

# 2023 Update on CDC Immunization Recommendations

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4/25/2023, Dane County Immunization Coalition

# Paul Hunter, MD

UW Medical School in Madison 1984 - 1989

UW Residency in Eau Claire 1989 - 1992

Family Medicine 1992 - 2011

Underserved in Milwaukee & Rockford

Public Health & Academic Medicine 2009 -

University of Wisconsin

Community-based projects and research

Teaching public health and medical students

City of Milwaukee Health Department (Imms, STDs, TB)

CDC's Advisory Committee on Immunization Practices 2016-2020



# Disclosures

- Presenter – Paul Hunter MD
- Owns stock in Merck, GSK, Pfizer, AstraZeneca, Johnson & Johnson, Moderna, Novartis
- Consultant for GSK, Sanofi, Merck, Moderna
- These financial relationships have been mitigated through slide review by the Dane County Immunization Coalition

# Learning Objectives

- Increase knowledge on the updates to the ACIP childhood and adult vaccine schedules.
- Understand different approaches to communicate with families who are vaccine hesitant

# 2023 CDC Immunization Schedules

- Compile all current CDC recommendations for routine (non-travel) vaccinations including all the changes approved in 2022
- Insurance plans required to cover vaccinations listed on this schedule
- Schedules updated annually in February

# 2023 Immunization Schedules: Web, PDF

- Child and Adolescent Immunization Schedule

[www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html](http://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html)

- Adult Immunization Schedule

[www.cdc.gov/vaccines/schedules/hcp/imz/adult.html](http://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html)

- Laminated copies on sale at:

<https://shop.immunize.org/collections/laminated-immunization-schedules>

# 2023 Immunization Schedules: Apps

- CDC Vaccine Schedules app

[www.cdc.gov/vaccines/schedules/hcp/schedule-app.html#download](http://www.cdc.gov/vaccines/schedules/hcp/schedule-app.html#download)

- Shots Immunizations by STFM/AAFP app

<https://play.google.com/store/apps/details?id=org.immunizationed.shotsG3>

<https://apps.apple.com/us/app/shots-immunizations/id958783646>

- For pneumococcal vaccines: PneumoRec VaxAdvisor

[www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html](http://www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html)

# 2023 Imm Schedules: Changes from 2022

## Changes on **Both** Child and Adult

- Added COVID-19 vaccines
- MMR: Add doses in mumps outbreak  
Priorix<sup>®</sup> (2<sup>nd</sup> MMR product)
- MenB: If 3<sup>rd</sup> dose of Trumenba<sup>®</sup> given < 4 months after 2<sup>nd</sup> dose,  
give 4<sup>th</sup> dose ≥ 4 months after 3<sup>rd</sup> dose
- Polio: Added dose for age ≥ 18 years and ↑ risk of exposure

[www.cdc.gov/vaccines/schedules/hcp/schedule-changes.html](https://www.cdc.gov/vaccines/schedules/hcp/schedule-changes.html)



# Adult Hep B - 2023 Imm Schedule Changes

## Hepatitis B

- Age-based replaced risk-based recommendation
  - All 19 - 59 years **should** be vaccinated
    - $\geq 60$  years with known risk factors **should**
    - $\geq 60$  years without known risk factors **may**
- PreHevbrio™ (4<sup>th</sup> Hep B product)
  - 3 doses over 6 months, Age  $\geq 18$  years, VBI Vaccines Delaware

# Adult Zoster - 2023 Imm Schedule Changes

Zoster: On 2022 schedule immunocompromised &  $\geq 19$  years added 2023 notes added to clarify use of titers & varicella vaccine if negative

- If immunocompetent, positive varicella titer not needed to vaccinate
  - U.S. birth before 1980 = immunity (age  $\geq 43$  years)
  - If immunocompetent & negative titer, then varicella vaccination
- If immunocompromised and no documented history of varicella infection, varicella vaccination, or prior herpes zoster
  - Then varicella vaccination - Contra-indicated
    - Except HIV & CD4  $\geq 200$  (shared clinical decision)

# Adult Pneumo - 2023 Imm Schedule Changes

## Pneumococcal

- Hyperlink to CDC app PneumRecs VaxAdvisor  
[www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html](https://www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html)

# Adult Flu - 2023 Imm Schedule Changes

## Influenza

- Preferred for age  $\geq 65$  years:
  - IIV-HD - Inactivated high-dose (Fluzone)
  - RIV - Recombinant (Flublok)
  - aIIV - Adjuvanted inactivated (Fluad)
    - If none of these 3 available, then give any other, don't wait

# Influenza timing – Guidance since 2022

- Routine annual - all persons aged  $\geq 6$  months if no contraindications
- Timing – Ideally by 10/31, best in September and October
  - Non-pregnant adults – not July and August
  - As soon as vaccine available for following groups:
    - Missed opportunity likely
    - Children 6 months - 8 years who need 2 doses –
    - Children needing 1 dose (At least 2 doses before 7/1 in previous year)
    - Pregnant in 3<sup>rd</sup> trimester
  - Continue while flu circulating ( $\rightarrow$ March) & vaccine unexpired (June)

[www.cdc.gov/flu/professionals/acip/summary/summary-recommendations.htm](https://www.cdc.gov/flu/professionals/acip/summary/summary-recommendations.htm)

# Child - 2023 Imm Schedule Changes

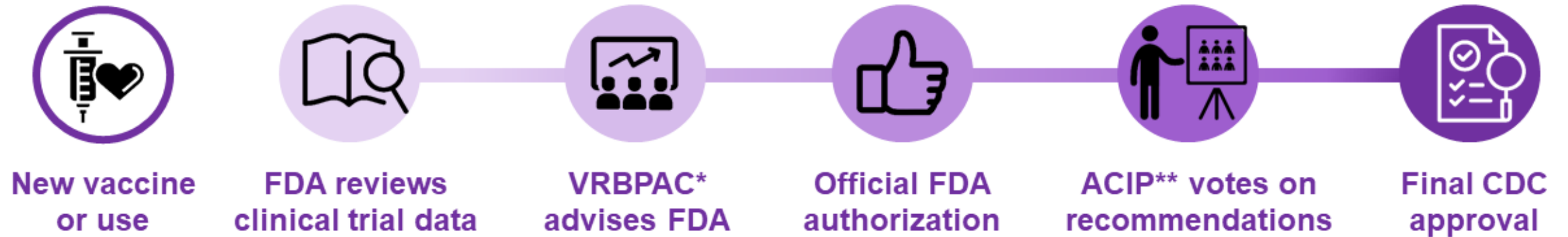
## Pneumococcal

- Added 15-valent conjugate vaccine (PCV15)

## Meningococcal

- MenACWY: New Menveo<sup>®</sup> 1-vial (all liquid) formulation should not be administered before age 10 years
- MenB: If 2<sup>nd</sup> dose of Trumenba<sup>®</sup> given  $\geq$  6 months after 1<sup>st</sup> dose, 3<sup>rd</sup> dose not needed.

# Authorization Process for New Vaccine Use



FDA = Food and Drug Administration

VRBPAC = Vaccines and Related Biological Products Advisory Committee

CDC = Centers for Disease Control and Prevention

ACIP = Advisory Committee on Immunization Practices (ACIP)

# Covid Bivalent Boosters

- No more monovalent boosters (except limited Novavax)
- 1 bivalent booster 2 months after last dose  
Age 6 months and older

3/14/23 FDA authorized, 3/16 CDC recommended  
bivalent booster for 6 mo – 4 yr  
who completed 3-dose Pfizer primary series



# Adult Vaccination Rates, USA

## Pneumococcal

- 24% for 19–64y at risk<sup>1</sup>
- 68% for ≥65y<sup>1</sup>

## Influenza

- 46% for ≥19y<sup>2</sup>

## Tdap

- 30% for ≥19y<sup>1</sup>

## Zoster

- 39% ≥60y<sup>1</sup>

## Hepatitis B

- 33% for 19–59y w diabetes<sup>2</sup>

1. Vaccination Coverage among Adults in the United States, National Health Interview Survey, 2019–2020. <https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/pubs-resources/vaccination-coverage-adults-2019-2020.html>

2. Lu P, et al. Surveillance of Vaccination Coverage Among Adult Populations — United States, 2018. *MMWR Surveill Summ* 2021;70(No. SS-3):1–26.

# Adult Vaccination Recommendations

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**Pneumococcal:** PCV20 or PCV15 + PPSV23

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**Influenza:** In Sept & Oct, Preferred 65+y - IIV-HD & RIV & aIV

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**Tdap:** q 10 year booster, 3<sup>rd</sup> trimester pregnancy

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**Zoster:** Age 50+, RZV=recombinant, 2 dose

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**Hepatitis A:** Risks: chronic liver disease, MSM, drug abuse

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**Hepatitis B:** Age 19-59 years, 60+ years if requested

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**HPV:** 27-45 years minimal benefit SDM. Catch up 19-26 years

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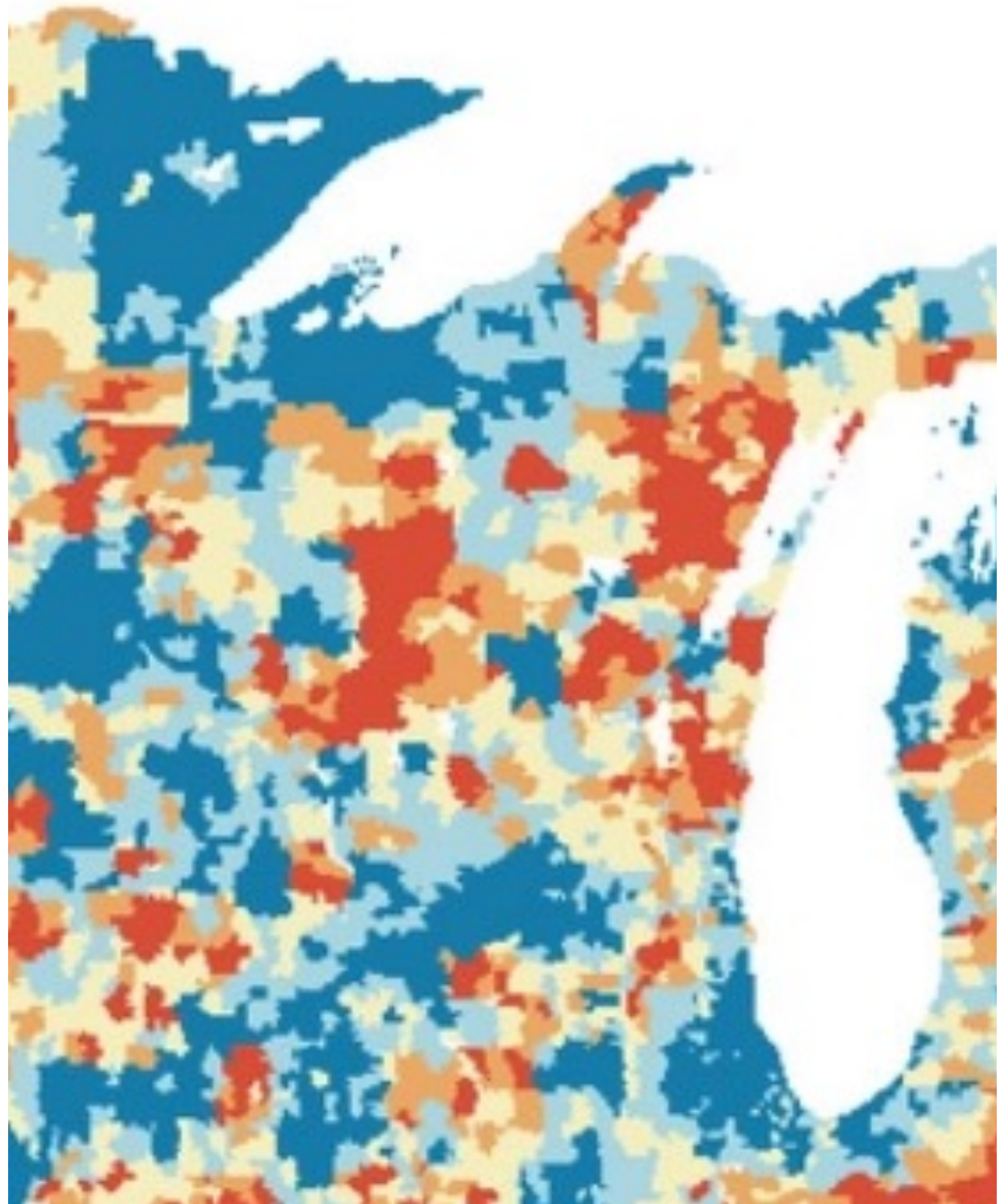
# Addressing vaccine hesitancy

Keeping vaccine conversations open and ongoing will be important ...[because of] variability in stages of readiness, fluidity of people's views, and persuasive power of... health professionals

[www.nejm.org/doi/full/10.1056/NEJMra2106441](http://www.nejm.org/doi/full/10.1056/NEJMra2106441)

- Vaccine hesitancy by ZIP code estimated via Facebook surveys
- varies substantially within a county
- 7 to 49% in rural Stearns County, MN

[www.nejm.org/doi/full/10.1056/NEJMra2106441](http://www.nejm.org/doi/full/10.1056/NEJMra2106441)



# Vaccine Communication Principles

P Hunter's suggestions for vaccinators:

- Make simple, clear, consistent recommendations
  - “You are due for vaccines **today** to prevent these diseases”
- Only if objections, then stop & listen to concerns
  - Ask what is the **main concern**
  - Assume patients have their own welfare as the goal
- Positive messages: Vaccine safety & efficacy
- Build trust – **Try again** at future visit
  - CASE\*: Corroborate, About me, Science, Explain
  - <https://www.dhs.wisconsin.gov/publications/p03023.pdf>

# Keeping up with Vaccination Recommendations

Know which vaccines to recommend when and why

- Subscribe to IZ Express: [www.immunize.org/express/](http://www.immunize.org/express/)
- Latest CDC recommendations in MMWR: [www.immunize.org/acip/acip\\_chrono.asp](http://www.immunize.org/acip/acip_chrono.asp)
- Ask the Experts: [www.immunize.org/askexperts/](http://www.immunize.org/askexperts/)

# Systemic changes versus Persuasion

- Addressing systemic barriers may be more important than improving communication by vaccinators.
- Health education and persuasion campaigns may be less likely to lead to vaccination than ...
- Decreasing inconveniences and barriers to vaccination
  - Automatically scheduled vaccination appointments
  - Phone and text reminders from doctors' offices and health depts
- <http://journals.sagepub.com/stoken/default+domain/10.1177/1529100618760521-free/full>

# Use the Registry

## Advanced Functions

- Get training in and regularly use the advanced functions
- Generate reports
  - Remove inactive patients from denominator
  - Document quality measures
  - **Identify patients who need to come in for vaccinations**



# Benefits of Standing Orders

- Efficient assessment for and administration of vaccines
- Empower nurses & medical assistants
- Improve vaccination rates in your practice.
- Protect more of your patients from preventable diseases
- Decrease opportunities for disease transmission in your clinic

[www.immunize.org/standing-orders/](http://www.immunize.org/standing-orders/)

# Increase Access to Immunizations

- Vaccinate at all appointment types including urgent care, follow up for problems, chronic disease management, and physicals
- “Nurse-only” visits for vaccinations
- Use standing orders on a walk-in basis
- Give vaccinations on evenings or weekends
- “Express” vaccination during regular office hours
- Easy-to-access site, separated from usual traffic pattern

[www.immunize.org/guide/](http://www.immunize.org/guide/)

# Vaccinate to prevent disease and save lives!

- Ask your questions now
- Or contact me later

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