

The Current Landscape of Immunizations in Wisconsin

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Division of Public Health



Session Objectives

- Discuss current state of vaccine preventable diseases in Wisconsin.
- Discuss the current immunization rates in Wisconsin.
- Discuss current immunization challenges and opportunities.
- Provide an update on the current state of the Wisconsin Immunization Registry (WIR).



Vaccine Preventable Diseases (VPD)



VPD cases in 2024

Zero cases of

Diphtheria

Rubella/Congenital Rubella Syndrome

VPD cases in 2024

Cases of

Pertussis: 2,685 Hepatitis A: 29

Mumps: 5 Perinatal Hep B: 2

Varicella: 212 HiB (less than 5y): 1

Meningococcal: 7 IPD (less than 5y): 22

Tetanus 2 Measles: 1

Pediatric Deaths 2024–2025 Respiratory Season

RSV deaths in infants: 7

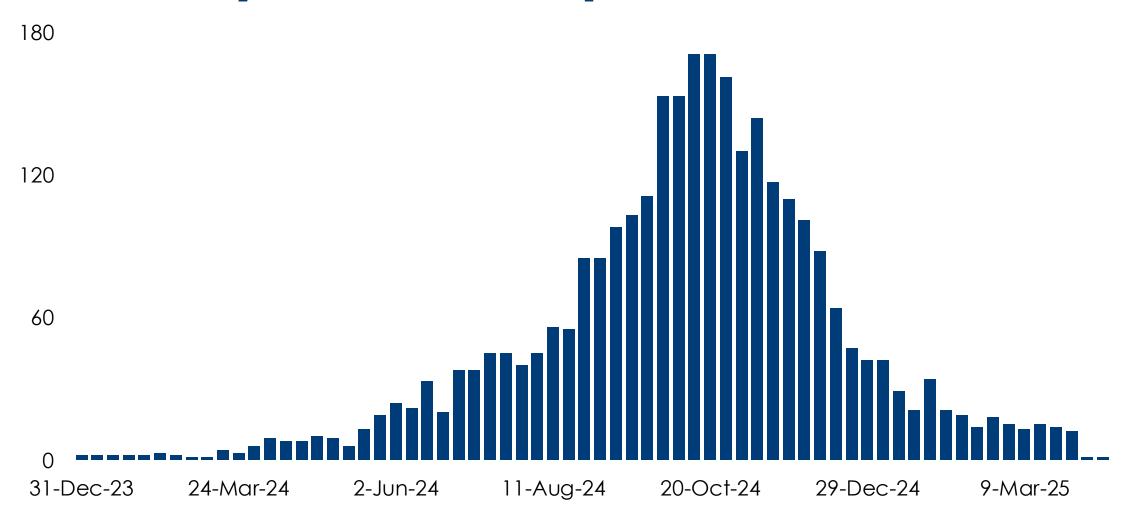
Pediatric influenza deaths: 4

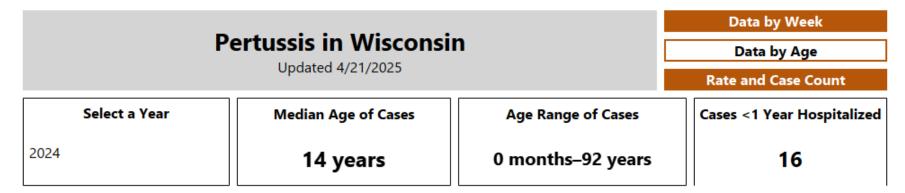


Pertussis



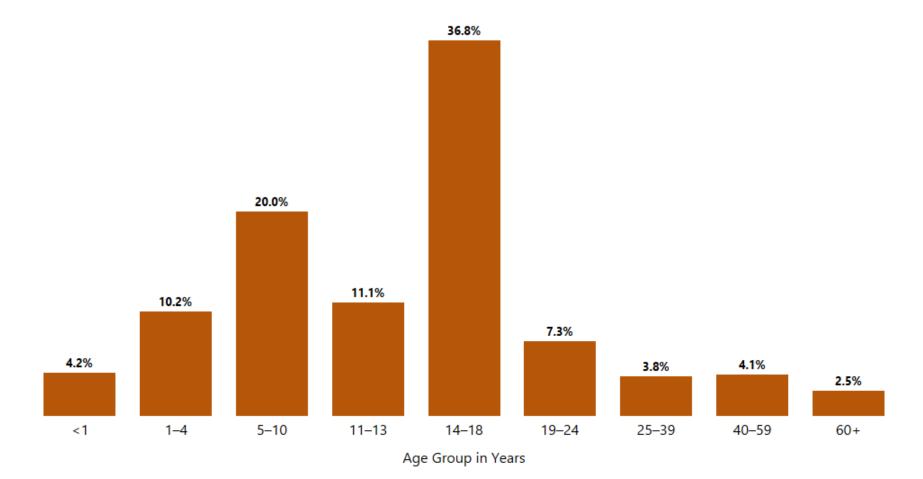
Pertussis in Wisconsin January 1, 2024–April 19, 2025





Pertussis Case Counts by Age Group

The **orange** bars represent case counts for each age group.

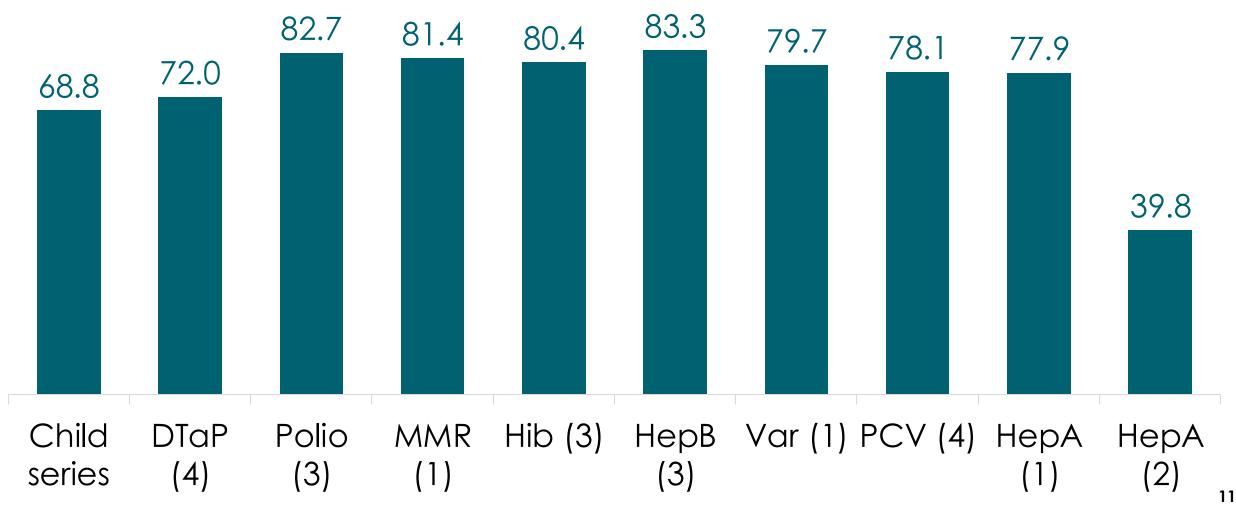




Childhood Vaccination Data



Vaccination Coverage by 24 Months, 2024

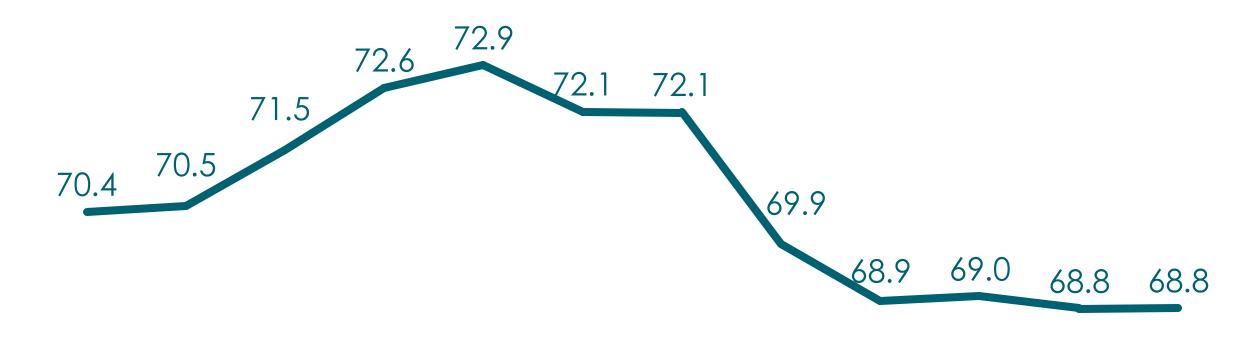


Difference Between 2023 and 2024 24-Month-Old Vaccination Rates

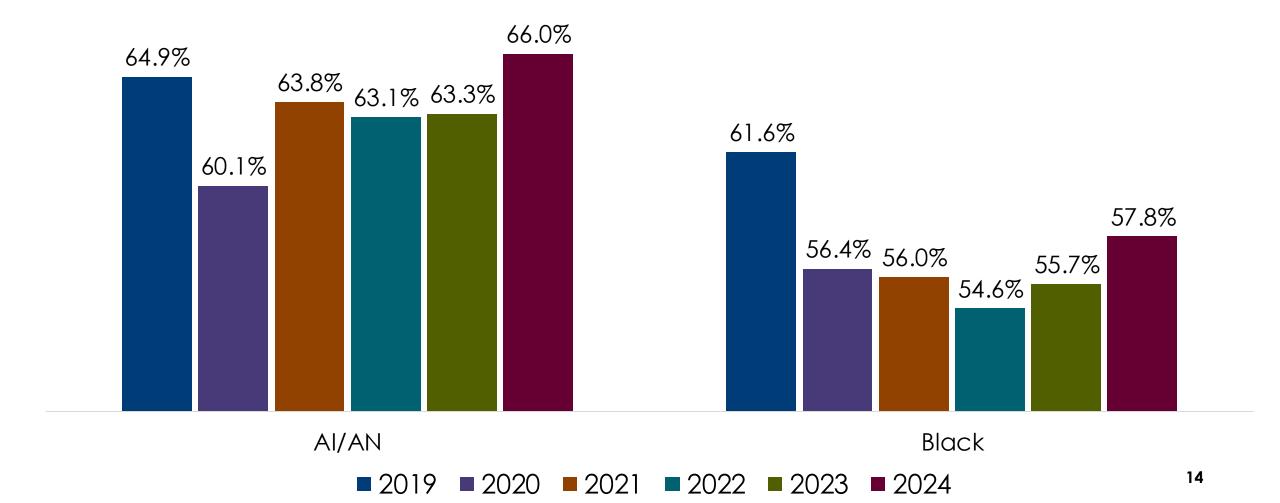
- Child series: ⇒0%
- MMR(1): ↓ -0.2%
- DTaP(4):⇒0%
- Polio(3): ↓ -0.5%
- Hib(3): ↓ -0.2%

- HepB(3):↓-0.5%
- Varicella(1): ↓ -0.4%
- PCV(4): ↓ -0.3%
- HepA(1): ↓ -0.3%
- HepA(2): ↓ -0.1%

Child Series Vaccination Coverage by 24 Months, 2013–2024



2024 24-Month-Old Vaccination Rates by Race

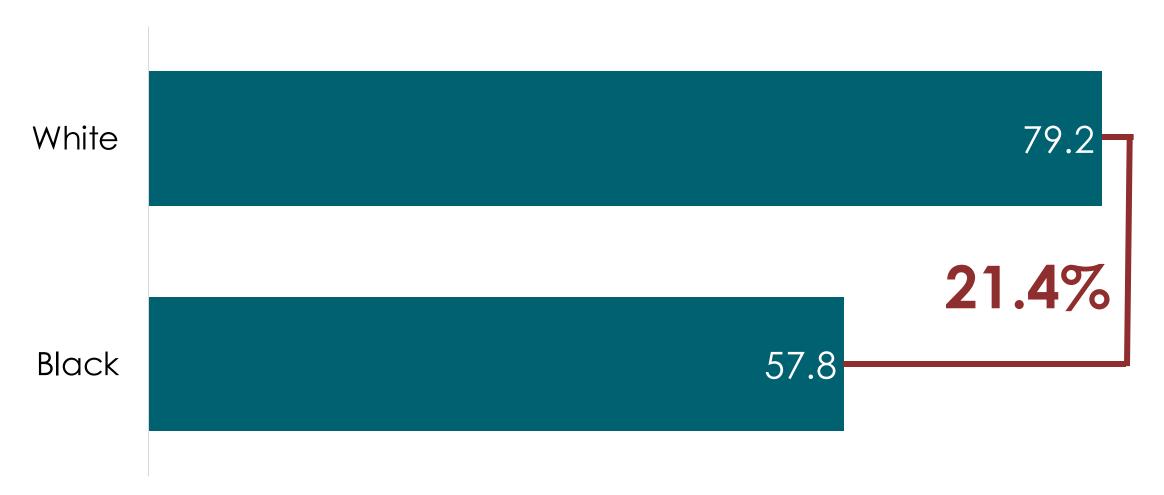


24-month Child Series Rate, 2024 by Race



^{*}American Indian, Alaska Native, Indigenous, or Native American **Asian, Native Hawaiian or Pacific Islander

24-month Child Series Rate, 2024 by Race

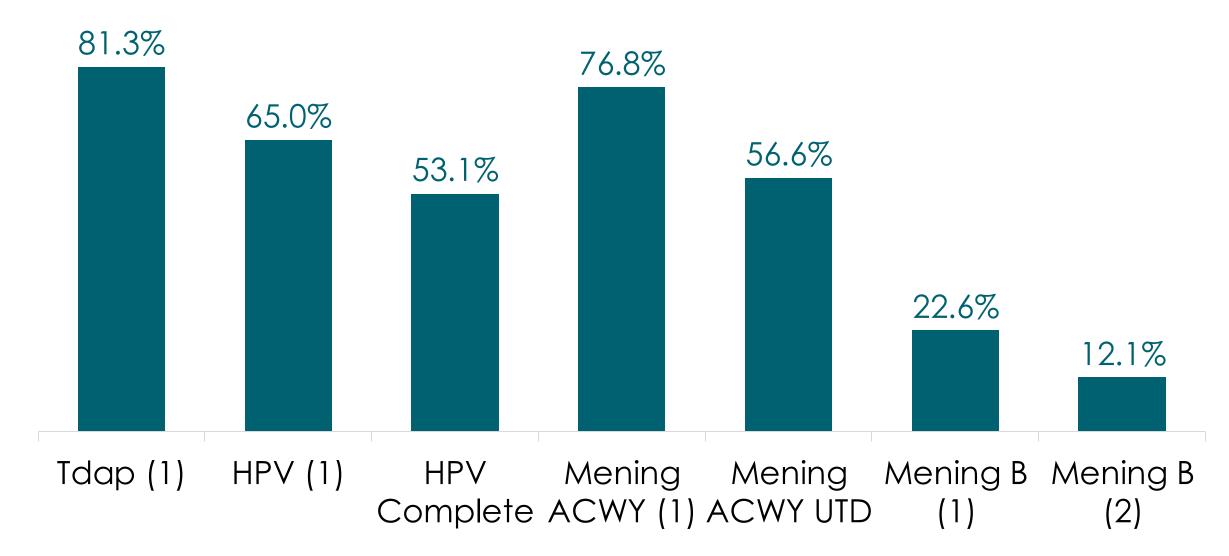




Adolescent Vaccination Data



Adolescent Vaccination Coverage, 2024



Difference Between 2023 and 2024 Adolescent Vaccination Rates

- HPV(1): ↓ -0.2%
- HPV Complete: 10.1%
- Tdap(1): **↓** 0.6%

Difference Between 2023 and 2024 Adolescent Vaccination Rates

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- Mening ACWY (1): 0.2%
- Mening ACWY (UTD): \$\mathbf{1} 5.3%
- Mening B(1): 10.9%
- Mening B(2): 1 0.3%

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School Requirements



2024–2025 School Requirements

Added meningococcal (MenACWY-containing) vaccine for students entering 7th grade and a booster dose for eligible students entering 12th grade.

Parent report of chickenpox disease is no longer acceptable for exemption from the varicella (chickenpox) vaccine.

2024–2025 School Requirements

Definition of "substantial outbreak" updated for both childcare and schools to align with CDC definition.

Added chickenpox and meningococcal disease to the outbreak definitions.



MMR



2024 MMR Vaccination Rates-WI

81.4%

of **2-year-olds** received at least 1 dose.

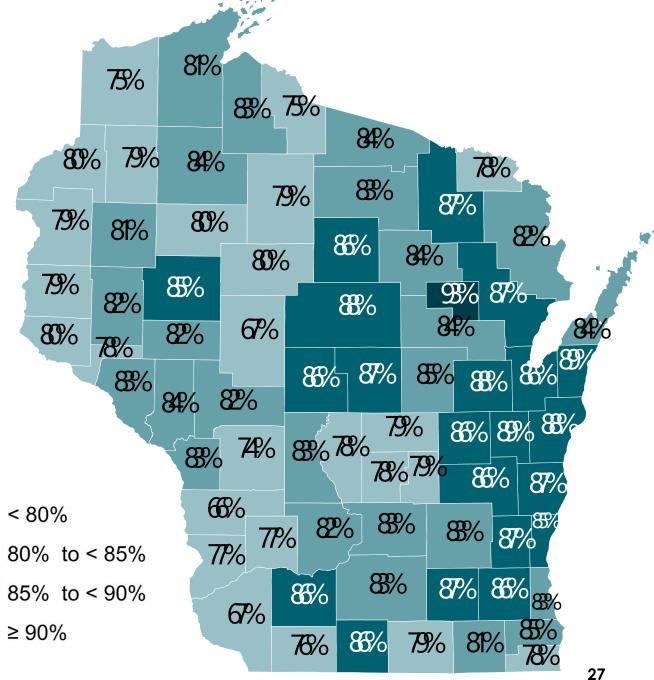


83.2%

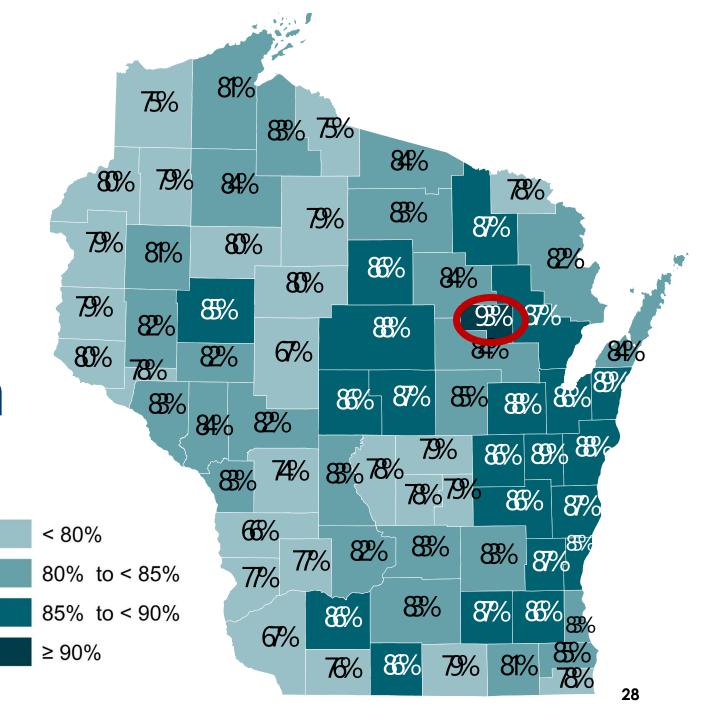
Of **5–18-year- olds** had received at least 2 doses.



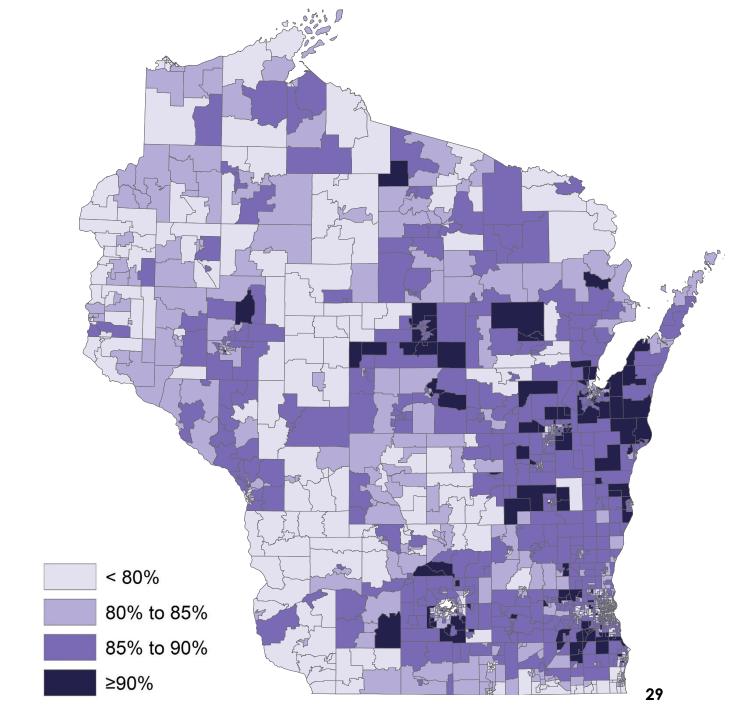
County 5-18-year-old **MMR** Vaccination Coverage, 2024



County 5-18-year-old MMR Vaccination Coverage, 2024

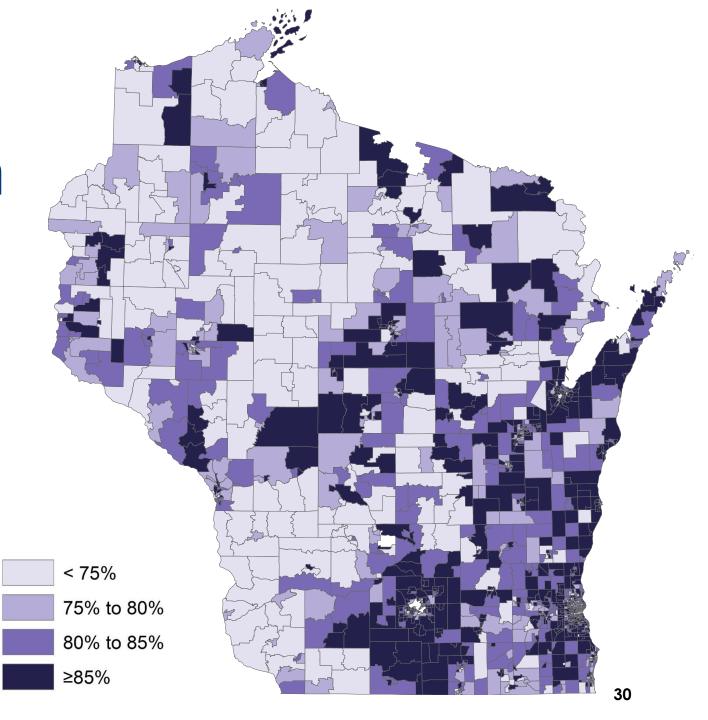


Census Tract MMR 5–18-yearold Vaccination Coverage, 2024

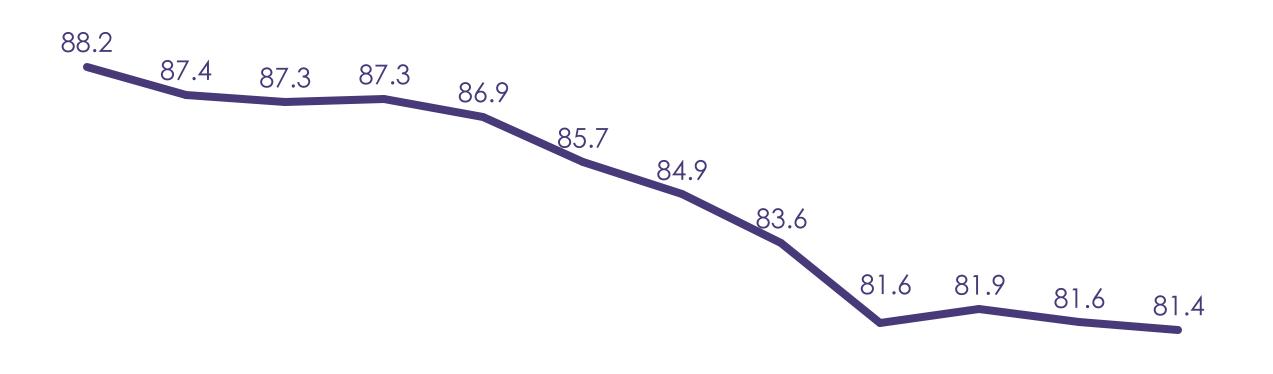


Census Tract MMR Vaccination Coverage by 24 Months, 2024

4% of census tracts had a rate at or above 95%



MMR Vaccination Coverage by 24 Months, 2013–2024



2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Measles Vaccine

Measles vaccine has been used for over 50 years.

Over 575 million doses administered worldwide.



Call to Action

Assess patients at every clinical encounter.

Reach out to those starting kindergarten this fall and schedule appointments now.

Regularly use the WIR or EMR to determine which patients are due or overdue for MMR.

Vaccinate!



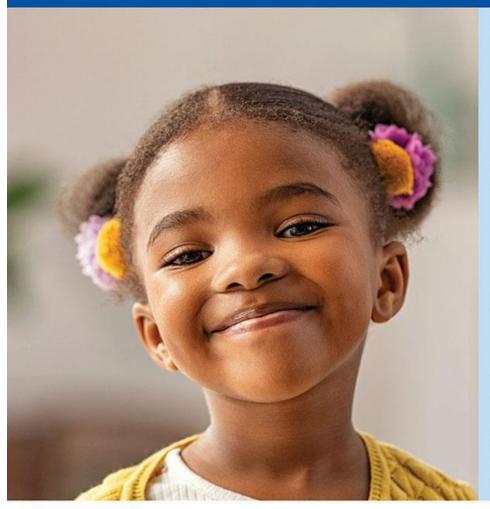
Vaccines for Children



Vaccines for Children

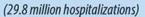
Protecting America's children every day

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





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

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





save nearly \$2.2

trillion in total
societal costs
(that includes \$479 billion in direct costs)





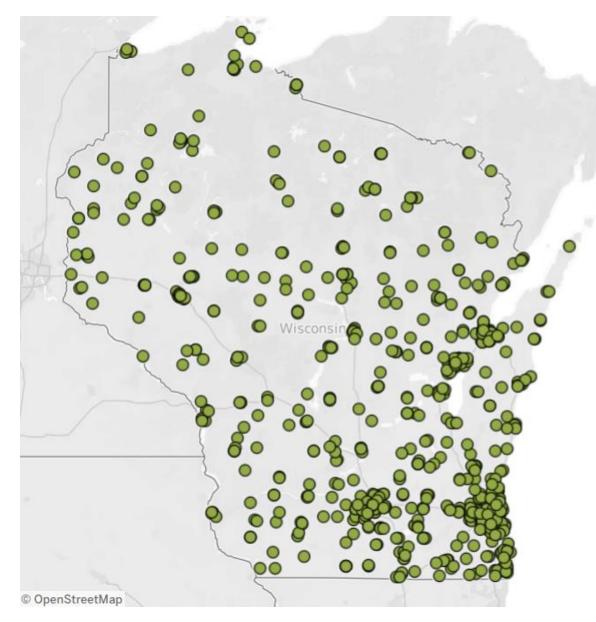
more than \$5,000 for each American

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



VFC Program in WI

- Network of 734 providers throughout the state
- In 2024, provided over 918,000 doses of vaccine
- Annual cost of nearly \$76 million
- Serves about 50% of children in the state



VFC Eligibility

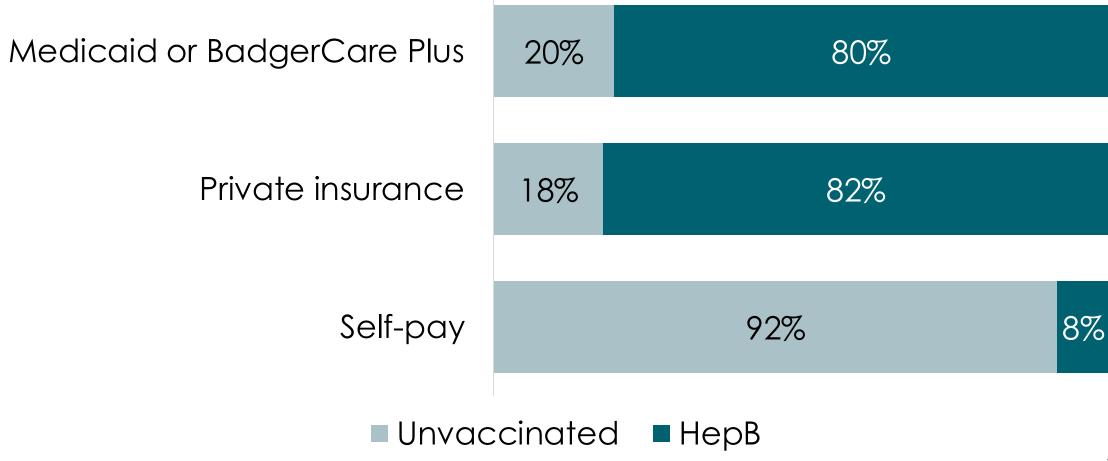
Children who are ages 18 years and younger and:

Are enrolled or eligible for Medicaid.

Are American Indian or Alaska Native.

Don't have health insurance.

Insured infants have higher hepB vaccination rates than those who are uninsured (self-pay).



Social Vulnerability Index (SVI)

Created by:

- Centers for Disease Control and Prevention (CDC)
- Agency for Toxic Substances and Disease Registry (ATSDR)

Purpose:

- Help identify communities that may need support to prepare or recover from emergency events such as severe weather or disease outbreaks.
- Guide community-based health promotion activities.

Status

Socioeconomic

Household Characteristics

Racial & Ethnic Minority Status

Housing Type & Transportation

Below 150% Poverty

Unemployed

Housing Cost Burden

No High School Diploma

No Health Insurance

Aged 65 & Older

Aged 17 & Younger

Civilian with a Disability

Single-Parent Households

English Language Proficiency

Hispanic or Latino (of any race) Black or African American, Not Hispanic or Latino Asian, Not Hispanic or Latino American Indian or Alaska Native, Not Hispanic or Latino Native Hawaiian or Pacific Islander, Not Hispanic or Latino Two or More Races, Not Hispanic or Latino Other Races, Not Hispanic or Latino

Multi-Unit Structures

Mobile Homes

Crowding

No Vehicle

Group Quarters

Social Vulnerability Index

- Percentile Rank 0-1
- Quantiles
 - High
 - Medium-High
 - Low-Medium
 - Low

Social Vulnerability Index

Census tract A

- Below 150% poverty: 15%
- Unemployment: 9%
- Uninsured: **10%**
- No Vehicle: **36%**
- Minority: **94%**
- Overall SVI Score: .9993
- SVI Category: High

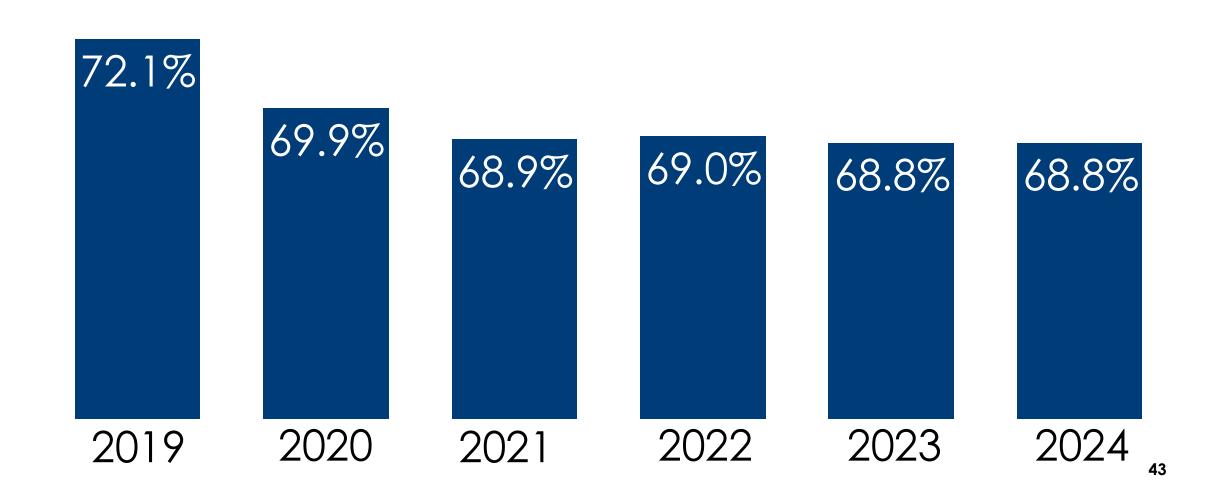
Social Vulnerability Index

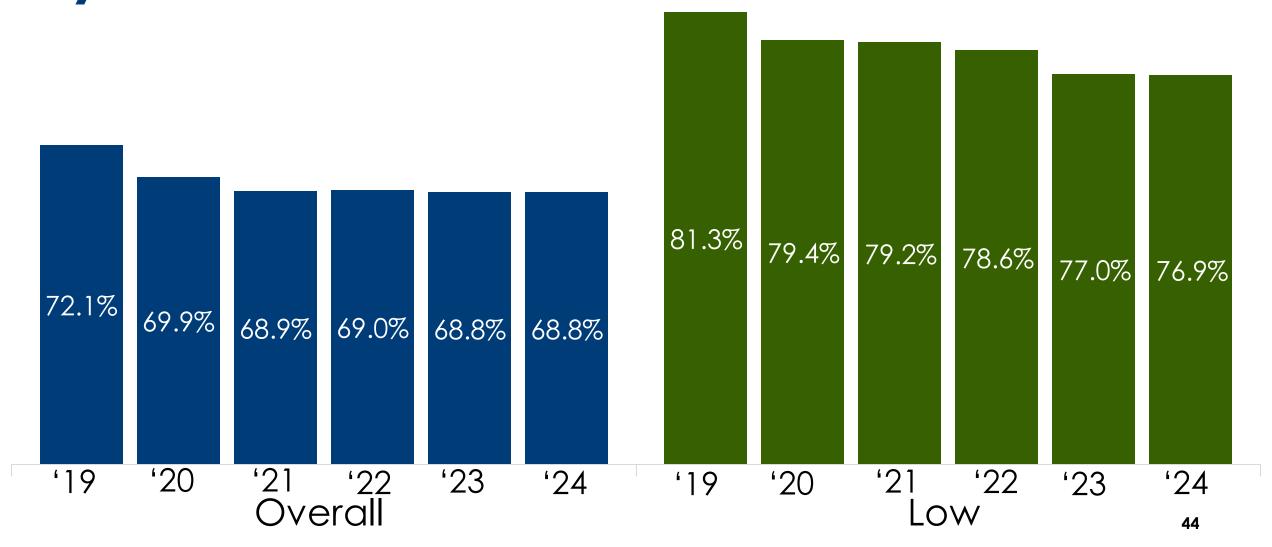
Census tract A

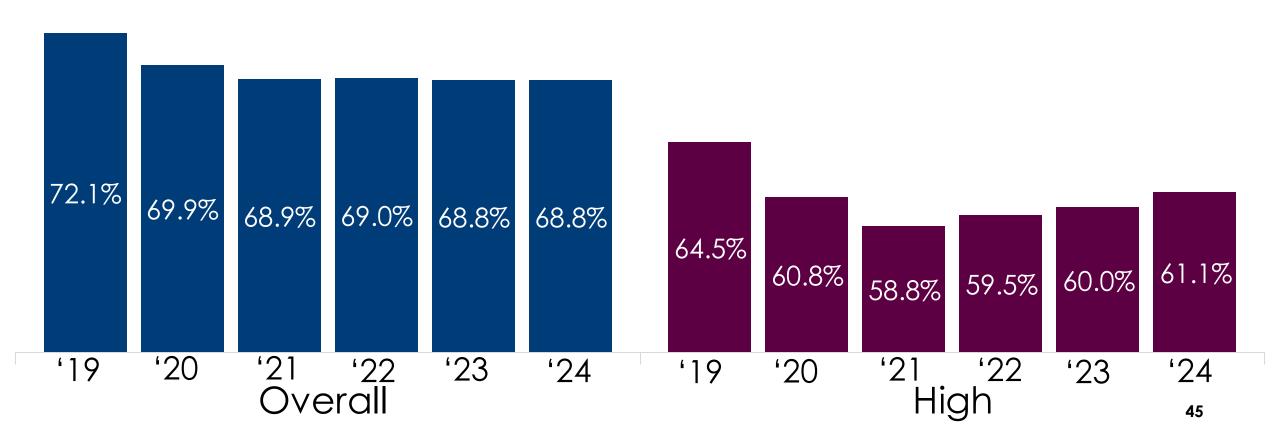
- Below 150% poverty: **15%**
- Unemployment: 9%
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- No Vehicle: **36%**
- Minority: **94%**
- Overall SVI Score: .9993
- SVI Category: High

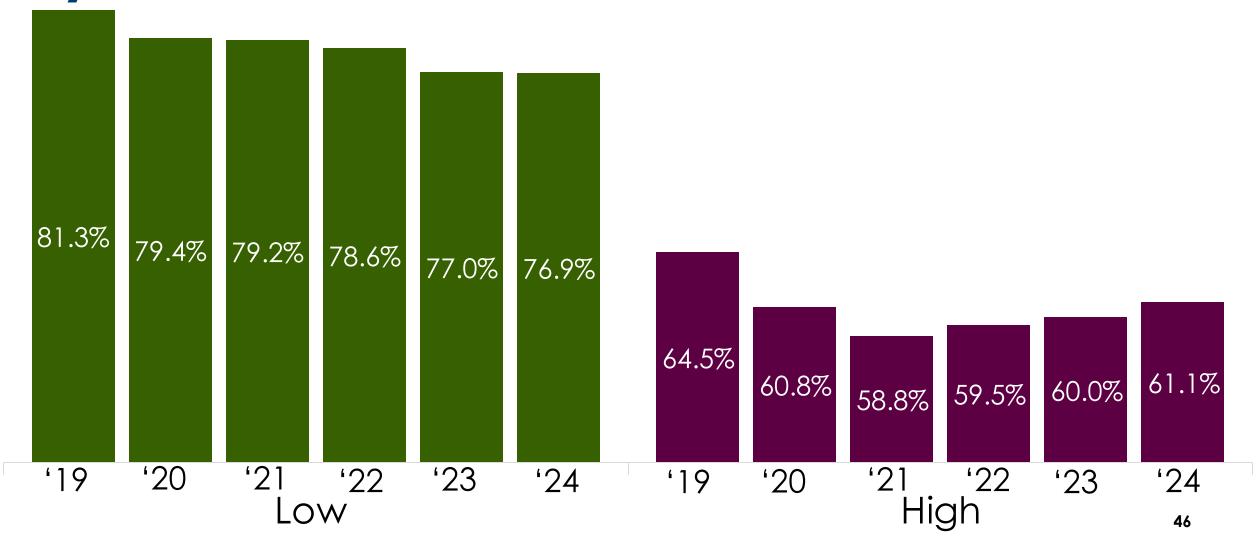
Census tract B

- Below 150% poverty: 1%
- Unemployment: 1%
- Uninsured: 1%
- No Vehicle: **1%**
- Minority: 12%
- Overall SVI Score: .002
- SVI Category: Low









Key Findings

 Children living in census tracts with higher vulnerability had lower series completion rates.

Overall Vulnerability

Socioeconomic Status

Household Characteristics

Racial & Ethnic Minority Status

Housing Type & Transportation

Below 150% Poverty

Unemployed

Housing Cost Burden

No High School Diploma

No Health Insurance

Aged 65 & Older

Aged 17 & Younger

Civilian with a Disability

Single-Parent Households

English Language Proficiency

Hispanic or Latino (of any race)
Black or African American, Not Hispanic or Latino
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Other Races, Not Hispanic or Latino

Multi-Unit Structures

Mobile Homes

Crowding

No Vehicle

Group Quarters

Social Vulnerability Index

Key Findings

 The metrics with the largest difference in vaccination rates between children living in low versus high vulnerability census tracts were poverty and lack of health insurance.

Call to Action

Ensure all families know about VFC.

Carry and administer all ACIP recommended vaccines (including COVID, RSV).*



Pregnancy



The following vaccines are recommended by the Advisory Committee on Immunization Practices (ACIP) during pregnancy:



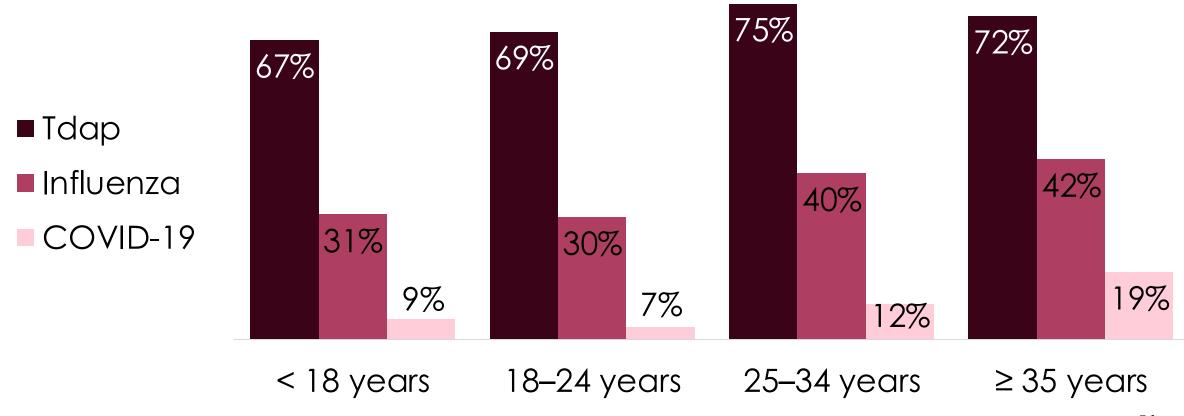
- Tdap
- Influenza
- COVID-19
- RSV*



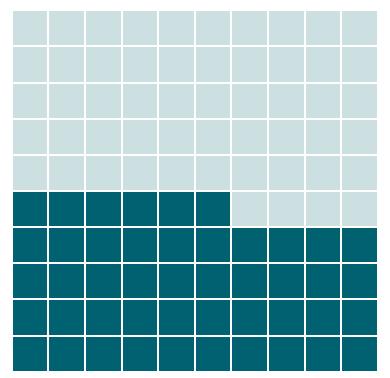
77%

of pregnant people received vaccines during their prenatal period

Vaccination During Pregnancy

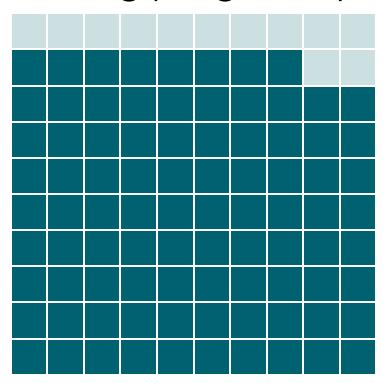






46% of infants received hepB at birth

Vaccinated during pregnancy



88% of infants received hepB at birth

Call to Action

Talk to expecting parents early on about vaccination during pregnancy.

Provide information during pregnancy about childhood vaccines and Hepatitis B birth dose.





Vaccine Administration During Pregnancy in Wisconsin

Tdap, Influenza, COVID-19, and RSV Vaccination Coverage Report, 2021-2023

Wisconsin Immunization Program

Immunization Data Reports



Where to Find Immunization Data

• <u>Immunization data homepage</u> <u>link</u>

 Tiled images navigate to data dashboards

Data pages



RSV immunization data

The Department of Health Services reports on RSV immunization for infants ages 0 to 19 months and adults ages 18 to 49 and 60+ years.

View RSV immunization



COVID-19 vaccination data

DHS reports on updated COVID-19 vaccination for Wisconsin residents 6 months and older.

> Visit the COVID-19 vaccination data page



Child and adolescent vaccine data

DHS reports on vaccination data for children and adolescents in Wisconsin.

View child and adolescent vaccine data



Flu vaccination data

The Department of Health Services reports on flu vaccinations for people at least 6 months old who have received at least one dose of flu vaccine during the season.

View flu vaccination data

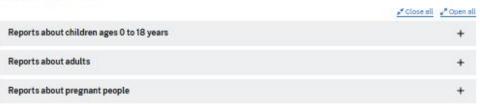


Impact of COVID-19 on routine vaccination

The COVID-19 pandemic caused many children and teenagers to fall behind schedule for vaccines. This dashboard compares quarterly vaccination rates to the average rates of the three years before the pandemic.

See the impact of COVID-19 on routine vaccination

Data reports



Where to Find Immunization Data

 Click + to expand accordion drop downs for data reports

Data pages



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See the impact of COVID-19 on routine vaccination

Data reports

Reports about children ages 0 to 18 years +

Reports about adults +

Reports about pregnant people +

Vaccines During Pregnancy: Fact Sheet and Technical Report

Vaccinations During Pregnancy in Wisconsin, 2023a

Health care providers play an important role in ensuring the health of their pregnant patients and newborns. A recommendation from a health care professional is the top predictor of patients getting vaccinated (1,2). To protect newborns and pregnant people against serious complications from diseases, health care providers should recommend the Tdap, Influenza (flu), COVID-19, and RSV vaccines to their pregnant patients.

Figure 1: In 2023, three out of four patients received the Tdap vaccine, but only one in 10 received the COVID-19 vaccine, suggesting missed opportunities.^{b-f}



Providers may co-administer COVID-19, Influenza, and RSV (when applicable) vaccines to their patients when giving the Tdap vaccine. Co-administration ensures that individuals who may have difficulty accessing care or may experience several barriers in coming to the clinic are fully protected.

Figure 2: For Tdap, Influenza, and RSV vaccines, most pregnant people received the vaccines in traditional medical settings while most COVID-19 vaccines were administered in pharmacies.

| Location Vaccinated | Tdap | Influenza | RSV | COVID-19 |
|----------------------------|-------|-----------|-------|----------|
| Clinic or Medical Practice | 59.2% | 49.7% | 57.8% | 33.9% |
| Pharmacy | 4.3% | 11.5% | 16.1% | 49.7% |
| Birthing Hospital | 11.8% | 11.7% | 11.2% | 6.9% |
| OB/GYN | 21.7% | 11.8% | 11.8% | 0.3% |
| All Others | 3.1% | 15.3% | 3.2% | 9.2% |

Other locations include federally qualified health centers, local and Tribal public health department clinics, occupational health centers, workplace settings, and other non-traditional settings.

Providing access to vaccines in convenient locations is one strategy that may improve vaccination coverage.

Figure 3: Black pregnant people experienced the lowest vaccination rates for COVID-19, RSV, Influenza, and Tdap vaccines while Asian pregnant people experienced the highest vaccination rates for these vaccines.

| | COVID-19 | RSV | Influenza | Tdap |
|------------------------------------|----------|-----|-----------|------|
| American Indian / Alaska Native | 12% | 14% | 40% | 74% |
| Asian* | 19% | 35% | 53% | 83% |
| Black | 10% | 11% | 28% | 64% |
| Hispanic | 12% | 16% | 43% | 79% |
| White | 13% | 18% | 40% | 77% |
| Multi-race | 11% | 17% | 33% | 72% |
| Other | 14% | 15% | 50% | 79% |

The COVID-19 pandemic highlighted racial disparities in disease burden and access to vaccines. Lack of access to health care, prior instances of discrimination from health care providers, historical mistrust of the medical field, and lower income due to systemic inequities contributed to lower vaccination rates among Black, Hispanic, and American Indian and Alaskan Natives in general (3,4,5). These disparities stress the importance for health care providers to foster patient trust, especially among pregnant patients who are at increased risk of severe illness from COVID-19, RSV, Influenza, and Pertussis. Vaccine recommendations or referrals for vaccination from health care providers remain essential for improving vaccination coverage rates among pregnant people and may help decrease vaccine hesitancy (6).



Vaccine Administration During Pregnancy in Wisconsin

Tdap, Influenza, COVID-19, and RSV Vaccination Coverage Report, 2021–2023

Wisconsin Immunization Program



Wisconsin Immunization Registry (WIR)



WIR Modernization Project Overview

- Wisconsin Immunization Registry (WIR) has served Wisconsin for over 20 years.
- To ensure continued implementation of standards and technology, Division of Public Health (DPH) is currently exploring options for a new Immunization Information System (IIS) that would replace WIR.
- We plan to retain much of the functionality of WIR in its current state when deciding on an IIS vendor.

WIR Modernization Project Overview

• Stakeholder surveys were conducted to gather feedback and input into the features important to retain from the current system and ways to enhance a future system.

• DPH is in the procurement phase of the project and will provide updates on the WIR website and through email to users and the public.



WIR Modernization Project Status

- ✓ DPH requirements gathering complete
- ✓ Stakeholder surveys to gather input complete
- Discussions with other states
- Procurement in progress
- Communication plan developed
- Frequently Asked Questions (FAQ)

WIR Modernization Key Requirements

- Support current IIS functional standards
- Interoperability with Electronic Health Records
- Public (consumer) access

- Interoperability with IZ Gateway
- Enhanced reporting capabilities
- More user friendly
- Barcode scanning

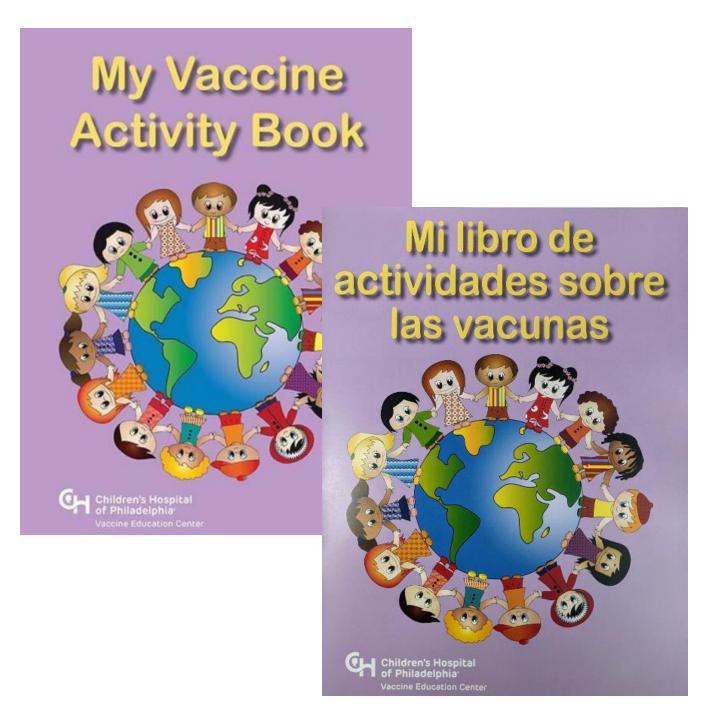
Acknowledgements

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Free Copies Available





Thank you!