



Hepatitis B: A Preventable Infection and Public Health Problem

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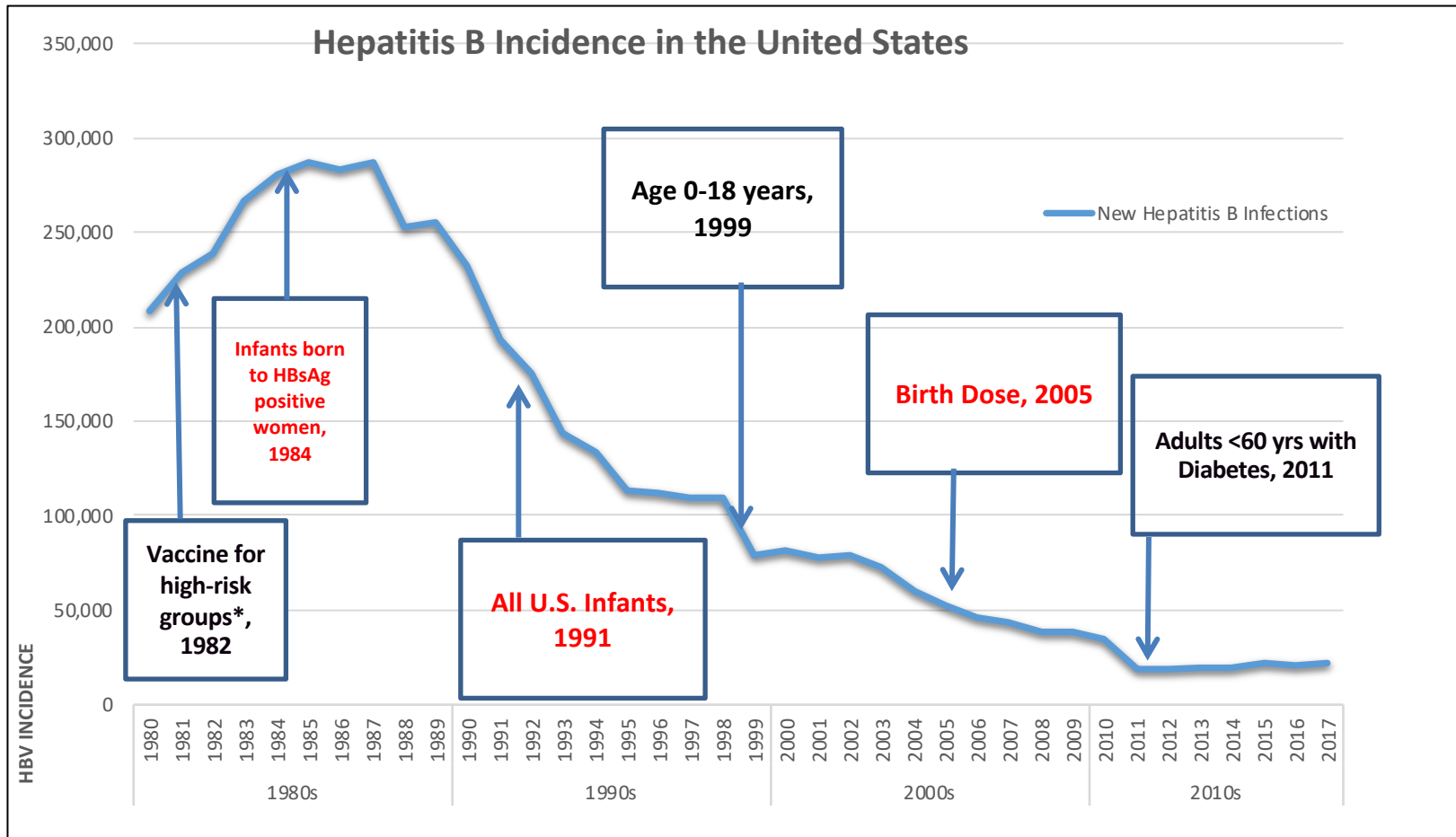
April 30, 2020

Overview

- **Hepatitis B is a Public Health Problem**
- **CDC's Approach:**
 - Advisory Committee on Immunization Practices
 - Economic Modeling of Hepatitis B Vaccination
 - CDC Funding for High Impact Settings
 - CDC and HHS Office of Minority Health Collaboration
 - Perinatal Hepatitis B Prevention Program

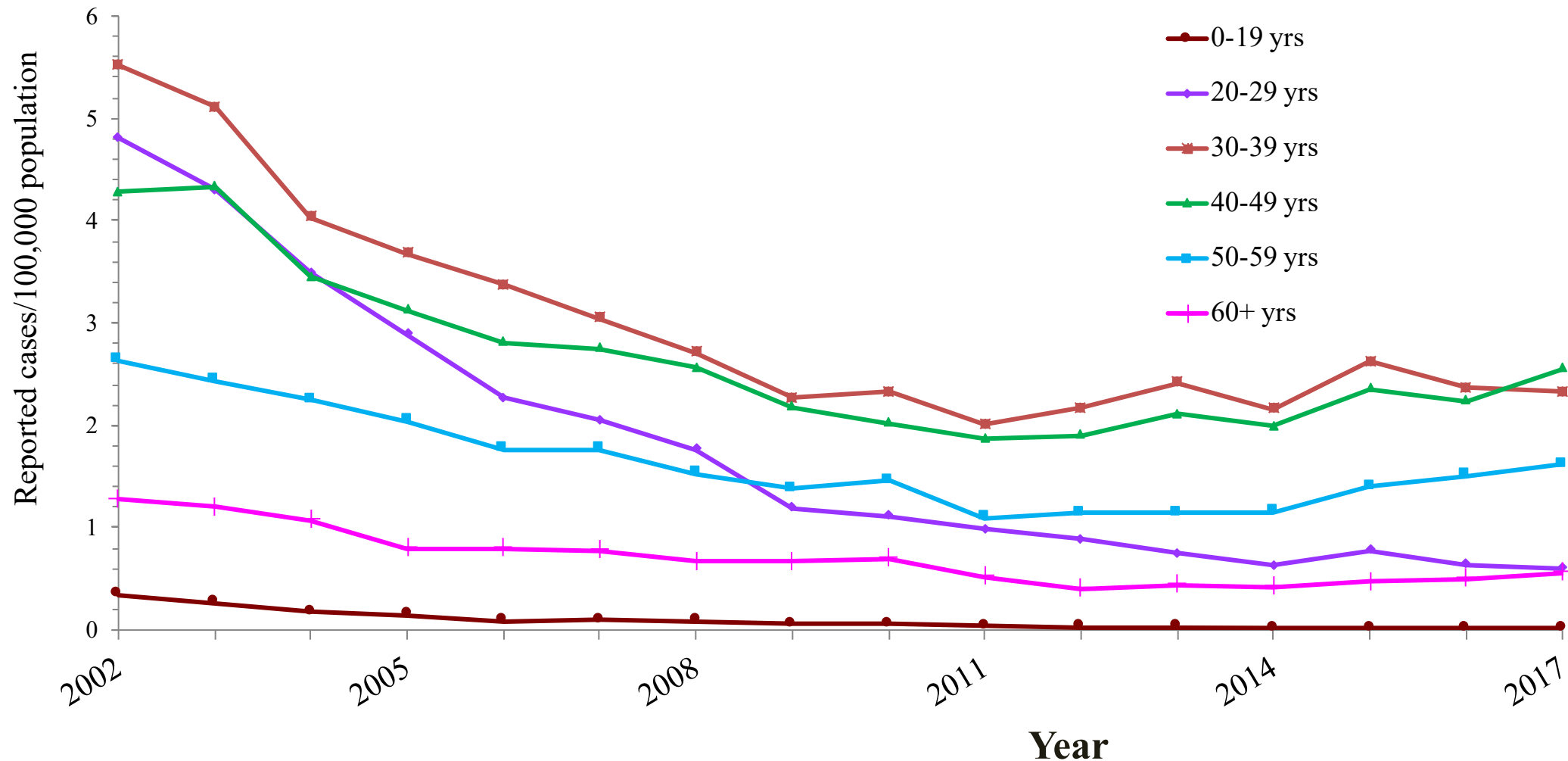
Hepatitis B: Burden and Vaccine Coverage

Hepatitis B Vaccine Policy has Positively Impacted Acute Hepatitis B Cases in the United States



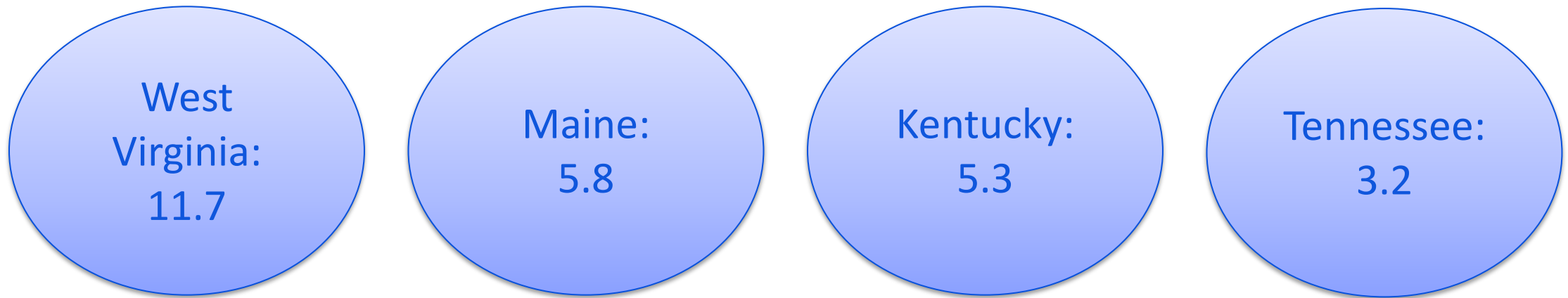
*Health care providers, MSM, IDU, hemodialysis patients, household & sexual partners of persons with chronic HBV, persons in certain institutional settings, e.g., inmates of long-term correctional facilities.

Rates of Reported Acute Hepatitis B Rising in Adults Aged > 40 years



States Reported Dramatically Different Rates of Acute Hepatitis B in 2016 and 2017

National Average Rate* in 2017: 1.1

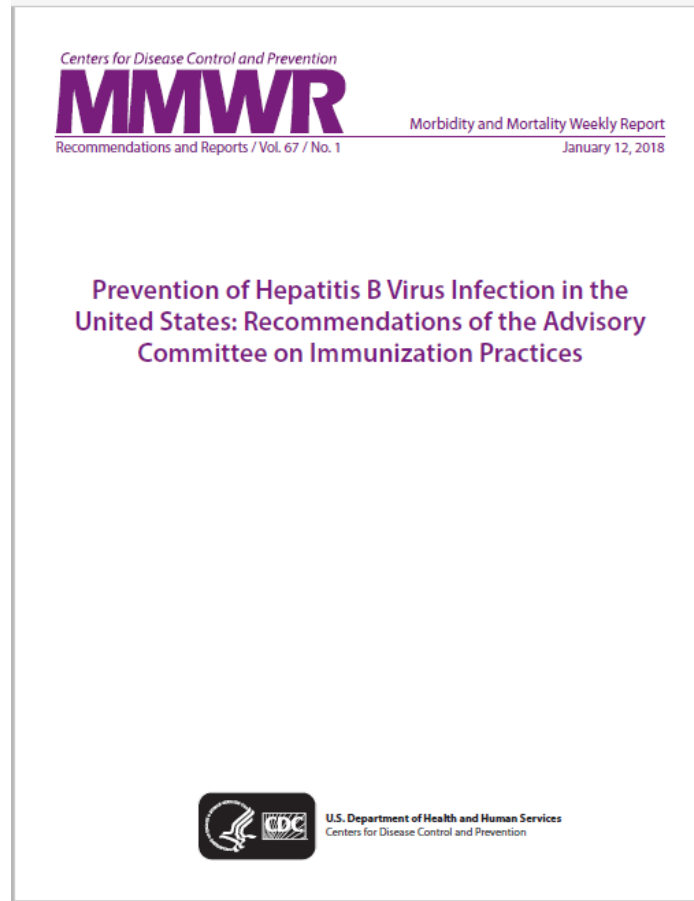


State-level trends were influenced by the opioid crisis¹ and lack of protection among populations for whom vaccination is recommended.

* Rate per 100,000 population

¹Gomes, T., et al., The Burden of Opioid-Related Mortality in the United States. JAMA Network Open, 2018. 1(2): p. e180217. Available from PubMed Central PMC6324425.

New Advisory Committee on Immunization Practices (ACIP) Hepatitis B Recommendations, 2018

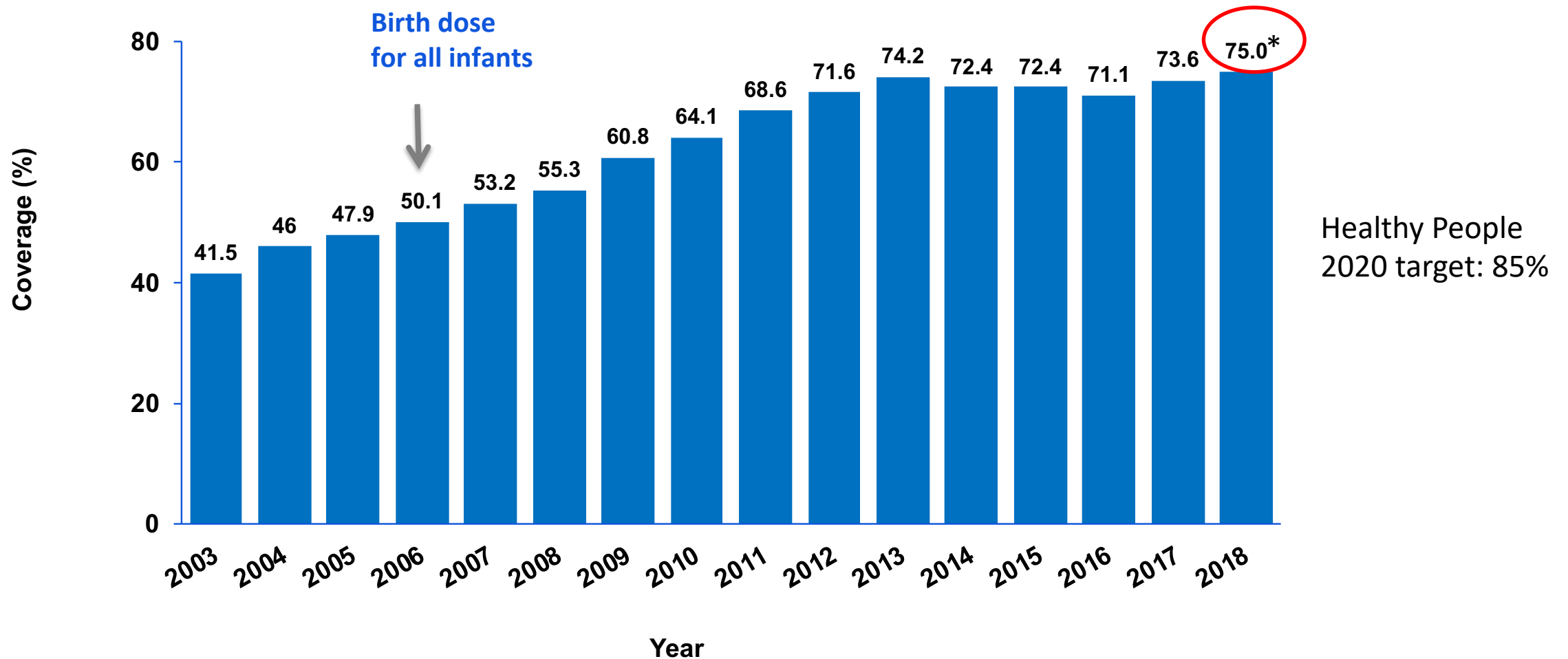


ACIP Recommendations

- All infants
- Unvaccinated children aged <19 years
- Persons at risk for infection by sexual exposure
- Persons at risk for infection by percutaneous or mucosal exposure to blood
- Others (e.g., International Travelers, Persons with HCV, Persons with chronic liver disease, Persons with HIV, Incarcerated persons)

1. Schillie S, Vellozzi C, Reingold A, Harris A, Haber P, Ward JW, Nelson NP. Prevention of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices. MMWR Recomm Rep. 2018 Jan 12;67(1):1-31.
2. Schillie S, Harris A, Link-Gelles R, Romero J, Ward J, Nelson N. Recommendations of the Advisory Committee on Immunization Practices for Use of a Hepatitis B Vaccine with a Novel Adjuvant. MMWR Morb Mortal Wkly Rep. 2018 Apr 20;67(15):455-458.

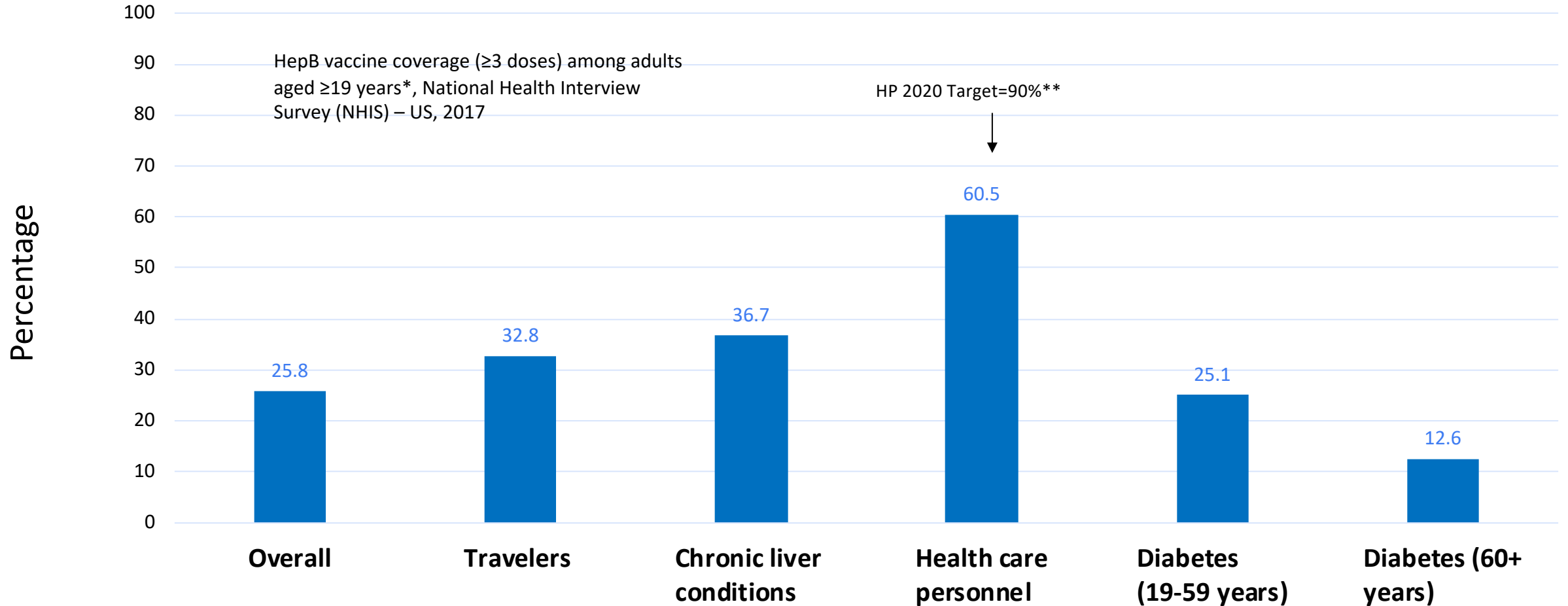
Hepatitis B Birth Dose Vaccine Coverage Continues to Improve



* 2018 coverage is by 24 months of age, birth year 2015–2016

Source: National Immunization Survey, CDC

Adult Hepatitis B Vaccine Coverage Remains Low



Vaccination Coverage Among Adults in the United States, National Health Interview Survey, 2017.
<https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/pubs-resources/NHIS-2017.html#box2>

*19-59 years and 60+ years for adults with diabetes
**Refers to health care personnel (HCP) overall; 69.8% vaccination rate among HCP with direct patient care; 42.8% among HCP without direct patient care

CDC Hepatitis B Focused Initiatives

ACIP Hepatitis Vaccines Workgroup Activities

- **Evaluating the evidence base for a universal approach to vaccination of adults against hepatitis B**
- **Potential considerations for universal adult hepatitis B vaccination include:**
 - Closing the gap in adult vaccination coverage, providing protection to individuals who might be reluctant to disclose certain risk factors to their healthcare provider
 - Providing simplified recommendations for providers, making it feasible for providers to stock hepatitis B vaccines and
 - Creating opportunities for vaccination prior to onset of behaviors or practices that put persons at increased risk of infection

Economic Modeling to Improve Vaccination Coverage and Immune Response

- Assessing the cost-utility of universal hepatitis B vaccination among adults
- Assessing the cost-utility of preferentially administering HEPLISAV-B vaccine to certain populations



CDC Funds States for Hepatitis Prevention, Vaccination, Testing, and Linkage to Care



Expected Outcomes

Increased **HBV and HCV** testing and detection of current infection

Increased **number of people** who are aware of their current infection status

Increased **linkage** to appropriate medical care for clients with current HBV and/or HCV infection



Focus on High Impact Settings

Syringe Services Programs

Substance Abuse Treatment

Correctional facilities

Hospital Emergency Departments



Partnerships

Recipients are encouraged to identify collaborating entities and resources and establish partnerships to ensure PWID have access to preventative services, such as **hepatitis B vaccination**.

CDC and HHS Office of Minority Health Collaboration

Identifies Best Practices for:

- Comprehensive, culturally competent community-based hepatitis B education, screening, **vaccination** and treatment programs in disadvantaged and minority communities

Nearly \$3 Million Funds Projects in:

- Chicago, IL
- New York, NY
- Philadelphia, PA
- Washington, DC
- Davis, CA
- Fountain Valley, CA

U.S. Perinatal Hepatitis B Prevention Program (PHBPP)

Programs funded in 64 jurisdictions (50 states, 6 cities, 5 territories & 3 freely associated island nations)

PHBPPs Goals Are to Ensure:

- Identification of all Hepatitis B-infected pregnant women
- Timely receipt of infant prophylaxis
- Infant post-vaccination testing after completion of Hepatitis B vaccine series
- Revaccination of infants with non-response to Hepatitis B vaccine

Looking to the Future

CDC is Developing a Viral Hepatitis 2020 - 2025 Strategic Plan

Goals and objectives for hepatitis A, B, and C with specific outcome measures, including measures monitoring outcomes among disproportionately affected communities

Aligned with HHS National Viral Hepatitis Strategic Plan and Healthy People 2030

Thank you!

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



Advisory Committee on Immunization Practices (ACIP)

Persons recommended to receive hepatitis B vaccination

- **All infants**
- **Unvaccinated children aged <19 years**
- **Persons at risk for infection by sexual exposure**
 - Sex partners of hepatitis B surface antigen (HBsAg)–positive persons
 - Sexually active persons who are not in a long-term, mutually monogamous relationship (e.g., persons with more than one sex partner during the previous 6 months)
 - Persons seeking evaluation or treatment for a sexually transmitted infection
 - Men who have sex with men
- **Persons at risk for infection by percutaneous or mucosal exposure to blood**
 - Current or recent injection-drug users
 - Household contacts of HBsAg-positive persons
 - Residents and staff of facilities for developmentally disabled persons
 - Health care and public safety personnel with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids
- Hemodialysis patients and predialysis, peritoneal dialysis, and home dialysis patients
- Persons with diabetes aged 19–59 years; persons with diabetes aged ≥60 years at the discretion of the treating clinician
- **Others**
 - International travelers to countries with high or intermediate levels of endemic hepatitis B virus (HBV) infection (HBsAg prevalence of ≥2%)
 - Persons with hepatitis C virus infection
 - Persons with chronic liver disease (including, but not limited to, persons with cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, and an alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal)
 - Persons with HIV infection
 - Incarcerated persons
 - All other persons seeking protection from HBV infection