



# Preventing Acute Rises in Hepatitis B within the Opioid Epidemic: Policy and Primary Care Based Opportunities to Increase Adult Hepatitis B Vaccination in the United States

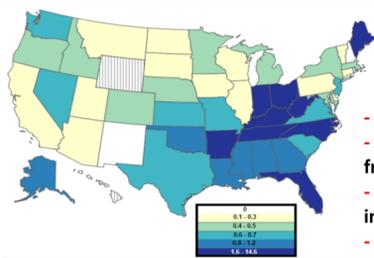


Rita K. Kuwahara, MD MIH<sup>1,2</sup>, Jeffrey Caballero, MPH<sup>2</sup>, Asha Marhatta, MD MPH<sup>1</sup>

Connecticut Institute for Communities, Inc.<sup>1</sup> and the Association of Asian Pacific Community Health Organizations<sup>2</sup>

## Introduction

Centers for Disease Control and Prevention  
Acute Hepatitis B Rate by State – 2016



- 729% increase in ME from '15-'17
- 114% increase in KY, TN, WV from '09-'13
- 78% increase in southeastern MA in 2017
- 62% increase in NC from '12-'16

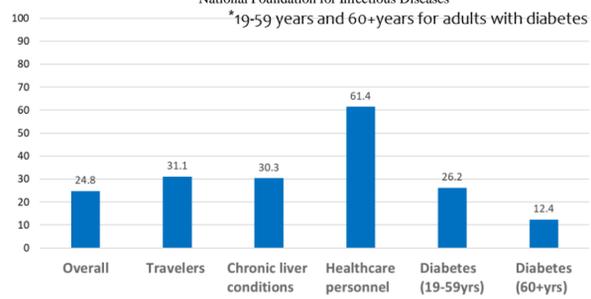
Maine: Average age at acute hepatitis B diagnosis: 42 years, 55% hospitalization rate

### Chronic Hepatitis B Virus Infection in the United States:

- Up to 2.2 million people living with chronic hepatitis B in the U.S.
- 2/3 of individuals with chronic hepatitis B are **unaware** of their infection in the U.S.
- 1 in 4 individuals with unmanaged chronic hepatitis B develop liver cancer, liver failure and/or cirrhosis
  - Individuals with **chronic hepatitis B can develop liver cancer without cirrhosis**
- Universal childhood hepatitis B vaccination in the U.S. began in the mid-1990s and became the first anti-cancer vaccine to be administered
- **Only 25% of adults in the U.S. are vaccinated against hepatitis B**

### Hepatitis B Vaccination Coverage (≥3 Doses) among Adults Aged ≥ 19 Years\* in the U.S.

National Health Interview Survey—US, 2016  
National Foundation for Infectious Diseases  
\*19-59 years and 60+ years for adults with diabetes



## Purpose

- \* To determine primary care physicians' awareness of current adult hepatitis B (HBV) vaccination rates in the U.S.
- \* To identify opportunities to increase adult HBV testing and vaccination within the primary care setting.

## Methods

- ▶ Primary Care Internal Medicine residents and faculty at a Connecticut Community Health Center:
  - Completed a survey of their adult HBV testing & vaccination practices.
  - Attended a session on current HBV testing & vaccination guidelines.
  - Completed a post-test survey to determine their anticipated practice changes to address adult HBV testing and vaccination.
- ▶ Engaged in advocacy to raise awareness of adult HBV vaccination.

## Results

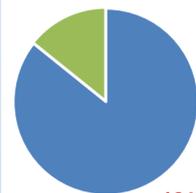
### Perceptions of Adult Hepatitis B Vaccination Rates:

- **0% Realized that the adult HBV vaccination rate is only 25%**
- 86% **Incorrectly** believed that the adult HBV vaccination rate is 75%

Vaccinate All Adults at Risk for Hepatitis B AND All Adults who Request Vaccination

- 29% did not know that anyone requesting HBV vaccination should be vaccinated against HBV according to the Advisory Committee on Immunization Practices (ACIP)
- 14% were unaware that chronic HBV can cause liver cancer without cirrhosis

### Patients with HBV Risk Factors



86% Cared for at least 10-19 patients with at least 1 HBV risk factor in the past month

**43% Cared for over 20 patients with an least 1 HBV risk factor in the past month, yet...**

### Adults at Risk for Hepatitis B

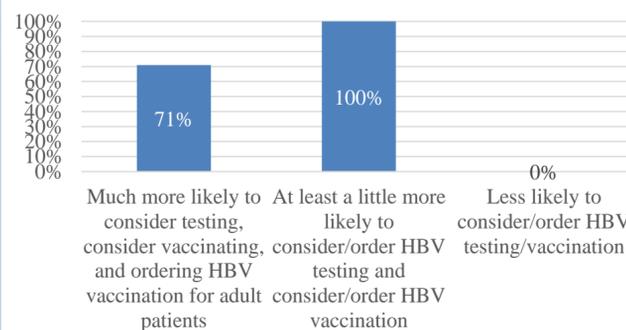
- HIV positive persons
- Persons who inject drugs
- Men who have sex with men
- Persons with chronic liver disease
- Persons with hepatitis C
- Persons with diabetes
- Persons with end stage renal disease and those on hemodialysis
- Pregnant women
- Persons on immunosuppressive therapy
- Persons from regions with a ≥2% prevalence of hepatitis B
- Incarcerated persons
- Healthcare personnel
- Household contacts or sex partners of persons with chronic hepatitis B

### Pre-Intervention HBV Testing and Vaccination Practices

Never considered testing their patients for HBV in the past 1 month	43%
Never considered vaccinating their patients against HBV in the past 1 month	29%
Reported ordering HBV vaccinations for less than 5 of their patients in the past 1 month	71%

### Post-HBV Clinical Guidelines Update

Reported Practice Changes Post-HBV Clinical Guidelines Update (%)



### HBV Adult Vaccination Guidelines:

#### CDC HBV Vaccination Implementation Guidelines

- Provide information to all adults regarding the benefits of hepatitis B vaccination
- Assess need for vaccination by obtaining a history that emphasizes risks for sexual or bloodborne transmission of hepatitis B
- Vaccinate all adults who report risk factors for hepatitis B infection
- Identify, counsel and vaccinate susceptible household, sex, and needle-sharing contacts of individuals with chronic hepatitis B infection
- Vaccinate anyone seeking protection from hepatitis B— identification of a specific risk factor is NOT required <https://www.cdc.gov/hepatitis/b/vacc/adults.htm>

#### ACIP Recommends Universal Adult Vaccination in the Following Settings:

- Sexually transmitted disease treatment facilities
- HIV testing and treatment facilities
- Facilities providing drug-abuse treatment and prevention services
- Health care settings targeting services to injection drug users
- Correctional facilities
- Health care settings targeting services to men who have sex with men
- Chronic hemodialysis facilities and end-stage renal disease programs
- Institutions and nonresidential day care facilities for developmentally disabled persons <https://www.cdc.gov/hepatitis/b/vacc/infants.htm#vacc5AQ>

## Advocacy Phase

- ◆ Employed advocacy techniques and coalition building strategies to raise awareness of the need to increase adult hepatitis B vaccination rates in the setting of the opioid epidemic
- ◆ Collaborated with Members of Congress to introduce a Resolution in the U.S. House of Representatives and U.S. Senate to Designate April 30 as National Adult Hepatitis B Vaccination Awareness Day

### U.S. Congressional Resolution to Designate April 30 as National Adult Hepatitis B Vaccination Awareness Day

**H. RES. 331**  
Endorsed by over 75 organizations

**S. RES. 177**

**RESOLUTION**

**RESOLUTION**

Endorsed by: AMA, ACP, AMWA, AAFP, ACPM, AASLD, ACOG, APHA, HEPATITIS B FOUNDATION, AAPCHO

## Conclusions and Next Steps

- There are significant opportunities to increase adult hepatitis B testing and vaccination in the primary care setting:
  - Routinely speak with patients regarding hepatitis B testing and vaccination.
  - Implement protocols to identify patients requiring hepatitis B testing/vaccination, including integration into diabetes checklists, standing orders, etc.
- To prevent outbreaks of acute hepatitis B within the opioid epidemic, it is vital to raise awareness of adult hepatitis B testing and vaccination among clinicians at all levels of training, as well as in the community.

### Study Limitations:

- Single center study site with small sample size
- Lack of local and national comprehensive hepatitis B surveillance data

### Next Steps Include:

- ▶ Improving access to hepatitis B testing and vaccination by stocking the 2- and 3-dose hepatitis B vaccines in clinic and enabling individuals to access hepatitis B testing and vaccination in non-clinic settings.
- ▶ Developing systems to appropriately link those with chronic hepatitis B into care for ongoing management/hepatocellular carcinoma surveillance.
- ▶ Strengthening local, state and national hepatitis B surveillance systems.
- ▶ Building coalitions with national partners, Members of Congress and government agencies to develop a national adult hepatitis B vaccination and testing awareness campaign, particularly within the opioid epidemic.

## References and Disclosures

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