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Care of Pregnant People with HIV: Preventing Perinatal Transmission

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- *No personal disclosures*
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Objectives

At the completion of this presentation, participants should be able to

1. Recognize risks for perinatal HIV transmission
2. Describe testing for HIV in people who are pregnant
3. Describe elements of patient centered, team based, treatment and delivery plans to prevent perinatal HIV transmission

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Question

True or False. Most people with HIV who become pregnant deliver babies with HIV.

A. True

B. False

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HIV in Pregnancy: Less than 1% risk if…

- Suppressive ART throughout pregnancy
- Postnatal infant antiretroviral prophylaxis
- C-section and IV zidovudine if indicated
- Avoidance of breastfeeding

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Connor EM et al. N Engl J Med.1994;331:1173-80.
Kourtis AT et al. JAMA. 2001,285;709-12.

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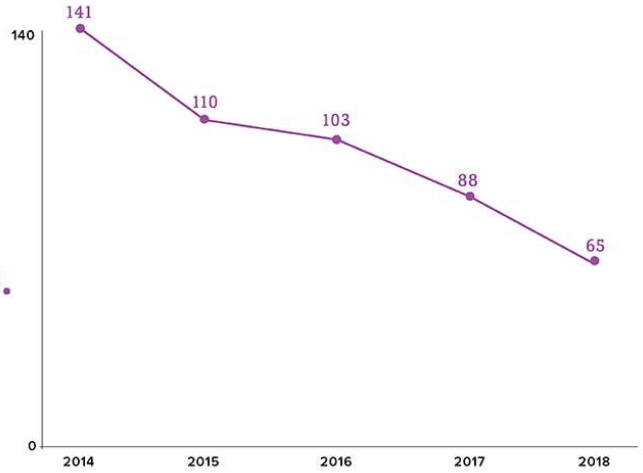
Diagnoses of Perinatal HIV Infections in the US and Dependent Areas, 2014-2018

HIV diagnoses declined 54% among children overall from 2014 to 2018.



Source: CDC. Diagnoses of HIV infection in the United States and dependent areas, 2018 (updated). *HIV Surveillance Report* 2020;31.

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https://www.cdc.gov/hiv/group/gender/pregnantwomen/index.html

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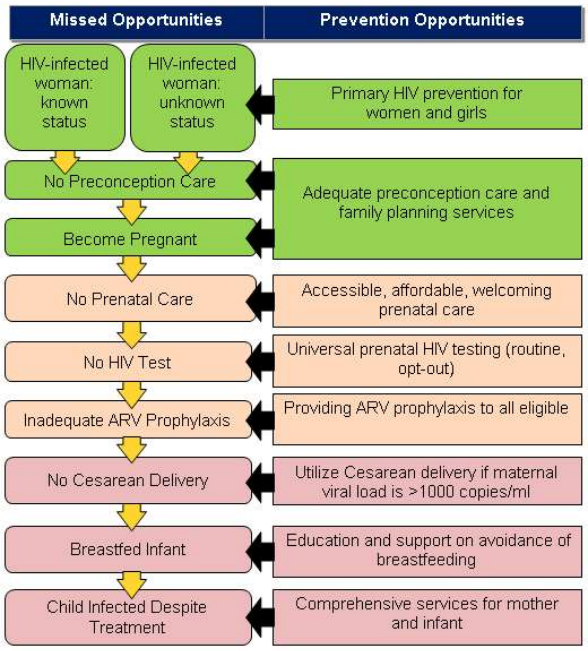

https://www.cdc.gov/hiv/group/gender/pregnantwomen/emct.html

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Missed Opportunities for Preventing Perinatal Transmission of HIV: Florida 2007 – 2014

- 1.6% of exposed babies were perinatally infected
- Among the infected maternal-infant pairs, over 1/3 of mothers
  - **Used street drugs** or
  - **Acquired an STI during pregnancy**

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Trepka MJ et al. Southern Med J 2017 Feb;110(2):11-128. PMID: 28158882

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Missed Opportunities for Preventing Perinatal Transmission of HIV: Florida 2007 – 2014

- Relative Risk of Perinatal Transmission
  - **Maternal HIV Diagnosis during labor and delivery**
    - RR = 5.66, (95% CI 2.31-13.91) (compared with prenatal diagnosis)
  - **Maternal HIV Diagnosis after birth**
    - RR = 26.50, (95% CI 15.44-45.49)
- Factors associated with perinatal transmission of HIV
  - **Late diagnosis**
  - **Maternal acute HIV infection**
  - **Poor or late prenatal care**

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Trepka MJ et al. Southern Med J 2017 Feb;110(2):11-128. PMID: 28158882

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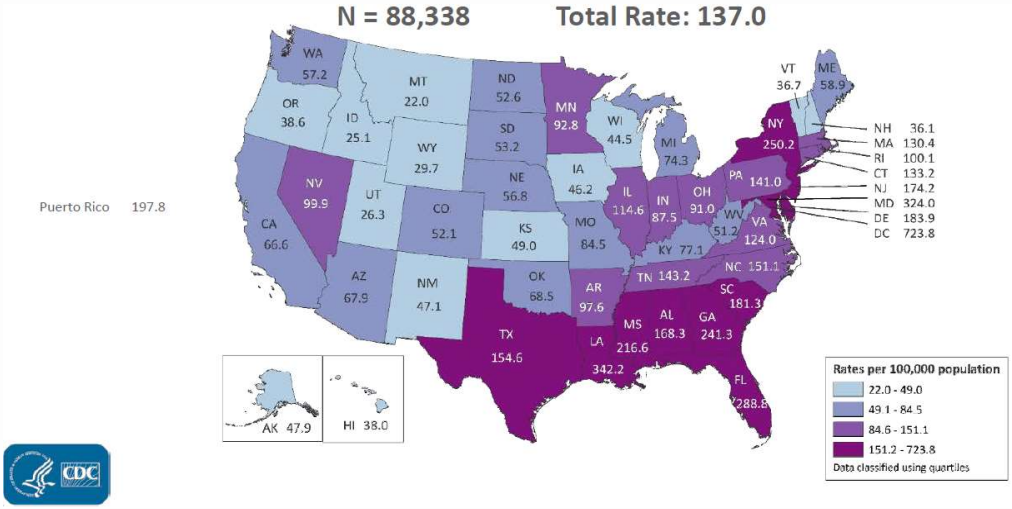
Rates of Females Aged 15-44 Years Living with Diagnosed HIV Infection by Area of Residence, 2017



CDC.gov. Available at https://www.cdc.gov/hiv/pdf/library/slidesets/cdc-hiv-surveillance-pediatric-2018.pdf. Accessed 3.7.20.

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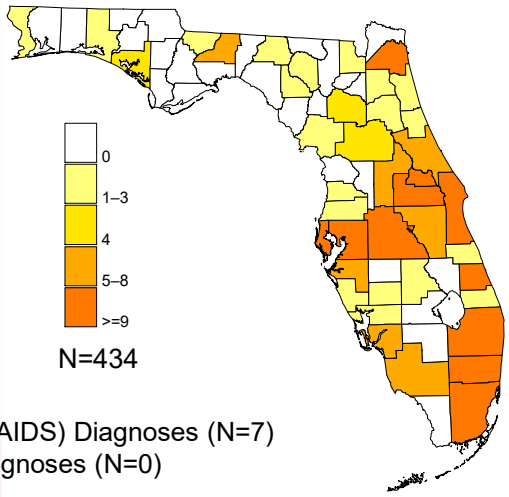
Perinatal HIV Exposures for Infants Born in Florida, 2022, (N=434)



- HIV (not AIDS) Diagnoses (N=7)
- AIDS Diagnoses (N=0)

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www.floridahealth.gov

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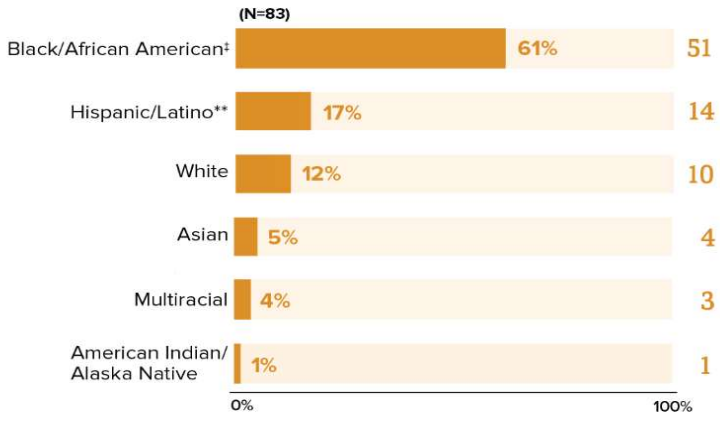
Diagnosis of Perinatal HIV Infections in the US and Dependent Areas by Race/Ethnicity, 2019

New perinatal HIV diagnoses disproportionately affect certain racial and ethnic groups.



Source: CDC. Diagnosis of HIV Infection in the United States and dependent areas, 2019, HIV Surveillance Report 2021;32.

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HIV Transmission from Mother to Baby

- 25% risk of perinatal transmission in absence of therapy
  - 20% before 36 weeks
  - 50% between 36 weeks and delivery
  - 30% active labor and delivery
- Less than 1% risk if
  - Suppressive antiretroviral therapy (ART) throughout pregnancy
  - Postnatal infant antiretroviral prophylaxis
  - C-section & zidovudine (AZT) if indicated
  - Avoidance of breastfeeding

Connor EM et al. N Engl J Med.1994;331:1173-80.
Kourtis AT et al. JAMA. 2001,285;709-12.

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Viral Load During Pregnancy is the Strongest Predictive Factor for Transmission

TABLE 2. RATES OF PERINATAL TRANSMISSION OF HIV-1 ACCORDING TO MATERNAL PLASMA HIV-1 RNA LEVELS AND THE USE OF ZIDOVUDINE THERAPY DURING PREGNANCY.*

ZIDOVUDINE THERAPY	MATERNAL PLASMA HIV-1 RNA COPIES/ml					P VALUE†
	<1000	1000–10,000	>10,000–50,000	>50,000–100,000	>100,000	
	no. of infants infected/total no. (%)					
Yes	0/22	10/83 (12.0)	13/75 (17.3)	5/16 (31.2)	7/34 (20.6)	0.02
No	0/35	22/110 (20.0)	26/108 (24.1)	12/38 (31.6)	19/30 (63.3)	<0.001
Total	0/57	32/193 (16.6)	39/183 (21.3)	17/54 (30.9)	26/64 (40.6)	<0.001

*Values are the geometric means of measurements obtained throughout pregnancy. For each woman, levels were measured up to three times during pregnancy and once at delivery. The treatment status of one woman was not known.

†The P values were calculated with use of the Mantel extension test for trend.

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Garcia et al NEJM 1999 PMID 10432324

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Question

When should pregnant people be screened for HIV?

A) At entry into care for pregnancy

B) Anytime they have any signs or symptoms suggestive of acute HIV

C) In the 3rd trimester if at risk of HIV acquisition

D) All of the above

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Screening for HIV

https://www.clinicaladvisor.com/home/topics/hiv-aids-information-center/hiv-screening-at-25-years-optimal-for-outcomes-cost/

At presentation for pregnancy care

Repeat in 3rd trimester (<36 weeks)

- If at risk of acquiring HIV during pregnancy
  - Area/hospital with high number of people with HIV
  - Transactional sex
  - Drug use
  - Sex partner with HIV
  - New sex partner or more than 1 sex partner
  - Suspected or diagnosed sexually transmitted infection

At labor and delivery if HIV status is unknown

As mandated by law

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https://clinicalinfo.hiv.gov/en/guidelines/perinatal

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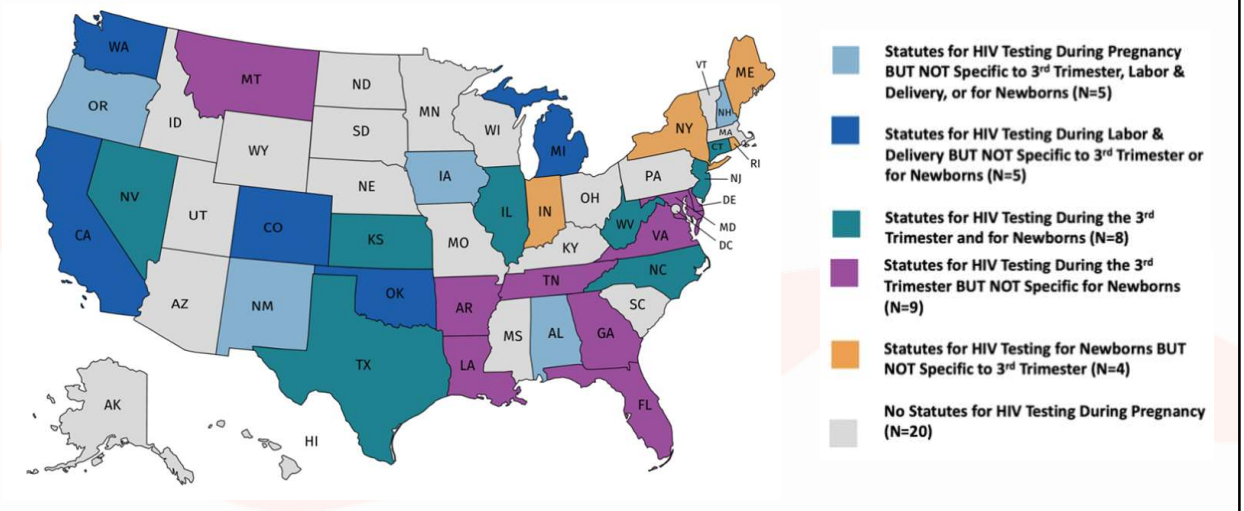
Newborn and 3rd Trimester HIV Testing Laws by State



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CDC.gov. Perinatal Testing Laws. Available at https://www.cdc.gov/hiv/policies/law/states/perinatal.html. Accessed 1/23/2022.

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HIV Acquisition Probability and Relative Risk: 2751 African Women with HIV-Infected Male Partners, by Reproductive Stage

Table 5. HIV Acquisition Probability and Relative Risk (RR) of HIV Acquisition Among 2751 African Women With HIV-Infected Male Partners, by Reproductive Stage

	Base Model[a]			Adjusted Model[b]		
Reproductive Stage	Probability[c] of HIV Acquisition per Condomless Sex Act (95% CI)	RR[d] for per-Act Probability of HIV Acquisition (95% CI)	*P*	Probability[c] of HIV Acquisition per Condomless Sex Act (95% CI)	RR[d] for per-Act Probability of HIV Acquisition (95% CI)	*P*
Early pregnancy through postpartum period	0.0027 (0.0009, 0.0074)	4.97 (2.95, 8.38)	<.001	0.0029 (0.004, 0.0093)	2.76 (1.58, 4.81)	<.001
Early pregnancy	0.0018 (0.0003, 0.0070)	3.20 (1.24, 8.25)	.02	0.0022 (0.0004, 0.0093)	2.07 (0.78, 5.49)	.14
Late pregnancy	0.0031 (0.0008, 0.0102)	5.54 (2.62, 11.69)	<.001	0.0030 (0.0007, 0.0108)	2.82 (1.29, 6.15)	.01
Postpartum period	0.0044 (0.0008, 0.0167)	7.80 (3.04, 20.02)	<.001	0.0042 (0.0007, 0.0177)	3.97 (1.50, 10.51)	.01
Nonpregnant/nonpostpartum periods	0.0005 (0.0003, 0.0009)	1.00	…	0.0011 (0.005, 0.0019)	1.00	…

Thomson K et al. J Infect Dis. 2018;218:16-25

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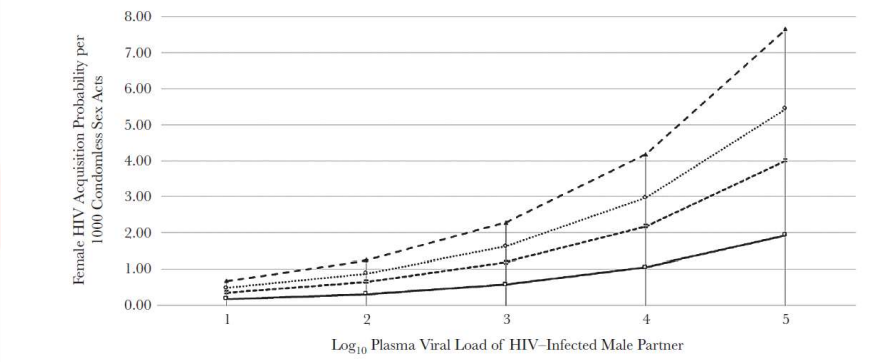
Adjusted HIV Acquisition Probabilities per 1000 Condomless Sex Acts



Nonpregnant	0.17	0.31	0.58	1.05	1.93
Early pregnancy	0.36	0.65	1.19	2.19	4.00
Late pregnancy	0.48	0.89	1.62	2.97	5.44
Postpartum	0.68	1.25	2.29	4.18	7.65

25 yo woman
Not on PrEP
Varying plasma HIV viral load for male partner

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Thomson K et al. J Infect Dis. 2018;218:16-25.

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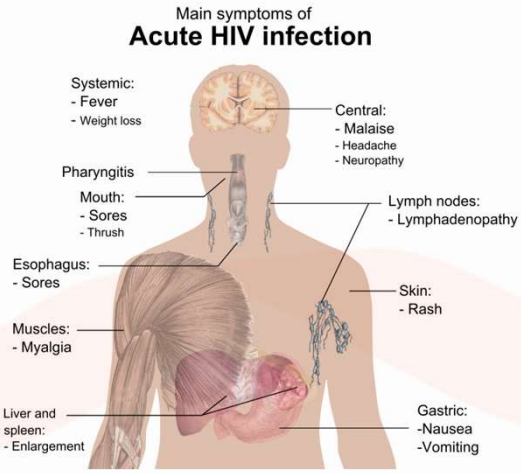
Screening for HIV

- If signs or symptoms of acute HIV, obtain
  - 4th generation Ag/Ab test AND
  - HIV RNA PCR --quantitative
- Partners of all pregnant people should be referred for HIV testing when their status is unknown



https://commons.wikimedia.org/wiki/File:Symptoms_of_acute_HIV_infection.svg

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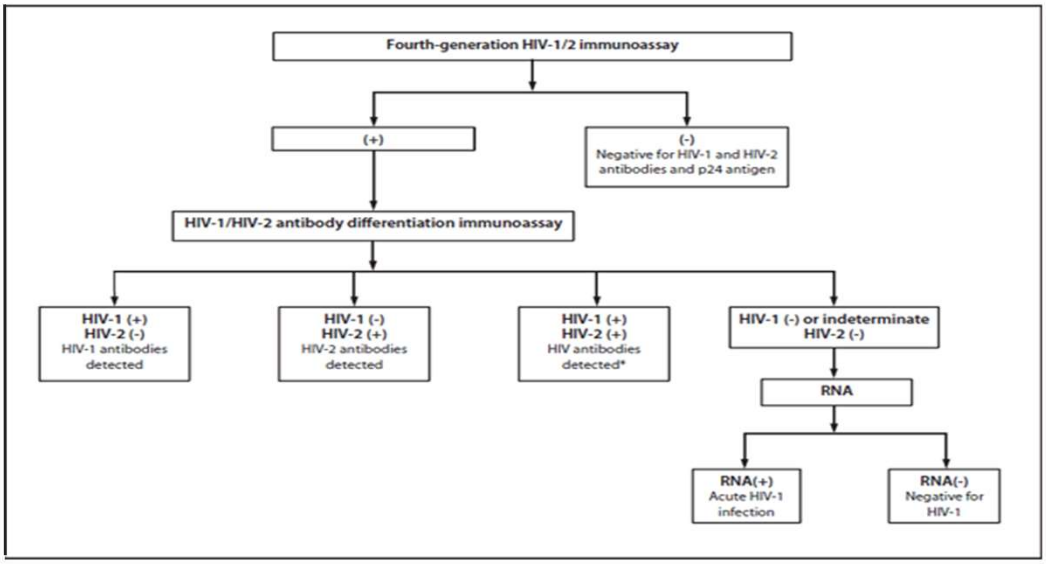
HIV Testing Algorithm



https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6224a2.htm

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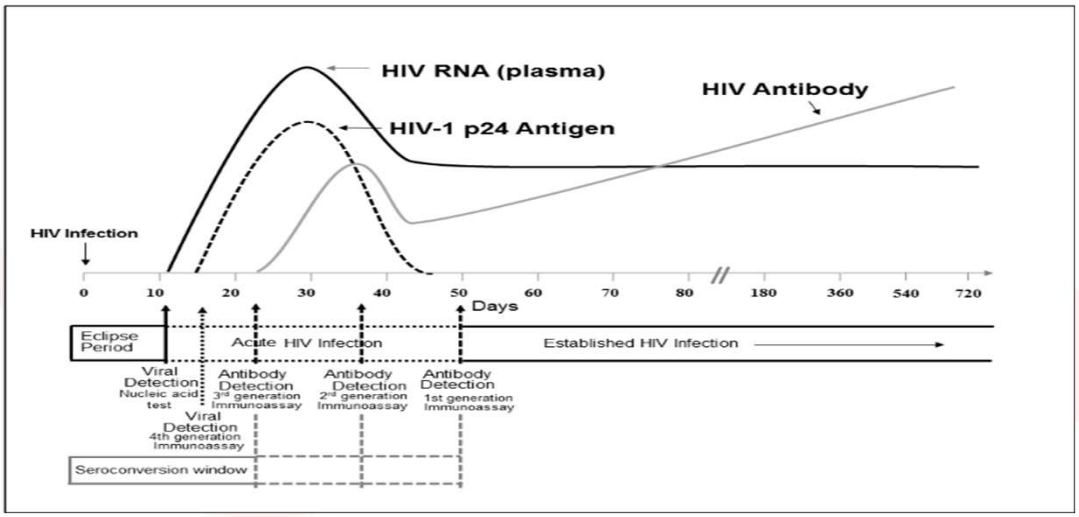
Sequence of Appearance of Lab Markers of HIV-1 Infection



Branson BM, et al. Laboratory Testing for the Diagnosis of HIV Infection: Updated Recommendations. CDC.gov. June 27, 2014. Available at http://stacks.cdc.gov/view/cdc/23446..

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Question

- A pregnant person presents to care and has a negative HIV test. What should happen next? Select all that are correct.

A. Inform patient of negative test and describe availability of HIV pre-exposure prophylaxis (PrEP)

B. Don't talk about HIV as patient has tested negative

C. Ask if sex partner's HIV status is known

D. If injection drug user, ask if injection partner's HIV status is known

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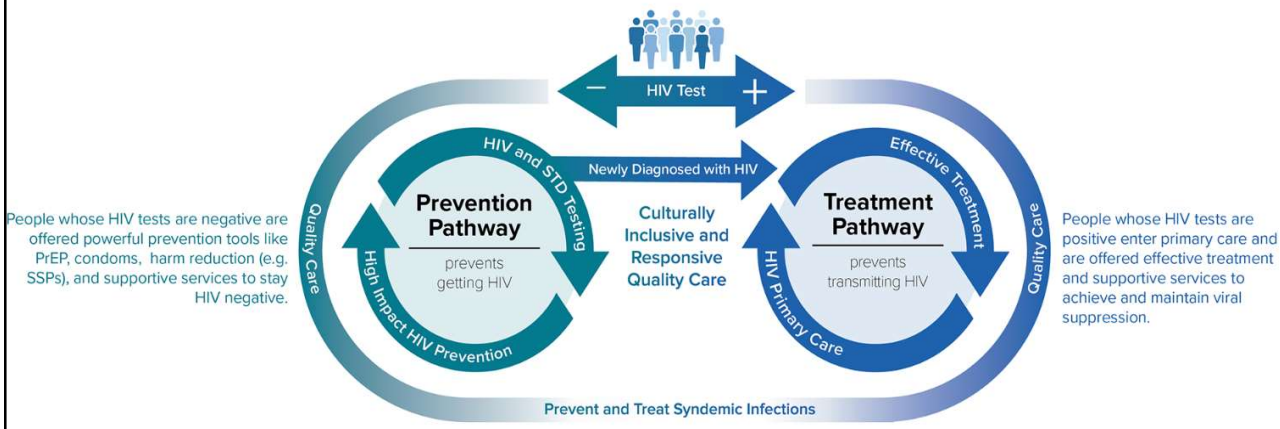
Status Neutral HIV Prevention and Care



Follow CDC gudielines to test people for HIV. Regardless of HIV status, quality care is the foundation of HIV prevention and effective treatment. Both pathways provide people with the tools they need to stay healthy and stop HIV.

CDC.gov. Issue Brief: Status Neutral HIV Care and Service Delivery Eliminating Stigma and Reducing Health Disparities. CDC.gov/hiv/pdf/policies/issue-brief/Issue-Brief-Status-Neutral-HIV-Care.pdf.Accessed 10/2/22.

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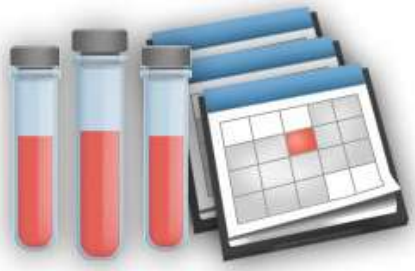
Pre-exposure Prophylaxis



PrEP IS AN HIV PREVENTION METHOD IN WHICH PEOPLE WHO DO NOT HAVE HIV INFECTION TAKE A PILL DAILY TO REDUCE THEIR RISK OF BECOMING INFECTED

ONLY PEOPLE WHO ARE HIV-NEGATIVE SHOULD USE PrEP. AN HIV TEST IS REQUIRED BEFORE STARTING PrEP AND THEN EVERY 3 MONTHS WHILE TAKING PrEP.

http://aids.gov/hiv-aids-basics/prevention/reduce-your-risk/pre-exposure-prophylaxis

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Question

- What should occur in the event of a positive HIV Ag/Ab test and a negative HIV Ab differentiation assay while awaiting the results of an HIV viral load in a pregnant person?

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Qustion

A. Start antiretroviral therapy in the mother
B. Counsel regarding C-section if no viral load available at time of delivery
C. Counsel regarding indication for C-section if viral load results > 1000 copies/mL
D. Plan maternal IV AZT therapy around time of delivery
E. All of the above

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Care for the Pregnant Person with HIV

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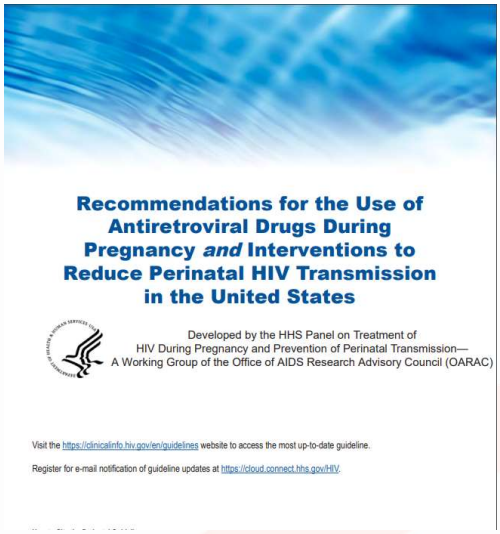

https://clinicalinfo.hiv.gov/en/guidelines
Last update: January 31, 2024

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Perinatal Antiretroviral Therapy

- Start as soon as possible
  1. Earlier viral suppression = reduced risk of transmission to the fetus
  2. Modify therapy later if needed
  3. **Goal**: Maintain HIV viral load level below the limit of detection during and after pregnancy
  4. “PrEP” for the fetus

https://clinicalinfo.hiv.gov/sites/default/files/guidelines/documents/PerinatalGL.pdf

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French Perinatal Cohort: Update

- 14630 HIV-infected mother-infant pairs
- 2000 to 2017
- Pregnant people received ART, delivered live-born children with determined HIV status, and did not breastfeed

Sibiude et al. CID 2023:76 (1 February)

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French Perinatal Cohort: Update

- 5482 children born to mothers on ART prior to conception, ART throughout pregnancy, HIV viral load < 50 copies/mL at delivery, no breastfeeding
  - No HIV transmission
- Regardless of viral load at birth, risk of transmission varied based on when ART was started
  - ART prior to conception 0.14%
  - ART started in first trimester 0.52%
  - ART started in second trimester 0.75%
  - ART started in third trimester 1.67%

Sibiude et al. CID 2023:76 (1 February)

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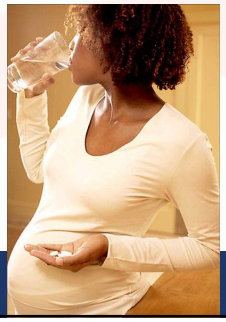
Medications in Pregnancy

- Many physical changes occur in pregnancy that affect drug pharmacokinetics
  - Decrease in serum proteins
  - Increased plasma volume
  - Increase in kidney filtration
  - Delayed stomach emptying
- What does this mean for the pregnant person?
  - May have to take higher doses or take ART more often to get appropriate blood and placental levels



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Preferred Initial Therapy for Antiretroviral Naïve Pregnant People

2 NRTIs + INSTI

NRTI = Nucleoside Reverse Transcriptase Inhibitor
INSTI = Integrase Strand Transfer Inhibitor

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DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/21/24.

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Preferred 2-NRTI Backbones

1. **Abacavir (ABC)/lamivudine (3TC) = Epzicom**
   - Must be HLA-B*5701 negative
   - If HIV viral load > 100,000 don't combine with atazanavir or efavirenz
2. **Tenofovir alafenamide (TAF) /emtricitabine (FTC) = Descovy**
3. **TAF + 3TC**
4. **Tenofovir disoproxil fumarate (TDF)/emtricitabine (FTC) = Truvada**
5. **TDF/3TC = Cimduo, Temyxis**

- **Tenofovir in pregnancy**
  - Both TAF and TDF are preferred in pregnancy
  - TAF associated with fewer adverse birth outcomes and slightly higher gestational weight
  - TDF has potential renal toxicity
  - Either form appropriate for treatment of HIV/hepatitis B co-infection

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DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/21/24.

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INSTIs

- **Preferred: Dolutegravir (Tivicay)**
  - Once daily dosing
  - Specific timing and/or food recommendations if taken with calcium or iron
  - Preferred for treatment of acute HIV during pregnancy
- **Alternative: Bictegravir (as part of BIC/TAF/FTC)**
  - One pill once daily
  - Specific timing and/or food recommendations if taken with calcium or iron
- **Alternative: Raltegravir (Isentress)**
  - Must be dosed 400 mg twice daily in pregnancy
  - Don't use high dose, once daily formulation
  - Well-tolerated, few drug interactions

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DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/2124.

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Protease Inhibitors

- **Preferred: Darunavir/r (Prezista + Norvir)**
  - Dose in pregnancy: darunavir 600 mg + ritonavir 100 mg twice daily with food
- **Alternative: Atazanavir/r (Reyataz + Norvir)**
  - Once-daily dosing
  - Do not use with proton pump inhibitors
  - Associated with increased maternal indirect bilirubin levels

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DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/21/24.

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Alternative ART for Initial Therapy in Pregnancy

NRTI backbone

- **Zidovudine/3TC** (Combivir)

NNRTI

- **Efavirenz (Sustiva)**
- **Rilpivirine (Edurant)**
  - Take with food
  - Interacts with acid reducing agents
  - Don't use if HIV viral load > 100,000 copies/mL or CD4 < 200 cells/mm^3
  - PK data suggests lower drug levels and risk for viral rebound in second and third trimesters – monitor closely

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DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/21/24.

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Acute HIV in Pregnancy

Preferred regimen

Dolutegravir + tenofovir + emtricitabine (or lamivudine)

Alternative regimen

Darunavir/r + tenofovir + emtricitabine (or lamivudine)

DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/21/24.

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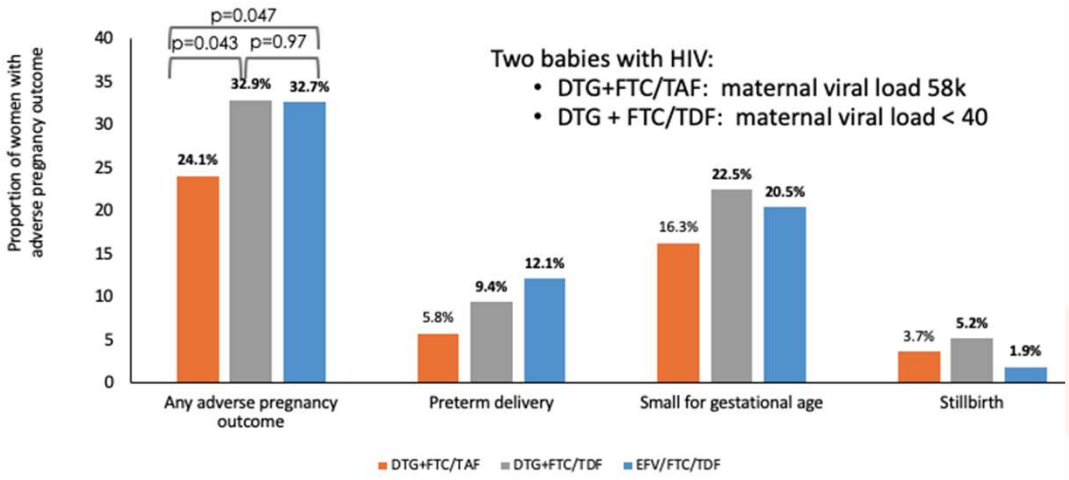
IMPAACT 2010: DTG + TAF/FTC associated with *fewest* adverse pregnancy outcomes when started during pregnancy



Two babies with HIV:
- DTG+FTC/TAF: maternal viral load 58k
- DTG + FTC/TDF: maternal viral load < 40

Chinula L, et al. 27th CROI; Boston, MA; March 8-11, 2020. Abst. 130LB.

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Other Antiretrovirals as Initial Regimens in Pregnancy

- *Insufficient Data:* Doravirine
- *Not Recommended:*
  - Cobicistat containing regimens due to pharmacokinetic changes that can reduce medication efficacy
    - (Atazanavir/c, darunavir/c, elvitegravir/c)
  - Long-acting injectable cabotegravir (CAB) plus rilpivirine (RPV)

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DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/21/24.

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Antiretroviral Therapy in Pregnancy Key Points

1. In most cases, people who present for obstetric care on fully suppressive HIV therapy should continue their current regimen
2. Use the same regimens recommended for nonpregnant adults in pregnant people when regimen is: tolerated, safe, effective in suppressing viral replication
3. Consider whether pharmacokinetic changes in second, third trimesters may lead to lower plasma levels of certain ART, require increasing doses, more frequent viral load monitorin

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DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/21/24

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Table 7. Situation-Specific Recommendations for Use of Antiretroviral Drugs in Pregnant People and Nonpregnant People Who Are Trying to Conceive

ART Regimen Component	ART for Pregnant People Who Have Never Received ARV Drugs and Who Are Initiating ART for the First Time	Continuing ART for People Who Become Pregnant on a Fully Suppressive, Well-Tolerated Regimen	ART for Pregnant People Who Have Received ARV Drugs in the Past and Who Are Starting or Restarting ART[a]	New ART Regimen for Pregnant People Whose Current Regimen Is Not Well Tolerated and/or Is Not Fully Suppressive[a]	ART for Nonpregnant People Who Are Trying to Conceive[a,b]
Integrase Strand Transfer Inhibitor (INSTI) Drugs Used in combination with a dual-nucleoside reverse transcriptase inhibitor (NRTI) backbone[c,d]					
DTG[a]	Preferred[a]	Continue	Preferred[a]	Preferred	Preferred
BIC[a,e]	Alternative[a]	Continue	Alternative[a]	Alternative	Alternative
RAL	Alternative	Continue	Alternative	Alternative	Alternative
CAB[d] Oral (lead-in) Long-acting (IM)	Not recommended	Continue with frequent viral load monitoring or consider switching due to insufficient data[d]	Insufficient data	Insufficient data	Insufficient data
EVG/c[f]	Not recommended	Continue with frequent viral load monitoring or consider switching.	Not recommended	Not recommended	Not recommended

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https://clinicalinfo.hiv.gov/en/guidelines/perinatal/recommendations-arv-drugs-pregnancy-situation-specific-conceive-full. Accessed: 4/21/24

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What about 2 drug or injectable regimens?

- Pregnant persons who present to care on DTG/3TC or DTG/RPV and have successfully maintained viral suppression can continue the two-drug regimen **(BIII)** with more frequent viral load monitoring every 1 to 2 months throughout pregnancy **(CIII)**
- Data about the use of long-acting injectable cabotegravir (CAB-LA) and RPV during pregnancy are extremely limited and insufficient to make a recommendation for or against use in pregnancy

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DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/21/24

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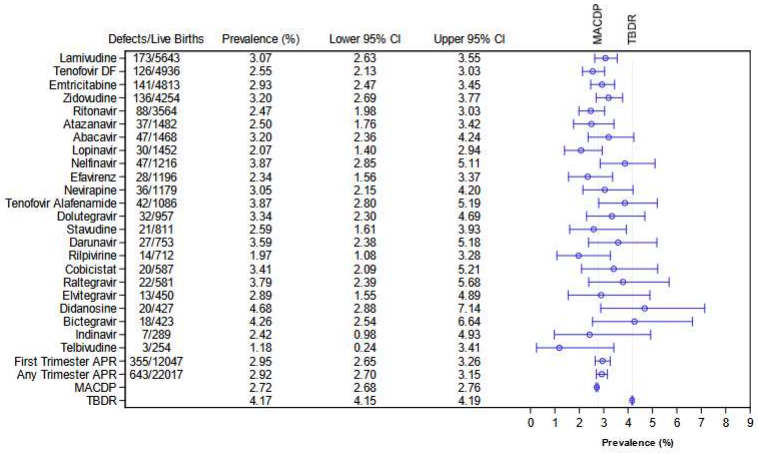
THE ANTIRETROVIRAL PREGNANCY REGISTRY INTERIM REPORT

1 JANUARY 1989 THROUGH 31 JULY 2023

(Issued: December 2023)

Figure 1: Summary of Birth Defects among First Trimester Exposures, Prospective Registry Cases Closed with Outcome through 31 July 2023



Apregistry.com. Accessed: 4/21/24

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Monitoring of HIV During Pregnancy

- HIV viral load testing
  - Initial visit
  - 2-4 weeks after starting or changing ART
  - Monthly until HIV viral load is below limit of detection of test (“undetectable”)
  - Every 3 months during pregnancy
  - 34-36 weeks’ gestation to inform delivery decisions (4 weeks prior to delivery)
- Antiretroviral resistance testing
  - Prior to starting ART if never on treatment
  - Prior to changing regimen if HIV RNA >200 copies/ml
    -need to have enough virus for resistance testing (> 500 to 1,000 copies/mL)

DHHS Perinatal Guidelines Available at https://clinicalinfo.hiv.gov/en/guidelines/perinatal. Accessed 4/21/24

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Monitoring of CD4 During Pregnancy

- CD4 lymphocyte count should be measured at initial visit with review of prior CD4 counts
- If patient has been on ART ≥ two years, consistently undetectable and CD4 ≥ 300 cells/mm^3 →no further checking needed during this pregnancy
- If on ART for < 2 yrs, CD4 ≥ 300 cells/mm^3, check CD4 every six months
- All others, check CD4 every three months during pregnancy

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What if virologic suppression is not attained?

1. Test for drug resistance
2. Assess drug adherence, tolerability, dosing, potential problems with absorption, lack of attention to food requirements
3. Consider ART modification using medications that are recommended for use in pregnancy

Adherence to ART, labs and appointments (both OB and HIV care) are critical to success in preventing mother to child transmission!

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Virologic Failure Near Delivery

- HIV RNA > 1,000 copies/mL or unknown viral load
  - Scheduled cesarean section at 38 weeks
  - Intravenous zidovudine
    - 2 mg/kg dose followed by a continuous infusion of 1 mg/kg/hour until delivery
      - Some providers would give IV zidovudine if last HIV viral load > 50 or any concern for non-adherence
- At UF→our policy is to give all pregnant persons with HIV AZT at delivery regardless of viral load

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Case

- Kelly is a 32-year-old woman, with perinatally-acquired HIV, well-controlled on DTG +TAF/FTC, pregnant with her first child
- She understands that the baby will be given prophylactic ART upon delivery
- She would like to breastfeed her child and wants to know how best to go about doing this for her and her child's health
- How do you advise her?

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Infant Feeding for Individuals with HIV in the United States

- Section updated January 31, 2023
- Section previously named: *Counseling and Managing Individuals With HIV in the United States Who Desire To Breastfeed*

Panel's Recommendations

- People with HIV should receive evidence-based, patient-centered counseling to support shared decision-making about infant feeding. Counseling about infant feeding should begin prior to conception or as early as possible in pregnancy; information about and plans for infant feeding should be reviewed throughout pregnancy and again after delivery **(AIII).** During counseling, people should be informed that—
  - Replacement feeding with properly prepared formula or pasteurized donor human milk from a milk bank eliminates the risk of postnatal HIV transmission to the infant **(AI).**
  - Achieving and maintaining viral suppression through antiretroviral therapy (ART) during pregnancy and postpartum decreases breastfeeding transmission risk to less than 1%, but not zero **(AI).**
- Replacement feeding with formula or banked pasteurized donor human milk is recommended to eliminate the risk of HIV transmission through breastfeeding when people with HIV are not on ART and/or do not have a suppressed viral load during pregnancy (at a minimum throughout the third trimester), as well as at delivery **(AI).**
- Individuals with HIV who are on ART with a sustained undetectable viral load and who choose to breastfeed should be supported in this decision **(AIII).**
- Individuals with HIV who choose to formula feed should be supported in this decision. Providers should ask about potential barriers to formula feeding and explore ways to address them **(AIII).**
- Engaging Child Protective Services or similar agencies is not an appropriate response to the infant feeding choices of an individual with HIV **(AIII).**

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Shared-decision Making

- Patient-centered counseling regarding infant feeding should begin before pregnancy, continue during pregnancy and reviewed again upon delivery
- Counseling should include the following information:
  - Replacement feeding with properly prepared formula or pasteurized donor human milk from a milk bank eliminates the risk of postnatal HIV transmission to the infant
  - Achieving and maintaining viral suppression through ART during pregnancy and postpartum decreases breastfeeding transmission risk to less than 1%, but not zero

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Shared-decision Making

- Individuals with HIV, on ART with a sustained undetectable viral load and who choose to breastfeed should be supported in this decision
- Individuals with HIV who choose to formula feed should be supported in this decision. Providers should ask about potential barriers to formula feeding and explore ways to address them
- Engaging Child Protective Services or similar agencies is not an appropriate response to the infant feeding choices of an individual with HIV

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The Fourth Trimester: Postpartum Care

- The 12 weeks postpartum are referred to as “the fourth trimester”
- Address the following
  - Mood and emotional wellbeing
  - Infant care and feeding
  - Sleep, fatigue and physical recovery from birth
  - Sexuality, contraception, birth spacing
  - Chronic disease management and coordination of care with PCP
  - Health Maintenance
- Women living with HIV are often lost to HIV follow-up during this time period

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https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/05/optimizing-postpartum-care

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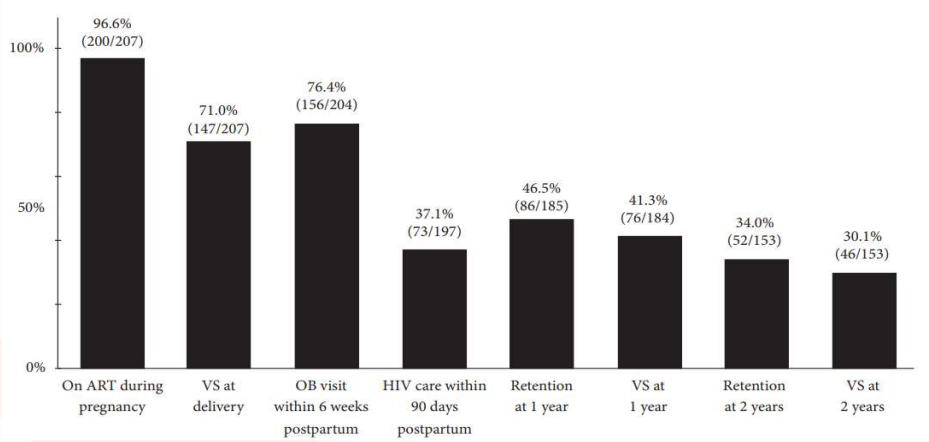
Postpartum HIV Care Continuum Atlanta 2011 - 2016



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Meade CM, et al. Infect Dis Obstet Gynecol. 2019 Feb 14;2019:8161495.

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Postpartum HIV Care:

- Cross-disciplinary approach to integrate HIV obstetric care during pregnancy
- Enhanced care coordination for transition between obstetric and HIV services postpartum
- Co-locate HIV primary care for mother and pediatric care of infant

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Meade CM, et al. Infect Dis Obstet Gynecol. 2019 Feb 14;2019:8161495.

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Support Pregnant People with HIV So They Stay in Care and on Therapy

- Coordination of services helps:
  - Prenatal care providers
  - Primary care and HIV specialty care providers (Adult and Peds ID)
  - Mental health and substance use disorder treatment, if needed
  - Intimate partner violence support services
  - Public assistance programs
  - Perinatal coordinator, case manager, peer, and/or support groups

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Family Planning Conversations

- Women with HIV can use all available contraceptive methods, including hormonal contraception

Integrase Strand Transfer Inhibitors (INSTIs)	
Bictegravir/Emtricitabine/Tenofovir Alafenamide (BIC/FTC/TAF)	
Dosing Recommendation/Clinical Comment for COC/P/R, POPs, DMPA[a], Etonogestrel Implants	No additional contraceptive protection is needed.
Effect on Contraceptive Drug Levels and Contraceptive's Effects on ART and HIV	No significant drug interactions with EE or norgestimate
Clinical Studies	N/A
Justification/Evidence for Recommendation	No clinical data

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Summary

- Recognizing HIV infection in people who are pregnant is critical for protection of the pregnant person's health and to prevent transmission to the baby
- There are multiple effective, safe and well tolerated options for antiretroviral treatment in pregnancy
- Support before, throughout, and after pregnancy is critical for the health of people with HIV and their babies

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AETC Program National Centers and HIV Curriculum

National Coordinating Resource Center –serves as the central web –based repository for AETC Program training and capacity building resources; its website includes a free virtual library with training and technical assistance materials, a program directory, and a calendar of trainings and other events. Learn more: https://aidsetc.org/

▪**National Clinical Consultation Center** –provides free, peer-to-peer, expert advice for health professionals on HIV prevention, care, and treatment and related topics. Learn more: https://nccc/ucsf.edu

▪**National HIV Curriculum** –provides ongoing, up –to-date HIV training and information for health professionals through a free, web –based curriculum; also provides free CME credits, CNE contact hours, CE contact hours, and maintenance of certification credits. Learn more: www.hiv.uw.edu

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