

HIV and Viral Hepatitis in the United States: Urgency, Focus, Action

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on HIV and Viral Hepatitis Diagnosis, Prevention, and Access to Care
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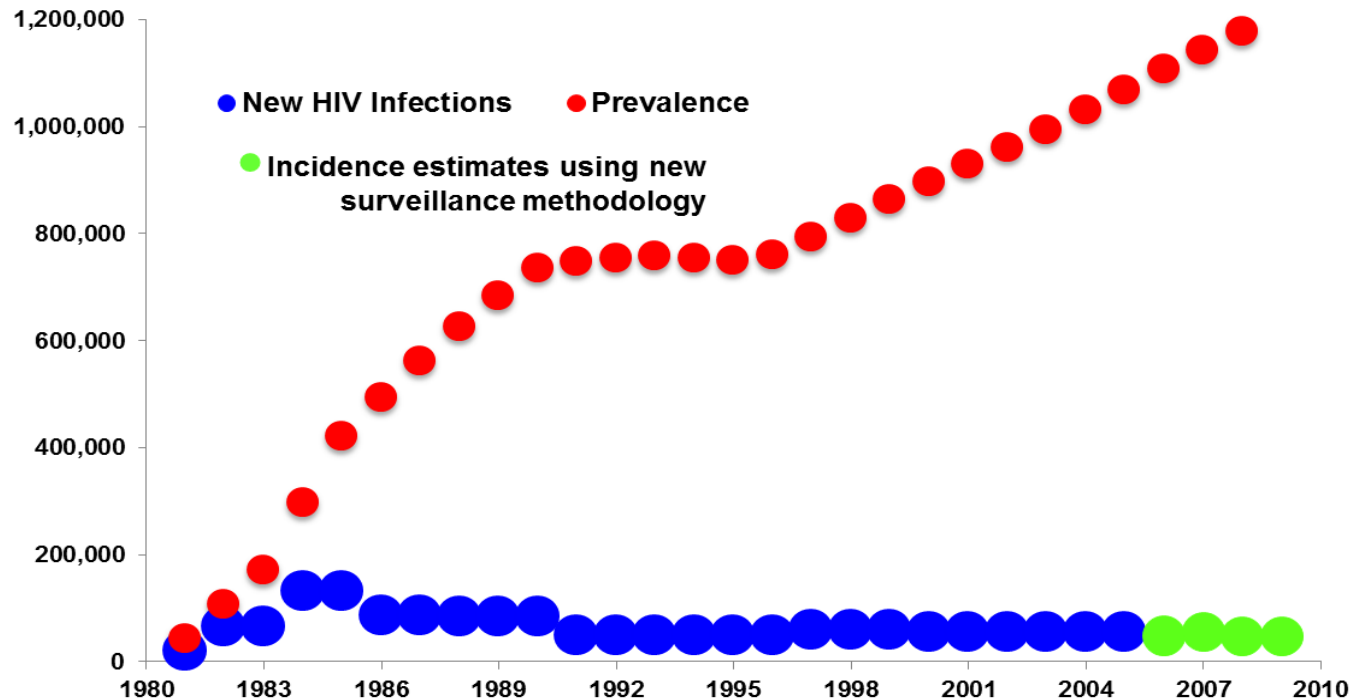


Overview

- 1. HIV in the U.S. today**
- 2. Viral Hepatitis B and C in the U.S.**
- 3. Enhancing Prevention: New CDC Approaches to HIV and Viral Hepatitis B and C**

1. HIV/AIDS in the U.S. Today

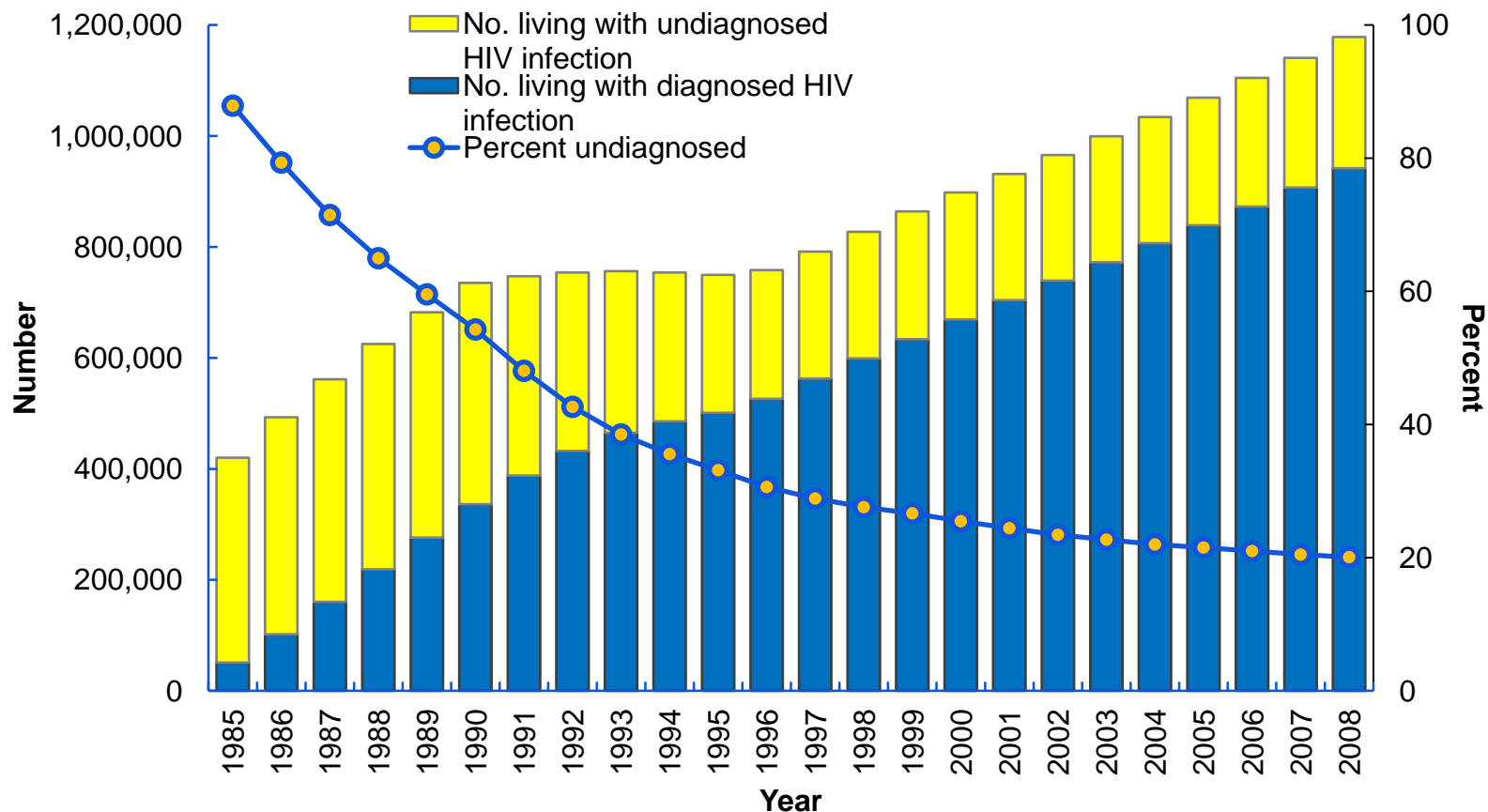
Trends in HIV Prevalence and Incidence, United States



SUMMARY

- An estimated **1.1 million people** in the United States living with HIV
- Approximately **50,000 Americans infected** and **18,000 deaths** annually
- HIV prevalence **increased by 8%** from 2006 to 2009
- HIV transmission rate has **declined 9%** from 2006 to 2009

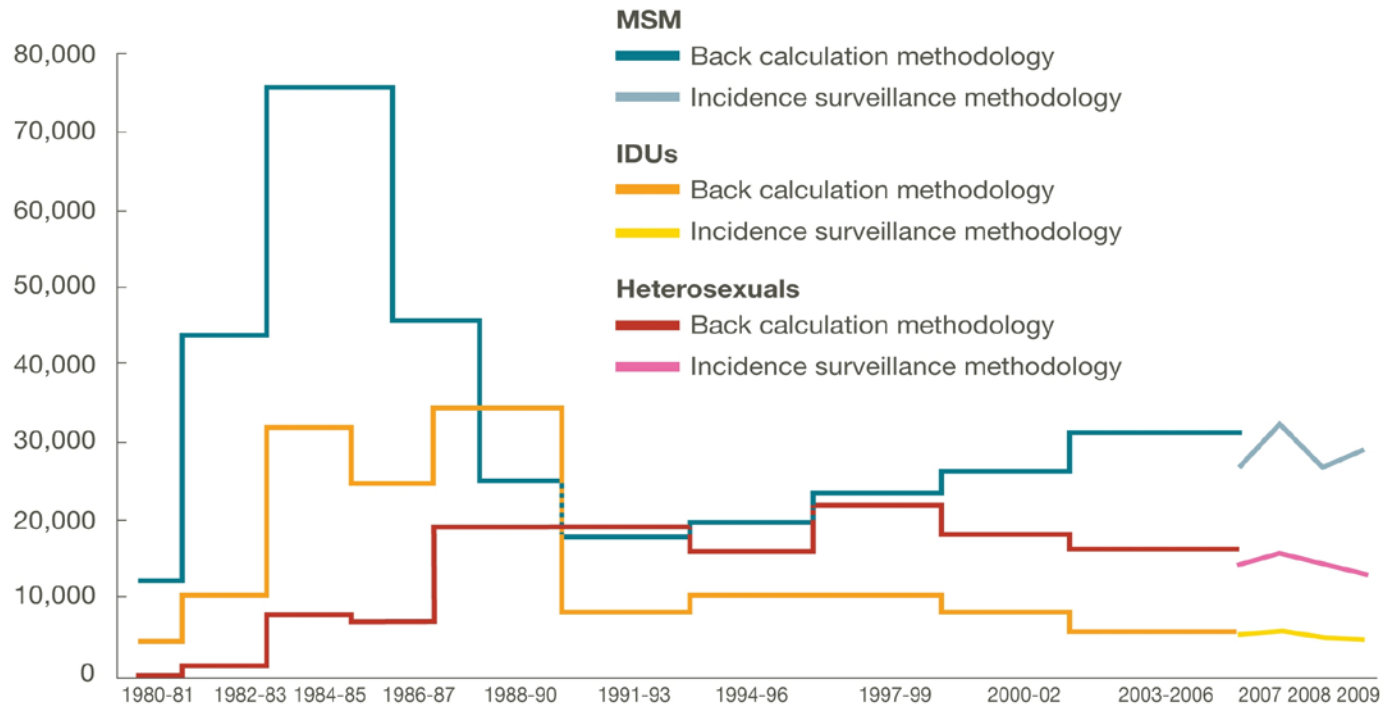
Estimated Number of Adults and Adolescents Living with HIV Infection (Diagnosed and Undiagnosed)* and Percent Undiagnosed† – United States, 1985 - 2008



*HIV prevalence was estimated based on national HIV surveillance data for adults and adolescents (aged ≥ 13 years at diagnosis) reported through June 2010 using extended back-calculation.

†The number of undiagnosed HIV infections was derived by subtracting the estimated number of diagnosed living cases from the estimated overall HIV prevalence

HIV Incidence by Transmission Category, United States, 1980-2009

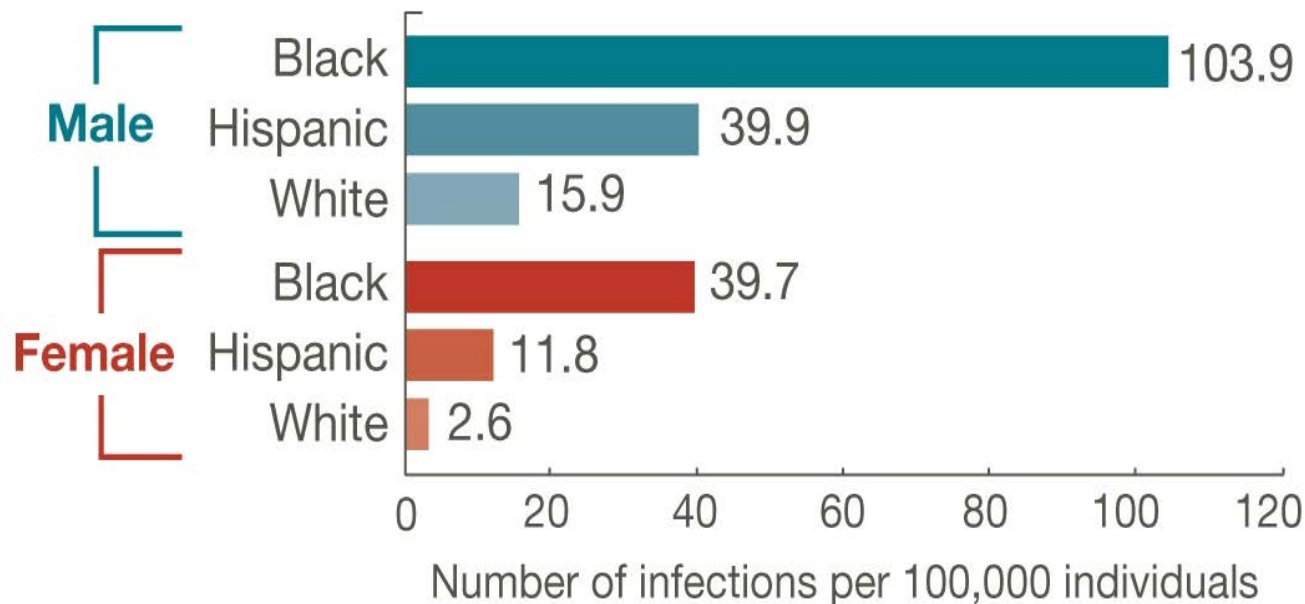


SUMMARY

- Overall HIV incidence **stable** for the past decade
- HIV incidence in IDUs has **declined by >80%** since peak in the 1980s
- All groups showing declines in HIV incidence **except MSM**
- Among MSM incidence has **doubled since nadir** in early 1990s
- HIV incidence increased significantly in young Black MSM (50%) between 2006-2009

HIV Health Inequities

HIV incidence by gender and race/ethnicity

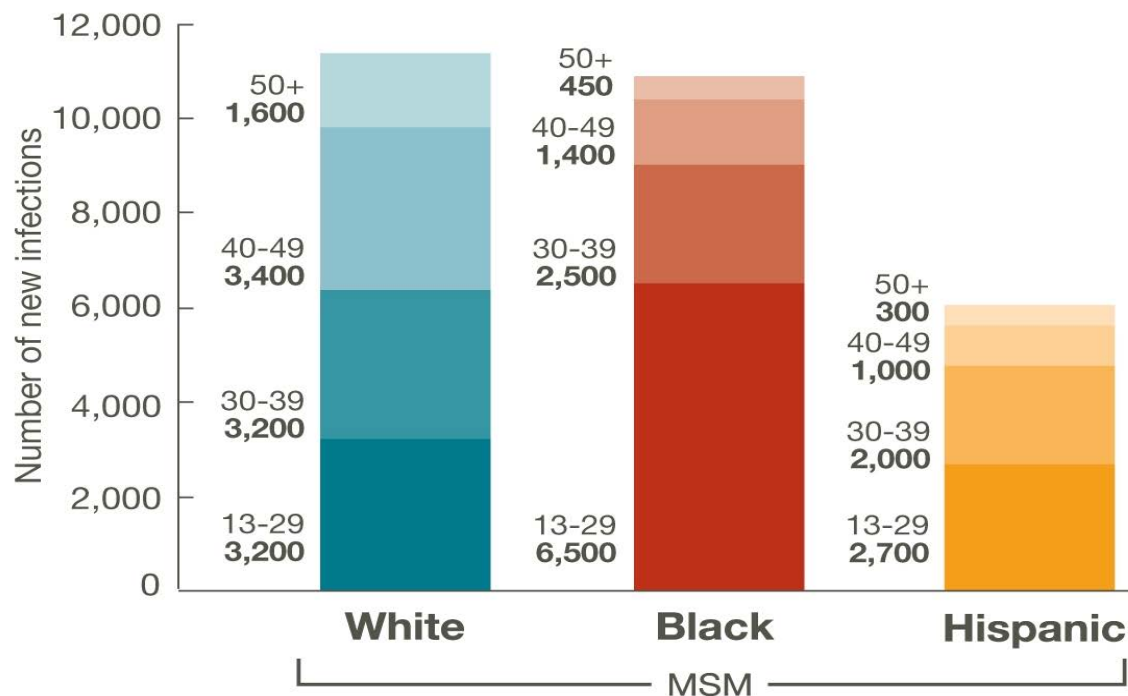


SUMMARY

- In 2009, the rate of new HIV infection for black men was more than **6x** as high as that of white men, and **2.5x** as high as that of Latino men or black women.
- In 2009 there were **11,200 (23%) new HIV infections** among US women.
- The rate of new HIV infections among black women was **15x** that of white women, and **over 3x** the rate of Hispanic/Latina women
- **1 in 16 black men and 1 in 32 black women** will be diagnosed with HIV

HIV Health Inequities

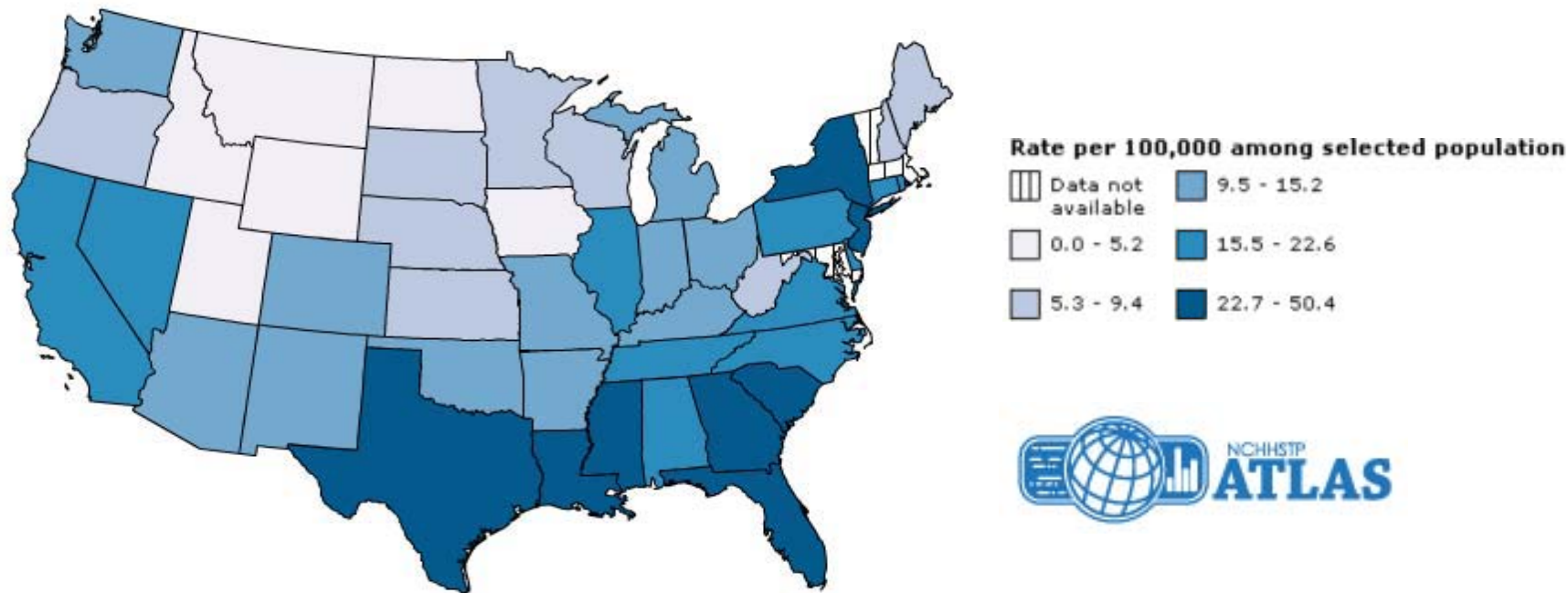
HIV incidence in men who have sex with men



SUMMARY

- About **39% (or 19,000)** of Americans infected in 2009 are 13 to 29 years old
- Young MSM accounted for **27% of new HIV infections** in the US and 69% of new HIV infections among persons aged 13–29.
- Among MSM aged 13 to 24 diagnosed with HIV in 2010, **58% were Black**
- Also, black MSM experienced the **largest increase** among young MSM in diagnosed HIV infections—from 2,925 diagnoses in 2007 to 4,358 diagnoses in 2010

Rates of Diagnoses of HIV infections among Adults and Adolescents, 2010—46 States and 5 U.S. Dependent Areas

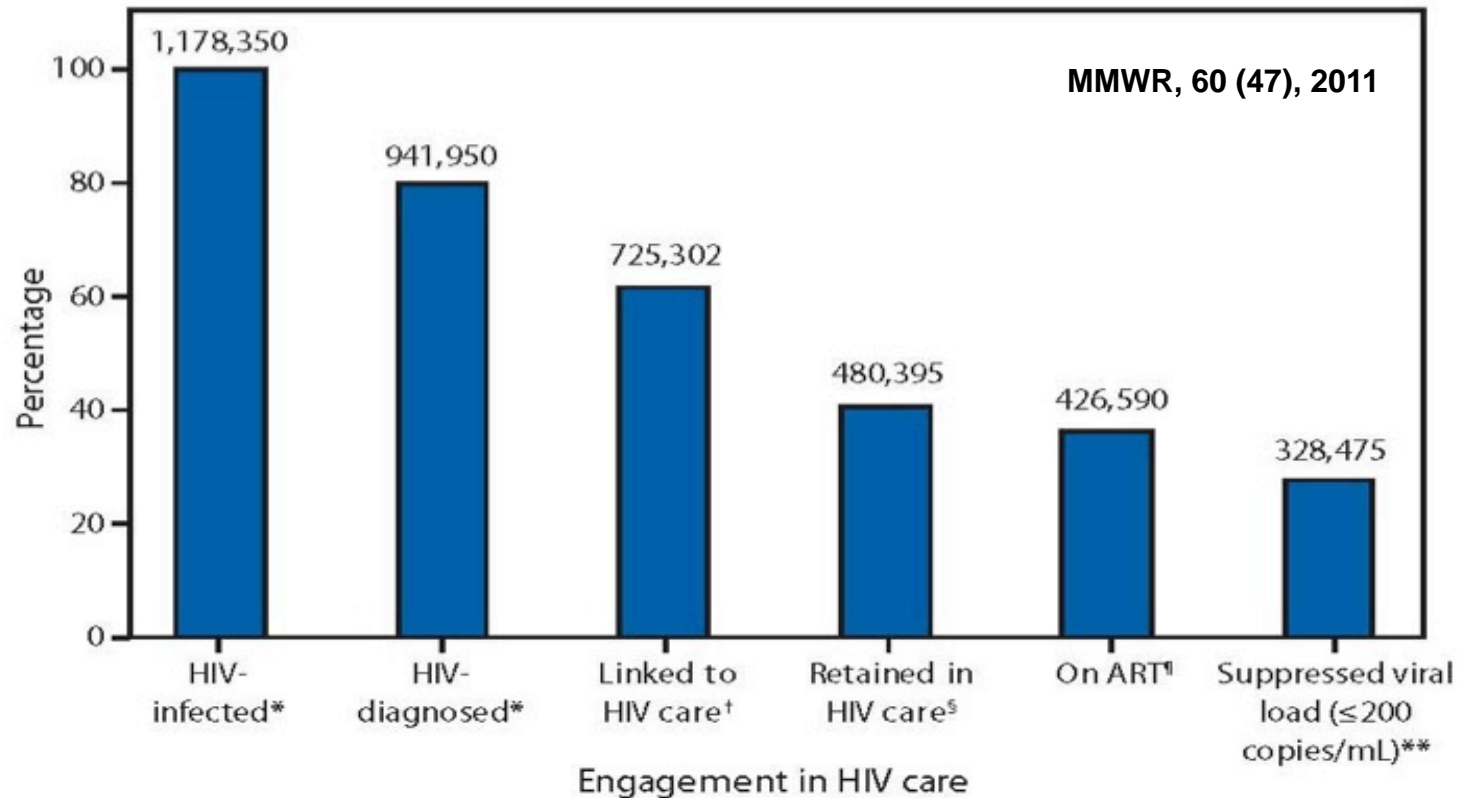


SUMMARY

Of the 46 states with long-term confidential reporting:

- ➔ **Four states account for an estimated 50%** of persons living with a diagnosis of HIV infection at the end of 2009: New York, California, Florida and Texas
- ➔ **Ten states account for an estimated 73%** of persons living with a diagnosis of HIV infection at the end of 2009: New York, California, Florida, Texas, New Jersey, Georgia, Illinois, Pennsylvania, North Carolina and Virginia

The Continuum of HIV Prevention, Care and Treatment in the United States, 2010



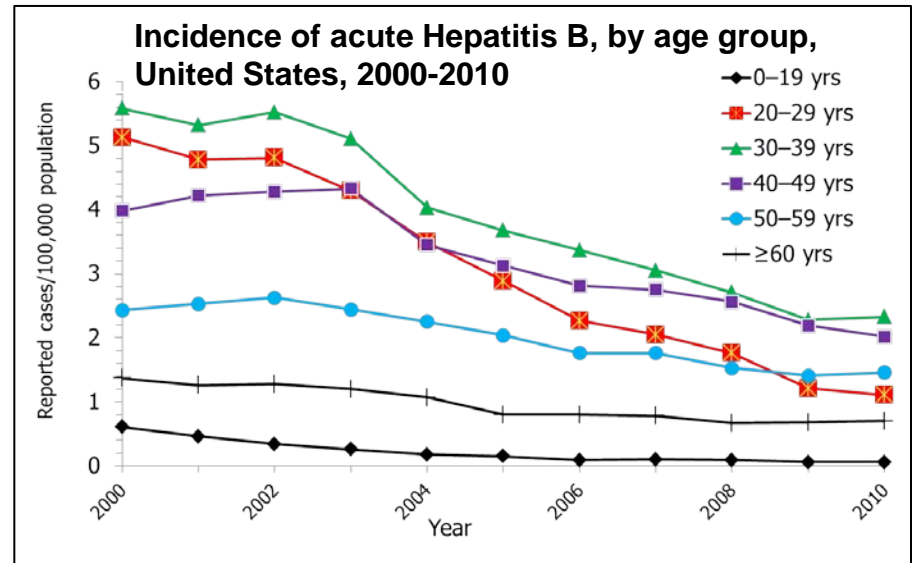
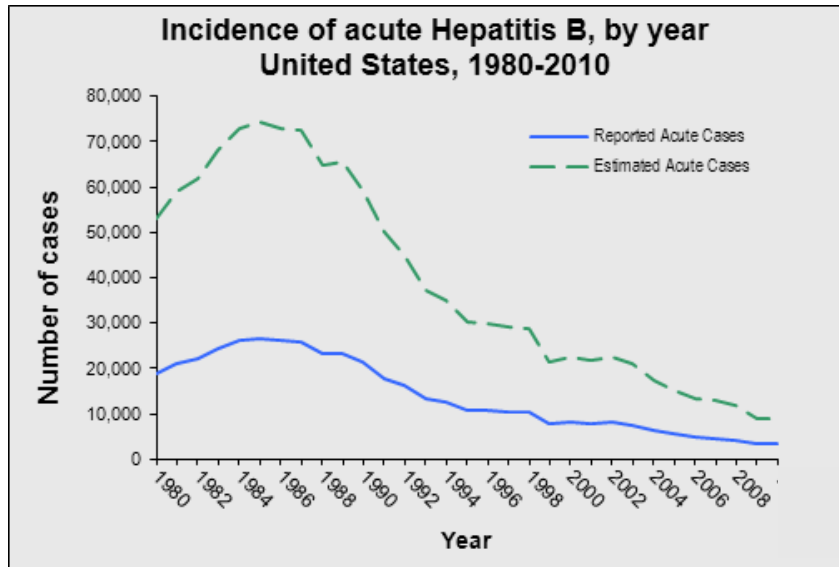
SUMMARY

- ➔ Of the estimated 942,000 persons with HIV who were aware of their infection, approx. **77% were linked to care**, and **51% remained in care**
- ➔ **In care**, 45% had prevention counseling; 89% given ART; 77% virally suppressed
- ➔ Estimated **28% of all HIV-infected** persons have a suppressed viral load



Acute Hepatitis B in the United States

Epidemiological Update



SUMMARY

- Vaccine-based elimination strategy (1991) successful, with high infant, child **vaccine** coverage
- Adults represent **95% of new HBV infections**.
 - In 2010, 38,000 est. new infections, with highest rates were among persons aged 30-39 years and lowest among adolescents and children
 - **Infants of HBsAg+ mothers** continue to become infected
 - Adults at risk for infection include **occupationally-exposed, dialysis patients, MSM, injection drug users, and STD clinic clients**

Chronic HBV Infection in the United States

Epidemiological Update

- ➔ Estimated prevalence of chronic HBV is **700,000 to 1.4 million**
- ➔ In 2009, **21,506 cases reported** to CDC, and over 50% of individuals were of Asian-Pacific Island heritage
- ➔ Perinatal programs: **80% of HBsAg+** mothers are foreign born
- ➔ A survey of 6,347 African refugees in Atlanta reported 11% HBsAG+
- ➔ Mortality: Asian Americans have 11-fold greater risk

Hepatitis C in the United States

Disease, Mortality, and Costs

⇒ HCV is a major cause of liver disease

- 40,000 (36%) of 114,000 of persons on liver transplant waitlist
- 50% of all persons with liver cancer (2.5% annual increase)

⇒ Increasing HCV disease (1996-2006) and mortality (1999-2007)

- 20-fold increase in liver cancer
- 50% increase in HCV-associated mortality from 1999 (7,555) to 2007 (15,106); median age 57 years
- 37% lifetime risk of HCV-related mortality

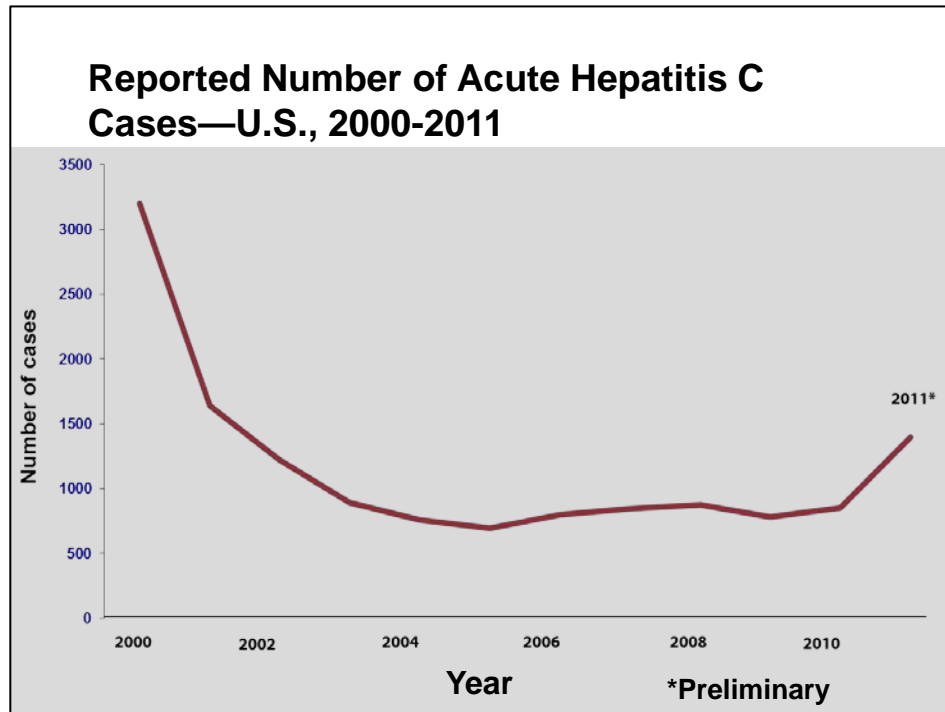
⇒ Substantial HCV-related costs

- Three-fold higher disability days (1.36 vs. 0.34) than other employees
- \$21,000 in annual health costs vs. \$5,500 others
- HCV clearance via therapy reduces annual care costs by half (\$1436 vs. \$717)



Recent HCV Trends in the United States

Falling or Low Incidence for HCV Not Assured



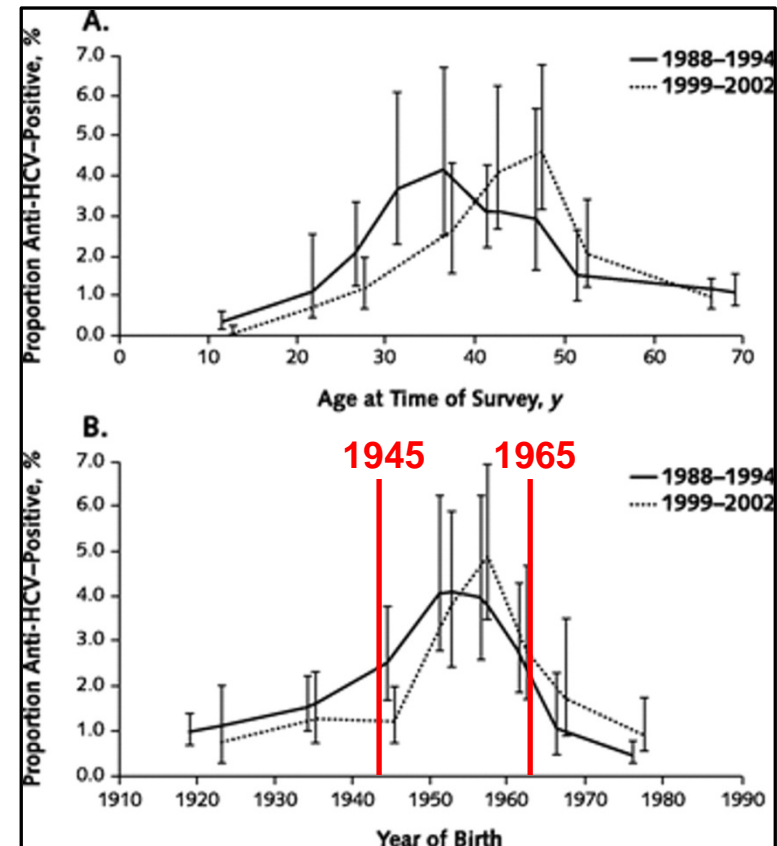
SUMMARY

- After remaining at about 800 reported cases/year from 2004 through 2010, there has been an **increase in acute HCV cases** to almost 1,400 reported cases in 2011 (preliminary data)
- Increases seen among **young adults (20-29 years old)** in some states, particularly among injection drug users

Viral Hepatitis C Prevalence in the U.S.

Addressing the highest risk birth cohort

- ➔ Estimated **3.2 million Americans** living with chronic HCV
- ➔ **Two out of three** HCV-infected were born between 1945-1965
- ➔ **1 out of 30 Americans** born 1945-1965 have HCV
 - Represents 81% of all U.S. adult chronic HCV infections
 - 67% have medical insurance
 - Infected population has modifiable disease co-factors
 - 45% report no risk for HCV
 - Represents 73% HCV-associated mortality



HIV and Viral Hepatitis Co-infection

Overlapping epidemics or syndemics

- ➔ About **25% of individuals** infected with HIV in the U.S. also infected with HCV
 - About 80% of injection drug users with HIV infection also have HCV
- ➔ About **10% of HIV infected in U.S.**, also infected with HBV
 - About 20% of new HBV infections in U.S. are among MSM
- ➔ HIV co-infection more than **triples the risk** for liver disease, liver failure, and liver-related death from HCV
- ➔ CDC recommends **all persons with HIV infection** be tested for HCV and HBV

“The United States will become a place where new HIV infections are rare and when they do occur, every person, regardless of age, gender, race/ethnicity, sexual orientation, gender identity or socio-economic circumstance will have unfettered access to high quality, life-extending care, free from stigma and discrimination.”

United States National HIV/AIDS Strategy, July 2010

Enhancing Prevention:

National HIV/AIDS Strategy

➔ Three goals for the NHAS:

1. Reducing **HIV incidence**
2. Increasing **access to care** and optimizing health outcomes
3. Reducing HIV-related **health disparities**

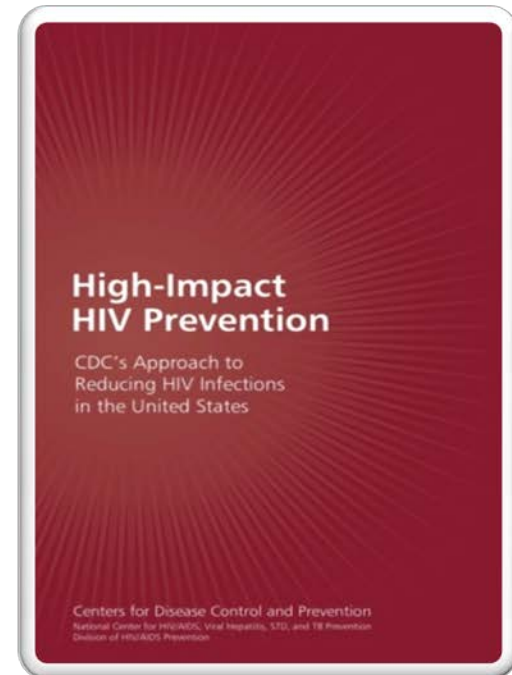
➔ CDC HIV prevention aligned with NHAS Goals:

- The lead federal agency for **domestic HIV prevention** (Goal1)
- Collaborates with HRSA to **improve care** (Goal2)
- Implements programs and data systems to reduce and **monitor disparities** (Goal3)
- Actively **coordinates efforts** with other HHS agencies (Goal 4)
- In addition, CDC systems are used to **measure progress** on most NHAS indicators

Enhancing Prevention

High-Impact Prevention

- ➔ Ensuring that the right interventions are selected, targeted and scaled
- ➔ Key components
 - Effectiveness and cost
 - Feasibility of full-scale implementation
 - Coverage of targeted population
 - Interaction and targeting
 - Prioritizing
- ➔ Preventing the most HIV and promoting equity



Available for download at:
www.cdc.gov/hiv

Enhancing Prevention

High Impact Prevention in Practice

HIV Testing

- Testing in health care and non-health care settings
- Testing of pregnant women
- Ensure linkage to care and prevention services

HIV Prevention with Positives

- ART and adherence interventions
- STD screening and treatment
- Partner services
- Behavioral interventions for HIV-positive persons
- Retention and re-engagement in care

Condom Distribution

- Focus on people with HIV and at high risk

Structural and Policy Initiatives

- Create enabling environment for optimal HIV prevention and care through policies, regulations, and practice

Implementing the NHAS

Examples of CDC High Impact HIV Prevention Activities

➔ Enhanced Comprehensive HIV Prevention Planning Project

- 12 jurisdictions with 44% of epidemic; planning for maximum impact

➔ CDC Expanded HIV Testing Initiative

- 2.8 million tests conducted in first 3 years
- 18,000 people newly diagnosed with HIV; 70% Afr Am; 12% Latino
- Averted an estimated 3,381 HIV infections

➔ New CDC Health Department FOA

- Realigns federal resources with burden of epidemic
- Focuses efforts on scaling up highest impact prevention interventions

➔ Care and Prevention in the U.S. (CAPUS)

- Awards made for innovative demo projects in eight states
- Will address social, economic, clinical, and cultural barriers to HIV testing and care in these communities

“HHS is committed to ensuring that new cases of viral hepatitis are prevented and that persons who are already infected are tested; informed about their infection; and provided with counseling, care, and treatment.”

**HHS Action Plan for the Prevention, Care & Treatment of Viral Hepatitis,
May 2011**

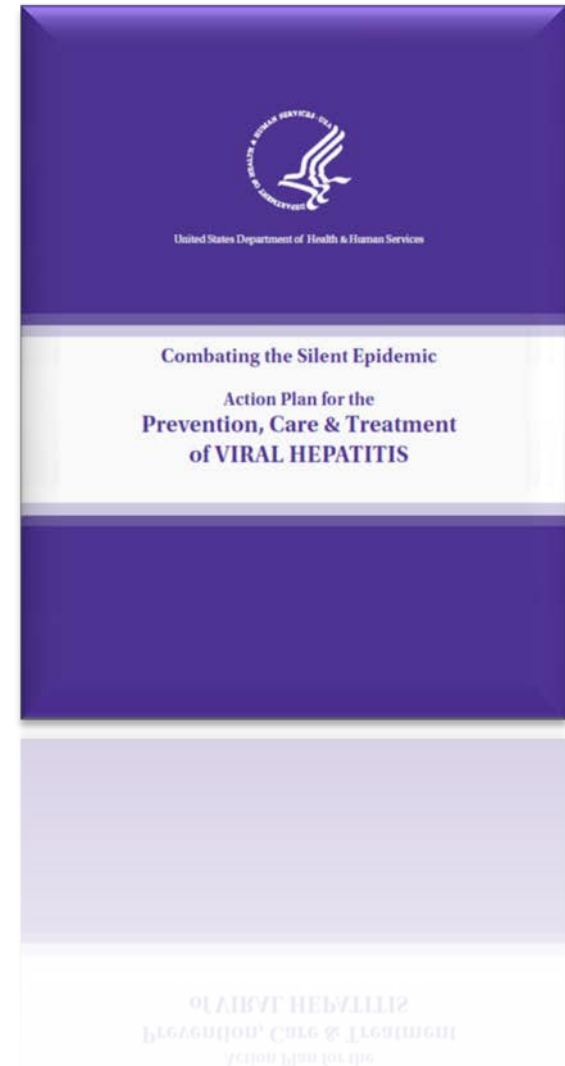
Enhancing Hepatitis Prevention in the U.S.

HHS Viral Hepatitis Action Plan

➔ CDC supports the Action Plan

➔ Key elements include:

- **Educating providers and communities** to reduce health disparities
- Improving **testing, care, and treatment** to prevent liver disease and cancer
- Strengthening **surveillance** to detect viral hepatitis transmission and disease
- **Eliminating transmission** of vaccine-preventable viral hepatitis
- Reducing viral hepatitis cases caused by **drug-use behaviors**
- Protecting patients from **health-care associated** hepatitis



CDC Recommends One-Time HCV Testing for Persons Born 1945-1965

- ➔ CDC expanded its hepatitis C testing recommendations with a recommendation for that all persons **born 1945-1965** be tested once
- ➔ Previous recommendations only called for testing for risk factors
 - Risk-based screening still important
- ➔ ~50% of baby boomers infected with HCV are unaware of their infection



Recommendations for the Identification of Chronic Hepatitis C Virus Infection Among Persons Born During 1945-1965



Enhancing Hepatitis Prevention

New Projects Boosting CDC Hepatitis Prevention Efforts

- ➔ CDC awarded nearly **\$10 million** in funding from the Affordable Care Act's Public Health Prevention Fund recently
- ➔ Included funds to **32 organizations** to expand testing for hepatitis B and hepatitis C and to enhance linkage to care, treatment, and prevention for people living with these infections
- ➔ Also enhances **education efforts** among key populations at risk for viral hepatitis, such as:
 - National "Know More Hepatitis" campaign to increase awareness of hepatitis C and hepatitis B testing among those born between 1945 and 1965.
 - New multilingual campaign to increase awareness and encourage hepatitis B testing among Asian Americans
 - Education and training materials to enhance knowledge among health care professionals about hepatitis B and C

Summary

- More Americans are **living with HIV** with stable incidence, declining mortality and declining transmission rates
- Viral hepatitis remains a **largely silent and pervasive epidemic**
- New national strategic plans for both conditions provide **unique opportunities to make sustained advances** in prevention treatment and care, reducing health inequities, and improve inter-agency coordination
- Future success for these epidemics will depend on our ability to **implement what we know works**, for those at risk, while expanding the knowledge base for more effective implementation

Thank You

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