



**Thank you for joining**

**The presentation will  
begin shortly**



# Rise to Immunize® Monthly Webinar

## **Screening for Gaps in Hepatitis B Vaccines in Your EHR**

Camilla Graham, MD, MPH, *Harvard Medicine*

October 17, 2024

# Today's Webinar

- **Campaign Updates**

- RIZE Action Month
- AMGA webinar
- Collaborative deliverables
- RIZE Award winners
- Pulse survey

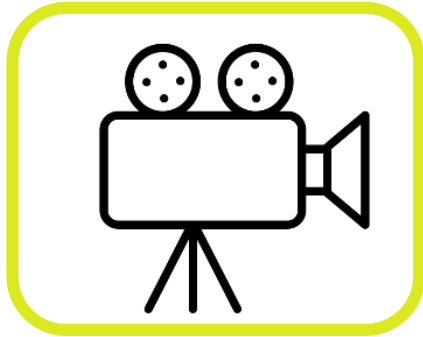
- **Screening for Gaps in Hepatitis B Vaccines in your EHR**

- Camilla Graham, MD, MPH, *Harvard Medicine*

- **Q&A Session**



# Webinar Reminders



Today's webinar recording will be available the **week of 10/21**

- Will be sent via email
- Will be available on website



Ask questions during the webinar using the **Q&A feature**

- Questions will be answered at the end of the presentation

(RiseToImmunize.org → "Resources" → "Webinars")

# RIZE Action Month



**“It was our most successful RIZE Action Month meeting that we have held so far!”**  
– RIZE Action Month participant

# Take Action!



## Alternate Activities



Hold a meeting  
to discuss  
involvement in  
RIZE campaign

Educate staff  
about  
respiratory  
vaccines

Develop patient  
education  
materials

Plan for  
implementation  
of fall flu clinics

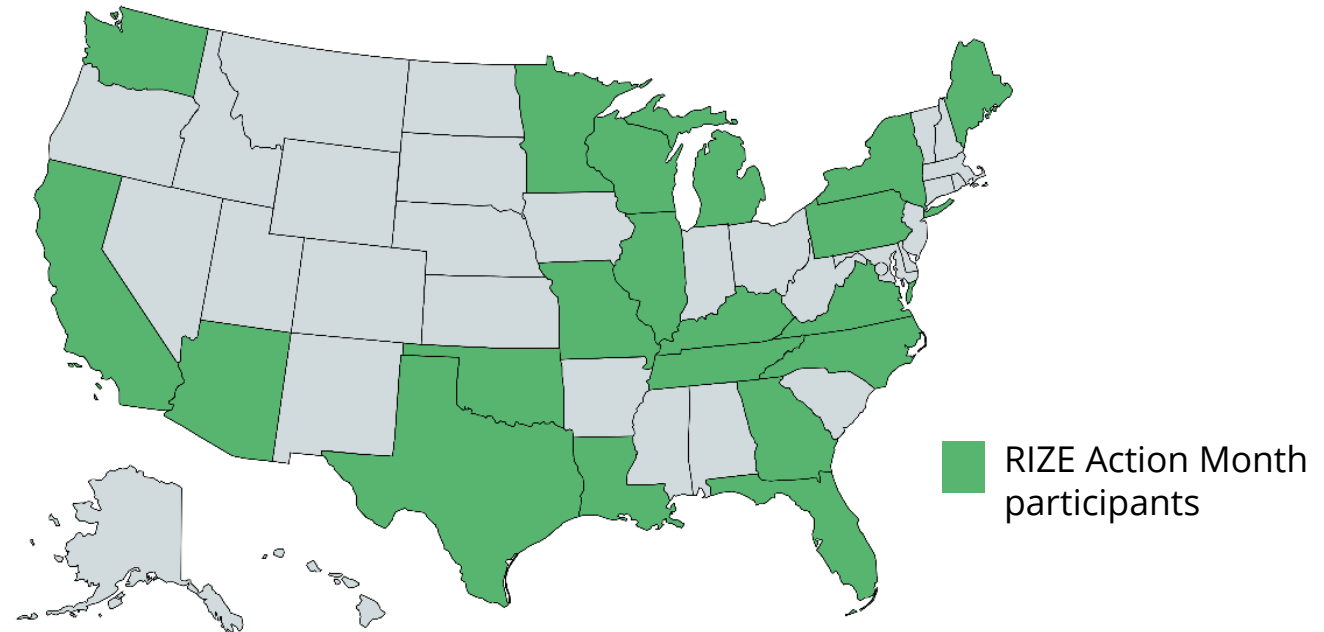
Send bulk  
messaging to  
patients for flu  
vaccine scheduling

Emphasize the  
importance of  
vaccines to PCPs

# Impact



**~700 healthcare professionals across 31 AMGA member groups participated in this year's RIZE Action Month**







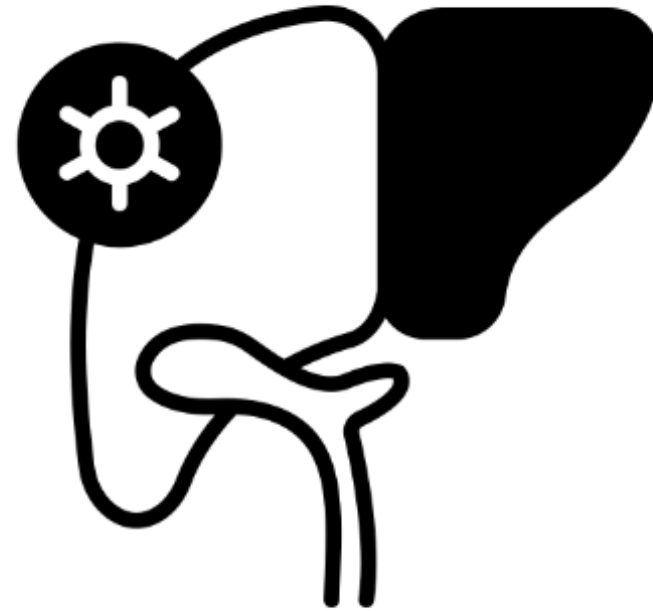
We hope you join us in  
**August 2025** for next  
year's RIZE Action Month!

## AMGA Webinar

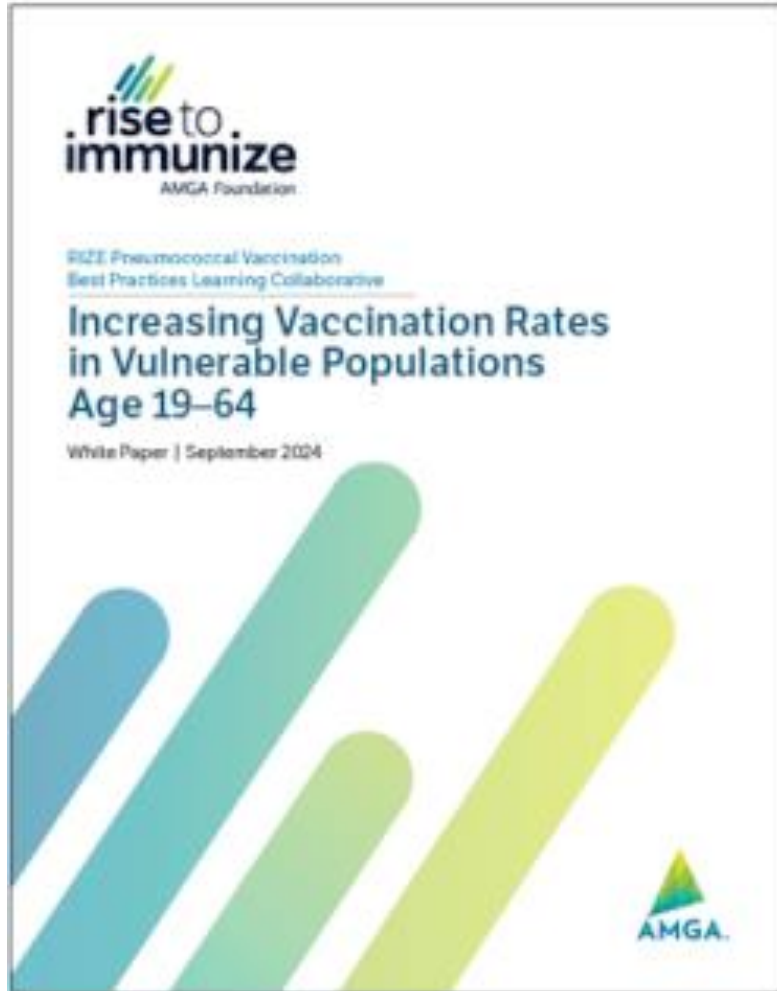


“Liver Cancer  
Prevention: The Role of  
Adult Hepatitis B  
Vaccination in Disease  
Elimination”

**Wednesday, October 30  
at 3:00 pm ET**



# Collaborative Deliverables



# RIZE Award Winners

  
rise to  
immunize  
AMGA Foundation

2024  
RIZE to the Challenge  
Award

*presented to*

Coastal Carolina  
Health Care P.A.



  
rise to  
immunize  
AMGA Foundation

2024  
RIZE to the Challenge  
Award

*presented to*

Henry Ford  
Medical Group



  
rise to  
immunize  
AMGA Foundation

2024  
RIZE to the Challenge  
Award

*presented to*

Sutter Health –  
Palo Alto Medical Foundation







**Please take a moment to  
answer a one question  
pulse survey.**

We appreciate your feedback!

# Today's Speaker



**Camilla Graham, MD, MPH**, Assistant Professor of Medicine, Beth Israel Deaconess Medical Center, *Harvard Medicine*

# **A Framework for Integrating HBV Vaccination and Screening into Large Health Systems – A Provider's Perspective**

Camilla S. Graham, MD, MPH

Division of Infectious Disease

Beth Israel Deaconess Medical Center

Harvard Medical School

# Disclosures

- None for hepatitis B



# Topics

- HBV vaccination
- HBV screening
- Challenges interpreting HBV serologies
- Brief overview of HBV treatment
- Areas where AMGA can help improved HBV management in the US

# National Academies of Sciences, Engineering, and Medicine Consensus Committee on HBV Elimination

- Elimination of HBV is feasible in the US (published in 2016)
- Barriers include:
  - >50% of patients have not been diagnosed (need for improved **screening**)
  - Low adult **vaccination** rates - ~25% of adults have been vaccinated
  - Ongoing perinatal transmission
- Need improved mechanisms to screen patients and link to care
  - Education to reduce stigma
  - Less than 1/3 of persons who likely should be treated receive antivirals
- More research on reactivation and curative strategies




## Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2022

Weekly / April 1, 2022 / 71(13):477–483

- Hep B vaccination is recommended for all eligible adults aged 19–59 years and adults aged  $\geq 60$  years **with risk factors** for hepatitis B.
- Adults aged  $\geq 60$  years without known risk factors for hepatitis B **may** also receive Hep B vaccines
  - “The new language for adults aged  $\geq 60$  years without known risk factors is intended to prompt all providers to offer Hep B vaccination to patients in that cohort, rather than wait for a patient to request vaccination, thus **shifting the responsibility** of initiating the consideration of Hep B vaccination from the patient to the provider.”

# Implementing Adult Hepatitis B Immunization and Screening Using Electronic Health Records: A Practical Guide

by H. Nina Kim <sup>1,\*</sup> , Kelly L. Moore <sup>2,3</sup>, David L. Sanders <sup>2</sup>, Michaela Jackson <sup>4</sup>, Chari Cohen <sup>4</sup> , Richard Andrews <sup>5,6</sup> and Camilla S. Graham <sup>7</sup>

<sup>1</sup> Division of Allergy & Infectious Diseases, Department of Medicine, University of Washington, Seattle, WA 98104, USA

<sup>2</sup> Immunize.org, St. Paul, MN 55116, USA

<sup>3</sup> Department of Health Policy, Vanderbilt School of Medicine, Nashville, TN 37232, USA

<sup>4</sup> Hepatitis B Foundation, Doylestown, PA 18902, USA

<sup>5</sup> Houston Viral Hepatitis Task Force, Houston, TX 77040, USA

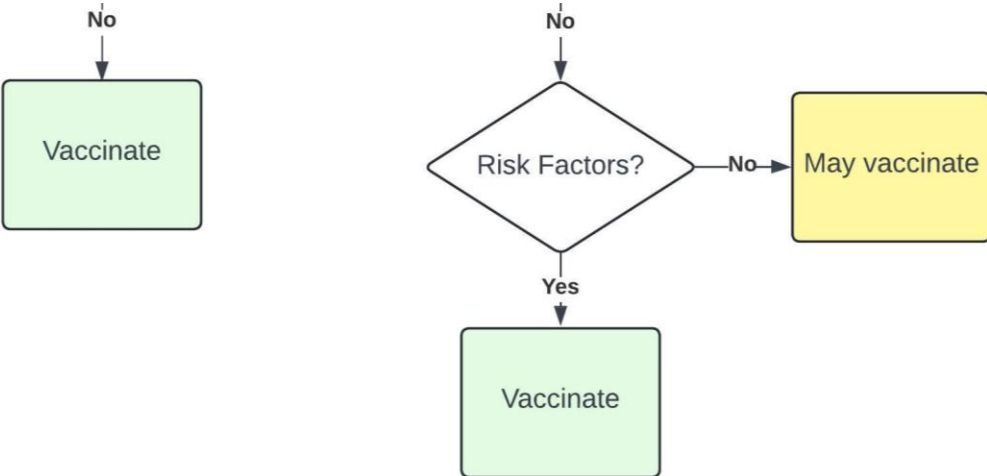
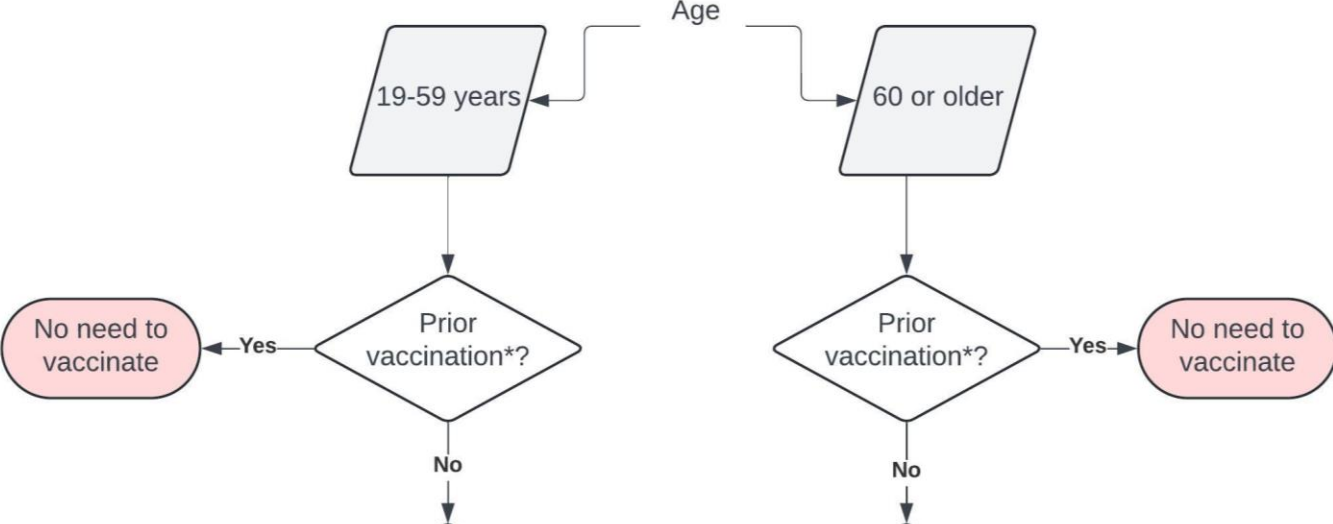
<sup>6</sup> Advisory Panel, Hep B United, Doylestown, PA 18902, USA

<sup>7</sup> Division of Infectious Diseases, Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, MA 02215, USA

\* Author to whom correspondence should be addressed.

# Implement Hep B vaccination prompt in EHR: Can be done without HBV screening

“Prior vaccination?” means documented receipt of a full series as defined by a specific brand, population, and dose



Kim HN, Moore KL, Sanders DL, Jackson M, Cohen C, Andrews R, Graham CS. Implementing Adult Hepatitis B Immunization and Screening Using Electronic Health Records: A Practical Guide. *Vaccines*. 2024; 12(5):536.

# Adults aged $\geq 60$ years with risk factors for hepatitis B

- Persons at risk for infection by sexual exposure
  - Sex partners of persons testing positive for HBsAg
  - 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
  - Persons with current or recent injection drug use
  - Household contacts of persons testing positive for HBsAg
  - Residents and staff members of facilities for persons with developmental disabilities
  - Health care and public safety personnel with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids
- Persons on maintenance dialysis, including incenter or home hemodialysis and peritoneal dialysis, and persons who are predialysis
- Persons with diabetes at the discretion of the treating clinician
- Others
  - International travelers to countries with high or intermediate levels of endemic hepatitis B virus infection (HBsAg prevalence of  $\geq 2\%$ )
  - 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 or aspartate aminotransferase level greater than twice the upper limit of normal)
  - Persons with HIV infection
  - Persons who are incarcerated
- Adults aged  $\geq 60$  years without known risk factors for hepatitis B may receive hepatitis B vaccines

# Hep B Vaccine Options for Age 60+

- Option 1:
  - Identify risk factors or proxys to tie to Hep B vaccine prompt
  - Send letter to **all** patients age 60+ who lack documentation of a full vaccine series or evidence of immunity/exposure informing them of Hep B vaccine option
- Option 2:
  - Add Hep B vaccine prompt to all patients over age 60 who lack documentation of a full vaccine series or evidence of immunity/exposure
- ACA/IRA covers HBV vaccination. If patient has Medicare coverage:
  - Part B if patient has risk factors
  - Part D if patient does not have known risk factors

### Immunizations

**Patient is due for the following immunizations:**

PCV 13 (Prevnar 13 – Conjugate)

Zoster Recombinant (Shingrix)

\* [For date:](#)

04/28/2019

Type

Last entry

Type

Last entry

#### Routine Immunizations

Hepatitis A Vaccination

Hepatitis B Vaccination  
[Project-HD Recombivax Enderix Vaccination Flyer](#)

- Heparisav-B (Adult, Routine administration)
- Recombivax or Enderix, Adult standard dose (1mL/dose) (preferred in pregnancy, Recombivax Age>10, Enderix Age >19)
- Recombivax, high dose (40mcg = 1mL/dose) (End-stage renal disease, immunocompromised host)
- Enderix, high dose (40mcg = 2mL/dose) (End-stage renal disease, immunocompromised host)
- Recombivax (5mcg) or Enderix (10mcg), Pediatric dose (0.5mL/dose) – (Recombivax Age<=10, Enderix <=19)

HPV Vaccination (Gardasil)

Influenza Vaccination [02/27/2019](#)

MenACWY (Menveo; Menactra)

MMR Vaccination

PCV 13 (Prevnar 13 – Conjugate) [11/30/2015](#)

DTP [08/08/2014](#)



# Provide Hep B Vaccine Decision Support

- Brand of vaccine
  - Different brands have different dosing so don't just list "Hepatitis B vaccine"
  - Selection of preferred brand may involve P&T committee, contracting, etc
- Indicated populations
  - Adult only, pregnancy, hemodialysis
- Appropriate dose and number of vaccines in full series
  - i.e., HD patients receive high dose Engerix-B for four doses
- Pre-populate vaccine schedule and add to dashboard for all providers
- Schedule future appointments for additional vaccines in series
- Send reminders to patient for follow up
- Provide decision-support tables and FAQs

# Examples of Common HBV Vaccine Questions

- Do you need to confirm anti-HBs Ab status after completing a full vaccine course?
  - Population level = No
    - In most circumstances we do not check titers to verify response to a vaccine
  - Individual level: If a patient is immunocompromised or is at high risk for HBV acquisition, check anti-HBs Ab 3 -4 months after completion of series
- If you are uncertain about someone's HBV vaccine status, can you give them a first HBV vaccine and then soon after check their anti-HBs Ab status?
  - In general, yes. If using a 3-vaccine series, can spare patients third vaccine if boosting leads to seroprotective levels of anti-HBs



## Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2022

*Weekly* / April 1, 2022 / 71(13);477–483

*USPSTF and CMS have not updated recommendations so currently only adult risk-based screening is consistently covered by insurance*



Simultaneous implementation



## Screening and Testing for Hepatitis B Virus Infection: CDC Recommendations — United States, 2023

*Recommendations and Reports* / March 10, 2023 / 72(1);1–25

# Implement Hep B Vaccination Prompt in EHR: With Serology Data

“Past/current HBV infection”:

- Hepatitis B surface antigen
- Hepatitis B core antibody (total, IgG, or IgM)
- Hepatitis B surface antibody\*
- Hepatitis B e antigen
- Hepatitis B e antibody
- Hepatitis B DNA

Kim HN, Moore KL, Sanders DL, Jackson M, Cohen C, Andrews R, Graham CS. Implementing Adult Hepatitis B Immunization and Screening Using Electronic Health Records: A Practical Guide. *Vaccines*. 2024; 12(5):536.



- [Blastomycosis Antibody \(by CF and ID\)](#)
- [Cardiolipin Antibodies \(IgG, IgM\)](#)
- [CMV IgG Ab](#)
- [CMV IgG/IgM Ab Panel](#)
- [Coccidioides Ab, Complement Fixation and Immunodiffusion](#)
- [Cryptococcal Antigen](#)  
(w/reflex titer if positive)
- [EBV Ab Panel](#)
- [H. pylori IgG Ab](#)
- [Hepatitis A Antibody](#)
- [Hepatitis A Antibody, IgM](#)
- [Hepatitis B Screening Panel](#)  
(Includes Hepatitis B Surface Antigen,  
Hepatitis B Surface Antibody,  
Hepatitis B Core Antibody (Total))
- [Hepatitis B Core Antibody](#)
- [Hepatitis B Core Antibody, IGM](#)
- [Hepatitis B Surface Antibody](#)
- [Hepatitis B Surface Antigen](#)
- [Hepatitis Be Antibody](#)
- [Hepatitis Be Antigen](#)

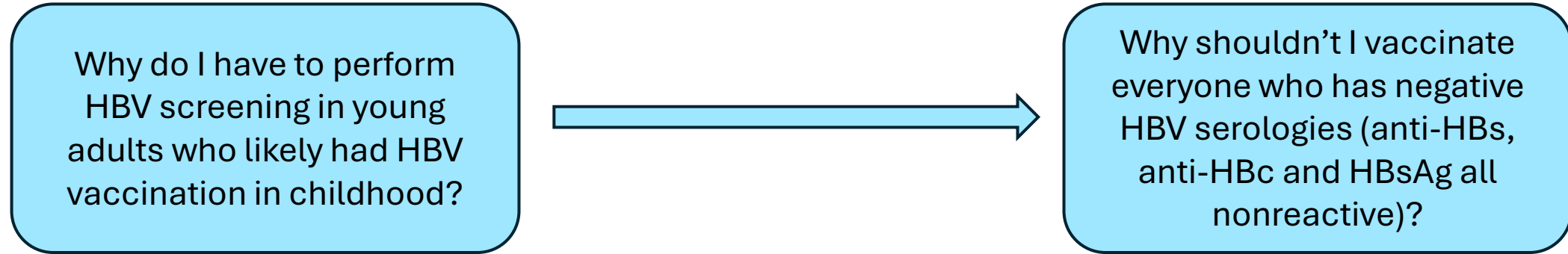
Use an HBV Screening order set to reduce ordering errors and ensure all three HBV serological tests are performed



# Interpreting HBV Serologies: Vaccination

HBsAg	Total Anti-HBc	Anti-HBs	Interpretation	Management	HBV Vaccination
-	-	-	Susceptible	Vaccinate unless <b>documented</b> receipt of full vaccine series and low risk acquisition	YES
+	-	-	False positive	Repeat screening panel in 30 days BEFORE next HBV vaccine given	YES

# Understand Causes of Confusion in HBV



- Critical to prompt for vaccination for everyone who meets criteria
- Equally critical to not prompt for vaccination in patients who do not meet criteria
- Risk-based HBV screening (HBsAg) is a USPSTF Grade B recommendation
- Need to account for HBV serologies even if no active screening program since patients may have these lab data
- Provide informational support (vaccine selection, interpret serologies) so providers understand next steps in management

# Interpreting HBV Serologies

HBsAg	Total Anti-HBc	Anti-HBs	Interpretation	Management	HBV Vaccination
+	+	-/+	Current infection	Refer to HBV specialists for management of active HBV Reminder to refer household and sexual contacts for HBV screening and vaccination	NO
-	+	+	Prior infection with immune control	Add “risk of HBV reactivation with immune suppression” to problem list	NO
-	+	-	Prior infection or Window period or Occult infection or False positive (1-3%)	Refer to HBV specialists for evaluation	Probably NO
-	-	+	Immune from prior vaccination	No further action - protected for life from chronic HBV infection	NO
-	-	-	Susceptible	Vaccinate unless <b>documented</b> receipt of full vaccine series and low risk acquisition	YES
+	-	-	False positive	Repeat screening panel in 30 days BEFORE next HBV vaccine given	YES



# Examples of HBV Vaccine Questions in Setting of HBV Serology Data

- If someone's HBV serologies are all negative, should you vaccinate them even if they have documentation of a full vaccine series?
  - Population level: No
    - In most circumstances we do not check titers to verify response to a vaccine
    - If someone has previous documentation of anti-HBs with titer >10 IU/mL, even if it wanes, T cell responses prevent the development of chronic active HBV infection
  - Individual level: Consider, esp if vaccinated with older formulations, immunocompromised, at high risk for HBV acquisition
    - >5% of people do not respond to the older HBV vaccines
- Should you vaccinate someone who is isolated anti-HBc Ab positive?
  - Almost always, no
  - 0.2% to 3% false positive in all isolated anti-HBc+ pts.
    - If immunocompromised or other high risk, can try to vaccinate and check anti-HBs titer
    - Can ask lab if anti-HBc Ab result is near cut-off since low titer more likely to be false positive
    - Can check HBeAg and anti-HBe but >50% of true positive pts will be negative and have no other hepatitis B markers
    - Do not want to miss identifying patients at risk for HBV reactivation if immune suppressed

# HBV Vaccination Patient Letter Template Example: No Immunity and Age <60 Years

- Your blood tests show that you do not have hepatitis B infection, but also that you do not have evidence of immunity to hepatitis B or documentation of prior vaccination. Hepatitis B vaccination is recommended for all people under the age of 60.
- Hepatitis B is a virus that infects the liver and can cause damage, and is spread by contact with body fluids, such as through sexual activities, injection drug use, or blood products. There is a vaccine for hepatitis B, which is well tolerated and covered by insurance.
- Please feel free to call the office at XXX or using the patient portal to make an appointment with a nurse, or visit a local pharmacy to receive the hepatitis B vaccine. If you have further questions, I would be happy to *discuss them at your next appointment.*

# HBV Vaccination Patient Letter Template

## Example: No Immunity and Age $\geq 60$ Years

- Your blood tests show that you do not have hepatitis B infection, but also that you do not have evidence of immunity to hepatitis B or documentation of prior vaccination.
- Hepatitis B is a virus that infects the liver and can cause damage, and is spread by contact with body fluids, such as through sexual activities, injection drug use, or blood products.
- There is a vaccine for hepatitis B, which is well tolerated and covered by insurance\*. *It is generally recommended for people age 60 years or greater who have certain risk factors but you may decide to get it if you like.* If you have further questions, we can discuss them at your next appointment.

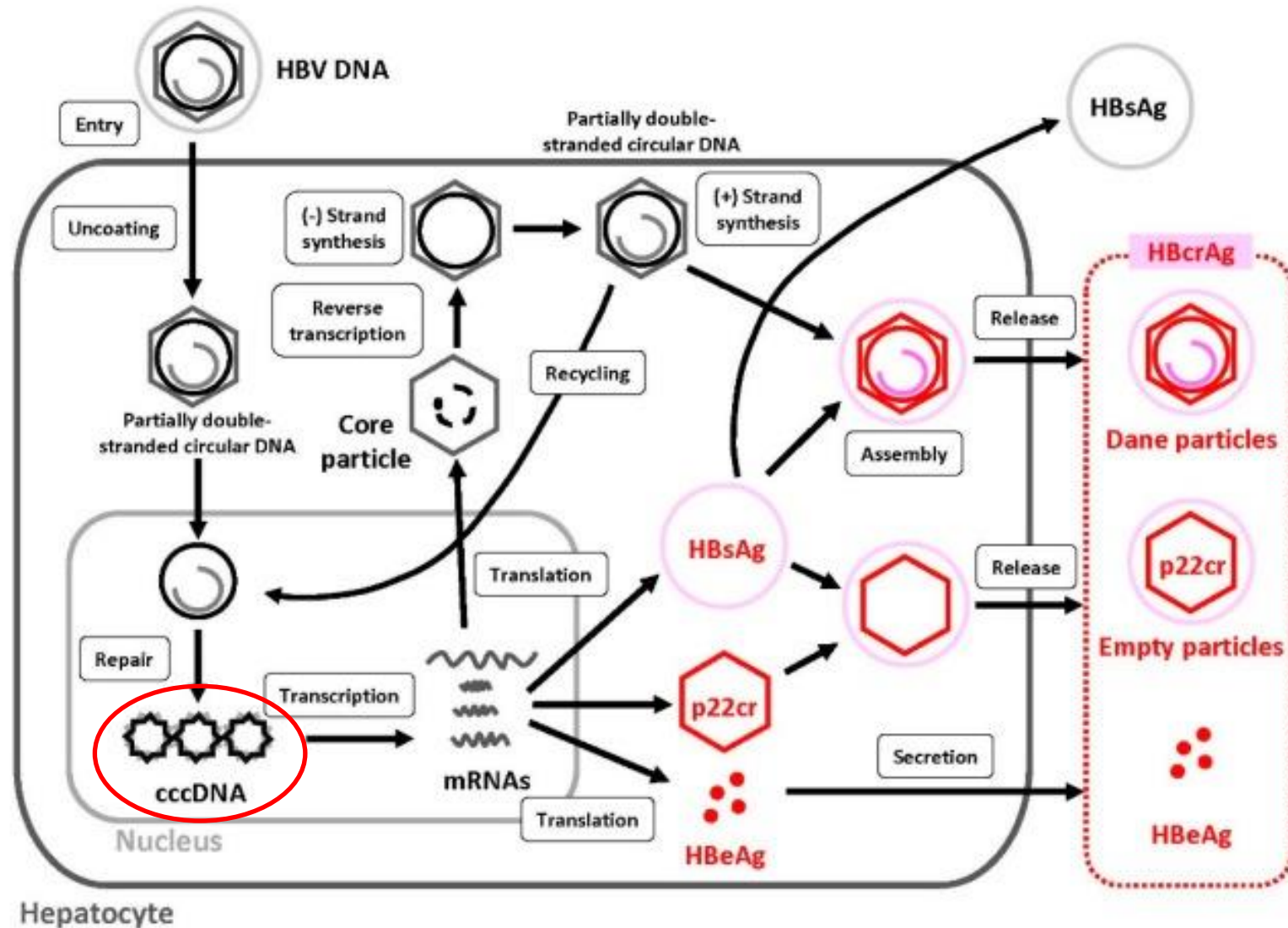
As of Oct 1, 2023, Medicare covers HBV vaccination under Part B for those with risk factors and Part D for those without risk factors. Note CMS and some commercial payers do not cover HBV screening in persons without risks

Evaluation of isolated anti-HB core antibody is a substantial source of confusion for providers

But may not be amendable to EHR decision support beyond “refer to specialist for management”

# Hepatitis B Virus Life Cycle

(a)



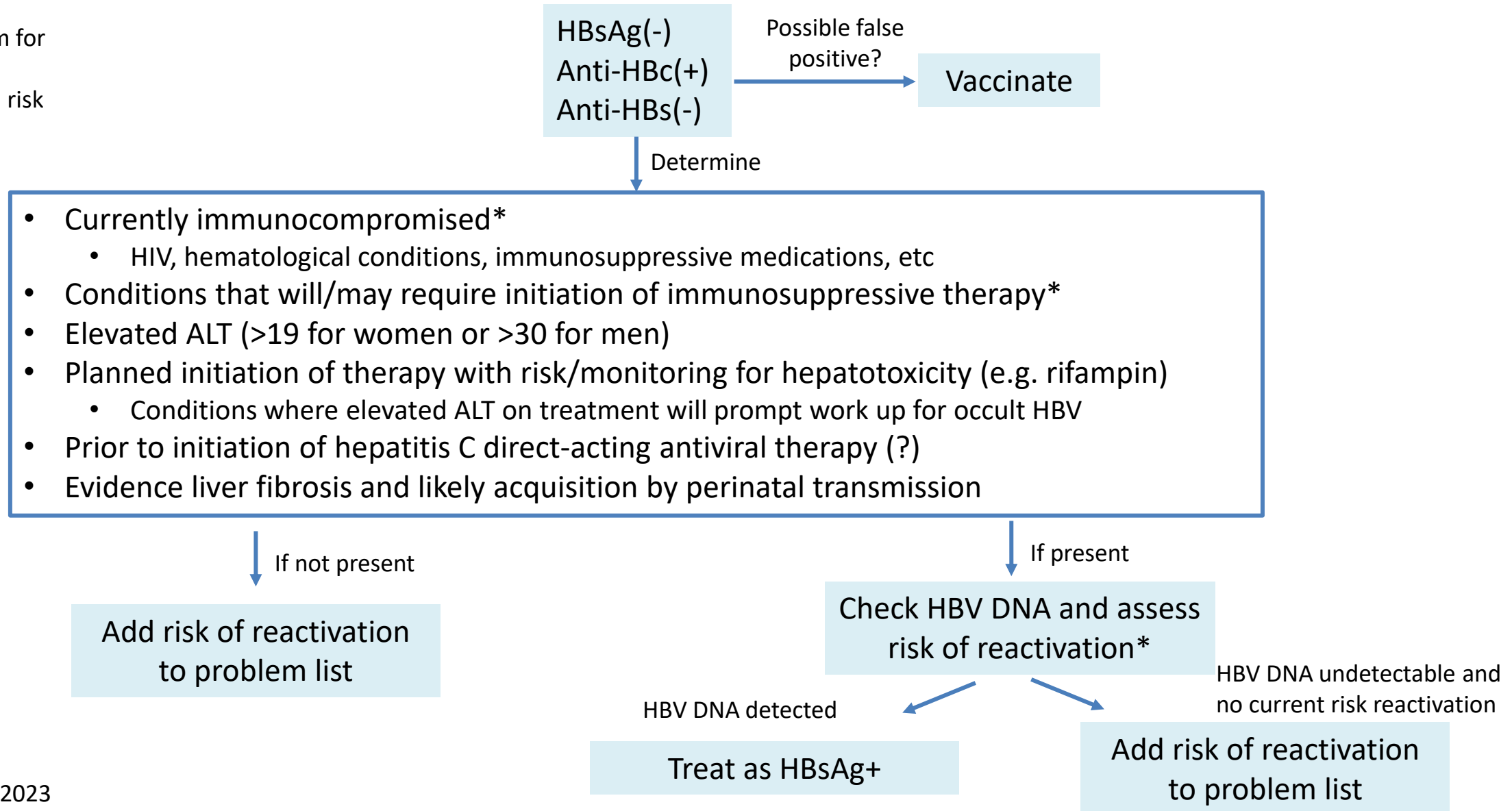
If someone has anti-HBc, they most likely have HBV DNA in their hepatocytes

# How commonly is isolated anti-HBc a false positive?

- 412,236 Canadian blood donors were tested for anti-HBc, and 4,489 donors (1.1%) were repeat-reactive to anti-HBc
  - 85% had anti-HBs (prior infection with immune control)
  - 41 (0.9%) had isolated anti-HBc with detected HBV DNA
  - 434 were only anti-HBc positive
    - Were allowed to return to donate blood again
    - If still anti-HBc positive, would not be allowed to donate again
  - Of the 300 who returned, only 21 were now anti-HBc negative
  - By the end, only 6 people were able to make multiple donations
    - False positive rate:  $6/4489 = 0.13\%$  to  $6/434 = 1.4\%$

# Proposed Algorithm for Evaluation of a Person with Isolated anti-HBc

\*Separate algorithm for patients with current/anticipated risk of HBV reactivation

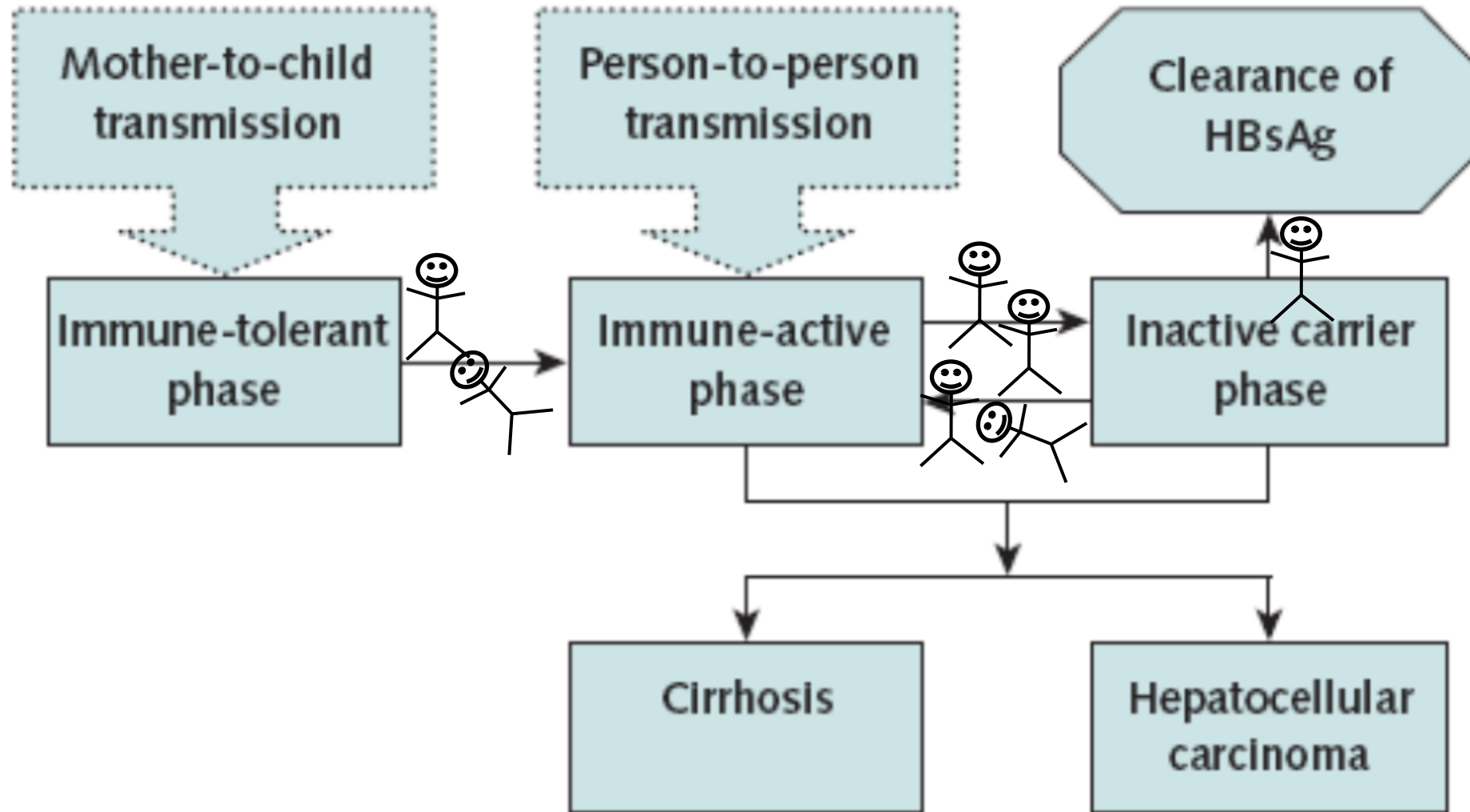


Focus on directing patients who have HBsAg detected to providers with expertise in management of people with active HBV infection

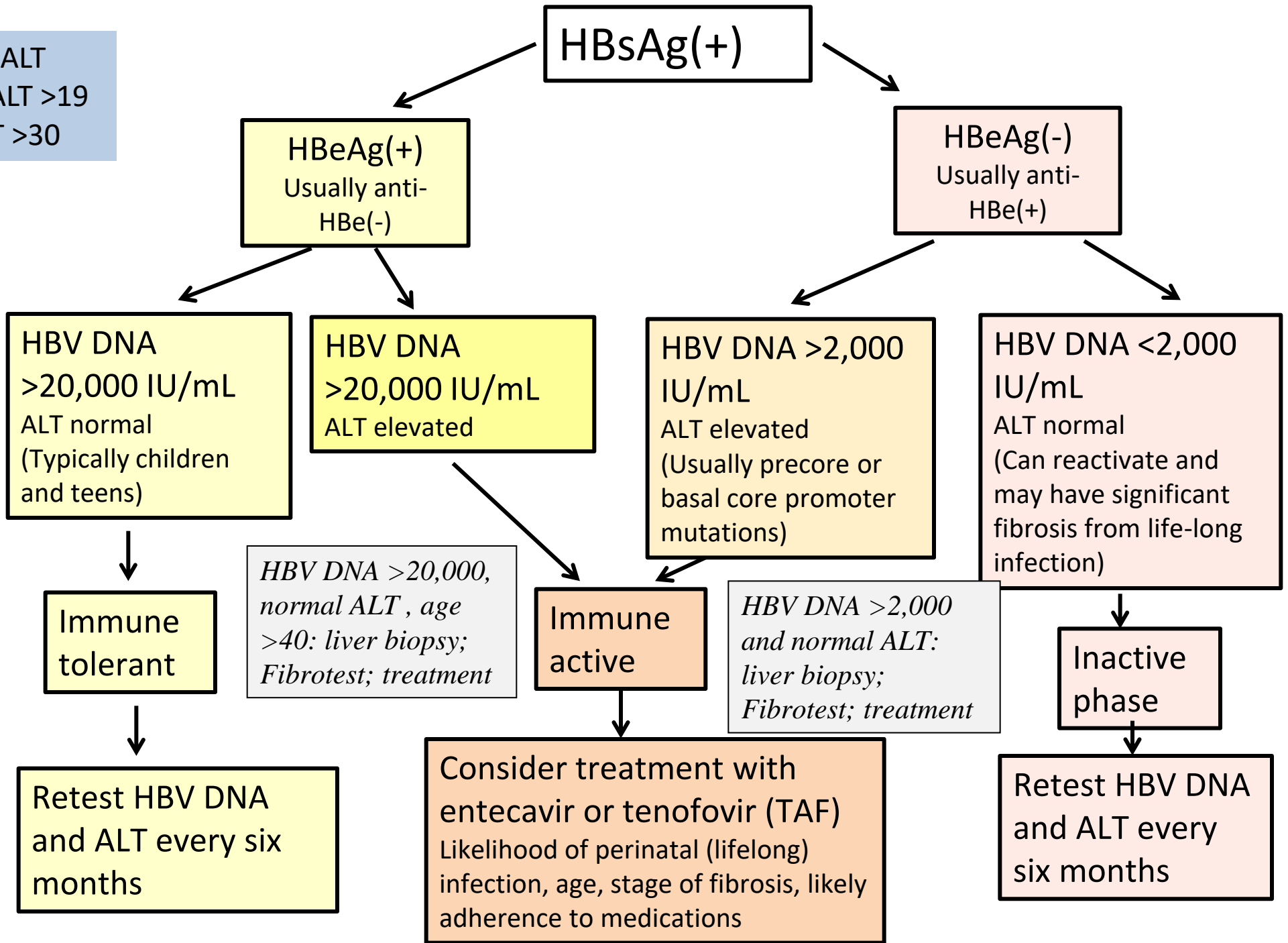
HBV treatment may not currently be easily amendable to EHR decision support beyond “refer to specialist for management”



# Classic View of Natural History of HBV



Abnormal ALT  
Females: ALT >19  
Males: ALT >30



*HBV DNA >20,000, normal ALT, age >40: liver biopsy; Fibrotest; treatment*

*HBV DNA >2,000 and normal ALT: liver biopsy; Fibrotest; treatment*

# HBV AASLD Guidelines Leave Many People in a “Grey Area”

		ALT < ULN M<35, F <25	ULN < ALT < 2x ULN	ALT > 2x ULN
HBeAg+	HBV DNA >20,000	Monitor	Monitor*	Treat
	HBV DNA <20,000	Monitor	Monitor*	Monitor*
HBeAg-	HBV DNA >2,000	Monitor*	Monitor*	Treat
	HBV DNA <2,000	Monitor	Monitor*	Monitor*

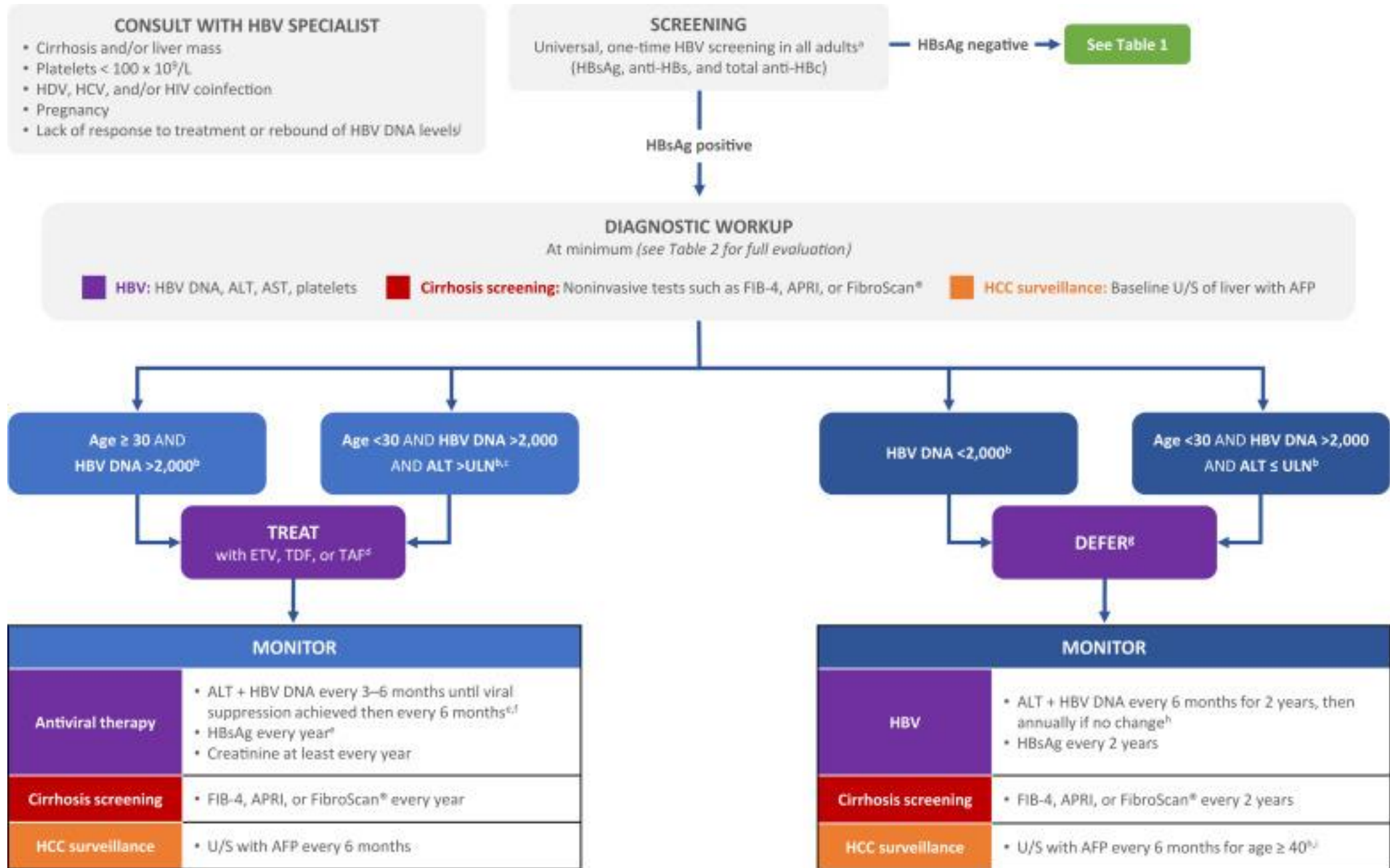
\*Values, alone or in combination, that would shift decision making towards antiviral therapy:

- Inflammation >A3 (requires liver biopsy)
- Fibrosis ≥F2 (elastography, noninvasive serum markers, biopsy)
- Age >40
- Persistent ALT >ULN >6 months
- Other causes elevated ALT excluded (alcohol, fatty liver, autoimmune, etc)

*If persistent ALT >ULN > 6 months and HBV DNA >2,000 and age >40, consider antiviral treatment*

# Need for a Simplified Approach to HBV Treatment

- “Grey area” guidelines are confusing and hard to implement
- HBV experts often don’t actually follow these guidelines
- Guidelines should be straightforward enough that community practitioners are able to follow them



# Simplified Approach Eliminates “Grey Area”

		ALT < ULN	ALT > ULN
HBV DNA >2,000	Age ≥ 30	Treat	Treat
	Age < 30	Monitor	Treat
HBV DNA <2,000	Age ≥ 30	Monitor	Monitor
	Age < 30	Monitor	Monitor

## Monitor:

- Age ≥ 30 = If HBV DNA >2,000 then treat
- Age <30 = If HBV DNA >2,000 and ALT > ULN then treat

*Remember AASLD Guidelines: If persistent ALT >ULN > 6 months and HBV DNA >2,000 and age >40, consider antiviral treatment*

# How Can AMGA Help HBV Elimination Goals?

- If you develop programming to support HBV vaccination and/or screening, share with groups AND EHR companies
- EHR companies - please integrate HBV support into foundational platforms
- If you have non-risk based HBV screening data, please share with USPSTF and CMS (Hepatitis B Foundation can help)
- Publish your data on HBV vaccination and screening to help others develop best-practice initiatives



# Universal HBV Vaccination & Screening Resources

### Who should be vaccinated?

- Adults < 60
- Adults 60 years and older with risk factors\* for HBV
- Anyone who wants the vaccine

*\*See risk factors at the bottom of the page*


### Which Vaccine?

- All HBV vaccines are approved for use in the general adult population. There is no official preference for one vaccine over another.
  - HepB and PreHevB are NOT recommended in pregnancy due to a lack of safety data
  - HepB and PreHevB have quicker and higher rates of protection including higher rates of protection associated with obesity, smoking, diabetes, and well-managed chronic illnesses over older 3 dose HBV vaccines

### Screening Information

- All adults 18 years and older should be screened once in their life for HBV using the triple panel test (HBsAg, HBsAb, HBcAb).
- Recommend patients talk to their doctor about screening if you cannot screen during the visit.

Scan to learn more about the updated HBV screening guidelines



**Universal adult HepB vaccination through age 59 years removes the need for risk factor screening and disclosure.**

### Billing and Insurance

The HBV vaccine should be covered with no cost-shares for all insured adults with commercial insurance, Medicare, and states with expanded Medicaid.

ICD-10: Z23 - Encounter for immunization  
CPT Administrative Code: 90471

### CPT Product Codes (adult schedule):

- PreHevB (3-dose) - 90759
- Engerix-B (3-dose) - 90746
- Twinrix (Hepatitis A & B - 3 dose) - 90636
- Recombivax HB (3-dose) - 90746
- HepB (2-dose) - 90739

**NOTE:** The above codes are for a standard adult patient, and the CPT code may differ based on the dosage/schedule needed for your patient. Please refer to current payer publications for the most up-to-date coding information, as codes may have changed.

### FAQ

**Q: What should be done if the HBV vaccine series was not completed?**  
A: If the HBV vaccine series is interrupted, the next dose should be given as soon as possible. The first dose(s) does not need to be repeated.

## Clinical Resources for Implementing Universal Adult Hepatitis B Vaccination and Screening

### Guidance on the Clinical Implementation of Adult Universal Hepatitis B Vaccination and Screening -

- This document is intended to aid clinicians in implementing the new adult hepatitis B recommendations. It contains a summary of the updated recommendations, strategies for implementation in different settings, downloadable resources and handouts for providers, and connections to helpful patient and clinical resources.

### Call to Action: Eliminating Hepatitis B Virus Through Universal Screening and Vaccination for Adults Ages 19-59

- The Foundation's Hepatitis B Screening & Vaccine Advisory Council has developed guidance on how healthcare providers in various settings can begin implementing universal hepatitis B screening and vaccination.

### Adult Hepatitis B Vaccination Information for Providers Handout -

- This handout contains information on who should be vaccinated for hepatitis B, billing and insurance codes, and a provider FAQ.

## Hepatitis B Online Lessons

### HBV Epidemiology

Reviews United States and global HBV incidence and prevalence, populations at risk for HBV acquisition, and the clinical and laboratory criteria for HBV case definitions.

### Quick Reference >

Rapidly access info about HBV Epidemiology

### Self-Study 2nd Edition CNE/CME

Track progress and receive CE credit

### HBV Screening, Testing, and Diagnosis

Details the groups considered at priority for HBV testing, the recommended screening and diagnostic tests, and how to interpret HBV diagnostic test results.

### Quick Reference >

Rapidly access info about Screening, Testing and Diagnosis

### Self-Study 2nd Edition CNE/CME

Track progress and receive CE credit

### HBV Immunizations

Identifies indications for HBV vaccine, describes dosing schedules and administration of vaccines, and management of vaccine nonresponders.

### Quick Reference >

Rapidly access info about HBV Immunizations

### Self-Study 2nd Edition CNE/CME

Track progress and receive CE credit



Anyone can be at risk for hepatitis B.

## Are you Protected from Liver Cancer?

Most adults born before 1991 were never vaccinated for hepatitis B.

The hepatitis B vaccine is:

- Safe
- Effective
- Free



**HEPATITIS B FOUNDATION**

## IT'S TIME TO GET PROTECTED FROM HEPATITIS B

The CDC recommends hepatitis B screening for all adults and hepatitis B vaccination for all adults ages 19-59.

**HEPATITIS B:**

- SPREADS BY CONTACT WITH INFECTED BLOOD
- CAN INFECT ANYONE WHO IS NOT VACCINATED
- HAS NO SYMPTOMS
- CAN CAUSE LIVER CANCER

**YOU CAN PROTECT YOURSELF FROM LIVER CANCER**

- Get tested for hepatitis B. It's the only way to know if you have ever been exposed to the virus.
- Get vaccinated for hepatitis B. The hepatitis B vaccine protects you for life!

Visit [www.hepb.org](http://www.hepb.org) for more information.



# Upcoming Webinar



**Topic:** Year 3 Data & RIZE Awards



**Date/ Time:** Thursday, November 21 at 2pm ET



**Presenters:** The Rise to Immunize Team and representatives from Palo Alto Medical Foundation, Coastal Carolina Healthcare, and Henry Ford Medical Group

# Questions?



Submit your questions using the **Q&A feature** at the bottom of the screen

