Infection Preventionist Lunch and Learn

August 12, 2025

Healthcare-Associated Infections (HAI) Prevention Program

WISCONSIN DEPARTMENT *of* HEALTH SERVICES

Series Objectives

- Encourage learning, growth, and networking
- Provide non-regulatory education and information
- Discuss topics relevant to new infection preventionists (IPs)

RSV and Hepatitis B Immunizations

Wisconsin Immunization Program

Stephanie Borchardt
Shivani Shah

WISCONSIN DEPARTMENT of HEALTH SERVICES

Options for Protecting Infants from Respiratory Syncytial Virus (RSV)

RSV in Infants

RSV is a respiratory virus that can be serious in infants

- It is the number one cause of hospitalization among U.S. infants.
- It can cause bronchiolitis and pneumonia, which may require hospitalization, oxygen support, and mechanical ventilation
- Most (79%) of children hospitalized with RSV under 2 years of age had no underlying medical conditions.

RSV in Infants

This past season, RSV associated hospitalizations among infants ages seven months and younger were between 28% and 43% lower than pre-COVID-19 levels (MMWR).

Infants that received nirsevimab had an 87% reduction in the risk of RSV with lower respiratory tract disease compared to those that didn’t (AAP).

Overview:
Abrysvo (RSVPreF vaccine)

Vaccine	Abrysvo (Pfizer) only
Recipient	Pregnant people
Gestation Age for Administration	32 weeks through 36 weeks and 6 days gestation
Administration Timing	September 1–January 31
Vaccines that may be co-administered	Routine vaccines, such as: • Flu • COVID-19 • Tdap

Abrysvo Administration

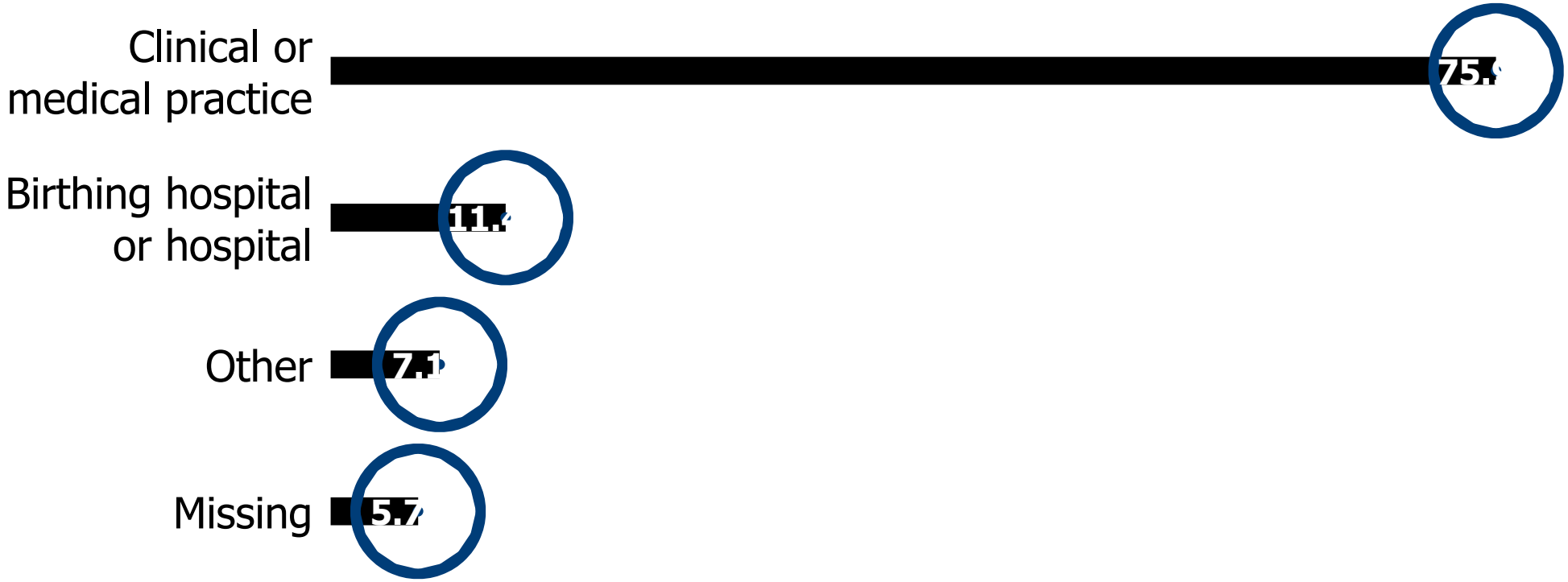
17%

2023–2024

43%

2024–2025

Abrysvo Administration by Provider Type, 2024–2025



Infant Protection: Monoclonal Antibodies

Nirsevimab (Beyfortus)

Clesrovimab (Enflonsia)

Overview: Nirsevimab

Recipient	Newborn / Infant

Age for Administration	• All infants less than 8 months old
	  • 50 mg (<5 kg)
	  • 100 mg (≥5 kg)
	Recommended to be administered within 7 days of life, ideally during birth hospitalization
	
	• High risk individuals 8–19 months old
	  • 200 mg dose
	  • Administered as two 100 mg doses at different injection sites

Administration Timing	October 1–March 31
Vaccines that may be co-administered	• Birth dose Hepatitis B • Other routine childhood vaccines (for example, MMR, Tdap, Varicella, Hepatitis A, Flu)

Nirsevimab Eligibility

High risk 8–19-month-olds include the following groups:

- **American Indian and Alaska Native children.**
- Children who are severely immunocompromised.
- Children with cystic fibrosis with severe disease.
- Children with chronic lung disease of prematurity who require medical support during the six months before the start of their second RSV season.

Nirsevimab Administration

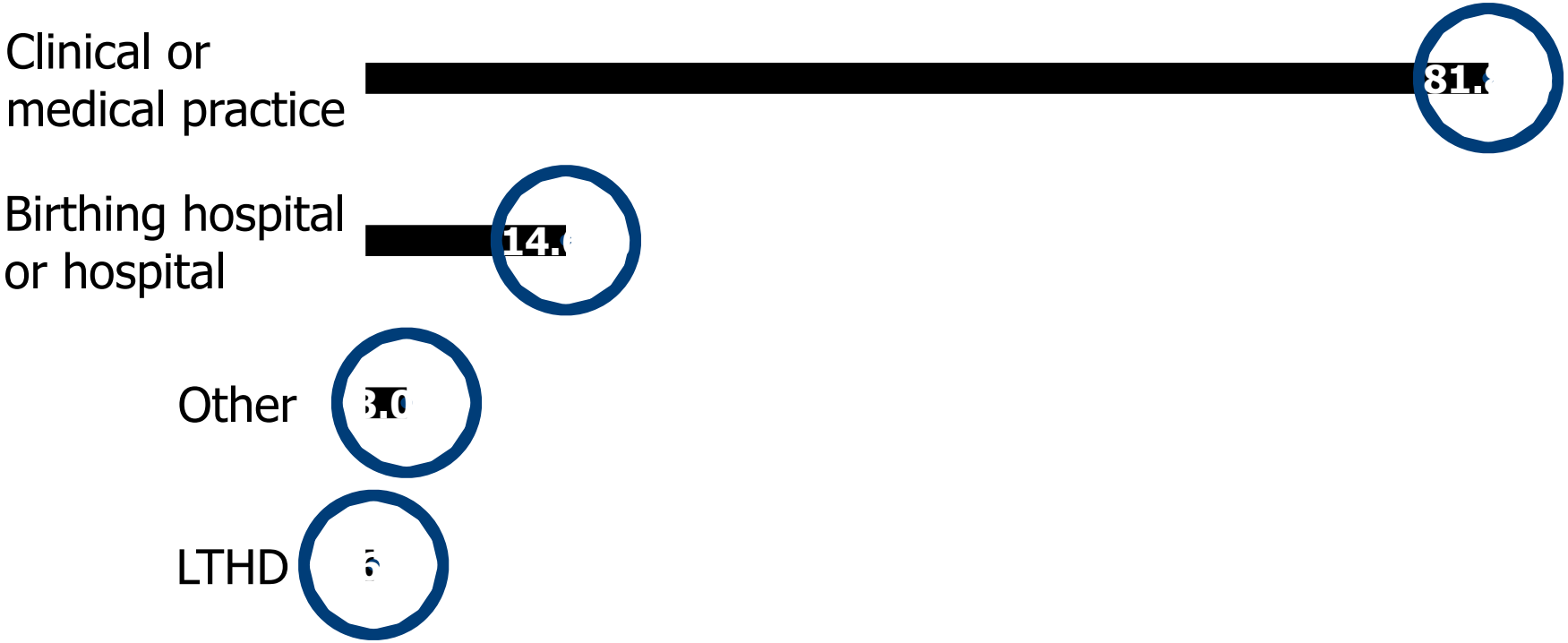
19%

2023–2024

23%

2024–2025

Nirsevimab Administration by Provider Type, 2024–2025



Clesrovimab Background

- ACIP approved a second monoclonal antibody during their June meeting, and it will be included in the VFC Program pending HHS Secretary's or CDC Director's sign off (as of 7/22).
- More information to come regarding private and VFC availability.

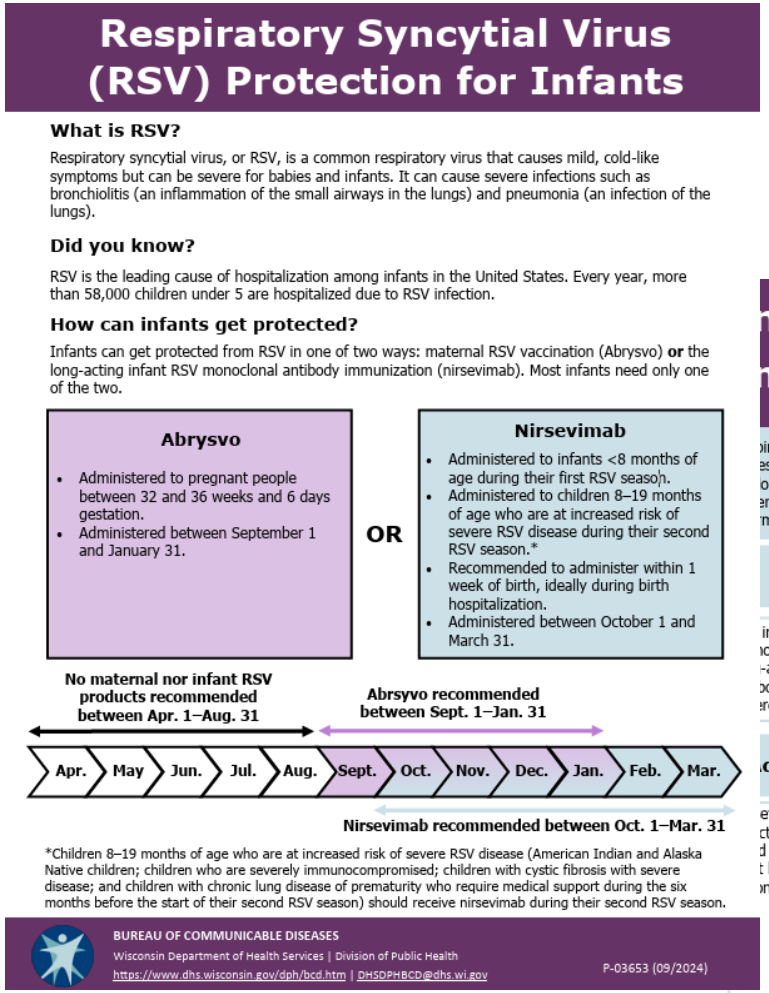
Overview: Clesrovimab

Recipient	Newborn / Infant
Age for Administration	• All infants less than 8 months old • 105 mg, regardless of weight Recommended to be administered within 7 days of life, ideally during birth hospitalization
Administration Timing	October 1–March 31
Vaccines that may be co-administered	• Birth dose Hepatitis B • Other routine childhood vaccines (e.g., MMR, Tdap, Varicella, Hepatitis A, Flu)

Resources and Materials

Partner Assets

- RSV Overview
- Nirsevimab and Abrysvo Administration Tip Sheets
- FAQs



Respiratory Syncytial Virus (RSV) Protection for Infants

What is RSV?

Respiratory syncytial virus, or RSV, is a common respiratory virus that causes mild, cold-like symptoms but can be severe for babies and infants. It can cause severe infections such as bronchiolitis (an inflammation of the small airways in the lungs) and pneumonia (an infection of the lungs).

Did you know?

RSV is the leading cause of hospitalization among infants in the United States. Every year, more than 58,000 children under 5 are hospitalized due to RSV infection.

How can infants get protected?

Infants can get protected from RSV in one of two ways: maternal RSV vaccination (Abrysvo) **or** the long-acting infant RSV monoclonal antibody immunization (nirsevimab). Most infants need only one of the two.

Abrysvo

- Administered to pregnant people between 32 and 36 weeks and 6 days gestation.
- Administered between September 1 and January 31.

OR

Nirsevimab

- Administered to infants <8 months of age during their first RSV season.
- Administered to children 8–19 months of age who are at increased risk of severe RSV disease during their second RSV season.*
- Recommended to administer within 1 week of birth, ideally during birth hospitalization.
- Administered between October 1 and March 31.

No maternal nor infant RSV products recommended between Apr. 1–Aug. 31

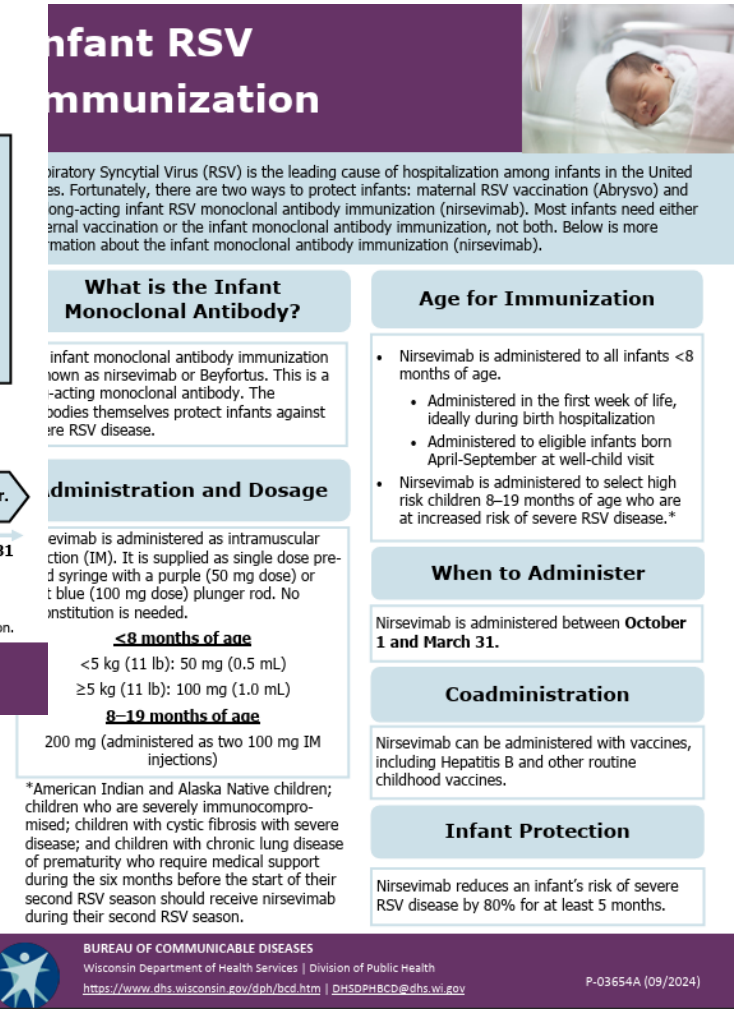
Abrsyvo recommended between Sept. 1–Jan. 31

Apr. | May | Jun. | Jul. | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar.

Nirsevimab recommended between Oct. 1–Mar. 31

*Children 8–19 months of age who are at increased risk of severe RSV disease (American Indian and Alaska Native children; children who are severely immunocompromised; children with cystic fibrosis with severe disease; and children with chronic lung disease of prematurity who require medical support during the six months before the start of their second RSV season) should receive nirsevimab during their second RSV season.

BUREAU OF COMMUNICABLE DISEASES
Wisconsin Department of Health Services | Division of Public Health
https://www.dhs.wisconsin.gov/dph/bcd.htm | DHSDPHBCD@dhs.wi.gov
P-03653 (09/2024)



nfant RSV mmunization

iratory Syncytial Virus (RSV) is the leading cause of hospitalization among infants in the United es. Fortunately, there are two ways to protect infants: maternal RSV vaccination (Abrysvo) and ong-acting infant RSV monoclonal antibody immunization (nirsevimab). Most infants need either rnal vaccination or the infant monoclonal antibody immunization, not both. Below is more mation about the infant monoclonal antibody immunization (nirsevimab).

What is the Infant Monoclonal Antibody?

infant monoclonal antibody immunization own as nirsevimab or Beyfortus. This is a -acting monoclonal antibody. The odies themselves protect infants against re RSV disease.

dministration and Dosage

evimab is administered as intramuscular ction (IM). It is supplied as single dose pre- d syringe with a purple (50 mg dose) or t blue (100 mg dose) plunger rod. No nstitution is needed.

<8 months of age

<5 kg (11 lb): 50 mg (0.5 mL)

≥5 kg (11 lb): 100 mg (1.0 mL)

8–19 months of age

200 mg (administered as two 100 mg IM injections)

*American Indian and Alaska Native children; children who are severely immunocompro- mised; children with cystic fibrosis with severe disease; and children with chronic lung disease of prematurity who require medical support during the six months before the start of their second RSV season should receive nirsevimab during their second RSV season.

Age for Immunization

- Nirsevimab is administered to all infants <8 months of age.
  - Administered in the first week of life, ideally during birth hospitalization
  - Administered to eligible infants born April-September at well-child visit
- Nirsevimab is administered to select high risk children 8–19 months of age who are at increased risk of severe RSV disease.*

When to Administer

Nirsevimab is administered between **October 1 and March 31.**

Coadministration

Nirsevimab can be administered with vaccines, including Hepatitis B and other routine childhood vaccines.

Infant Protection

Nirsevimab reduces an infant's risk of severe RSV disease by 80% for at least 5 months.

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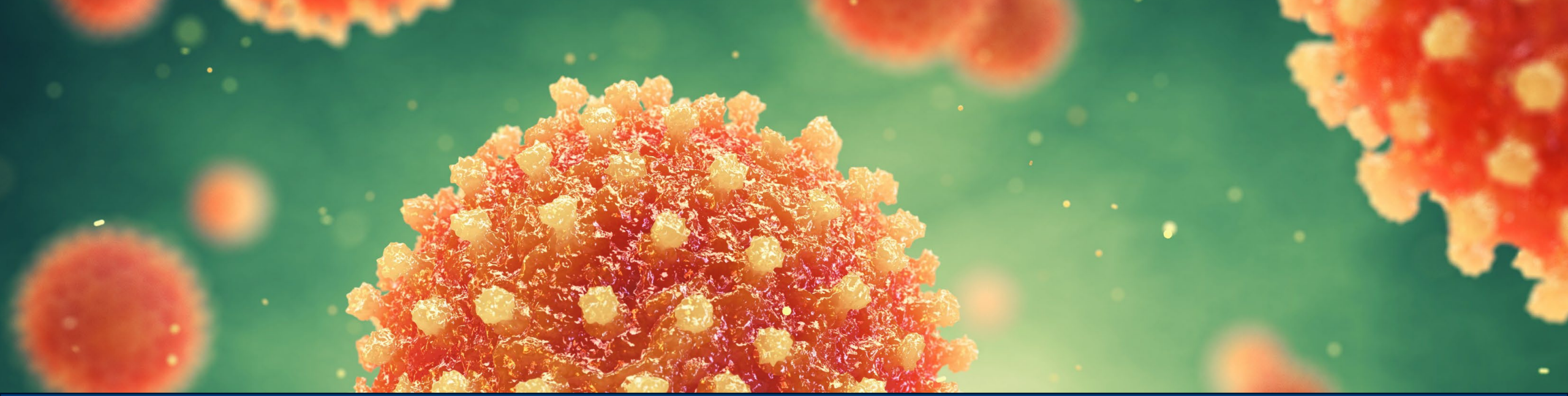
Wisconsin Department of Health Services | Division of Public Health
https://www.dhs.wisconsin.gov/dph/bcd.htm | DHSDPHBCD@dhs.wi.gov
P-03654A (09/2024)

Summary

About two-thirds of WI infants were protected from severe RSV disease through either maternal vaccination or infant immunization this past season.

IPs can encourage hospitals to carry and administer these products as part of routine immunizations to ensure equitable access.



Hepatitis B

Hepatitis B: Transmission

Transmitted through blood, semen, vaginal fluids

Exposure factors

- Sharing injection and non-injection drug use equipment
- Unregulated or DIY tattoos and piercings
- Sharing household items like razors and toothbrushes
- Sexual contact

Hepatitis B: Treatment

Vaccine-preventable

Cannot be cured, but can be treated:

- Acute infections – supportive treatment
- Anti-viral medications
- Interferon injections

Universal Hepatitis B Screening (2023)

Screen all adults at least once and pregnant people during each pregnancy.

Use the HBV triple panel test.

Anyone who requests HBV testing should be tested.

Source: https://www.cdc.gov/hepatitis/hbv/testingchronic.htm

HBV Test Results

Test and Result	Interpretation
HBsAg—Positive	Acute Infection Link to care
Total anti-HBc — Positive	
IgM anti-HBc — Positive	
Anti-HBs — Negative	

HBV Test Results

Test and Result	Interpretation
HBsAg—Positive Total anti-HBc — Positive IgM anti-HBc — Negative Anti-HBs — Negative	Chronic Infection Link to care

HBV Test Results

Test and Result	Interpretation
HBsAg— Negative Total anti-HBc — Positive Anti-HBs — Positive	Resolved Infection Counsel about HBV infection reactivation risk

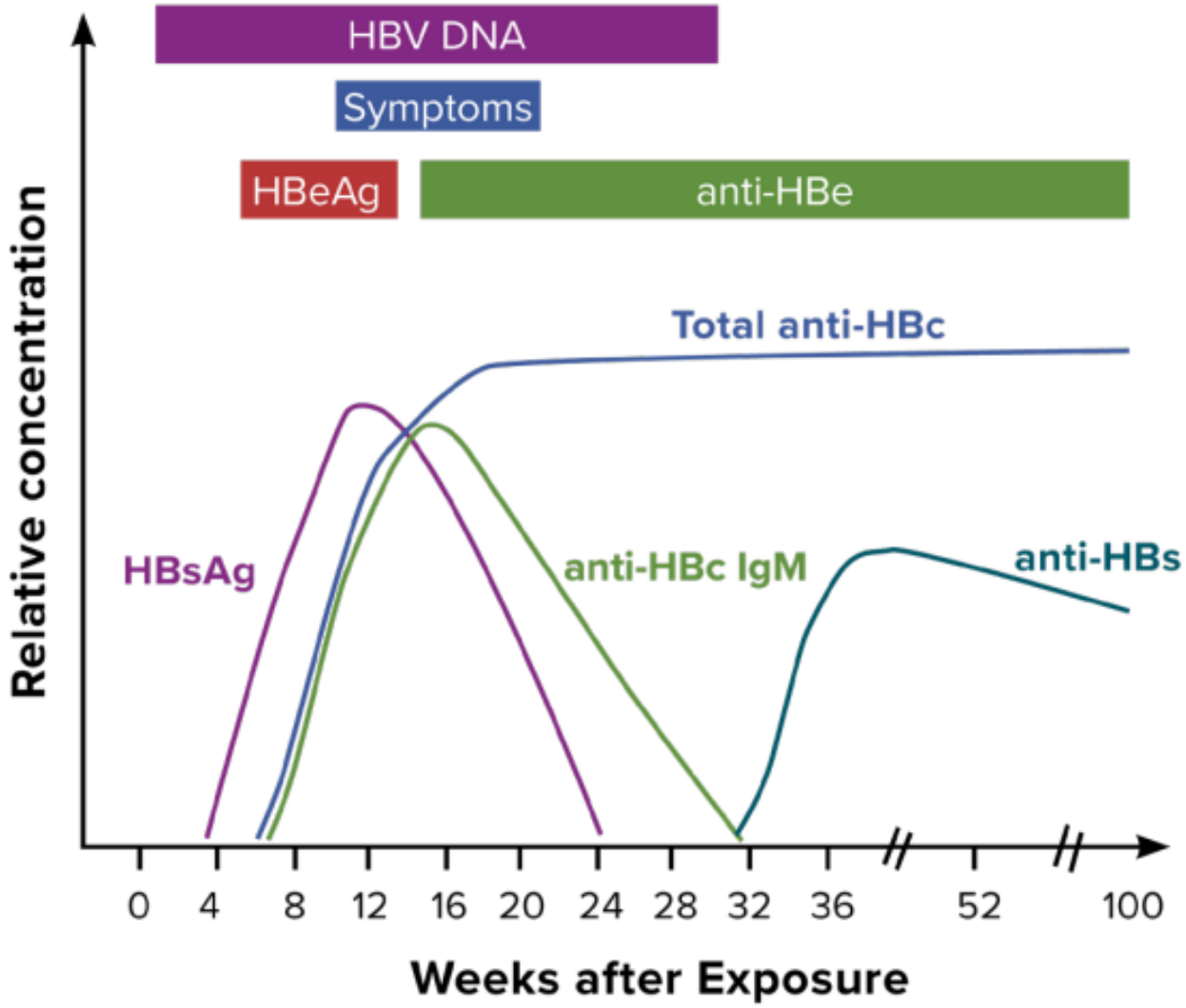
HBV Test Results

Test and Result	Interpretation
HBsAg— Negative Total anti-HBc — Negative Anti-HBs — Positive	Immune from receipt of prior vaccination if documented complete series If no documentation, complete vaccine series per ACIP recommendations

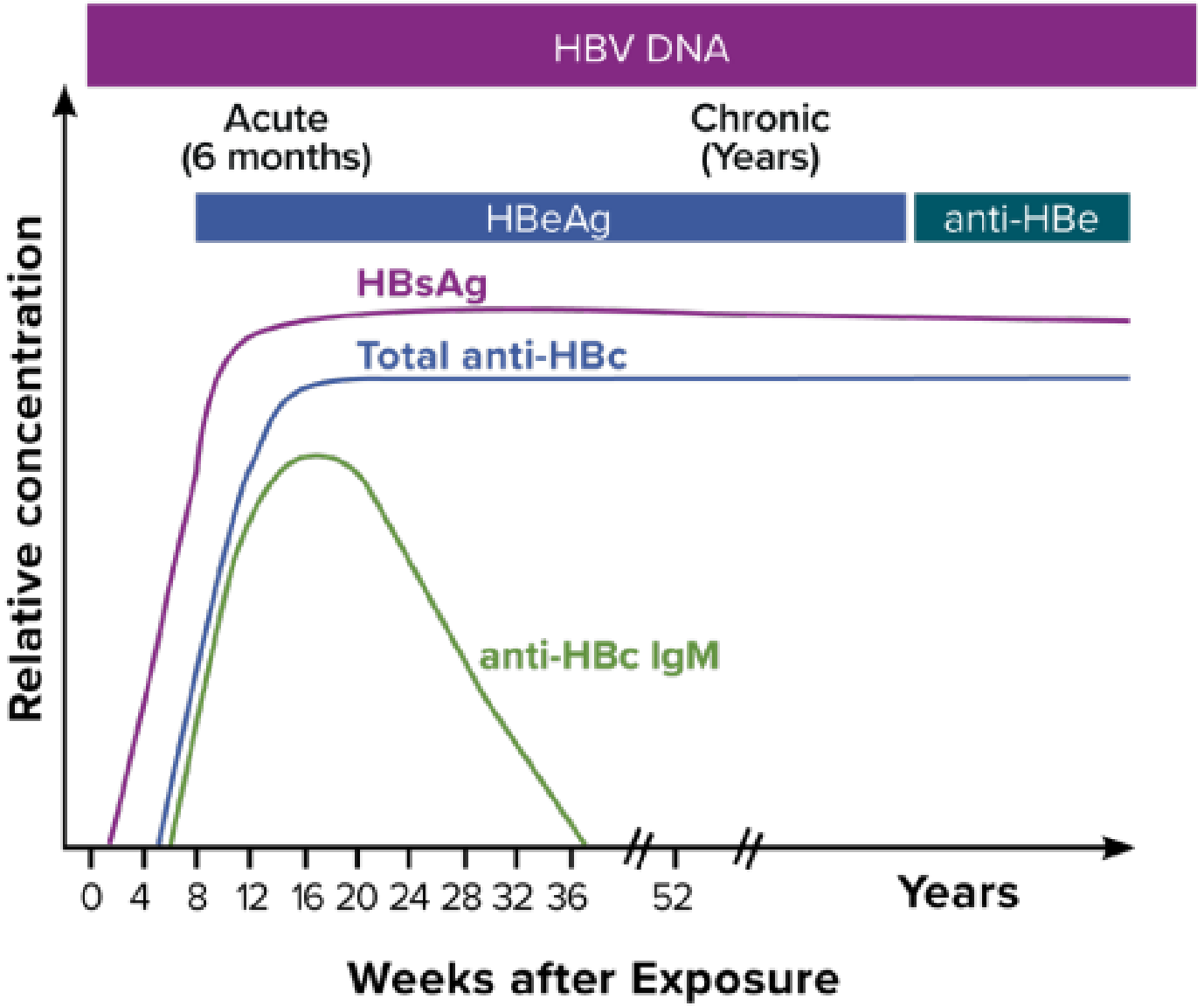
HBV Test Results

Test and Result	Interpretation
HBsAg— Negative Total anti-HBc — Negative Anti-HBs — Negative	Susceptible, never infected if there is no documentation of HBV vaccine series completion Offer HBV vaccine per ACIP recommendations

Typical Serologic Course of Acute HBV to Recovery



Typical Serologic Course of Chronic HBV



Universal Hepatitis B Vaccination (2022)

- Recommends all adults aged 19–59 years should receive HBV vaccines.
- It removes the need for risk factors being disclosed.
- Could increase vaccination coverage and decrease HBV cases.

Source: Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2022 | MMWR (cdc.gov)

Hepatitis B Vaccination

2 dose series Heplisav-B

OR

3 dose series Engerix-B, PreHevbrio, or Recombivax

OR

3 dose series HepA-HepB (Twinrix)

OR

4-dose series HepA-HepB (Twinrix) ← Accelerated series

Immunoprophylaxis of Infants

HBsAg 'STAT' testing should be ordered for pregnant persons with unknown status

Birth Parent HBsAg Status	Hepatitis B Vaccine	HBIG
Positive	Within 12 hours of birth	Within 12 hours of birth
Unknown	Within 12 hours of birth	Within 7 days of birth*
Negative	Prior to hospital discharge	None

*HBIG must be administered within 7 days of birth. Allow the results of the 'STAT' testing to guide administration of HBIG.

Immunoprophylaxis of Preterm Infants Weighing less than 2000 g.

Birth Parent HBsAg Status	Hepatitis B Vaccine	HBIG
Positive	Within 12 hours of birth*	Within 12 hours of birth
Unknown	Within 12 hours of birth*	Within 12 hours of birth
Negative	Delay until 1 month of age or hospital discharge	None

Pediatric Hepatitis B Vaccine Schedules

Dose	Single Antigen Vaccine Engerix-B or Recombivax HB	Combination Vaccine DTaP-HepB-IPV (Pediarix)	Combination Vaccine DTaP-IPV-Hib-HepB (Vaxelis)
Dose 1	Prior to hospital discharge*	*Only single antigen*	*Only single antigen*
Dose 2	1-2 months	2 months	2 months
Dose 3	6 months	4 months	4 months
Dose 4	*N/A*	6 months	6 months

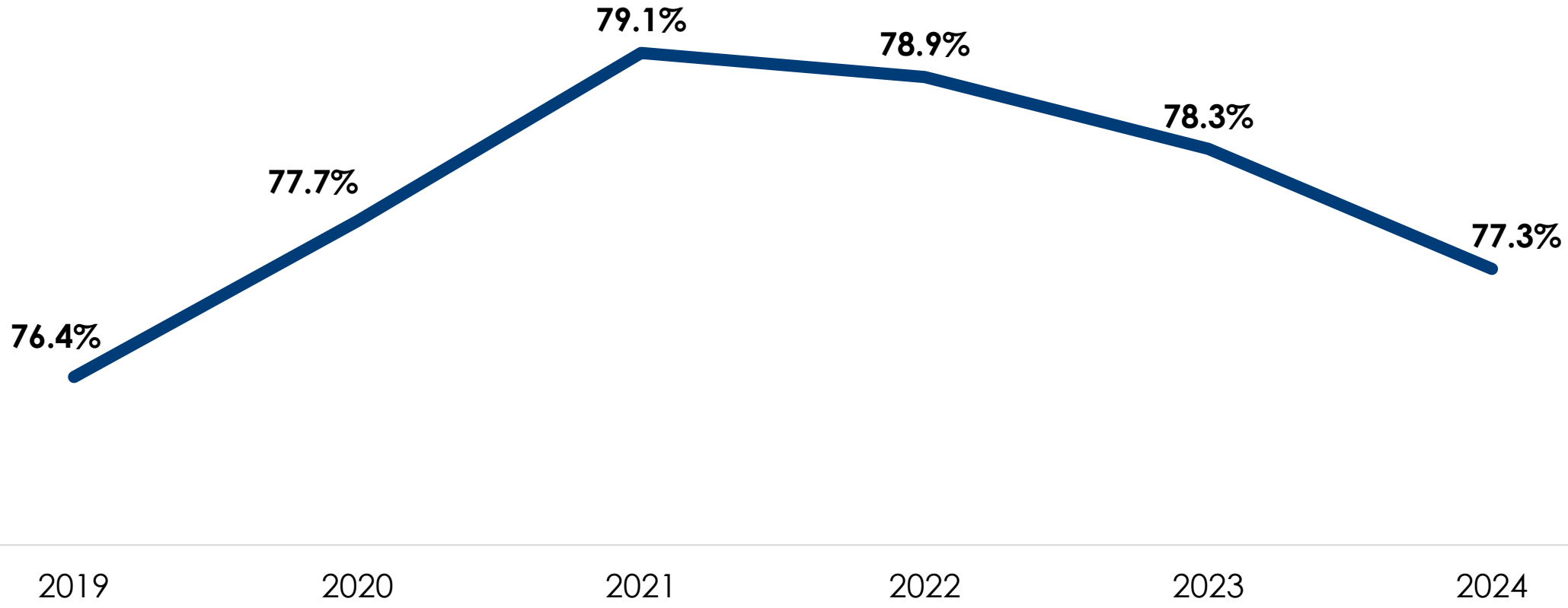
*Within 12 hours from birth for infants born to a HBsAg-positive birth parent.

Perinatal Hepatitis B Case Management Outcomes

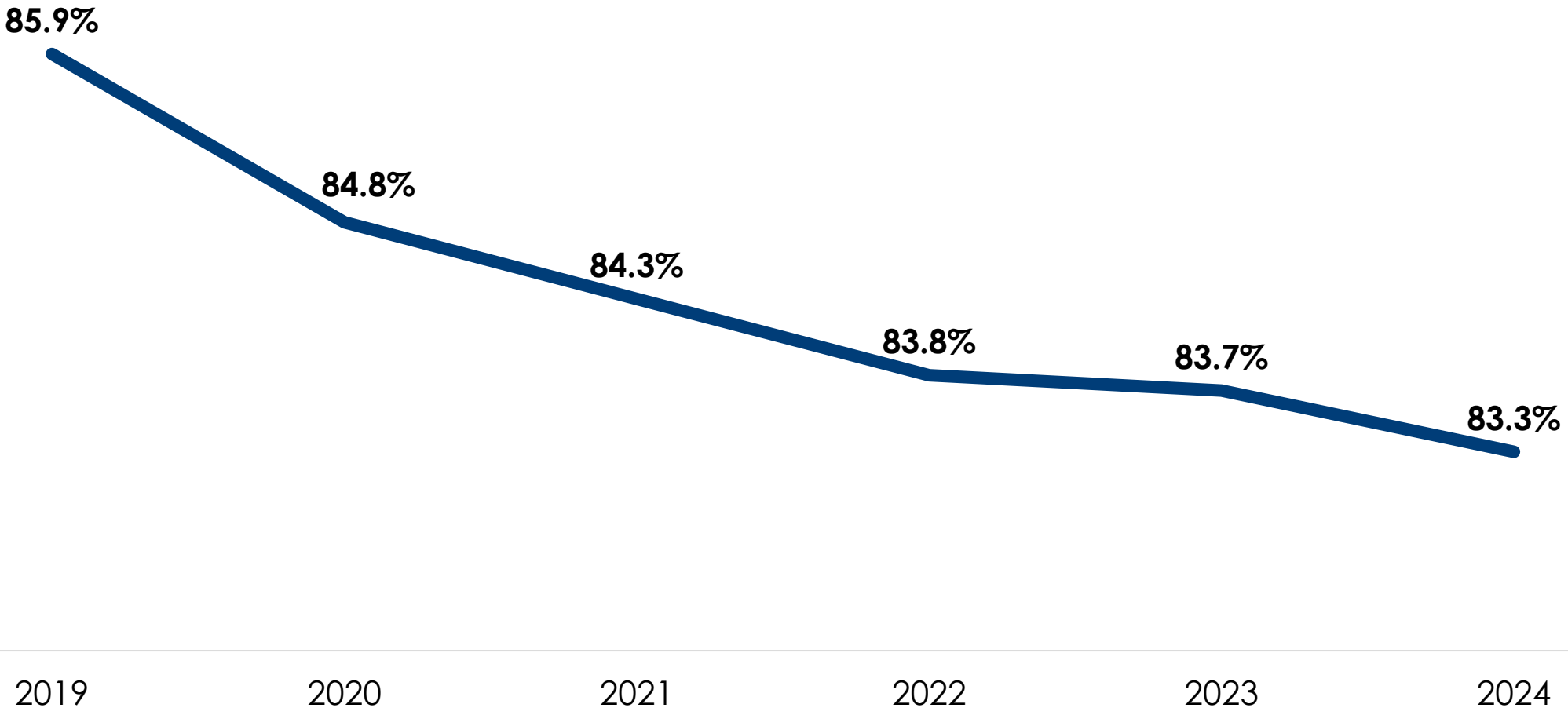
Perinatal Hepatitis B Outcome	2020 Birth Cohort	2021 Birth Cohort	2022 Birth Cohort	2023 Birth Cohort
Receipt of hepatitis B vaccine and HBIG (PEP) at birth	95% (105/110)	99% (85/86)	99% (92/93)	94% (85/90)
Hepatitis B vaccine series completion by age 12 months*	87% (96/110)	97% (83/86)	88% (82/93)	90% (81/90)
Post-vaccination serologic testing by age 9-12 months[a]	67% (74/110)	63% (54/86)	76% (71/93)	78% (70/90)

PEP, post-exposure prophylaxis
*Children must have received PEP at birth to be included in the numerator.
[a]Children must have received PEP at birth and have completed the hepatitis B vaccine series by age 12 months or by the end of the next calendar year to be included in the numerator.

HepB Birth Dose Among 24-month-olds in Wisconsin



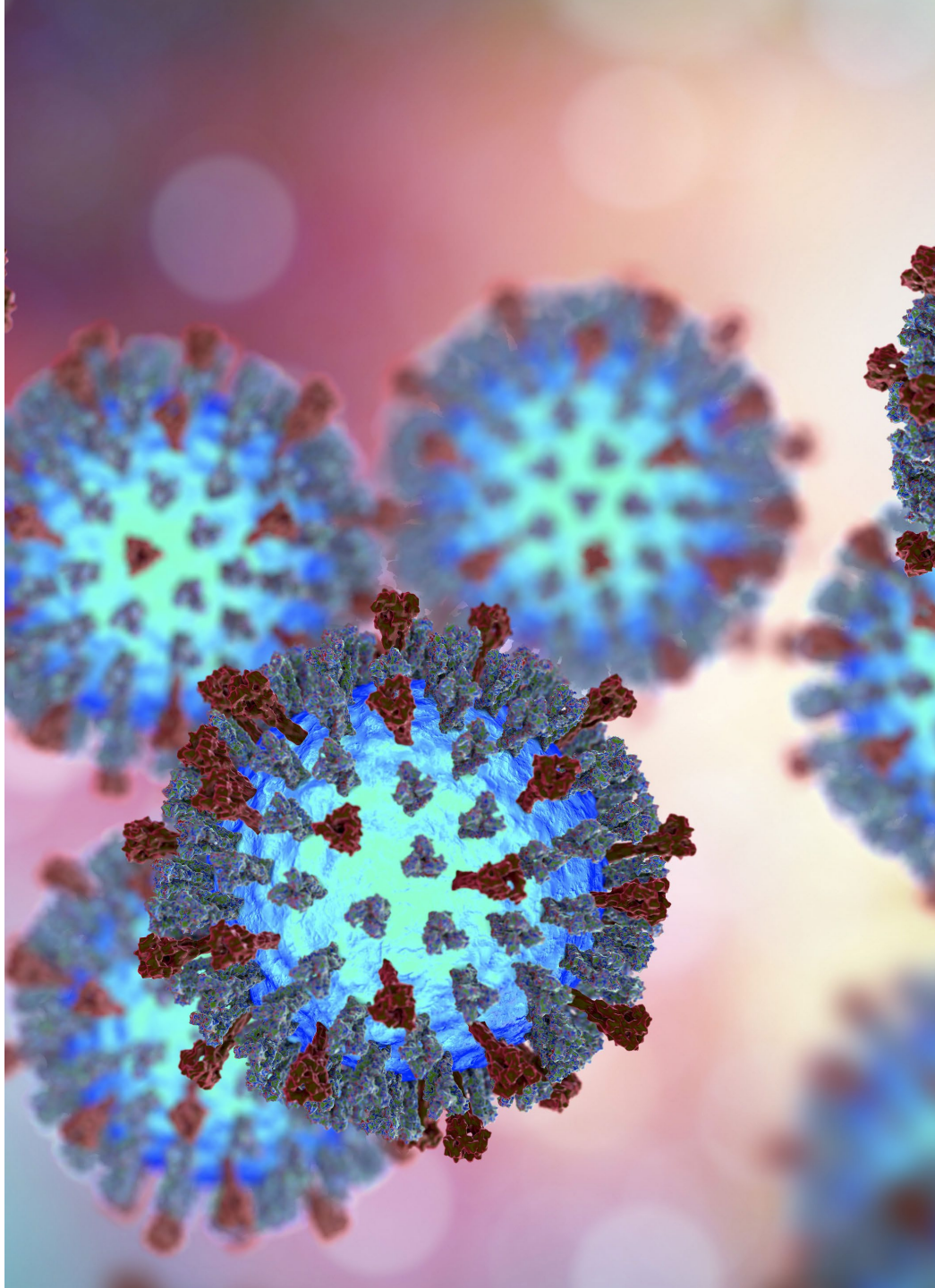
HepB Vaccination Series Completion Among 24-month-olds in Wisconsin



Thank You

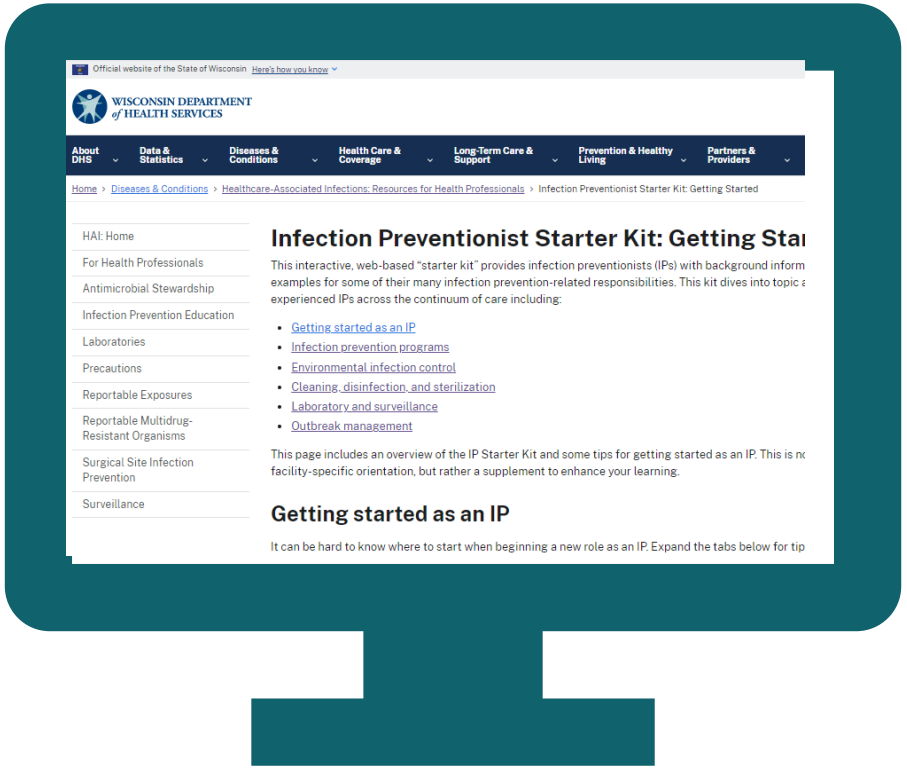
Shivani Shah
Shivani.Shah@dhs.wisconsin.gov

Stephanie Borchardt
Stephanie.Borchardt@dhs.wisconsin.gov



IP Starter Kit

- Interactive, web-based resource
- Background information, resources, and templates
- Covers topics applicable to IPs across care settings



Contact the HAI Prevention Program

 **Email:** dhswihaipreventionprogram@dhs.wisconsin.gov

 **Phone:** 608-267-7711

 **Website:** www.dhs.wisconsin.gov/hai/contacts.htm

Send Questions and Topic Suggestions

Email your ideas to Ashley O'Keefe

Ashley.OKeefe@dhs.wisconsin.gov

Upcoming Lunch and Learn Session

Date: September 9, 2025

Topic: Respiratory Reminders