

Institute of Medicine

Review of Viral Hepatitis Prevention

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I have no financial relationships to disclose within the past 12 months relevant to my presentation

AND

My presentation does not include discussion of off-label or investigational use



Sponsors

Federal

Primary: Division of Viral Hepatitis, CDC

Additional support

Division of Cancer Prevention, CDC

Office of Minority Health, HHS

Public Health Strategic Health Care

Group, Department of Veterans Affairs

Community

National Viral Hepatitis Roundtable

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Why ?

- § Chronic hepatitis B and hepatitis C are under recognized as public health problems
- § Responsible for considerable morbidity and mortality
- § Prevention is complex but interventions can prevent infection and slow or halt disease
- § Public health capacity is inadequate

IOM Review of Viral Hepatitis Prevention

ÿ Charge

- § Provide advice regarding the proper investment in prevention of chronic viral hepatitis
- § Identify prevention priorities for investment

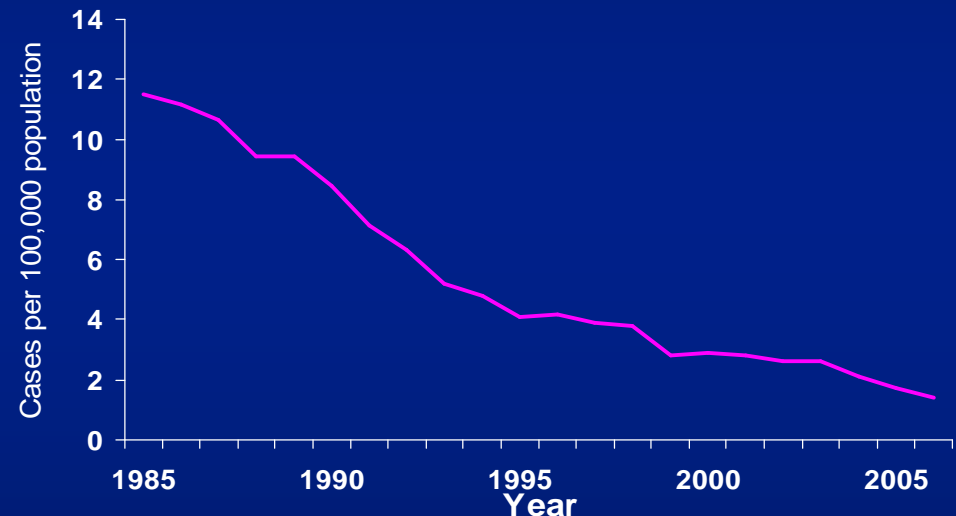
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1. Strategies for preventing HBV and HCV infections
2. Strategies for reducing morbidity and mortality from chronic HBV and HCV infections
3. Assess the type and quality of data needed from state and local viral hepatitis surveillance systems to guide and evaluate prevention services

Implement Strategies to Eliminate HBV Transmission

- ÿ Vaccine based elimination strategy (1991)
 - § High infant, child vaccine coverage
 - § 46,000 acute infections in 2006; 95% among at risk adults
 - § Infants of HBsAg+ mothers continue to become infected

Reported Acute Hepatitis B, 1985-2006



Reduce HCV incidence

- Case reporting up in 2006 (19,000 cases); 50% IDU

§ ~15% of new IDUs acquire HCV /yr

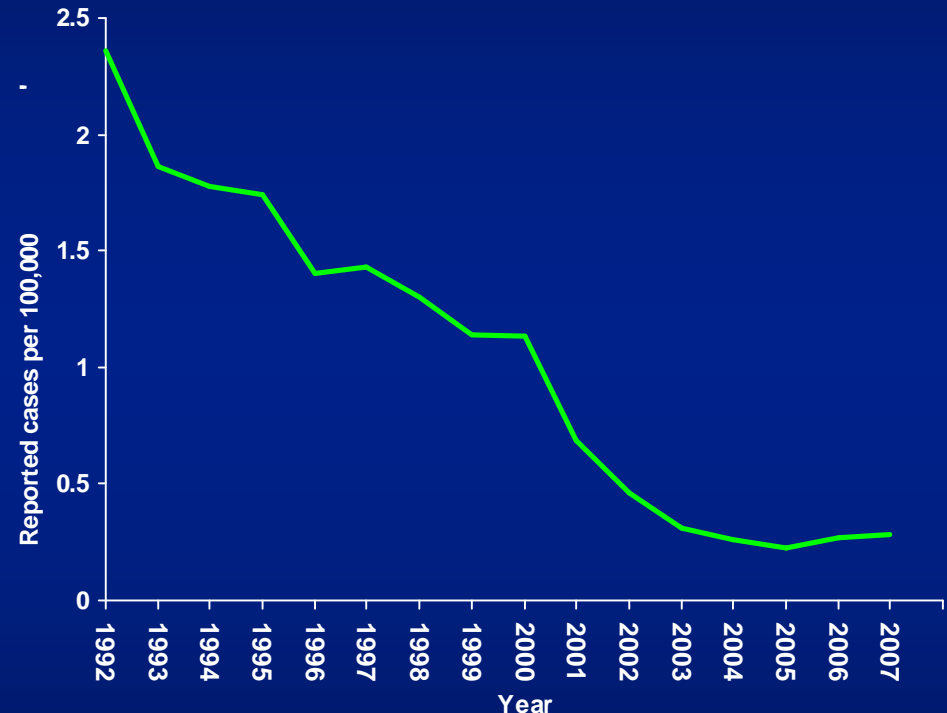
§ Need HCV specific interventions

§ Other emerging risk populations

§ Health-care

§ HIV+MSM

Incidence of Acute Hepatitis C* 1992-2007



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Strategies for reducing morbidity and mortality from chronic HBV and HCV infections

The Burden of Chronic Hepatitis B and Hepatitis C

- **Persons living with chronic infection- ~ 4.5 M**
 - § **Chronic HBV** 800,00-1.4 million
 - § **Chronic HCV** 3.2 million
- **Chronic viral hepatitis associated deaths – 10,000-14,000**
 - § **Chronic HBV** 2,000-4,000 per yr
 - § **Chronic HCV** 8,000-10,000 per year
- § **HIV infected:** 9% HBV; 25% HCV
- § **Cause of most chronic liver disease in US**

Chronic Viral Hepatitis and Health Disparities

§ Chronic HBV

§ Asian/Pacific Islanders

§ 1 in 12 living with chronic HBV

§ Leading cause of cancer death

§ 40,000 cases per year among new entrants to US

§ Chronic HCV

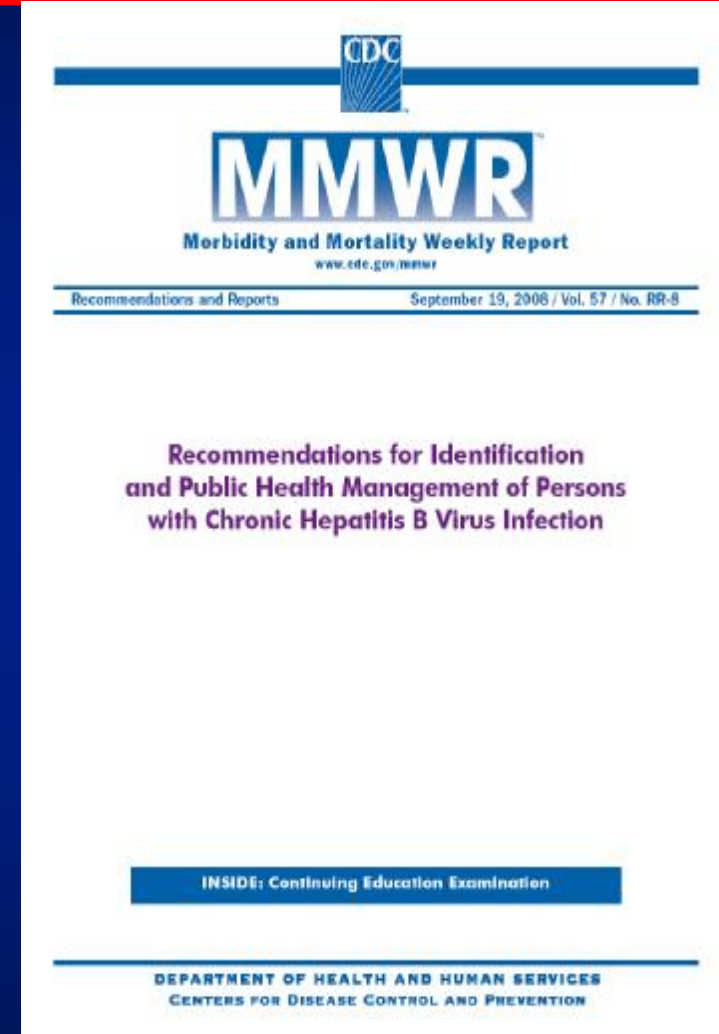
§ Most infections among persons born 1940-1965

§ Mortality twice that of whites for blacks, Hispanics, Native Americans



Recommendations for Identification and Management of Persons with Chronic HBV Infection

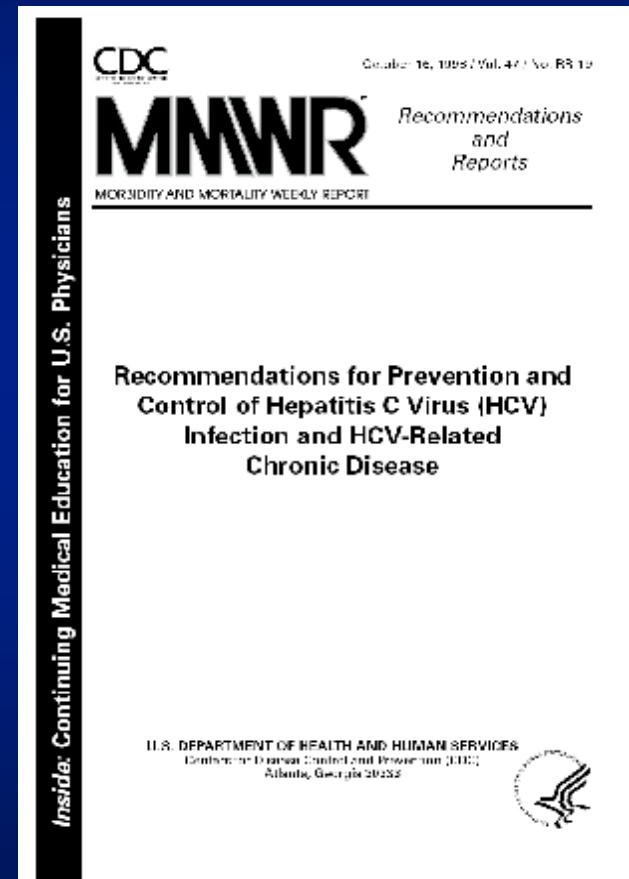
- ÿ **Testing recommendations**
 - § Populations with $\geq 2\%$ prev)
 - t Foreign born- (e.g. Asia, Africa)
 - t MSM, IDU
 - t Others (e.g., HIV)
- ÿ **Management guidance**
 - § Patient counseling
 - § Contact management
 - § Referral for care and treatment
- ÿ **Infrastructure needs**
 - § Community outreach
 - § State/local prevention programs
 - § Care capacity



Recommendations for Prevention and Control of Hepatitis C

- Risk based screening
 - IDU
 - Unscreened tissue/organs
 - Hemodialysis
 - Evidence of liver disease
- Counseling and referral
- Medical management

MMWR 1998;47 (No. RR-19)



Viral Hepatitis and Correctional Facilities

- | 1.4 M prisoners in the US
 - t 12-35% HCV +
 - t 1-4% HBV+
- n Recommended services*
 - t Vaccination
 - t Screening
 - t Continuity of care after release
- n Variable implementation

*(MMWR 2003: 52 LRR01)

Chronic Hepatitis Prevention Challenges

- ÿ **Community awareness is low**
- ÿ **Many persons are unaware of their chronic infection**
- ÿ **Inadequate capacity for education, screening and referral**
- ÿ **Care and new therapies increase benefits of screening**
- ÿ **Barriers limit access**

Areas for Institute of Medicine Review

Assess the type and quality of data needed from state and local viral hepatitis surveillance systems to guide and evaluate prevention services

Current and Emerging Issues in Viral Hepatitis Surveillance

Acute Disease

- Suboptimal data quality
- Inadequate ability to identify emerging trends
- Low sensitivity to detect cases
- Poor markers of acute HCV

Chronic Infection

- Suboptimal data quality
- Large volume of reports
- Limits opportunities
 - § to document burden
 - § to support registries
 - § to link with HIV, cancer registries

Comparison of National Chronic Disease Surveillance Systems

System [Coordinator]	Est. no. infected	No. reports/ year	Est. Case Complete	Funding
HIV/AIDS	1.2 m	50,000- 60,000	>85%	\$50 m
Cancer	-	1.2 million	>95%	\$38 m
End-stage renal Disease	2.0 m	100,000	~99%	\$3 m
Acute and chronic Viral hepatitis	4.5 m	200,000	~10%	\$2.5M

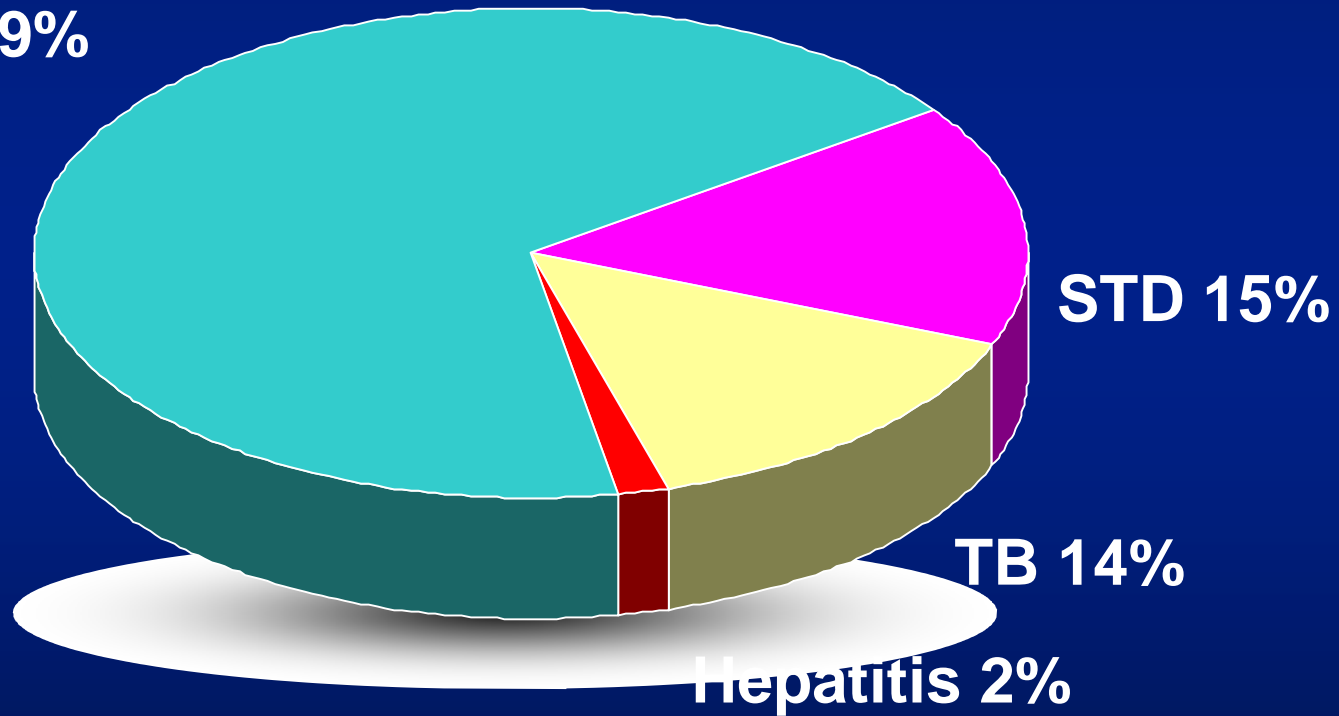
% \$0



FY 2008 Domestic Enacted Funds

Total: \$1 billion

Domestic HIV
69%



CDC Support of State and Local Prevention

Y Training and education - ~\$900K

- § Five grantees
- § Response to recent announcement
 - s >50 applicants approved for funding
 - s \$7.5M requested

Y Adult Viral Hepatitis Prevention Coordinators - \$5M

- § 49 states, D.C., and 5 US cities
- § Average award- \$90,000
- § Thirty states have HCV prevention plans
- § No funds for program

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