Sep 22nd, 8:00 AM - 9:00 AM

HIV/AIDS: Pregnancy & the Newborn

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Georgia Department of Public Health

HIV/AIDS: Pregnancy & the Newborn

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September 22, 2018

Objectives

- Review the HIV epidemic
- Describe preconception counseling, testing, assessment & therapy of both the mother's & newborn's HIV
- Discuss aspects of medical care prior to, throughout, & post-hospitalization of the mother's & newborn's HIV
- Summarize the continuation of care post hospitalization with an emphasis on adherence to medical care, issues associated with breast feeding & pre-mastication

No Disclosures

Summary of the global HIV epidemic (2017)

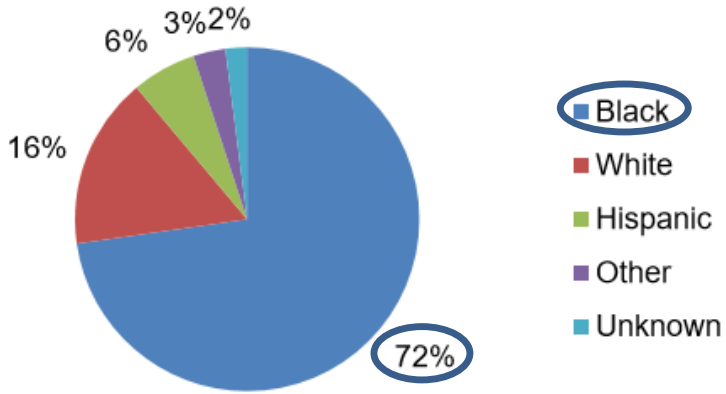
	People living with HIV in 2017	People newly infected with HIV in 2017	HIV-related deaths 2017
Total	36.9 million [31.1 million – 43.9 million]	1.8 million [1.4 million – 2.4 million]	940 000 [670 000 – 1.3 million]
Adults	35.1 million [29.6 million – 41.7 million]	1.6 million [1.3 million – 2.1 million]	830 000 [590 000 – 1.2 million]
Women	18.2 million [15.6 million – 21.4 million]	–	–
Men	16.8 million [13.9 million – 20.4 million]	–	–
Children (<15 years)	1.8 million [1.3 million – 2.4 million]	180 000 [110 000 – 260 000]	110 000 [63 000 – 160 000]

Source: UNAIDS/WHO estimates

Georgia Epidemiology: 2016

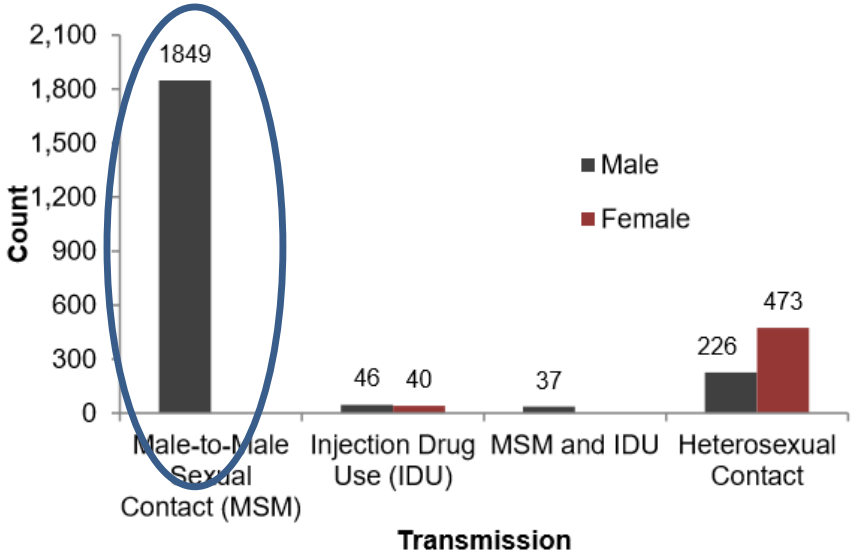
- 5th highest: total number of new diagnoses of HIV
- December 31, 2016: 56,789 persons living with HIV infection
  - 2,593 persons were diagnosed in 2016
  - 64% living with HIV infection reside in the Atlanta area
- Black or African American alone, July 1, 2016 - 32%

New Diagnoses of HIV by Race/Ethnicity, GA, 2015



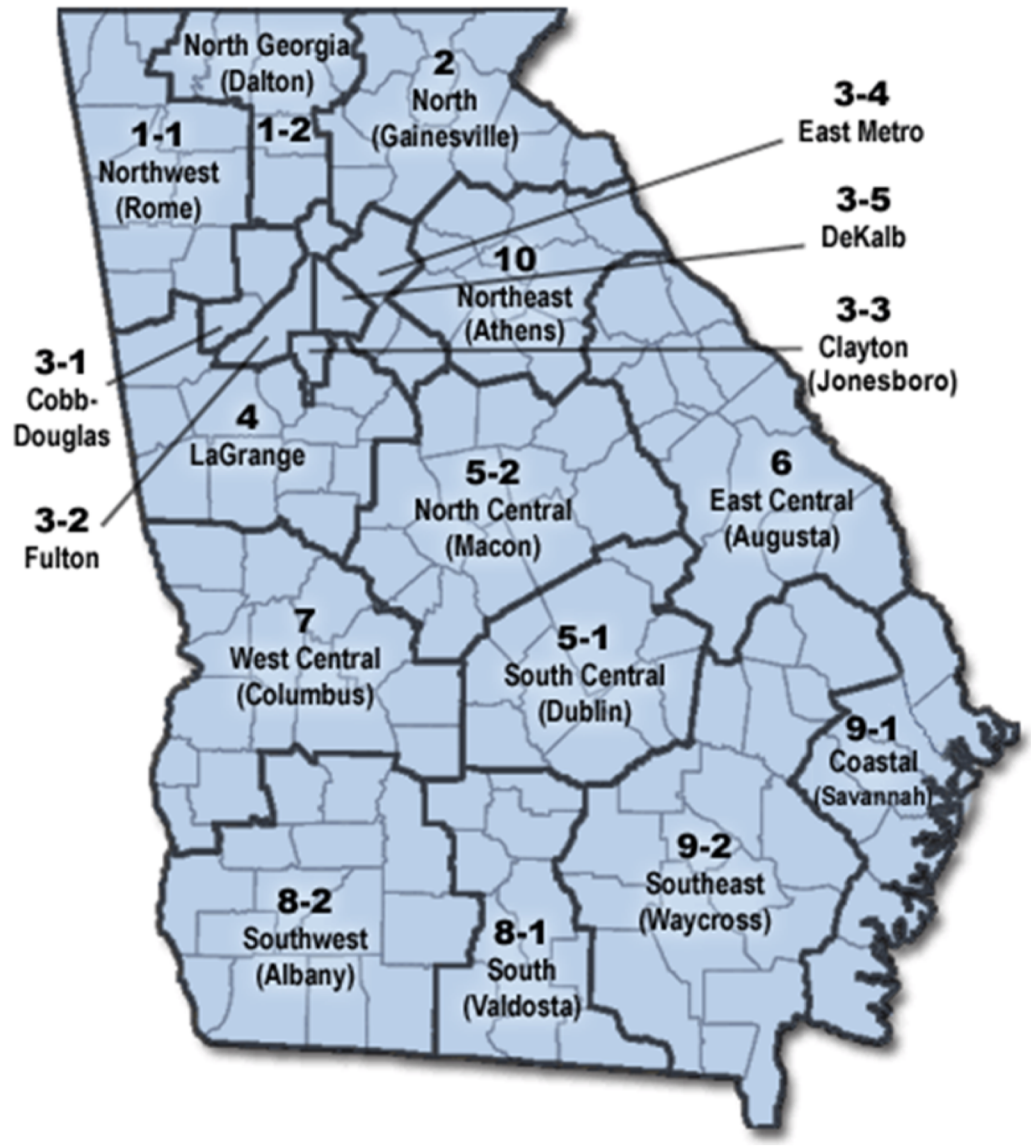
http://dph.georgia.gov/data-fact-sheet-summaries
http://www.census.gov/quickfacts/table/PST045215/13

New Diagnoses of HIV, by Sex & Transmission among Adolescents & Adults (13 years and older), Georgia, 2015



Number & Rates: Persons Living with HIV & AIDS, GA, through December 31, 2016

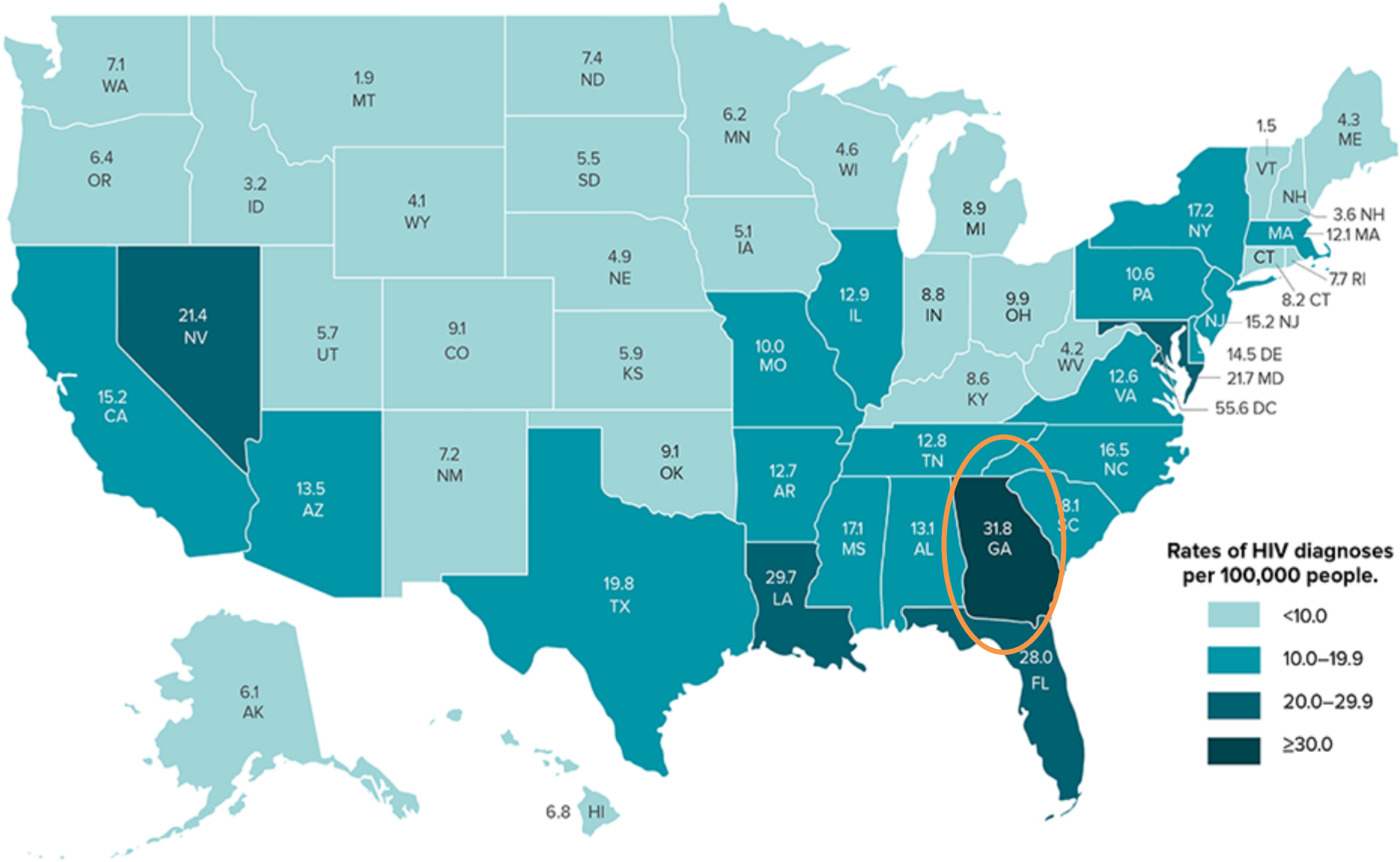
Publ	WH as of /31/2016 (#)
1-1 North	994
1-2 North	658
2 North (G	784
3-1 Cobb-D	3,843
3-2 Fulton	16,424
3-3 Clayto	2,463
3-4 East M	3,897
3-5 DeKalb	9,537
4 LaGrang	1,999
5-1 South	628
5-2 North	2,141
6 East Cen	2,224
7 West Ce	1,728
8-1 South	1,119
8-2 Southw	1,714
9-1 Coasta	2,682
9-2 Southe	1,206
10 Northe	942
Unknown	
Atlanta M	39,347
Total	56,789



https://dph.georgia.gov/sites/dph.georgia.gov/files/HIV_EPI_Fact%20Sheet_Georgia%202015_04.14.17.pdf

The rates (per 100,000 people) of HIV diagnoses in 2016 were 16.8 in the South, 11.2 in the Northeast, 10.2 in the West, and 7.5 in the Midwest.

Rates of HIV Diagnoses Among Adults and Adolescents in the US by State, 2016



Source: CDC. Diagnoses of HIV infection in the United States and dependent areas, 2016 . *HIV Surveillance Report* 2017;28.

Estimated Number of New HIV Infections, 2015	
Transmission Category	**Estimated Number of New Infections**
Male-to-male sexual contact	26,200
Injection drug use	2,200
Male-to-male sexual contact and injection drug use	1,200
Heterosexual contact[a]	8,800

[a] Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

HIV diagnoses, late diagnoses, and stage 3 (AIDS) diagnoses, Georgia, 2016

	HIV Diagnoses (all stages)		Late HIV Diagnoses[1]			Stage 3 (AIDS) Diagnoses[2]	
	N	%*	N	%*	Row %	N	%*
Total	2,593	100%	530	100%	20%	1,158	100%
Gender							
Male	2,037	79%	405	76%	20%	865	75%
Female	524	20%	116	22%	22%	274	24%
Transgender	32	1%	9	2%	28%	18	2%

HIV Care Continuum, United States, 2014

An estimated 1.1 million people are living with HIV in the United States.

Adults and Adolescents Living with Diagnosed HIV, Georgia, 2016, by Current Age (in Years)

100%

Ryan White Part B Clinics:
Clients Retained in Care
HIV Viral Load Suppression: 80%

Diagnosed Receiving care Retained in care Virally supressed

Source: Centers for Disease Control and Prevention

Georgia DPH Resource HUB

https://www.gacapus.com

Georgia Law

Generally **requires notification to the patient before an HIV test is performed**. According to the statute, a health care provider who orders an HIV test "shall do so only after notifying the person to be tested;" the notification must be "prior to drawing the body fluids;" and the person "shall have the opportunity to refuse the test." O.C.G.A. § 31-22-9.2(c).

This can be accomplished by adding some simple notification and opt-out language to an existing medical consent form. Although the law contains no requirement that the consent/opt-out to be in writing, it is definitely the better practice.

Prior notice and consent of the patient is not required if:

- Testing is mandatory under one of the following statutes:
  - O.C.G.A. § 15-11-603 (court-ordered testing of juvenile who committed AIDS-transmitting crime);
  - O.C.G.A. § 17-10-15 (court-ordered testing of adult convicted of AIDS-transmitting crime);
  - O.C.G.A. § 31-17-4.2 (providers must test pregnant women unless they specifically refuse);
  - O.C.G.A. § 31-17A-3 (DPH can petition superior court to test person suspected of HIV infection with clear and convincing evidence of "compelling need to protect public health");
  - O.C.G.A. § 42-5-52.1 (HIV testing required for all inmates); or
  - O.C.G.A. § 42-9-42.1 (HIV test results may be considered in deciding clemency, pardon, or parole);
- The person is a minor or incompetent and the parent or guardian consents;
- The person is unconscious, comatose, or temporarily incompetent and the next of kin consents;
- "The physician ordering the test is of the opinion that the person to be tested is in such a medical or emotional state that disclosure of the test would be injurious to the person's health;" or
- There is an emergency or life-threatening situation.

Georgia Law

No counseling is required (and it may even be counterproductive) before the test is performed. The provider is required to give "medically appropriate counseling" regarding the test results "when the last confirmatory test has been completed." O.C.G.A. § 31-22-9.2(d) Medically appropriate counseling may consist of:

- Accurate information regarding AIDS and HIV;
- An explanation of behaviors that may reduce the risk of transmission;
- An explanation of the confidentiality of HIV/AIDS information;
- Information regarding "both social and medical implications of HIV tests;" and/or
- Information regarding "commonly recognized treatment."

O.C.G.A. § 31-22-9.1(a)(6).

Under the statute, the counseling "may include all or a part of" the above topics.

O.C.G.A.§31-17-7(a): any minor may consent to the treatment of a sexually transmitted disease or any illness or condition arising from having contracted a sexually transmitted disease without parental consent

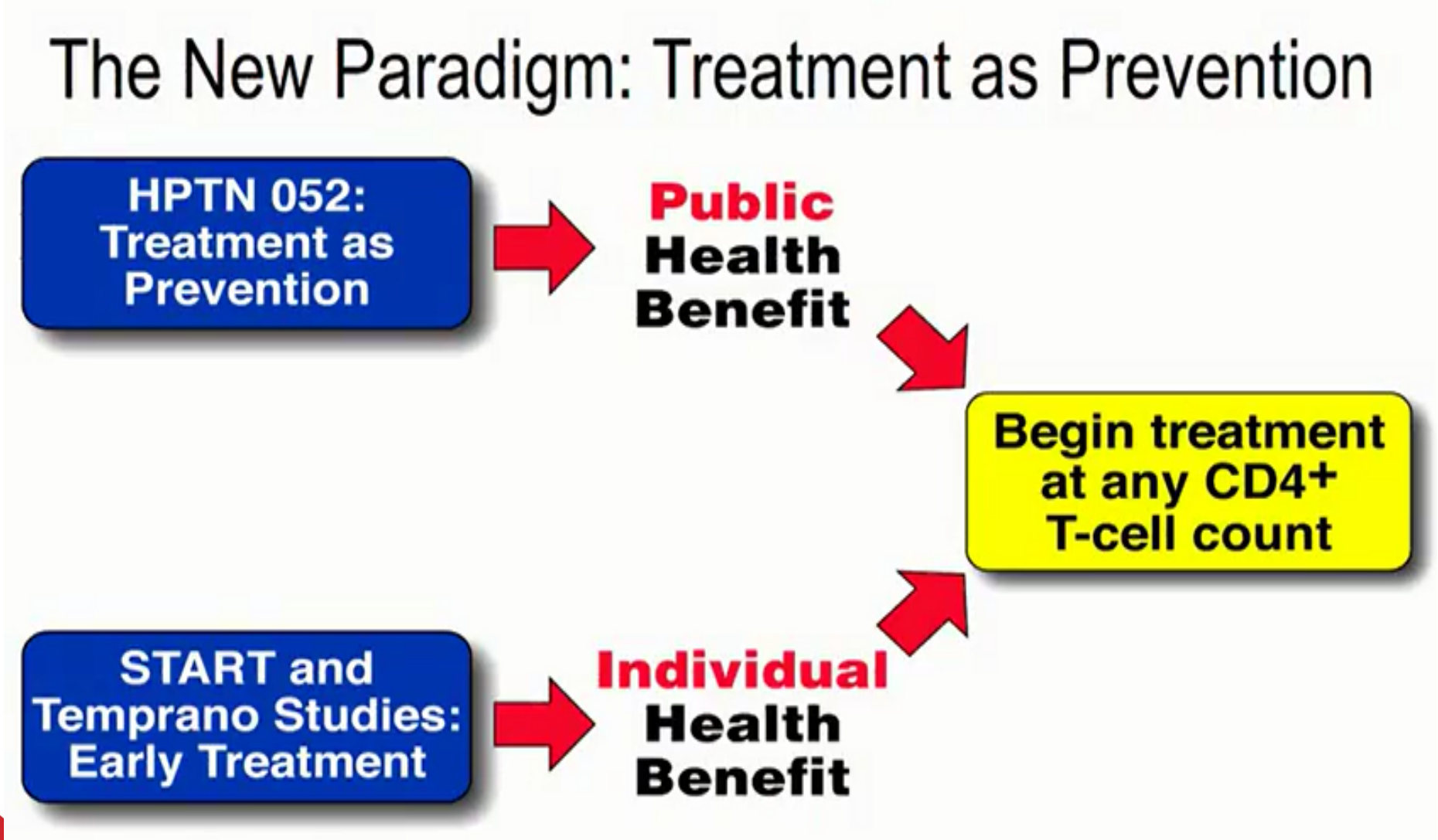
Health Information Exchange

Senate Bill 342

"The Department of Public Health may disclose AIDS confidential information regarding a person who has been reported, under paragraph (1) or (2) of subsection (h), to be infected with HIV to a health care provider licensed pursuant to Chapter 11, 26, or 34 of Title 43 whom that person has consulted for medical treatment or advice."

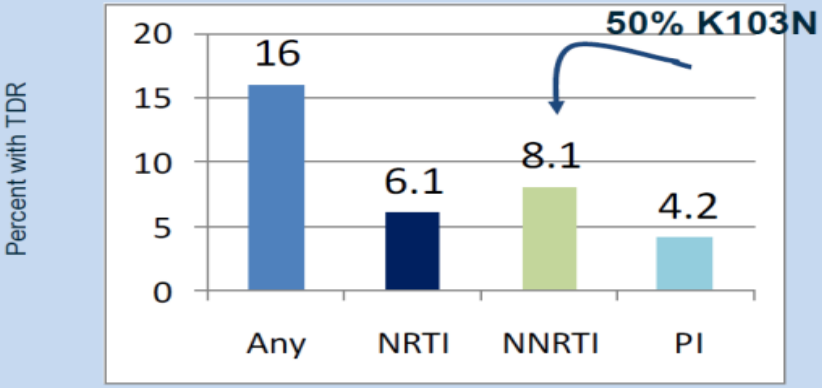
Signed by the Georgia Governor: April 29, 2014

Initiation of ARVs



US Transmitted Drug Resistance: Newly Diagnosed

- 2007 CDC surveillance for TDR detected 16% of pts with new HIV diagnosis & mutations
  - Most common: NNRTI
  - 83% had single mutation



Primary Resistance in Young Pts: 55 recently infected pts (16-24 yo) from 15 US cities; approx. 50% AA; 25% Hisp.

Resistance	By Genotype	By Phenotype
Overall	18%	22%
NNRTI	15%	18%
PI	3.6%	5.5%
NRTI	4%	4%

Kim D, et al. 17th CROI; San Fran; February 16-19, 2010. Abst. 580; Viani R, et al. 13th CROI, Denver 2006; #21.

Acknowledgment: Elizabeth Race, MD MPH

Genotype: genetic code of the sample virus is compared to the wild type
Phenotype: sample of HIV is grown with each ARV

http://hivdb.stanford.edu/
http://www.iasusa.org/resistance_mutations

NsRTIs

AZT	Zidovudine /Retrovir
ddI	Didanosine /Videx*
ddC	Zalcitabine /Hivid*
d4T	Stavudine /Zerit*
3TC	Lamivudine /Epivir
ABC	Abacavir /Ziagen
FTC	Emtricitabine /Emtriva

NtRTIs

TDF/TAF	Tenofovir /Viread

NNRTIs

NVP	Nevirapine /Viramune
DLV	Delavirdine /Rescriptor
EFV	Efavirenz /Sustiva
ETV	Etravirine /Intelence
RPV	Rilpivirine /Edurant

Booster

COBI	Cobicistat /Tybost

Protease Inhibitors

SQV	Saquinavir /Invirase
RTV	Ritonavir /Norvir
IDV	Indinavir /Crixivan
NFV	Nelfinavir /Viracept
APV	Amprenavir /Agenerase
LPV/r	Lopinavir /Ritonavir (Kaletra)
ATV	Atazanavir /Reyataz
FPV	Fosamprenavir /Lexiva
TPV	Tipranavir /Aptivus
DRV	Darunavir /Prezista

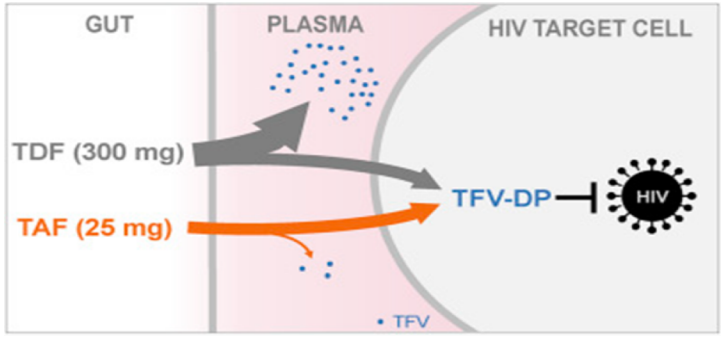
Entry Inhibitor

T-20*	Enfuvirtide /Fuzeon
MVC	Maraviroc /Selzentry
Ibalizumab	**CD4 postattachment inh**

Integrase Inhibitor

RAL	Raltegravir /Isentress (HD)
DTG	Dolutegravir /Tivicay
EVG	Elvitegravir /Vitekta
BIC	Biktegravir

- Lamivudine, Zidovudine
  - Combivir™ (gen) $931.61
- Abacavir, Lamivudine
  - Epzicom™ $1,416.35
- Emtricitabine, Tenofovir (TDF)
  - Truvada™ $1,539.90
- Emtriva, Tenofovir Alafenamide (TAF)
  - Descovy™ $1,759.73
- Abacavir, Zidovudine, Lamivudine
  - Trizivir™ (gen) $1,738.46
- Efavirenz, Emtriva, TDF
  - Atripla™ $2,551.99
- Rilpivirine, Emtriva, TDF
  - Complera™ $2,463.37
- Emtriva, Rilpivirine, TAF
  - Odefsey™ $2,815.04
- Elvitegravir, cobi, Emtriva, TDF
  - Stribild™ $2,948.70



http://www.sciencedirect.com/science/article/pii/S0166354215300310

- Elvitegravir, cobi, Emtriva, TAF
  - Genvoya™ $4,182.52
- Dolutegravir, Abacavir, Lamivudine
  - Triumeq™ $2,648.84
- Darunavir, Cobicistat
  - Prezcobix™ $1,725.29
- Atazanavir, Cobicistat
  - EvoTaz™ $1,684.44
- Dolutegravir, Rilpivirine
  - Juluca™ $2,583.33
- Bictegravir, Emtriva, TAF
  - Biktarvy™ $2,945.65
- Darunavir, cobi, Emtriva, TAF
  - Symtuza™ $3,482.00

ANTIRETROVIRAL (ARV) REGIMENS FOR ART-NAÏVE PATIENTS

Recommended Regimen Options

INSTI Based

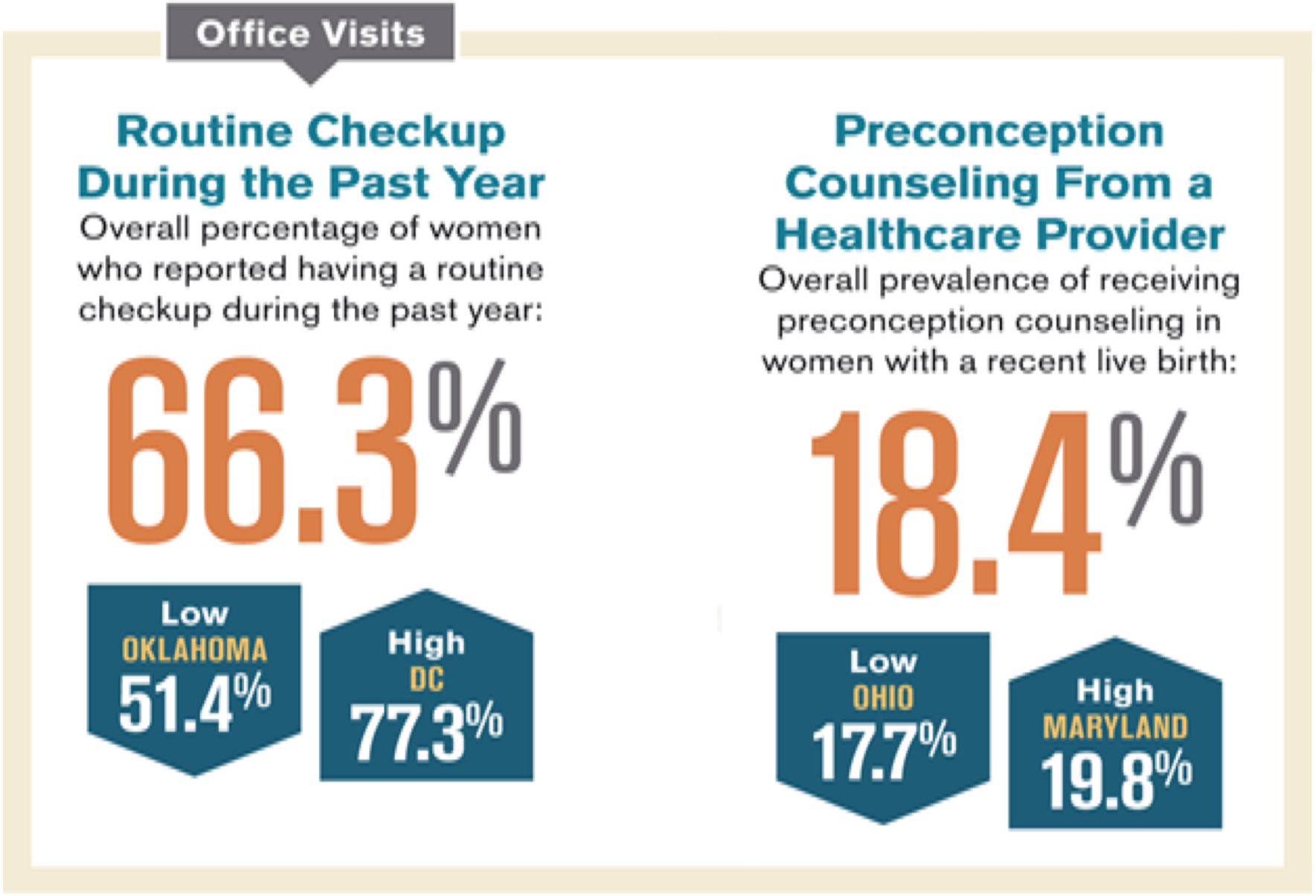
• DTG + ABC**/3TC* **Triumeq™**	• DTG + TAF/FTC* or TDF/FTC*
• EVG/cobi***/TAF/FTC **Genvoya™**	• RAL### + TDF/FTC* or TAF/FTC*
• EVG/cobi***/TDF/FTC **Stribild™**	• BIC (Bictegravir)/TAF/FTC **Biktarvy™**

Recommended Initial Regimens in Certain Clinical Situations

Effective and tolerable but have some disadvantages when compared with the above recommended regimens, or have less supporting data from randomized clinical trials. However, one of the following regimens may be the preferred regimens in certain clinical situations.

PI Based¥	**NNRTI Based**
• (DRV/cobi*** or DRV/r) + TAF/FTC* or TDF/FTC*	• EFV + TDF/FTC* **Atripla™**
• (DRV/cobi*** or DRV/r) + ABC**/3TC*	• EFV + TAF/FTC*
• (ATV/cobi*** or ATV/r) + TAF/FTC* or TDF/FTC*	• RPV# + TDF/FTC* **Complera™**
• (ATV/cobi*** or ATV/r) + ABC**/3TC* (##)	• RPV# + TAF/FTC* **Odefsey™**
INSTI Based	**If TDF, TAF or ABC cannot be used**
• RAL### + ABC**/3TC* (##)	• DRV/r + RAL (twice daily)#
	• LPV/r¥¥ (twice daily) + 3TC* (twice daily)

July 18, 2018: Symtuza™ FDA Approved



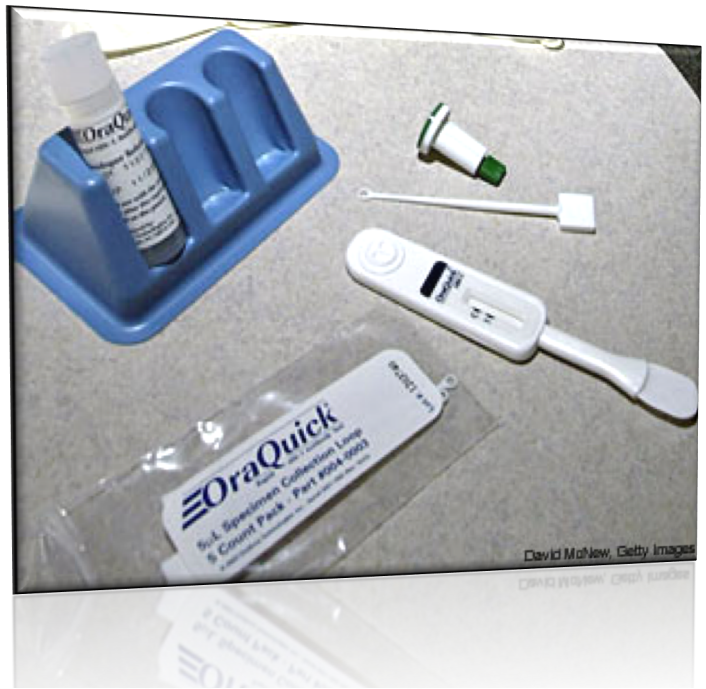
http://contemporaryobgyn.modernmedicine.com/contemporary-obgyn/content/tags/centers-disease-control-and-prevention/preconception-health-indicato?page=full

Initial Assessment

- Review past HIV-related illnesses & previous therapy
- Education: benefits of therapy
- Check a Genotype (**do not delay therapy**)
- Check CBC, CMP, HLA B5701 (if Ziagen considered)
- Check current CD4 and Viral Load
- Assess need for OI prophylaxis or treatment
- **Hepatitis A / B / C / Tb assessment**
- Assess immunization needs
  - Hepatitis A/B, influenza, pneumococcus, Tdap
- Assess supportive care & adherence
- **Close follow up with a team approach**

The National Perinatal HIV Hotline: 1-888-448-8765
Antiretroviral Pregnancy Registry: 1-800-258-4263
http://www.apregistry.com
http://aidsinfo.nih.gov/contentfiles/perinatalGL.pdf

Rapid Testing

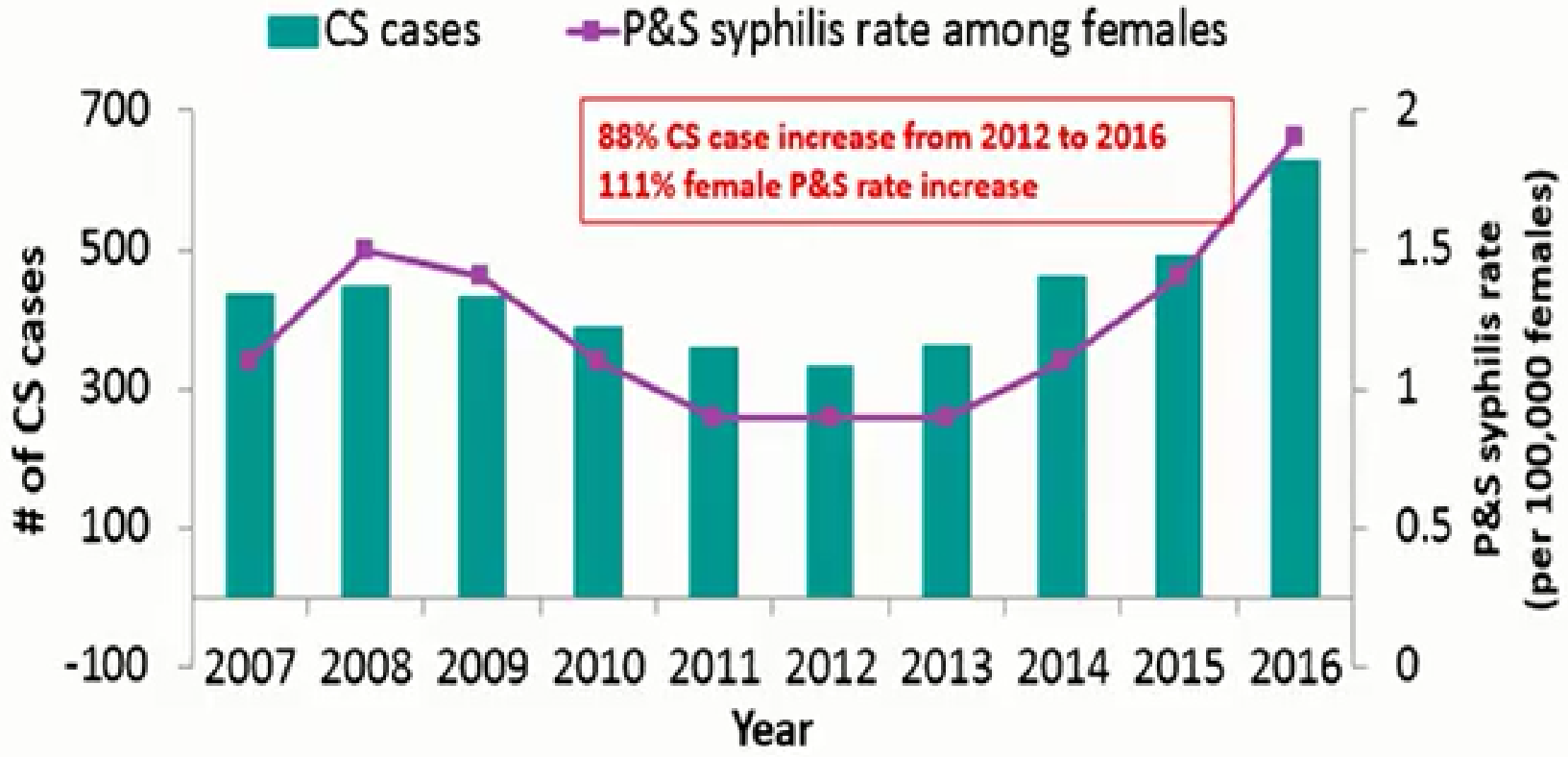


Georgia HIV/Syphilis Pregnancy Screening Act of 2015; enact

House Bill 436 / § 31-17-4.2: Signed May 12, 2015

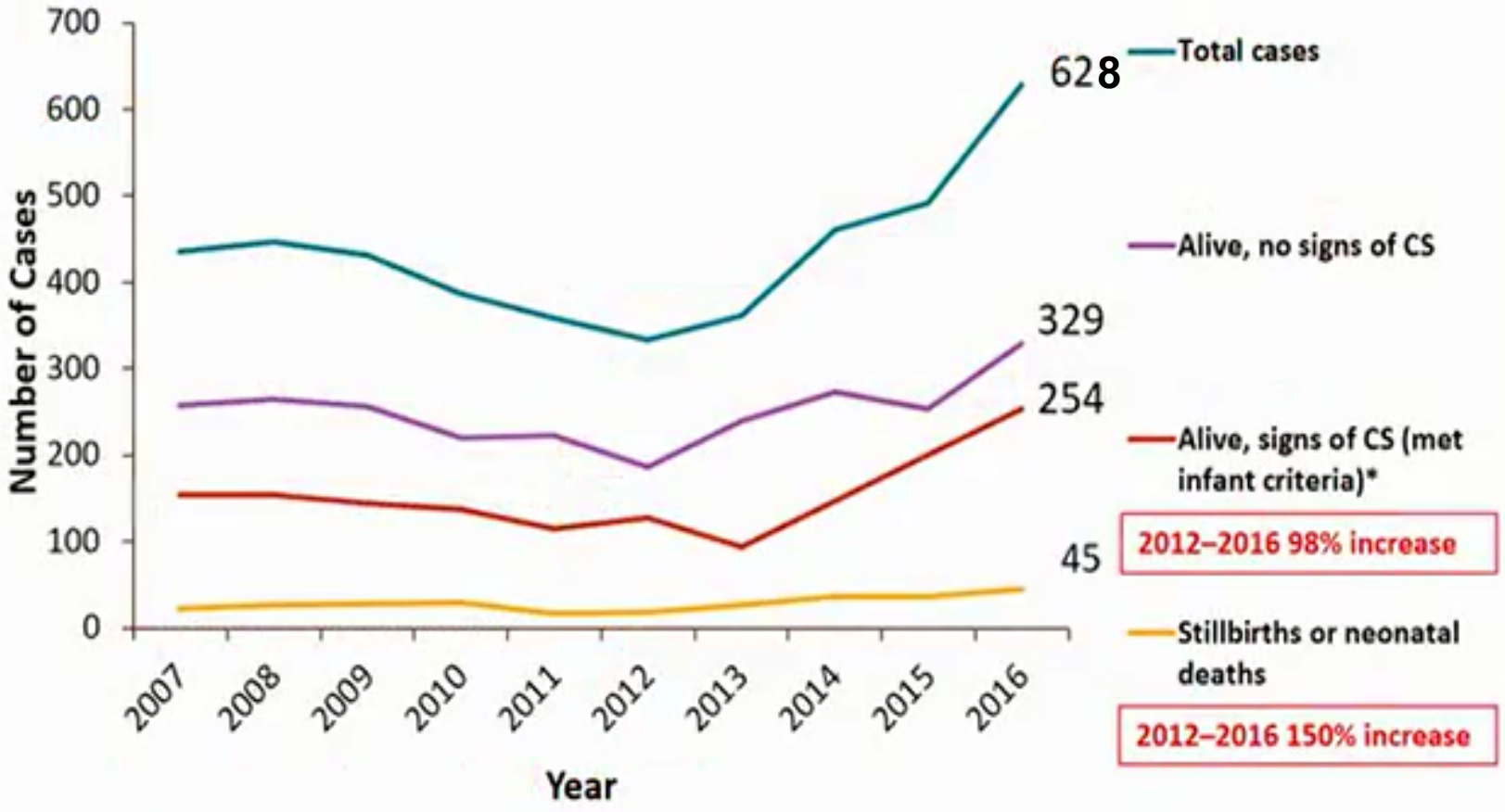
Every physician/HCP who assumes responsibility of care …shall be **required to test for HIV & syphilis except in cases where the woman refuses**. Additionally, … during the **3rd trimester** shall offer HIV & syphilis tests at the time of 1st exam regardless of whether testing was performed during the first 2 trimesters.

Congenital Syphilis (CS) Cases and Rate of Primary and Secondary (P&S) Syphilis Among Females, U.S., 2007–2016



https://www.cdc.gov/std/stats16/msm.htm
https://www.cdc.gov/std/stats16/default.htm

Reported Congenital Syphilis Cases by Vital Status and Presence of Signs of Infection—United States, 2007–2016



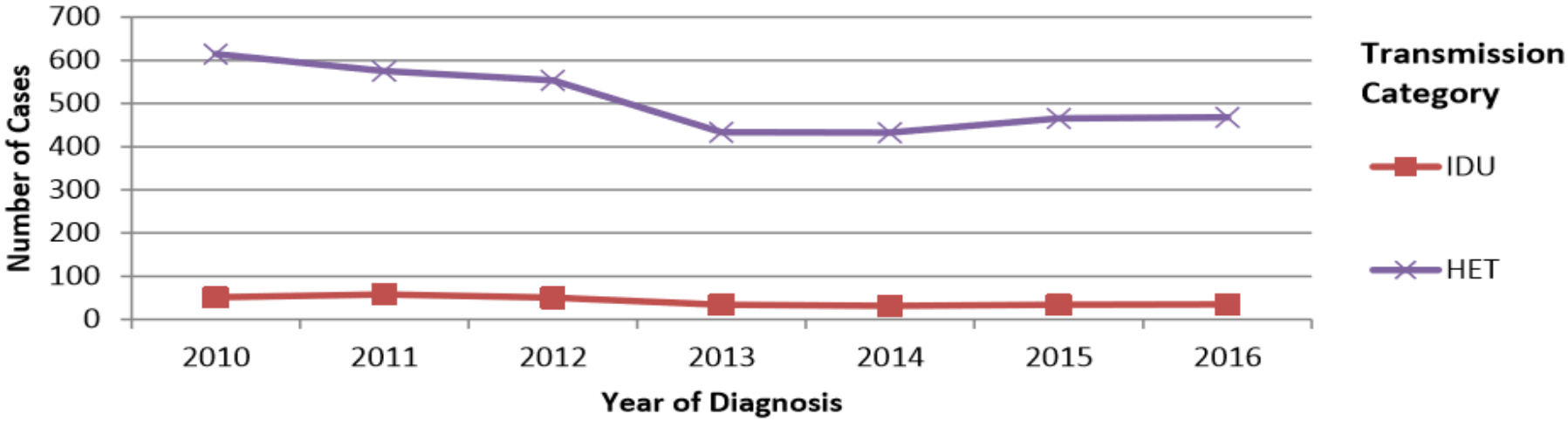
*includes laboratory, x-ray, and physical findings consistent with congenital syphilis infection

Georgia Concerns

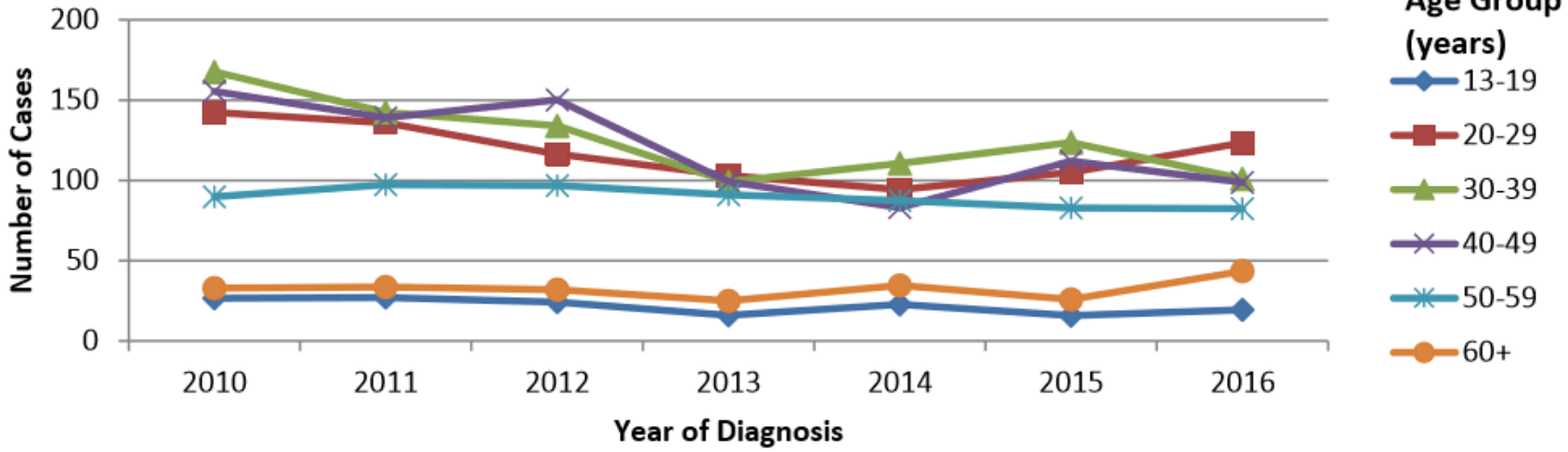
Georgia National Rank (2016)	STD	Cases	Rate per 100,000 population
3	Gonorrhea	20,553	201.2
4	P&S Syphilis	1,350	13.2
5	Chlamydia	62,776	614.6
9	Congenital Syphilis	21	16
10	P&S Syphilis (women)	113	2.2

https://www.cdc.gov/std/stats16/toc.htm

HIV Diagnoses among Females, by Transmission Category, Georgia, 2010-2016



HIV Diagnoses Attributed to Heterosexual Contact among Females, by Age Group, Georgia, 2010-2016



https://dph.georgia.gov/sites/dph.georgia.gov/files/HIV_EPI_2010-2016_Trends%20Fact%20Sheet.pdf

Prevention of Perinatal Transmission

- **All** pregnant women with acute/chronic HIV
  - should receive/continue ARVs to prevent MTCT
- Key
  - Taking ART for 24 weeks or more
  - ART initiation prior to 28 weeks' gestation
  - Viral Load of < 50 copies/mL near delivery
  - Prophylaxis of the newborn
- Reduced transmission rate:
  - 20% to 30% reduced to < 0.5%
  - 0.09% if HIV-VL < 50 copies/mL (UK data)

Timing of transmission to infant: Non-breastfeeding population

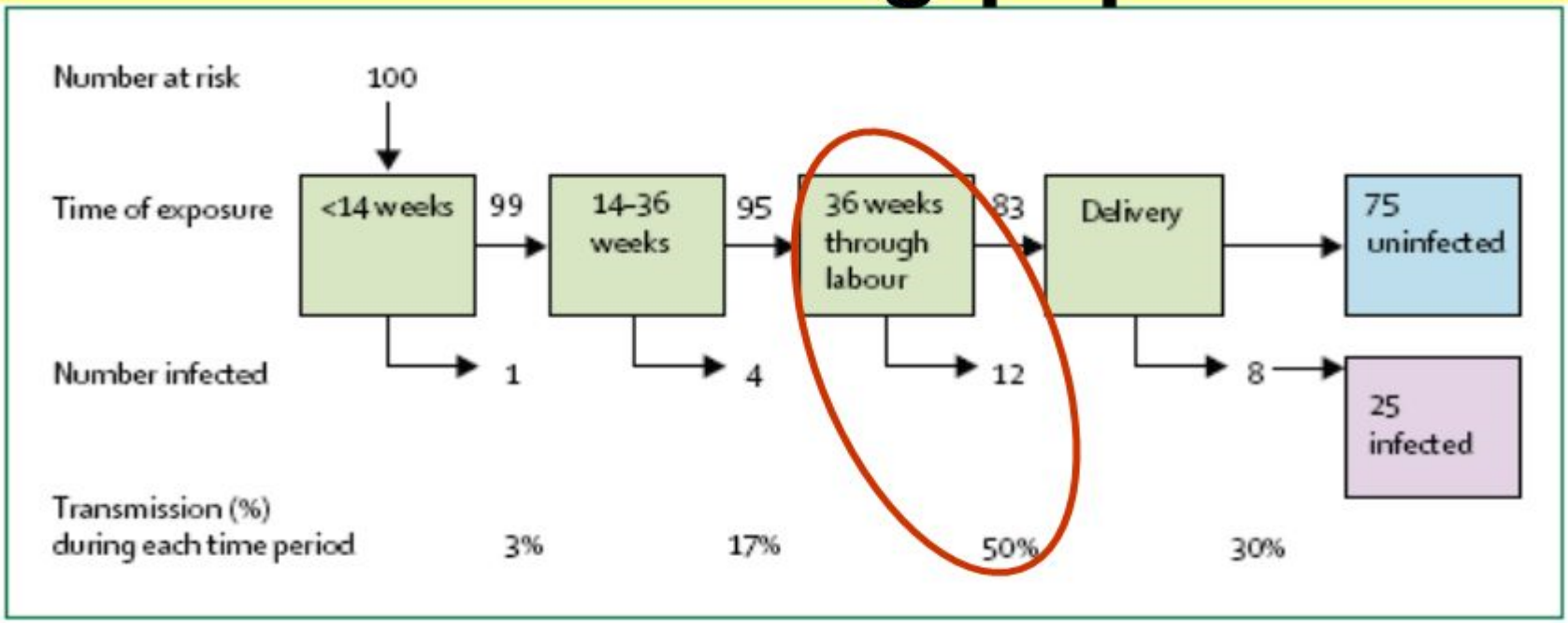


Figure 2: **Estimation of timing of mother-to-child HIV-1 transmission in a non-breastfeeding population** Estimates are based on a hypothetical cohort of 100 children born to HIV-infected women without any interventions. Upper line numbers indicate number of children at risk for infection. Adapted from reference 6.

Athens PK, et al. Mother-to-child transmission of HIV-1: timing and implications for prevention. *Lancet Infect Dis* 2006; 6:726–32.

MTCT, 2000-2006, 5,930 births to HIV+ Women, UK/Ireland

Townsend CL, et al. AIDS 2008;22:973-981

Prophylaxis	MTCT	Adjusted OR
Overall	1.2%	
ART > 14 days	**0.8%**	
HAART with NNRTI	0.9%	1.31 (0.6-2.8) p=0.48
HAART with PI	1.1%	
HAART at conception	0.1%	0.18 (0.02-1.3) p=0.09
HAART during pregnancy	1.3%	
HAART elective CS	0.7%	P=0.15
HAART planned vaginal	0.7%	
AZT elective CS (N=464)	0%	

Cesarean section for HIV-infected women in the combination antiretroviral therapies era, 2000-2010

- Vaginal deliveries incr. 25% in 2000 to 53% in 2010
- MTCT rate did not differ according to mode of delivery
  - In term deliveries (≥37 gestational weeks)
  - 0.3% after both vaginal delivery and elective CS with VL <50
  - 4.0% vs 5.3%, respectively, with VL ≥10,000 copies/mL
- Preterm delivery
  - MTCT rates tended to be higher with vaginal delivery
  - Postpartum complications were more frequent following CS than vaginal deliveries (6.5% vs 2.9, P < .01)
- CONCLUSION:
  - Suggest that HIV-infected women on ARVs with low VL can safely opt for vaginal delivery in the absence of obstetrical risk factors

Am J Obstet Gynecol. 2013 Oct;209(4):335.e1-335.e12. doi: 10.1016/j.ajog.2013.06.021. Epub 2013 Jun 18

C-Section

Recommend C-Section at 38 Weeks

IF HIV RNA > 1000 copies/mL or Unknown

Acute HIV infection during pregnancy

Especially if occurring late in pregnancy

IF HIV RNA < 1000 copies/mL and C-sect scheduled perform at 39 weeks for standard OB indications

Still give prophylactic antibiotics within 60 min of skin incision

Cefazolin: 2grms for pts <120kg & 3grms for pts ≥120 kg

Clinda / Gent: 900 mg / 5 mg/kg IV

Preferred Therapy / Follow Up

Check Resistance Testing

May start therapy with a PI based regimen if:

HIV conversion occurs during pregnancy

- Fetal ultrasound at 18 to 20 weeks
  - If on Efavirenz at the time of pregnancy
- HIV-VL: 2-4 weeks after starting/changing HAART
  - Then monthly until undetectable & at 34-36 weeks
- Glucose screening at weeks 24-28 esp. if on a PI

DHHS 2017 Guidelines

Recommendations for Use of Antiretroviral Drugs during Pregnancy

	NRTIs	NNRTIs	PIs	Entry Inhibitors	Integrase Inhibitors
Preferred	ABC*/ 3TC TDF/ (3TC or FTC)		ATV/r DRV/r (twice daily)		RAL (twice daily)
Alternate	ZDV/ 3TC	RPV EFV***	LPV/r (twice daily)		DTG
Insufficient Data	TAF/FTC	Odefsey™			
Not Recommended	ABC*/3TC/ZDV ddI + d4T# ddC	NVP** ETR	FPV SQV/r IDV/r TPV/r NFV RTV (as single PI)	T20 MVC	Stribild™ Genvoya™ Cobicistat June 4: Prezcobix

** Use ABC only for HLA-B*5701 negative patients*

*** Use with caution: use only if CD4 count < 250*

**** anencephaly, microphthalmia, cleft palate*

 # Implicated in death of a client: severe lactic acidosis with hepatic steatosis with or without pancreatitis

March 18, 2018
FDA Drug Safety Alert

Botswana identified neural tube defects in 4 infants born to 426 women who initiated a DTG-based regimen prior to pregnancy, & who were still receiving it at the time of conception

In response to the FDA alert, interim guidance has been issued by the HHS Antiretroviral Guidelines Panels regading dolutegravir (DTG).[2] The Office of AIDS Research Advisory Council will be reviewing for proposed guideline changes. The interim recommendations of the Panels are as follows[3]:

- Health care providers are encouraged to counsel women of childbearing age with HIV currently receiving DTG about this newly identified potential risk.
- Pregnant women with HIV who are currently taking DTG should not stop their ARV therapy and should speak with their health care provider for additional guidance.
- Women of childbearing age with HIV who desire to become pregnant should discuss alternative ARV regimen options with their health care provider.
- Women of childbearing age with HIV who are not planning to become pregnant may be on DTG-based regimens provided their pregnancy test before initiation of therapy is negative, and they consistently use a reliable contraceptive method.
- Health care providers are encouraged to report all pregnancy data to the Antiretroviral Pregnancy Registry (1-800-258-4263; http://www.apregistry.com).

https://www.cdc.gov/ncbddd/birthdefects/data.html
http://www.who.int/bulletin/volumes/94/1/14-151365/en/

Preliminary Data Suggest Increased Risk of Neural Tube Defects (NTDs) With Dolutegravir (DTG) Exposure at Conception

Tsepamo: birth outcomes surveillance study / Summary of Key Conclusions

- Unplanned analysis of ongoing birth outcomes surveillance study among Botswanan women with and without HIV infection detected preliminary increase in prevalence of NTDs among infants exposed to DTG **at conception**
- NTD prevalence: DTG exposure **at conception**: 4/426 (**0.94%**; 95% CI: 0.37% - 2.4%)
  - 1 case each- encephalocele, anencephaly, myelomeningocele, iniencephaly
- NTD prevalence: other subgroups
  - non-DTG ART at conception (0.12%), efavirenz at conception (0.05%),
  - DTG started during pregnancy (0.00%), and HIV-negative women (0.09%)
- At latest analysis, July 2018:
  - NTD prevalence: DTG exposure **at conception**: 4/596 (**0.67%**; 95% CI: 0.26% - 1.7%)
  - NTD prevalence: DTG started **in pregnancy**: 1/3104 (**0.03%**; 95% CI: 0.01% - 0.18%)

Investigators suggest that this preliminary, early signal needs further data and analysis

Source: 22nd International AIDS Conference
Released: July 27, 2018

AZT at the Time of Delivery

- IV AZT: Administer
  - If HIV RNA >1000 copies/mL
  - Unknown HIV RNA near delivery
  - Regardless of antepartum regimen or mode of delivery
- IV AZT: Not required
  - On combination ARV regimens & no concerns of adherence
  - **And** a sustained HIV RNA ≤1000 copies/mL
- IV AZT during labor: (even if AZT resistant)
  - Stop oral AZT, if IV AZT started; continue all other oral agents
  - If C-sect scheduled – start 3 hours prior to procedure
  - 2 mg/kg body weight IV over 1 hour, then
  - 1 mg/kg body weight IV per hour until delivery

Additional Considerations

Postpartum bleeding resulting from uterine atony

- Protease Inhibitors / Cobi
  - Methergine use if NO alternative agents available
    - i.e. prostaglandin F2-alpha, misoprostol, oxytocin
  - Treatment outweighs the risk
  - Lowest effective dose used for the shortest possible duration

- NNRTIs
  - Methergine levels decreased with inadequate treatment effect
  - Additional urotonic agents may be needed

All HIV-Exposed Infants

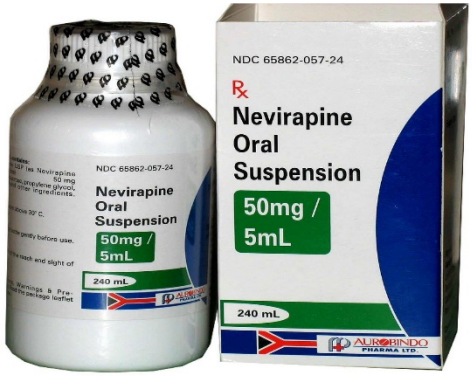
- Neonate: 6 Weeks of AZT Therapy
  - No benefit if started after 48 hours + infection established after 14 days
  - >= 35 wks gestation: 4 mg/kg po Q12H **within 6-12 hours**
    - 3 mg/kg/dose IV, if unable to tolerate PO
  - < 35 wks: 2 mg/kg po Q12H then increase dose as noted below:
    - 1.5 mg/kg/dose IV Q12H, if unable to tolerate PO
      - if >= 30wks gestation
        - » advance to 3 mg/kg/dose PO Q12H at age 15 days
        - » 2.3 mg/kg/dose IV Q12H, if unable to tolerate PO
      - if < 30wks gestation
        - » advance to 3 mg/kg/dose PO Q12H after age 4 weeks
        - » 2.3 mg/kg/dose IV Q12H, if unable to tolerate PO

2016 Update

- 4 week chemoprophylaxis may be considered
  - **Full term infants**
  - Mother received standard antiretroviral therapy
  - No concerns with adherence during pregnancy
  - Consistent viral suppression
    - VL < 1,000 copies near the time of delivery
  - No prolonged rupture of membranes or obstetric complications including cord prolapse

High Risk Deliveries

- Consider 3 doses of Nevirapine for high risk deliveries
  - **Late presenters**, lack of maternal VL suppression, resistant HIV
  - Dose at birth – 48hrs, 48 hrs later, 96 hrs after the 2nd dose
  - *Birth weight 1.5–2 kg: 8 mg total per dose given orally*
  - *Birth weight >2 kg: 12 mg total per dose given orally*



https://www.flickr.com/photos/blyth/1074446532

Trimethoprim / Sulfamethoxazole

- To prevent *Pneumocystis jirovecii pneumonia*
- Given to **ALL** infants born to HIV-infected women
- Initiate at ages 4 to 6 weeks
  - Start after completing their ARV prophylaxis regimen
  - Unless adequate test data to presumptively exclude HIV
- TMP-SMX: 150/750 mg/m2 body surface area per day
  - Max daily dose: 320/1600 mg orally
  - Alternative dosing if given: QMWF **OR**
  - Administered 3 times weekly on consecutive day

HIV Infected Newborns

DO NOT delay triple therapy while awaiting studies

AZT/3TC/Nevirapine

Stop prophylaxis if mother's HIV testing returns negative

If mother's test is positive: perform HIV DNA PCR assay on newborn

Newborn HIV DNA or RNA PCR testing

Within first 14-21 days of life, at 1-2 mnths, at 4-6 mnths

TWO positive tests constitute a diagnosis of HIV

If HIV diagnosed in newborn: stop 1 or 2 drug prophylaxis

Assessment/Treatment by a pediatric HIV specialist

No evidence: using maternal resistance test results improves outcomes

Interruption of Therapy After Pregnancy

Maternal therapeutic indications are the same as for other nonpregnant individuals

BUT: use caution if stopping HAART

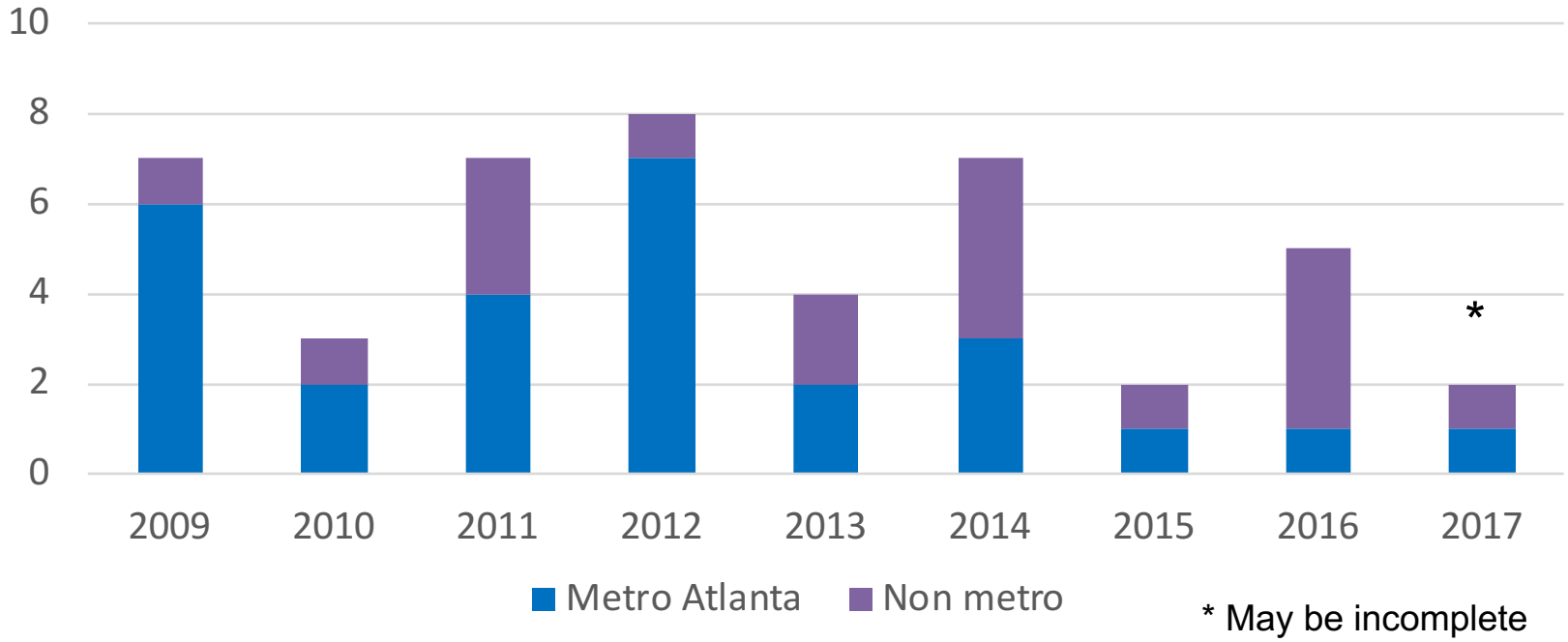
Extend NRTIs 7 to 30 days if stopping a NNRTI (or)
Add a Boosted PI to the NRTIs for the 7 to 30 day period

Caution with HIV / Hepatitis B co-infected clients

Breastfeeding & Pre-mastication of Food

- **Avoid** breastfeeding: confirmed HIV pos. women
- Pumping and discarding or freezing milk
  - If confirmatory testing is pending
- Replacement feeding
  - Affordable, feasible, acceptable, sustainable, safe
  - Low risk of mortality: diarrheal & respiratory disease
- Routinely inquire about pre-mastication of food

Perinatal Transmissions by Mother's Residence, 2009-2017



Georgia Perinatal HIV Coordination Service

§ 31-17-4.2: Georgia HIV/Syphilis Pregnancy Screening Act of 2015; enact

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