

Webinar Series

Local Approaches to Preventing and Eliminating Hepatitis B

The Landscape of Hepatitis B in the United States

Wednesday, March 20th 2019
11:00 AM PT / 2:00 PM ET

Speaker:

Sierra Pellechio, BS, CHES
Health Outreach Coordinator,
Hepatitis B Foundation

Why is hepatitis B a reportable disease?

Who is at risk?

How is it transmitted?

Acute vs. Chronic Infections: What's the difference?

Why are acute cases rising?

Who needs treatment?

Mission

NACCHO is comprised of nearly **3,000** **local health departments** across the United States. Our mission is to serve as a **leader, partner, catalyst,** and **voice** with local health departments.

There's value in belonging



Learn more by viewing a short video available on our website.

Our Work



Local Hepatitis B Efforts

Local health departments are on the frontlines of addressing viral hepatitis from prevention to care/cure, and continue to play a key role in moving our nation closer to the goal of eliminating viral hepatitis as a public health threat by 2030. NACCHO supports the role of local health departments in achieving elimination goals through capacity building, guidance, and advocacy.

-   Surveillance
-   Vaccination & Testing
-   Treatment
-   Education & Prevention
-   Outbreak Response
-   Elimination Planning

Poll Q1: Which of the following best describes your job title?

- Perinatal hepatitis B coordinator
- Disease Intervention Specialist
- Nurse
- Epidemiologist
- Other



Poll #2

Poll Q2: If you are representing a health department, please tell us more about your jurisdiction and the population size you serve:

- Small jurisdiction
- Medium jurisdiction
- Large jurisdiction



Poll #3



Poll Q3: How would you describe your community?

- Rural
- Suburban
- Urban

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The Hepatitis B Foundation

Doylestown, PA



- 6 public health team employees
- 4 communications and development team employees
- 50 scientists

We are a national nonprofit organization dedicated to finding a cure and improving the quality of life for those affected by hepatitis B worldwide. Our commitment includes **funding focused research, promoting disease awareness, supporting immunization and treatment initiatives, and serving as the primary source of information for patients and their families, the medical and scientific community, and the general public.**

Hep B United: A National Coalition

- 40+ local coalitions & national organizations in 20 states
- **Mission** - Hep B United is a national coalition dedicated to reducing the health disparities associated with hepatitis B by increasing awareness, screening, vaccination, and linkage to care for high-risk communities across the United States.



hepbunited.org



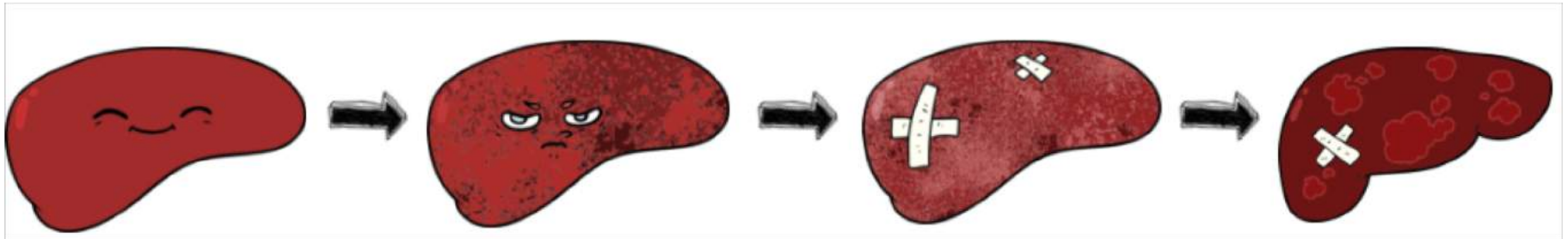
Role of Health Department

Follow up on newly identified cases of HBV

- In pregnant women → prevent mother to child transmission of HBV, protect health of mother
- Funding dependent, all cases → educate the public, navigate patients into care and management

What is Hepatitis B?

Virus that affects the liver and can lead to liver damage or liver cancer over time



It is vaccine preventable and treatable – yet 32 million people become newly infected each year and only 5% receive treatment!

292 million people globally living with chronic hepatitis B

Why is the Liver Important?

The liver has many roles in the body –
you cannot live without your liver!

Digests food. 🍌

Regulates energy.



Builds muscle.

Breaks down toxins.



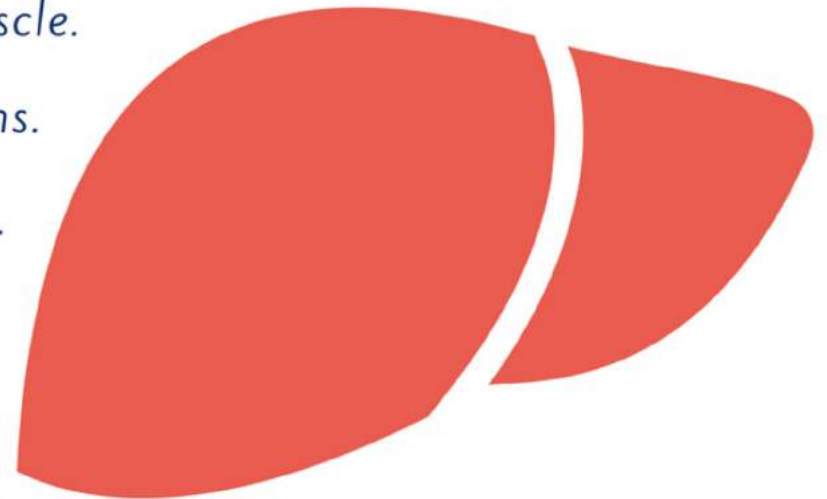
Fights infections.

Processes medications.

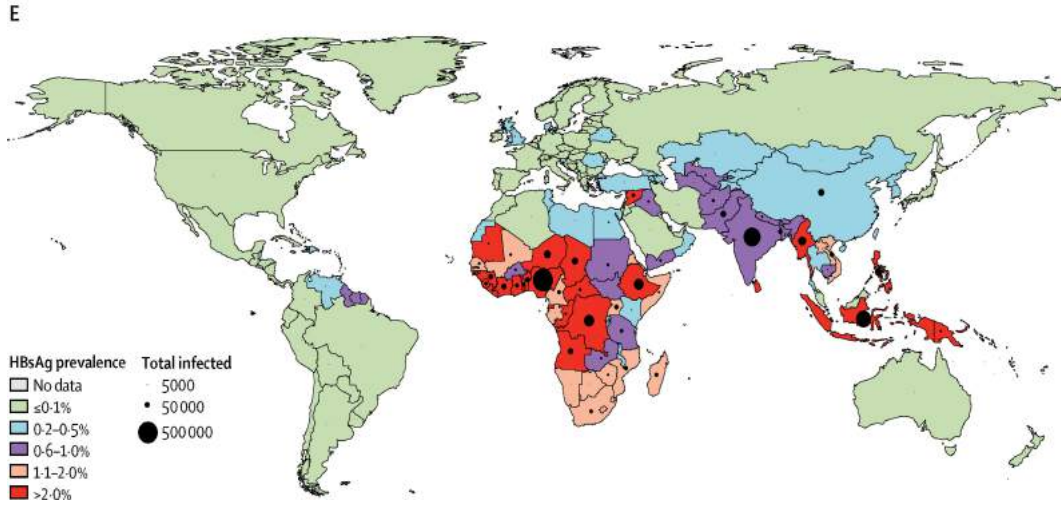


Stores vitamins.

Helps blood clot.



Hepatitis B-Related Health Disparities



- Asian Americans & Pacific Islanders carry 50% of chronic hepatitis B burden
 - 1 in 12 Asian Americans have hepatitis B
- 5% - 15% infection rates have been found in African-born community-based studies in the U.S.

Why are Asian
American, Pacific
Islander,
and African
Communities
Disproportionately
Affected?

- Hepatitis B is an ancient virus that has existed in Asia and Africa for thousands of years
- Structural barriers to control
 - Poor awareness, testing and vaccination practices
 - Lack of screening pregnant women
- Cultural and religious values
 - Play a role in the persistence of the virus in these regions
 - Taboos around discussing disease
 - Myths about transmission and origin of hepatitis B

Hepatitis B Symptoms

Possible Symptoms



Stomach pain



Yellow eyes or skin (Jaundice)



Feeling tired



Nausea

Loss of appetite



Fever



Dark urine

Clay colored stools

People can live with hepatitis B for many years, even decades without any symptoms

We tell people not to focus on symptoms as a sign they are infected – the only way to know for sure is a blood test!

The most common symptom is no symptoms at all!

Hepatitis B Basics (Cont.)

Transmission – direct contact with blood and sexual fluids

*Direct blood to blood contact
with someone who is infected*



*Unsterile
medical
equipment*

*Sexual transmission
There is a risk during any
type of sexual contact*



*Household contact
Sharing hygiene equipment
(razors, toothbrushes, earrings etc.)*



*Tattoos, piercings, barbers,
scarification or
circumcision practices*

Sharing needles



Hepatitis B is NOT in tears, saliva or sweat – NOT spread casually!

Preventing Hepatitis B

- The hepatitis B vaccine is the first “anti-cancer” vaccine
- Safe and effective 3-dose vaccine (not active vaccine)
 - 2 brand options; Engerix-B (GlaxoSmithKline)
 - Recombivax HB (Merck)
 - 3 shots over 4-6 months
- Now a 2 dose vaccine; Heplisav B (Dynavax) approved for adults 18+
 - Now covered by Medicaid
 - Ordered by Physicians
 - Available at Sam’s Club
- You should promote hepatitis B vaccination to adults and family members of people with hepatitis B

3 POKES.

A lifetime of protection.



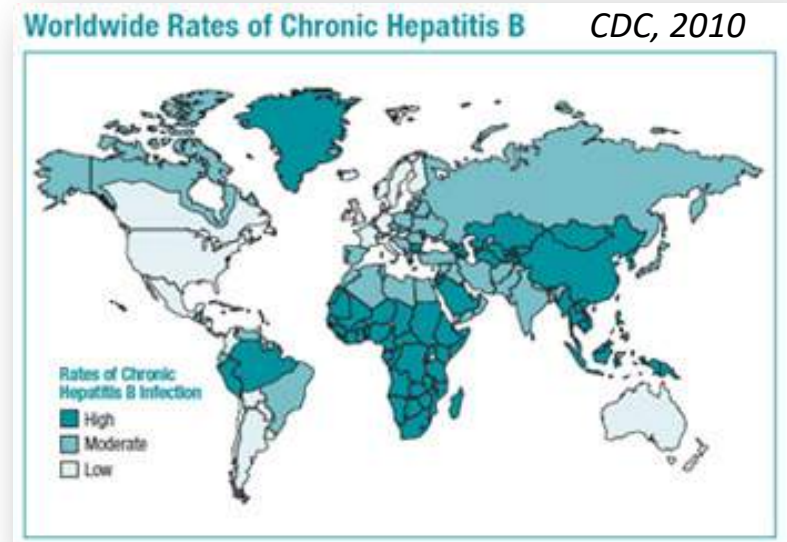
2 POKES.

A lifetime of protection.



High Risk Groups for Hepatitis B

- People born in geographic regions where hepatitis B is more common, with HBsAg prevalence of $\geq 2\%$
- Sexually active individuals (more than 1 partner in the past six months)
- People who inject drugs
- Men who have sex with men
- Kidney dialysis patients
- People living with HCV, HIV
- Health care providers and emergency responders
- Children adopted from countries where hepatitis B is common
- Inmates and staff of a correctional facility
- Residents and staff of facilities for developmentally disabled persons



Hepatitis B and the Opioid Epidemic

For the first time since 2006, the number of reported cases of acute HBV infection across the country is rising - increased by 20.7% in 2015 alone

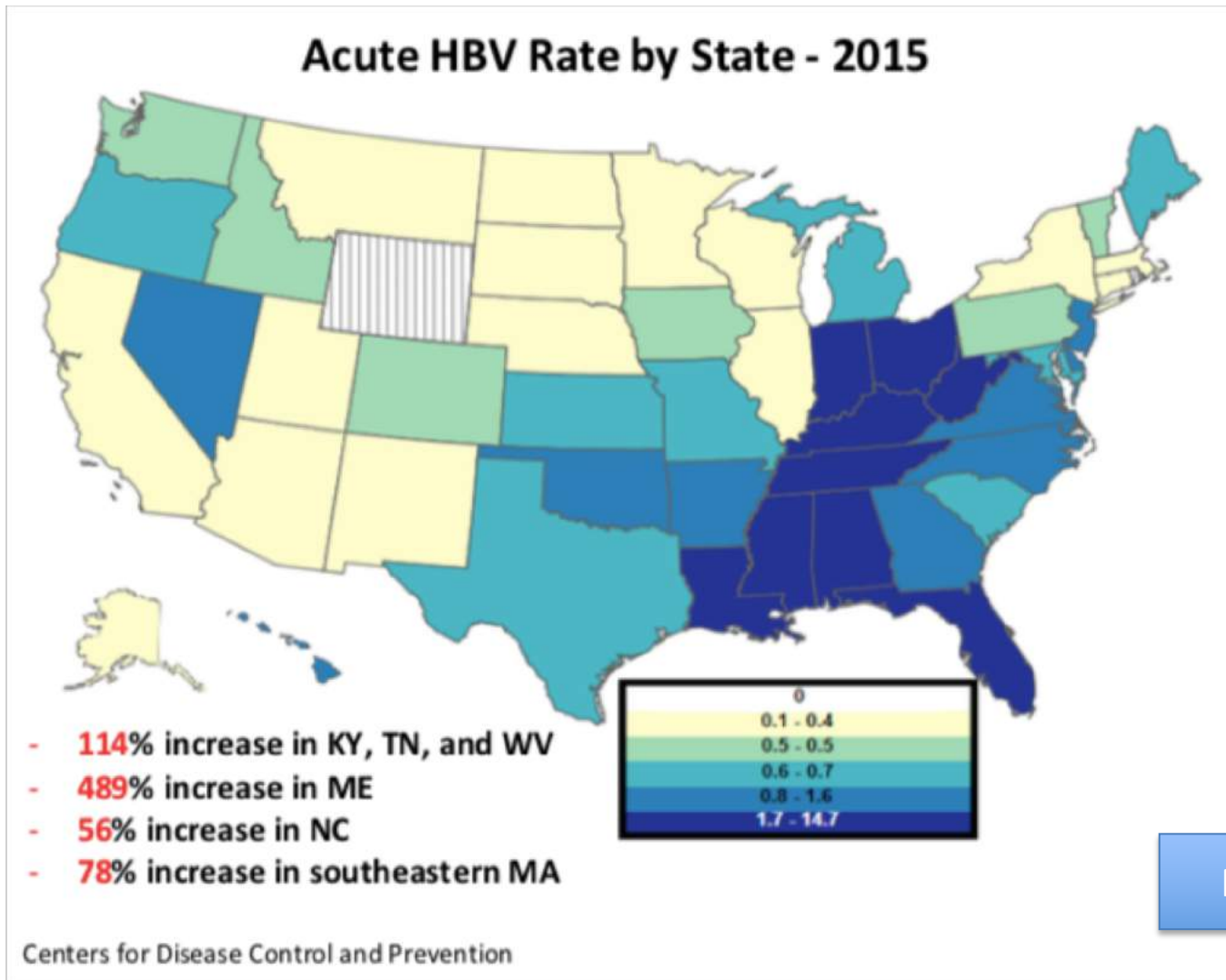
Where?


- Kentucky, Tennessee, and West Virginia: 114% increase (2009-2013)
- North Carolina: 56% increase (2014-2016)
- Maine: 489% increase (2015-2016)

Who is it impacting?

- Rural communities
- Younger population (under 40)
- Non-Hispanic whites
- 30-39 years
- Injection drug users

Rising Acute Cases





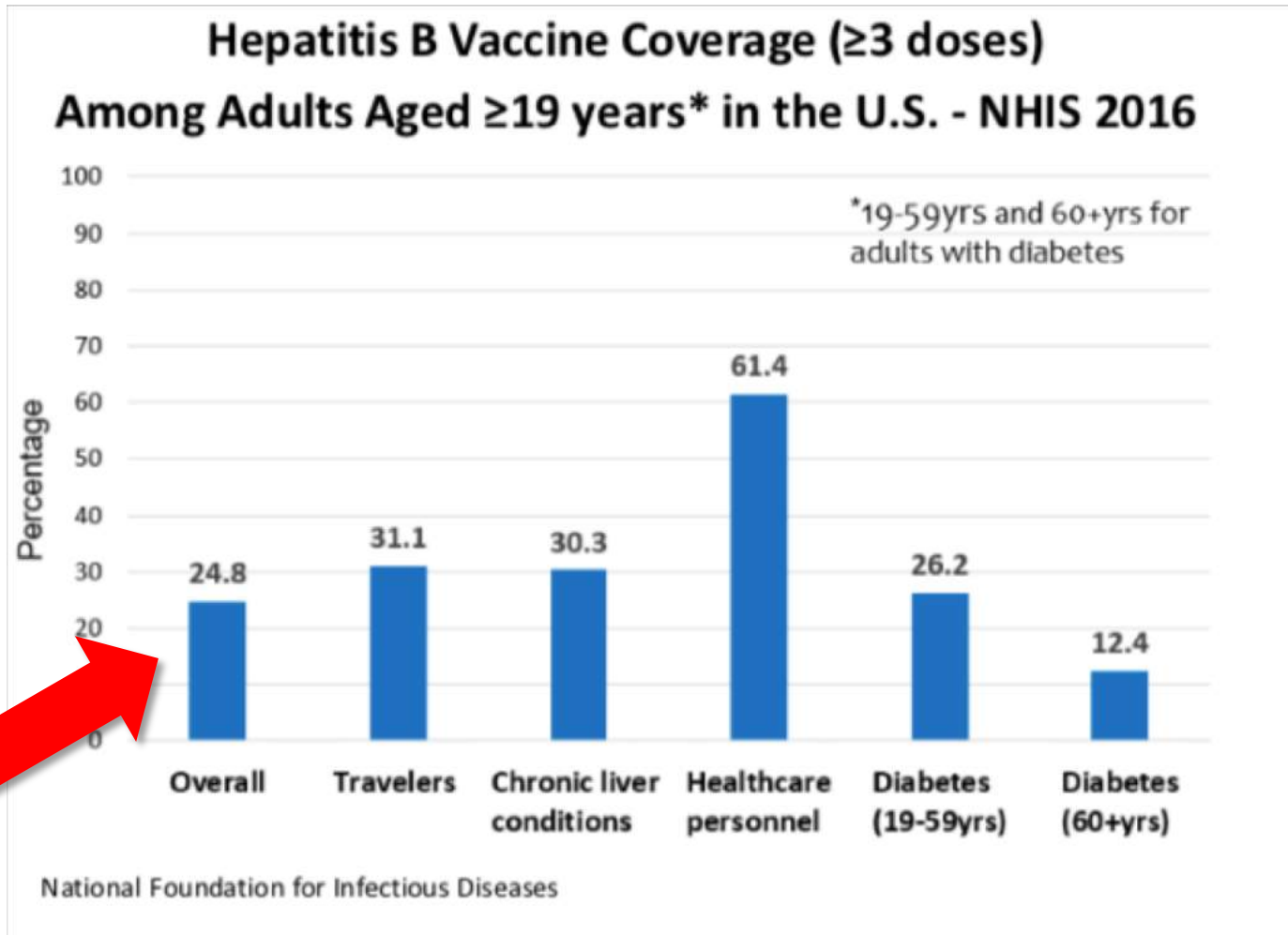
Poll Q4: In the past 12 months, has your jurisdiction seen increases in new hepatitis B infections?

A. Yes

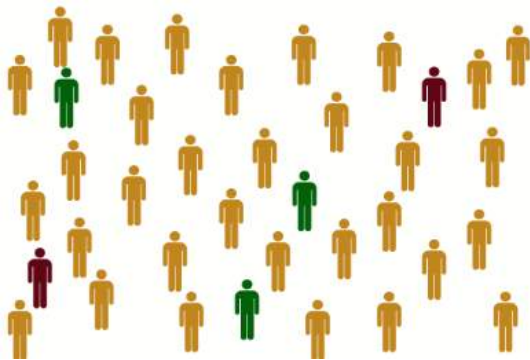
B. No

C. Not sure

Adult Vaccination Coverage in U.S.



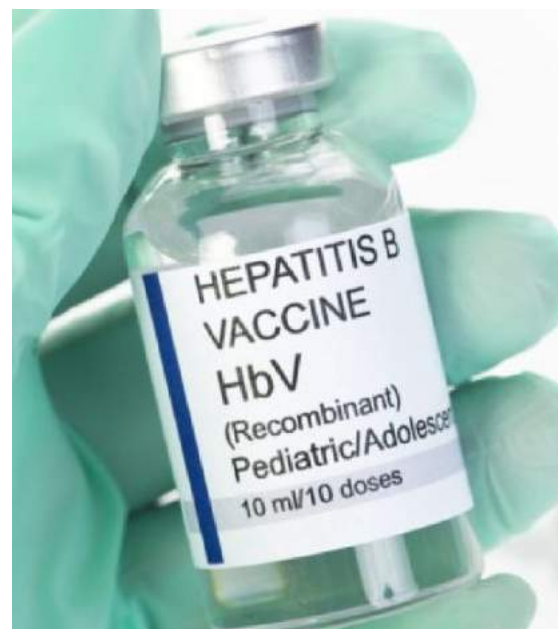
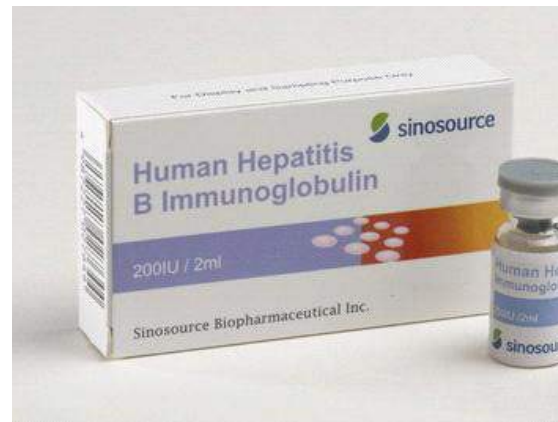
Most Adults Are Not Vaccinated!



- Universal infant vaccination program in 1991
- Requirements for healthcare workers
- Most of U.S. population is unvaccinated
- Opportunities for transmission and spread of disease
- Complications with coinfections; HCV and HIV

Post Exposure Response Guidelines

- Hepatitis B immune globulin (HBIG) + Vaccine
 - Depending on the exposed person's vaccination status and source of exposure
 - If person has written documentation of completed HBV vaccination series after possible exposure should complete vaccination booster dose
 - If persons who are in the process of being vaccinated but have not completed the vaccination series should receive both HBIG and hepatitis B vaccine
 - Unvaccinated persons should receive both HBIG and hepatitis B vaccine
 - All should be done as soon as possible after exposure (preferable within 24 hours after possible exposure)



Diagnosing Hepatitis B: Acute vs. Chronic

The age when someone becomes infected determines what type of infection they will have

Acute

An infection that lasts less than 6 months



- Less common
- Usually occurs by getting infected as an adult
- Usually clears from the body within 6 months

Chronic

An infection that lasts for life



- More common
- Usually occurs by getting infected during childhood
- Usually lasts for life

Acute Infection



Acquired during the last
6 months

- Requires getting re-tested for the virus 6 months from the date of diagnosis

Not usually treated with
antivirals

- Unless patient shows signs of possible liver failure
- Waiting game!

Chronic Infection



All chronically infected individuals need ongoing medical management

- Liver specialist appointments every 6-12 months
- Includes routine screening for liver cancer

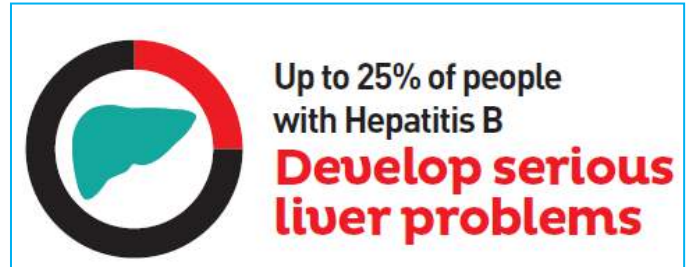
Some chronically infected individuals need treatment

- FDA approved antivirals can keep the virus under control and prevent liver damage

Outcomes of Chronic HBV Infection

Left untreated, 1 in 4 will develop liver disease or liver cancer

- HBV causes 887,000 deaths each year worldwide due to cirrhosis, primary liver cancer (HCC), and liver failure
- HBV is #1 cause of liver cancer globally – the 2nd deadliest cancer in the world (after lung cancer)
- **In the U.S., primary liver cancer is the only cancer rising in incidence and mortality rates**
- **The relative 5-year survival rate is 16.6%**



Healthy liver



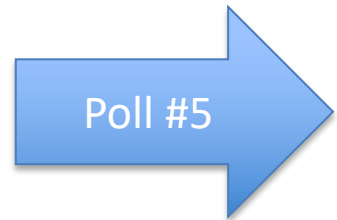
Fibrotic liver



Cirrhotic liver



Liver cancer



Treatment and Management

A daily antiviral pill taken for life

- Low side effects
- Very important to not start and stop medication


People who take treatment before they need it will not benefit from it

- A liver specialist must evaluate the patient's blood tests and liver ultrasound to understand if treatment is needed

Healthy lifestyle is important

- Avoid alcohol and cigarettes
- Be aware of medications that could harm the liver
- Eat a nutritious, low-fat diet
- Get regular physical activity





Poll Q5: Please indicate which HBV cases your health department refers for continued case management?

- A. Perinatal cases only
- B. New HBV cases
- C. Perinatal and new cases only
- D. Chronic HBV cases
- E. All cases

Hepatitis B Testing

3 tests to understand full hepatitis B status
(run from a single blood test)

HBsAg (surface antigen)

- Tests for the virus (active infection)

Anti-HBc (core antibody)

- Tests for infection at any point in time

Anti-HBs (surface antibody)

- Tests for protection against the virus (from natural infection or vaccine)

Hepatitis B Test Interpretation

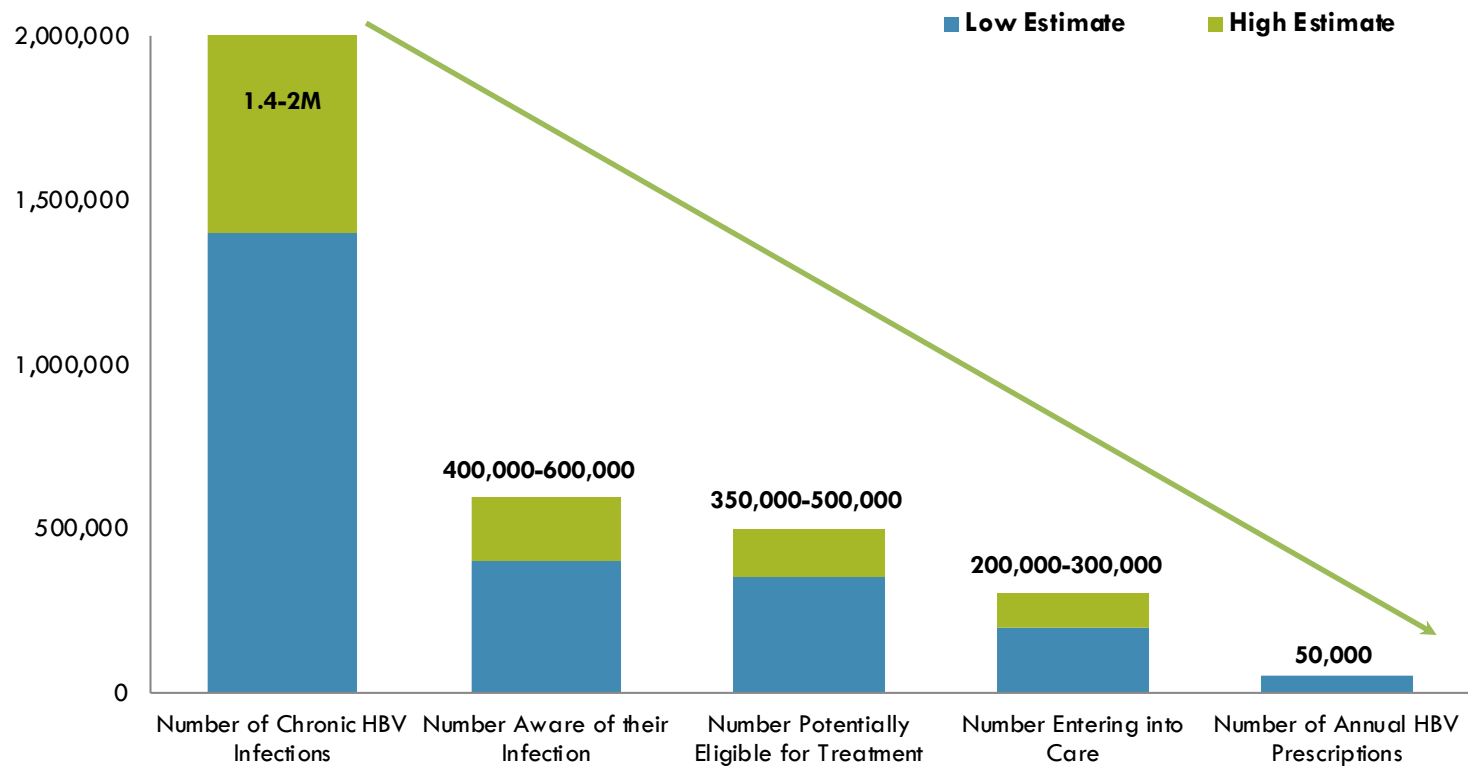
	HBsAg Surface Antigen	Anti-HBs Surface Antibody	Anti-HBc Core Antibody
Immune through natural infection	-	+	+
Immune through vaccination	-	+	-
Active infection	+	-	+
Unclear – Needs additional testing	-	-	+

Gaps in Addressing Hepatitis B in the U.S.

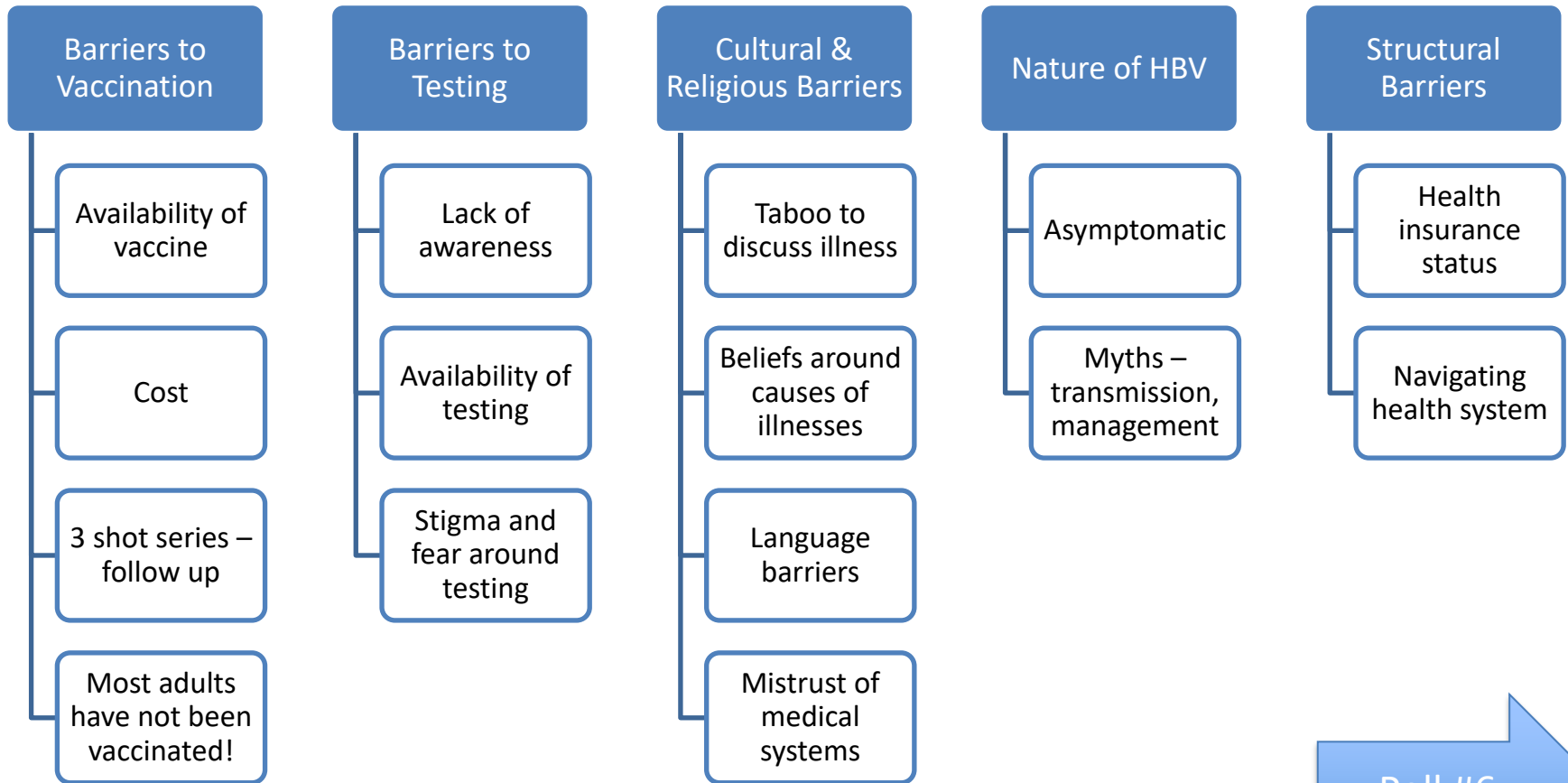
- Only 30-35% of chronically infected individuals are aware of their disease
 - Lack of routine screening at the primary care level
 - Asymptomatic nature of disease
- Less than 10% of all infected individuals are diagnosed, able to access care, and receive appropriate treatment
- Lack of primary care doctors, knowledge of healthcare system, culture, language barriers

HBV Care Cascade

Only 30-35% of infected Americans are diagnosed
Less than 10% of all infected Americans are treated



Barriers to Elimination




Poll Q6: Does your health department fund or provide any technical support, education or screening to local service providers to conduct HBV screening?

- A. Yes, technical support only
- B. Yes, educational efforts only
- C. Yes, screening efforts only
- D. All of the above
- E. No support at this time



Poll #7



Poll Q7: Would your health department be interested in receiving more information about joining local Hep B United coalitions to expand your hepatitis B education and screening capacity?

A. Yes

B. Not at this time

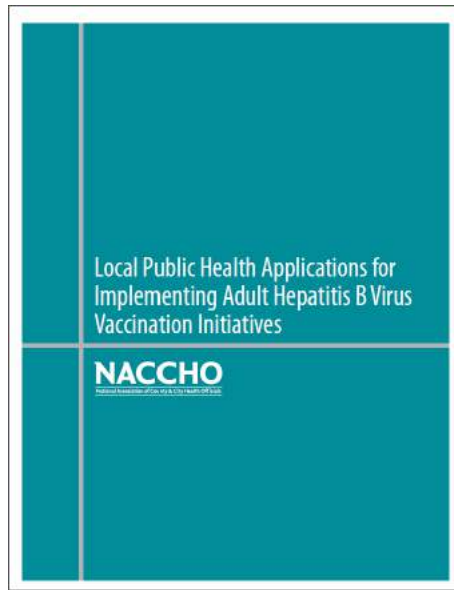
For more information on Hep B United:

- Visit www.hepbunited.org
 - ▣ Local partners tab – see a list of all cities and states where we currently have coalitions
 - ▣ Email connect@hepbunited.org for assistance with connecting to a local coalition



Resources

NACCHO HBV Toolkit



Additional HBV information & printable fact sheets



Subscribe to Hepatitis B Foundation, Hep B United and NACCHO Newsletters



Available at: toolbox.naccho.org

Available at: www.hepb.org

Stay tuned for our “Part 2” webinar for additional resources and HBV tips!

Thank you!

Sierra Pellechio, BS, CHES
Health Outreach Coordinator
Hepatitis B Foundation

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215-489-4932

***Email us additional needs and
future webinar suggestions!***

Save the Date! Webinar Series Parts 2 and 3



May 1st (2pm EDT)

Part 2: Exploring National and Local Approaches to
Perinatal Hepatitis B Prevention

May 22nd (2pm EDT)

Part 3: Hidden Consequences: The Opioid Epidemic and
Rising Hepatitis B Rates

Thank you for joining!

For more information:

www.hepb.org

www.hepbunited.org

Hepatitis B help-line
(for patient/provider use):

215-489-4900

Info@hepb.org

Contact NACCHO:

Michelle Cantu

Director of Infectious

Disease & Immunization

immunization@naccho.org

www.naccho.org