevention of Perinatal Transmission of HIV (NVP at birth, 48 hours, and 96 hours after second dose vs. therapeutic doses of ZDV/3TC and NVP 6 mg/kg BID.

National Perinatal HIV Hotline

The National Perinatal HIV Hotline (888-448-8765) is a federally funded service providing free clinical consultation for difficult cases to providers caring for HIV-infected pregnant women and their infants, and can provide referral to local or regional pediatric HIV specialists.

http://nccc.ucsf.edu/clinician-consultation/perinatal-hiv-aids/


Q&A

Thank you!

- Please take 2 minutes to give us your feedback via this electronic survey (we'll send the link via email to all registered participants):

https://www.surveymonkey.com/r/2016HIVPerinatalGuidelines