


1  **CDC's HIV Testing Initiatives** Bernard M. Branson, M.D.

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2  Awareness of HIV Status among
Persons with HIV, United States **Estimated new infections annually**

56,300
Number HIV infected 1,106,400
**Number unaware of
their HIV infection 232,700 (21%)**

3  **HIV/AIDS Diagnoses among Adults and Adolescents,**
by Transmission Category — 33 States, 2003–2006

(Two Pie Charts Displayed)
DATA ON MALES = MSM 66%, IDU 13%, MSM/IDU 5%, Heterosexual 16%, Other .05%
DATA ON FEMALES = Heterosexual 79%, IDU 20%, Other 1%

4  **New HIV Infections**

- Test specimens from people newly diagnosed with HIV with BED assay (differentiates recent from long-standing infections)
- Compare with HIV case reports, testing and treatment history
- Estimate the number of new infections using mathematical models

5  **Estimated Percentage of New HIV Infections, by Sex and Age**

50 U.S. States & DC, 2006
(Two Pie Charts Displayed)
DATA ON PIE 1 = Men 73%, Women 27%
DATA ON PIE 2 = 13-29 34%, 30-39 31%, 40-49 25%, 50-99 10%

6  **Estimated Percentage of New HIV Infections, by Transmission Category**
(Pie Chart Displayed)

DATA ON PIE CHART: Men who have sex with men 53%, Injection Drug Users, 12%, Men who have sex with men and inject drugs, 4%, Heterosexual contact, 31%

SOURCE: 2006 HIV Incidence Surveillance, JAMA 2008

7 **Estimated HIV/AIDS Prevalence and U.S. Population by Race/Ethnicity, 2006**

(Two Bar Graphs Displayed)

BAR 1: HIV/AIDS Prevalence

White, not Hispanic 35%

Black, not Hispanic 46%, Hispanic 18%

Asian/PI 1%

BAR 2: US Population

White, not Hispanic 66%, Black, not Hispanic 12%, Hispanic 15%, Asian/PI 5%

SOURCE: HIV Prevalence Estimates, MMWR 2008

8 **Estimated Percentage of New HIV Infections, by Race/Ethnicity
50 U.S. States & DC, 2006**

(Pie Chart Displayed)

White 35%, Black 45%, Hispanic 17%, Asian/Pacific Islander 2%, American Indian/Alaskan Native 1%

9 **Estimated Rates of new HIV Infections by Race/ethnicity**

50 U.S. States & DC, 2006

(Bar Chart Displayed)

RATE PER 100,000

Total 22.8, White 11.5, Black 83.7, Hispanic 29.3, Asian/Pacific Islander 10.3, American Indian/Alaskan Native 14.6

Total Male: 34.3 per 100,000

Total Female: 11.9 per 100,000

10 **HIV Prevalence, NHANES 1999-2002**

(Bar Chart Displayed Showing Prevalence of HIV Antibody)

FIRST CHART: Age 18-39 years

White M .052, White F .04, Black M 1.93, Black F 1.01, Hispanic M .4, Hispanic F .04

SECOND CHART: Age 40-49 years

White M .04, White F .04, Black M 4.54, Black F 2.78, Hispanic M .43, Hispanic F .4

SOURCE: McQuillan et al, NCHS: JAIDS April 2006

11 **National Health Interview Survey**

- Annual, cross-sectional household probability sample of the U.S. population conducted by National Center for Health Statistics
- Provides estimates for a broad range of health measures for the U.S. population, including HIV testing.

12 **HIV Testing: 2006**

- 40% of adults tested for HIV at least once
 - Estimated 71.5 million persons
- 10.4% tested in the preceding 12 months
 - Estimated 17.8 million persons

13 **Persons Tested, Preceding 12 Months**

TABLE DISPLAYED

White 8%

Black 22%

Hispanic 13%

Risk factors?

Yes 23%

No 10%

Pregnant?

Yes 61%

No 13%

SOURCES: Duran et al, MMWR August 2008; 2006 National Health Interview Survey

14 **Where were persons tested for HIV?**

(Table Displayed)

Private doctor/HMO (2003) 44% (2006) 53%

Hospital, ED, Outpatient (2003) 22% (2006) 18%

Community clinic (public) (2003) 9% (2006) 9%

HIV counseling/testing (2003) 5% (2006) 5%

Correctional facility	(2003) 0.6%	(2006) 0.4%
STD clinic	(2003) 0.1%	(2006) 0.1%
Drug treatment clinic	(2003) 0.7%	(2006) 0.4%

SOURCE: 2006 National Health Interview Survey

15 **Percent of Persons Ever Tested and Tested in the Preceding 12 Months - NHIS 2002-2006**

Percent of persons who reported ever being tested for HIV are represented by the red line and among those who reported a test in the preceding 12 months are represented by the yellow line. This trend chart shows a steady increase in the percentage of persons ever having an HIV test from 6% in 1987 to 39% in 2002. This percent has been constant from 2002-2006, between 39% and 40%, although 10-11% of respondents each year reported having an HIV test in the preceding 12 months. A possible explanation for this finding is that the people who are having an HIV test every year are the same (i.e., repeat testers), which in fact won't have any effect on the ever tested line.

In 2006, 40% of the adults 18-64 y/o living in the United States indicated ever having an HIV test, which is equivalent to 71M of the U.S. population. For the same year, among those who reported having an HIV test, 10% indicated it was conducted in the preceding 12 months, which is an estimated 18 M people.

This data suggest that a change has been needed in HIV testing strategy to increase the number of people having an HIV test at least once in their lifetime and to identify unaware HIV infected individuals.

16 **Early Indications of Progress**
(Table Displayed)

2005 (Ever Tested) 70,036,336 (39.9%) (Last 12 Months) 18,042,610 (10.4%)

2006 (Ever Tested) 71,468,420 (40.4%) (Last 12 Months) 17,775,006 (10.4%)

2007 (Ever Tested) 73,848,002 (41.3%) (Last 12 Months) 18,791,895 (10.7%)

17 Legal or Regulatory Constraints

- 2006 CDC Recommendations:
 - Opt-out testing with the option to decline after notifying the patient testing will be done
 - No separate written informed consent in health-care settings

18 Legal or Regulatory Constraints

- At the time of CDC's 2006 recommendations, 20 states had laws or regulations that required written informed consent for HIV testing.

19 Legislative Changes Since 2006

11 states have removed written informed consent requirements:

1

- Arizona
- California
- Iowa
- Illinois
- Indiana
- Louisiana

2

- Maine
- Maryland
- New Hampshire
- New Mexico
- North Carolina

20 Legislative Changes Since 2006

1

7 states proposed legislation to remove written consent that was not enacted:


- Hawaii
- Massachusetts
- Nebraska
- Connecticut
- Pennsylvania
- Rhode Island
- Wisconsin


2


No legislative action regarding written consent requirements in 2 states:

- New York


- Michigan

21  (Image of National HIV/AIDS Clinicians' Consultation Center Website.
Http://www.nccc.ucsf.edu)


22  Examples:
Expanded Testing Programs

23  Expanded HIV Testing Initiative:
New York Health and Hospitals Corporation


- Largest municipal health-care delivery system in the U.S. for New York City residents
- 4,934,000 annual visits
- 19,000 patients with HIV infection in care
- Signed informed consent for HIV testing

24  Annual Unique HIV Tests
(Bar Chart Displayed)

FY04 56,212
FY05 58,785
FY06 92,123
FY07 133,859
FY08 160,900

25  Number of Positive HIV Tests More Than Doubled
(Bar Chart Displayed)

FY04 670
FY05 720
FY06 1514
FY07 1630
FY08 1863

26  Not All Positive Tests Represent New HIV Diagnoses
(Bar Chart Displayed)

FY06 (Positive Tests) 1514 (New Positive Tests) 774
FY07 (Positive Tests) 1630 (New Positive Tests) 864
FY08 (Positive Tests) 1863 (New Positive Tests) 767

- 27 Percent of Patients with a Concurrent AIDS Diagnosis
(Bar Chart Displayed)

FY06 32.3%

FY07 21.2%

FY08 21.8%

- 28 44% of Unique Eligible Patients Have Now Been Tested for HIV

- 29 President's Testing Initiative

- Increase HIV testing opportunities for populations disproportionately affected by HIV- primarily African Americans who are unaware of their HIV status.
- \$35 million awarded September 2007 to 23 jurisdictions with highest number of AIDS cases among African Americans

- 30 **Expanded HIV Testing Initiative: Chicago**

- Initiated October 2007
- Rapid testing in
 - 4 emergency departments
 - 6 STD clinics
 - Correctional health facility
 - 3 CBO clinics

- 31 Expansion of HIV Testing, Chicago Oct 2007- Sept 2008
(Bar Chart Displayed)

Chart Show Number of Tests Conducted

Q4-2007: 6206

Q1-2008: 8023

Q2-2008: 12516

Q2-2008: 15688

Provisional data as of 10/16/08

*Source: HIV Counseling Testing and Partner Services Unit, Division of STD/HIV/AIDS,
Chicago Department of Public Health*

- 32 HIV Tests and Positive Tests, Chicago, Oct 2007- Sept 2008
(Table Displayed)

Emergency Depts

(HIV Tests) 12,685

(New HIV Positive) 115 (0.9%)

STD Clinics

(HIV Tests) 21,259

(New HIV Positive) 203 (1.0%)

Corrections

(HIV Tests) 6,468

(New HIV Positive) 58 (0.9%)

CBO clinic

(HIV Tests) 2,021

(New HIV Positive) 44 (2.0%)

Total

(HIV Tests) 42,433

(New HIV Positive) 420 (1.0%)

Provisional Data as of 10/16/2008

Source: HIV Counseling Testing and Partner Services Unit, Division of STD/HIV/AIDS, Chicago Department of Public Health

33  Race/Ethnicity of Persons with Positive HIV Diagnosis Chicago, Oct 2007- Sept 2008

(Pie Chart Displayed)

African American 71%

Hispanic 8%

White 19%

Asian-Pacific Islander 1.4%

Other/Unidentified 0.8%

Provisional Data as of 10/16/2008

*Source: HIV Counseling Testing and Partner Services Unit, Division of STD/HIV/AIDS,
Chicago Department of Public Health*

34 **Expanded HIV Testing Initiative: Florida**

- Rapid testing in
 - 30 Medical settings
 - 8 emergency departments
 - 17 primary care clinics
 - 4 community health centers
 - 1 urgent care clinic
 - 10 STD clinics
 - 10 jails
 - 10 CBOs
 - 10 mobile units
 - 1 substance abuse treatment center

35 HIV Tests and Positive Tests, Florida, Oct 2007- July 2008
(Table Displayed)

Medical settings

(Total Tests) 6,897

(HIV-Positive %) 163 (2.4%)

(New Positive %) 151 (1.2%)

STD clinics

(Total Tests) 7,737

(HIV-Positive %) 156 (2.0%)

(New Positive %) 92 (1.2%)

Jails

(Total Tests) 8,216
(HIV-Positive %) 78 (0.95%)
(New Positive %) 60 (0.7%)

CBO

(Total Tests) 18,954
(HIV-Positive %) 605 (3.2%)
(New Positive %) 340 (1.8%)

Mobile unit

(Total Tests) 2,321
(HIV-Positive %) 37 (1.6%)
(New Positive %) 32 (1.4%)

Drug treatment

(Total Tests) 403
(HIV-Positive %) 3 (0.7%)
(New Positive %) 2 (0.5%)

Total

(Total Tests) 44,528
(HIV-Positive %) 1,042 (2.3%)
(New Positive %) 677 (1.5%)

36  HIV tests and Positive Tests, Florida, Oct 2007 – July 2008

- Total tests in clinical settings: 25,574 (57%)
 - New HIV infections: 335 (1.3%)
- Total tests, non-clinical settings: 18,954 (43%)
 - New HIV infections: 342 (1.8%)

37  Race/Ethnicity of Persons with New Positive HIV Diagnosis Florida, Oct 2007- July 2008

(Pie Chart Displayed)

African American 66%

Other/Unidentified 0.9%

Hispanic 18%

White 15%

38 Capacity Building

- Eight regional workshops for hospitals and emergency departments to develop strategic plans for HIV testing in EDs:
 - New York -- Washington DC
 - Hartford -- Miami
 - Philadelphia -- Boston
 - Raleigh -- San Antonio

39 Capacity Building

- HRSA's AIDS Education and Training Centers:
 - Training and technical assistance for more than 20,000 health-care providers at 1,000 training sessions in 10 regions
 - National Resource Center clearinghouse for informational materials and toolkits
 - National Clinician Consultation Center "warmline" for health-care providers

40 Remaining Challenges

- "Not my job"

- Too daunting to screen such large numbers

- Interferes with primary mission and patient flow

- Reimbursement

41 Summary

- Signs of Progress
 - Reduction in percentage of persons unaware of their infection from 25% to 21%

 - The number of persons who have had an HIV test increased by 1.4 million in 2007

 - Reductions in late diagnosis in NY hospitals after expanded HIV testing

 - Legislative changes in 11 states to facilitate HIV testing in health-care settings

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