Modern Approaches to Transgender and Nonbinary Youth with HIV

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Speaker Disclosures

Speaker: Michelle Collins-Ogle, MD, FAAP, FPIDS

Disclosures: No financial conflicts of interest



Learning Objectives

Upon completion of this presentation, learners should be better able to:

- Review the nuances when assessing transgender and nonbinary youth for HIV/STI screening and linkage to HIV care
- Adopt strategies for engaging transgender persons in effective patient-provider communications to improve sexual health and HIV outcomes
- Apply the latest guidelines and recent clinical evidence on safety, efficacy, and adherence to improve PrEP initiation and monitoring in diverse patient groups
- Describe the impact of the 4 Us on prioritizing HIV prevention in transgender and non-binary youth of color



Global Threat of HIV in Children

- Globally in 2022, 1.5 million children are infected with HIV (under 15 yo)
- In 2022, 84,000 AIDS related deaths occurred in children
- In 2022, 130,000 new HIV infections are in children
- Since 2010, new HIV infections among children decreased by 58%.
- Youth, ages 15-24 account for 27% of all new infections
 - Youth face barriers accessing sexual and reproductive health services
 - Delayed diagnosis and underestimate of new infections

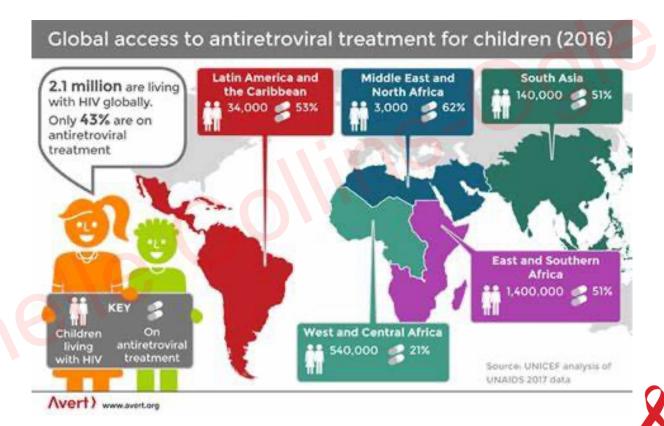
UNAIDS, Global HIV statistics 2023 fact sheet; July 2023.



AIDS Education &

Training Center Program

Globally HIV Remains a Significant Challenge in Children



"My mom doesn't know I'm gay. Don't tell her I have AIDS."





M. Collins Ogle: Used with permission.

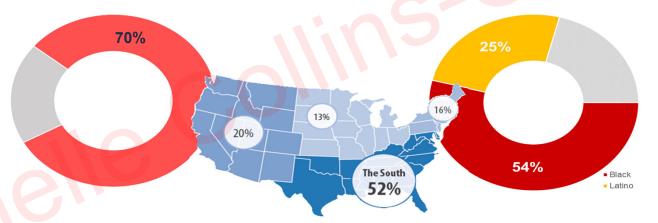


Incidence of HIV Diagnoses among MSM Youth of Color

Men Who Have Sex With Men (MSM)

accounted for 70% of youth newly diagnosed with HIV in 2019

Of those, **79%** were **Young Men of Color**, primarily in the South



CDC. (2019). Fact Sheet: HIV and Youth.

CDC. (2019). Fact Sheet: HIV

Surveillance Report.

Polling Question #1

What percent of adolescents 13-24 yrs. are virally suppressed?

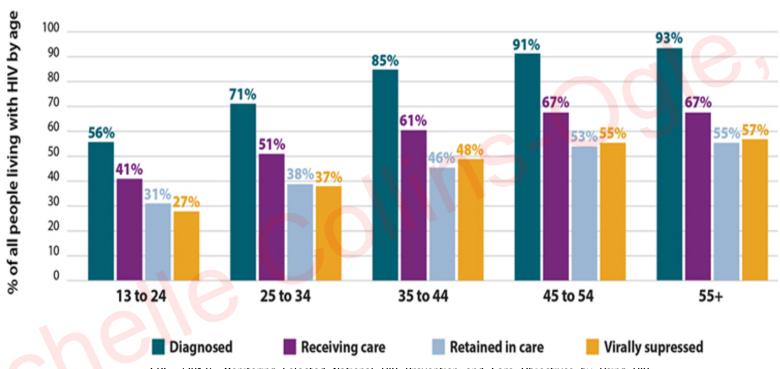
A. 14%



- B. 35%
- C. 27%
- D. 50%
- E. There is no data in this age group



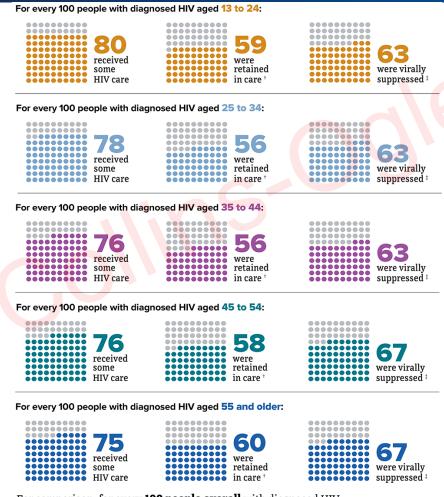
CDC HIV Care Continuum 2017



CDC. (2017). Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data United States and 6 dependent areas, 2015. HIV Surveillance Report. 22 (2), 1-63.



People with Diagnosed HIV in 44 States and the District of Columbia by Age, 2019*



* Data not available for children aged 12 and under.
† Had 2 viral load or CD4 tests at least 3 months apart in a year.
‡ Based on most recent viral load test.

Source: CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2019. HIV Surveillance Supplemental Report 2021;26(2).

For comparison, for every **100 people overall** with diagnosed HIV, **76 received some care**, **58 were retained in care**, and **66 were virally suppressed**.



Review of Program Objectives

- Review the nuances when assessing transgender and nonbinary youth for HIV/STI screening and linkage to HIV care
- Adopt strategies for engaging transgender persons in effective patient-provider communications to improve sexual health and HIV outcomes
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Novel Approach to HIV Treatment for Transgender Youth



Transgender Population in the US and New York

- According to the Centers for Disease Control,1 million people identify as Transgender, 0.6% of adult population in 2016
- Transgender youth ages 13-17 make up 0.7% of the youth population, about 150,000 people.
- Bronx population about 1.4 million
- Estimated 5000-9000 trans individuals in the Bronx
- 78,600 (.43% of population) in NYS identify as Transgender





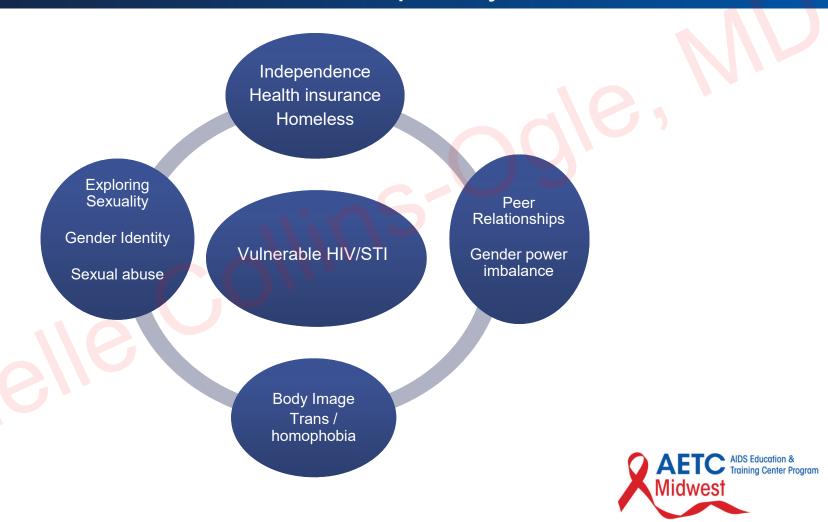
Polling Question # 2

Which of the following is **NOT CORRECT** about HIV risk in transgender and nonbinary youth?

- ?
- 1. Transgender adolescents with HIV experience homelessness at higher rates than their cisgender counterparts.
- Transgender and nonbinary youth should be virally suppressed before initiating hormone therapy.
- 3. The majority of transgender adolescents with HIV enter healthcare as asymptomatic and with minimal immune dysfunction.
- 4. Mental health challenges and substance use disorder are important co-morbidities for transgender adolescents with HIV.
- 5. 'You can't trick me;' all statements are correct.



Adolescents and Youth Susceptibility to HIV/STI



Challenges with LGBTQ Youth with HIV

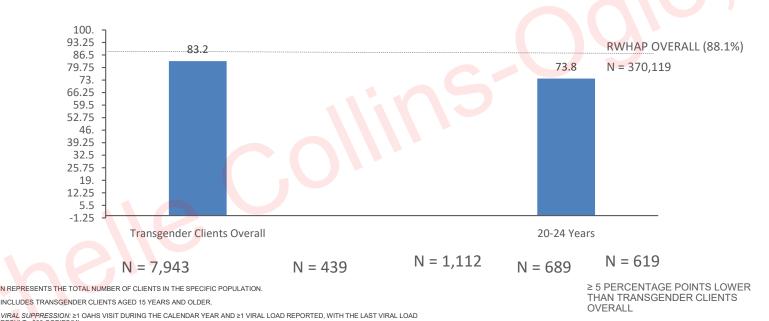
- Same developmental challenges as all youth
- Must develop healthy, integrated identity amidst negative stereotypes/prejudice, often without family support
- More susceptible to emotional distress, psychiatric morbidity, multiple disparities, stigma, abuse, violence, isolation, suicide
- Particular challenges of TG youth: childhood to adolescence
- Sexuality and healthy relationships





Viral Suppression among Transgender Adults and Adolescents Served by the Ryan White HIV/AIDS Program, 2019

VIRAL SUPPRESSION AMONG TRANSGENDER ADULTS AND ADOLESCENTS SERVED BY THE RYAN WHITE HIV/AIDS PROGRAM, 2019 – US AND 3 TERRITORIES



A GUAM, PUERTO RICO, AND THE U.S. VIRGIN ISLANDS.

Health Resources & Services Administration. Clients Served by the Ryan White HIV/AIDS Program 2019. HIV Care Outcomes: Viral Suppression. February 2021. https://hab.hrsa.gov/sites/default/files/hab/data/datareports/rsr-2019-viral-suppression.pptx. Accessed 6/4/2021.



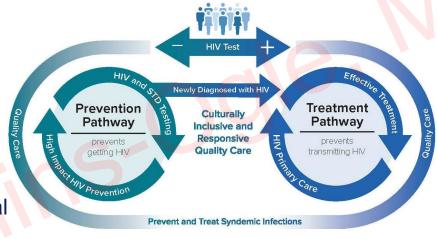
Status Neutral Approach: Adolescent focused Care



Decreases Stigma
Dramatically decreases
new HIV infections

Supports optimal health through continual

engagement in comprehensive care





Increases opportunities for more efficient service delivery

Improves health equity



Status Neutral Approach and Adolescents

Goals - Meet youth where they are, destigmatize <u>sexual health</u> and <u>gender</u> <u>affirming care</u>

- 1. Expand access to pediatric and adolescent people at risk for Sexually Transmitted Infections including HIV. End the epidemic!
- 2. Expand access to gender affirming care for pediatric and adolescent people.
- 3. Provide options to care for people with HIV.



Building a program focused on adolescents and young adults

Montefiore Adolescent and Youth Sexual-health Clinic (MAYS)

<u>Division of Pediatric Infectious Diseases</u>

People with HIV, PrEP, PEP
High Risk HIV negative Transgender / Non-binary
**HIV exposed (uninfected / infected) babies
**Other STI exposures (Syphilis, GC, Hep B/C)

Division of Allergy and Immunology

People with HIV, PrEP, PEP

Division of Adolescent Medicine

Gender Affirming Care

Division of Psychiatry / Behavioral Health

Oval Center - Adult Infectious Diseases



"I didn't keep my appointments because I didn't care. Now I love myself for the first time, I feel happy."



M. Collins Ogle: Used with permission. MAYS image



Case # 1: Meet Jazzay

19 y/o Latina transgender teenage girl presents for routine visit

Medical History

- Last saw a medical provider 3 years ago at the beginning of the COVID-19 pandemic.
- ➤ Has been on estradiol and spironolactone since age 17.
- Gender affirming surgery include breast augmentation 1 year ago.
- ➤ Had HIV screen before her last surgery (nonreactive). She has never had an STI screen.
- ➤ No new medical issues and at the clinic for routine monitoring.

Social history

- ➤ Lives with grandmother; separated from long term partner 2 years ago.
- Has sex with cisgender men (oral and anal), sometimes with condoms.

I'm just here for a checkup!



Case # 1 (Cont'd)

Physical Examination

- General: Well developed, appears stated age
- Skin: No lesions
- Cardiac/Respiratory: Normal
- Breast: Clinical breast exam normal
- Genital: Normal male genitalia +genital warts

Laboratory Values

- CBC, BMP: Normal
- AST, ALT: Normal
- Serum estradiol: 200 pg/ml
- Serum testosterone: 19 ng/dL

STI Testing

- Syphilis: Nonreactive
- 3 site testing for GC/Chlamydia: Negative
- HIV 1/2/Ab: REACTIVE

Medications

- Oral estradiol 6 mg once daily
- Oral spironolactone 200 mg daily



Polling Question #3

19 y/o Latina transgender woman presents for routine visit and has a reactive HIV Ab/Ag test



Which of the following is true regarding next steps?

- A. ART should not be initiated until HIV confirmatory testing is done
- B. ART should be initiated immediately
- C. Gender-affirming hormone therapy is associated with reduced ART efficacy
- D. ART should not be initiated until viral load is determined



Case # 1: Clinical Course

19 y/o Latina transgender woman presents for routine visit and has a reactive HIV Ab/Ag test



Maria was counseled about HIV and offered rapid initiation of ART

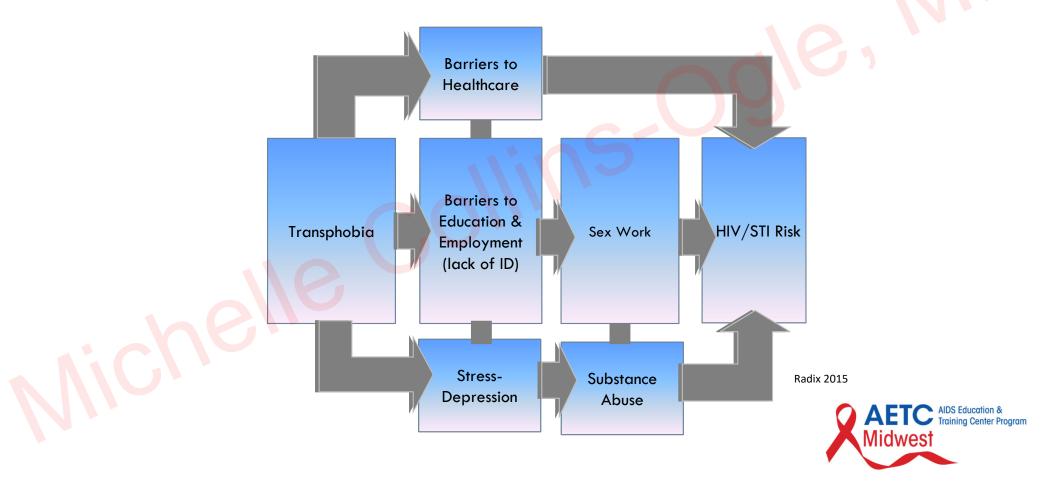
She agreed and was started on BIC/FTC/TDF one tablet daily



She asked several questions:
Will BIC/FTC/TDF affect my hormone levels?
Can I stay on my current dose of estradiol?
I heard these medicines can cause bone problems. Do I need to worry?



Barriers to Viral Suppression in Transgender / Nonbinary Youth



ARV Drugs and Gender Affirming Hormones

Potential Effect		ARV Drugs	Affected GAHT Drugs
	Least Potential Impact on GAHT	All NRTIs Unboosted INSTIs: BIC, DTG, RAL NNRTIs: RPV, DOR	None
	ARV Drugs that may Increase GAHT	EVG/c, PI/r, PI/c	Testosterone Finasteride
1	ARV Drugs that may Decrease GAHT	PI/r	Estradiol
		EFV, ETR, NVP	Estradiol Testosterone Finasteride
3	ARV Drugs with Unclear Effect on GAHT	EVG/c and PI/c on estradiol	Estradiol

ARV = Antiretroviral; GAHT = Gender Affirming Hormone Therapy; NRTI = Nucleoside Reverse Transcriptase Inhibitor; BIC = Bictegravir; DTG = Dolutegravir; RAL = Raltegravir; NNRTI = Non-Nucleoside Reverse Transcriptase Inhibitor; RP' = Rilpivirine; DOR = Doravirine; EVC/c = Elvitegravir/Cobicistat; PI/r = Protease Inhibitor/Ritonavir; PI/c = Protease Inhibitor/Cobicistat; EFV = Efavirenz; ETR = Etravirine; NVP = Nevirapine.

Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV. Department of Health and Human Services.

https://aidsinfo.nih.gov/contentfiles/lvguidelines/adultandadolescentgl.pdf. Accessed 6/4/2021.

Tailoring HIV Prevention Services for Transgender Youth



Case # 2: Meet Angel

A 17 y/o transgender teenage female presents for initial visit to start hormone therapy

Medical history

- > Has taken her friend's estradiol for about 9 months
- ➤ Thinks she had a UTI a few months ago (burning)
- > Has been well otherwise

Medications

> No current medications

Social history

- ➤ Intermittently lives with her 30-year old cisgender boyfriend; denies partner violence
- Can't live as female at home; couch serfs
- Current alcohol and marijuana use
- Has sex with cisgender men (anal receptive / oral)
- > Sometimes engages in survival sex to pay bills / eat (no condoms)



My family doesn't support my gender identity.



How Do You Engage Angel?

Medical History cont.

- ➤ Last HIV/STI testing about 1 year ago: HIV nonreactive
- ➤ Had been on TDF/FTC a year ago but stopped
- ➤ No gender affirming surgeries
- She has never been diagnosed with an STI

Social history

- Unemployed
- Uses marijuana / alcohol
- Unstable housing



I'm just here for my hormones!



Angel (Cont'd)

A 17 y/o transgender teenage female presents for initial visit to start hormone therapy

Physical Examination

- General: Thin, not cachectic
- Skin: Non pruritic; hyper-pigmented macular, copper color lesions on trunk, palms and soles
- Breast development: Tanner 1
- Genital: Normal male genitalia; no lesions, sores or vesicles

Laboratory Values

- CBC, BMP: Normal
- AST, ALT: Mildly elevated
- Total / Direct Bili: Elevated
- Estrogen/Testosterone: Unremarkable
- Hep A Ab+; Hep B Core / Surface Ag & Ab-
- Hep C Ab -

STI Testing

- HIV: Nonreactive
- Syphilis RPR: 1:64, T. pallidum Ab+
- 3 site testing for GC/Chlamydia: Rectal GC+



Polling Question #4

A 17 y/o transgender teenage female presents for gender affirming hormone therapy (GAHT), engages in survival sex, diagnosed with secondary syphilis and rectal GC+.



Is Angel a candidate for HIV pre-exposure prophylaxis (PrEP)?

- A. Yes; she should start TDF/FTC along with oral GAHT now
- B. No; she did not bring it up or ask about PrEP
- C. Maybe; more discussion is needed about HIV risk and prevention
- D. No; PrEP and GAHT should not be initiated simultaneously
- E. Both B and D



Angel (Cont'd): Clinical Course

A 17 y/o transgender teenage female presents for an initial visit to start hormone therapy.



Angel was treated for STIs

LA Benzathine Penicillin 2.4 million units for secondary syphilis

Ceftriaxone 500 mg IM for Rectal GC



She is concerned about FTC/TDF PrEP and estradiol levels

√ Discussed the risks and benefits of initiating hormone therapy



Does she need parental consent?

- √ For PrEP?
- √ For gender affirming care?

Discussed with her the ongoing risk for acquisition of HIV

√ Survival Sex / Syphilis and GC





Rationale for integrating gender affirming care and HIV prevention

- HIV estimated prevalence 9.2% for all transgender persons nationally with a significantly higher prevalence for transgender women at 14.1%. A paucity of published data exists defining the risk of HIV in transgender or non-binary (TGNB) youth. *Becasen JS, et al. Am J Public Health 2018 Nov 29
- Recent CDC data reported the urgent need for more HIV prevention and treatment services in this population.
- TGNB youth have several risk factors for HIV infection, including unstable housing, under/uninsured, unemployment, and substance use disorder.
- We assessed key social determinants of health (SDOH) in TGNB youth and the impact on their ability to prioritize and access HIV prevention in our PrEP program in the Bronx, NY

Methods: Assess gaps in understanding risks

- From 10/2021-8/2022 we conducted an assessment of 101 sexually active TGNB youth 14-27 years to evaluate potential barriers to HIV prevention by querying the 4 U's: 1) Unemployed,
 2) Uninsured/Underinsured, 3) Unstable housing, and 4) substance Use disorder.
- The assessment also questioned medical gender affirmation and HIV/STI prevention. Information obtained was used to assess knowledge gaps that affect their understanding of HIV risk.
- Based on results, we created and implemented a research tool, ARTISTA (Assess Risk for Transmitted Infections in Sexually active Transgender Adolescents) to improve gaps in understanding HIV/STI risk in TGNB youth.



Transgender and Non-binary youth at risk for HIV

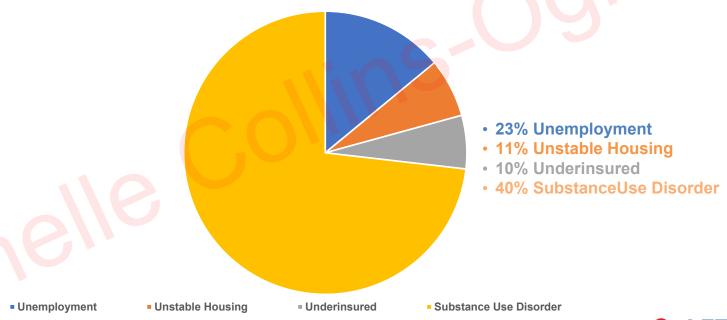
Table 1: Demographics of TGNB youth attending the MAYS clinic Bronx, NY

	Sexually active TGNB youth assessed for HIV risk and PrEP awareness (N=101)	
Transgender female, (49%)	51 (50.4%)	
Mean Age (years)	20 ± 2.7 years	
TGNB Youth of Color	66%	
PrEP initiation and adherence	24% (10/41)	



Social Determinants of Health in TGNB Youth in the Bronx

Figure 1: Assessment of Key SDOH in TGNB Youth of Color in the Bronx: 4 U's





Results and conclusion

	SDOH (N)	Initiated PrEP(N)
Total Sexually Active TGNB	101	24
Assessed	22	5
Unemployed	11	3
Unstable Housing	9	3
Uninsured or Underinsured	4	10
Substance Use Disorder	65	3

More than one of the above SDOH

- Gender affirming care is associated with access and willingness for STI testing and counseling to inform them of their individual risk for HIV
- SDOH, specifically the 4 U's negatively impact TGNB youth of color in the Bronx and are prioritized over HIV prevention
- We are restructuring our PrEP program to better understand the impact of ARTISTA and SDOH on improved PrEP uptake in TGNB youth of color



Additional references and resources What can clinicians do to improve comprehensive care?

- Educational materials designed to improve clinicians' ability to provide evidence-based, high-quality care for transgender patients. The World Professional Association for Transgender Patients (WPATH) https://www.wpath.org provides guidelines for healthcare clinicians. Another excellent source for transgender clinicians is University of California, San Francisco (UCSF) Transgender Care & Treatment Guidelines. https://transhealth.ucsf.edu
- Host a clinic event: "Birthday clinic visit" Trans-girls Lunch and Learn; Transitioning awards.
- Recognize and document trauma as well as PTSD in transgender Youth. It is key to their
 overall health and may help in ongoing high-risk behaviors. Providing mental health services
 needs to be incorporated as part of comprehensive healthcare.



Crisis Text Line: employs nonconsensual active rescue using 911, first responders and potential law enforcement.

Text HOME to 741741

National Suicide Prevention Hotline: employs nonconsensual active rescue using 911, first responders, and potential law enforcement.

Call 1-800-273-8255.

988: employs nonconsensual active rescue using 911, first responders and potential law enforcement

GLBT National Hotline: 888-843-4564

National Sexual Assault Telephone Hotline by RAINN: 800-656-4673

National Domestic Violence Hotline: 1-800-799-7233

Sex, Gender, and Relationships Hotline (SGR Hotline): 415-989-7374

Anti-violence Project hotline: 212-714-1141

National Council on Alcoholism and Drug Dependence, 24-hour Hopeline: 800-622-2255

Thrive Lifeline: for marginalized people in STEM fields

Trans Lifeline: U.S. 877-565-8860; Canada 877-330-6366

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MATEC Resources

- National Clinician Consultation Center <u>http://nccc.ucsf.edu/</u>
 - HIV Management
 - Perinatal HIV
 - HIV PrEP
 - HIV PEP line
 - HCV Management
 - Substance Use Management
- AETC National HIV Curriculum <u>https://aidsetc.org/nhc</u>

- AETC National HIV-HCV Curriculum https://aidsetc.org/hivhcv
- Hepatitis C Online https://www.hepatitisc.uw.edu
- AETC National Coordinating Resource Center https://aidsetc.org/
- Additional Trainings https://matec.info



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