

HIV/AIDS in the United States:

An Update.

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March 25, 2008.

[Woman wearing AIDS ribbon.]

U.S. Department of Health and Human Services.

Centers for Disease Control and Prevention (C D C).

Overview

- NCHHSTP mission, priorities
- HIV/AIDS epidemic in the United States
- HIV Prevention
- Challenges, Priorities, Opportunities
- Summary

About NCHHSTP.

About NCHHSTP:

- NCHHSTP established in 1995
- Viral hepatitis added in 2006
- Staff: over 900 domestic FTEs and nearly 300 field staff in U.S.
- Center supports both domestic and global activities
- Rated “Effective” by OMB PART

NCHHSTP Mission:

Maximize public health and safety nationally and internationally through the elimination, prevention, and control of disease, disability, and death caused by

- HIV/AIDS
- Non-HIV Retroviruses
- Viral Hepatitis
- Other Sexually Transmitted Diseases
- Tuberculosis
- Non-Tuberculosis Mycobacteria

Coordinating Center for Infectious Diseases.

Coordinating Center, Office of Director.

N C I R D.

Influenza Division.

Immunization Services Division.

Global Immunization Division.

Division of Viral Diseases.

Division of Bacterial Diseases.

N C Z V E D.

Division of Parasitic Diseases.

Division of Vector-Borne Infectious Diseases.

Division of Viral and Rickettsial Diseases.

Division of Foodborne, Bacterial, and Mycotic Diseases.

N C H H S T P.

Division of HIV/AIDS Prevention.

Global AIDS Program.

Division of Viral Hepatitis.

Division of S T D Prevention.

Division of Tuberculosis Elimination.

N C P D C I D.

Division of Bioterrorism, Preparedness, and Response.

Division of Global Migration and Quarantine.

Division of Healthcare Quality Promotion.

Division of Scientific Resources.

Division of Emerging Infections and Surveillance Services.

Division of Laboratory Systems.

S S P U.

Extramural Programs (research and non-research).

Human Studies Oversight and Review.

Technology Transfer.

Informatics.

Regulatory Affairs.

Enterprise Communications.

Safety Management and Coordination.

Space Planning, Advising, Coordination and Evaluation.

Virtual Workgroups.

S B U.

Travel.

Personnel/Training.

Procurement and Properties/Facilities.

Records Management/F O I A and Committee Management/Conference Logistics.

National Center for Immunization and Respiratory Diseases (N C I R D).
National Center for Zoonotic, Vector-Borne, and Enteric Diseases (N C Z V E D).
National Center for HIV/AIDS, Viral Hepatitis, S T D, and T B Prevention (N C H H S T P).
National Center for Preparedness, Detection, and Control of Infectious Diseases
(N C P D C I D).
Strategic Science and Program Units (S S P U).
Strategic Business Unit (S B U).

[Tick, cells, mosquito, viruses.]
U.S. Department of Health and Human Services.
Centers for Disease Control and Prevention (C D C).

NCHHSTP Priorities:

- Program collaboration and Service integration (PCSI)
- Reducing Health Disparities
- Maximizing Global Synergies

NCHHSTP Workgroups.

[Charts.] Surveillance/ Strategic information
[Woven lines.] Program Integration
[Ruler, triangle, and protractor.] Health Measurement
[Man and woman looking at each other.] Health Disparities
[Three young men.] MSM
[Syringe.] Drug Users.
[Globe.] Global Perinatal
[Keyhole.] Corrections

NCHHSTP FY08 Priorities:

1. Publish PCSI white paper and research priorities
2. Publish integrated surveillance report
3. Publish guidelines on integrated surveillance
4. Develop national mobilization on PCSI
5. Continue directors site visits to rural US and territories
6. Publish green paper for research on tracking the social determinants
7. Strengthen external communications to partners (e.g. blog, connections)
8. Heighten meta-leadership for prevention across federal agencies
9. Complete NCHHSTP 2020 strategic plan
10. Identify opportunities for strategic partnerships for prevention

HIV/AIDS in the United States.

Prevalent HIV infections

- Number HIV infected
1,039,000 – 1,185,000
- Number unaware of their HIV infection
252,000 - 312,000 (24%-27%)

Source: Glynn M, Rhodes P. 2005 HIV Prevention Conference

HIV Prevalence by age, sex and race/ethnicity, 1999-2006.

All	Male ³	Female	18-29 years	30-39 years	40-49 years ²	NH white	American* NH Black ¹	Mexican
0.47%	0.72%	0.22%	0.25%	0.55%	0.61%	0.23%	2.01%	0.3%

1-Significantly different from non-Hispanic whites & Mexican-Americans; 2-Significantly different from 18-29 yrs old; 3-Significantly different from females; * Estimate unstable. Based on fewer than 10 HIV+ persons. Note: nationally representative sample of the civilian, noninstitutionalized household population. Source: CDC, NCHS, National Health and Nutrition Examination Survey, 1999-2006.

Estimated AIDS Cases and Deaths, 1985-2006

AIDS Cases and Deaths in Thousands.

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AIDS Diagnoses	12.001	19.267	28.813	35.635	42.814	48.807	59.437	77.988	77.615	70.978	67.821	59.776	48.695	41.723	39.824	39.956	39.261	39.25	39.69	38.807	37.662	37.852
Deaths	6.978	12.152	16.4	21.097	27.802	31.553	36.72	41.399	45.494	50.664	51.74	38.621	22.648	19.129	18.459	17.895	18.149	17.628	17.283	16.982	16.865	14.627

1993 Definition implementation.

1995 Beginning of HAART.

Note: Data have been adjusted for reporting delays.

“Estimated AIDS Cases and Deaths, 1985-2006, U.S. and Dependent Areas.”

Estimated AIDS Prevalence, 1985-2006

AIDS Cases and Deaths in Thousands.

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Persons Living with AIDS	10.507	17.622	30.035	44.573	59.585	76.839	99.556	136.145	168.266	188.58	204.661	225.816	251.863	274.457	295.822	317.883	338.995	360.617	383.024	404.849	425.646	448.871

1993 Definition implementation.

99% increase in PLWA 1996-2006.

Note: Data have been adjusted for reporting delays. “Estimated AIDS Prevalence, 1985-2006—US and Dependent Areas.”

AIDS cases by race/ethnicity and year of diagnosis, 1985-2006

Percent of cases.

Year of Diagnosis	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
White, NH	59.2	59.2	57.4	54.1	52.1	49.7	48.1	46	41.9	39.4	38.6	34.9	31.8	30.6	30.1	28.7	28.1	28.7	27.7	28.6	28.50	29
Black, NH	25	24.9	26.4	28	29.8	31.7	32.7	34.9	37.8	39.7	40.4	43.7	46.3	47.8	48.1	48.9	49.2	49.1	49.3	49.1	48.3	47.8
Hispanic	14.7	14.8	15	16.8	16.9	17.5	18.1	17.8	19	19.5	19.4	19.7	20.3	19.8	19.8	20.2	20.4	19.7	20.5	19.8	20.7	20.4
A/PI	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.8	1	1.1	1.1	1.2	1.2	1.4
AI/AN	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4

Note: Data have been adjusted for reporting delays. "Proportion of AIDS Cases Among Adults and Adolescents, by Race/Ethnicity and Year of Diagnosis, 1985 – 2006, US and Dependent Areas."

AIDS Cases by Year of Diagnosis, 1985 – 2006

Percent of cases.

Year of Diagnosis	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
MSM sexual contact	64	64	61	58	57	55	53	50	47	46	45	43	41	40	40	39	40	41	41	42	42	43
Injection drug use (IDU)	19	19	21	24	25	26	27	28	30	30	29	29	29	27	26	26	24	23	22	21	20	19
High risk heterosexual contact*	3	3	4	5	6	8	9	11	13	15	17	20	23	25	26	28	29	30	31	31	31	32
Male-to-male sexual contact and IDU	9	9	9	8	8	8	8	8	8	7	7	7	7	6	6	6	6	5	5	5	5	

Note. Data adjusted for reporting delays and estimated proportional redistribution of cases initially reported without risk.* Heterosexual contact with a person known to have, or to be at high risk for, HIV infection. "Proportion of AIDS Cases Among Adults and Adolescents, by Transmission Category and Year of Diagnosis, 1985-2006—US and Dependent Areas."

Reported AIDS Cases and Population by Race/Ethnicity, 2006.

AIDS Cases.

N* = 37,911.

White	Black	Hispanic	Asian/Pacific Islander	American Indian/Alaska Native
30%	49%	19%	1%	1%

U.S. Population.

N = 299,398,484.

White	Black	Hispanic	Asian/Pacific Islander	American Indian/Alaska Native
67%	13%	15%	5%	1%

*Total includes 357 persons of unknown or multiple races. "Proportion of AIDS Cases and Population by Race/Ethnicity, Reported in 2006—50 States and DC."

HIV/AIDS Cases, Adults and Adolescents, 2006 — 33 States.

Males (n ≈ 25,928).

MSM	IDU	Heterosexual	MSM/IDU
67%	12%	16%	5%

Females (n ≈ 9,252).

Heterosexual	IDU	Other
80%	18%	1%

Note: Data from 33 states with confidential, name-based HIV reporting since at least 2003. Data have been adjusted for reporting delays and cases without risk factor information were proportionally redistributed. * Heterosexual contact with a person known to have, or to be at high risk for, HIV infection. "Proportion of HIV/AIDS Cases among Adults and Adolescents, by Sex and Transmission Category, 2006—33 States."

Estimated AIDS Cases in Males through 2006

- 81% of 973,354 cases of AIDS in adults and adolescents diagnosed through 2006, were males
 - 4% of cases in males were aged 13-24 years
 - 64% of cases in males aged 13-24 were attributed to male-to-male sexual contact

During 2006, 43% of adult and adolescent AIDS cases were MSM

Note: Data have been adjusted for reporting delays and for estimated proportional redistribution of cases in persons initially reported without an identified risk factor. "Estimated AIDS Cases in Adult/Adolescent Males through 2006, 50 States and DC."

Proportion of AIDS Cases, Male Adults & Adolescents, 2002-2006

Race/Ethnicity	Male-to-male sexual contact	Injection drug use (IDU)	Male-to-male sexual contact and IDU	Heterosexual contact	Other/Not identified
White not Hispanic	72%	11%	9%	7%	1%
Black not Hispanic	47%	22%	6%	24%	1%
Hispanic	54%	22%	6%	17%	1%
Asian/Pacific Islander	68%	10%	5%	15%	1%
American Indian/Alaska Native	57%	17%	15%	10%	1%

Note: Data adjusted for reporting delays and cases without risk factor information were proportionally redistributed.* Includes hemophilia, blood transfusion, perinatal exposure, and risk not reported or identified.”Proportion of AIDS Cases among Male Adults and Adolescents by Transmission Category and Race/Ethnicity, 2002-2006—US and Dependent Areas.”

Estimated AIDS Cases Among MSM, 1985-2006

Year of Diagnosis	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AIDS Cases	7,571	12,025	17,235	20,361	23,852	26,225	31,113	38,876	36,106	32,269	29,915	25,188	19,675	16,671	15,727	15,629	15,561	15,918	16,276	16,277	15,933	16,213
Percentage	64	64	61	58	57	55	53	50	47	46	45	43	41	40	40	39	40	41	41	42	42	43

Note: Data have been adjusted for reporting delays and for estimated proportional redistribution of cases in persons initially reported without an identified risk factor. "Estimated AIDS Cases Among MSM, 1985-2006, U.S. and Dependent Areas."

MSM AIDS Cases by Region and Race/Ethnicity, 2006.

Number of Cases.

Region	Northeast	Midwest	South	West
White	1302	1013	2510	1864
Black	1115	862	3201	532
Hispanic	687	225	1138	1151
Asian/Pacific Islander	61	20	38	166
American Indian/Alaska Native	6	9	14	35

Note: Data adjusted for reporting delays and estimated proportional redistribution of cases initially reported without risk. “Estimated Number of AIDS Cases among Adult and Adolescent MSM, By Region and Race/Ethnicity, 2006—50 States and DC.”

HIV/AIDS Cases among MSM by Age Group, 2001 – 2006, 33 States.

Year of Diagnosis	2001	2002	2003	2004	2005	2006
13-24	1,725	1,818	2,028	2,328	2,624	3,061
25-34	4,870	4,772	4,458	4,538	4,734	4,795
35-44	5,997	5,926	5,647	5,481	5,625	5,724
45-54	2,463	2,453	2,390	2,524	2,812	2,821
55+	1,026	941	886	1,008	1,038	1,064

Note: Data adjusted for reporting delays and estimated proportional redistribution of cases initially reported without risk. “Estimated Number of HIV/AIDS Diagnoses among Adult and Adolescent MSM, by Race, 2006—33 States.”

HIV/AIDS Cases among MSM aged 13-24, 2001-2006, 33 States.

Estimated number of HIV/AIDS diagnoses.

Year of Diagnosis	2001	2002	2003	2004	2005	2006
White	430	460	507	530	591	703
Black	938	957	1,113	1,316	1,523	1,811
Hispanic	330	371	360	431	449	481
Asian	9	9	16	16	26	32
American Indian	8	9	11	13	9	18

Note: Data adjusted for reporting delays and estimated proportional redistribution of cases initially reported without risk. "Estimated Number of HIV/AIDS Diagnoses among MSM aged 13-24, by Race, 2001-2006, 33 States."

Est. HIV/AIDS Cases among MSM, aged 13-24, 2006 – 33 states.

White	Black	Hispanic	Asian/Pacific Islander	American Indian/Alaska Native
23%	59%	16%	1%	1%

Note: Data adjusted for reporting delays and estimated proportional redistribution of cases initially reported without risk. "Estimated Proportion of HIV/AIDS Diagnoses among MSM aged 13-24, by Race, 2006—33 States."

Rates of Est. HIV/AIDS Cases, 2006—33 States.

Cases per 100,000 population.

	Asian/Pacific Islander	White	American Indian/Alaska Native	Hispanic	Black
Males	13.5	16.7	17.7	50.9	119.1
Females	3.2	2.9	4.6	15.1	56.2

Note: Data have been adjusted for reporting delays. "Estimated Rates of HIV/AIDS Diagnoses among Adults and Adolescents, 2006—33 States."

AIDS Cases, Female Adults and Adolescents, 2002-2006.

Race/Ethnicity	Injection drug use	Sex with injection drug user	Sex with men of other or unspecified risk*	Other/Not identified**
White not Hispanic	36%	14%	48%	2%
Black not Hispanic	25%	11%	62%	2%
Hispanic	27%	13%	58%	2%
Asian/Pacific Islander	16%	12%	67%	5%
American Indian/Alaska Native	41%	14%	42%	3%

Note: Data adjusted for reporting delays; cases without risk factor information were proportionally redistributed.*Heterosexual contact with a man known to have, or to be at high risk for, HIV infection.

** Includes hemophilia, blood transfusion, perinatal exposure, and risk not reported or identified. US and Dependent Areas.

HIV/AIDS in Adolescents, 13-19 years, 2006.

White	African American	Hispanic	Asian/Pacific Islander	American Indian/Alaska Native
14%	70%	14%	1%	1%

No. =1,373*

Note: Data have been adjusted for reporting delays. * Includes 4 persons of unknown race or multiple races. "Proportion of HIV/AIDS Cases among Adolescents 13 to 19 Years of Age, by Race/Ethnicity, Diagnosed in 2006—33 States."

Prevalence of Adults and Adolescents Living with AIDS 2005.

Rate (per 100,000 population).

- Alabama. 98.2.
- Alaska. 60.7.
- Arizona. 98.9.
- Arkansas. 92.3.
- California. 207.2.
- Colorado. 104.4.
- Connecticut. 252.1.
- Delaware. 247.2.
- District of Columbia. 2,016.5
- Florida. 304.8
- Georgia. 227.7
- Hawaii. 115.1
- Idaho. 26.4
- Illinois. 153.1.
- Indiana. 77.
- Iowa. 35.
- Kansas. 56.1.
- Kentucky. 74.1.
- Louisiana. 229.
- Maine. 45.2.
- Maryland. 311.8
- Massachusetts. 162.5.
- Michigan. 79.
- Minnesota. 54.
- Mississippi. 133.
- Missouri. 113.1
- Montana. 25.9.
- Nebraska. 53.1.
- Nevada. 145.9.
- New Hampshire. 50.
- New Jersey. 236.8.
- New Mexico. 78.6.
- New York. 438.1.
- North Carolina. 115.6.
- North Dakota. 13.6.
- Ohio. 74.
- Oklahoma. 74.5
- Oregon. 91.7
- Pennsylvania. 177.3.
- Rhode Island. 143.6.
- South Carolina. 195.9.
- South Dakota. 21.6.
- Tennessee. 127.7.
- Texas. 181.1.
- Utah. 59.3
- Vermont. 44.6.

Virginia. 132.5.
Washington. 102.8.
West Virginia. 48.4.
Wisconsin. 46.4.
Wyoming. 23.7.
American Samoa. 2.5.
Guam. 28.4.
Northern Mariana Islands. 4.4.
Puerto Rico. 341.8.
U.S. Virgin Islands. 355.

Total rate=174.5*

Note: Data have been adjusted for reporting delays. Includes persons whose area of residence is unknown or missing. “Estimated Prevalence Rates for Adults and Adolescents Living with AIDS (per 100,000 population), 2006—US and Dependent Areas.”

AIDS Cases among Adults and Adolescents, 2006.

Metropolitan Population.
By Region.*

Northeast. N = 9,481. >500,000 = 88%. 50,000–500,000 = 7%. Non-metropolitan area = 4%.
Midwest. N = 4,160. >500,000 = 79%. 50,000–500,000 = 12%. Non-metropolitan area = 9%.
South. N = 17,085. >500,000 = 76%. 50,000–500,000 = 12%. Non-metropolitan area = 11%.
West. N = 6,065. >500,000 = 89%. 50,000–500,000 = 7%. Non-metropolitan area = 4%.

Note: Data adjusted for reporting delays. * Region totals include persons whose metro. area of residence is unknown or missing. “Proportion of AIDS Cases Among Adults and Adolescents, by Region and Size of Place of Residence, Diag. in 2006, 50 States and DC.”

Estimated Perinatally Acquired AIDS Cases, 1985-2006.

Year of Diagnosis	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Number of Cases	170	269	395	495	618	698	706	857	839	779	652	507	322	240	195	125	121	104	70	53	52	37

Note. Data have been adjusted for reporting delays.

“Estimated Number of Perinatally Acquired AIDS Cases by Year of Diagnosis, 1985-2006—50 States and DC.”

Challenges and Opportunities.

Epidemic drivers: MSM and African Americans

MSM

- Safer sex fatigue
- HIV treatment optimism
- Substance abuse (e.g., alcohol, methamphetamine)
- Changing demographic characteristics
- Evolving social and sexual networks (e.g., internet chat rooms)

African Americans

- Higher rates of other STDs
- Substance abuse
- Incarceration
- Poverty
- Racism and discrimination
- Stigma and homophobia

Domestic HIV/AIDS Prevention Challenges:

- One quarter of those with HIV infection undiagnosed
- MSM remain at increased HIV risk
- African Americans and other communities of color at increased HIV risk
- Availability of effective treatments has led to complacency about HIV risk

Domestic HIV/AIDS Prevention Challenges:

- HIV/AIDS stigma persists
- Changing patterns and distribution of substance abuse (e.g., methamphetamines)
- Internet as means for meeting partners
- Need more culturally competent interventions and greater scale up of interventions

Domestic HIV/AIDS Prevention Priorities

- Increase knowledge of HIV infection through testing
- Identify effective interventions for at-risk and HIV-infected persons and increase the use of these interventions
- Ensure cost-effective allocation of prevention resources to match changing profile of the epidemic
- Implement surveillance systems to better monitor HIV epidemic, risk behavior, and prevention programs

Recent Accomplishments:

- Decreased HIV/AIDS cases among IDUs
- Decreased HIV/AIDS cases among females
- Increased number of persons who have been tested for HIV
- Decreased pediatric AIDS cases to 37 in 2006

Recent Accomplishments:

Refocused HIV prevention efforts

- More than 3,600 agencies trained on effective behavioral interventions
- New programs for YMSM of color and transgender persons
- New research on biomedical prevention strategies
- Heightened National Response to HIV/AIDS Among African Americans
- 2007 HIV Testing initiative
- Early diagnosis screening program

Recent Accomplishments:

- Improved surveillance, monitoring, and evaluation
- Confidential, name-based HIV reporting adopted in 48 states
- New HIV incidence and behavioral surveillance systems
- Program Evaluation and Monitoring System (PEMS)
- Medical Monitoring Project

Major initiatives.

Advancing the CDC 2006 HIV Testing Recommendations.

- Major citywide testing initiatives
 - NY, LA, Oakland, DC
- Numerous emergency departments making HIV screening routine
- Supportive policies issued by 38 professional organizations
- Some states have harmonized laws
 - 14 states have changed laws to remove barriers to testing; 7 states have introduced legislation.* (*As of March 2008.)

FY07 HIV Testing Initiative.

- FY 2007 \$45 million
 - \$35 million to health departments to increase HIV testing for populations disproportionately affected by HIV—primarily African Americans unaware of their HIV status
 - \$10 million to support training, capacity building, social marketing, program evaluation, and technical assistance
- HIV tests available mainly in clinical settings – EDs, CHCs, STD clinics, and correctional health facilities

*As of March 2008

FY07 HIV Testing Initiative Awardees:

States Awarded funds:

California.
Michigan.
Ohio.
New York.
Massachusetts.
Connecticut.
Pennsylvania.
New Jersey.
Maryland.
Virginia.
Tennessee.
North Carolina.
South Carolina.
Georgia.
Florida.
Louisiana.

Cities Awarded funds:

Los Angeles.
Chicago.
Houston.
New York City.
Philadelphia.
Washington, D. C.

Heightened National Response in African Americans.

- Four key pillars:
- Expand the reach of prevention services
- Increase opportunities for diagnosing and treating HIV/AIDS
- Develop new, effective prevention interventions for African American
- Mobilize broader community action

Community Mobilization.

The March 8, 2007 Partnership meeting brought together >75 leaders to mobilize response to HIV/AIDS in the African American community.

[African American community leaders speaking.
Participants in partnership meeting.]

Example of Heightened National Response Activities.

- Dr. Ronald Mason, President, Jackson State University
- Led the development of a campus wide HIV/AIDS awareness and prevention agenda for JSU.
- Sent a letter to the presidents of 53 historically black colleges and universities discussing the importance of the education sector's involvement in HIV Prevention.

[Doctor Ronald Mason speaking at podium.]

Take Charge. Take the Test.

- Single African American women
- Ages 18-34
 - Who make less than \$30,000 per year
 - Have some college education or less
 - Reside in specific areas of Philadelphia and Cleveland based on AIDS data
 - Are having unprotected sex with men

[Young African American woman smiling.]

HIV. Take Charge. Take the Test.

Summary

- HIV/AIDS continues to evolve with marked geographic heterogeneity and a high burden among African Americans and MSM
- Stigma, homophobia, prevention workforce issues, and the Internet are major challenges
- Renewed commitment to increased partnerships, testing, and integration of services.

[Doctor wearing mask, glasses, and rubber gloves. Young man smiling. Young African American woman.]

Thank you.

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

<http://www.cdc.gov/nchhstp>

[Woman wearing AIDS ribbon.]