

## Testing Adolescents for HIV/AIDS: Evidence-based Theory and Effective Clinical Practices

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## Disclosure

We have no real or perceived vested interests that relate to this presentation nor do we have any relationships with pharmaceutical companies, biomedical device manufacturers, and/or other corporations whose products or services are related to pertinent therapeutic areas.

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## Presentation Objectives

- To review the scope of HIV/AIDS among adolescents and youth
- To apply emerging policies on identifying teens who do not know their positive serostatus in family planning clinics
- To identify best practices in applying new technologies in disease prevention and intervention including Opt-Out and rapid test methods with teens.

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## Emerging Findings on HIV Diagnosis

- In 2003, of the approximately 1.0--1.2 million persons living with HIV in the US, 1/4(252,000--312,000 persons) were unaware of their infection.
- Progress in earlier diagnosis is insufficient. During 1990-1992, the proportion of persons who first tested positive for HIV <1 year before receiving a diagnosis of AIDS was 51% during 1993--2004, this proportion declined only to 39% in 2004.
- Persons tested late in the course of their infection were more likely to be black or Hispanic and to have been exposed through heterosexual contact, the target users of public family planning clinics.

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## Statistical Profiles of HIV/AIDS among Adolescents

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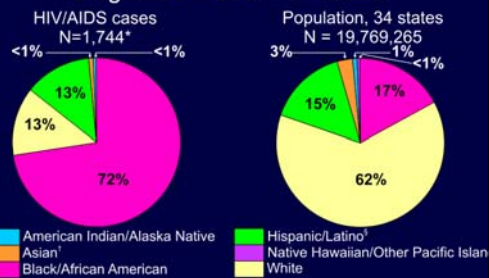
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Percentages of HIV/AIDS Cases and Population among Adolescents 13 to 19 Years of Age, by Race/Ethnicity Diagnosed in 2007—34 States



Note: Data include persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 34 states with confidential name-based HIV infection reporting since at least 2003. Data have been adjusted for reporting delays. Includes 10 persons of unknown race or multiple races. Includes Asian and Pacific Islander legacy cases. Hispanics/Latinos can be of any race.

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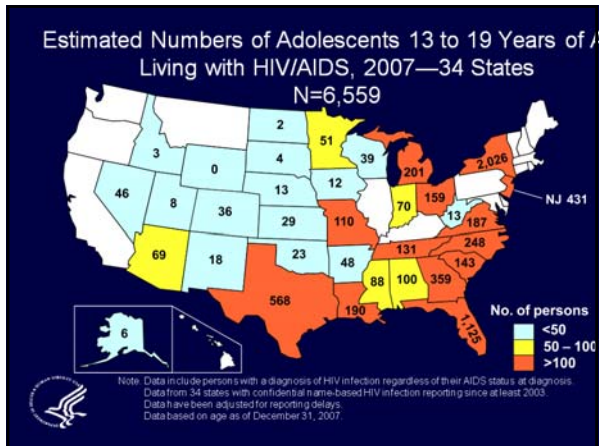
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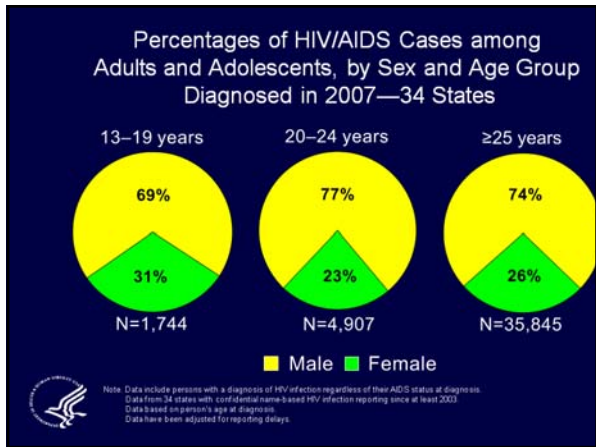
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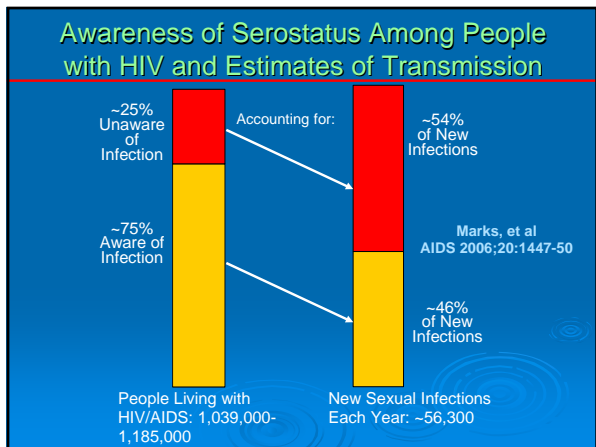
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### Routine Screening for HIV Infection among Adolescents

- Voluntary HIV screening is now considered a normal part of medical practice, similar to screening for other treatable conditions.
- Treatment can be offered before symptoms develop and, for communicable diseases, interventions can be started to reduce continued transmission.
- HIV can be detected by reliable, inexpensive, and noninvasive screening tests.
- The costs of screening are reasonable in relation to the anticipated benefits, especially among teens and pregnant women.

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### Major CDC Testing Guideline Revisions in Health Care Settings

- HIV screening is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- Persons at high risk for HIV infection should be screened for HIV at least annually.
- Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing.
- Prevention counseling should not be required as part of HIV screening programs in health-care settings.

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### What Has Changed: HIV Incidence among Teens Over Time

- In 2004
- An estimated 4,883 young people received a diagnosis of HIV infection or AIDS, representing about 13% of the persons given a diagnosis during that year.
- An estimated 2,174 young people received a diagnosis of AIDS (5.1% of the estimated total of 42,514 AIDS diagnoses), and 232 young people with AIDS died

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## Exposure Data and Risk Awareness of Teens

- The 2007 YRBSS indicated that 47.8% of high school students reported that they had had sexual intercourse at least once, and 38.5% of sexually active students had not used a condom during their most recent act of sexual intercourse
- More than half of all HIV-infected adolescents are estimated not to have been tested and are unaware of their infection

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## Exposure data and risk awareness of teens (cont.)

- Among young (aged 18--24 years) men who have sex with men (MSM) surveyed during 2004--2005 in five U.S. cities, 14% were infected with HIV; 79% of these HIV-infected MSM were unaware of their infection
- Adolescents prefer to receive this information from their health-care providers rather than from their parents, teachers, or friends.

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## Added Value in Disease Prevention

Including males in family planning

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## HIV Opt-Out Testing Implementation

- System Modifications
- Staff Training
- Selecting types of tests
- Interpreting test results
- Impact: Testing and HIV positivity
- Lessons learned
- Conclusions

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## System Modifications

- Adapt Policies and Procedures: Protocol and HIV Risk Assessment were modified to include new recommendations (all clients routinely offered testing, documentation, etc.)
- The separate consent form was eliminated.
- Point-of-service for confidential HIV testing with 20-minute result was initiated

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## Training

Staff was trained on various aspects of HIV and testing:

- How to perform rapid tests
- How to convey information about the test (nature, purpose, meaning of results)
- Use clear communication that is compatible with an Opt-Out approach
- How to deliver positive results (preliminary, confirmatory) using a client-centered approach

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## Continuous Staff Support

- Regular on-site clinical mentorship and supportive supervision are provided
- Continuous updates of staff on HIV issues (importance of testing, number of tests completed, number of positive cases identified)

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## Selecting Types of Rapid HIV Tests

- Rapid tests (such as OraQuick, Uni-Gold, and Clearview Complete) provide results in about 30 minutes, using Clinical Laboratory Improvement Act (CLIA) waived tests.
  - All of these tests have between 99-100 percent sensitivity and specificity.

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## Interpreting Test Results

- If a result is negative, no further testing is required
- If rapid test is positive, it is considered to be a “preliminary positive” and must be verified with a (serum) confirmatory test before informing the client of a “confirmed positive” result

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## Follow Up Care & Prevention Messages

- Clinic developed MOUs with various HIV/AIDS organizations to ensure linkage to care
- Individuals who test positive are referred for follow-up care
- Prevention messages are reinforced using ABC (Abstinence, being Faithful, Consistent Condom use)

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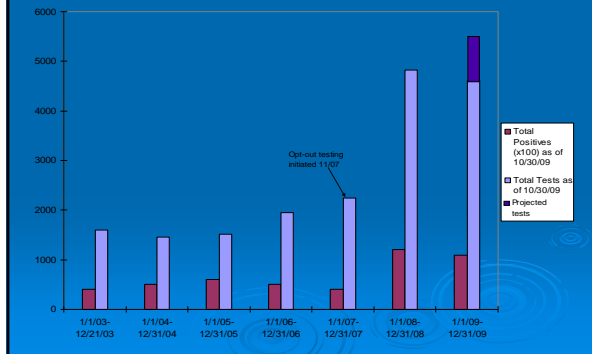
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Baylor Teen Health Clinic from 1/1/2003 and projected through 12/31/09




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## Impact: Testing and HIV Positivity

- As shown by the data, HIV testing greatly increased following the introduction of HIV Opt-Out testing in November 2007
- The number of positives also increased
  - A similar trend is seen for 2009

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## HIV Positivity Trends

- The increase in the number of young males at family planning clinics coincided with a significant increase in the number of HIV positive cases identified among males
- An analysis of their risk behaviors suggest that the majority have sex with men (MSM). These are some of the profiles:

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## Males Tested Positive

| Client              | Risk Behaviors  |
|---------------------|---|
| 1. 15 Black Male    | 1 older female partner  |
| 2. 20 Black Male    | 4 male partners, 3 female partners in the last year                             |
| 3. 20 Black Male    | 2 males in last year, 3 lifetime females partners (0 this year)                 |
| 4. 23 Hispanic Male | 50 lifetime male partners, 3 last year, no females                              |
| 5. 24 Hispanic Male | 4 lifetime male partners, 2 last year, 6 lifetime female partners (0 this year) |
| 6. 20 White Male    | 45 lifetime male partners, 10 last year, 2 lifetime females (0 this year)       |

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## Males Tested Positive

| Client               | Risk Behaviors  |
|----------------------|---|
| 7. 21 Black Male     | 3-4 lifetime male partners, one in the last year  |
| 8. 20 Black Male     | 5 female partners last year, unsure of lifetime number, 1 male partner last year                    |
| 9. 21 Black Male     | 3 female partners last year, 9 lifetime female partners   |
| 10. 20 Black Male    | 1 lifetime female partner, 9 lifetime male partners, unsure how many partners were in the last year |
| 11. 24 Hispanic Male | 10 lifetime male partners, 1 in the last year, no female partners                                   |
| 12. 20 Hispanic Male | 50+ lifetime male partners, 1 in the last year  |
| 13. 15 Black Male    | 7 lifetime female partners, 1 in the last year, no male partners                                    |

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### Most Common Risk Factors Among HIV Positive Males

- Having had sex in the last 12 months without a condom (93%), having oral sex (100%), having anal sex (86%), and having vaginal sex (54%)
- The 13 HIV positive males had an average of 13.9 male sexual partners and an average of 2.9 female sexual partners in their lifetime
- Only 1 of the 13 had never had sex with a male

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### Lessons Learned

- Although it is too early to document the widespread effects of Opt-Out testing on health outcomes since its implementation, these are some of the observations:
  - Providing routine HIV testing increases the number of individuals who know their HIV status
  - Increasing awareness of HIV status increases initiation of medical treatment, as well as decision making with regard to risk-behaviors
    - It is estimated that HIV transmission is 3.5 higher among persons who do not know their status

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### Lessons Learned

- Opt-in consent (asking if patient wants an HIV test):
  - 35% accepted testing
  - Some women felt accepting an HIV test indicated high risk behavior
- Testing offered as routine, opportunity to decline
  - 88% accepted testing
  - Significantly less anxious about testing

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## Lessons Learned

- It is important to ensure that promoting routine screening will not undermine patient autonomy to decline testing
- A patient's decision to decline testing should be documented to prevent legal issues
- Counseling is recommended for high-risk patients
- The primary beneficiaries of the screening of a disease must be the individuals who are screened-Linkages to follow-up care are essential

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## Conclusions

- Recent studies show that voluntary HIV testing is as cost-effective as other established screening programs for chronic diseases (e.g. hypertension and breast cancer)

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## Conclusions

- Providing testing at family planning clinics and in other healthcare settings helps target vulnerable populations (the poor, uninsured and minorities), and may help prevent further spread of HIV
- It is important to measure indicators such as number of persons tested, number of positives, and compliance with follow-up care in order to track the overall effectiveness of this policy on health outcomes

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