CDC’s Recommendations for HIV Screening in Health Care Settings

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The findings and conclusions in this presentation are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention
Defining the Problem:
Persons with HIV, United States

Number HIV infected 1,039,000 – 1,185,000

Number unaware of their HIV infection 252,000 - 312,000 (24%-27%)

Estimated new infections annually 40,000

Glynn M, Rhodes P.  2005 HIV Prevention Conference
HIV Testing in the United States - 2002

- 38% - 44% of US adults have been tested for HIV
- 16-22 million persons age 18-64 tested annually
- More than 75% of persons report they were tested for HIV in doctor’s offices, hospitals, or clinics
- Yet, 40% of persons reported with HIV receive an AIDS diagnosis within 1 year of their first HIV test – on average, 10 years after they first became infected (and infectious).

- National Health Interview Survey, 2002
- CDC HIV Surveillance Report, 2005
Reasons for testing: late versus early testers
Supplement to HIV/AIDS Surveillance, 2000-2003

Late (Tested < 1 yr before AIDS dx)

Early (Tested >5 yrs before AIDS dx)

MMWR June 27, 2003
Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings

MMWR 2006;55(No. RR-14):1-17

http://www.cdc.gov/mmwr
Recommendations and Reports
September 22, 2006
Revised Recommendations
Adults and Adolescents - I

- Routine, voluntary HIV screening for all persons 13-64 in health care settings, not based on risk

- All patients with TB or seeking treatment for STDs should be screened for HIV

- Repeat HIV screening of persons with known risk at least annually
Revised Recommendations
Adults and Adolescents - II

- Opt-out HIV screening with the opportunity to ask questions and the option to decline testing

- Separate signed informed consent should not be required

- Prevention counseling in conjunction with HIV screening in health care settings should not be required
Rationale for Revising Recommendations

Developments related to:

- Treatment
- Testing
- Transmission
Mortality and HAART Use Over Time
HIV Outpatient Study, CDC, 1994-2003

- Palella et al, JAIDS 2006; 43:27.
Initial Focus: HIV Screening in Hospitals and Emergency Departments

- CDC studies and demonstration projects:

<table>
<thead>
<tr>
<th>Site</th>
<th>New HIV+</th>
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<tbody>
<tr>
<td>Cook County ED, Chicago</td>
<td>2.3%</td>
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<tr>
<td>Grady ED, Atlanta</td>
<td>2.7%</td>
</tr>
<tr>
<td>Johns Hopkins ED, Baltimore</td>
<td>3.2%</td>
</tr>
<tr>
<td>King-Drew Med Center ED, Los Angeles</td>
<td>1.3%</td>
</tr>
<tr>
<td>Inpatients, Boston Medical Center</td>
<td>3.8%</td>
</tr>
</tbody>
</table>
Uni-Gold Recombigen

Multispot HIV-1/HIV-2

Reveal G3

OraQuick Advance

Clearview Complete HIV 1/2

Clearview HIV ½ Stat Pak
OraQuick Advance HIV-1/2

- CLIA-waived for finger stick, whole blood, oral fluid
- Store at room temperature
- Screens for HIV-1 and 2
- Read time 20-40 minutes
- Shelf life: 6 months
Collect oral fluid specimens by swabbing gums with test device.

Reduce hazards, facilitate testing in field settings
Read results at 20 minutes
Uni-Gold Recombigen

- CLIA-waived for finger stick, whole blood
- Store at room temperature
- Screens for HIV-1
- Read time 10-12 minutes
- Shelf life: 1 year
Finger stick with disposable pipette
Add 1 drop specimen to well
Add 4 drops of wash solution
Read results in 10 minutes
Clearview Complete HIV 1/2

- Applied for CLIA waiver for whole blood
- Store at room temperature
- Screens for HIV-1 and 2
- Read time 15-20 minutes
- Shelf life: 2 years
Obtain Fingerstick blood sample
Insert barrel into buffer vial
Read results in 15 minutes
Clearview HIV-1/2 Stat-Pak

- Clia-waived for whole blood and fingerstick
- Store at room temperature
- Screens for HIV-1 and 2
- Read time 15-20 minutes
- Shelf life: 2 years
Obtain finger stick specimen...
Add 5 microliters specimen
Add 3 drops buffer to well
Read results in 15-20 minutes
Rationale for Revising Recommendations

Developments related to:

- Treatment
- Testing
- Transmission
After people become aware they are HIV-positive, the prevalence of high-risk sexual behavior is reduced substantially.

Reduction in Unprotected Anal or Vaginal Intercourse with HIV-neg partners: HIV-pos Aware vs. HIV-pos Unaware

Meta-analysis of high-risk sexual behavior in persons aware and unaware they are infected with HIV in the U.S.  
Awareness of Serostatus Among People with HIV and Estimates of Transmission

- ~25% Unaware of Infection
- ~75% Aware of Infection

People Living with HIV/AIDS: 1,039,000-1,185,000

New Sexual Infections Each Year: ~32,000

Accounting for:

- ~54 - 70% of New Infections
- ~30 - 46% of New Infections

Marks, et al. AIDS 2006;20:1447-50
Implementation: Examples
San Francisco Public Health

- Changed requirement for signed informed consent, May 2006
- Compared rates of testing and new HIV diagnoses before and after change
Trends in HIV Testing:
San Francisco Public Health

20.6 HIV positive tests per month

30.6 HIV positive tests per month

Zetola et al, JAMA March, 2007
HIV Testing Expansion Initiative
New York City Health and Hospitals Corp

- Increase the number of patients who know their HIV status
- Increase testing from 50,000 per year to 100,000 per year in FY06
FY06: 57 Percent Increase in HIV Testing

FY03 - FY05 Outpatient Only (Source: PLM)
FY06 Outpatient, Inpatient and ED (Source: Facility Reports)
FY06: Number of HIV Positive Individuals More than Doubled

FY03 – FY04 Outpatient Only (Source: PLM)
FY05 Outpatient and ED Pilot Sites Only (Source: PLM and RHT in ED Pilot Project Reports)
FY06 Outpatient, Inpatient and ED (Source: Facility Reports)
ED Rapid Testing, New Jersey

- NJ health department provides counselors, test kits
- 23 EDs now offer rapid HIV testing
- 10,628 tested through November 9, 2006
- 274 (2.6%) HIV positive

Shaded: counties offer rapid testing
Fostering Implementation

- **CDC:**
  - Six regional workshops for high-priority EDs

- **National Medical Association:**
  - Work with primary care providers in 5 cities

- **Gilead Sciences:**
  - Funding support for acute-care testing in 8 cities
    - Baltimore
    - Chicago
    - Detroit
    - Miami
    - New York City
    - Philadelphia
    - San Francisco
    - West Palm Beach
Summary

- There is an urgent need to increase the proportion of persons who are aware of their HIV-infection status
- Expanded, routine, voluntary, opt-out screening in health care settings is needed
- Revised recommendations: September 2006
- Several jurisdictions have already begun