

### The HIV and Infant Feeding Guidelines at Six Months: Perspectives from National Leaders Moderators: Olivia G. Ford – The Well Project Marliese Warren – Perinatal HIV Hotline

June 2, 2023



### Acknowledgement

This National Clinician Consultation Center program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$2,633,756 with 0% financed with non-governmental sources.

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HIV/AIDS Warmline 800-933-3413	HIV treatment, ARV management, complications, and co-morbidities	Perinatal HIV Hotline 888-448-8765	Pregnancy, breastfeeding and HIV
Hepatitis C Warmline 844-HEP-INFO/ 844-437-4636	HCV testing, staging, monitoring, treatment	Substance Use Warmline 855-300-3595	Substance use evaluation and management
PrEPline 855-HIV-PrEP	HIV Pre-exposure prophylaxis	PEPline 888-448-4911	Occupational & non- occupational exposure management

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### thewellproject About The Well Project

- Non-profit organization whose mission is to change the course of the HIV/AIDS pandemic through a unique and comprehensive focus on women and girls across the gender spectrum
- Leverages technology to improve health outcomes and increase quality of life for women and girls living with HIV
- Our focus: education and information, community support, advocacy and leadership, collaborative engagement, and women-focused HIV research
- Access our resources and join our community at <u>www.thewellproject.org</u>

## New Recommendations for Infant Feeding: How Did We Get Here?

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

### Once upon a time...

- Prior to antiretroviral therapy (ART), the risk of perinatal transmission was ~25%. Perinatal transmission refers to mother to child transmission during pregnancy, labor, and delivery (this does not include breastfeeding).
- With zidovudine (AZT) during pregnancy and labor and for the infant after delivery for 6 weeks: 8%
- With ART: <1%
- With ART and undetectable VL at conception, throughout pregnancy, and at delivery (5482 motherbaby pairs reported):



Image 2. Free to use under the Content License No attribution required

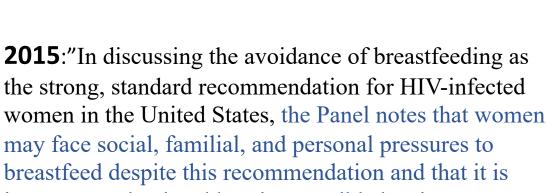
### What has been the guidance around feeding choice for infants of people living with HIV?

**Recommendations for the Use of Antiretroviral** Drugs in Pregnant Women with HIV Infection and Interventions to Reduce Perinatal HIV **Transmission in the United States** 

> Developed by the HHS Panel on Treatment of Pregnant Women with HIV Infection and Prevention of Perinatal Transmission-Working Group of the Office of AIDS Research Advisory Council (OARAC)

important to begin addressing possible barriers to formula feeding during the antenatal period." (HHS Panel) Panel on Treatment of HIV-Infected Pregnant Women and Prevention of Perinatal Transmission. Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1- Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States. https://clinicalinfo.hiv.gov/en/guidelines/archived-guidelines/perinatal-guidelines

**1985**: "HTLV-III/LAV-infected women should be advised against breastfeeding to avoid postnatal transmission to a child who may not yet be infected." (CDC and Public Health Service)



Weekly

December 06, 1985 / 34(48);721-6,731-2



Image 3. Adobe Stock | #59869545 What has been the guidance around feeding

choice for infants of people living with HIV?



Image 3

(con't) 2018: New section:

> Guidance for Counseling and Managing Women Living with HIV in the United States Who Desire to Breastfeed (Last updated March 27, 2018; last reviewed March 27, 2018)

#### **Panel's Recommendations**

- · Breastfeeding is not recommended for women living with HIV in the United States (AII).
- Women who have questions about breastfeeding or who desire to breastfeed should receive patient-centered, evidence-based counseling on infant feeding options (AIII).
- When women with HIV choose to breastfeed despite intensive counseling, they should be counseled to use harm-reduction measures to minimize the risk of HIV transmission to their infants (**BIII**).

Rating of Recommendations: A = Strong; B = Moderate; C = Optional

Rating of Evidence: I = One or more randomized trials with clinical outcomes and/or validated laboratory endpoints; II = One or more welldesigned, nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion

Panel on Treatment of HIV-Infected Pregnant Women and Prevention of Perinatal Transmission. Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1- Infected Women for Maternal Health *and* Interventions to Reduce Perinatal HIV Transmission in the United States. https://clinicalinfo.hiv.gov/en/guidelines/archived-guidelines/perinatal-guidelines



### 2023

Recommendations for the Use of Antiretroviral Drugs During Pregnancy and Interventions to Reduce Perinatal HIV Transmission in the United States

#### What's New in the Guidelines ?

The former section, *Counseling and Managing Individuals With HIV in the United States Who Desire to Breastfeed*, was revised and retitled to provide more comprehensive guidance on feeding infants born to individuals with HIV.

Content about breastfeeding in other sections was revised to align with and refer to updated recommendations in this section.

#### Infant Feeding for Individuals With HIV in the United States

Updated: January 31, 2023 Reviewed: January 31, 2023

#### 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).
- Clinicians are encouraged to consult the national <u>Perinatal HIV/AIDS</u> hotline (1-888-448-8765) with questions about infant feeding by individuals with HIV (AIII).

**Rating of Recommendations:** A = Strong; B = Moderate; C = Optional

**Rating 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



Recommendations for the Use of Antiretroviral Drugs During Pregnancy and Interventions to Reduce Perinatal HIV Transmission in the United States Infant Feeding for Individuals With HIV in the United States

Updated: January 31, 2023 Reviewed: January 31, 2023

#### What's

The form Managin United St revised a compreh feeding i

Content a sections to update

What is the major change? The primary recommendation is now to support parental choice through shared decision making, not a specific infant feeding mode

**Rating 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

(AIII).

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### Infant feeding considerations

Health benefits from breastfeeding	<ul> <li><u>Infant</u>: lower risk of infants developing asthma, obesity, type 1 diabetes, severe lower respiratory disease, otitis media, sudden infant death syndrome, gastrointestinal infections, and necrotizing enterocolitis.</li> <li><u>Breastfeeding parent</u>: decreased risk of hypertension; type 2 diabetes; and breast and ovarian cancers.</li> </ul>
Equity Considerations	<ul> <li>Black women are disproportionately affected by HIV</li> <li>People of color experience a greater burden of many health conditions that may be alleviated by breastfeeding</li> </ul>
Cultural Considerations	<ul> <li>Environmental, social, familial, and personal pressures to consider breastfeeding</li> <li>Fear that not breastfeeding would lead to disclosure of their HIV status</li> </ul>



# What is the risk of HIV transmission via breastfeeding?

 Without maternal antiretroviral therapy (ART) or infant antiretroviral prophylaxis, the risk of an infant acquiring HIV through breastfeeding is 15% to 20% over 2 years



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 Achieving and maintaining viral suppression through ART during pregnancy and postpartum decreases breastfeeding transmission risk to less than 1%, but not zero

https://clinicalinfo.hiv.gov/en/guidelines/perinatal/infant-feeding-individuals-hiv-united-states. Nduati R, et al. JAMA. 2000;283(9):1167-1174. (https://www.ncbi.nlm.nih.gov/pubmed/10703779) World Health Organization. HIV Transmission through breastfeeding: a review of available evidence; 2007 update. 2008. (http://apps.who.int/iris/bitstream/10665/43879/1/9789241596596\_eng.pdf); Bispo S, et al. J Int AIDS Soc. 2017 Feb 22;20(1):21251; Flynn P, et al. J Acquired Immune Defic Syndr. 1999 77.4 (2018): 383; Flynn P, et al. J Acquir Immune Defic Syndr. 2021 Oct 1;88(2):206-213



### **Overview of counseling and management**

For people with HIV who are **not on ART and/or do not have a suppressed viral load at delivery**, replacement feeding with formula or banked pasteurized donor human milk is recommended to eliminate the risk of HIV transmission. Individuals with HIV on ART with a consistently suppressed viral load during pregnancy (at a minimum during the third trimester) and at the time of delivery should be counseled on the options of formula feeding, banked donor milk, or breastfeeding

- The infant feeding options that eliminate the risk of HIV transmission are formula and pasteurized donor human milk
- Fully suppressive ART during pregnancy and breastfeeding decreases breastfeeding transmission risk to less than 1%, but not zero.



## How the new guidelines have dealt with intermittent use of formula

If breastfeeding is chosen, exclusive breastfeeding up to 6 months of age is recommended over mixed feeding (i.e., breast milk and formula), acknowledging that there may be intermittent need to give formula (e.g., infant weight loss, milk supply not yet established, mother not having enough stored milk). Solids should be introduced as recommended at 6 months of age, but not before.

### Situations to Consider Stopping or Modifying Breastfeeding

- In the case of a detectable viral load, ... breastfeeding [should] be temporarily stopped. Options include giving previously stored breastmilk, pumping/flash heating, providing replacement feeding, or cessation of breastfeeding; repeating viral load; and reassessing continuation or cessation of breastfeeding.
- If the repeat viral load is detectable ... the Panels advise immediate cessation of breastfeeding; this guidance is more directive than counseling for individuals on suppressive ART.



# There is no consensus on ARV prophylaxis for infants of individuals with sustained viral suppression who are breastfed

- Most Panel members agree on only 2 weeks of infant zidovudine (ZDV). However, several Panel members prefer to extend the duration of ZDV prophylaxis to 4 to 6 weeks.
- Alternatively, some Panel members recommend 6 weeks of nevirapine (NVP), as currently recommended by WHO for breastfeeding infants at low risk of HIV transmission in resource limited countries.
- Some others opt to continue NVP dosing throughout breastfeeding.



### Engaging Child Protective Services or similar agencies is not an appropriate response to the infant feeding choices of an individual with HIV

- Numerous pregnant people with HIV have reported that after expressing their interest/intention to breastfeed, their providers threatened to report them to Child Protective Services or actually did so.
- Such engagements can be extremely harmful to families; can exacerbate the stigma and discrimination experienced among people with HIV; and are disproportionately applied to minoritized individuals, including Black, Indigenous, and other people of color.

Putnam-Hornstein E, et al. *Am J Public Health*. 2021;111(6):1157-1163. Available at: <u>https://www.ncbi.nlm.nih.gov/pubmed/33856882</u>.; Roberts D. THE COLOR OF CHILD WELFARE. Vol. ed.: 2002. Wall-Wieler E, et al. M.. *AmJ of Epi*. 2018;187(6):1182-1188. Available at: <u>https://www.ncbi.nlm.nih.gov/pubmed/29617918</u> https://clinicalinfo.hiv.gov/en/guidelines/perinatal/infant-feeding-individuals-hiv-united-states



# What was new in process of developing the 2023 guidelines?

- Integration of community input from members of The Well Project, International Community of Women Living with HIV - North America, and others
- Obtaining input from lactation specialists at CDC
- New level of collaboration between the Perinatal and Pediatric Panels
- CDC chose to refer any queries about infant feeding in the U.S. to the Perinatal Guidelines (rather than having their own recommendations)

# Data are beginning to accumulate on breastfeeding in high resource countries

- Canadian series of 3 infants
- \*
- Baltimore series of 10 and Washington DC series of 8
- Italian series of 13



- German series of 42 and 30
- Swiss series of 41



 North American series of 72 (includes 3 of Canadian and the Baltimore/Washington cases= 52 new cases)



Nashid et al J Pediatric Infect Dis Soc. 2020 Yusuf et al J Pediatric Infect Dis Soc. 2022 Koay and Rakhmanina J Pediatric Infect Dis Soc. 2022 Prestileo et al Infectious Dis Reports 2022 Haberl L et al AIDS Patient Care and STDs 2021 Weiss et al Clinical Infectious Diseases 2022 Crisinel PA et al Eur J Obstet Gynecol Reprod Biol. 2023 Levison J, McKinney J et al. Clinical Infectious Diseases 2023 (online May 2023)



# Resources as you navigate this new road ...



Image 5: Adobe stock image





thewellproject.org



1-888-448-8765

nccc.ucsf.edu

### For more information

- To access resources and to learn more about HIV and breast/chestfeeding, visit:
  - Breastfeeding, Chestfeeding and HIV: Supporting Informed Choices: <u>bit.ly/BfingHIV</u>
  - BEEEBAH resources: <u>bit.ly/BEEEBAH</u>
  - Email Olivia G. Ford oford@thewellproject.org to join the [HIV\_InfantFeed] listserv
  - Email Marliese Warren Marliese.Warren@ucsf.edu to join the ReproID listserv
- For fact sheets and to connect to our community of women living with HIV, visit:
  - <u>www.thewellproject.org</u>
  - www.facebook.com/thewellproject
  - www.twitter.com/thewellproject
  - www.Instagram.com/thewellprojecthiv
  - www.youtube.com/thewellprojecthiv







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This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U10HA30039 (AIDS Education and Training Centers National Clinician Consultation Center) in partnership with the Centers for Disease Control and Prevention awarded to the University of California, San Francisco.

