

Estimated Prevalence of Undiagnosed HIV Infection in the United States at the End of 2006

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Background

- ❖ In the United States, more than 1 million persons age ≥13 years were estimated to be living with HIV infection—both diagnosed as well as undiagnosed—at the end of 2006
- ❖ The number of persons living with HIV infection is increasing, due in part to use of effective antiretroviral therapies
- ❖ Undiagnosed persons can't benefit from medical therapy
- ❖ Persons with undiagnosed HIV infection may disproportionately transmit HIV to others
- ❖ Information on persons living with HIV infection is important for guiding prevention decisions, as well as for resource allocation

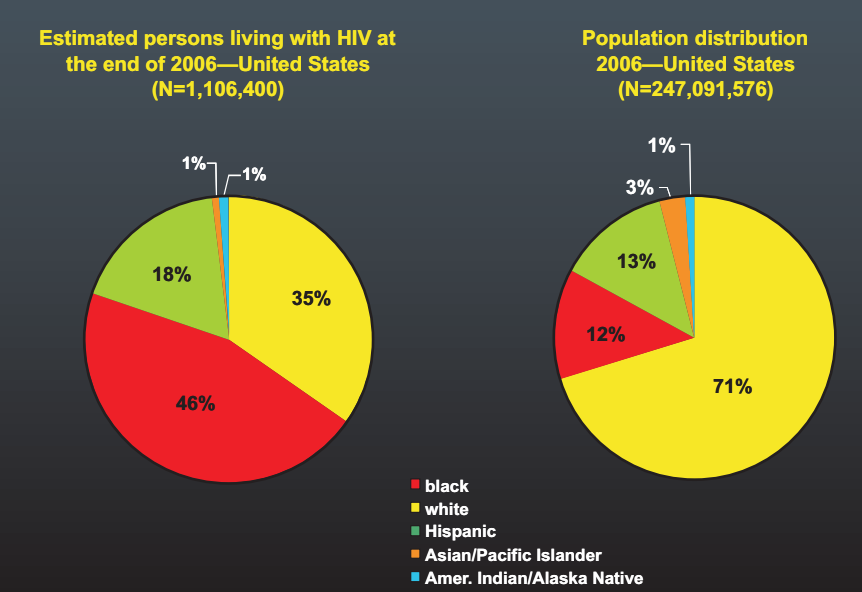
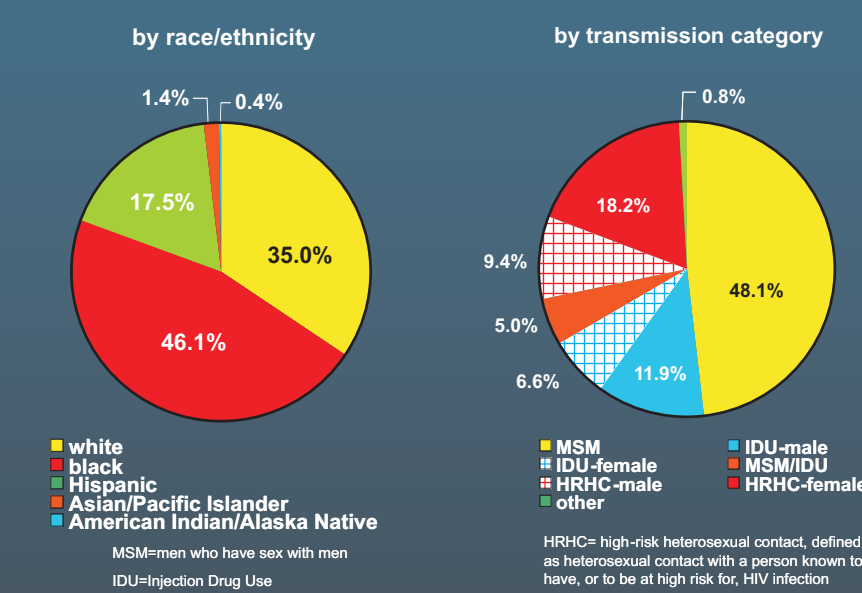
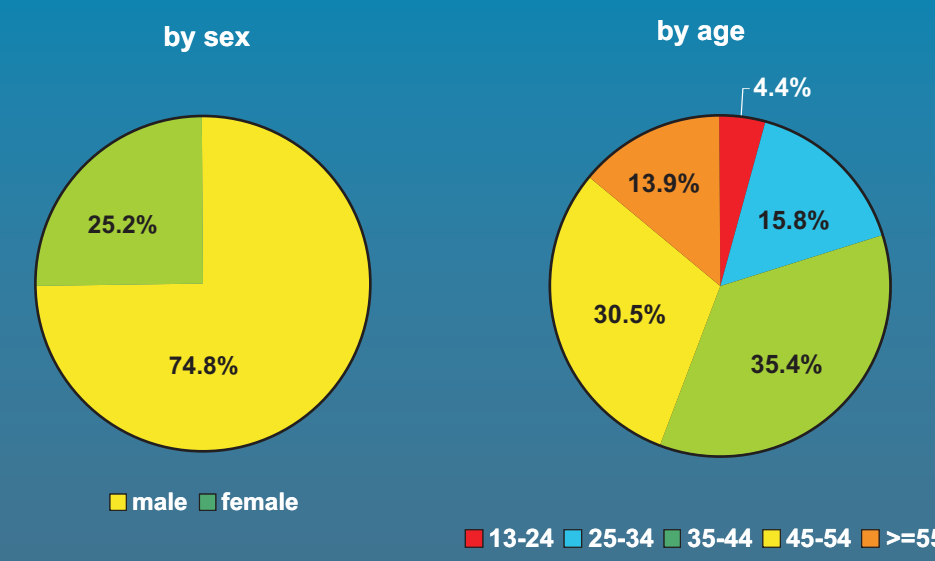
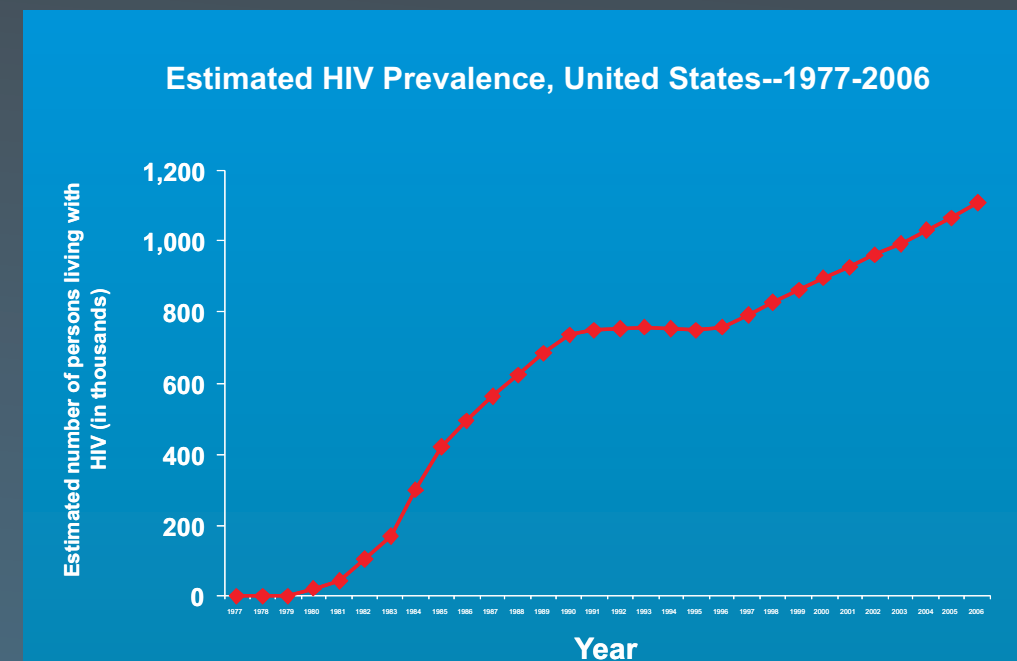
Objectives

- ❖ To describe characteristics of persons estimated living with HIV infection in the United States
- ❖ To describe characteristics of persons estimated living with undiagnosed HIV infection in the United States

Methods

- ❖ Extended back-calculation method to calculate HIV prevalence, based on:
 - ❖ Time of first HIV diagnosis
 - ❖ Disease severity (AIDS diagnosis in same year as HIV diagnosis)
- ❖ Used AIDS data from 50 states and DC, HIV data from 40 states
- ❖ Data adjusted for reporting delays and redistribution of unknown HIV transmission categories

Estimated persons living with HIV in the United States at the end of 2006:
N=1,106,400
(95% CI 1,056,400—1,156,400)



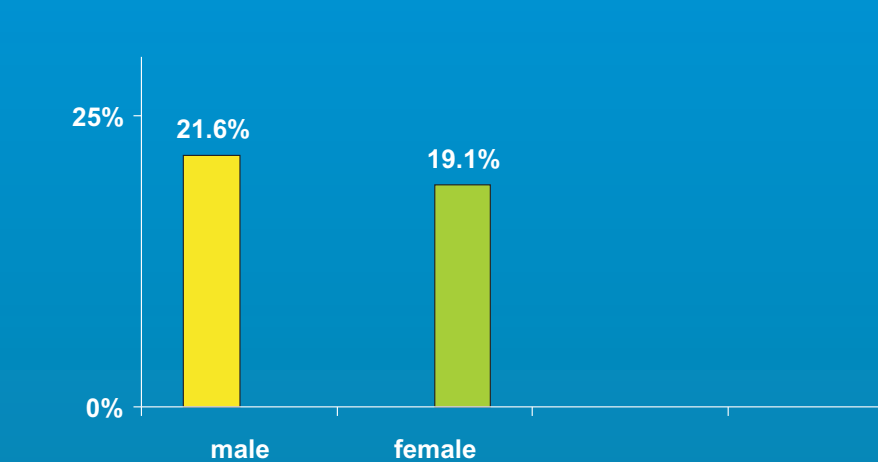
Estimated persons living with undiagnosed HIV infection in the United States at the end of 2006:
232,700
(95% CI 221,200—244,200)
Overall, 21.0% undiagnosed (232,700/1,106,400)

Undiagnosed HIV prevalence and rates

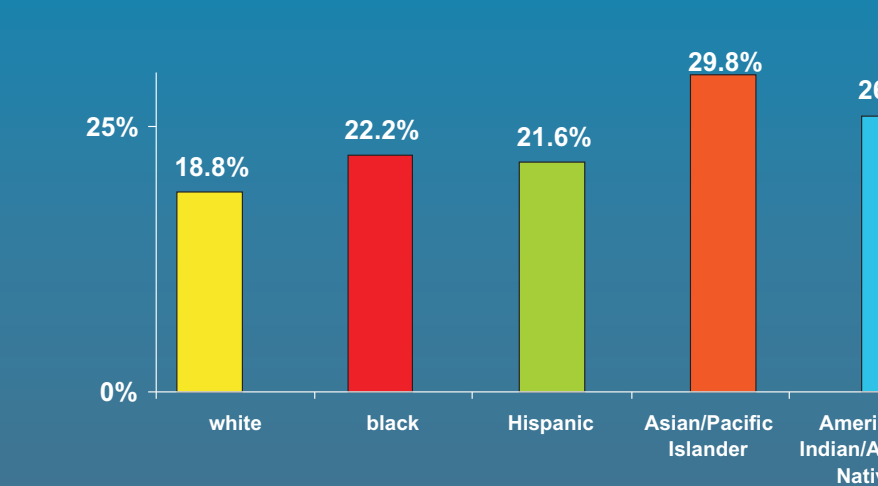
	Persons Living with undiagnosed HIV	Undiagnosed Prevalence Rate (per 100,000 population)
Overall	232,700	94.2
Sex		
male	179,400	148.6
female	53,200	42.1
Race		
white	72,000	42.2
black	113,100	380.3
Hispanic	41,900	126.4
Asian/Pacific Islander	4,500	38.6
American Indian/Alaska Native	1,200	60.4
Age (years)		
13-24	23,100	45.4
25-34	49,700	122.9
35-44	76,100	174.3
45-54	54,300	125.6
>=55	29,300	42.5
Transmission Category		
male-to-male sex	124,900	---
IDU*-male	19,000	---
IDU*-female	10,000	---
male-to-male sex and IDU*	6,700	---
HRHC**-male	27,900	---
HRHC**-female	42,700	---
other***	1,600	---

* IDU=Injection Drug Use
**HRHC= high-risk heterosexual contact, defined as heterosexual contact with a person known to have, or to be at high risk for, HIV infection
*** Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified
--- Rates not calculated due to lack of population denominator data

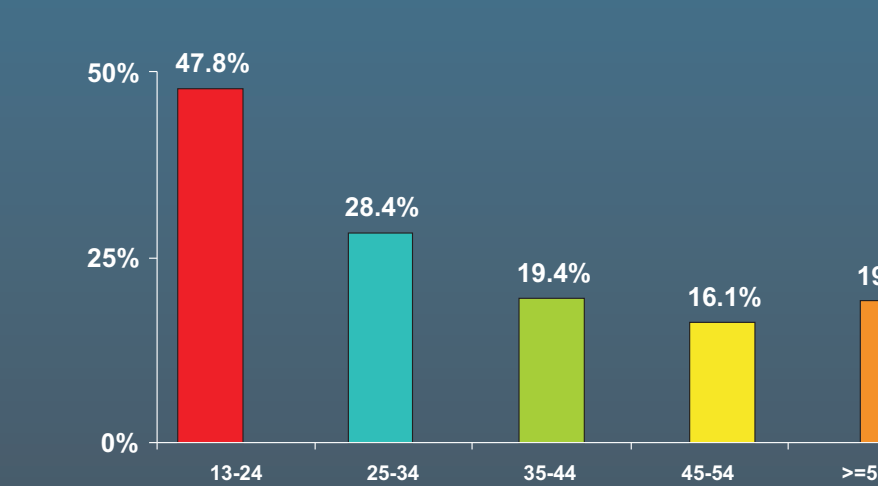
Percent undiagnosed by sex



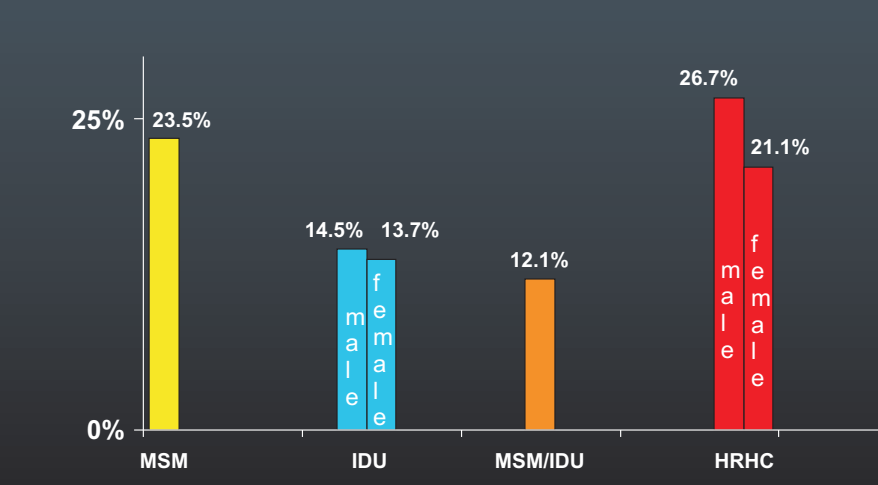
Percent undiagnosed by race/ethnicity



Percent undiagnosed by age



Percent undiagnosed by transmission category



Conclusions

- ❖ Number of persons living with HIV infection continues to increase
- ❖ Population groups are disproportionately affected by HIV
 - ❖ Blacks make up 46% of persons living with HIV but only 12% of the general population
 - ❖ All racial/ethnic minority groups have greater percentage of undiagnosed HIV compared to whites
 - ❖ Male HRHC and MSM have the highest percentages of undiagnosed HIV

Public Health Implications

- ❖ Increasing prevalence of persons with HIV infection is challenge for providing medical, prevention and social services
- ❖ Culturally appropriate strategies needed to address disparities in disease
- ❖ Diagnosing HIV-positive persons early in the course of disease has potential to decrease new infections and reduce HIV prevalence over time

Limitations

- ❖ Data from only 40 states with integrated HIV and AIDS surveillance reporting
 - ❖ HIV data unavailable from some high morbidity states: California, Illinois, Maryland
- ❖ Not all persons with HIV have been tested, diagnosed, and reported
- ❖ Adjustments for redistribution of unknown HIV transmission risk may not be accurate

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