



Treating Adolescents with HIV

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Overview

- Adolescents & HIV: Epidemiology & Risk
- Best Practices in HIV Treatment
- Effective Prevention Strategies
- Making HIV Screening Routine



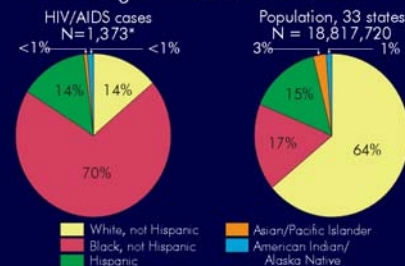
AIDS is NOT Over for Youth

- 1/4** New HIV infections among youth 13-24
12,000 US infections annually - 1 every hour
- 2/3** HIV+ youth sexually infected (40-50% young women)
- 3/4** HIV+ youth are racial/ethnic minorities
- 1/3+** HIV+ youth untested (80% HIV+ gay youth unaware)
- Growing numbers**
Perinatally-infected

CDC Youth HIV Fact Sheets



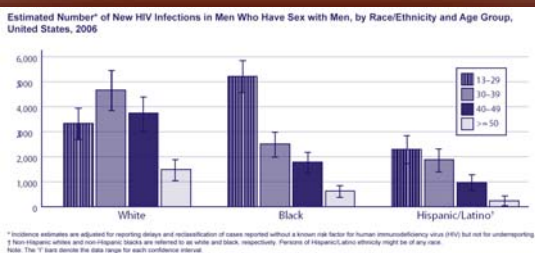
Proportion of HIV/AIDS Cases and Population among Adolescents 13 to 19 Years of Age, by Race/Ethnicity Diagnosed in 2006—33 States



Note: Data includes persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2003. Data have been adjusted for reporting delays. *Includes 22 persons of unknown race or multiple races.



Trends in HIV/AIDS Diagnoses Among Men Who Have Sex with Men 33 States, 2001-2006



CDC: MMWR September 12, 2008



Youth Susceptibility to STDs/HIV

- **Behavioral vulnerability**
 - The age of experimentation
 - By 12th grade, 65% of youth have had sex (YRBS 2007)
 - Gender power imbalance
- **Biological vulnerability of females**
 - Immature cervix
 - STDs often asymptomatic
 - More efficient: male to female
- **Socioeconomic vulnerability**
 - Lack health care coverage (25%)
 - Inadequate sex education
 - Lack of confidentiality

IOM 1997



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HIV Transmission in Youth

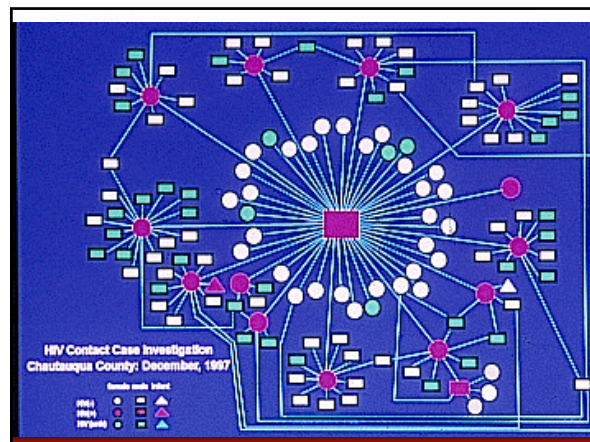
Perinatal Infection

- Growing numbers of youth: ARVs are prolonging life

Sexual Infection (highest mode of transmission)

- Many at-risk women unaware of risk
- Many YMSM don't identify with "gay" prevention
- Transgender youth avoid or don't get care
- STD, sexual/substance abuse, mental illness increases risk
- Children of HIV+ parents at increased risk

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Engaging Youth into Care

The best approach to care

- Multidisciplinary model with a youth-friendly mission
- www.hivcareforyouth.org

Medical services

- Comprehensive including sexual health services

Psychosocial services

- Case management
- Mental health & substance abuse services
- Risk reduction & contraception counseling
- Disclosure counseling & support

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Baseline Medical Evaluation

- **Complete H&P (perinatal and behavioral)**
- **Laboratory testing:**
 - HIV antibody
 - CD4 cell count
 - Plasma HIV RNA
 - Resistance test (genotype)
 - CBC, chemistry profile, BUN, Cr, transaminase, lipids
 - RPR or VDRL, GC, Chlamydia
 - Hepatitis A, B, C serology
 - Toxoplasma IgG

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Antiretroviral Therapy

- **HHS guidelines for adults appropriate for youth**
 - thymic volume and function favors youth
 - slower progression to AIDS than adults
 - adherence with youth more difficult
- **Pregnant HIV+ women should get ARVs to prevent perinatal transmission, regardless of CD4 count**
- **Be aware of resistance issues with perinatally-infected and other heavily treated youth**
- **Controversy on when to start**

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Should We Start Therapy Earlier?

<p>Potential Benefits</p> <ul style="list-style-type: none"> • Earlier suppression of viral replication may prolong disease-free survival • Preservation of immune function may be preferable to immune restoration • May result in fewer adverse effects • May limit risk of resistance with initial HAART • Possible decrease in the risk of HIV transmission 	<p>Potential Risks</p> <ul style="list-style-type: none"> • Adverse effects may reduce quality of life • Risk of serious toxicities • Early development of drug resistance due to suboptimal viral suppression <ul style="list-style-type: none"> • Limitation of future treatment options • Unknown durability of current available therapy
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DHSS adult ARV guidelines, Nov 3, 2008

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Antiretroviral Therapy: Youth Considerations

- Check for pubertal development
 - Tanner stage I or II: pediatric dosages
 - Tanner stage V: adult dosages
- Resistance testing before therapy initiation
- Avoid efavirenz-based regimens with females who might be or become pregnant
- Once-daily, non refrigerated meds improve adherence

DHSS adult ARV guidelines, Nov 3, 2008

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Antiretroviral Therapy: Barriers to Adherence

- Developmental issues key
 - Denial of need for treatment/invincibility
 - Concrete and present-oriented thinking
 - Adverse events may seem intolerable
 - Meds rebellion as a form of independence
- Low self-esteem, depression, hopelessness
- Mistrust providers & trust misinformation from peers
- Socioeconomic: chaotic lifestyles, insurance, housing & transportation challenges
- Lack of support / disclosure

DHSS adult ARV guidelines, Nov 3, 2008

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Transitioning: Youth aging into / out of adolescent care

- Facilitate transition from supportive to independent and responsibilities from parent/provider to patient
- Promote growth, self-expression and personal decision making
- Choose adult clinic with multidisciplinary services
- Traumatic for youth to leave trusted providers
- Uncomfortable in the presence of adult patients
- Consider phased transition (case manager, GYN)

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Prevention

US prevention leaves youth vulnerable

- Rates of infection among US youth increasing
- Mass media promotes sex but not safer sex
- Abstinence "only" sex education shown ineffective
- Comprehensive sex education offers better foundation and is wanted by most parents


Behavior change is very difficult

- Prolonged interventions more successful
- More successful programs combine skills-based and knowledge-based training
- A-B-C a better model!

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Fighting HIV is as easy as...



Abstinence
Be Faithful
Condom Use

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Prevention Options

Hoped for...	Available now...
<ul style="list-style-type: none"> ▪ Microbicides ▪ Vaccines ▪ PREP 	<ul style="list-style-type: none"> ▪ Healthy Sexual Activity ▪ STD Treatment ▪ PMTCT ▪ ARVs ▪ Blood safety ▪ Male Circumcision ▪ Knowledge of HIV Status

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Unfinished Business

- HIV is the worst epidemic in history
- 56,000 new cases yearly; 25% among youth (CDC)
- 1 in 4 ($\pm 250,000$) HIV+ Americans don't know they're infected (CDC)
- 80% of young HIV+ gay and bisexual men didn't know their status (CDC Young Men's Survey)
- In NYC, 40% of patients diagnosed HIV+ develop AIDS within one year of diagnosis (NYC DOHMH HIV Surveillance)
 - Many pts had interacted with health care systems in prior years but were never tested

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Taking Care of Business

- HIV C&T hasn't evolved as treatments have
- Patients overwhelmingly accept HIV testing when a provider recommends it
- HIV pre-test counseling session not proven as an effective means of behavior change
- Routine testing found cost/care effective in settings with $\geq .1\%$ HIV prevalence
- Prenatal testing now considered routine and is a successful model for routinization with all pts.

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Routinely Offered Testing: The Benefits

Reduces HIV transmission

- HIV+ people who know their status reduce high-risk sex by ~50% (Marks G, et al. *J AIDS*. 2005;39:446)
- Lower viral loads from ART also reduces transmission

Prolongs Life

- HIV treatment can increase survival by many years and improve quality of life


Preserves Resources

- Successful ART reduces overall care costs for HIV+ patients from \$36,532 to \$13,865 (AIDS Research and Human Retroviruses. March 1, 2006, 22(3): 240-247)

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CDC HIV Testing Recommendations: 2006



- Routinely offer testing to pts. ages 13-64 in all clinical settings
 - Discontinue risk-based screening
 - Where possible, offer opt-out
- No separate consent for HIV
- Pretest counseling not required
- Encourage repeat/annual testing based on patient risk factors
- Utilize rapid HIV testing

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What the CDC Recommendations Mean for NY & NJ Providers

	New York	New Jersey
Routinely offer	Best practice	Best practice
Written consent	Required	Not required
Opt-out	Law prohibits	Allowed
Pre-test counseling	Streamlined	Prenatal only
Rapid HIV tests	Available	Available

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AdolescentAIDS.org



It's Time for a Paradigm Shift!

HIV testing has become such a huge obstacle that many providers and patients prefer to sail around it.

ACTS:

Advise | Consent | Test | Support

A toolkit for streamlining HIV counseling & testing

- Facilitates operational & clinical practice changes
- Meets CDC & DOH testing criteria
- Condenses 45-minute process to 1-5 minutes
- Allows for better allocation of counseling support to HIV+

ACTS

ADVISE Routine HIV testing is for all patients.

- HIV is the virus that causes AIDS, only an HIV test can detect infection
- Testing benefits HIV+ patient's health and improves prevention for all
- HIV can be transmitted sexually, via needle sharing or perinatally

CONSENT Use NYS DOH (Part B) form.

- Testing is voluntary and can be confidential or anonymous
- For patients who test HIV+, NY protects confidentiality and requires partner notification and name reporting
- Obtain signature on consent form

TEST Use rapid or conventional test with blood or oral fluid.


- Rapid tests: have patient wait for results
- Conventional tests: verify contact information and make plans to deliver results later, as done with other test results

SUPPORT Give results and allow time to process.


- HIV negative:**
 - Explain the test by itself is not prevention and discuss staying negative
 - Encourage partner testing and annual testing; retest sooner if new risk: pregnancy, unsafe sex, STD, new partner, IV drug use or alcohol use
 - Clarify if client needs to return in three months (seroconversion period)
- HIV positive:**
 - Coping: Ask about response to patient's concerns, call counselor if needed
 - Treatment: Link patient to care, emphasize benefits of treatment, support
 - Prevention: Discuss prevention and partner disclosure
 - Review DOH reporting, partner notification and domestic violence laws

Rapid HIV Tests:

Getting Results



ORAL



BLOOD

OraQuick Advance

- OraQuick Advance, Reveal G3, Uni-Gold Recombigen, Multispot, Clearview
- Results in ±20 minutes
- Requires established referral mechanisms
- Can be performed anywhere (with lab approval)
- Very high Sensitivity & Specificity
- HIV negative results are conclusive
- Preliminary positives must be confirmed

Successes & Lessons Learned

- Benefit of HIV treatment is evidence-based
- Routine testing = fewer missed diagnoses
- Simplified counseling shown to significantly improve HIV offering and testing uptake
- Logistics preparation/problem-solving crucial
- Opt-out could greatly facilitate routine testing
- Routinization depends on new thinking & leadership of HIV providers

Contact Us

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Learn more about the care of HIV+ youth by visiting:
www.hivcareforyouth.org