



ILLINOIS CHAPTER, AMERICAN ACADEMY OF PEDIATRICS

# BACK TO SCHOOL IMMUNIZATIONS

SEPTEMBER 15, 2021







## DISCLOSURE

The webinar planning group, the CME application reviewers, the content reviewers and I have no relevant financial relationships to disclose.

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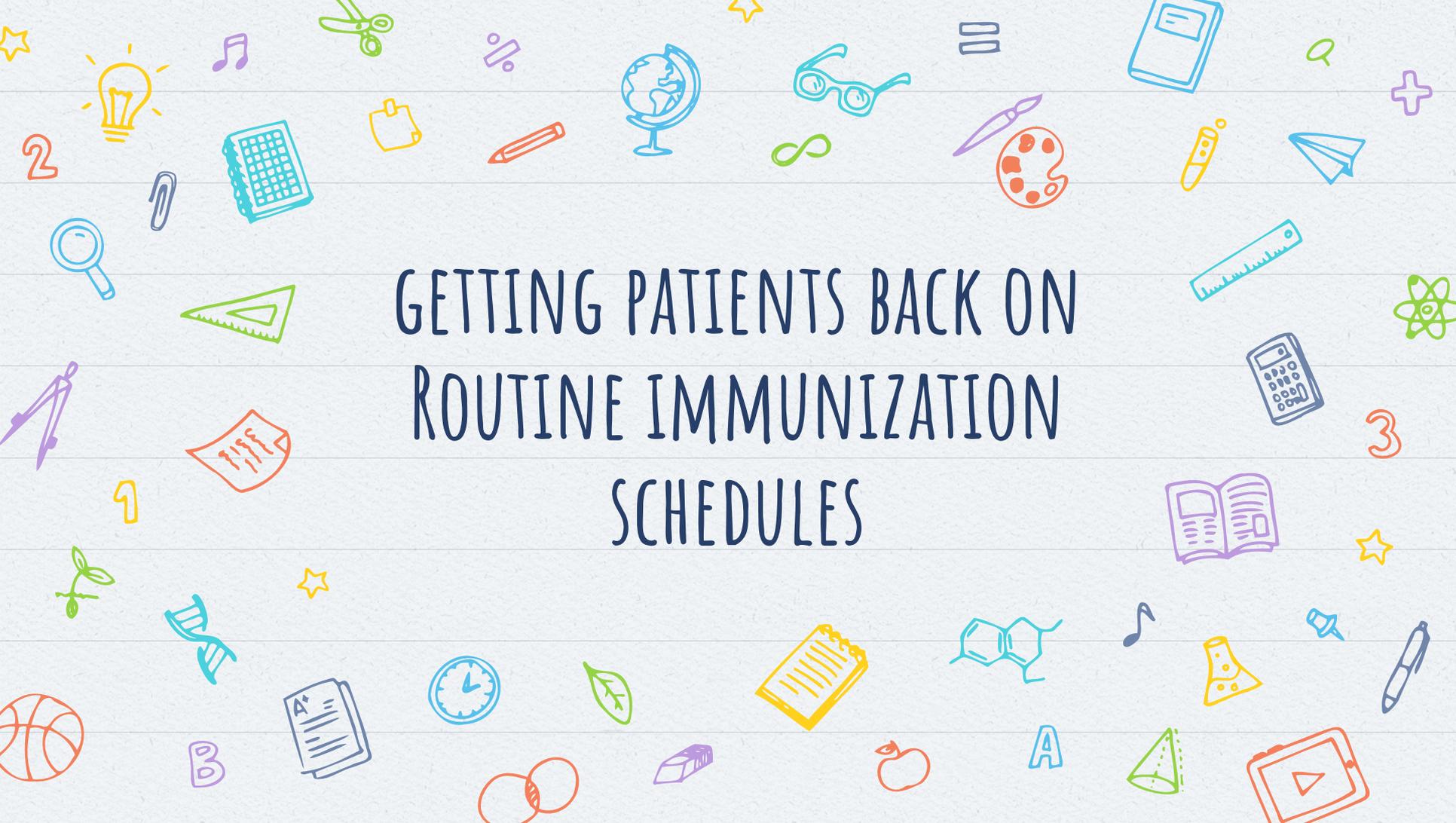




## OBJECTIVES

- Identify ways to get patients back on routine immunizations schedules.
- Outline recommendations for safely seeing patients during COVID-19.
- Discuss ACIP 2021 updates.
- Evaluate current guidance on COVID-19 vaccines for children and how to prepare your practice for future Emergency Use Authorizations.





GETTING PATIENTS BACK ON  
ROUTINE IMMUNIZATION  
SCHEDULES

"ANALYSIS OF IMMUNIZATION INFORMATION SYSTEMS DATA FROM 10 U.S. JURISDICTIONS INDICATED A SUBSTANTIAL DECREASE IN ADMINISTERED VACCINE DOSES DURING MARCH–MAY 2020 COMPARED WITH THE SAME PERIOD DURING 2018 AND 2019. ALTHOUGH ADMINISTERED DOSES INCREASED DURING JUNE–SEPTEMBER 2020, THIS INCREASE WAS NOT SUFFICIENT TO ACHIEVE CATCH-UP COVERAGE." – CDC, MMR JUNE 10, 2021



## VACCINE RATES

- Adolescent vaccine rates as compared to 2019:
  - Tdap –down 18.9%
  - HPV –down 19.3%
  - Meningococcal conjugate vaccine –down 15.1%



## CHOP'S 8 TECHNIQUES

1. Get every provider in the office to agree to use the **same schedule**
  - Variation holds the door open for error
2. Use **standing orders**
  - Pre-approved orders will reduce barriers -  
template available from immunize.org: [“Standing Orders Templates for Administering Vaccines”](#)





## CHOP'S 8 TECHNIQUES

3. Give vaccines at **every** type of visit
  - Vaccinate at all acute care visits OR agree on a list of acute care scenarios during which you will vaccinate
  
4. Give **all** the vaccines that are due
  - Set this expectation
  - Emphasize that you'll give all vaccines today to reduce anguish
  
5. Don't forget the **MenACWY booster** dose





## CHOP'S 8 TECHNIQUES

6. Train **ancillary staff** to do everything they can do
  - Identify, screen, answer questions, put in an order or prompt an order
7. Prevent pain
  - Educate parents and See the [“About Kids Health” YouTube channel](#)
8. Use the huddle
  - Make vaccinations a part of this conversation





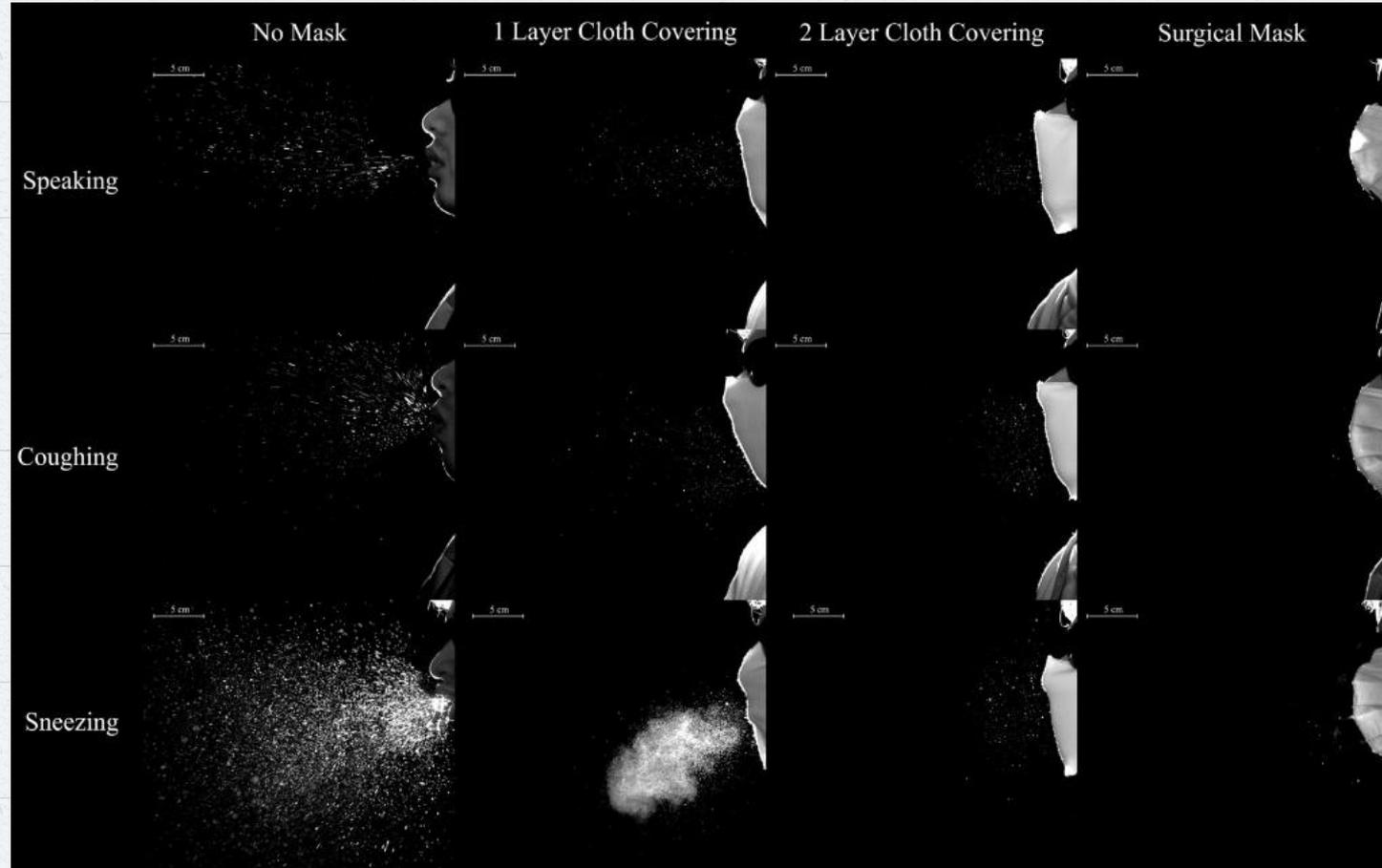




# PREVENTION

- Isolate infected people
- Distance,  $\geq 6$  feet is the goal, 3 feet works almost as well
- Masking is mostly to protect others except true PPE
  - Cloth, two layers e.g., cotton-silk, cotton-chiffon, cotton-flannel work best, and fit is important
- Face shields
  - Work almost as well as mask to protect others, and the wearer from droplets (less so from aerosol)
- Hand hygiene
- Ventilation
  - Open windows, open doors, fresh air, and do not have fans blowing horizontally

# TWO LAYERS IS BETTER THAN ONE!





# RECOMMENDATIONS

## Distancing

Providers should consider wearing goggles while seeing patients

## Vaccinated Staff

Ensure all providers and staff are vaccinated or tested weekly if unable to get vaccinated.





# RECOMMENDATIONS

## Separating Patients

Scheduling well visits and sick visits at different times of the day or use telehealth.

## Inform Patients

What you have done and why.

## Be Consistent

This will help with keeping patients on track with routine immunizations.



# ACIP 2021 UPDATES





# NEW MEN ACWY VACCINE

**TABLE 1. Licensed and available\* meningococcal vaccines — United States, 2020**

Vaccine product	Manufacturer	Trade name	Age group	Year licensed
<b>Conjugate (serogroups A, C, W, and Y)</b>				
MenACWY-D	Sanofi Pasteur	Menactra <sup>†</sup>	9 mos–55 yrs	2005
MenACWY-CPM	GlaxoSmithKline	Menveo <sup>‡</sup>	2 mos–55 yrs	2010
<b>MenACWY-TT</b>	Sanofi Pasteur	MenQuadfi <sup>¶</sup>	≥2 yrs	2020
<b>Protein based (directed at serogroup B)</b>				
MenB-FHbp	Pfizer	Trumenba <sup>**</sup>	10–25 yrs	2014
MenB-4C	GlaxoSmithKline	Bexsero <sup>††</sup>	10–25 yrs	2015



# MENINGOCOCCAL VACCINE RECOMMENDATIONS

**TABLE 2. Recommended meningococcal vaccines and administration schedules for children and adults — Advisory Committee on Immunization Practices, United States, 2020**

Age group	Serogroups A, C, W, and Y meningococcal conjugate vaccines MenACWY-D (Menactra, Sanofi Pasteur) or MenACWY-CRM (Menveo, GlaxoSmithKline) or MenACWY-TT (MenQuadfi, Sanofi Pasteur)	Serogroup B meningococcal vaccines MenB-FHbp (Trumenba, Pfizer) or MenB-4C (Bexsero, GlaxoSmithKline)
2 mos–10 yrs	Not routinely recommended See Table 3 for persons at increased risk	No recommendations for use of MenB vaccines in this population*
11–23 yrs	<p><b>Primary vaccination<sup>†</sup></b>: 1 dose at age 11–12 yrs</p> <p><b>Booster</b>: 1 dose at age 16 yrs if first dose administered before 16th birthday</p> <p><b>Catch-up vaccination</b>: Although routine vaccination is only recommended for adolescents aged 11–18 yrs, MenACWY may be administered to persons aged 19–21 yrs who have not received a dose after their 16th birthday</p> <p><b>Note</b>: MenACWY vaccines are interchangeable</p>	<p><b>Primary vaccination</b>: MenB series at age 16–23 yrs on basis of shared clinical decision-making (preferred age 16–18 yrs)</p> <ul style="list-style-type: none"> <li>• MenB-FHbp<sup>§</sup>: 2 doses at 0 and 6 mos</li> <li>• MenB-4C: 2 doses ≥1 mo apart</li> </ul> <p><b>Booster</b>: Not routinely recommended unless the person becomes at increased risk for meningococcal disease</p> <p><b>Note</b>: MenB-FHbp and MenB-4C are not interchangeable</p>
≥24 yrs	Not routinely recommended See Table 3 for persons at increased risk	Not routinely recommended See Table 3 for persons at increased risk



## PERSONS AT INCREASED RISK

**TABLE 3. Recommended meningococcal vaccines for persons at increased risk for meningococcal disease — Advisory Committee on Immunization Practices, United States, 2020**

Risk group	MenACWY vaccine	MenB vaccine	Table
Persons with complement component deficiency (e.g., C5–C9, properdin, factor H, or factor D), including patients using a complement inhibitor	Aged ≥2 mos	Aged ≥10 yrs	4
Persons with functional or anatomic asplenia (including sickle cell disease)	Aged ≥2 mos	Aged ≥10 yrs	5
Persons with HIV infection	Aged ≥2 mos	No recommendation	6
Microbiologists routinely exposed to <i>Neisseria meningitidis</i>	Age appropriate*	Age appropriate†	7
Persons exposed during an outbreak of meningococcal disease due to a vaccine-preventable serogroup	Aged ≥2 mos	Aged ≥10 yrs	8
Persons who travel to or live in countries where meningococcal disease is hyperendemic or epidemic	Aged ≥2 mos	No recommendation	9
College freshmen living in residence halls	Age appropriate*	No recommendation	10
Military recruits	Age appropriate*	No recommendation	10

**Abbreviations:** HIV = human immunodeficiency virus; MenACWY = meningococcal groups A, C, W, and Y; MenB = meningococcal group B.

\* Persons aged ≥2 months in these risk groups are recommended to receive MenACWY vaccination.

† Persons aged ≥10 years in this risk group are recommended to receive MenB vaccination.



# OUTBREAK SETTINGS

**TABLE 8. Recommended vaccination schedule and intervals for persons who are at risk during an outbreak\* attributable to a vaccine serogroup—Advisory Committee on Immunization Practices, United States, 2020**

Age group	Serogroups A, C, W, and Y meningococcal conjugate vaccines MenACWY-D (Menactra, Sanofi Pasteur) <sup>†</sup> or MenACWY-CRM (Menveo, GlaxoSmithKline) <sup>§</sup> or MenACWY-TT (MenQuadfi, Sanofi Pasteur) <sup>¶</sup>	Serogroup B meningococcal vaccines MenB-FHbp (Trumenba, Pfizer) or MenB-4C (Bexsero, GlaxoSmithKline)
2–23 mos	<p>Primary vaccination: MenACWY-D (aged ≥9 mos): 2 doses ≥12 wks apart or MenACWY-CRM: If first dose at age</p> <ul style="list-style-type: none"> <li>• 2 mos: 4 doses at 2, 4, 6, and 12 mos</li> <li>• 3–6 mos: See catch-up schedule<sup>††</sup></li> <li>• 7–23 mos: 2 doses (second dose ≥12 wks after the first dose and after the 1st birthday)</li> </ul>	<p>No recommendations for use of MenB vaccines in this population**</p>
2–9 yrs	<p>Primary vaccination: MenACWY-D<sup>§§</sup> or MenACWY-CRM or MenACWY-TT: 1 dose Boosters (if previously vaccinated and identified as being at increased risk)<sup>¶¶</sup>:</p> <ul style="list-style-type: none"> <li>• Aged &lt;7 yrs: Single dose if ≥3 yrs since vaccination</li> <li>• Aged ≥7 yrs: single dose if ≥5 yrs since vaccination</li> </ul>	<p>No recommendations for use of MenB vaccines in this population**</p>
≥10 yrs	<p>Primary vaccination: MenACWY-D or MenACWY-CRM or MenACWY-TT: 1 dose Boosters (if person previously vaccinated and identified as being at increased risk during an outbreak)<sup>¶¶</sup>:</p> <ul style="list-style-type: none"> <li>• Aged &lt;7 yrs: Single dose if ≥3 yrs since vaccination</li> <li>• Aged ≥7 yrs: Single dose if ≥5 yrs since vaccination</li> </ul>	<p>Primary vaccination: MenB-FHbp: 3 doses at 0, 1–2, and 6 mos or MenB-4C: 2 doses ≥1 mo apart Boosters (if person previously vaccinated and identified as being at increased risk during an outbreak)<sup>***</sup>: Single dose if ≥1 yr after MenB primary series completion (≥6 mos interval might also be considered by public health professionals) Note: MenB-FHbp and MenB-4C are not interchangeable</p>



# MENACWY VACCINES - THE FINE PRINT!

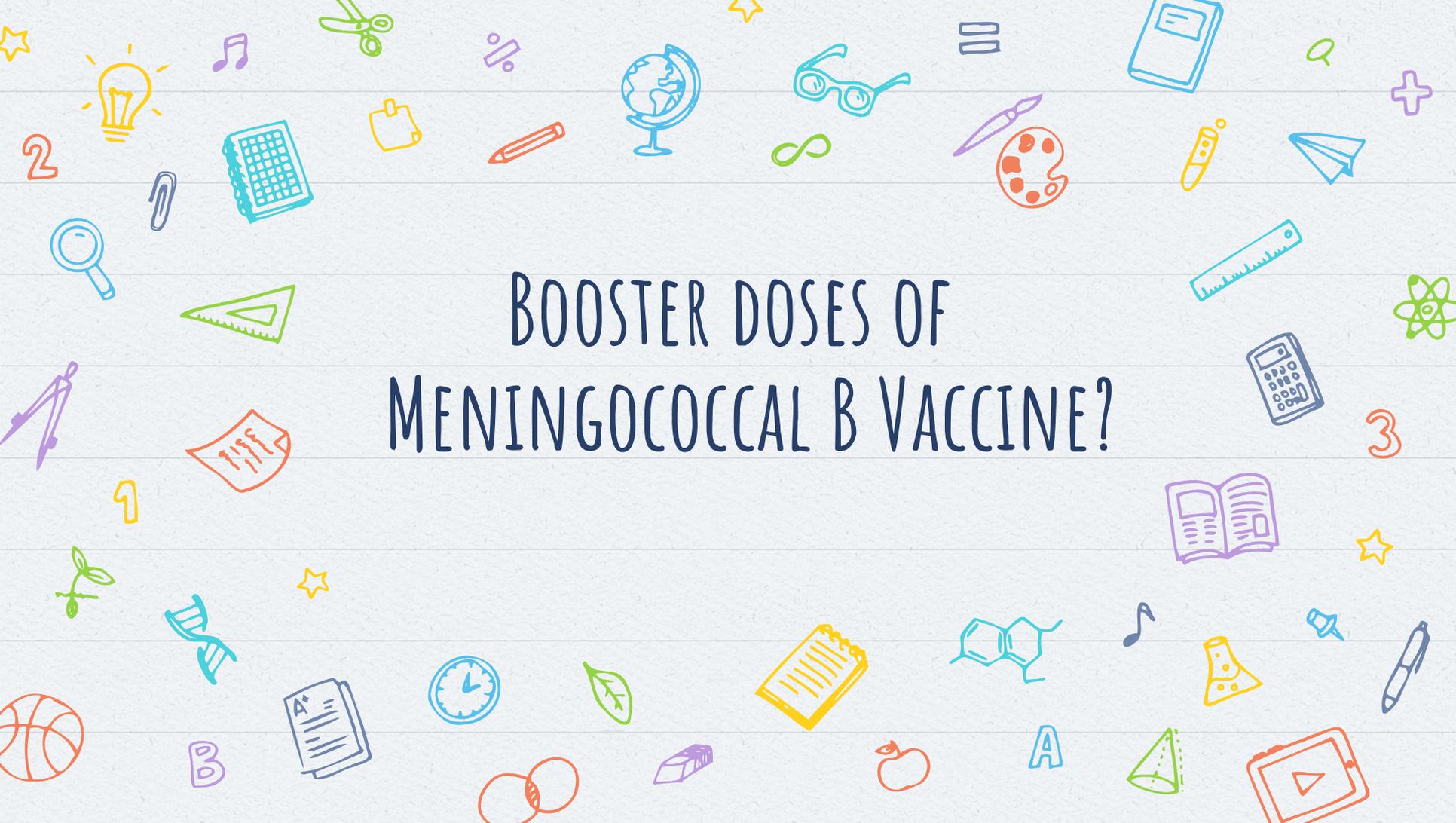
<p>2 to 23 months of age</p>	<p>Children with:</p> <ul style="list-style-type: none"> <li>• Persistent complement deficiencies</li> <li>• Functional or anatomic asplenia</li> <li>• HIV virus</li> <li>• Travel to or are residents of countries with meningococcal disease</li> <li>• Community outbreak</li> </ul>	<p>MenACWY-CRM (Menveo): 4 doses at 2, 4, 6, and 12 mo</p> <p><b>MenACWY-D (Menactra): MenACWY-D SHOULD NOT BE USED before 2 y of age in children with asplenia or HIV to avoid interference with the immune response to the pneumococcal conjugate vaccine (PCV) series</b></p> <p>For children aged <math>\geq 9</math> mo who are at increased risk because of complement deficiency, travel or an outbreak, MenACWY-D can be administered as a 2-dose series at 9 and 12 months (3 months apart)</p> <p><b>MenACWY-TT (MenQuadfi): SHOULD NOT BE USED before 2 y of age because not approved in this age group</b></p>
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## MENACWY VACCINES-THE FINE PRINT!

≥2 y	People with: <ul style="list-style-type: none"><li>• Persistent complement deficiencies</li><li>• Functional or anatomic asplenia</li><li>• HIV infection</li></ul>	<b>2 doses</b> of either MenACWY-CRM or MenACWY-D <sup>c</sup> or MenACWY-TT, 8-12 wk apart
≥2 y	People with: <ul style="list-style-type: none"><li>• Community outbreak</li><li>• Travel to or are residents of countries with meningococcal disease</li><li>• Laboratory workers</li></ul>	<b>1 dose</b> of MenACWY-CRM or MenACWY-D <sup>c</sup> or MenACWY-TT

# BOOSTER DOSES OF MENINGOCOCCAL B VACCINE?





## MENB VACCINE RECOMMENDATIONS-TWO GROUPS TO THINK ABOUT

- High Risk (asplenia, complement deficiency, outbreak settings)- **Immunize starting at age 10.**
- Normal Risk: A Men B vaccine series MAY be administered to adolescents and young adults aged 16-23 years to provide SHORT-TERM protection against MOST strains of serogroup B meningococcal disease. **The preferred age for Men B vaccination is 16-18 years.**



## Groups at increased risk for serogroup B meningococcal disease

Persons aged ≥10 years at increased risk for serogroup B meningococcal disease	Estimated increased risk
Persistent complement component deficiency	Up to 10,000-fold <sup>1</sup>
Complement inhibitor use (e.g., eculizumab)	2,000-fold <sup>3</sup>
Anatomic or functional asplenia (e.g. sickle cell disease)	Not quantified; Higher case-fatality rate
Microbiologists routinely exposed to <i>N. meningitidis</i>	120-fold <sup>6</sup>

<sup>1</sup> Figueroa JE. Clin Microbiol Rev 1991. <sup>2</sup> Estimated prevalence in all ages of 0.03% (Densen R. Clin Exp Immunol. 1991) though many may be undiagnosed.

<sup>3</sup> Food and Drug Administration. Meeting of the Drug Safety and Risk Management Advisory Committee, Nov 18, 2014. <sup>4</sup> Preliminary estimate projected from 2017 claims data (Marketscan and Medicaid)

<sup>5</sup> Based on estimated 100,000 persons with sickle cell disease (CDC data), minus the ~20,000 children aged <10 years with disease (estimated 1,800-2,000 children identified with sickle cell disease annually through newborn screening, with 95% survival to age 18 years). <sup>6</sup> Sejvar JJ. Journal of Clinical Microbiology. Sept 2005;43(9):4811-14.

<sup>7</sup> Bureau of Labor Statistics, 2016. Adjusted to estimate personnel with occupational exposure to *N. meningitidis*. <https://www.bls.gov/ooh/life-physical-and-social-science/microbiologists.htm#tab-1>, <https://www.bls.gov/ooh/healthcare/medical-and-clinical-laboratory-technologists-and-technicians.htm> ;



## MENINGOCOCCAL B VACCINE-BOOSTER DOSES

- Immunity from meningococcal B vaccine wanes quickly
- Individuals at highest risk now recommended to receive a booster dose 1-3 years after primary immunization
- Highest risk groups include:
  - Complement deficiency
  - Asplenia
  - Microbiologists
  - Outbreaks
- First booster dose 1 year after completing the primary series
- Repeat boosters every 2-3 years if risk continues



# HEPATITIS A VACCINE

- Catch up vaccination for all children through 18 years of age
- Immunization under 12 months of age for international travel
- Routine immunization for HIV infected individuals and the homeless



## NEW INDICATIONS FOR HEPATITIS A VACCINE

- Infants 6 months through 11 months of age traveling internationally
  - We used to give immune globulin to prevent hepatitis A in infants
  - The problem is we also want to protect children in this age group from measles
  - Immune globulin interferes with the immune response to measles vaccine
  - Hence, a new recommendation to use hepatitis A vaccine instead of immune globulin to protect traveling infants
- HIV infection is now an independent indication for hepatitis A vaccine
- Homelessness is also an independent indication for hepatitis A vaccine



## HEPATITIS A VACCINE AND TRAVEL

Age	Recommended	Notes
<6 mo	IGIM	For travel lasting up to 1 mo, 0.1 mL/kg; up to 2 mo, 0.2 mL/kg (repeat 0.2 mL/kg every 2 mo thereafter if risk remains).
<b>6–11 mo</b>	<b>HepA vaccine</b>	<b>This dose does not count toward the routine 2-dose series. Start the hepatitis A vaccination series at age 12 mo.</b>
12 mo–40 y	HepA vaccine	Those with immunocompromising conditions, chronic liver disease, or other chronic medical conditions may also receive IGIM. <sup>b,c</sup>
>40 y	HepA vaccine, consider IGIM	If departure is within 2 wk, may also receive IGIM <sup>c</sup> ; those with immunocompromising conditions, or chronic liver disease may also receive IGIM.

Illinois Chapter

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# TABLE CHANGES

WHAT EVER HAPPENED  
TO PERTUSSIS?





## EXPANDED RECOMMENDATIONS FOR TDAP BOOSTERS

- Pregnant women during each pregnancy, 27-36 weeks gestation preferred
- Decennial tetanus/diphtheria booster can now be either Tdap or Td
- Tetanus wound prophylaxis can now be either Tdap or Td
- Catch-up immunization for those behind can be either Tdap or Td



## Tdap-OTHER CONSIDERATIONS FOR A BOOSTER DOSE

- Family members when a new baby comes into the household
- Healthcare workers who see young infants
- During outbreaks in defined settings (e.g. schools, geographic areas experiencing peaks in cases)



## TDAP FOR CHILDREN $\geq$ 7 YEARS WHO DID NOT COMPLETE DTAP DOSES

- Children 7 through 10 years of age who have not completed their immunization schedule with DTaP before 7 years of age or who have an unknown vaccine history should receive at least one dose of Tdap.
  - If further dose(s) of tetanus and diphtheria toxoids are needed in a catch-up schedule, either Td or Tdap can be used.
  - The preferred schedule is Tdap followed by Td or Tdap at 2 months and 6 to 12 months (if needed)
- Children 7 through 9 years of age who receive Tdap or DTaP for any reason should receive the adolescent Tdap booster at 11 through 12 years of age.
- A Tdap or DTaP dose received by a 10 year-old for any reason can count as the adolescent Tdap booster dose.



## SUMMARY

- [ACIP Vaccine Recommendations and Guidelines](#)
- [ACIP Vaccine Recommendations by Date Published | CDC](#)
- [ACIP List of Errata/Updates for Guidelines for Immunization | CDC](#)
- Ebola - new Jan 2021
- COVID-19 new April 2021







## UNIVERSAL RECOMMENDATION

- **Everyone age  $\geq$  6 months**, unless contraindicated
- *Only* contraindication for inactivated vaccines is a history of severe allergic reaction to any component of the vaccine (except egg allergy)
- LAIV has others...



## TIMING OF INFLUENZA VACCINATION

- Flu season: October – May
  - Peak in December - February
  - COVID may make things worse
- 2 weeks to make antibodies from vaccine
- Offer vaccine as soon as it becomes available, by October if possible
  - ACIP, AAP are recommending all get immunized in October
- Offer vaccine during routine healthcare visits or during hospitalizations whenever vaccine is available
- Vaccinate throughout the entire flu season



## WHAT'S NEW IN 2021-2022 SEASON?

- No preferential vaccine statement No current ACIP preference for:
  - quadrivalent vs trivalent
  - high-dose vs standard dose\*\*
  - IIV vs. LAIV
- Providers to give what clinic stocks
- Flucelvax now approved to 2 years of age and older
- All Pediatric vaccines are Quadrivalent



## WHAT'S NEW IN 2021-2022 SEASON?

- **Fluzone**
  - Dose change related to age
- Persons  $\geq 36$  months ( $\geq 3$  years) should get *0.5mL*
- *Should only be giving 0.5mL to infants*



## WHAT'S NEW IN 2021-2022 SEASON?

- Travelers
  - Recommend getting flu vaccine at least 2 weeks before travel
- Adults >65
  - May consider getting High Dose
  - Limited Studies
- Caregivers/Household contacts
  - Focus on increasing immunization in this group
  - Like HCW
- COVID + persons
  - May consider delaying while ill



## 2021-2022 INFLUENZA COMPOSITION

### EGG BASED

- **Quadrivalent**
  - A/Victoria/2570/2019 (H1N1) pdm09-like virus;
  - A/Cambodia/e0826360/2020 (H3N2)-like virus;
  - a B/Washington/02/2019- like virus (B/Victoria lineage)
  - B/Phuket/3073/2013-like virus (B/Yamagata lineage)

### NON-EGG BASED

- **Quadrivalent**
  - A/Wisconsin/588/2019 (H1N1) pdm09-like virus;
  - A/Cambodia/e0826360/2020 (H3N2)-like virus;
  - B/Washington/02/2019- like virus (B/Victoria lineage);
  - B/Phuket/3073/2013-like virus (B/Yamagata lineage).



## LAIV 2021-2022

- FluMist Quadrivalent
  - Intranasal
  - Can be given to children  $\geq 2$  yo
  - Given to persons 2 to 49



## LAIV 2021-2022

- **Do not give** LAIV if:
  - Taking aspirin or salicylate-containing meds
  - 2 – 4 yo with asthma diagnosis or asthma/wheezing episode in past 12 months
  - Pregnant
  - Immunocompromised
  - Have experienced severe allergic reactions
  - Have taken influenza antiviral meds in the previous 48 hrs
  - Close contact or caregiver of severely immunosuppressed persons



## LITTLE KNOWN LAIV CONTRAINDICATIONS

- CSF leaks-theoretical access to CNS
- Cochlear implants-theoretical access to CNS
- Asplenia-immunocompromising condition





# LAIV 2021-2022

- NEW Contraindication
  - Do not give to the following
- CSF Leaks/Cochlear implants
  - VAERS: 3 reports no
    - CSF:0
    - Cochlear implants: 3 children non- serious
- Asplenia or sickle cell
  - VAERS: 2 events
    - Sickle cell 1 event non-serious
    - Asplenia/splenectomy:1 adult



## LAIV 2021-2022

- *Precautions* for using LAIV:
  - Moderate or severe acute illness with or without fever
  - GBS within 6 weeks following a previous dose of influenza vaccine
  - Asthma in persons aged  $\geq 5$  years
  - Safety in people with underlying conditions not established

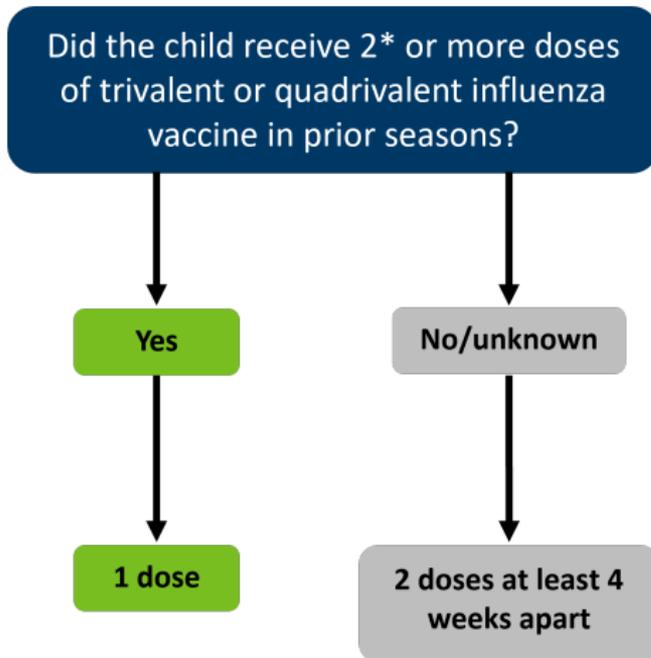


## ACIP PEDIATRIC RECOMMENDATIONS

- Children 6 mo – 8 yrs.
- If child received  $\geq 2$  doses of flu vaccine prior to July 1, 2020:
  - Only require 1 dose of 2021-2022 vaccine
- If flu vaccination history unclear/unknown:
  - Require 2 doses of vaccine ( $\geq 4$  wks apart)
- If child has never received flu vaccine:
  - Require 2 doses of vaccine ( $\geq 4$  wks apart)



## Influenza vaccine dosing algorithm for children 6 months through 8 years old – 2021-22 influenza season



\*The two doses do not need to have been received during the same or consecutive seasons.



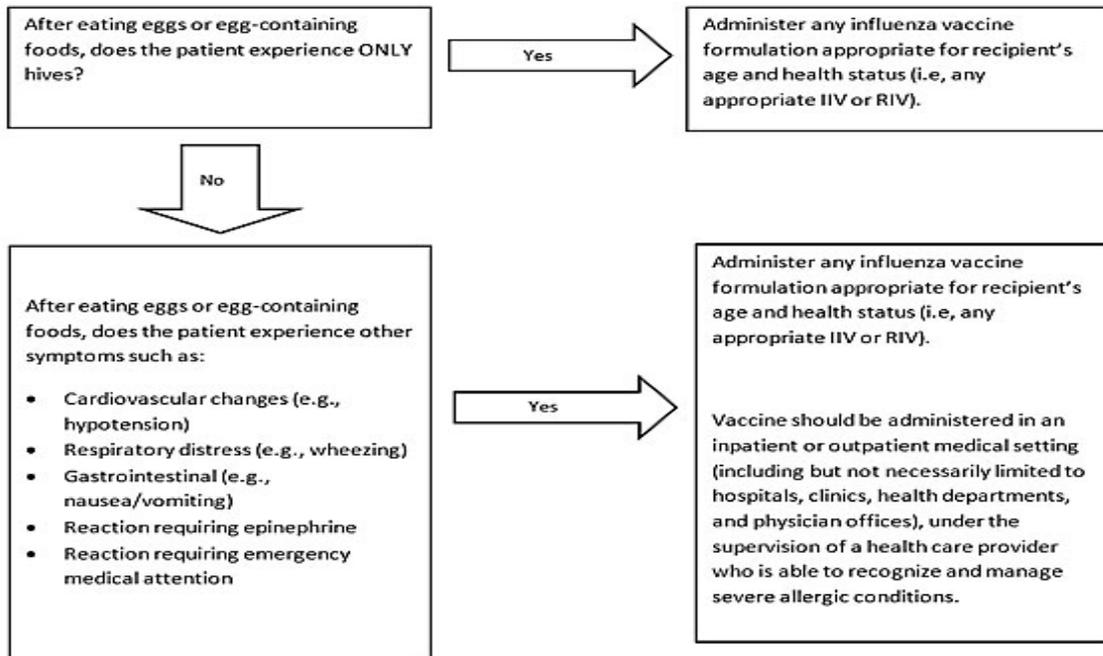
## ACIP RECOMMENDATIONS FOR EGG ALLERGIES

- No need to worry about egg allergies
  - Can receive any flu vaccine
  - For those with egg allergy causing hives → no special care, observe as usual
  - For those with severe allergy → get vaccine by HCP in inpatient or outpatient setting, just monitor
- Only RIV4 (Flublok Quadrivalent) *completely* egg-free
- cclIV4 (Flucelvax Quadrivalent) *nearly* egg free



## Recommendations regarding influenza vaccination of persons who report allergy to eggs: Advisory Committee on Immunization Practices, United States, 2016-17 Influenza season.

**NOTE:** Regardless of a recipient's allergy history, all vaccination providers should be familiar with the office emergency plan and be currently certified in cardiopulmonary resuscitation. Epinephrine and equipment for maintaining an airway should be available for immediate use. (CDC. General recommendations on immunization—recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2011;60(No. RR-2)



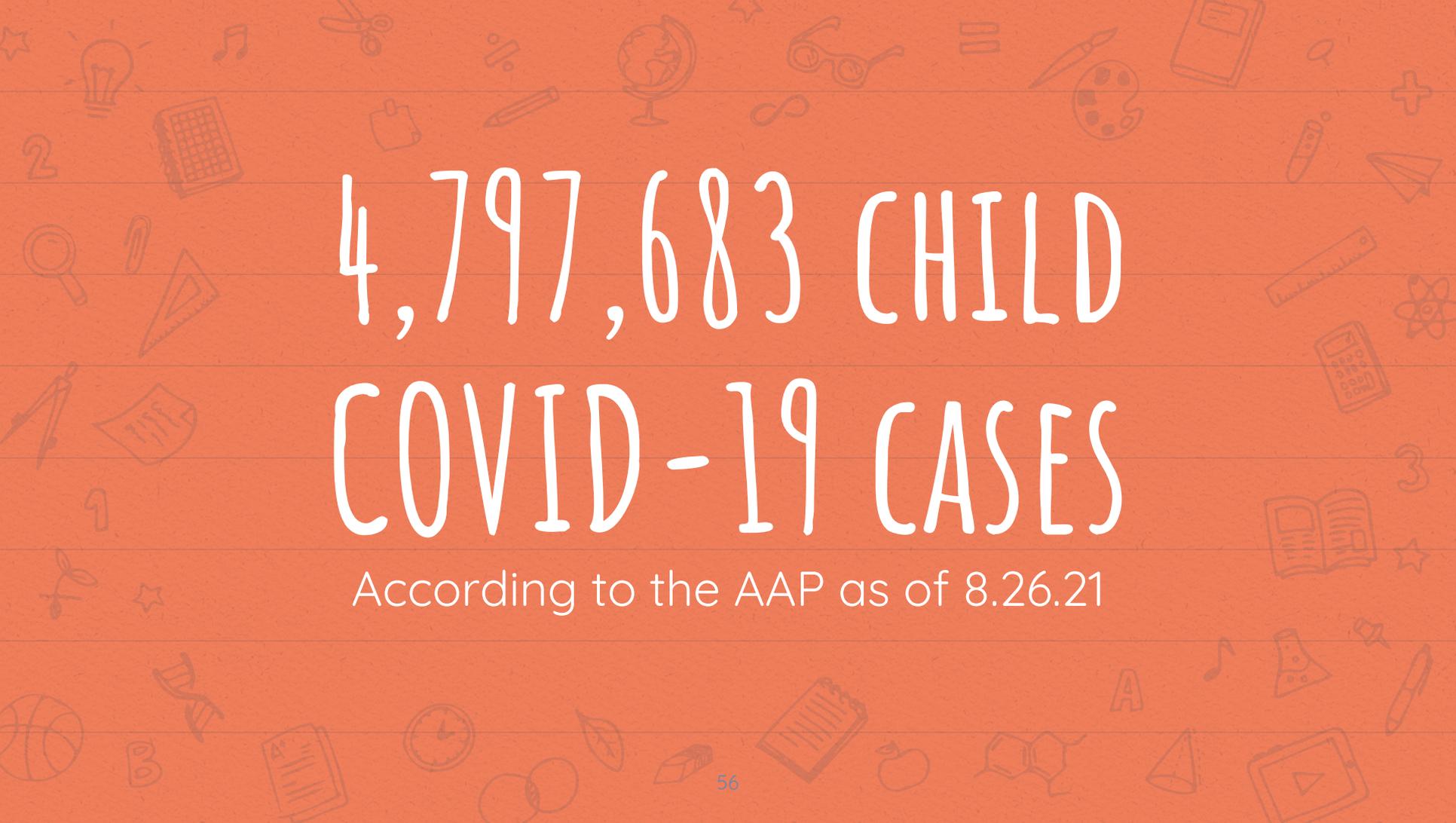
IIV=Inactivated Influenza Vaccine; RIV=Recombinant Influenza Vaccine.





# 9,300,000

Fully vaccinated 12 to 17 year-olds according to the  
AAP as of 9.1.21

The background is a solid orange color with a pattern of faint, light-colored icons representing various educational fields such as science, art, math, and general learning. The main text is centered in a large, white, rounded font.

4,797,683 CHILD  
COVID-19 CASES

According to the AAP as of 8.26.21



~14.5% OF THE US POPULATION IS UNDER 12  
that amounts to

AROUND 48 MILLION CHILDREN

who are not yet eligible for the COVID-19 vaccine.







# Contraindications and precautions for COVID-19 vaccines

CONTRAINDICATION TO VACCINATION	PRECAUTION TO VACCINATION	MAY PROCEED WITH VACCINATION
<p>History of the following:</p> <ul style="list-style-type: none"> <li>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to component of the vaccine<sup>†</sup></li> <li>Immediate allergic reaction* of any severity after a previous dose or known (diagnosed) allergy to a component of the vaccine<sup>†</sup></li> </ul> <p>Actions:</p> <ul style="list-style-type: none"> <li>Do not vaccinate.</li> <li>Consider referral to allergist-immunologist.</li> <li>Consider other vaccine alternative.<sup>‡</sup></li> </ul>	<p>Among persons without a contraindication, a history of:</p> <ul style="list-style-type: none"> <li>Any immediate allergic reaction* to other vaccines or injectable therapies<sup>‡</sup></li> </ul> <p>Note: persons with a contraindication to mRNA COVID-19 vaccines have a precaution to Janssen COVID-19 vaccine, and vice versa<sup>#</sup></p> <p>Actions:</p> <ul style="list-style-type: none"> <li>Risk assessment</li> <li>Consider referral to allergist-immunologist</li> <li>30-minute observation period if vaccinated</li> </ul>	<p>Among persons without a contraindication or precaution, a history of:</p> <ul style="list-style-type: none"> <li>Allergy to oral medications (including the oral equivalent of an injectable medication)</li> <li>History of food, pet, insect, venom, environmental, latex, etc., allergies</li> <li>Family history of allergies</li> </ul> <p>Actions:</p> <ul style="list-style-type: none"> <li>30-minute observation period: persons with history of anaphylaxis (due to any cause)</li> <li>15-minute observation period: all other persons</li> </ul>

<sup>†</sup> See [Appendix C](#) for a list of ingredients. Persons with a contraindication to one of the mRNA COVID-19 vaccines should not receive doses of either of the mRNA vaccines (Pfizer-BioNTech or Moderna).

\* Immediate allergic reaction to a vaccine or medication is defined as any hypersensitivity-related signs or symptoms consistent with urticaria, angioedema, respiratory distress (e.g., wheezing, stridor), or anaphylaxis that occur within four hours following administration.

<sup>‡</sup> Includes persons with a reaction to a vaccine or injectable therapy that contains multiple components, one of which is a vaccine component, but in whom it is unknown which component elicited the immediate allergic reaction.

<sup>#</sup> Polyethylene glycol (PEG) is an ingredient in both mRNA COVID-19 vaccines, and polysorbate 80 is an ingredient in Janssen COVID-19 vaccine. PEG and polysorbate are structurally related, and cross-reactive hypersensitivity between these compounds may occur. Persons with a contraindication to mRNA COVID-19 vaccines (including due to a known [diagnosed] allergy to PEG) have a precaution to Janssen COVID-19 vaccine. Among persons who received one mRNA COVID-19 dose but for whom the second dose is contraindicated, consideration may be given to vaccination with Janssen COVID-19 vaccine (administered at least 28 days after the mRNA COVID-19 dose). Persons with a contraindication to Janssen COVID-19 vaccine (including due to a known [diagnosed] allergy to polysorbate) have a precaution to mRNA COVID-19 vaccines. In patients with these precautions, vaccination should be undertaken in an appropriate setting under the supervision of a health care provider experienced in the management of severe allergic reactions. Consider referral to allergist-immunologist.

## Persons who previously received passive antibody therapy for COVID-19

- Currently no data on safety and efficacy of COVID-19 vaccination in persons who received monoclonal antibodies or convalescent plasma as part of COVID-19 treatment
- Vaccination should be deferred for at least 90 days to avoid interference of the passive antibody therapy with vaccine-induced immune responses
- Recommendation does not apply to persons receiving antibody therapies not specific to COVID-19 treatment







## YOU ARE A TRUSTED RESOURCE

- HCP are most trusted source of info on vaccines for **all** parents!
- Parents want consistent info from credible sources
- Internet is a frequent source of vaccine info
- Decision to vaccinate positively influenced by PCP
- Parents tend to follow pediatricians' advice about vaccines
- Confidence about advice correlates with **↑** vaccine uptake

**Parents need consistent, knowledgeable resource about vaccines → YOU!!**





## TALKING TO PARENTS ABOUT VACCINES

- *Remember common goal, you & parents want the best for their kids*
- Build partnerships with parents
- Personal stories can be effective
- Take advantage of early opportunities
- Take time to listen – give full attention
- Solicit and welcome questions
- Keep the conversation going
- Acknowledge benefits & risks
- Respect parents' authority



## TALKING TO PARENTS ABOUT VACCINES

### Less is more

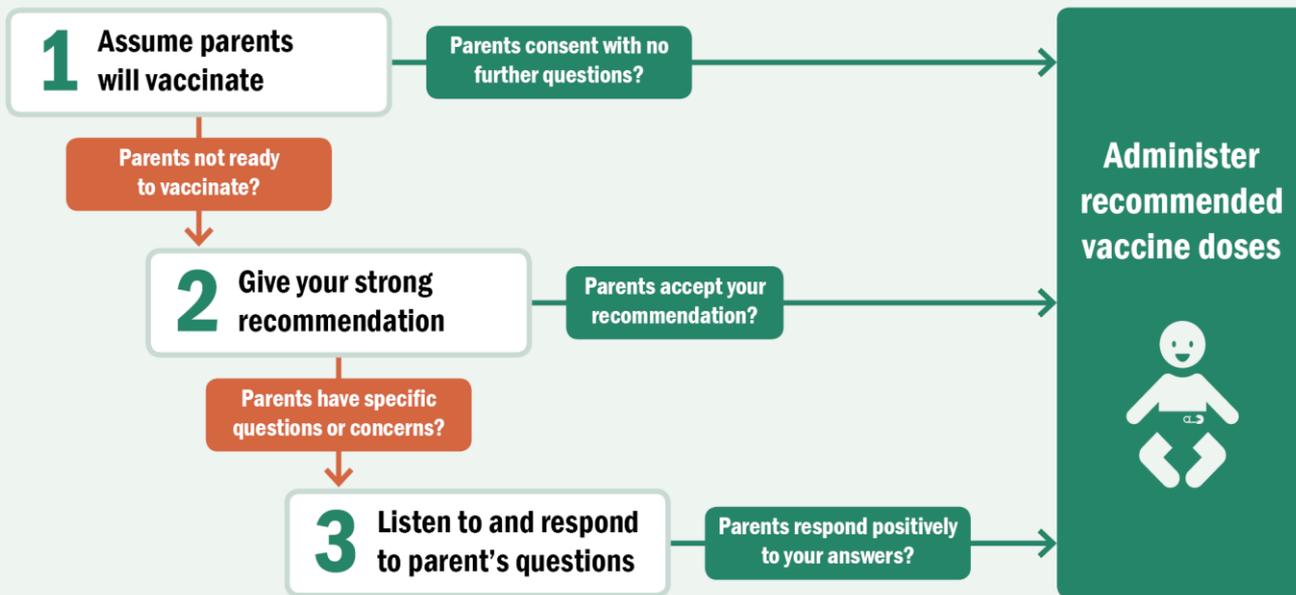
- Assume vaccination is default
- If parent has concerns → give strong recommendation + talk about their questions

*Instead of:* “What do you want to do about shots today?”

*Try:* “Today your child is due for 4 routine vaccinations: DTaP to protect against diphtheria, tetanus, and whooping cough; the polio vaccine; the chicken pox vaccine; and MMR that protects against measles, mumps, and rubella. Someone will be right in to administer these, and I look forward to seeing you at the next visit.”



# TALKING TO PARENTS ABOUT VACCINES





## TALKING TO PARENTS ABOUT VACCINES

### Corroborate, About Me, Science, Explain/Advise (CASE)

- *Corroborate*: Acknowledge concern & find common ground
- *About Me*: Describe how you've built knowledge & expertise
- *Science*: Explain the evidence
- *Explain/Advise*: Give your evidence-based recommendation



## TALKING TO PARENTS ABOUT VACCINES

- After the Visit
  - Document parents' questions and concerns
  - Follow up
- Catch missed opportunities
  - Non-primary care visits
  - Standing immunization orders
  - Extended immunization hours



## HOW TO HANDLE PARENT REFUSAL TO VACCINATE

- Educate about responsibilities:
  - Anytime child needs medical care → tell HCP they haven't received recommended vaccines
  - Need to consider vaccine-preventable disease (VPD) as diagnosis
  - Precautions to protect other patients from VPD
- Child can get disease from people who appear healthy
  - If outbreak of VPD → child needs to be taken out of school/childcare/etc. until safe to return
  - If child exposed to VPD → seek immediate medical help and alert HCP to vax status



## HOW TO HANDLE PARENT REFUSAL TO VACCINATE

- Not recommended to exclude child from your practice
- Educate about signs/symptoms of VPD
- Continue dialogue at next visit
- Consider using AAP's Refusal to Vaccinate form each time a vaccine is refused
  - A record of refusal in child's medical file
  - Requires parent signature
- CDC also has resources

**Refusal to Vaccinate**

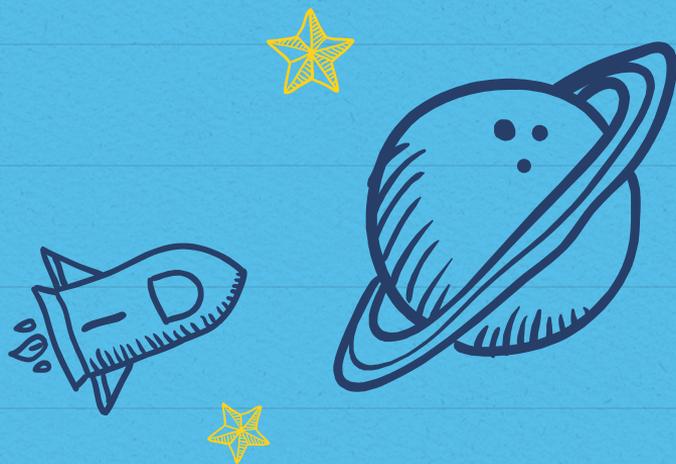
Child's Name \_\_\_\_\_ Child's ID# \_\_\_\_\_

Parent's/Guardian's Name \_\_\_\_\_

My child's doctor/nurse \_\_\_\_\_ has advised me that my child (named above) should receive the following vaccines:

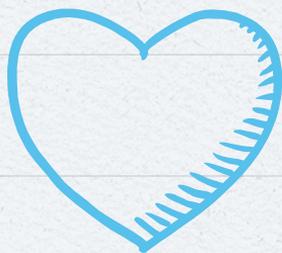
Recommended	Declined
<input type="checkbox"/> Hepatitis B vaccine	<input type="checkbox"/>
<input type="checkbox"/> Diphtheria, tetanus, acellular pertussis (DTaP or Tdap) vaccine	<input type="checkbox"/>
<input type="checkbox"/> Diphtheria tetanus (DT or Td) vaccine	<input type="checkbox"/>
<input type="checkbox"/> Haemophilus influenzae type b (Hib) vaccine	<input type="checkbox"/>
<input type="checkbox"/> Pneumococcal conjugate or polysaccharide vaccine	<input type="checkbox"/>
<input type="checkbox"/> Inactivated poliovirus (IPV) vaccine	<input type="checkbox"/>
<input type="checkbox"/> Measles-mumps-rubella (MMR) vaccine	<input type="checkbox"/>
<input type="checkbox"/> Varicella (chickenpox) vaccine	<input type="checkbox"/>

- That some vaccine-preventable diseases are common in other countries and that my unvaccinated child could easily get one of these diseases while traveling or from a traveler.
- If my child does not receive the vaccine(s) according to the medically accepted schedule, the consequences may include:
  - Contracting the illness the vaccine is designed to prevent (the outcomes of these illnesses may include one or more of the following: certain types of cancer, pneumonia, illness requiring hospitalization, death, brain damage, paralysis, meningitis, seizures, and deafness; other severe and permanent effects from these vaccine-preventable diseases are possible as well).
  - Transmitting the disease to others (including those too young to be vaccinated or those with immune problems), possibly requiring my child to stay out of child care or school and requiring someone to miss work to stay home with my child during disease outbreaks.



# PROMOTE VACCINE CONFIDENCE

Your recommendation matters.



THANKS!

Any questions?

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