1. HIV/AIDS Surveillance Update

Amy Laney, PhD
Acting Deputy Director
Division of HIV/AIDS Prevention
Centers for Disease Control & Prevention
Presidential Advisory Council on HIV/AIDS
March 25, 2009

2. Overview

- HIV incidence
- HIV/AIDS diagnoses
- Prevalence estimates
- Behavioral Surveillance
- Implications/Looking ahead

3. HIV Incidence in the US

- New incidence estimates show that the HIV epidemic is, and has been, worse than previously known
  - 56,300 new HIV infections in 2006
  - 40% higher than prior estimate


5. Estimated Percentage of New HIV Infections, by Race/Ethnicity, 2006*

6. Estimated Rates of New HIV Infections, 2006*

7. Estimated Percentage of New Infections by Sex and Race/Ethnicity, United States, 2006

8. Estimated Percentage of New Infections by Transmission Category, 2006*

9. Estimated Percentage of New Infections by Sex and Transmission Category, United States, 2006

10. Estimated Percentage of New HIV Infections, by Age, 2006

11. Estimated Rates of New HIV Infections, by Age, 2006*

12. Estimated Number of New HIV Infections in MSM, by Race/Ethnicity and Age Group, United States, 2006

13. HIV/AIDS Diagnoses


15. Estimated Percentages of HIV/AIDS Cases among Adults and Adolescents, by Sex, 2007, 34 States*

16. Estimated Percentages of HIV/AIDS Cases by Race/Ethnicity, 2007—34 States*

17. Estimated Percentages of HIV/AIDS Cases among Adults and Adolescents, by
Transmission Category, 2007—34 States*

18 Estimated Rates of HIV/AIDS Cases among Adults and Adolescents, by Sex and Race/Ethnicity, 2007—34 States*

19 Reported AIDS cases among adults and adolescents, by area of residence at diagnosis, 2006

20 Rate of reported AIDS cases for selected metropolitan statistical areas (Divisions) of residence, 2007

21 Reported AIDS case rates by region, 2006

22 Estimated numbers of cases of HIV/AIDS, by year of diagnosis, 2004-2007, 34 states*

23 Possible Reasons for Increases in HIV Diagnoses
   • Changes in surveillance practices
   • Increase in HIV testing
   • Increase in new HIV infections
   • Estimates for most recent year least stable

24 Prevalence Estimates

   • In 2006, 1.1 million people were living with HIV in the United States.
     – Includes 21% undiagnosed infections, down from previous estimate of 25%

26 Estimated HIV Prevalence, United States—1977 to 2006

27 Behavioral Surveillance

28 National HIV Behavioral Surveillance System (NHBS)


31 Prevention Counseling Session* in the preceding 12 months, by age in years, NHBS-MSM, November 2003-April 2005 (N=10,030)

32 HIV Prevalence in MSM in 5 Cities – NHBS, 2004-2005

33 Proportion with Undiagnosed HIV Infection in MSM
Implications and Looking Ahead

Implications of Higher Incidence Estimate and Increasing Prevalence
- More people will need HIV treatment and care
- More people living with HIV will need prevention services

Implications for MSM
- Incidence and Diagnosis data show that MSM continue to account for a substantial proportion of the epidemic in the US.
- Behavioral surveillance data show that risk behaviors are prevalent among MSM and prevention services may not be reaching enough people

CDC Professional Judgment
- CDC asked by Congress to develop professional judgment budget
  - Doubles CDC’s domestic HIV budget
  - Additional $877 million in FY2009
    - Additional $4.8 billion over 5 years

Priorities
- Increase HIV testing and number of people reached by HIV prevention programs
- Develop new tools to fight HIV
- Improve systems to monitor HIV and related risk behaviors and evaluate prevention programs

Prevention Works
- HIV testing significantly reduces risk of transmission among people with previously undiagnosed infection
- Individual and group interventions for people previously diagnosed with HIV significantly reduce risk
- Individual, group, and community interventions for at-risk persons significantly reduce risk

Prevention Works
- HIV incidence is declining among injection drug users and heterosexuals
- Mother-to-child transmission dramatically reduced
- Fewer people have undiagnosed HIV infection
  - Decreased from 25% to 21%

Think about the costs:
- treatment vs prevention
  - Treatment
    - $168,600 per case (diagnosed in 2002)*
    - 56,300 infections in 2006 = $9.5 billion in treatment costs
    - Preventing 240,000 infections by 2020 could save $40.5 billion in treatment costs

Opportunity & Responsibility
- We know prevention works when we apply what we’ve learned
• We have a tremendous opportunity and responsibility to change the future course of the epidemic

Estimated Number of New HIV Infections, by Sex, 1977-2006*

Estimated Number of New HIV Infections, by Race/Ethnicity, 1977-2006*

Estimated Number of New HIV Infections
by Transmission Category, 1977-2006