

# **Viral Hepatitis Prevention: Overview & Integration Projects**

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**A Consultation to Address HIV/AIDS**

**Among African American Women**

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# Outline of presentation

## Overview of viral hepatitis

- Hepatitis A
- Hepatitis B
- Hepatitis C

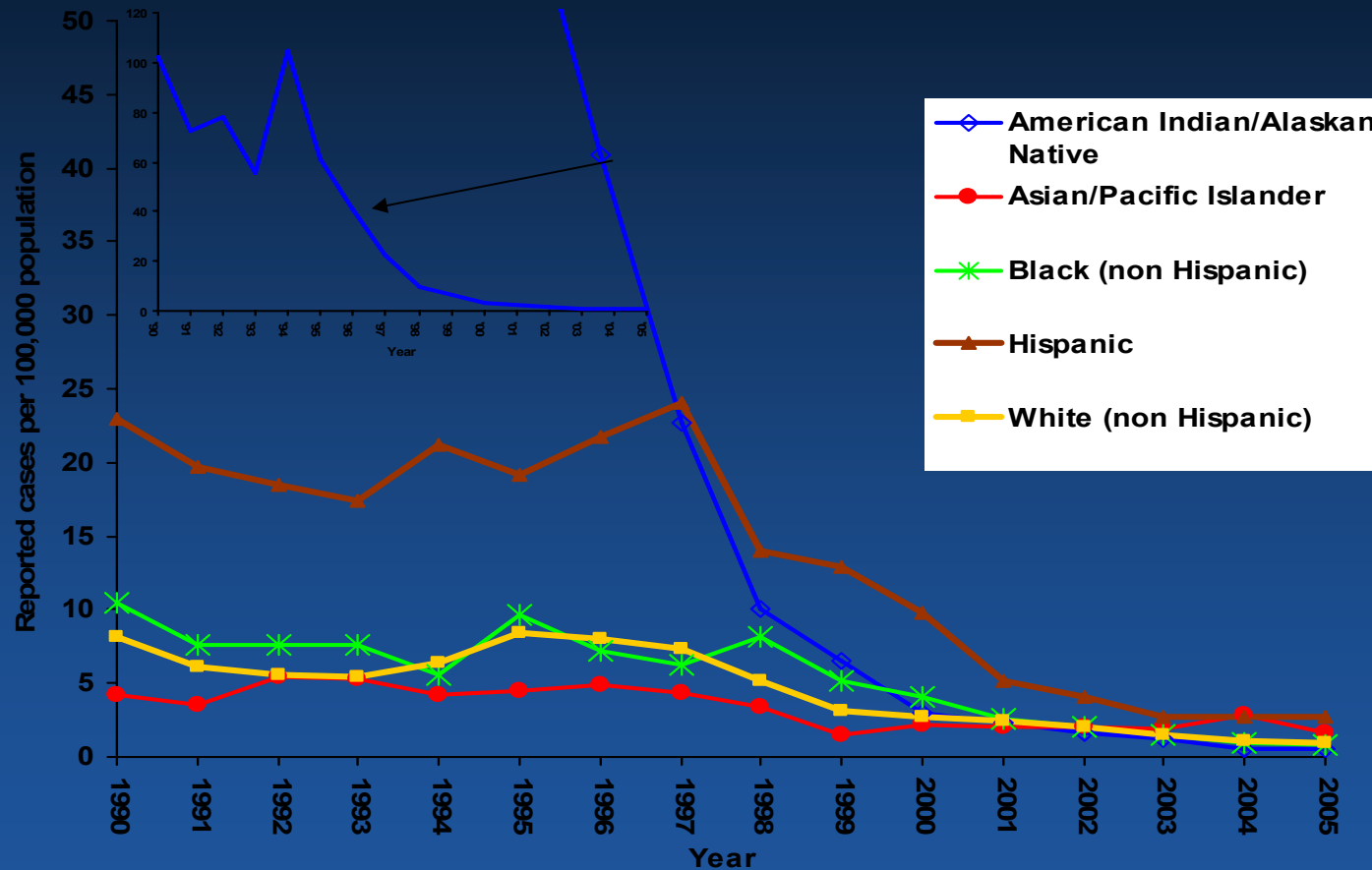
## Viral Hepatitis and HIV

Review CDC projects relating to integration

# Hepatitis A Virus Infection

Transmission	Fecal-oral
Main risk factors	Sex and household contacts of infected persons, Travelers endemic countries, MSM, IDU, and NIDU
Symptomatic	30% <6 years; 70% > 6 years of age
Infectious period	2 weeks, starting prior to jaundice
Chronic infection	No
Mortality	0.4% (acute liver failure)
# of new infections	42, 000 in 2005

# Incidence of Hepatitis A, by Race and Ethnicity, US, 1990-2005



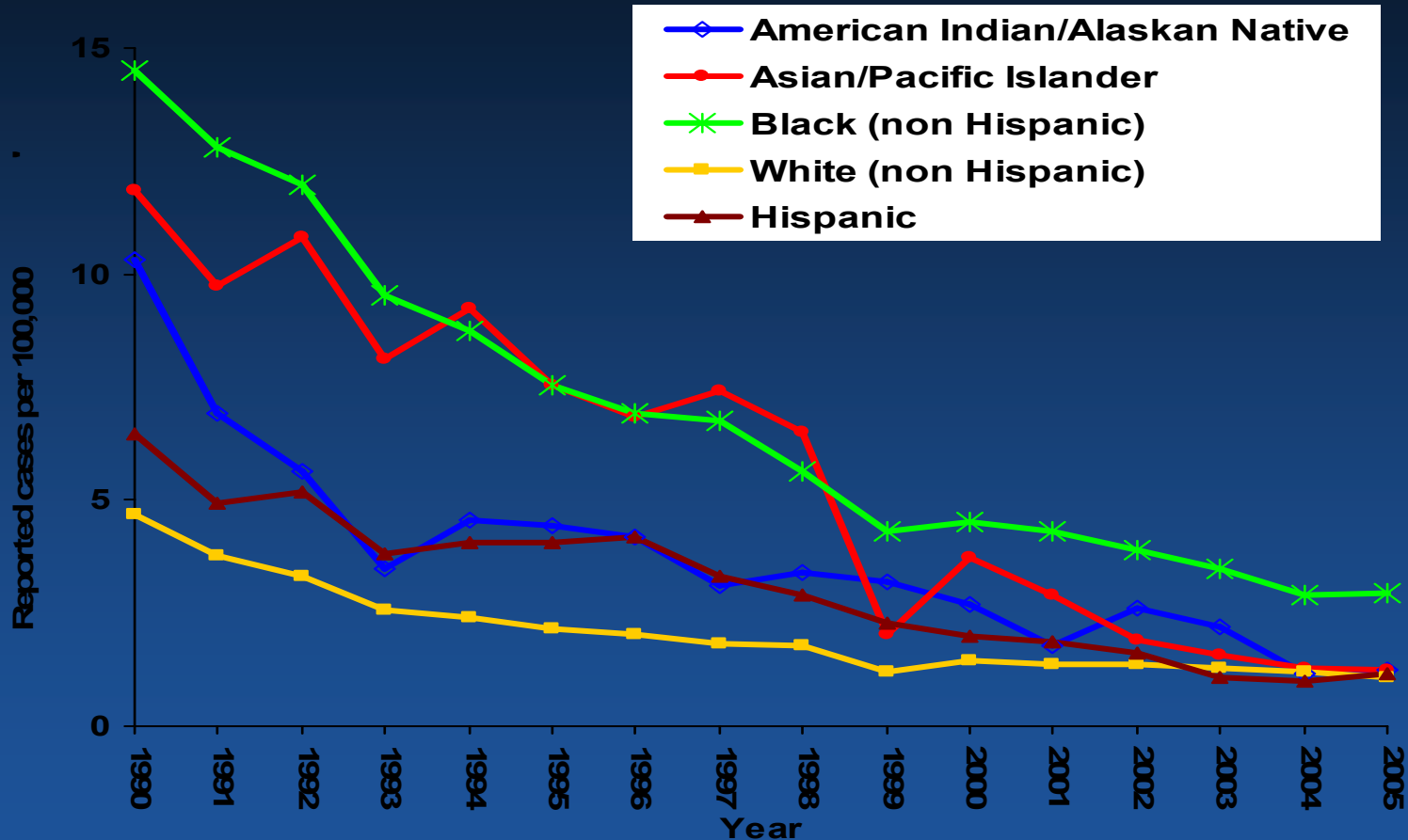
# Recommendations for Hepatitis A Prevention

- Vaccine is the primary prevention tool
- 2006: Universal infant vaccination
- 1996 Adults at increased risk of infection or its adverse consequences:
  - Travelers to HAV endemic countries,
  - Men who have sex with men (MSM),
  - Illegal drug users,
  - Persons with chronic liver disease,
  - Persons with clotting factor disorders

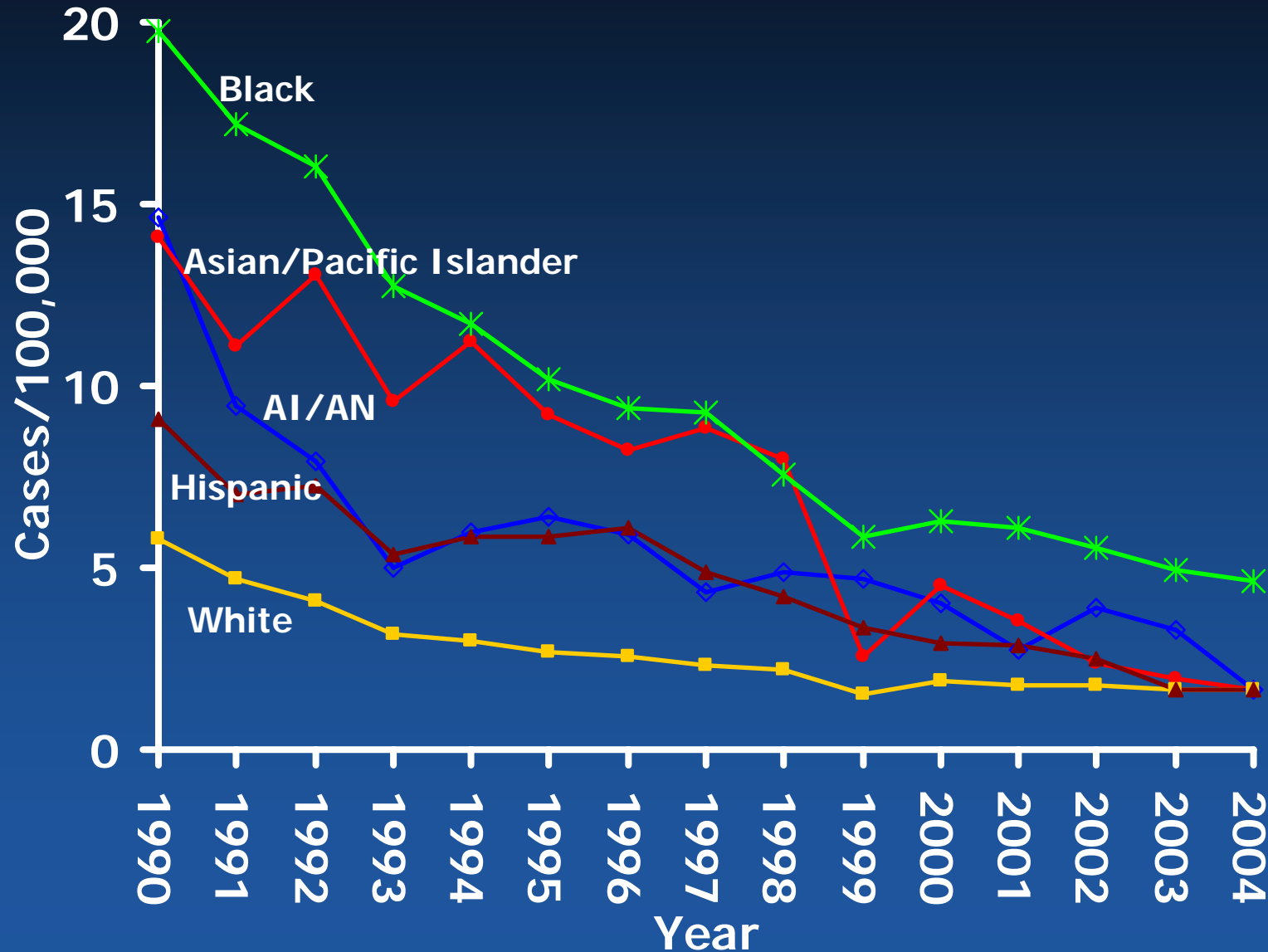
# Hepatitis B Virus Infection

Transmission	Percutaneous, mucosal
Main risk factors	Multiple sex partners, MSM, IDU, sexual and household contacts; perinatal exposure
Symptomatic	~0% <5 years; 30%-50% >5 years;
Chronic infection	90% <1 year; 5% >5 years;
Mortality	0.5%-1% (acute fatality); 15-25% (chronic liver disease)
# of new infections	51,000 in 2005
# of chronic infections	1.25 million in 2005
# of annual deaths	3,000-5,000 in 2005

# Incidence of Acute Hepatitis B, by Race and Ethnicity, United States, 1990-2005



# Hepatitis B Incidence $\geq$ 19 Years By Race/Ethnicity: United States, 1990-2004





## Strategy to Eliminate HBV Transmission

- Prevent perinatal HBV transmission
- Universal infant vaccination
- Catch-up vaccination of all children and adolescents <19 years
- Vaccination of adults in high risk groups

# Rationale for New Recommendations

- Since 1982, ACIP has recommended HepB vaccination for adults at risk for HBV infection
- However, recommendations have not been effectively implemented
- A substantial burden of new infections continues to occur among adults

# Hepatitis B Vaccine Recommendations for Adults



## MMWR

Morbidity and Mortality Weekly Report

Recommendations and Reports

December 8, 2006 / Vol. 55 / No. RR-16

### A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States

Recommendations of the Advisory  
Committee on Immunization Practices (ACIP)  
Part II: Immunization of Adults

INSIDE: Continuing Education Examination

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
CENTERS FOR DISEASE CONTROL AND PREVENTION

- HepB vaccine recommended for:
- all unvaccinated adults at risk
  - all adults seeking protection (acknowledgment of specific risk factor not required)

### Vaccination strategies for

- Settings w/high proportion of at risk adults

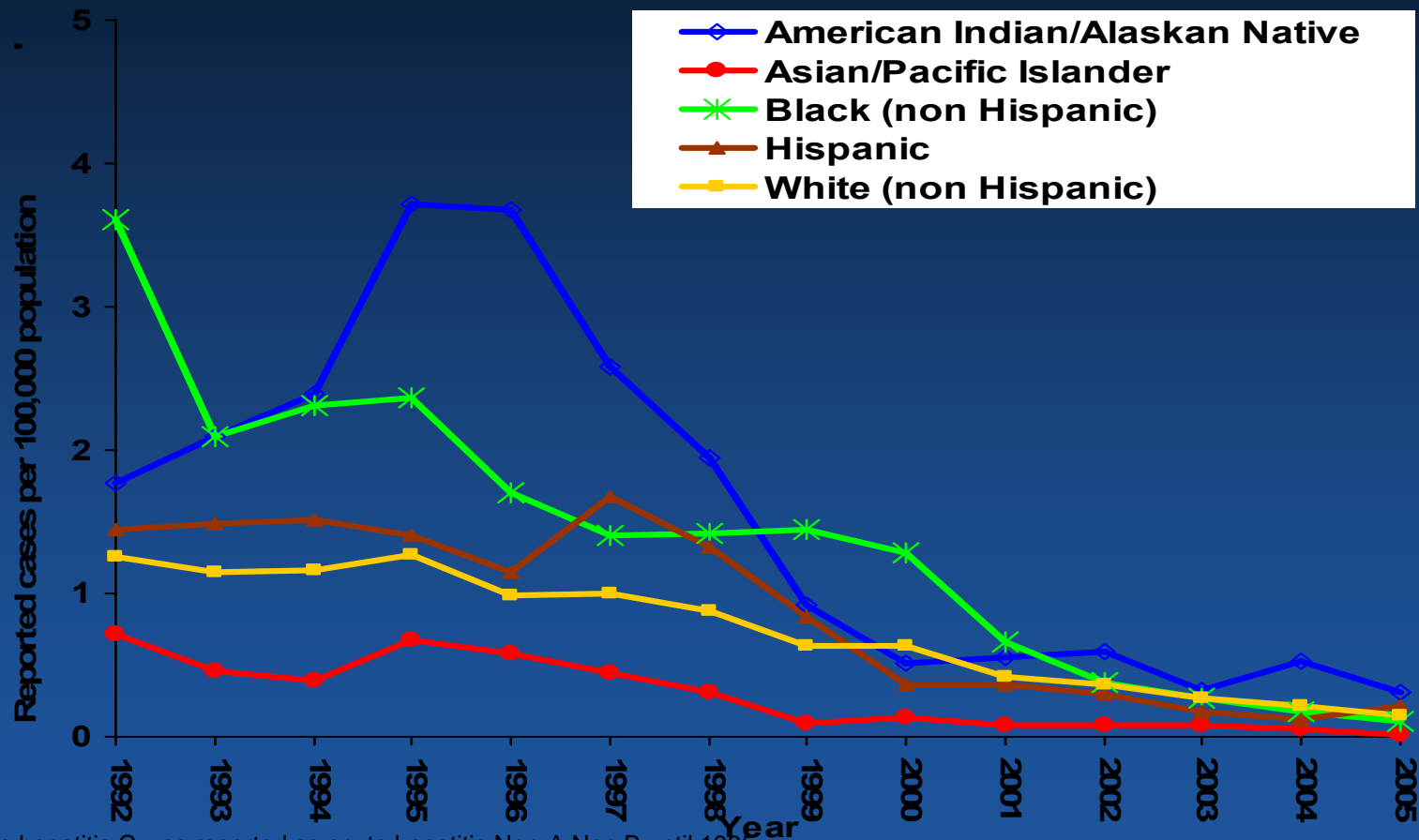
# Settings where hepatitis B vaccination is recommended for all clients:

- STD treatment facilities
- HIV testing *and treatment* facilities
- Substance abuse treatment facilities
- Correctional facilities
- Health care providers serving IDU
- Health care providers serving MSM
- Others including hemodialysis, adult institutions

# Hepatitis C Virus Infection

Transmission	Percutaneous
Main risk factor	IDU
Symptomatic	<25%
Chronic infection	85% in adults
Immunity	No protective antibody response identified
Mortality	1%-5% (chronic liver disease)
# of new infections	20,000 in 2005
# of chronic infections	3.2 million in 2005
# of annual deaths	8,000-10,000 in 2005

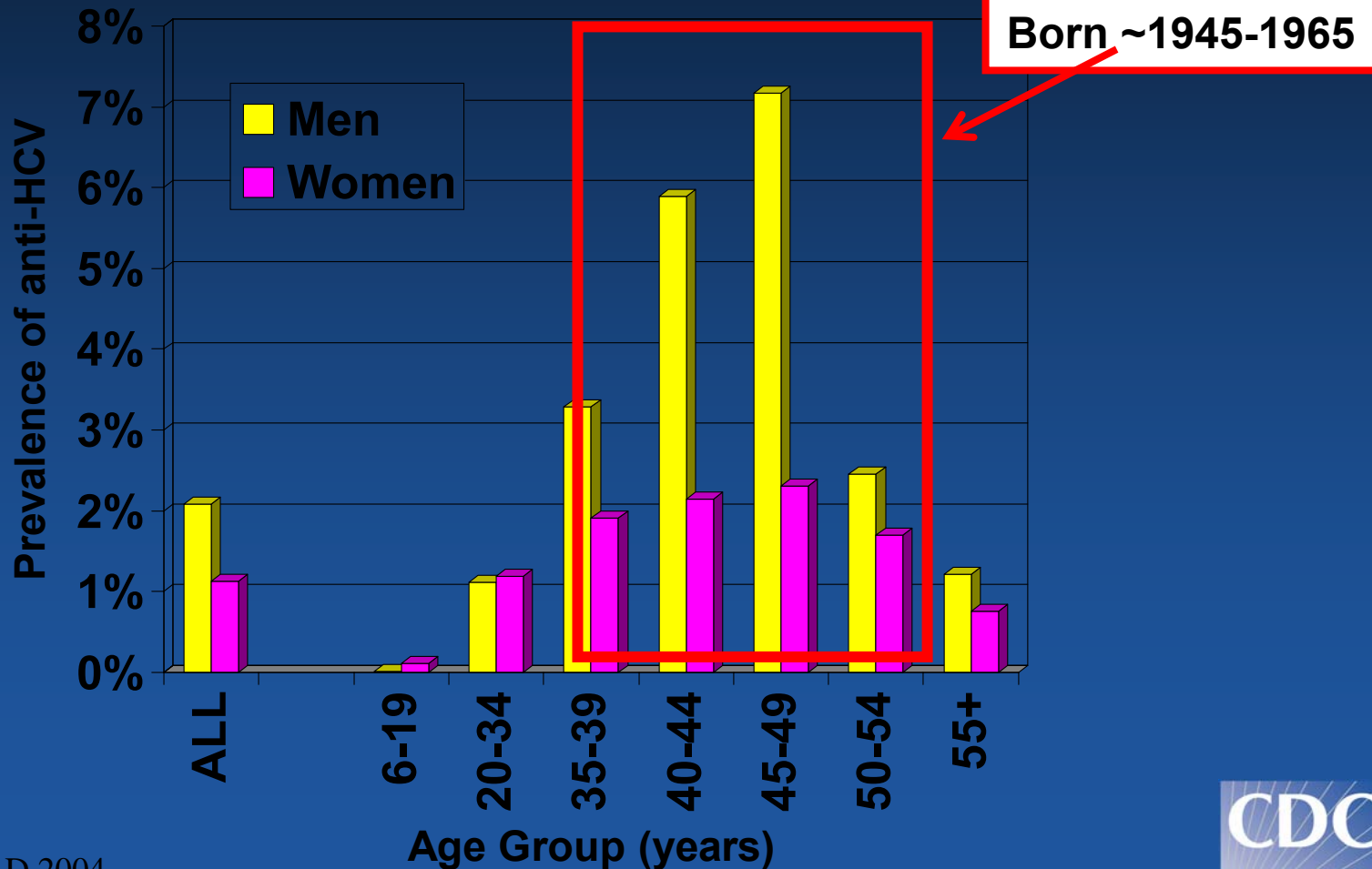
# Incidence of Acute Hepatitis C, by Race and Ethnicity, US, 1992-2005



\*Acute hepatitis C was reported as acute hepatitis Non-A Non B until 1995

# Prevalence of Anti-HCV, United States, 1999-2002 (NHANES)

Overall prevalence: 1.6% (4.1 million)



# Hepatitis C Prevention Strategy

## Prevent new infections

- Risk-reduction education and awareness
- Review and update infection control practices
- Screen and test donors
- Virus inactivation of plasma-derived products

## Reduce risk of liver disease in persons with chronic infection

- Identify and test persons at risk for HCV infection
- Counseling, medical evaluation, management of infected persons



# HIV and HCV

- Both HIV and HCV are blood-borne
- Affects many of same populations (primarily IDU)
- 200,000 co-infected in US
- HCV is 10 times more infectious than HIV by blood contact
- Most co-infected IDUs likely infected with HCV years before HIV

# DVH

# Integration Efforts and Projects

# *Integrating Viral Hepatitis*

## *Why ??*

# Reasons to Combine Viral Hepatitis with Existing Prevention Programs

- **Overlapping transmission risk factors**
- **Maximize use of existing PH infrastructure**
- **Opportunity to strengthen health messages**
- **Good public health sense**

# Prior Opportunities For Vaccination Among Patients With Acute Hepatitis B, 2001-2004

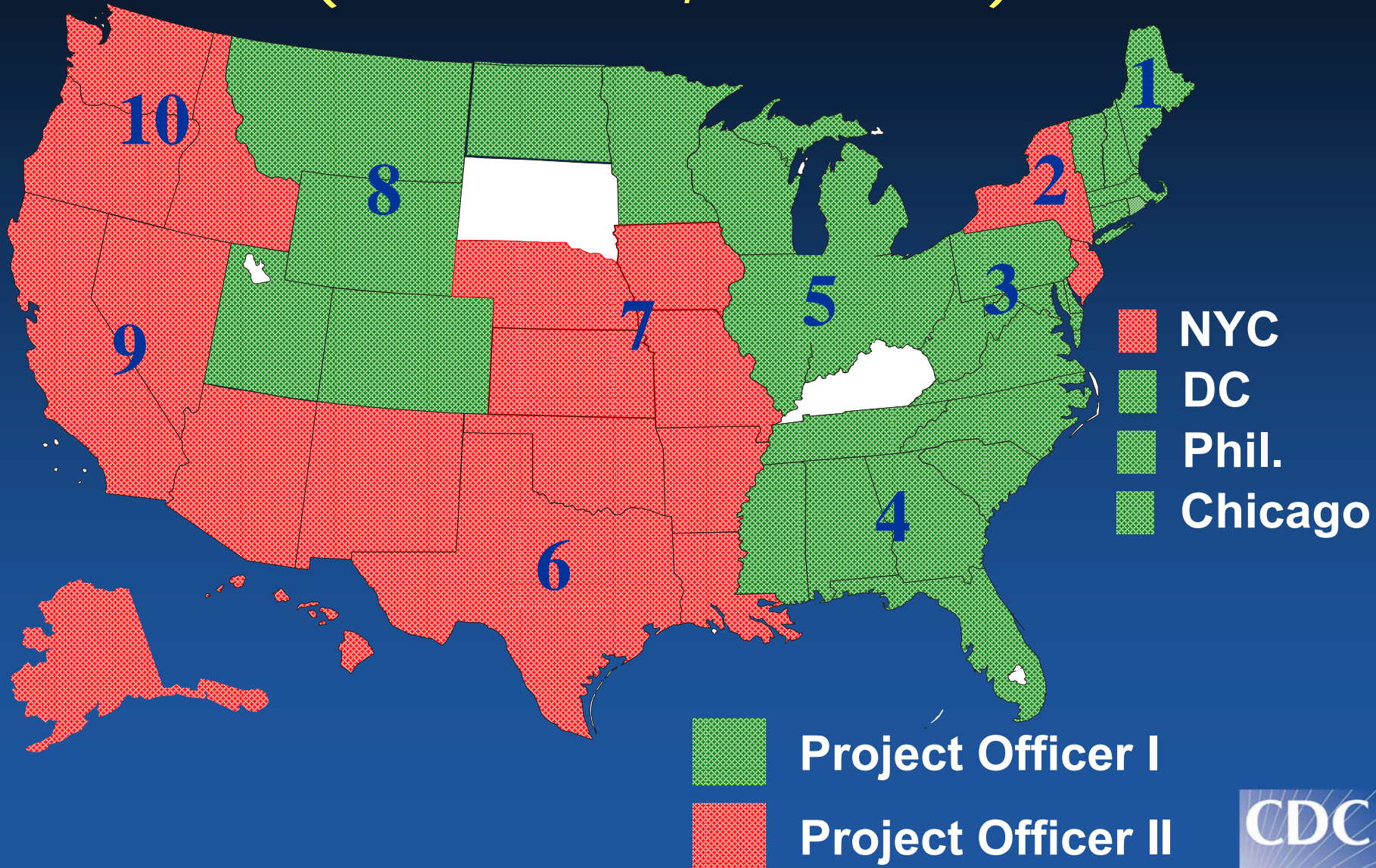
Prior Opportunity for Vaccination	%
History of incarceration	40%
History of STD treatment	39%
History of drug treatment	22%
Any of the above	61%

Source: Sentinel Counties Study of Viral Hepatitis (n=760)

# *Integrating Viral Hepatitis*

## *How ??*

# Hepatitis C Coordinators (48 states, 4 cities)



# Hepatitis C Coordinators

- 48 states, 4 cities
- Funded through NCID ELC Program through FY 2007; expected transition to new DVH Program in FY 2008: Scope Adult Viral Hepatitis Prevention Coordinator
- Current Recipient Activities:
  - Ensure training - health care professionals
  - Encourage HCV testing
  - ID resources for HepA and HepB vaccines
  - ID sources for medical referral of HCV-positive
  - Develop a viral hepatitis prevention plan
  - Evaluate and monitor viral hepatitis prevention efforts



# Integration of Viral Hepatitis Prevention into HIV/STD Program Announcements

## 2004 HIV Program Announcement

- Encourages collaboration/coordination w/hepatitis prevention programs to support local efforts to integrate viral hepatitis services
- HIV funds may be used for HCV testing (not HepA and HepB); based on CPG recommendation

## 2005 STD Program Announcement

- Encourages collaboration/integration w/ HIV and hepatitis prevention programs to serve groups at risk for or infected with all of these diseases
  - provide HIV testing, hepatitis A and B vaccination, and STD screening in high prevalence settings
  - integrate HIV, hepatitis and STD prevention messages

## 2007 HIV Program Announcement-African Americans

- HIV funds may be used for HCV testing

# Public Health Reports Supplement Volume 122; Supplement 2, 2007: Integrating Viral Hepatitis Prevention Into Public Health Settings

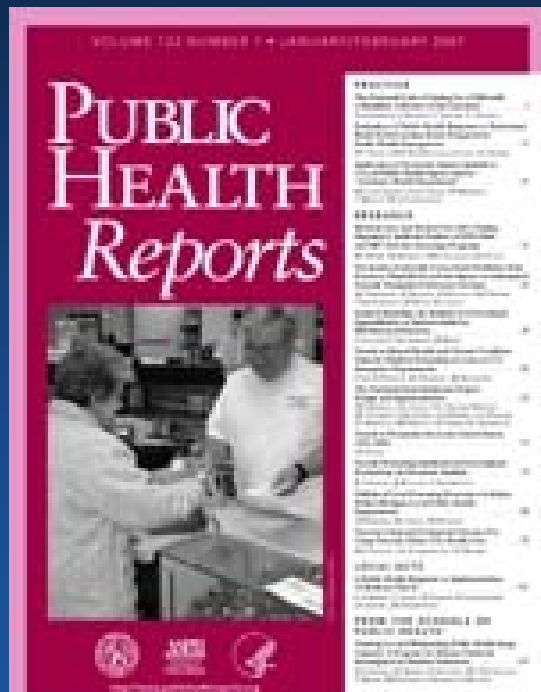


Table of Contents: 20 articles on

- State and local integration practices
- Hepatitis vaccination for high risk adults
- Hepatitis C: counseling, testing, and providing clinical care
- A community response to hepatitis C
- Current and future directions
- <http://www.publichealthreports.org>

**Thank You!!**

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