2024 VACCINES FOR CHILDREN SUMMIT

ILLINOIS CHAPTER
American Academy of Pediatrics
INCORPORATED IN ILLINOIS

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
IDPH
PROTECTING HEALTH, IMPROVING LIVES

University of Illinois – September 12, 2024

WELCOME!

- Introduction to IDPH Staff
- Interaction
- Bingo cards & awards

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The Illinois Chapter, American Academy of Pediatrics designates this live conference for a maximum of 5 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nurses and Nurse Practitioners can submit Certificates of Attendance to their accrediting board to claim credit for participation in the live webinars.

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AGENDA

- 8:15am – 8:45am: Check-in & Breakfast
- 8:45am – 10:45am: IDPH VFC Program
- 10:45am – 11am: Break
- 11am – 12:15pm: 2024 Vaccine Schedules
- 12:15pm – 1pm: Networking & Lunch
- 1pm – 1:45pm: Respiratory Virus Season
- 1:45pm – 2:45pm: Vaccine Hesitancy
- 2:45pm – 3pm: Questions & Closing

IDPH VFC PROGRAM

Caroline Werenskjold, MPH

AFTER THIS SESSION:

Participants will be able to:

1. Use the Illinois Comprehensive Automated Immunization Registry Exchange (I-CARE) portal to order and maintain vaccines.
2. Describe inventory reconciliation best practices for I-CARE and VFC mandates.
3. Implement effective vaccine storage and handling practices and keep vaccine waste to a minimum.

OVERVIEW - VFC PROGRAM

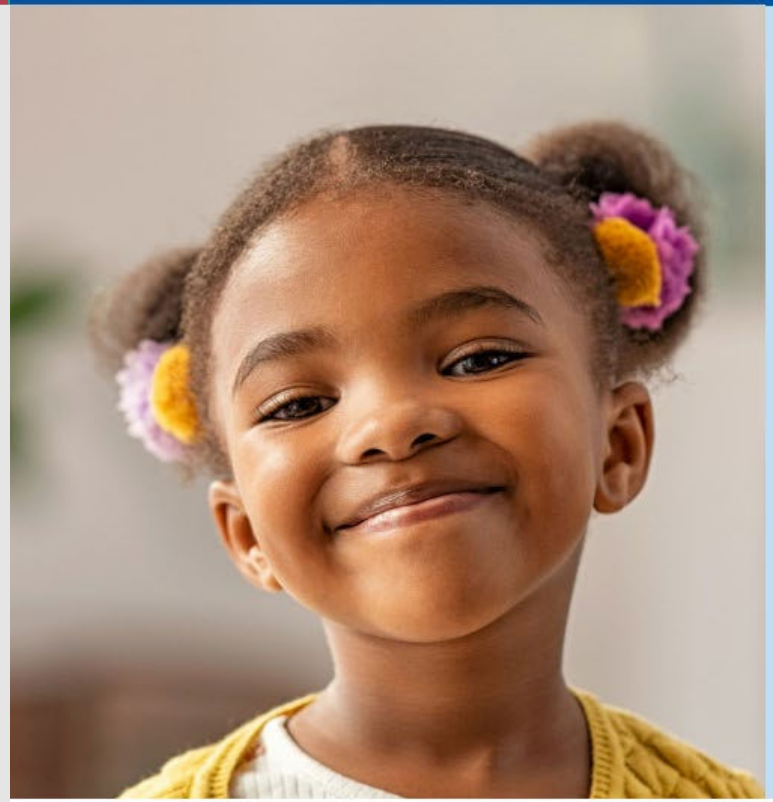
- Federally funded by the Centers for Disease Control and Prevention (CDC).
- Provides vaccines at no cost to children who may not otherwise get them.
- Eligibility: 18 years and younger and one of the following
  - Uninsured or Underinsured.
  - Medicaid Title 19 or 21 eligible.
  - American Indian or Alaskan Native.
- Children who are underinsured can access VFC vaccines at federally qualified health centers (FQHCs), rural health clinics, and some local health departments that are deputized by FQHCs or RHCs.

BENEFITS

Vaccines for Children

Protecting America's children every day

The Vaccines for Children (VFC) program helps ensure that all children have a better chance of getting their recommended vaccines. VFC has helped prevent disease and save lives.



CDC estimates that vaccination of children born between 1994 and 2021 will:

prevent **472 million** illnesses
(29.8 million hospitalizations)

more than the current population of the entire U.S.A.

help avoid **1,052,000** deaths

greater than the population of Seattle, WA

save nearly **$2.2 trillion** in total societal costs
(that includes $479 billion in direct costs)

more than $5,000 for each American

Updated 2021 analysis using methods from "Benefits from Immunization during the Vaccines for Children Program Era—United States, 1994-2021."

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

www.cdc.gov/vaccines/vfcprogram/

NCIRDWTLC | 10/28/22

I-CARE

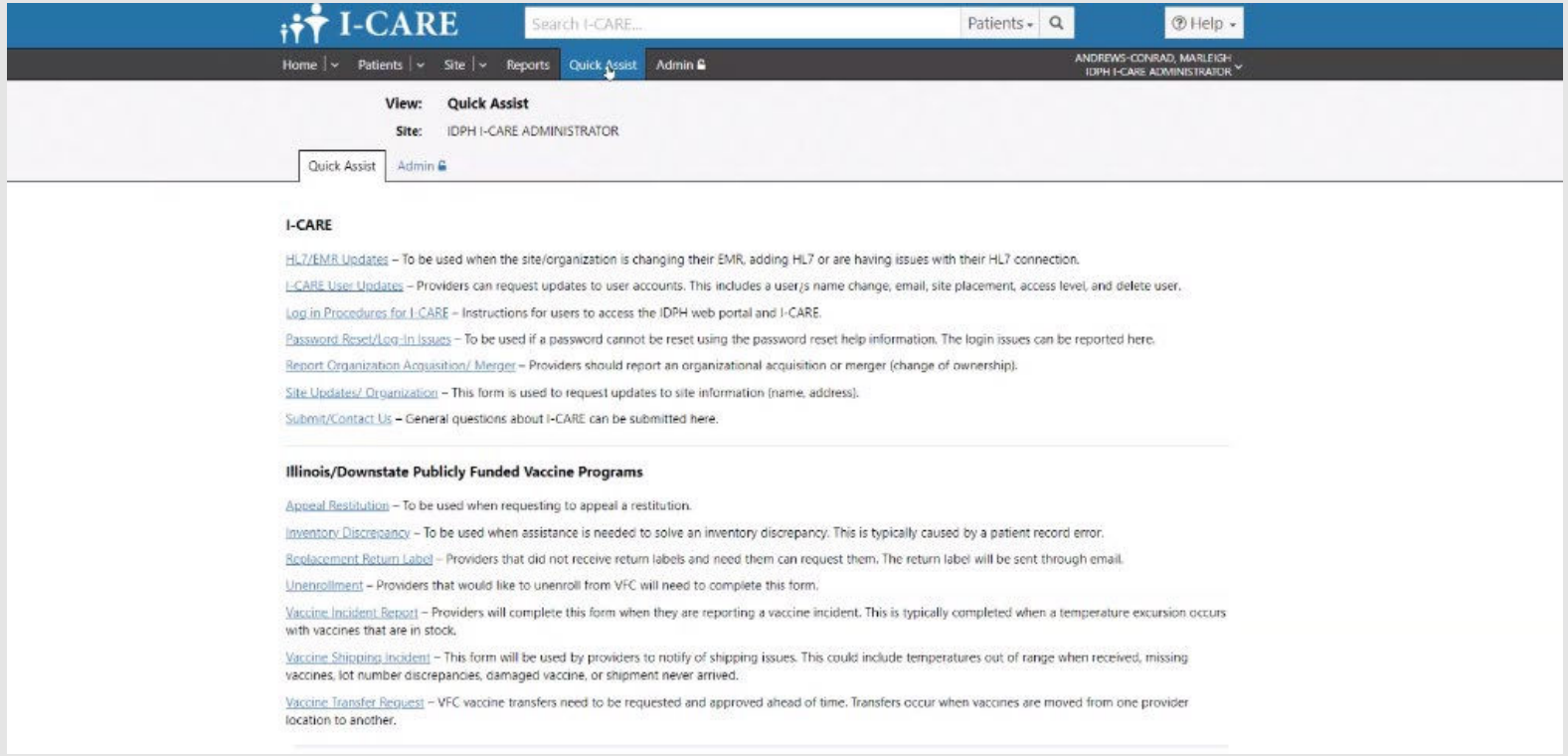
- IL's Immunization Information Systems (IIS).
- An electronic web-based immunization data registry operated by IDPH.
- All VFC providers **must be enrolled** in I-CARE.
- Must be able to provide individual patient immunization records.
- Immunization records can be entered manually or electronically through the provider's electronic medical record.

I-CARE ENROLLMENT

- Now done completely online, no paperwork.
  - Decrease turnaround time and prevent duplicate submissions.
- Easier to add/modify new users and organizations.
- Documents needing signature are automatically sent via DocuSign.

QUICK ASSIST

- New tab on I-CARE site that has links for submitting help requests.



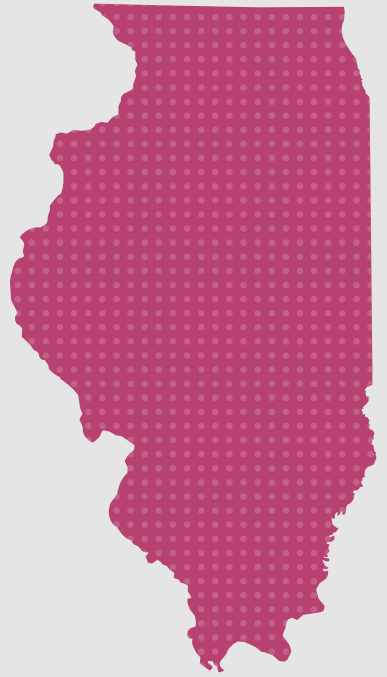
I-CARE & HL7

- Share Electronic Health Record (EHR) with I-CARE using HL7 data exchange.
  - Contact EHR vendor to determine if your system is HL7 compatible.
  - May need to acquire an additional interface for your EHR to send and exchange immunization data.

For more information on HL7 please visit I-CARE HL7 Specifications. If you have questions, contact dph.icare@illinois.gov.

VFC SITE REQUIREMENTS

- Be licensed in Illinois to administer vaccines to children 18 years old and younger.
- Be willing and able to follow all VFC program requirements, policies, and procedures, including participation in site visits and educational opportunities.
- Have capacity to order, receive, manage, store, and monitor the temperature of public vaccines.
- Be open at least four consecutive hours for three days a week to receive VFC vaccines.
- Record keeping and reporting adverse reactions to VAERS and MedWatch.



REQUIRED ENROLLMENT DOCUMENTS

CDC's Provider Agreement.

- The provider signing the Provider Agreement for a multi-provider practice must have the authority to sign on behalf of the entity.
- All licensed health care providers (MD, DO, NP, PA, pharmacist) at your facility who have prescribing authority must be listed with professional license numbers and individual NPI numbers (VFC Enrollment Form).

PROVIDER PROFILE

- A Provider Population Profile must be submitted when enrolling and updated annually or when order patterns indicate a change.
  - IDPH will send an update request via SmartSheets in April 2025.

- All VFC programs must determine individual provider populations served and associated vaccine need by funding type.

- This ensures publicly purchased vaccines are distributed in amounts representing the patient population served and to adjust as populations change.

ANNUAL EDUCATION

ANNUAL education on vaccine storage and handling training is required:

- You Call The Shots – Module 10 – Storage and Handling.
- You Call the Shots – Module 16 – Vaccines for Children Program.

- All staff members who receive vaccine deliveries and/or handle or administer vaccines should complete education.
- Documentation of **BOTH** training modules must be documented in the vaccine management plan and submitted with annual enrollment (reviewed during site visits).

BI-ANNUAL RECERTIFICATION

- All VFC providers must recertify their enrollment every other year (new change from annual) to continue participating in the VFC program.
  - Timing moving from Winter to Spring.
  - Submitted in I-CARE.
- Additionally, providers should:
  - Review and Agree to the VFC Eligibility and the VFC Loss and Replacement Policies.
  - Review, sign, and upload the VFC Provider Agreement.
- Remember: updating the provider profile and completing required education is still annual!

RECORD KEEPING

Distribution of Vaccine Information Statements (VISs)

- Must be provided each time a National Vaccine Injury Compensation Program (VICP) covered vaccine is administered*
- Given to parent, legal guardian, or patient (non-minor) to keep.*
- Must be the most current version.†
- Can provide other written or audio-visual materials as necessary.

Immunize.org: VISs (available in 47 languages)

*Required under the National Childhood Vaccine Injury Act, foreign VISs may not be up to date
†Required under CDC instructions

Documentation of Vaccine Administration

- Vaccine manufacturer, lot number, and date of administration.*
- Name and business address of the physician administering the vaccine.*
- Vaccine information statement version date and date provided. †
- Site (deltoid), route of administration (intramuscular), and expiration date of vaccine.

(Source: AAP Committee on Medical Liability. Medical liability for pediatricians, 6th Edition. 2004)

KNOWLEDGE CHECK

What is the minimum amount of time that VFC records should be maintained?

A. 1 year
B. 3 years
C. 5 years
D. Forever

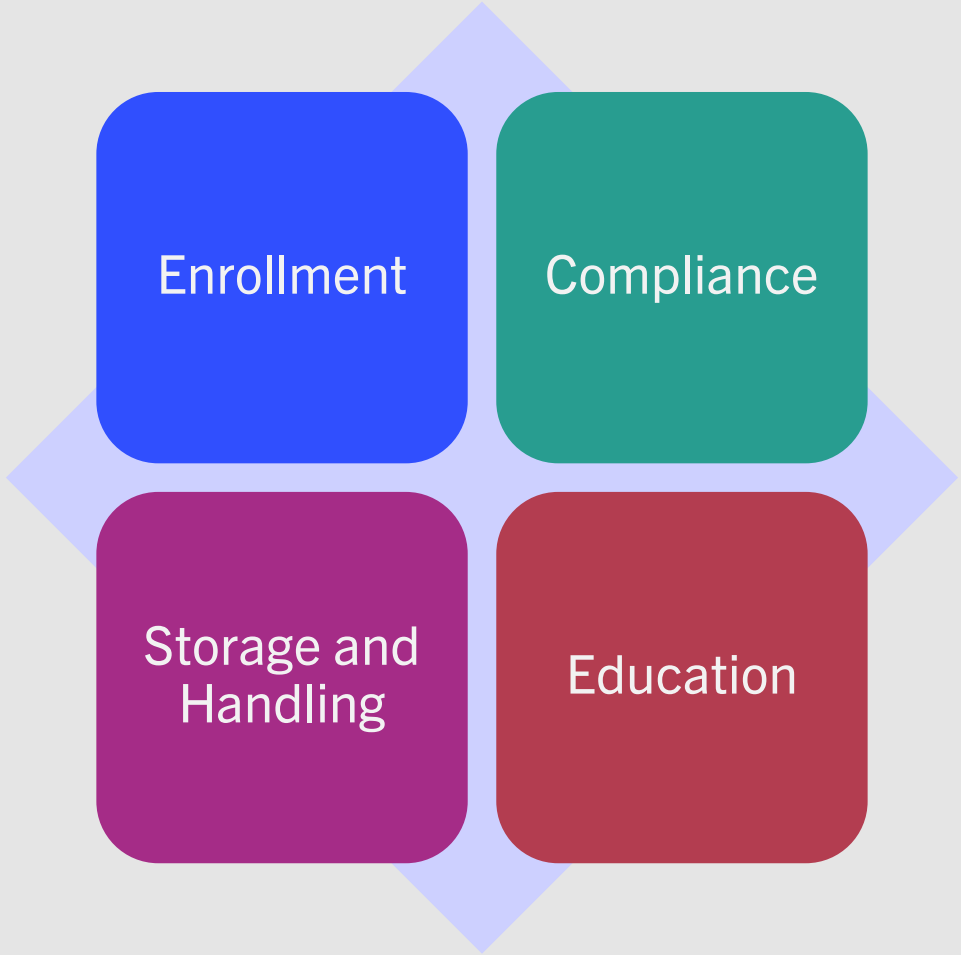
STAFF AND TRAINING — VACCINE COORDINATORS

- Primary and backup vaccine coordinators:
  - Responsible for ordering, receiving, rotating, and monitoring vaccines.
  - Must be fully trained on routine and emergency SOPs for vaccine ordering, storage, handling, transport, and inventory management.
- More information about coordinator responsibilities can be found in the Vaccine for Children Program Manual for Illinois VFC Providers.
- Notify IDPH when there is a change in vaccine coordinators or medical director. Vaccine Program Site Updates

PROVIDER UNENROLLMENT

- Providers who wish to terminate the provider agreement must:
  - Complete unenrollment form.
  - Stop using VFC vaccines as of the unenroll date.
  - Return any unused VFC vaccines within 30 days.
- Examples of why IDPH may terminate the provider agreement include:
  - Provider has not ordered vaccine in the past 12 months.
  - A provider is on the List of Excluded Individual and Entities (LEIE) list maintained by Office of the Inspector General.
  - Failure to comply with requirements.

SITE VISITS



ENROLLMENT VISITS

- All providers (newly enrolling or re-enrolling after an absence) must have an enrollment site visit before being approved to order VFC vaccines.
- This visit is to educate providers on:
  - VFC program requirements.
  - Proper vaccine storage and handling.
  - Appropriate resources to implement requirements.
- Providers should be prepared for follow-up visits during the first year.

COMPLIANCE VISITS

- Sites will be enrolled and active in the VFC program for 3-6 months before receiving a compliance site visit.
- This visit includes a review of and ensuring compliance with:
  - Provider Profile
  - Vaccine ordering and inventory management
  - Policies, procedures and vaccine management plan
  - Vaccine storage and handling equipment, procedures, and documentation
  - VFC screening requirements and billing practices
  - All ACIP vaccines are available to VFC-eligible patients
  - VFC-related document retention

STORAGE AND HANDLING VISITS

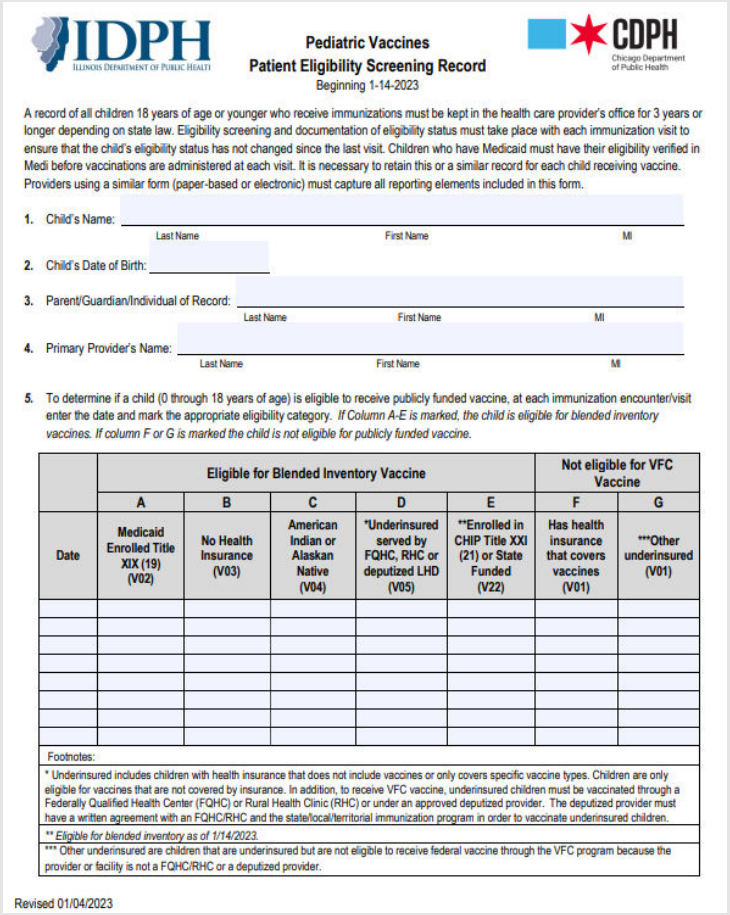
- May be scheduled or *unannounced*.
- IDPH must complete *unannounced* storage and handling site visits for a percentage of providers each year.
- This visit includes a review of and ensuring compliance with:
  - Vaccine inventory management
  - Vaccine storage and handling equipment and monitoring
  - Vaccine storage and handling procedures and Vaccine management plan
  - Appropriate storage and handling related documentation
- Vaccines purchased with state and federal funds that are deemed non-viable due to provider negligence must be **replaced** on a dose-for-dose basis with privately purchased vaccines.

FRAUD AND ABUSE

- Examples of fraud and abuse:
  - Providing VFC vaccines to non-VFC eligible children.
  - Billing a patient or third party for a VFC vaccine.
  - Denying VFC eligible children a VFC vaccine due to inability to pay an administration fee.
  - Failing to screen for and document eligibility at each visit.
  - Failing to properly maintain VFC records and requirements.
  - Failing to properly store and handle VFC vaccines, etc.
- IDPH may investigate to determine intentional or unintentional fraud/misuse.

PATIENT ELIGIBILITY

- Providers must screen, document, and verify VFC eligibility before administering VFC vaccines.
- Use the MEDI system or equivalent system (with HFS 270/271 electronic transaction data).
- The Patient Eligibility Screening Form provides a means of recording responses to VFC eligibility questions.
  - The provider, parent, or guardian may complete the VFC eligibility portion of the form.
  - Verification of parent/guardian responses is not required.



IDPH Illinois Department of Public Health

Pediatric Vaccines
Patient Eligibility Screening Record
Beginning 1-14-2023

CDPH Chicago Department of Public Health

A record of all children 18 years of age or younger who receive immunizations must be kept in the health care provider's office for 3 years or longer depending on state law. Eligibility screening and documentation of eligibility status must take place with each immunization visit to ensure that the child's eligibility status has not changed since the last visit. Children who have Medicaid must have their eligibility verified in Medi before vaccinations are administered at each visit. It is necessary to retain this or a similar record for each child receiving vaccine. Providers using a similar form (paper-based or electronic) must capture all reporting elements included in this form.

1. Child's Name: _____ (Last Name / First Name / MI)
2. Child's Date of Birth: _____
3. Parent/Guardian/Individual of Record: _____ (Last Name / First Name / MI)
4. Primary Provider's Name: _____ (Last Name / First Name / MI)
5. To determine if a child (0 through 18 years of age) is eligible to receive publicly funded vaccine, at each immunization encounter/visit enter the date and mark the appropriate eligibility category. *If Column A-E is marked, the child is eligible for blended inventory vaccines. If column F or G is marked the child is not eligible for publicly funded vaccine.*

	Eligible for Blended Inventory Vaccine					Not eligible for VFC Vaccine	
	A	B	C	D	E	F	G
Date	Medicaid Enrolled Title XIX (19) (V02)	No Health Insurance (V03)	American Indian or Alaskan Native (V04)	*Underinsured served by FQHC, RHC or deputized LHD (V05)	**Enrolled in CHIP Title XXI (21) or State Funded (V22)	Has health insurance that covers vaccines (V01)	***Other underinsured (V01)

Footnotes:

* Underinsured includes children with health insurance that does not include vaccines or only covers specific vaccine types. Children are only eligible for vaccines that are not covered by insurance. In addition, to receive VFC vaccine, underinsured children must be vaccinated through a Federally Qualified Health Center (FQHC) or Rural Health Clinic (RHC) or under an approved deputized provider. The deputized provider must have a written agreement with an FQHC/RHC and the state/local/territorial immunization program in order to vaccinate underinsured children.

** *Eligible for blended inventory as of 1/14/2023.*

*** Other underinsured are children that are underinsured but are not eligible to receive federal vaccine through the VFC program because the provider or facility is not a FQHC/RHC or a deputized provider.

Revised 01/04/2023

ELIGIBILITY

VFC Eligibility Criteria	Definition
American Indian or Alaska Native (AI/AN)	This population is defined by the Indian Health Care Improvement Act (25 U.S.C. 1603). (AI/AN children are VFC-eligible under any circumstance.)
Medicaid-eligible	Children who are eligible for the Medicaid program. For the purposes of the VFC program, the terms “Medicaid-eligible” and “Medicaid enrolled” are used interchangeably.
Uninsured	Children not covered by any health insurance plan.
Underinsured	Underinsured means the child has health insurance, but the insurance policy: • Does not include any vaccines; • Does not include all vaccines recommended by the Advisory Committee on Immunization Practices (ACIP); or • Has a fixed dollar limit or cap for vaccines. Underinsured children are only eligible to receive VFC vaccines at a FQHC, RHC, or a deputized provider.

KNOWLEDGE CHECK

Where can underinsured VFC-eligible children receive VFC vaccines from?

A. FQHCs
B. RHC
C. LHD deputized by a FQHC or RHC
D. All of the above

DISCUSSION QUESTION

If your site is not a FQHC, RHC or deputized LHD, what should you do to help underinsured VFC-eligible children get vaccinated?

ELIGIBILITY

- American Indian/Alaska native (AI/AN) children are VFC-eligible under any circumstance.
  - Participation in VFC is voluntary.
- Children with a private primary health insurance plan *with Medicaid as their secondary insurance* are VFC-eligible because of their Medicaid enrollment.

BILLING - MEDICAID SECONDARY INSURANCE*

Option 1: The provider can administer VFC vaccines and bill Medicaid for the administration fee.

Considerations:

- Easiest way for a provider to use VFC vaccines and bill Medicaid for the administration fee.
- No out-of-pocket costs to the parent for the vaccine or the administration fee.

Option 2: The provider can administer private stock vaccines and bill the primary insurance carrier for both the cost of the vaccine and the administration fee.

Considerations:

- Provider may be reimbursed a higher dollar amount if privately purchased vaccine is administered and both the vaccine and the administration fee are billed to the primary insurer.

*Consider these options for AI/AN populations that qualify for VFC under a second category as the family may be responsible for administration fees.

Child's Insurance Status	VFC-Eligible?	VFC Eligibility Category
Enrolled in Medicaid	Yes	Medicaid (V02).
Has private health insurance plan with Medicaid as secondary Insurance.	Yes	Medicaid (V02). The provider should choose the option that is most cost-effective for the family.
Has health insurance covering all vaccines but has not yet met plan's deductible or paid for other services received at visit.	No	Insured (V01). This applies even when primary insurer would deny reimbursement for the cost of the vaccine and its administration because the plan's deductible has not been met.
Has health insurance covering all vaccines but has not yet met plan's deductible or paid for other services received at visit and has Medicaid as secondary insurance.	Yes	Medicaid (V02).
Has health insurance covering all vaccines, but the plan has a fixed dollar limit or cap on amount that it will cover.	Yes	Insured (V01) until the fixed dollar limit is met. Underinsured (V05) after the fixed dollar limit is reached.
Has an insurance plan that does not cover all ACIP-recommended vaccines.	Yes	Underinsured (V05). Child can only receive vaccines not covered by the plan.
Has health insurance, but plan does not cover any vaccines.	Yes	Underinsured (V05). With implementation of ACA, this situation should be rare.
Has no health insurance coverage.	Yes	Uninsured (V03).
Has private health insurance that covers all vaccinations and is AI/AN.	Yes	AI/AN (V04). The provider should choose the eligibility category most cost effective for the family.
Has Medicaid and is AI/AN.	Yes	Medicaid (V02) or AI/AN (V04). Providers should use Medicaid for the administration fee (least out-of-pocket expense for family).

NO CHARGE FOR VACCINES

- Patients and families cannot be charged for publicly purchased vaccines.

- Do not bill any individual or other third-party payer for the cost of VFC-supplied or other vaccines purchased through CDC federal contracts.

ADMINISTRATION FEES

- Bill only Medicaid for the administration fee for VFC-eligible children enrolled in Medicaid (per vaccine and not per antigen).
- The vaccine administration fee for non-Medicaid VFC-eligible children must not exceed $23.87 per dose.
- VFC providers may issue a single bill for the administration fee for non-Medicaid VFC-eligible children within 90 days of vaccine administration.
- Unpaid VFC vaccine administration fees may not be sent to collections and VFC providers may not refuse to vaccinate an eligible child whose parents have unpaid vaccine administration fees.

KNOWLEDGE CHECK

The vaccine administration fee for non-Medicaid VFC-eligible children must not exceed how much per dose?

A. $6.40
B. $16.71
C. $21.62
D. $23.87

VACCINE MANAGEMENT

- Providers should follow VFC storage and handling requirements based on CDC's Vaccine Storage and Handling Toolkit including:
  - Ordering vaccines
  - Utilizing required equipment
  - Digital data loggers
  - Vaccine cold chain

VACCINE MANAGEMENT PLAN

- Contact info for current primary and backup vaccine coordinators.
- Proper storage and handling practices.
- Procedures for vaccine ordering, receiving, inventory control, stock rotation, and handling vaccine loss and waste.
- Procedures for emergency situations (transport, equipment malfunction, power failure, and natural disaster).
- Documented training related to vaccine management.
- Provider and vaccine coordinator roles & responsibilities.
- Plans must be updated annually or more frequently as needed.

ORDERING VACCINES

- Ordering is completed through I-CARE.
- Should be up-to-date before submitting an order:
  - ❑Vaccine inventory.
  - ❑Patient immunization records.
  - ❑Temperature logs for all appliances.
  - ❑All data logger certificates of calibration are valid and not expired.
  - ❑All temperature excursions must have a vaccine incident report on file.
  - ❑Delivery hours, including specifying lunch hours or other closures.
- Order and stock enough vaccine to meet patient demand for one to three months.

KNOWLEDGE CHECK

Borrowing between public VFC & private vaccine inventory is **not** allowed.

A. True

B. False

VACCINE MANAGEMENT — BORROWING VACCINES

- Borrowing between public VFC & private vaccine inventory is not allowed.
- Transfers of VFC vaccine between VFC clinics are allowable with permission from IDPH and proper transport storage equipment.
  - (e.g., transferring short-dated vaccines to another provider that can use them)
- A transfer request form is available in I-CARE.

KNOWLEDGE CHECK

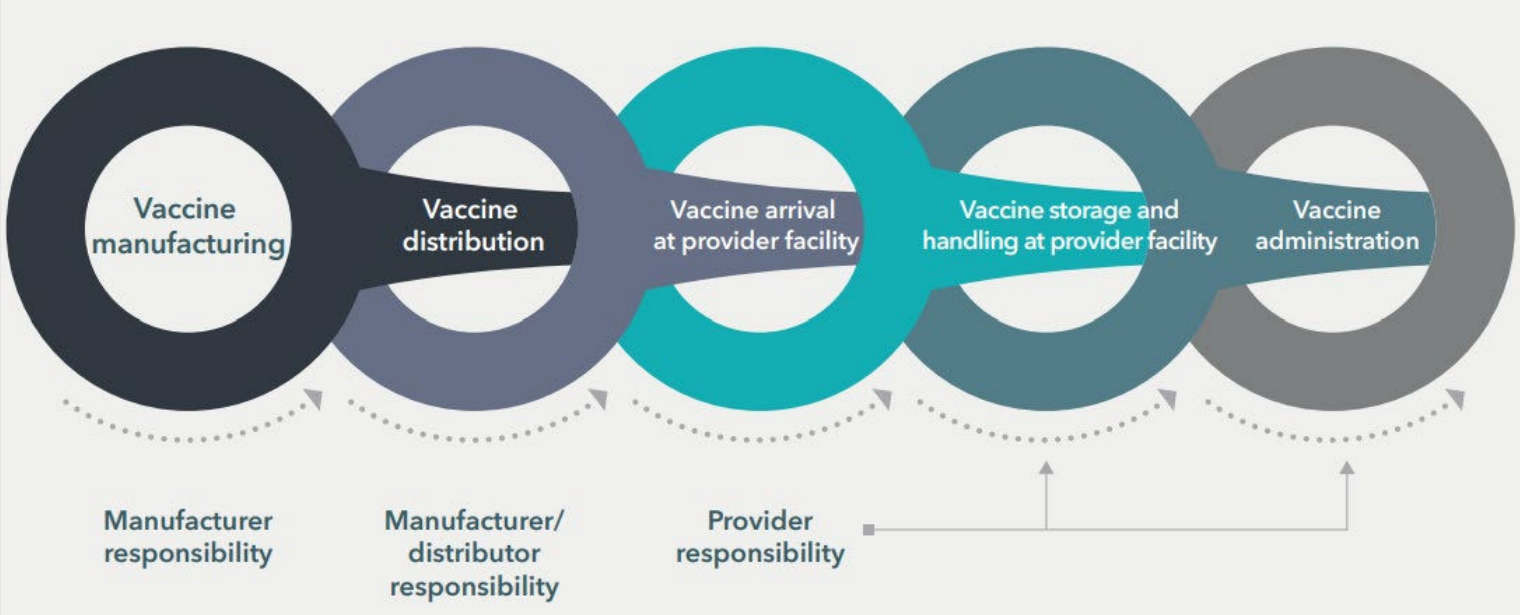
Transfers of VFC vaccine between VFC clinics are allowable with permission from IDPH and proper transport storage equipment.

A. True

B. False

VACCINE MANAGEMENT — COLD CHAIN

- Vaccine cold chain must be maintained (ensures potency and useability).
- Helps save money and avoid re-vaccination.
- Vaccine appearance is NOT a reliable indicator that vaccines have been stored in appropriate conditions.



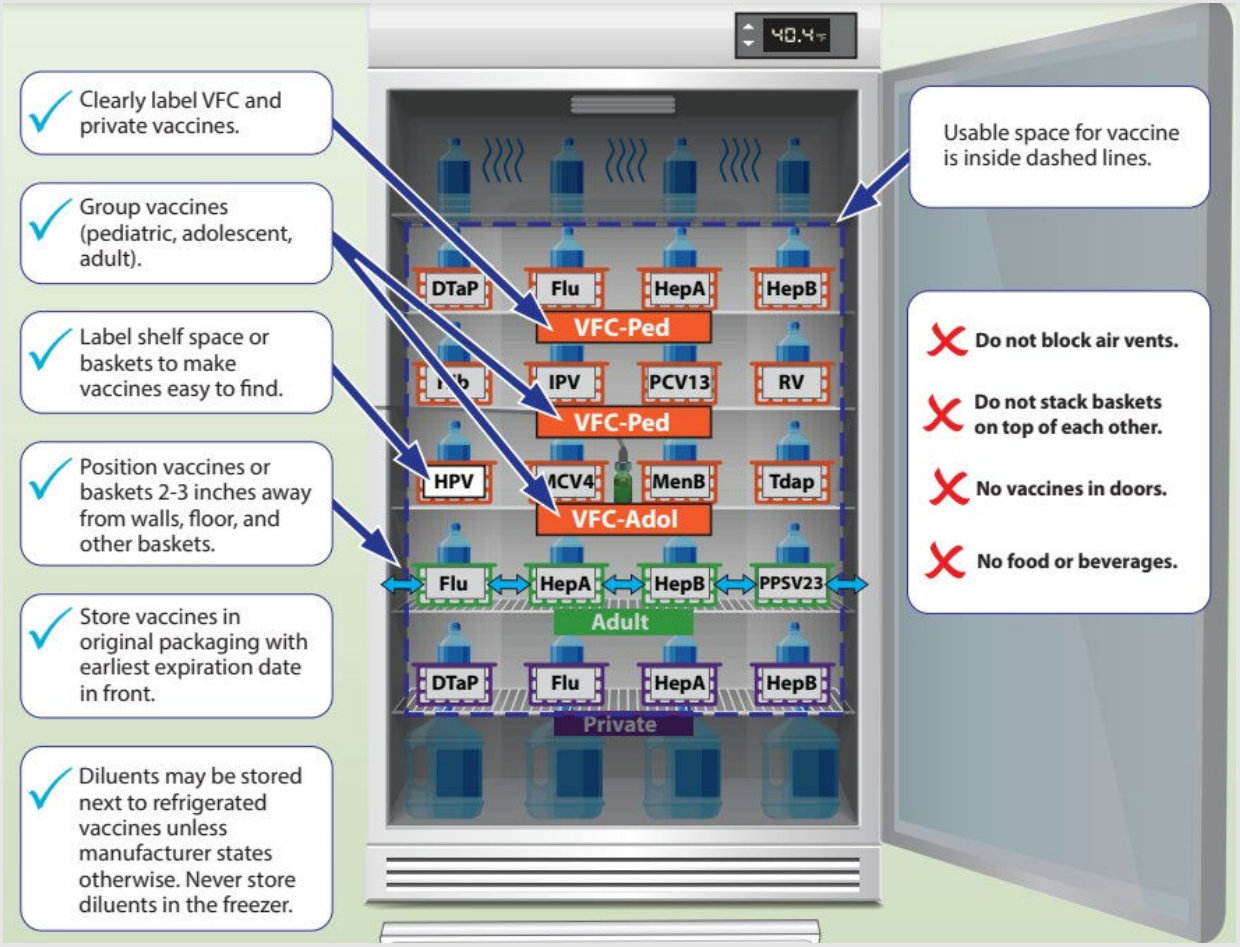
VACCINE MANAGEMENT — RECEIVING VACCINE

- Vaccine and diluent should be immediately unpacked, stored at recommended temperatures, and documented upon arrival.
- Do not store shipment box in vaccine storage unit – the combined storage methods may be too cold.
- Check immediately for:
  - Physical damage of shipping container.
  - Correct products were received.
  - Diluent and vaccine expiration dates.
  - Cold chain monitor, if included.

Any issues should be reported within two hours to the Illinois VFC Program Services Staff at 217-785-1455. If you do not immediately reach anyone, please call again and follow up with an email to dph.vaccines@illinois.gov.

VACCINE MANAGEMENT — STORING VACCINE

- Store vaccine by funding type (check I-CARE or packing slips).
- Separate units are not required.
  - VFC: VFC eligible patients only.
  - 317: 317-eligible adults or approved outbreak response.



VACCINE MANAGEMENT — STORING VACCINE

- Stock rotation and removal:
  - Rotate vaccine stock so the vials with the soonest expiration date are at the front (used first).
  - Immediately remove expired vaccine from stock.

TIP: Determine regular intervals for rotation (i.e., weekly), including when there is a vaccine delivery.

VACCINE MANAGEMENT – REQUIRED EQUIPMENT

Purpose-built or pharmaceutical-grade refrigerators and freezers are preferred.

- Needs to be approved and met with the guidelines and re-certified by approved source.
- Stand-alone refrigerator and freezer units may also be used.
- IDPH does not allow combination household refrigerator/freezer units for storage.
  - Never store vaccine in a dorm-style or bar-style combined refrigerator/freezer unit.

VACCINE MANAGEMENT — REQUIRED EQUIPMENT

- Some purpose-built units separate public & private vaccine stock electronically.
  - If electronic, an inventory printout must be available upon request.
- Power Supply:
  - Plug in only one storage unit per electrical outlet.
  - Use a safety-lock plug or an outlet cover.
  - Post “DO NOT UNPLUG” warning signs at outlets and on storage units.
  - Label fuses and circuit breakers to alert others not to turn off these units.
  - Use caution when using power outlets that can be tripped or switched off and avoid using:
    - Built-in circuit switches (may have reset buttons).
    - Outlets that can be activated by a wall switch.
    - Multioutlet power strips.

VACCINE MANAGEMENT — REQUIRED EQUIPMENT

- Storage units should be placed in a well-ventilated room, between 68°F - 77°F, and without anything blocking them.
  - Refrigerators should maintain temps between 2° C - 8° C (36°F - 46°F).
  - Freezers should maintain temps between -50° C and -15° C (-58°F - +5°F).
  - Recommended to set temps in Celsius and record to 1 decimal place.
  - Record temperatures:
    - Any time staff are in the clinic, at least 3x/week.
    - 2x/day and the min/max temps at the start of every day.
  - Doors should always remain closed – consider using locks or alarms.
- It can take multiple days to stabilize the temp in a new or repaired unit.
  - Min and max temps should be recorded 2x/day for 2 to 7 days.
  - Once two consecutive days of temperatures are recorded within the recommended range, the unit is stable and ready for use.

KNOWLEDGE CHECK

Vaccines and food/beverages can be stored in the same unit.

A. True

B. False

VACCINE MANAGEMENT — DIGITAL DATA LOGGERS

- Digital Data Loggers (DDLs) continually monitor the temperature of vaccines.
- Data from DDLs is retrieved using special software or a website.
- DDLs must have a certificate of calibration that is current.
- Some purpose-built units have built-in DDLs. Make sure these meet all the requirements.
- A back-up DDL must be available.

VACCINE MANAGEMENT — DIGITAL DATA LOGGERS

The DDL must be equipped with:

- A temperature probe or sensor.
- An active temperature display outside the unit that can be easily read without opening the unit's door.
- Continuous temperature monitoring and recording capabilities and capacity to routinely download data.

Additional recommended DDL features:

- Alarm for out-of-range temperatures
- Temperature display showing current, minimum, and maximum temperatures
- Low battery indicator
- Accuracy of +/-1°F (0.5°C)
- User-programmable logging interval (or reading rate) recommended at a maximum time interval of no less frequently than every 30 minutes.

VACCINE MANAGEMENT — DIGITAL DATA LOGGERS

Certificates of Calibration Testing must include:

- Model/device number.
- Serial number.
- Date of calibration (report or issue date).
- Confirmation the instrument passed testing (or instrument in tolerance).

Certificates of calibration must indicate at least one of the following:

- Conforms to ISO 17025.
- Testing was performed by an ILAC/MRS Signatory body accredited laboratory.
- Is traceable to the standards maintained by NIST.
- Meets specifications and testing requirements for the American Society for Testing and Materials (ASTM) Standard E2877 tolerance Class F (0.5 °C) or better.

LOG MAINTENANCE

- Data from DDLs should be downloaded and reviewed **at least weekly.**

- Temperature data logger files must be retained according to VFC records retention policy for a **minimum of 3 years**, so that they can be analyzed for long-term trends and/or recurring problems.

- Temperature data logger data files must be made available, upon request, within the time frame requested.

KNOWLEDGE CHECK

Purpose-built vaccine storage units with built-in DDLs that meet all requirements are an acceptable way to monitor vaccine temperature.

A. True

B. False

DISCUSSION QUESTION

Temperature Excursions: Why do these matter?

TEMPERATURE EXCURSIONS

Any temperature reading outside the recommended ranges in the manufacturers' package inserts.

- Manufacturers will help determine if the vaccine is still viable.
- Review storage & handling policies and take the appropriate actions.
- Complete the Vaccine Incident Report in I-CARE.
- Unsure if an excursion occurred?
  - Mark vaccine "DO NOT USE!"
  - Do not use or discard until the manufacturer determines viability and IDPH VFC is contacted.

KNOWLEDGE CHECK

A temperature of 8.1 degrees Celsius in a refrigerator unit is a normal temperature and does not need to be reported as a temperature excursion.

A. True

B. False

VACCINE EMERGENCY RESPONSE

- Onsite generators or backup batteries can be used to prevent transporting vaccines to another storage facility in the event of an emergency like a power outage.
- Generators and backups should be tested quarterly.
- If the unit breaks down, it may be appropriate to transport.

EXPIRED, SPOILED, WASTED VACCINE

- Must be reported in I-CARE within one week of the expiration date.
- Expired and spoiled vaccines in unopened vials or unused manufacturer pre-filled syringes should be returned to McKesson Specialty within 6 months of the expiration date for Excise Tax Credit.
  - Must be unopened and in the original manufacturer vial or prefilled syringe.
- Wasted vaccines must be disposed of according to usual medical biosafety procedures and your clinic's procedures. Includes:
  - Open vials or prefilled syringes with or without the needles attached
  - Vaccine that was drawn into a syringe
  - Vaccines compromised due to a dropped or broken container

TRANSFERRING VACCINES

- Acceptable in these cases:
  - Vaccine is six months or less from the expiration date and unable to be used by the site.
  - A VPD outbreak.
  - Clinic closure.
  - Seasonal clinic closing.
- These transfer requests will be reviewed on a case-by-case basis:
  - Vaccines are more than six months from the expiration date.
  - There is an immediate need before an order can be received.
- Cold chain must be maintained (use DDL when transferring).

MOBILE CLINICS

Same VFC storage requirements with a permanently installed unit.

- Mobile clinic should be plugged into a power source at home site location when not in use.
- Will be inspected as part of the compliance visit.
- Vaccines cannot be transported to the city of Chicago or out-of-state.
- Vaccine must be delivered to the home site.

TEMPORARY OFF-SITE VACCINE CLINICS

- Transportation, storage, and handling must meet VFC program guidelines.
- Total time for travel + clinic day should not exceed 8 hours (e.g. if transport to an off-site clinic is 1 hour each way, the clinic may run for up to 6 hours).
- Use a portable vaccine refrigerator/freezer unit or a qualified container and packout that maintains appropriate temperatures.
  - Use of the manufacturer's shipping container or frozen water bottles is not permitted.
- Vaccine must be returned to permanent location & DDLs reviewed to ensure proper temperatures were maintained.

NEW OFF-SITE CLINIC REQUEST PROCESS

Annual Plan Submission

- An annual plan must be submitted and approved before off-site clinics can be held.
- This plan should outline the management of vaccines and must be completed by the vaccine coordinator.

Notification of Temporary Off-Site Clinic

- Providers must notify IDPH at least 48 business hours before each clinic event.
- Notifications should include the clinic's location, date, and time, as well as clinic details about the vaccines being administered and storage

Post Clinic Follow-Up

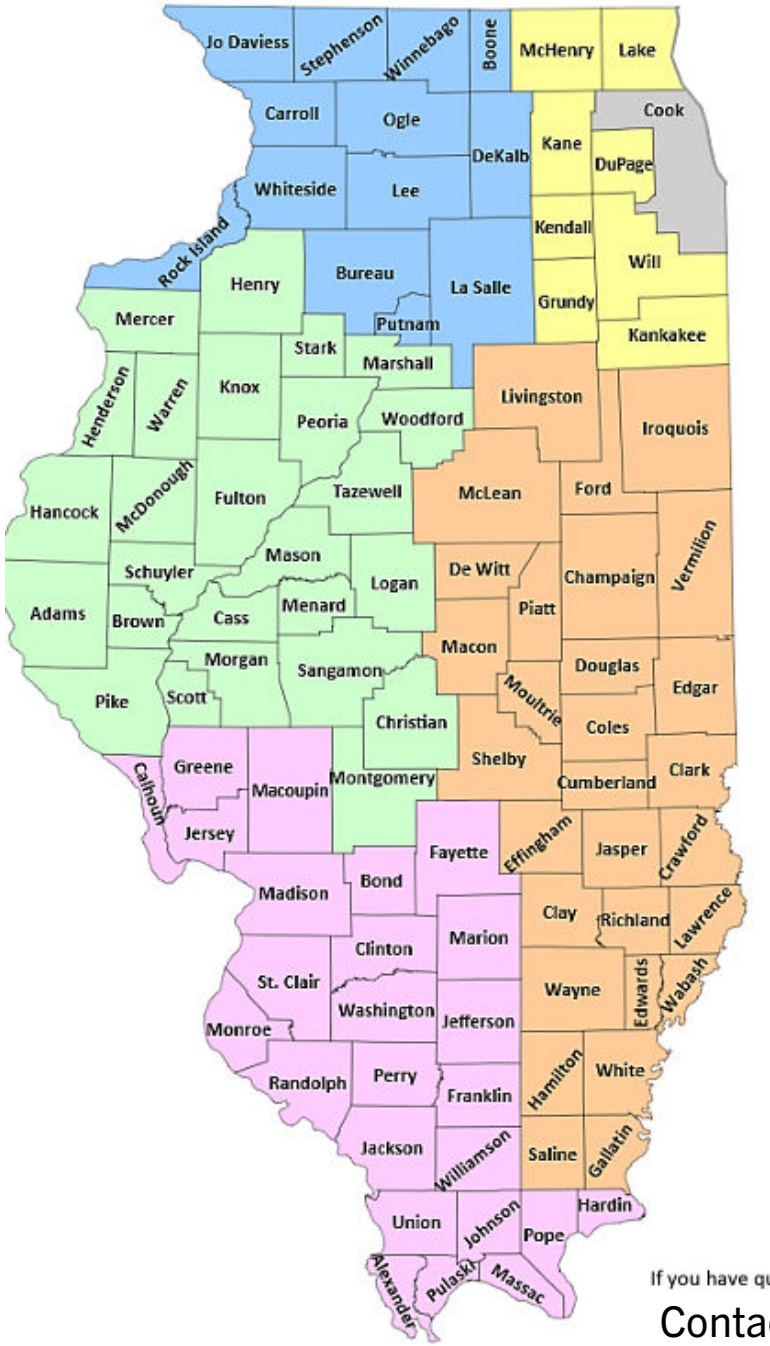
- After each clinic event, providers will receive an email notification with follow-up questions.
- This follow-up should be completed and submitted within 48 business hours after each event.

An Off-Site Clinic Dashboard has been developed to help providers navigate the off-site vaccination clinic process and requirements.

SIREN ALERTS

- Siren is the emergency planning, alerting, and notification system for IDPH.
- Get rapid notifications on outbreaks, updates, and other important health alerts.
- Register at: https://www.siren.illinois.gov/

IDPH REGIONAL CONTACTS



Bellwood Region
Mijiza Jefferson
3 Westbrook Corporate Center. 3rd Flr. Westchester, IL 60154
Ph: 708-240-7625 • Fax: 708-375-7011
Email: Mijiza.Jefferson@Illinois.gov

West Chicago Region
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5415 N. University St.
Peoria, IL 61614
Ph: 309-693-5374 • Fax: 309-693-5118
Email: Christopher.Morrow@Illinois.gov

Champaign Region
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2125 S. First St.
Champaign, IL 61820
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Metro-East Region
Katrina Galati
11 Executive Drive, Suite 10
Fairview Heights, IL 62208
Ph: 618-656-6680 • Fax 618-680-6256:
Email: katrina.galati@illinois.gov

If you have questions concerning immunizations, please

Contact the VFC program at DPH.Vaccines@illinois.gov

QUESTIONS?

BREAK

Resume at 10:15!

2024 ACIP VACCINE SCHEDULES

Tricia Scerba, MD

AFTER THIS SESSION:

Participants will be able to:

1. Outline new vaccine products and updates.
2. Apply the 2024 Advisory Committee on Immunizations Practices (ACIP) pediatric vaccination and catch-up schedules.
3. Summarize current routine immunization rates.

IMMUNIZATION SCHEDULES – WHY THEY MATTER

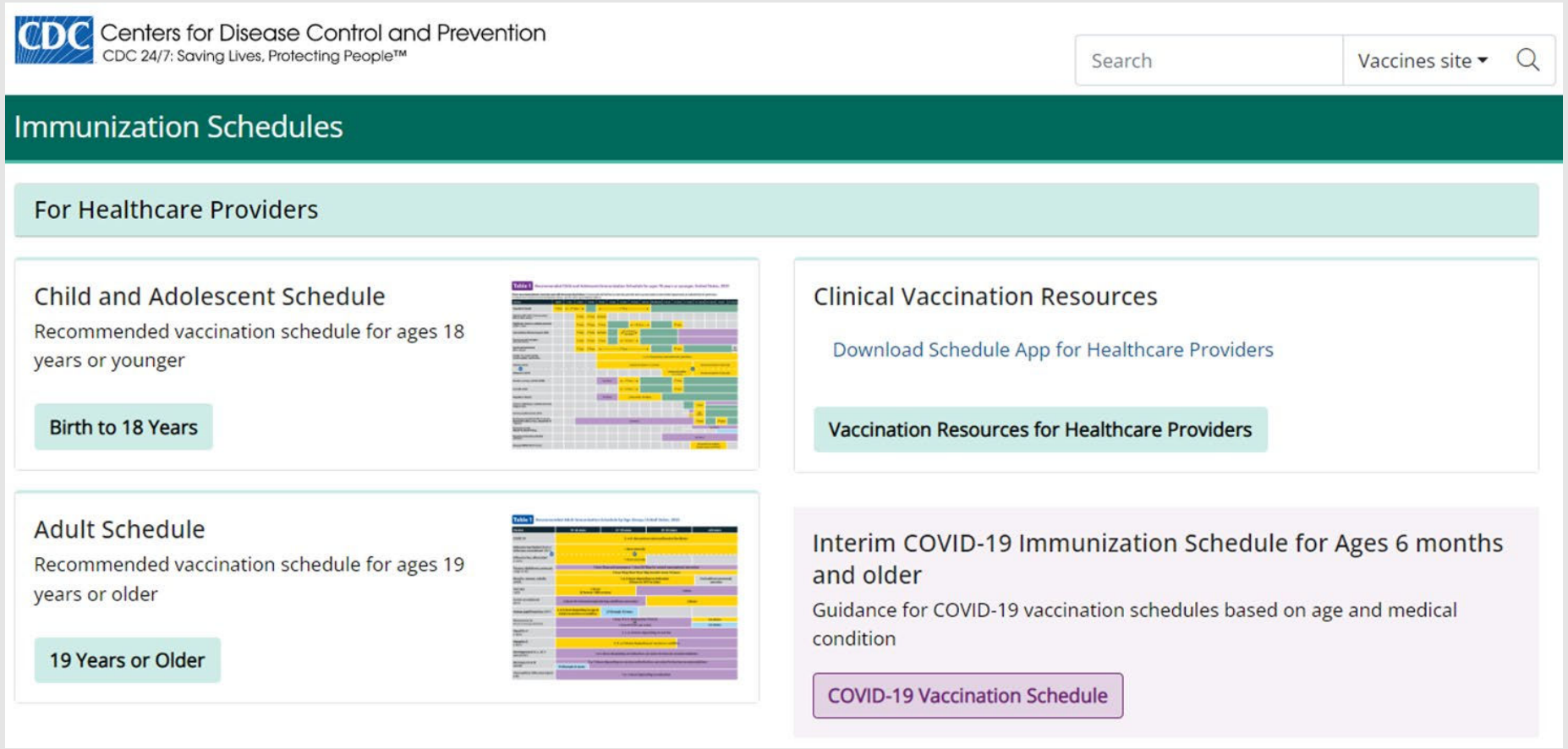
- Protection against roughly 20 different life-threatening diseases.
- Prevention/protection of infectious disease outbreaks.
  - Global vaccination efforts have saved an estimated 154 million lives, including 101 million infants according to the World Health Organization.
  - Vaccinations led to the eradication of smallpox, and polio is on the brink of eradication.
- Gives children protection when they are most vulnerable.
  - The measles vaccine has had the most significant impact on reducing infant deaths, accounting for 60% (94 million) of the lives saved by immunization (WHO).
- There are no other alternative studied immunization schedules approved.

VALUE OF IMMUNIZATIONS

- An AAP study demonstrated that routine childhood vaccines help prevent unnecessary morbidity and mortality, as well as have cost-saving impacts.
- Estimated vaccines costs of $8.5 billion were entirely offset by the avoided $63.6 billion in disease-related costs.

https://publications.aap.org/pediatrics/article/150/3/e2021056007/188497/Value-of-the-Immunization-Program-for-Children-in?autologincheck=redirected

SCHEDULES



https://www.cdc.gov/vaccines/schedules/index.html

USING THE ACIP SCHEDULE

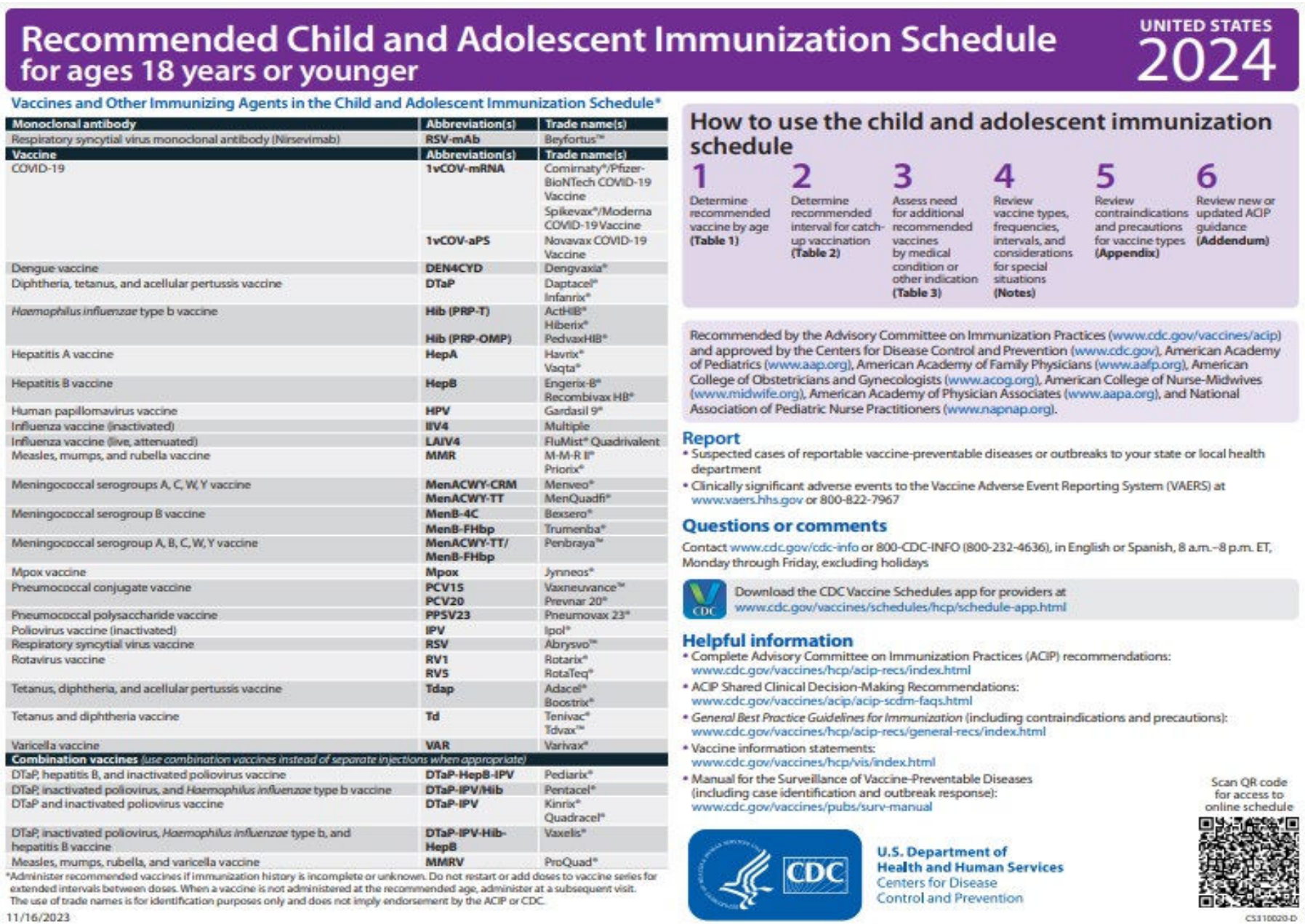
To make vaccination recommendations, healthcare providers should:

1. Determine needed vaccines based on age (Table 1).
2. Determine appropriate intervals for catch-up, if needed (Table 2).
3. Assess for medical conditions and other indications (Table 3).
4. Review special situations (Vaccination Notes).
5. Review contraindications and precautions to vaccination (Appendix).
6. Review new or updated vaccine guidance (Addendum).

APPROVING PARTNERS

Child/Adolescent Schedule	Both Schedules	Adult Schedule
American Academy of Pediatrics (AAP)	American Academy of Family Physicians (AAFP)	American College of Physicians (ACP)
National Association of Pediatric Nurse Practitioners (NAPNAP)	American Academy of Physician Associations (AAPA)	Society for HealthCare Epidemiology of American (SHEA)
	American College of Obstetricians and Gynecologists (ACOG)	American Pharmacists Association (APhA)
	American College of Nurse-Midwives (ACNM)	

ACIP RECOMMENDED CHILD & ADOLESCENT SCHEDULE 2024



Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger

UNITED STATES 2024

Vaccines and Other Immunizing Agents in the Child and Adolescent Immunization Schedule*

Monoclonal antibody	Abbreviation(s)	Trade name(s)
Respiratory syncytial virus monoclonal antibody (Nirsevimab)	RSV-mAb	Beyfortus™
Vaccine	**Abbreviation(s)**	**Trade name(s)**
COVID-19	1vCOV-mRNA	Comirnaty®/Pfizer-BioNTech COVID-19 Vaccine Spikevax®/Moderna COVID-19 Vaccine
	1vCOV-aPS	Novavax COVID-19 Vaccine
Dengue vaccine	DEN4CYD	Dengvaxia®
Diphtheria, tetanus, and acellular pertussis vaccine	DTaP	Daptacel® Infanrix®
Haemophilus influenzae type b vaccine	Hib (PRP-T)	ActHIB® Hiberix® PedvaxHIB®
	Hib (PRP-OMP)	
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IIV4	Multiple
Influenza vaccine (live, attenuated)	LAIV4	FluMist® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R II® Priorix®
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-CRM	Menveo®
	MenACWY-TT	MenQuadfi®
Meningococcal serogroup B vaccine	MenB-4C	Bexsero®
	MenB-FHbp	Trumenba®
Meningococcal serogroup A, B, C, W, Y vaccine	MenACWY-TT/ MenB-FHbp	Penbraya™
Mpox vaccine	Mpox	Jynneos®
Pneumococcal conjugate vaccine	PCV15 PCV20	Vaxneuvance™ Prevnar 20®
Pneumococcal polysaccharide vaccine	PPSV23	Pneumovax 23®
Poliovirus vaccine (inactivated)	IPV	Ipol®
Respiratory syncytial virus vaccine	RSV	Abrysvo™
Rotavirus vaccine	RV1 RV5	Rotarix® RotaTeq®
Tetanus, diphtheria, and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Tetanus and diphtheria vaccine	Td	Tenivac® Tdvax™
Varicella vaccine	VAR	Varivax®
Combination vaccines *(use combination vaccines instead of separate injections when appropriate)*		
DTaP, hepatitis B, and inactivated poliovirus vaccine	DTaP-HepB-IPV	Pediarix®
DTaP, inactivated poliovirus, and *Haemophilus influenzae* type b vaccine	DTaP-IPV/Hib	Pentacel®
DTaP and inactivated poliovirus vaccine	DTaP-IPV	Kinrix® Quadracel®
DTaP, inactivated poliovirus, *Haemophilus influenzae* type b, and hepatitis B vaccine	DTaP-IPV-Hib-HepB	Vaxelis®
Measles, mumps, rubella, and varicella vaccine	MMRV	ProQuad®

*Administer recommended vaccines if immunization history is incomplete or unknown. Do not restart or add doses to vaccine series for extended intervals between doses. When a vaccine is not administered at the recommended age, administer at a subsequent visit. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

11/16/2023

How to use the child and adolescent immunization schedule

1. Determine recommended vaccine by age **(Table 1)**
2. Determine recommended interval for catch-up vaccination **(Table 2)**
3. Assess need for additional recommended vaccines by medical condition or other indication **(Table 3)**
4. Review vaccine types, frequencies, intervals, and considerations for special situations **(Notes)**
5. Review contraindications and precautions for vaccine types **(Appendix)**
6. Review new or updated ACIP guidance **(Addendum)**

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American Academy of Pediatrics (www.aap.org), American Academy of Family Physicians (www.aafp.org), American College of Obstetricians and Gynecologists (www.acog.org), American College of Nurse-Midwives (www.midwife.org), American Academy of Physician Associates (www.aapa.org), and National Association of Pediatric Nurse Practitioners (www.napnap.org).

Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to your state or local health department
- Clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or 800-822-7967

Questions or comments

Contact www.cdc.gov/cdc-info or 800-CDC-INFO (800-232-4636), in English or Spanish, 8 a.m.–8 p.m. ET, Monday through Friday, excluding holidays

Download the CDC Vaccine Schedules app for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html

Helpful information

- Complete Advisory Committee on Immunization Practices (ACIP) recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- ACIP Shared Clinical Decision-Making Recommendations: www.cdc.gov/vaccines/acip/acip-scdm-faqs.html
- *General Best Practice Guidelines for Immunization* (including contraindications and precautions): www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Vaccine information statements: www.cdc.gov/vaccines/hcp/vis/index.html
- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual

Scan QR code for access to online schedule

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CS310020-D

https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf

2024 UPDATES

Changes to Format

1. Changed headers from “Vaccine” to “Vaccines and other Immunizing Agents”.
2. Cover page: COVID-19 is added. As well as Trade name Priorix for MMR and Vaxneuvance (PCV15) for pneumococcal conjugate vaccine.

Changes to Vaccination Notes

1. RSV-mAb (nirsevimab)
2. RSVPreF (Abrysvo)
3. Jynneos (mpox)
4. Influenza
5. COVID-19
6. Meningococcal A, C, W, Y
7. Meningococcal B
8. Pneumococcal
9. Polio

Changes to Appendix

1. Column Header
2. Influenza
3. Hepatitis B
4. HPV
5. Measles, Mumps and Rubella
6. Varicella

https://publications.aap.org/aapnews/news/27351/CDC-releases-2024-immunization-schedules?autologincheck=redirected

Table 1 Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2024

These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars.
To determine minimum intervals between doses, see the catch-up schedule (Table 2).

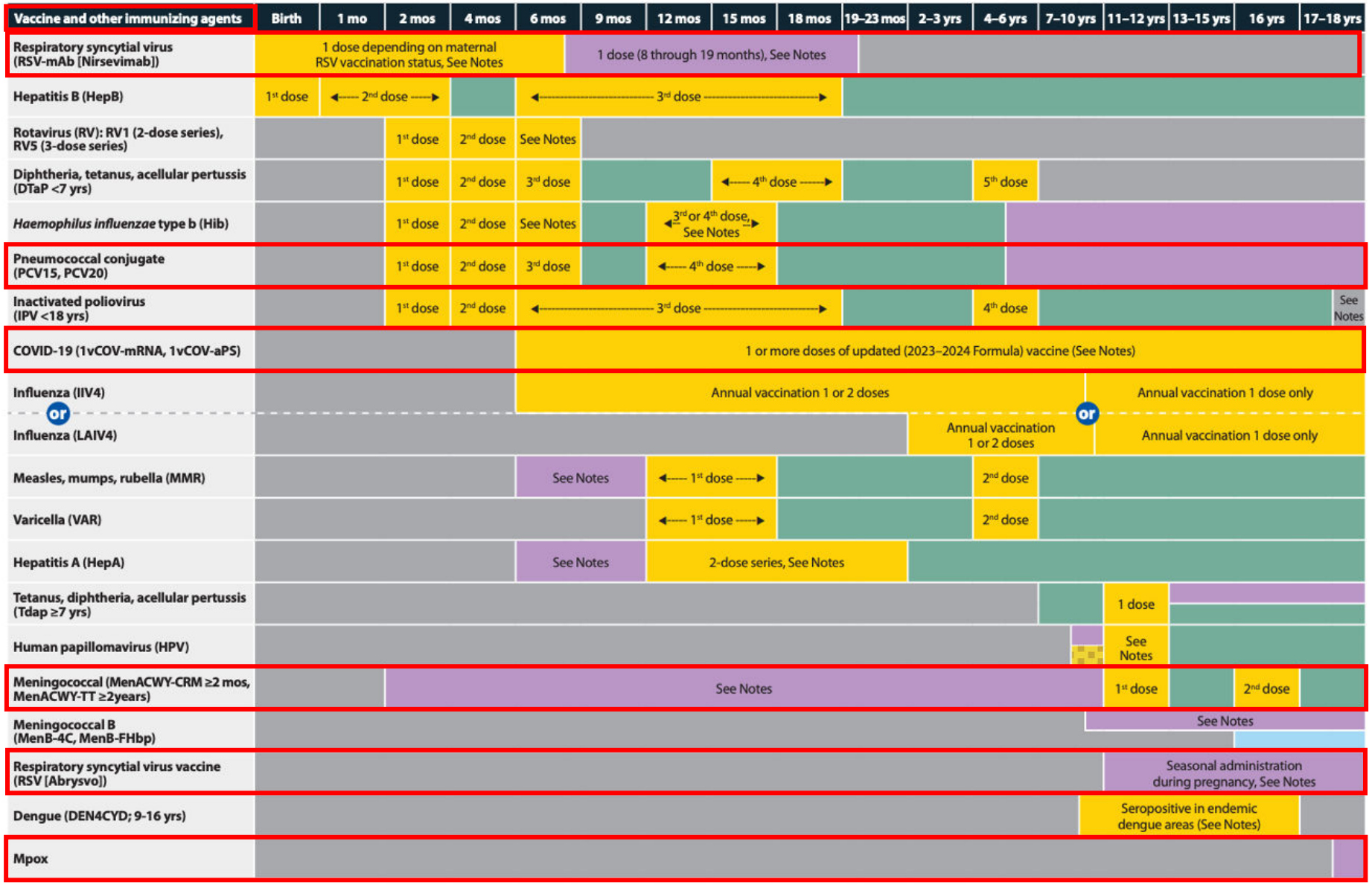


Table 2 Recommended Catch-up Immunization Schedule for Children and Adolescents Who Start Late or Who Are More than 1 Month Behind, United States, 2024

The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. **Always use this table in conjunction with Table 1 and the Notes that follow.**

Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Children age 4 months through 6 years					
Hepatitis B	Birth	**4 weeks**	**8 weeks *and* at least 16 weeks after first dose** minimum age for the final dose is 24 weeks		
Rotavirus	6 weeks Maximum age for first dose is 14 weeks, 6 days.	**4 weeks**	**4 weeks** maximum age for final dose is 8 months, 0 days		
Diphtheria, tetanus, and acellular pertussis	6 weeks	**4 weeks**	**4 weeks**	**6 months**	**6 months** A fifth dose is not necessary if the fourth dose was administered at age 4 years or older ***and*** at least 6 months after dose 3
Haemophilus influenzae type b	6 weeks	**No further doses needed** if first dose was administered at age 15 months or older. **4 weeks** if first dose was administered before the 1st birthday. **8 weeks (as final dose)** if first dose was administered at age 12 through 14 months.	**No further doses needed** if previous dose was administered at age 15 months or older **4 weeks** if current age is younger than 12 months ***and*** first dose was administered at younger than age 7 months ***and*** at least 1 previous dose was PRP-T (ActHib®, Pentacel®, Hiberix®), Vaxelis® or unknown **8 weeks *and* age 12 through 59 months (as final dose)** if current age is younger than 12 months ***and*** first dose was administered at age 7 through 11 months; **OR** if current age is 12 through 59 months ***and*** first dose was administered before the 1st birthday ***and*** second dose was administered at younger than 15 months; **OR** if both doses were PedvaxHIB® and were administered before the 1st birthday	**8 weeks (as final dose)** This dose only necessary for children age 12 through 59 months who received 3 doses before the 1st birthday.	
Pneumococcal conjugate	6 weeks	**No further doses needed** for healthy children if first dose was administered at age 24 months or older **4 weeks** if first dose was administered before the 1st birthday **8 weeks (as final dose for healthy children)** if first dose was administered at the 1st birthday or after	**No further doses needed** for healthy children if previous dose was administered at age 24 months or older **4 weeks** if current age is younger than 12 months ***and*** previous dose was administered at <7 months old **8 weeks (as final dose for healthy children)** if previous dose was administered between 7–11 months (wait until at least 12 months old); **OR** if current age is 12 months or older ***and*** at least 1 dose was administered before age 12 months	**8 weeks (as final dose)** This dose is only necessary for children age 12 through 59 months regardless of risk, or age 60 through 71 months with any risk, who received 3 doses before age 12 months.	
Inactivated poliovirus	6 weeks	**4 weeks**	**4 weeks** if current age is <4 years **6 months (as final dose)** if current age is 4 years or older	**6 months (minimum age 4 years for final dose)**	
Measles, mumps, rubella	12 months	**4 weeks**			
Varicella	12 months	**3 months**			
Hepatitis A	12 months	**6 months**			
Meningococcal ACWY	2 months MenACWY-CRM 2 years MenACWY-TT	**8 weeks**	See Notes	See Notes	
Children and adolescents age 7 through 18 years					
Meningococcal ACWY	Not applicable (N/A)	**8 weeks**			
Tetanus, diphtheria; tetanus, diphtheria, and acellular pertussis	7 years	**4 weeks**	**4 weeks** if first dose of DTaP/DT was administered before the 1st birthday **6 months (as final dose)** if first dose of DTaP/DT or Tdap/Td was administered at or after the 1st birthday	**6 months** if first dose of DTaP/DT was administered before the 1st birthday	
Human papillomavirus	9 years	**Routine dosing intervals are recommended.**			
Hepatitis A	N/A	**6 months**			
Hepatitis B	N/A	**4 weeks**	**8 weeks *and* at least 16 weeks after first dose**		
Inactivated poliovirus	N/A	**4 weeks**	**6 months** A fourth dose is not necessary if the third dose was administered at age 4 years or older ***and*** at least 6 months after the previous dose.	A fourth dose of IPV is indicated if all previous doses were administered at <4 years **OR** if the third dose was administered <6 months after the second dose.	
Measles, mumps, rubella	N/A	**4 weeks**			
Varicella	N/A	**3 months** if younger than age 13 years. **4 weeks** if age 13 years or older			
Dengue	9 years	**6 months**	6 months		

Table 3 Recommended Child and Adolescent Immunization Schedule by Medical Indication, United States, 2024

Always use this table in conjunction with Table 1 and the Notes that follow. Medical conditions are often not mutually exclusive. If multiple conditions are present, refer to guidance in all relevant columns. See Notes for medical conditions not listed.

Vaccine and other immunizing agents	Pregnancy	Immunocompromised (excluding HIV infection)	HIV infection CD4 percentage and count[a]		CSF leak or cochlear implant	Asplenia or persistent complement component deficiencies	Heart disease or chronic lung disease	Kidney failure, End-stage renal disease or on Dialysis	Chronic liver disease	Diabetes
			<15% or <200mm	≥15% and ≥200mm						
RSV-mAb (nirsevimab)		2nd RSV season		1 dose depending on maternal RSV vaccination status, See Notes			2nd RSV season for chronic lung disease (See Notes)	1 dose depending on maternal RSV vaccination status, See Notes		
Hepatitis B										
Rotavirus		SCID[b]								
DTaP/Tdap	DTaP Tdap: 1 dose each pregnancy									
Hib		HSCT: 3 doses	See Notes			See Notes				
Pneumococcal										
IPV										
COVID-19		See Notes								
IIV4										
LAIV4							Asthma, wheezing: 2–4 years[c]			
MMR	*									
VAR	*									
Hepatitis A										
HPV	*	3 dose series. See Notes								
MenACWY										
MenB										
RSV (Abrysvo)	Seasonal administration, See Notes									
Dengue										
Mpox	See Notes									

- Recommended for all age-eligible children who lack documentation of a complete vaccination series
- Not recommended for all children, but is recommended for some children based on increased risk for or severe outcomes from disease
- Recommended for all age-eligible children, and additional doses may be necessary based on medical condition or other indications. See Notes.
- Precaution: Might be indicated if benefit of protection outweighs risk of adverse reaction
- Contraindicated or not recommended *Vaccinate after pregnancy, if indicated
- No Guidance/ Not Applicable

a. For additional information regarding HIV laboratory parameters and use of live vaccines, see the General Best Practice Guidelines for Immunization, "Altered Immunocompetence," at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html and Table 4-1 (footnote J) at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html.

b. Severe Combined Immunodeficiency

c. LAIV4 contraindicated for children 2–4 years of age with asthma or wheezing during the preceding 12 months

Notes

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2024

For vaccination recommendations for persons ages 19 years or older, see the Recommended Adult Immunization Schedule, 2024.

Additional Information

- For calculating intervals between doses, 4 weeks = 28 days. Intervals of ≥4 months are determined by calendar months.
- Within a number range (e.g., 12–18), a dash (–) should be read as "through."
- Vaccine doses administered ≤4 days before the minimum age or interval are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum age or minimum interval should not be counted as valid and should be repeated as age appropriate. **The repeat dose should be spaced after the invalid dose by the recommended minimum interval.** For further details, see Table 3-2, Recommended and minimum ages and intervals between vaccine doses, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/timing.html.
- Information on travel vaccination requirements and recommendations is available at www.cdc.gov/travel/.
- For vaccination of persons with immunodeficiencies, see Table 8-1, Vaccination of persons with primary and secondary immunodeficiencies, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html, and Immunization in Special Clinical Circumstances (In: Kimberlin DW, Barnett ED, Lynfield Ruth, Sawyer MH, eds. *Red Book: 2021–2024 Report of the Committee on Infectious Diseases*. 32nd ed. Itasca, IL: American Academy of Pediatrics; 2021:72–86).
- For information about vaccination in the setting of a vaccine-preventable disease outbreak, contact your state or local health department.
- The National Vaccine Injury Compensation Program (VICP) is a no-fault alternative to the traditional legal system for resolving vaccine injury claims. All vaccines included in the child and adolescent vaccine schedule are covered by VICP except dengue, PPSV23, RSV, and COVID-19 vac… COVID-19 vaccines that are authorized or approved by the FDA are covered by the Countermeasures Injury Compensation Program (CICP). For more information, see www.hrsa.gov/vaccinecompensation or www.hrsa.gov/cicp.

COVID-19 vaccination
(minimum age: 6 months [Moderna and Pfizer-BioNTech COVID-19 vaccines], 12 years [Novavax COVID-19 Vaccine])

Routine vaccination

Age 6 months–4 years

- Unvaccinated:
  - 2-dose series of updated (2023–2024 Formula) Moderna at 0, 4–8 weeks
  - 3-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 3–8, 11–16 weeks
- Previously vaccinated† with 1 dose of any Moderna: 1 dose of updated (2023–2024 Formula) Moderna 4–8 weeks after the most recent dose
- Previously vaccinated† with 2 or more doses of any Moderna: 1 dose of updated (2023–2024 Formula) Moderna at least 8 weeks after the most recent dose
- Previously vaccinated† with 1 dose of any Pfizer-BioNTech: 2-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 8 weeks (minimum interval between previous Pfizer-BioNTech and dose 1: 3–8 weeks)
- Previously vaccinated† with 2 or more doses of any Pfizer-BioNTech: 1 dose of updated (2023–2024 Formula) Pfizer-BioNTech at least 8 weeks after the most recent dose

Age 5–11 years

- Unvaccinated: 1 dose of updated (2023–2024 Formula) Moderna or Pfizer-BioNTech vaccine
- Previously vaccinated† with 1 or more doses of Moderna or Pfizer-BioNTech: 1 dose of updated (2023–2024 Formula) M…

Special situations

Persons who are moderately or severely immunocompromised††

Age 6 months–4 years

- Unvaccinated:
  - 3-dose series of updated (2023–2024 Formula) Moderna at 0, 4, 8 weeks
  - 3-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 3, 11 weeks
- Previously vaccinated† with 1 dose of any Moderna: 2-dose series of updated (2023–2024 Formula) Moderna at 0, 4 weeks (minimum interval between previous Moderna and dose 1: 4 weeks)
- Previously vaccinated† with 2 doses of any Moderna: 1 dose of updated (2023–2024 Formula) Moderna at least 4 weeks after the most recent dose
- Previously vaccinated† with 3 or more doses of any Moderna: 1 dose of updated (2023–2024 Formula) Moderna at least 8 weeks after the most recent dose
- Previously vaccinated† with 1 dose of any Pfizer-BioNTech: 2-dose series of updated (2023–2024 Formula) Pfizer-BioNTech at 0, 8 weeks (minimum interval between previous Pfizer-BioNTech and dose 1: 3 weeks)
- Previously vaccinated† with 2 or more doses of any Pfizer-BioNTech: 1 dose of updated (2023–2024 Formula) Pfizer-BioNTech at least 8 weeks after the most recent dose

Age 5–11 years

- Unvaccinated:
  - 3-dose series of updated (2023–2024 Formula) Moderna at 0, 4, 8 weeks

The National Vaccine Injury Compensation Program (VICP)is a no-fault alternative to the traditional legal system for resolving vaccine injury claims. All vaccines included in the child and adolescent vaccine schedule are covered by VICP except dengue, PPSV23, **RSV**, and COVID-19 vaccines. COVID-19 vaccines that are authorized or approved by the FDA are covered by the Countermeasures Injury Compensation Program (CICP). For more information, see www.hrsa.gov/vaccinecompensation or www.hrsa.gov/cicp.

Notes Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2024

Influenza vaccination
(minimum age: 6 months [IIV], 2 years [LAIV4], 18 years [recombinant influenza vaccine, RIV4])

Routine vaccination

- Use any influenza vaccine appropriate for age and health status annually:
  - **Age 6 months–8 years** who have received **fewer** than 2 influenza vaccine doses before July 1, 2023, or whose influenza vaccination history is unknown: 2 doses, separated by at least 4 weeks. Administer dose 2 even if the child turns 9 years between receipt of dose 1 and dose 2.
  - **Age 6 months–8 years** who have received **at least** 2 influenza vaccine doses before July 1, 2023: 1 dose
  - **Age 9 years or older:** 1 dose
- For the 2023-2024 season, see www.cdc.gov/mmwr/volumes/72/rr/rr7202a1.htm.
- For the 2024–25 season, see the 2024–25 ACIP influenza vaccine recommendations.

Special situations

- **Close contacts (e.g., household contacts) of severely immunosuppressed persons who require a protected environment:** these persons should not receive LAIV4. If LAIV4 is given, they should avoid contact with for such immunosuppressed persons for 7 days after vaccination

Note: Persons with an egg allergy can receive any influenza vaccine (egg-based and non-egg-based) appropriate for age and health status.

Added information for vaccinating persons with a history of egg allergy.

Notes Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2024

- Deleted MenACWY-D (Menactra) recommendations from all sections.
- Added MenABCWY (Penbraya)

Meningococcal serogroup A,C,W,Y vaccination (minimum age: 2 months [MenACWY-CRM, Menveo], 2 years [MenACWY-TT, MenQuadfi]), 10 years [MenACWY-TT/MenB-FHbp, Penbraya])

Routine vaccination

- 2-dose series at age 11–12 years; 16 years

Catch-up vaccination

- Age 13–15 years: 1 dose now and booster at age 16–18 years (minimum interval: 8 weeks)
- Age 16–18 years: 1 dose

Special situations

Anatomic or functional asplenia (including sickle cell disease), HIV infection, persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use:

- **Menveo®***
  - Dose 1 at age 2 months: 4-dose series (additional 3 doses at age 4, 6, and 12 months)
  - Dose 1 at age 3–6 months: 3- or 4-dose series (dose 2 [and dose 3 if applicable] at least 8 weeks after previous dose until a dose is received at age 7 months or older, followed by an additional dose at least 12 weeks later and after age 12 months)
  - Dose 1 at age 7–23 months: 2-dose series (dose 2 at least 12 weeks after dose 1 and after age 12 months)
  - Dose 1 at age 24 months or older: 2-dose series at least 8 weeks apart
- **MenQuadfi®**
  - Dose 1 at age 24 months or older: 2-dose series at least 8 weeks apart

Travel to countries with hyperendemic or epidemic meningococcal disease, including countries in the African meningitis belt or during the Hajj (www.cdc.gov/travel/):

Notes

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2024

- Children less than age 24 months:
  - **Menveo** * **(age 2–23 months)**
    - Dose 1 at age 2 months: 4-dose series (additional 3 doses at age 4, 6, and 12 months)
    - Dose 1 at age 3–6 months: 3- or 4-dose series (dose 2 [and dose 3 if applicable] at least 8 weeks after previous dose until a dose is received at age 7 months or older, followed by an additional dose at least 12 weeks later and after age 12 months)
    - Dose 1 at age 7–23 months: 2-dose series (dose 2 at least 12 weeks after dose 1 and after age 12 months)
- Children age 2 years or older: 1 dose Menveo* or MenQuadfi†

First-year college students who live in residential housing (if not previously vaccinated at age 16 years or older) or military recruits:

- 1 dose **Menveo** * or **MenQuadfi** †

Adolescent vaccination of children who received MenACWY prior to age 10 years:

- **Children for whom boosters are recommended** because of an ongoing increased risk of meningococcal disease (e.g., those with complement component deficiency, HIV, or asplenia): Follow the booster schedule for persons at increased risk.
- **Children for whom boosters are not recommended** (e.g., a healthy child who received a single dose for travel to a country where meningococcal disease is endemic): Administer MenACWY according to the recommended adolescent schedule with dose 1 at age 11–12 years and dose 2 at age 16 years.

**Menveo has two formulations: lyophilized and liquid. The liquid formulation should not be used before age 10 years. See www.cdc.gov/vaccines/vpd/mening/downloads/menveo-single-vial-presentation.pdf.*

Note: For MenACWY **booster dose recommendations** for groups listed under "Special situations" and in an outbreak setting and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm.

Children age 10 years or older may receive a single dose of Penbraya™ as an alternative to separate administration of MenACWY and MenB when both vaccines would be given on the same clinic day, and a single injection with Penbraya™ is preferred (see "Meningococcal serogroup B vaccination" section below for more information).

Meningococcal serogroup B vaccination (minimum age: 10 years [MenB-4C, Bexsero*; MenB-FHbp, Trumenba*†])

Shared clinical decision-making

- **Adolescents not at increased risk** age 16–23 years (preferred age 16–18 years) based on shared clinical decision-making:
  - **Bexsero** : 2-dose series at least 1 month apart
  - **Trumenba** : 2-dose series at least 6 months apart (if dose 2 is administered earlier than 6 months, administer a 3rd dose at least 4 months after dose 2)

Special situations

Anatomic or functional asplenia (including sickle cell disease), persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use:

- **Bexsero** : 2-dose series at least 1 month apart
- **Trumenba** : 3-dose series at 0, 1–2, 6 months (if dose 2 was administered at least 6 months after dose 1, dose 3 not needed; if dose 3 is administered earlier than 4 months after dose 2, a 4th dose should be administered at least 4 months after dose 3)

Note: Bexsero and **Trumenba** are not interchangeable; the same product should be used for all doses in a series.

For MenB **booster dose recommendations** for groups listed under "Special situations" and in an outbreak setting and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm.

Children age 10 years or older may receive a dose of Penbraya™ as an alternative to separate administration of MenACWY and MenB when both vaccines would be given on the same clinic day, and a single injection with Penbraya™ is preferred. If using Penbraya™ for dose 1 MenB, subsequent MenB doses must be either MenB-FHbp (Trumenba) or Penbraya™ (minimum interval between Penbraya™ doses: 6 months). Children age 10 years or older recommended to receive booster doses of MenACWY and MenB less than 6 months after a dose of Penbraya™ should receive MenACWY and MenB-FHbp (Trumenba) separately.

Mpox vaccination (minimum age: 18 years [Jynneos*†])

Special situations

- **Age 18 years and at risk for Mpox infection:** 2-dose series, 28 days apart.

Risk factors for Mpox infection include:

- Persons who are gay, bisexual and other MSM, transgender or nonbinary people who in the past 6 months have had:
  - At least 1 sexually transmitted disease
  - More than 1 sex partner
  - Sex at a commercial sex venue
  - Sex in association with a large public event in a geographic area where Mpox transmission is occurring
- Persons who are sexual contacts of the persons described above.
- Persons who anticipate experiencing any of the situations described above.
- Persons deemed at risk by public health authorities in mpox outbreak settings.

- **Pregnancy:** There is currently no ACIP recommendation for Jynneos use in pregnancy due to lack of safety data in pregnant persons. Pregnant persons with any risk factor described above may receive Jynneos.

For detailed information, see: www.cdc.gov/poxvirus/mpox/interim-considerations/jynneos-vaccine.html.

Pneumococcal vaccination (minimum age: 6 weeks [PCV15], [PCV 20]; 2 years [PPSV23])

Routine vaccination with PCV

- 4-dose series at 2, 4, 6, 12–15 months

Catch-up vaccination with PCV

- Healthy children ages 2–4 years with any incomplete* PCV series: 1 dose PCV
- For other catch-up guidance, see Table 2.

Note: Either PCV15 or PCV20 can be used when PCV is indicated. PCV20 is not indicated for children who have received 4 doses of PCV13 or PCV15 or another age appropriate complete PCV series.

Special situations

- **Age 18 years and at risk for Mpox infection:** 2-dose series, 28 days apart.

Risk factors for Mpox infection include:

- Added bullet on use of Jynneos in pregnant persons

Mpox vaccination
(minimum age: 18 years [Jynneos®])

Special situations

- **Age 18 years and at risk for Mpox infection:** 2-dose series, 28 days apart.

Risk factors for Mpox infection include:

- Persons who are gay, bisexual, and other MSM, transgender or nonbinary people who in the past 6 months have had:
  - A new diagnosis of at least 1 sexually transmitted disease.
  - More than 1 sex partner.
  - Sex at a commercial sex venue.
  - Sex in association with a large public event in a geographic area where Mpox transmission is occurring.
- Persons who are sexual partners of the persons described above.
- Persons who anticipate experiencing any of the situations described above.

- **Pregnancy:** There is currently no ACIP recommendation for Jynneos use in pregnancy due to lack of safety data in pregnant persons. Pregnant persons with any risk factor described above may receive Jynneos.

For detailed information, see: https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2023-10-25-26/04-MPOX-Rao-508.pdf

HEPATITIS B VACCINE

- Routine vaccination:
  - 3-dose series at age 0, 1–2, 6–18 months (use monovalent HepB vaccine for birth dose and any doses administered before age 6 weeks).
  - Additional steps dependent on mother's HBsAg status.
- Heplisav-B and PreHevbrio may be used for catch up for age 18 years and older.
- Heplisav-B not recommended during pregnancy.

HEPATITIS B VACCINE CONT.

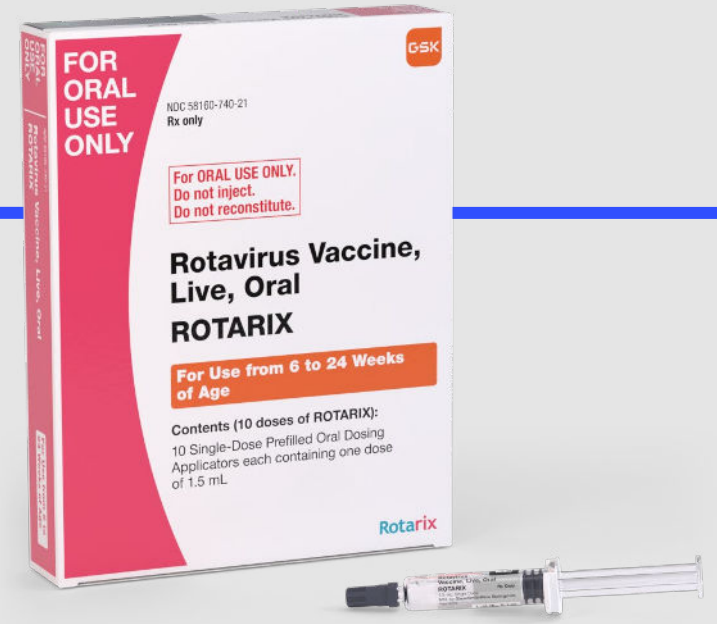
- Providers are required to refer pregnant women who are HBsAg-positive within 7 days after receipt of the test result to the local health department for case management.

ROTAVIRUS VACCINE

- Products
  - RotaTeq® (RV5)
  - Rotarix® (RV1)
- Routine Vaccination:
  - Rotarix®: 2-dose series at age 2 and 4 months
  - RotaTeq®: 3-dose series at age 2, 4, and 6 months
  - If any dose in the series is either RotaTeq® or unknown, default to 3-dose series.
- Catch-Up Vaccination:
  - Do not start the series on or after age 15 weeks, 0 days.
  - The maximum age for the final dose is 8 months, 0 days

ROTAVIRUS VACCINE

- Rotavirus (Rotarix ™)
  - NO RECONSTITUTION NEEDED!
  - Oral-dosing applicator-only presentation.
  - FDA approved in Nov 2022.
  - There are 2 variations of live vaccine Rotarix available until 2025 when older lyophilized formulation will retire.
  - Use up current 1ml lyophilized formulation (requires reconstitution) prior to using new liquid formulation.



DTAP/TDAP

- DTaP: 5-dose series (3-dose primary series at age 2, 4, and 6 months, followed by a booster doses at ages 15–18 months and 4–6 years)
  - Prospectively: Dose 4 may be administered as early as age 12 months if at least 6 months have elapsed since dose 3
  - Retrospectively: A 4th dose that was inadvertently administered as early as age 12 months may be counted if at least 4 months have elapsed since dose 3
- Tdap: Age 11–12 years: 1 dose Tdap (adolescent booster)
- Catch-Up Vaccination:
  - DTaP: Dose 5 is not necessary if dose 4 was administered at age 4 years or older and at least 6 months after dose 3
  - Tdap: Dependent on age and DTaP vaccination history

HIB

- Products: ActHIB®, Hiberix®, Pentacel®, PedvaxHIB® or Vaxelis®
- Routine Vaccination
  - 4-dose series (3-dose primary series at age 2, 4, and 6 months, followed by a booster dose* at age 12–15 months)
    - Vaxelis® is not recommended for use as a booster dose. A different Hib-containing vaccine should be used for the booster dose.
  - PedvaxHIB®: 3-dose series (2-dose primary series at age 2 and 4 months, followed by a booster dose at age 12–15 months)
- Catch-Up Vaccination
  - Refer to catch up schedule: Dependent on age and vaccination history

PNEUMOCOCCAL VACCINE

- Products:
  - Pneumococcal conjugate vaccines (PCVs, specifically PCV15 and PCV20) – ACIP has not made a preferential statement.
  - Pneumococcal polysaccharide vaccine (PPSV23).
- Routine Vaccination with PCV:
  - 4-dose series at 2, 4, 6, 12–15 months.
- Catch-Up Vaccination with PCV:
  - Healthy children ages 2–4 years with any incomplete* PCV series: 1 dose PCV.
  - Note: Either PCV15 or PCV20 can be used when PCV is indicated. For children without risk conditions, PCV20 is not indicated if they have received 4 doses of PCV13 or PCV15 or another age-appropriate complete PCV series.

PNEUMOCOCCAL VACCINE CONT.

- PCV13 is no longer distributed or recommended for use in the U.S.

- Pneumococcal polysaccharide vaccine PPSV23 (Pneumovax23, Merck)
  - No longer routinely recommended for all children and adolescents aged ≥2 years at increased risk for invasive pneumococcal disease. It is still recommended in certain circumstances.

POLIO VACCINE

- Routine Vaccination:
  - 4-dose series at ages 2, 4, 6–18 months, 4–6 years
  - 4 or more doses of IPV can be administered before age 4 years when a combination vaccine containing IPV is used. A final dose between 4 – 6 years of age is recommended.
- Catch-Up Vaccination:
  - In the first 6 months of life, use minimum ages and intervals only for travel to a polio-endemic region or during an outbreak.
  - Adolescents aged 18 years known or suspected to be unvaccinated or incompletely vaccinated: administer remaining doses (1, 2, or 3 IPV doses) to complete a 3-dose primary series.

POLIO VACCINE

- Doses of OPV administered on or after April 1, 2016, do not count towards the U.S. vaccination requirements.

- Related to polio eradication strategy, OPV administered on or after April 1, 2016 are either bOPV (used in routine vaccination and campaigns), or mOPV (used in a type-specific outbreak response)
- These doses do not count towards the U.S. vaccination requirements for protection against all three poliovirus types.
- Persons aged <18 years with doses of OPV that do not count towards the U.S. vaccination requirements should receive IPV to complete the schedule according to the U.S. IPV schedule. https://www.cdc.gov/mmwr/volumes/66/wr/mm6606a7.htm

MMR VACCINE

- Products:
  - M-M-R II® (MMR)
  - PRIORIX® (GSK)
  - ProQuad® (MMRV)

- Routine Vaccination:
  - 2-dose series at age 12–15 months, age 4–6 years
  - MMR or MMRV* may be administered
    - For dose 1 in children age 12–47 months, it is recommended to administer MMR and varicella vaccines separately because there was a slight increase in febrile seizures seen in the combination vaccine
    - MMRV may be used if parents or caregivers express a preference. If MMRV is used, the minimum interval between MMRV doses is 3 months

MMR VACCINE

Catch Up Vaccination:

- Unvaccinated children and adolescents: 2-dose series at least 4 weeks apart.
- The maximum age for use of MMRV* is 12 years.

*Note: If MMRV is used, the minimum interval between MMRV doses is 3 months.

DURING OUTBREAKS

- In the context of community measles transmission the 2nd MMR dose can be administered as soon as 28 days after the 1st dose.
- This “accelerated” 2nd dose of MMR meets Illinois’ vaccination requirements for school enrollment.

MMR VACCINE: CDC INTERNATIONAL TRAVEL

Infants aged 6–11 months who are traveling should receive an early dose before departure.

- They should then follow the recommended schedule to get another dose at 12–15 months and a final dose at 4–6 years.

VARICELLA

- Routine Vaccination:
  - 2-dose series at age 12–15 months, 4–6 years.
  - VAR or MMRV* may be administered.

  * Dose 2 may be administered as early as 3 months after dose 1 (a dose inadvertently administered after at least 4 weeks may be counted as valid).
- Catch-Up Vaccination:
  - Ensure persons aged 7–18 years without evidence of immunity have a 2-dose series.

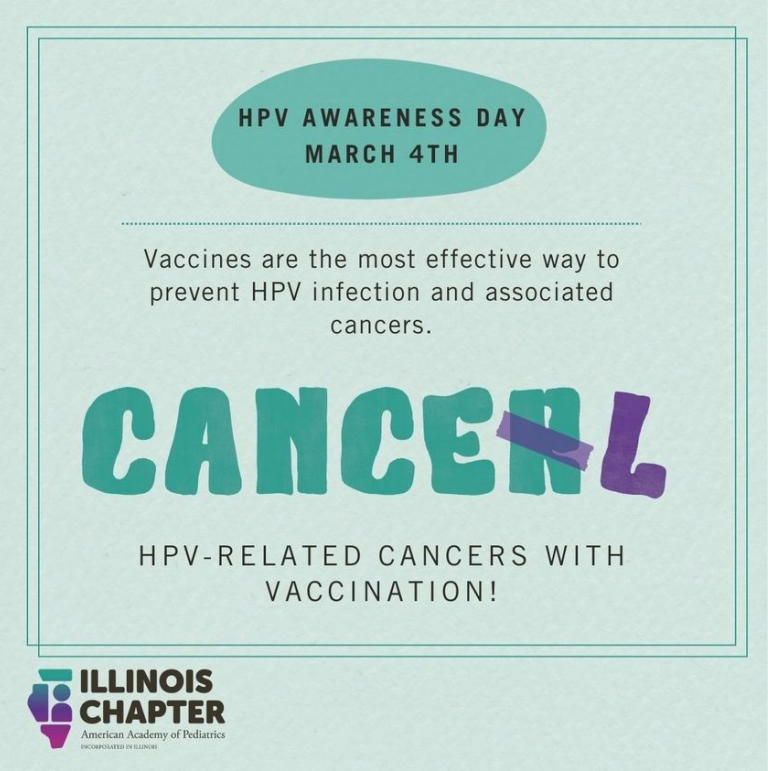
HEPATITIS A

- Routine Vaccination:
  - 2-dose series (minimum interval: 6 months) at age 12–23 months.
  - Never need to restart the series you pick up where you left off (same with Hep B).
- Catch-Up Vaccination:
  - Unvaccinated persons through age 18 years should complete a 2-dose series (minimum interval: 6 months).
  - Persons who previously received 1 dose at age 12 months or older should receive dose 2 at least 6 months after dose 1.
  - Twinrix® (HepA and HepB vaccine): 18 years or older.
    - 3-dose series (0, 1, and 6 months) or
    - 4-dose series (3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months.

***May give Hep A for travel to infants as young as 6 if traveling internationally, but doses administered to infants 6-11 months old do not count toward the routine 2-dose series.**

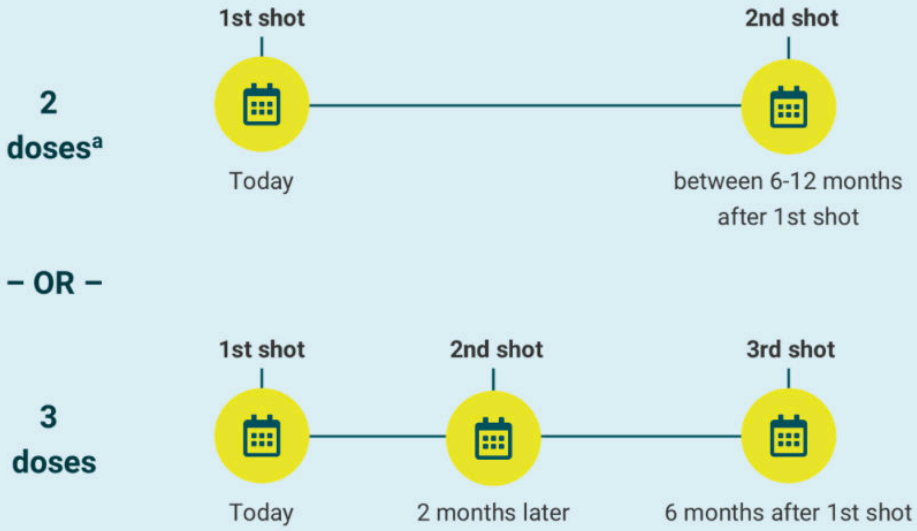
HPV

- HPV vaccination is cancer prevention.
  - Cervical, oropharyngeal, anal, and others.
- Recommended for both girls and boys.
- Routinely recommended starting at 11 years but administration can start at 9 years.
  - Starting HPV vaccine discussions at age 9 years gives more time for parents to make the decision to vaccinate.



HPV

If your child is 9- to 14-years-old, your child's doctor will determine whether your child needs a 2-dose or 3-dose schedule of GARDASIL 9.



[a]If the second shot is given earlier than 5 months after the first shot, your child will need to get a third shot at least 4 months after the second shot was given.

For individuals 15- to 45-years-old

https://www.gardasil9.com/adolescents/what-is-gardasil-9/hpv-vaccine-schedule/

MENINGOCOCCAL VACCINES

- Products:
  - Meningococcal conjugate or MenACWY vaccines (Menveo® and MenQuadfi®).
  - Serogroup B meningococcal or MenB vaccines (Bexsero® and Trumenba®).
  - Combination: Pentavalent meningococcal or MenABCWY vaccine (PenbrayaTM).
- Routine Vaccination:
  - 2-dose series at age 11-12 years; 16 years.
- Catch-Up Vaccination:
  - Age 13-15 years; 1 dose now and booster at age 16-18 years (minimum interval: 8 weeks).
  - Age 16-18 years: 1 dose.

https://www.cdc.gov/vaccines/vpd/mening/index.html

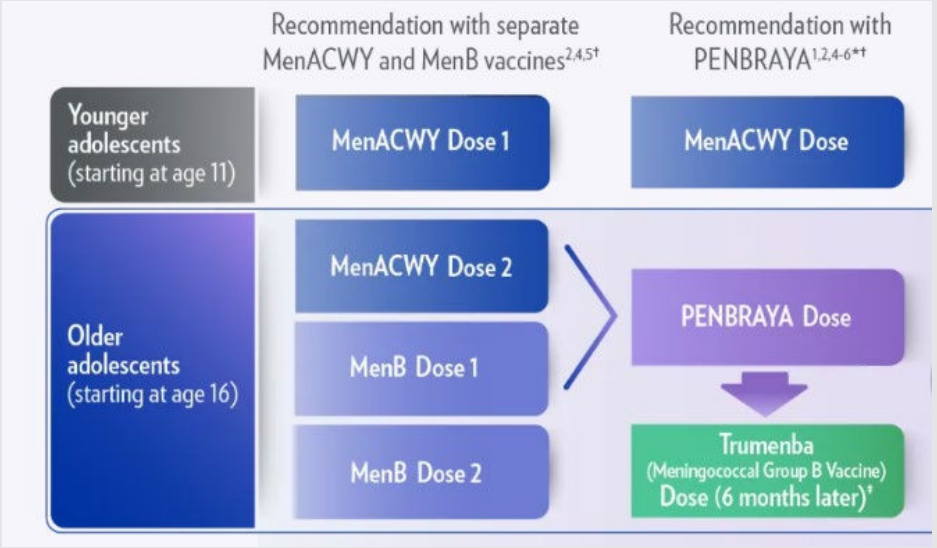
MENINGOCOCCAL VACCINES CONT.

- MenACWY (Menactra) no longer recommended or distributed.
- Pfizer's pentavalent meningococcal vaccine (Penbraya) approved by ACIP in October 2023 for use in adolescents and young adults ages 10 to 25 years. The vaccine includes serogroups A, B, C, W, and Y.
  - Approved for the VFC program.
- MenQuadfi® and Menveo can be given regardless of DTaP.
- MenACWY vaccines may be administered simultaneously with MenB vaccines if indicated, but at a different anatomic site, if feasible.
- In children under 10 years needing a meningitis vaccine for increased risk, Menveo liquid (one-vial presentation) is not appropriate for use.

https://www.fda.gov/media/137306/download

PENBRAYA

- Pentavalent (MenABCWY) meningococcal vaccine approved for use in adolescents 16 years of age and older.
- Allows full meningococcal vaccine series to be completed in 3 injections instead of 4.



- Prenbraya must be followed by Trumenba and not other MenB vaccine products.

https://penbraya.pfizerpro.com/dosing-recommendations

LIVE-ATTENUATED VACCINES

- When possible, give first doses of MMR and Varicella at the same encounter.
  - If these live-attenuated vaccines are not given on the same day, the patient must wait 28 days before receiving the other live-attenuated vaccine.
  - If administered before 28 days, the vaccine administered is considered invalid and must be repeated at least 28 days later.
- The 4-day grace period should not be applied to the 4-week interval between two different live vaccines.

LIVE-ATTENUATED VACCINES

- When possible, give first doses of MMR and Varicella at the same encounter.
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- The 4-day grace period should not be applied to the 4-week interval between two different live vaccines.

NATIONAL IMMUNIZATION COVERAGE

- From the 2019–20 to the 2021–22 school year, national coverage with state-required vaccines among kindergartners declined from 95% to approximately 93%
- Infants (vaccination coverage by 24 months): coverage remains high and stable
- Adolescents (aged 13 -17): coverage similar to 2022
  - Decline in HPV vaccine up-to-date coverage
- Among children born in 2020, vaccination coverage was 4–14 percentage points lower among children who were eligible versus non-eligible for the VFC program.

https://www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7245a2-H.pdf
https://www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7244a3-H.pdf
https://www.cdc.gov/mmwr/volumes/73/wr/pdfs/mm7333a1-H.pdf
https://www.cdc.gov/mmwr/volumes/73/wr/pdfs/mm7333e1-H.pdf

ILLINOIS VACCINATION COVERAGE DASHBOARDS

- School Vaccination Coverage Dashboard – New!
  - Date from ISBE: Showcases immunization data and comprehensive school program information annually from 2014 to 2023.
- Influenza Vaccination Coverage Dashboard
  - Data from I-CARE: Displays flu vaccination coverage data among Illinois residents monthly and cumulatively for current and previous flu seasons from 2018 – current season.
- COVID-19 Vaccination Coverage Dashboard
  - Data from I-CARE: Displays COVID vaccination coverage data among Illinois residents who have received at least 1 dose of the updated 2023 – 2024 COVID-19 vaccine, since September 2023

QUESTIONS?

LUNCH & NETWORKING

Please return at 12:10!

RESPIRATORY VIRUS SEASON

Tricia Scerba, MD

AFTER THIS SESSION:

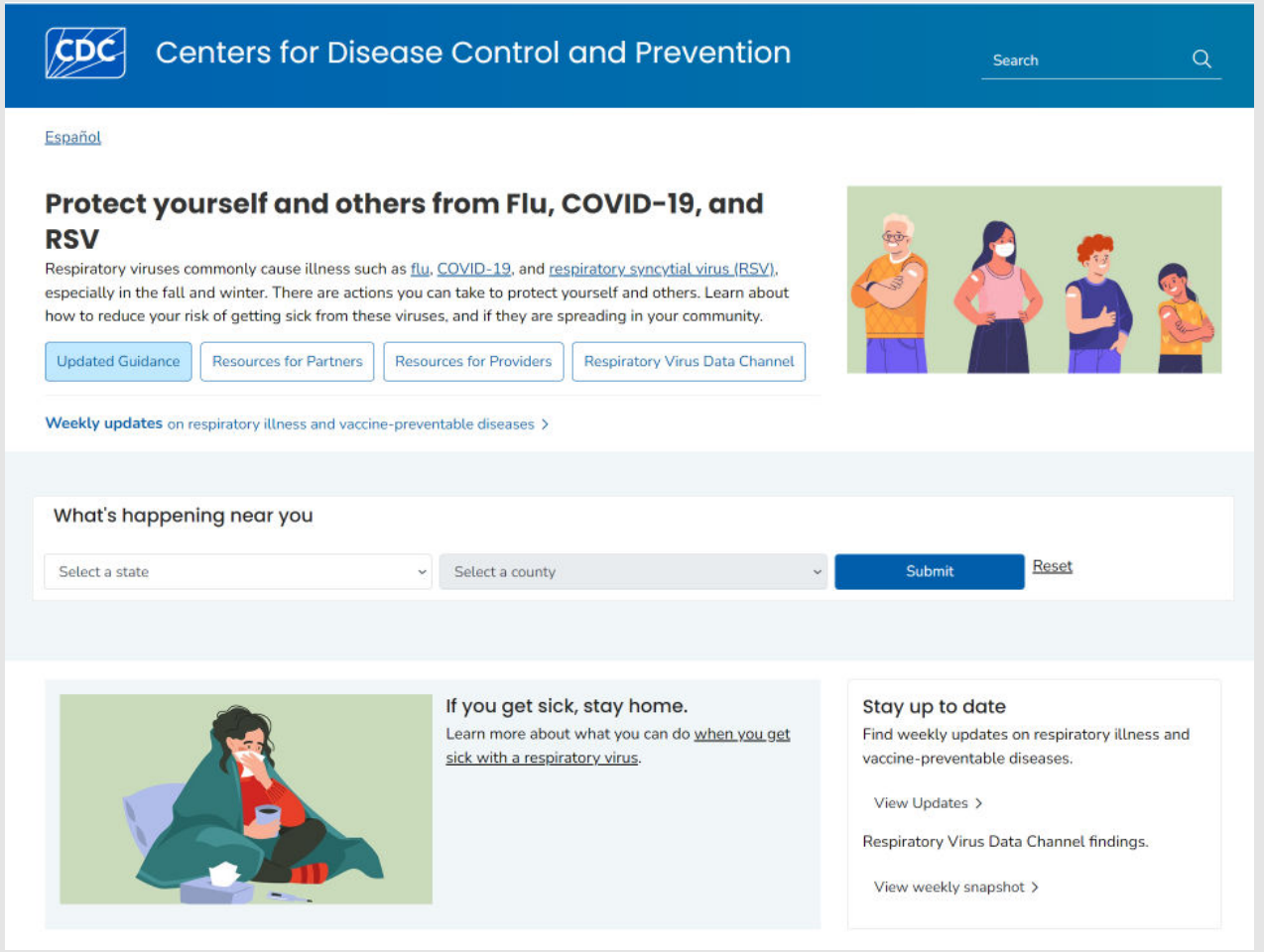
Participants will be able to:

1. Summarize immunization data and trends for the 2023 – 2024 respiratory virus season.
2. Outline products available to prevent respiratory viruses.
3. Describe current respiratory virus immunization guidelines and expectations for the 2024 – 2025 season.

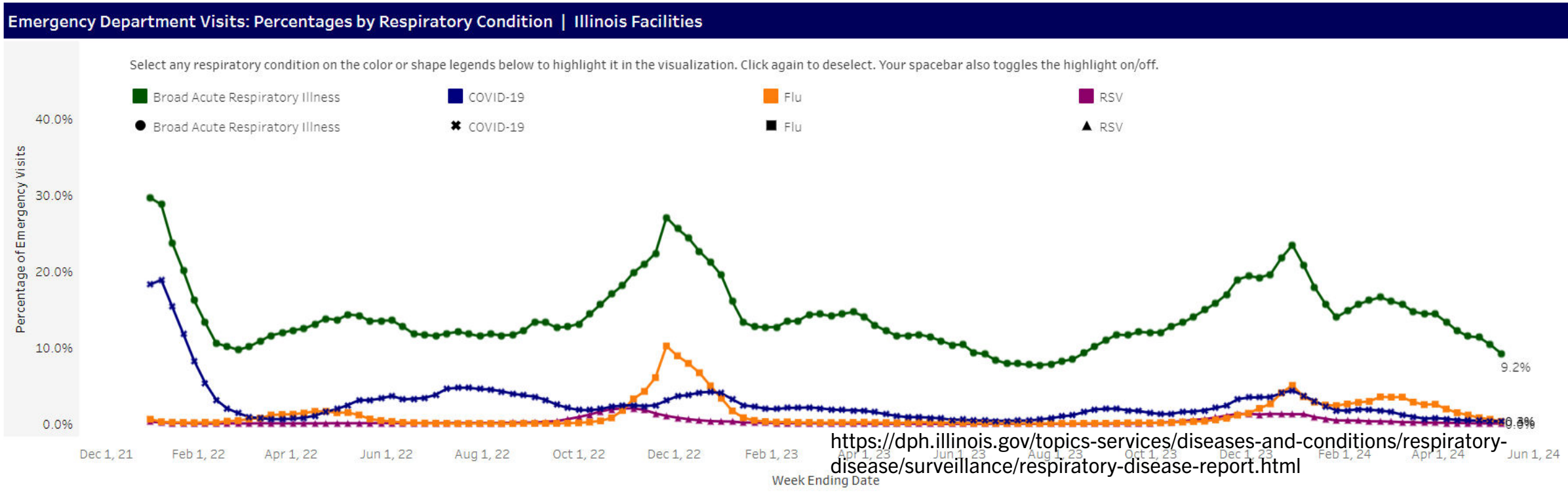
RESPIRATORY VIRUS SEASON

- Flu
- COVID-19
- RSV

[6 Tips to Prepare Your Practice and Patients for Respiratory Virus Season (CDC)]



ILLINOIS DATA



https://dph.illinois.gov/topics-services/diseases-and-conditions/respiratory-disease/surveillance/respiratory-disease-report.html

Trends in Emergency Department visits for broad acute respiratory conditions, COVID-19, flu and RSV over the last 3 years. Color and shape of marks identify the different respiratory conditions.

RESPIRATORY VIRUS SEASON TRENDS

Expert projections:

- A similar number of total hospitalizations compared to last year.
- A moderate COVID-19 wave, causing around as many hospitalizations at the peak as occurred at last winter's peak.
- Influenza season will fall in the typical range of severity.
- RSV is likely to return to normal season patterns following a severe season last year.

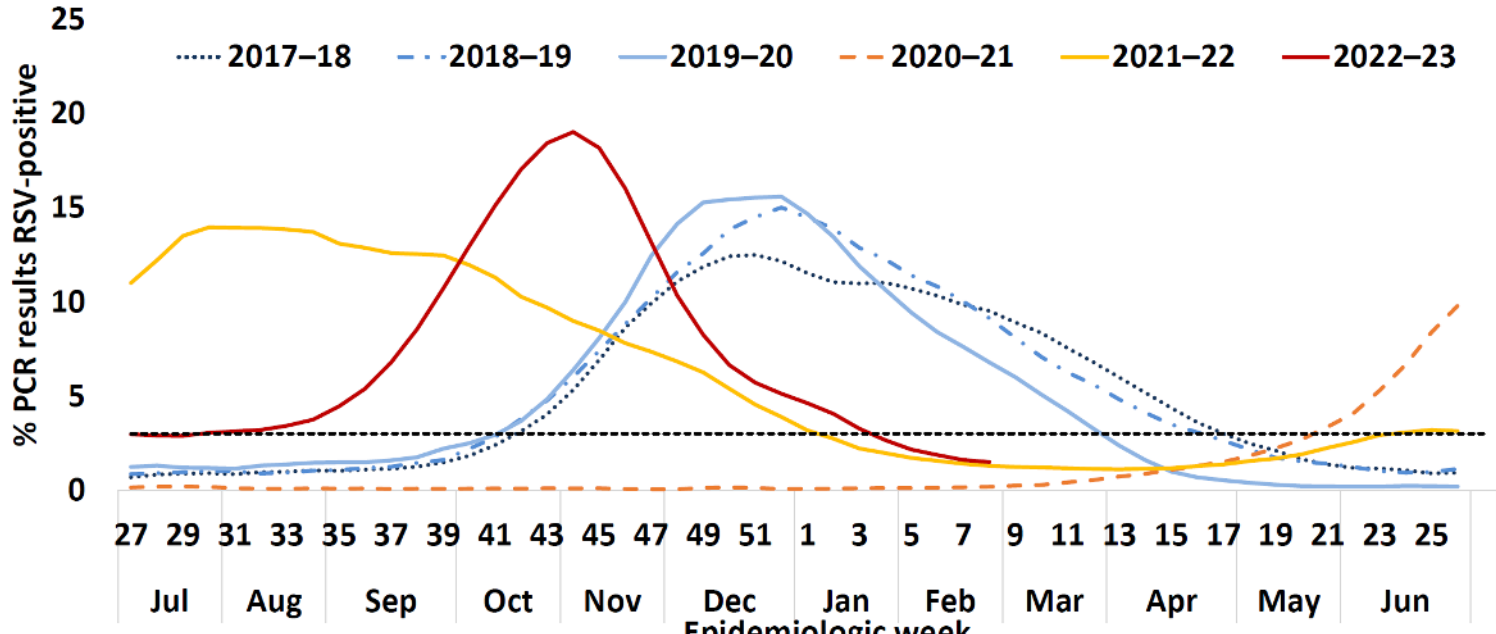
BURDEN OF RSV DISEASE

- Most common cause of hospitalization in U.S. infants
- 58,000-80,000 hospitalizations among children <5 years old
- 100–300 deaths in children <5 years old
- 2.1 million outpatient visits
- Risk declines by increasing age throughout infancy and early childhood
- Prematurity and other chronic diseases increase risk of RSV-associated hospitalization, but most hospitalizations are in healthy, term infants

CDC Respiratory Syncytial Virus Infection.2023 https://www.cdc.gov/rsv/index.html; Hall CB. *New Engl J Med*. 2009; Rha B. *Pediatrics* 2020

BURDEN OF RSV DISEASE

Changes in seasonality of RSV transmission following SARS-CoV2 introduction— NREVSS[1], 2017–2023



Abbreviation: PCR = polymerase chain reaction; RSV = respiratory syncytial virus.

* 3-week centered moving averages of percentage of RSV-positive PCR results nationwide. The black dotted line represents the threshold for a seasonal epidemic (3% RSV-positive laboratory PCR results).

1. https://www.cdc.gov/mmwr/volumes/72/wr/mm7214a1.htm

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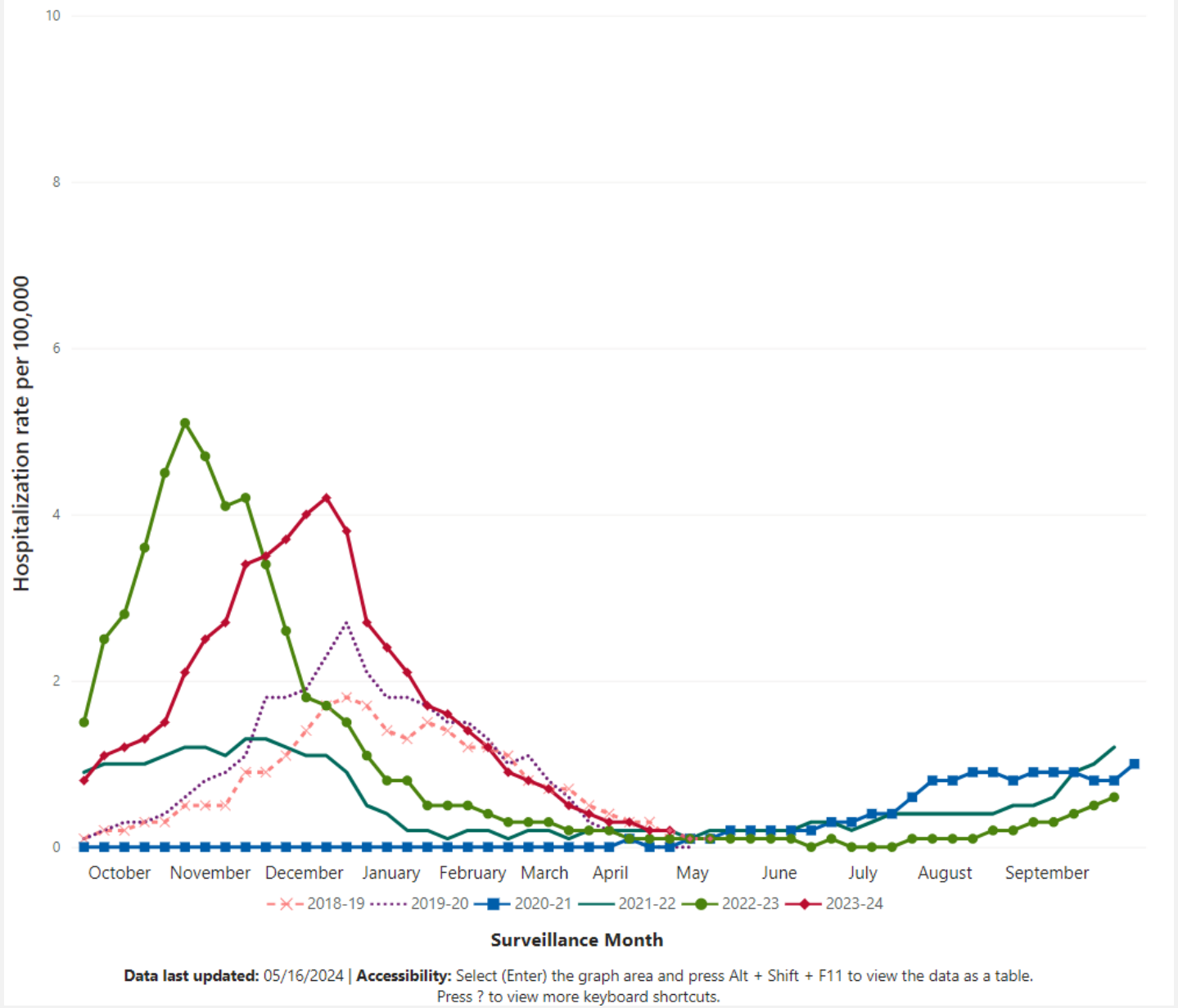
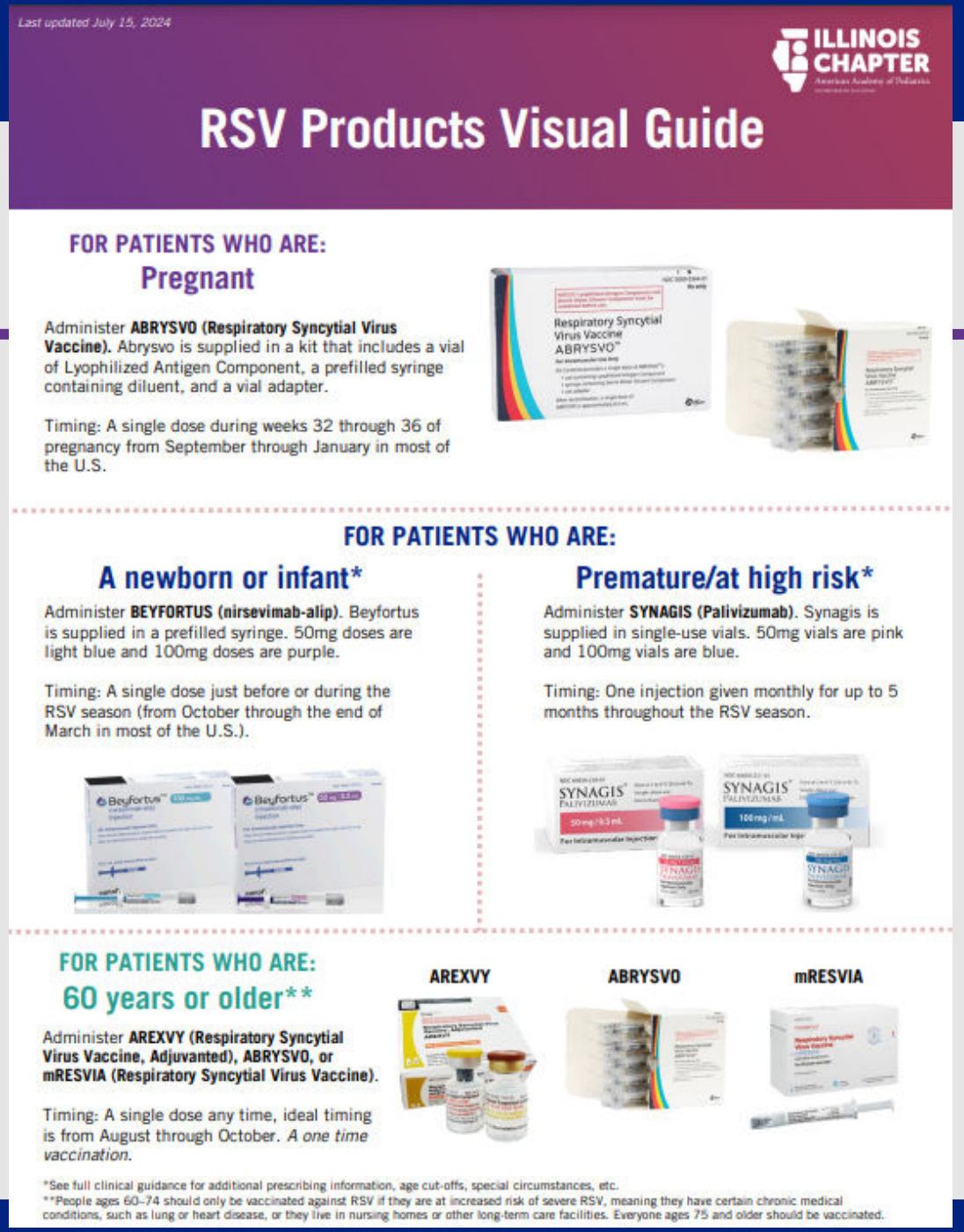


https://www.cdc.gov/rsv/research/rsv-net/dashboard.html

RSV PREVENTION

- Nirsevimab (Beyfortus) – monoclonal antibody
- Palivizumab (Synagis) – monoclonal antibody
- Abrysvo – vaccine
- Arexvy – vaccine
- mResvia - vaccine



NIRSEVIMAB

- Recommended for ALL infants 7 months and younger who are born shortly before/during RSV season or entering their first RSV season.
- Administer 1 appropriate dose (weight-based) within 1 week of birth if:
  - Mother did not receive Abrysvo
  - Mother’s vaccination status is unknown
  - Mother received Abrysvo less than 14 days before delivery

NIRSEVIMAB

- Recommended for children 8 - 19 months who are entering their second RSV season, regardless of maternal RSV vaccination, who:
  - Have chronic lung disease of prematurity who required medical support (chronic corticosteroid therapy, diuretic therapy, or supplemental oxygen).
  - Are severely immunocompromised.
  - Have cystic fibrosis who have either 1) manifestations of severe lung disease (previous hospitalization for pulmonary exacerbation in the first year of life or abnormalities on chest imaging that persist when stable), or 2) weight-for-length <10th percentile.
  - Are American Indian or Alaska Native.

NIRSEVIMAB ADMINISTRATION

- May be given concomitantly with childhood vaccines.
  - Administer in separate syringes, at different injection sites.
- Palivizumab should not be administered if nirsevimab was administered in the same season.
- If palivizumab was administered initially for the RSV season and < 5 doses were administered, 1 dose of nirsevimab may be administered. No further palivizumab should be administered.
- Nirsevimab may be administered before or during the second RSV season in children 8-19 months old who are eligible for nirsevimab and who received palivizumab in their first RSV season.
- Report to MedWatch: The FDA Safety Information and Adverse Event Reporting Program instead of VAERS.

Beyfortus (nirsevimab-alip) [package insert]. AstraZeneca AB; 2023
ACIP and AAP Recommendations for nirsevimab. Red Book: 2021–2024 Report of the Committee on Infectious Diseases (32nd edition)

NIRSEVIMAB TIMING

	Administration Setting	Administration Timing	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
During RSV Season (Oct-Mar)	Hospital (or within 1 week of discharge)	1 dose at birth												
Outside RSV season (Apr-Sept)	Office	1 dose prior to start of their first RSV season												

Chart adapted from Sanofi's RSV National Expert Program

ABRYSVO (PFIZER)

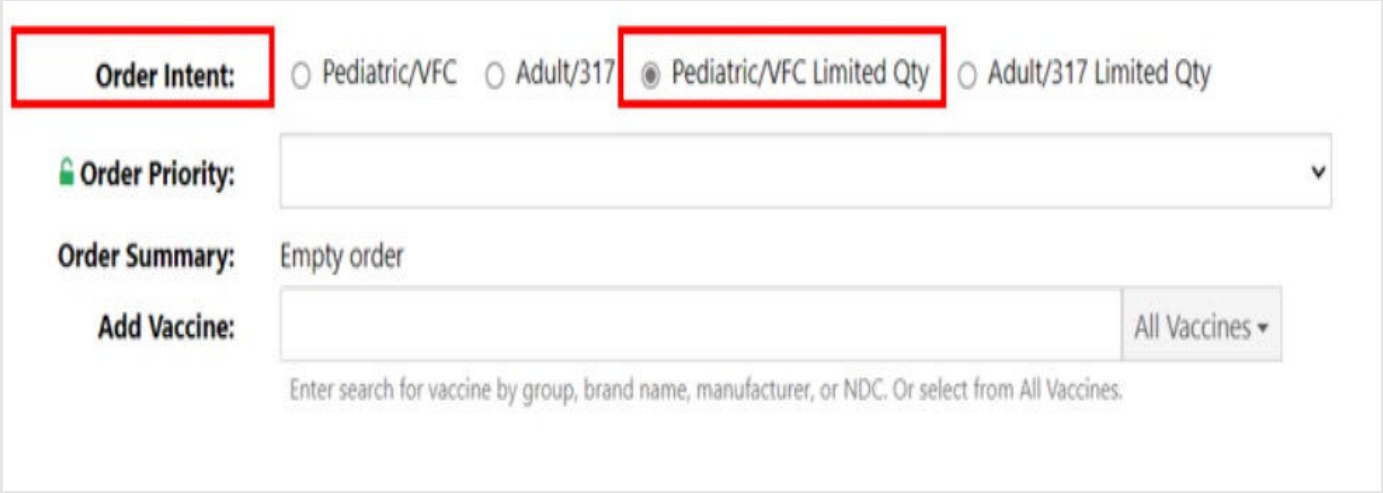
- Only approved RSV vaccine for pregnant people.
- One dose should be administered during RSV season (September-January) for those between 32 – 36 weeks gestation.
- No data on revaccinating with every pregnancy – studies are ongoing.

NIRSEVIMAB CODES

Proprietary Name	NDC11 Code	CVX Code	CVX Description	Doses per Carton	MVX Code	Manufacturer Name
Beyfortus	49281-0575-15	306	RSV, mAb, nirsevimab-alip, 0.5 mL, neonate to 24 months	5	PMC	Sanofi Pasteur Inc.
Beyfortus	49281-0574-15	307	RSV, mAb, nirsevimab-alip, 1 mL, neonate to 24 months	5	PMC	Sanofi Pasteur Inc.

PLACING A LIMITED QUANTITY ORDER

- Nirsevimab can now be ordered in I-CARE as a Pediatric/VFC Limited Quantity Order
  - Doses may be adjusted based on total allocation, provider size, and recent or expected use.



KNOWLEDGE CHECK

Which product is recommended for all infants 8 months and younger?

A. Abrysvo

B. Nirsevimab

C. Arexvy

COVID-19

- All VFC providers are required to stock and recommend COVID-19 vaccines.
- 2023 – 2024 COVID vaccines are no longer authorized and should not be administered.
- 2024 – 2025 Novavax COVID-19 vaccine approved by FDA August 30, 2024.
  - Targets JN.1 strain
- 2024-2025 Pfizer & Moderna COVID-19 vaccines approved by FDA August 22, 2024
  - Targets the KP.1 strain.
- Everyone 6 months and older should receive a COVID-19 vaccine.
  - Most people only require one dose.
  - IVAC dosing charts – will be updated soon!

DOSING AND ADMINISTRATION

Initial vaccination

- Ages 6 months–4 years
  - 2 doses of 2024–2025 Moderna or 3 doses of 2024–2025 Pfizer-BioNTech
- Ages 5 years and older
  - 1 dose of 2024–2025 Moderna or 1 dose of 2024–2025 Pfizer-BioNTech
  - **12 years and older:** 1 dose of 2024 – 2025 Novavax **or** 1 dose of 2024–2025 Moderna **or** 1 dose of 2024–2025 Pfizer-BioNTech

DOSING AND ADMINISTRATION

Received previous doses of a COVID-19 vaccine

- Ages 6 months–4 years
  - 1 or 2 doses of 2024–2025 mRNA vaccine from the same manufacturer as administered for initial vaccination, depending on the vaccine and the number of prior doses
- Ages 5 years and older
  - 1 dose of 2024–2025 Moderna or 1 dose of 2024–2025 Pfizer-BioNTech
  - **12 years and older:** 1 dose of 2024 – 2025 Novavax **or** 1 dose of 2024–2025 Moderna **or** 1 dose of 2024–2025 Pfizer-BioNTech

DOSING AND ADMINISTRATION - IMMUNOCOMPROMISED

Initial vaccination

- Ages 6 months and older
  - 3 doses of 2024–2025 Moderna or 3 doses of 2024–2025 Pfizer-BioNTech

Received previous doses of a COVID-19 vaccine

- Recommended mRNA vaccine and number of 2024–2025 doses are based on age and vaccination history

Additional doses: People who are moderately or severely immunocompromised ages 6 months and older may receive 1 or more age-appropriate doses of a 2024–2025 mRNA COVID-19 vaccine.

COVID-19 VACCINE CONSIDERATIONS

- People should receive the age-appropriate vaccine product and dosage based on their age on the day of vaccination.
- COVID-19 vaccine doses from the same manufacturer should be administered whenever recommended. In the following circumstances, an age-appropriate COVID-19 vaccine from a different manufacturer may be administered:
  - Same vaccine not available at the time of the clinic visit
  - Previous dose unknown
  - Person would otherwise not receive a recommended vaccine dose
  - Person starts but unable to complete a vaccination series with the same COVID-19 vaccine due to a contraindication
    - A Vaccine Adverse Event Reporting System (VAERS) report is not indicated in these circumstances.

ADULT VACCINE AVAILABILITY

- Bridge Program ended effective August 28, 2024.
- Providers outside of Chicago can participate in IDPH's Adult Immunization Program (AIP).
  - Allows adults 19 years old and above who are uninsured or underinsured to receive the COVID-19 vaccines and other routine immunizations.
  - Local health departments, rural health centers, and FQHCs are automatically enrolled in AIP if also VFC providers.
  - A person whose insurance does not provide first-dollar coverage for vaccines is considered underinsured and eligible for AIP vaccines effectives August 23.

COVID-19 ORDERING

- Ordering for Novavax not yet available.
- Early season/limited quantity ordering:
- Order from VFC as normal, fill order intent as Pediatric/VFC Limited Qtny for VFC vaccines, Adult/317 Limited Qtny for AIP adult vaccines
- Enter quantities needed and change status to requested.
- Regular ordering for the following Pfizer now open, Moderna ordering expected to be open week of 9/3.

Manufacturer	Presentation	Unit of Sale NDC
Pfizer Inc.	12y+; SYR; 10pk	00069-2432-10
Pfizer Inc.	Ped 5y-11y; SDV; 10pk	59267-4438-02
Pfizer Inc.	Ped 6m-4y; MDV3; 10pk*	59267-4426-02

Manufacturer	Presentation	Unit of Sale NDC
ModernaTX Inc.	12y+; SYR; 10pk	80777-0110-93
ModernaTX Inc.	Ped 6m-11y; SYR; 10pk	80777-0291-80

KNOWLEDGE CHECK

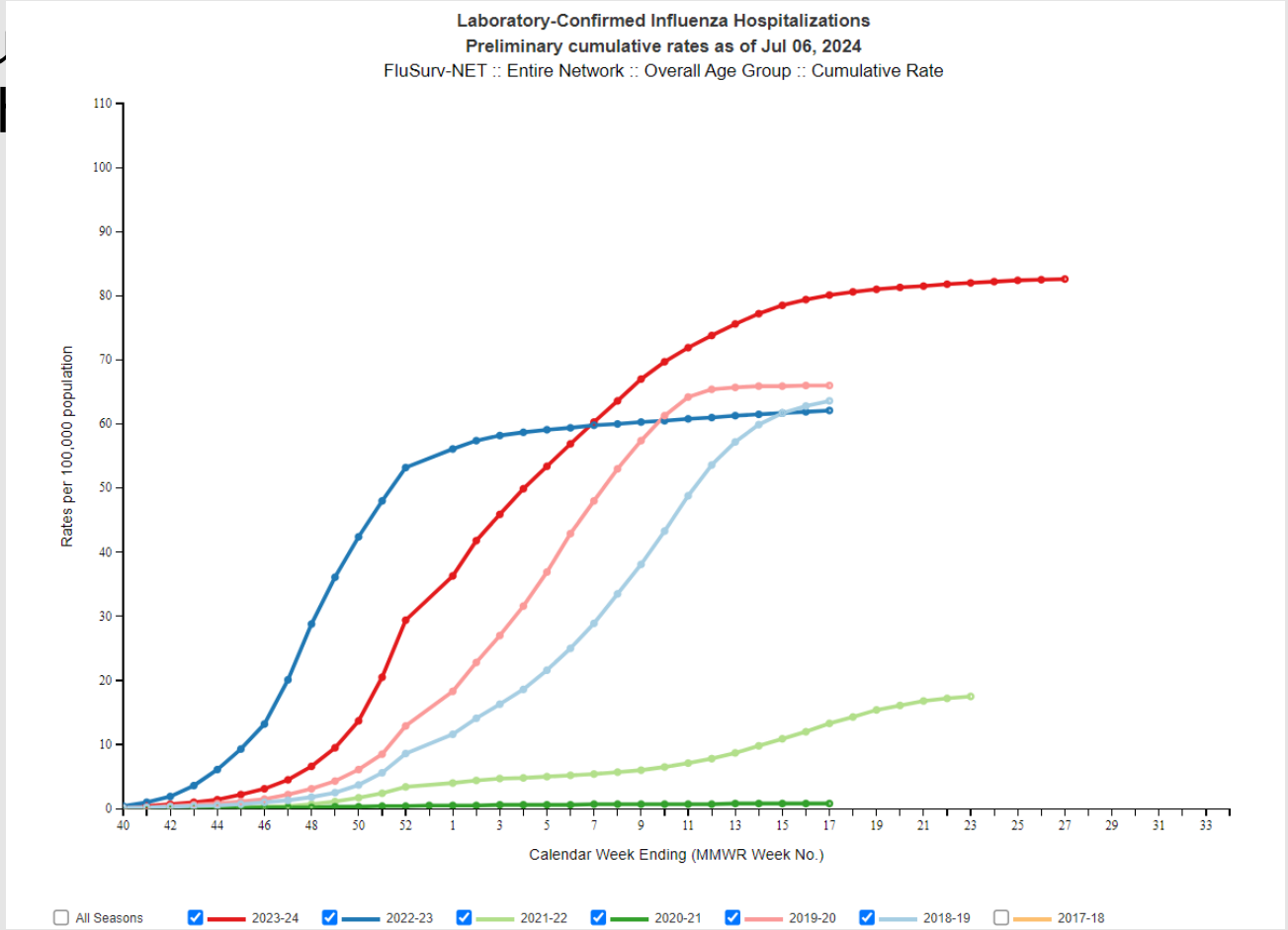
COVID-19 vaccine administration is seasonal.

A. True

B. False

2023-2024 FLU SEASON

- More children died of flu season than in each of th past three seasons



https://www.cdc.gov/flu/weekly/index.htm

INFLUENZA VACCINE

- All flu vaccines in the United States for the 2024-2025 season are trivalent.
- AAP continues to recommend everyone 6 months+ be vaccinated and does not express a product preference.
- ACIP recommends high-dose inactivated (HD-IIV3) and adjuvanted inactivated (aIIV3) influenza vaccines for solid organ transplant recipients aged 18 through 64 years who are on immunosuppressive medication regimens.

AAP recommending flu vaccination for everyone 6 months and older with updated trivalent vaccines in 2024-'25 season

INFLUENZA VACCINE

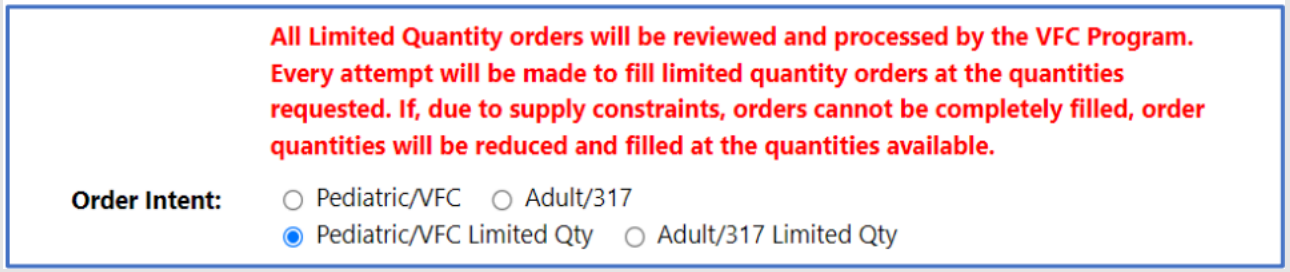
- Children 6 months through 8 years who have not received at least two doses of the trivalent or quadrivalent flu vaccine prior to July 1, 2024, will need two doses this season.
- Adults and children over 9 years old will only need one dose.
- Pregnant persons can be vaccinated with IIV3 or RIV3 vaccines.
- LAIV should not be used for immunocompromised persons.

ORDERING FOR VFC

Manufacturer	Brand	Description	Age
AstraZeneca	FluMist	0.2mL single dose sprayer, 10 pack	2-49 years
GSK	FluLaval	0.5mL single dose syringe, 10 pack	6 months +
Sanofi	Fluzone	0.5mL single dose syringe, 10 pack	6 months +
Seqirus, Inc	Afluria	0.5mL single dose syringe, 10 pack	36 months +
Seqirus, Inc	Flucelvax	0.5mL single dose syringe, 10 pack	6 months +

ORDERING FOR VFC

- Influenza vaccine also ordered as ‘Pediatric/VFC Limited Quantity’.



- On a weekly basis, IDPH will review and approve requests as inventory allows. The vaccine coordinator will receive an email via I-CARE regarding any approvals, quantity reductions, or other needs.
- If your order was reduced or if you need more vaccine, you may place a new order the following week.

LUNCH BREAK!

Resume at 12:30pm

VACCINE HESITANCY

Caroline Werenskjold, MPH

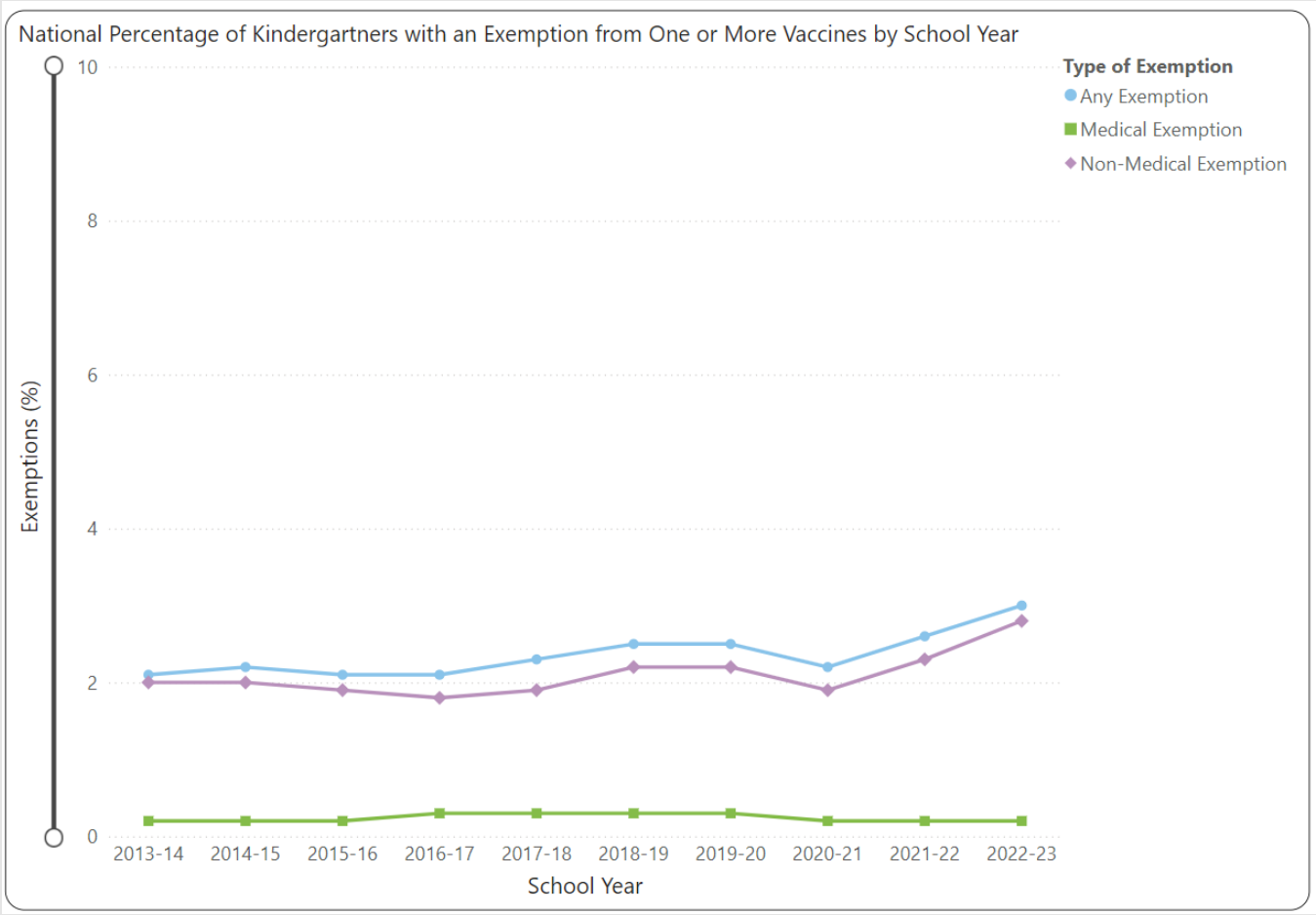
AFTER THIS SESSION:

Participants will be able to:

1. Describe vaccine hesitancy, misinformation, and disinformation.
2. Demonstrate strategies for combatting vaccine misinformation and disinformation.
3. Outline ways to discuss vaccine hesitancy with patients.

SCHOOL EXEMPTIONS

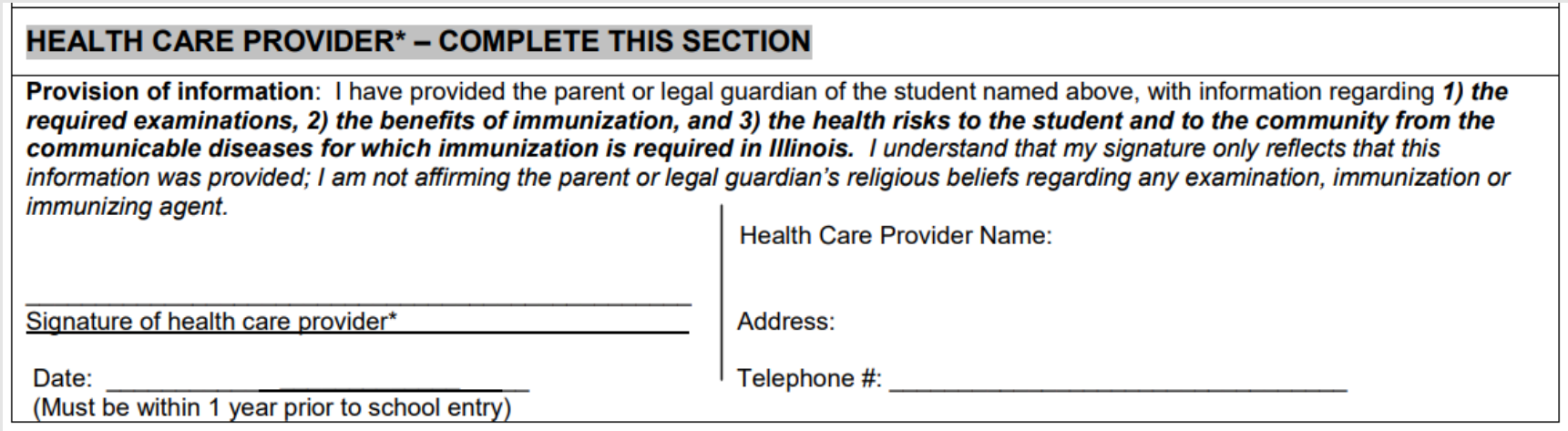
- Seeing an increase in school exemptions for vaccinations.
- Illinois allows for medical and religious exemptions only.



https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/index.html

SCHOOL EXEMPTIONS

- If a parent brings a religious exemption form, you are still required to counsel them on:
  1. What vaccines are needed.
  2. Why vaccinating is important.
  3. The dangers of being unvaccinated.
- Up to the school official to decide if their listed objection is valid or not.



HEALTH CARE PROVIDER* – COMPLETE THIS SECTION

Provision of information: I have provided the parent or legal guardian of the student named above, with information regarding ***1) the required examinations, 2) the benefits of immunization, and 3) the health risks to the student and to the community from the communicable diseases for which immunization is required in Illinois.*** *I understand that my signature only reflects that this information was provided; I am not affirming the parent or legal guardian's religious beliefs regarding any examination, immunization or immunizing agent.*

Health Care Provider Name:

_____

Signature of health care provider*

Address:

Date: _____

(Must be within 1 year prior to school entry)

Telephone #: _____

MISINFORMATION VS. DISINFORMATION

Misinformation

- When people spread misinformation, they often **believe** the information they are sharing.

Disinformation

- Disinformation is crafted and disseminated with the **intent to mislead** others.

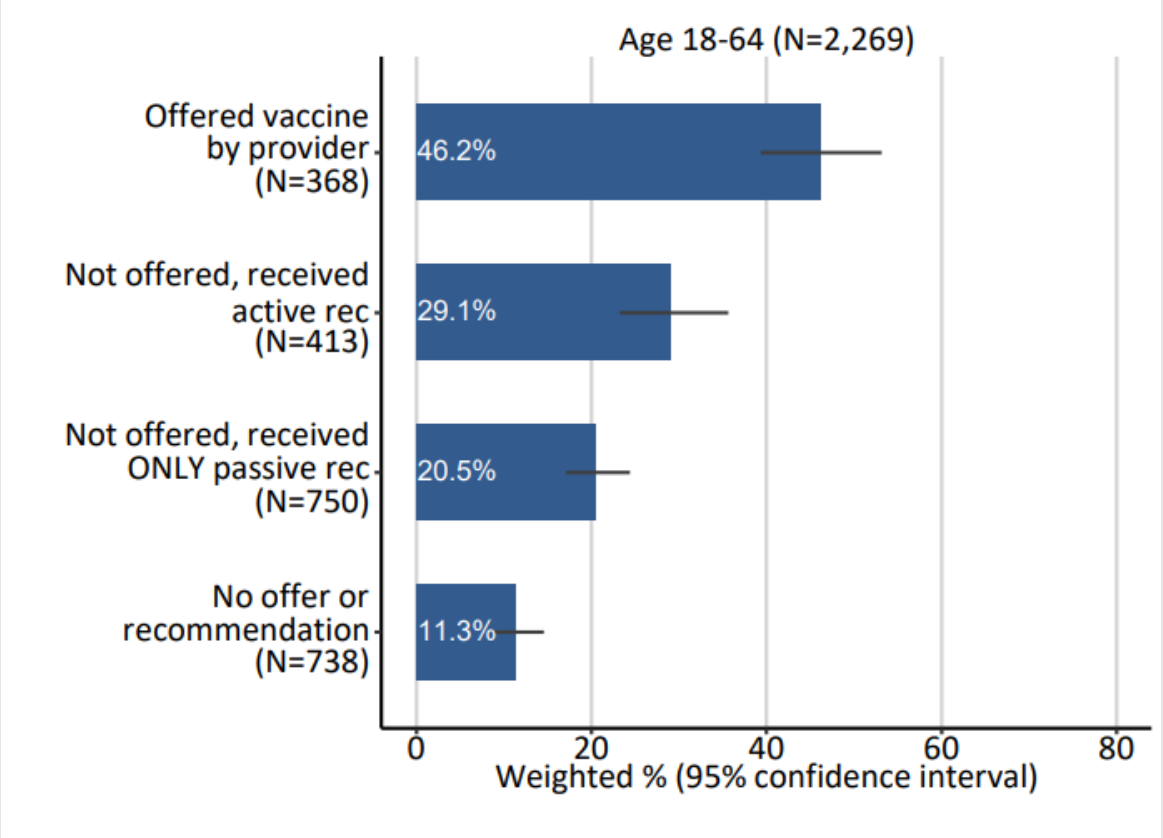
MISINFORMATION ONLINE

- Information ecosystem is changing.
  - Main source of information for most Americans is online sources.
- Misinformation goes farther, faster, deeper, and more broadly than the truth
  - Misinformation thrives online, receiving more retweets, shares, and direct messages.
- Disinformation campaigns are deliberate, often orchestrated, and highly effective in confusing people enough to change behaviors.

POWER OF PROVIDER RECOMMENDATIONS

- Adults and children who received a health care provider recommendation to get the COVID vaccine were more likely to get vaccinated.

- A doctor's office remains the most preferred vaccination location for parents of children who have not received a COVID-19 vaccine.



STRATEGIES FOR ADDRESSING HESITANCY

Give Your Strong Recommendation

- Healthcare professionals remain the most trusted source for vaccine-related information.

Presumptive Approach

- Start each vaccine conversation with a strong, positive “You are due for x vaccine today.”

STRATEGIES FOR ADDRESSING HESITANCY

Motivational Interviewing

- Readiness scaling to learn what is preventing someone from getting vaccinated.

Show Your Vaccine Confidence

- Display posters in clinic spaces with vaccine confident messages.
- Share your own stories of why you got vaccinated and why you recommend vaccines.

VACCINE ACCESSIBILITY

Vaccine messaging should be relatable to diverse communities and accommodations to the vaccine administration should be available in order to make vaccines accessible for all.

VACCINE HEALTH EQUITY

Health equity means that all people have a fair and just opportunity to be as healthy as possible.

Achieving health equity requires:

- Valuing every person and their health fairly.
- Addressing unfair practices and unjust conditions that can harm the health of specific groups in society.
- Working with different groups in specific, sensitive ways to address health issues that affect them.

https://www.frameworksinstitute.org/wp-content/uploads/2023/05/Talking-about-Health-Equity.pdf

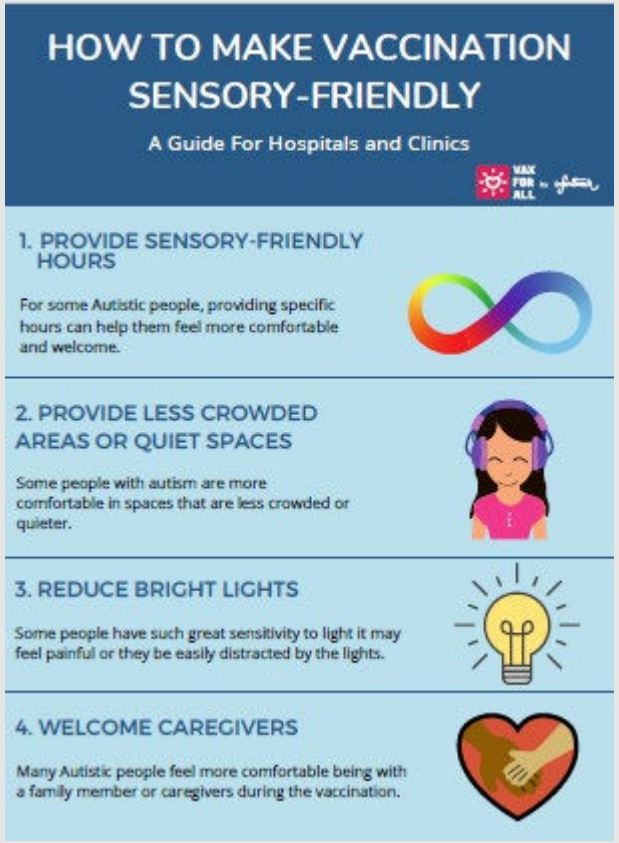
PEOPLE WITH DISABILITIES

- People with disabilities face many challenges with vaccination
  - Making appointments
  - Getting to appointments
  - Sensory challenges
- Some questions to ask…
  - What is the impact of vaccines on people living with disabilities?
  - What can disability agencies, organizations, and service providers contribute?
  - Are people living with disabilities who are employed at your organization willing to share their experiences?
  - Are programs and program materials accessible, both physically and virtually?

https://vaccineresourcehub.org/resource/factsheet-10-essential-questions-disability-inclusion-health-agencies-english-spanish?ACSTrackingID=USCDC_2175-DM131681&ACSTrackingLabel=ACIP%20Recommendations%2C%20Avian%20Influenza%20Updates%2C%20and%20more!-%207%2F9%2F2024&deliveryName=USCDC_2175-DM131681

PEOPLE WITH DISABILITIES

- How to make vaccination sensory-friendly
  - Provide sensory friendly hours
  - Provide less crowded areas or quiet spaces
  - Reduce bright lights
  - Welcome caregivers
  - Provide sensory toys
  - Give clear and precise instructions
  - Offer accessible areas
- Additional resources
  - Disability Vaccine Access Opportunities Center Resource Hub



https://vaccineresourcehub.org/resource/factsheet-how-make-vaccination-sensory-friendly?ACSTrackingID=USCDC_2175-DM122927&ACSTrackingLabel=Funding%20Opportunity%2C%20ACIP%20Recommendations%2C%20and%20Important%20Updates!%20-%202%2F20%2F2024&deliveryName=USCDC_2175-DM122927

RURAL COMMUNITIES

- Geographic considerations – rural Americans often live 10+ miles away from nearest healthcare facility
- Digital divide – limited access to accurate information about vaccines
- Vaccine hesitancy and medical mistrust
- Use relatable images and messages
  - Dignity as a Values message

https://www.astho.org/communications/blog/forming-partnerships-to-increase-rural-immunization-rates/

https://www.frameworksinstitute.org/wp-content/uploads/2024/07/FWI_NNPHI-Playbook_V5.pdf

LGBTQ+ COMMUNITIES

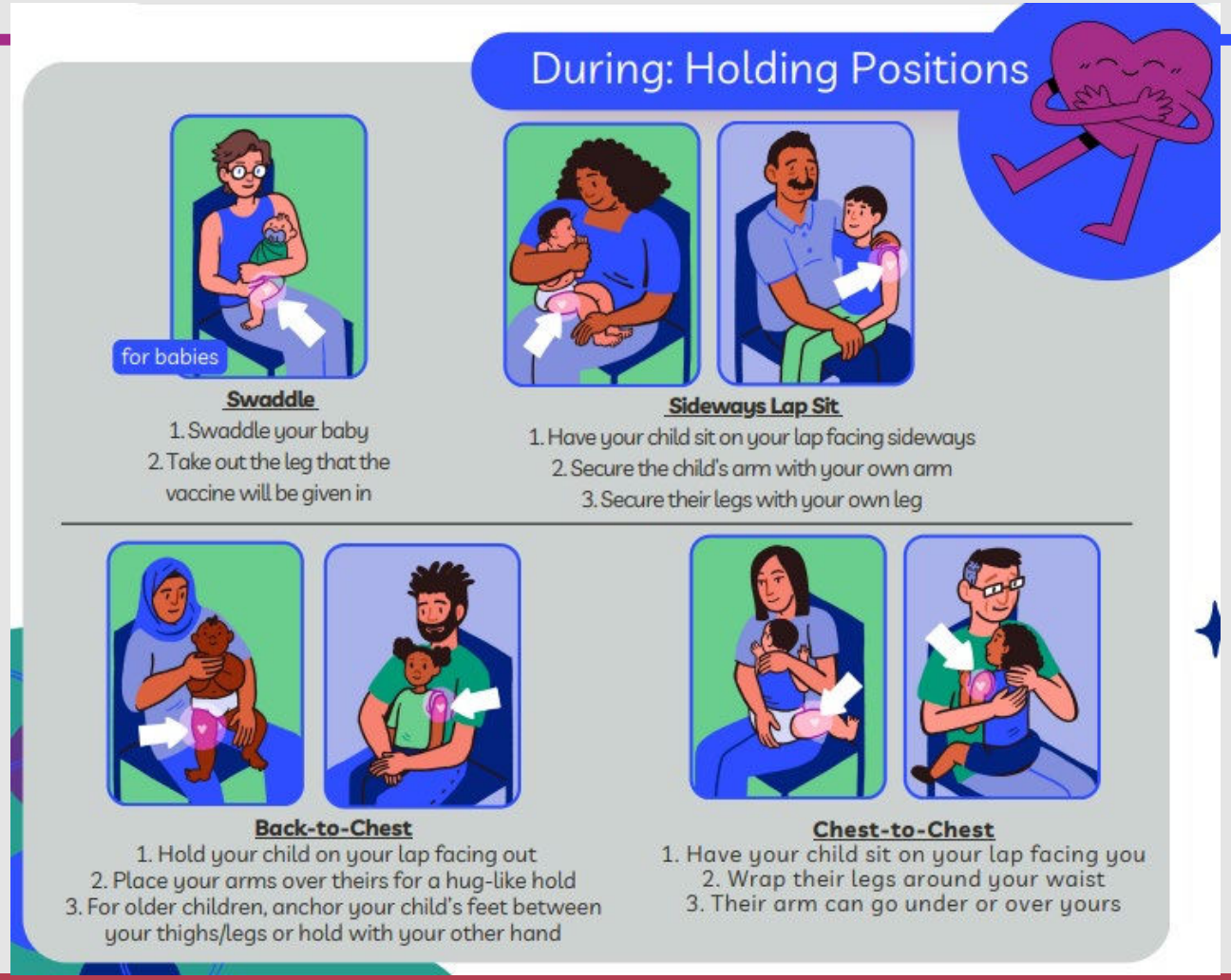
- Ask, record, and use preferred name and pronouns

- Create a visibly safe space
  - Post a non-discrimination statement
  - Rainbow flags
  - Brochures/flyers about LGBTQ health concerns

- Consider communication best practices for avoiding assumptions, correcting mistakes, & interacting with parents

https://tpchd.org/healthy-people/provider-resources/lgbtqia-information-for-providers/

COMFORTING HOLDS



GROUP ACTIVITY

- Form groups of 6-8 people around your tables.
- Designate a speaker and a note taker.
- Read through the hypothetical situation on the handout and work in your groups to answer the questions.
- Speaker will report out after 15 minutes.

GROUP REPORT OUTS

1. Norovirus Vaccine Rollout
2. Pertussis Outbreak
3. Epstein-Barr Virus Vaccine Rollout
4. COVID-19 + Influenza Combined Vaccine Rollout

GROUP REPORT OUTS

1. Norovirus Vaccine Rollout
   - Vaccine available for ages 5+ years
   - Administration: Single dose administered yearly
   - Misinformation: some people have never heard of norovirus and think that the government is creating new diseases so that they can profit from new vaccines.

- What creative communication/outreach strategies did your group come up with?

GROUP REPORT OUTS

2. Pertussis Outbreak
   - 30 reported cases all among unvaccinated people, half in childcare centers
   - IDPH: VFC providers should do reminder/recall
   - Misinformation: parent Facebook groups that adding rosemary oil to baby formula will help prevent Whooping Cough.

- What creative communication/outreach strategies did your group come up with?

GROUP REPORT OUTS

3. Epstein-Barr Virus Vaccine Rollout
   - Vaccine available for ages 10+ years
   - Administration: 2-dose series, 30 days apart
   - Misinformation: EBV & this vaccine are related to sexual activity and should not be given to children as young as ten.

- What creative communication/outreach strategies did your group come up with?

GROUP REPORT OUTS

4. COVID + Influenza Combined Vaccine Rollout
   - Vaccine available for ages 6+ months
   - Administration: Single dose administered yearly
   - Misinformation: lingering COVID-19 vaccine-related hesitancy, confusion that this is another bivalent COVID-19 vaccine

- What creative communication/outreach strategies did your group come up with?

AWARDS

Best Infant Series Coverage

Best HPV Coverage

BINGO WINNER!

EVALUATION & CME

- Please complete the evaluation by **September 19**
  - Required if you are seeking CME
  - Link will be sent out in a follow-up email

THANK YOU!