

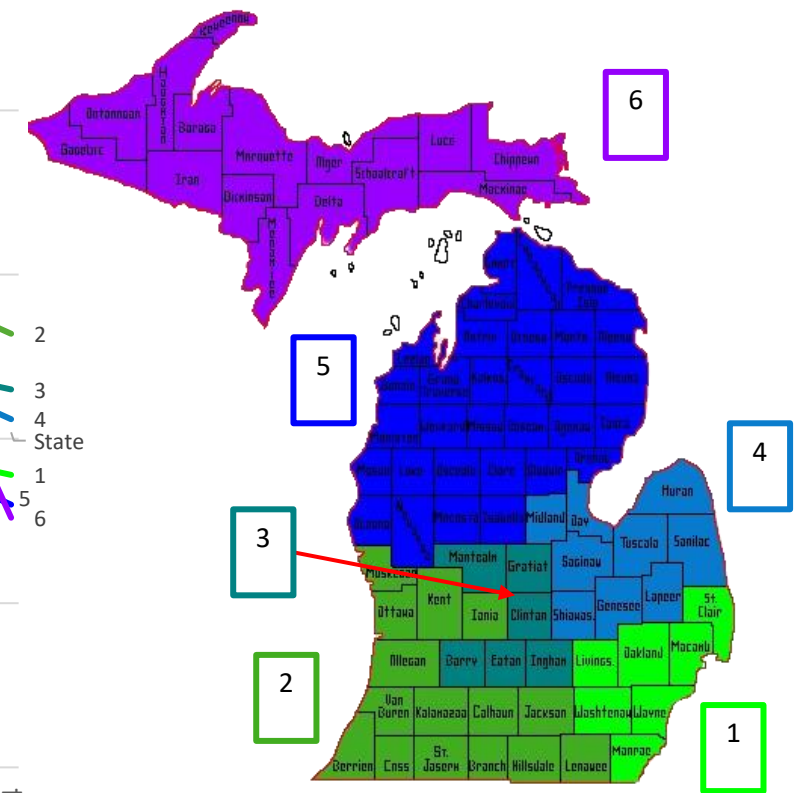
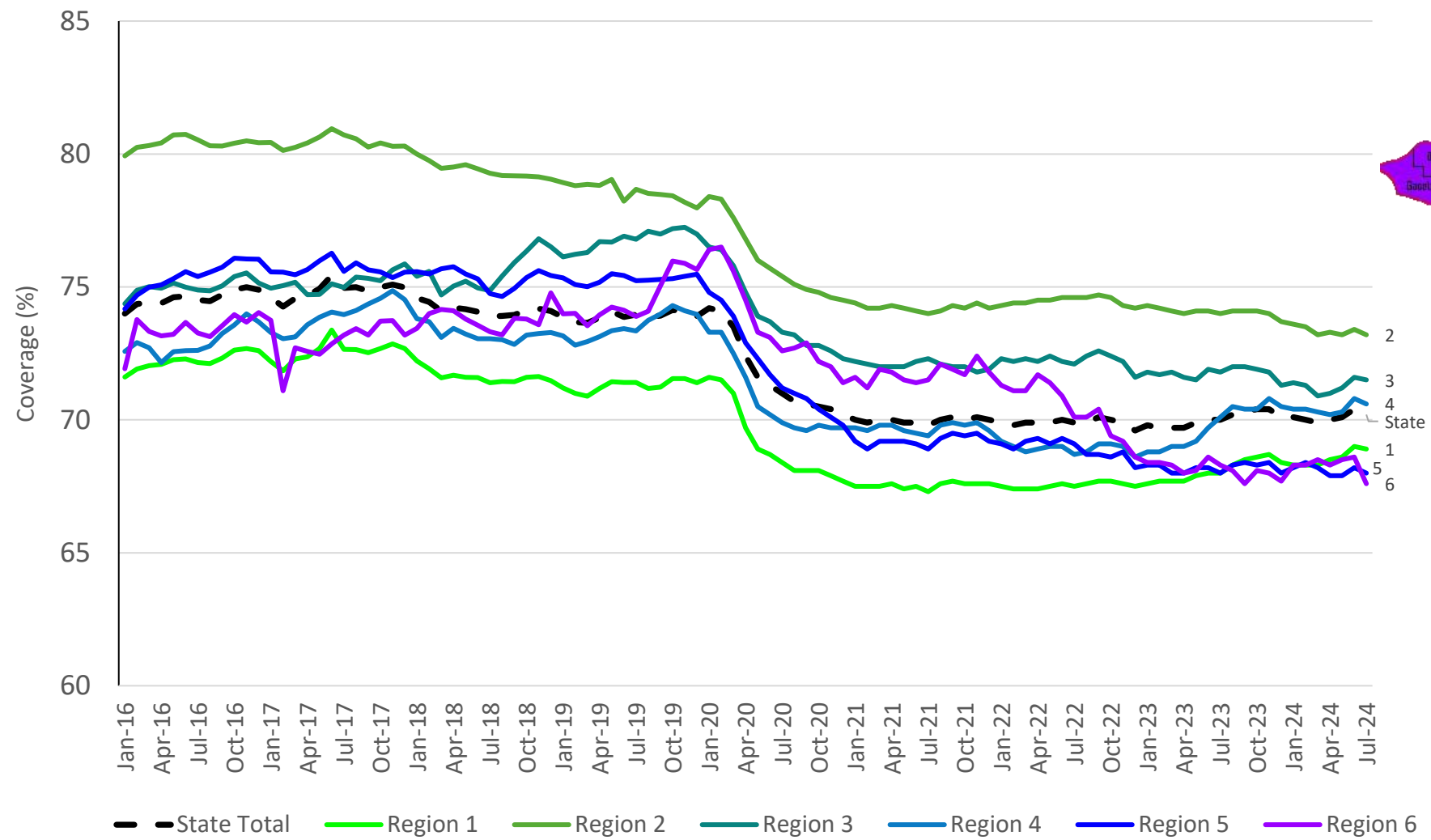
Immunization Rates and VPD Trends in Michigan

Thrishika Bala, MPH
VPD Surveillance Epidemiologist



Child and Adolescent Coverage

4313314 Coverage by MCIR Region

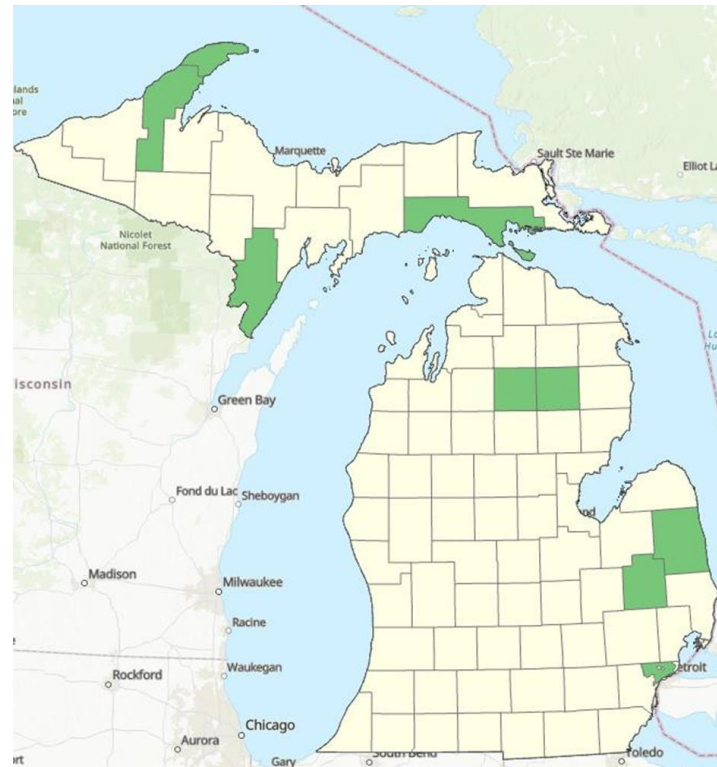


Childhood Coverage by County

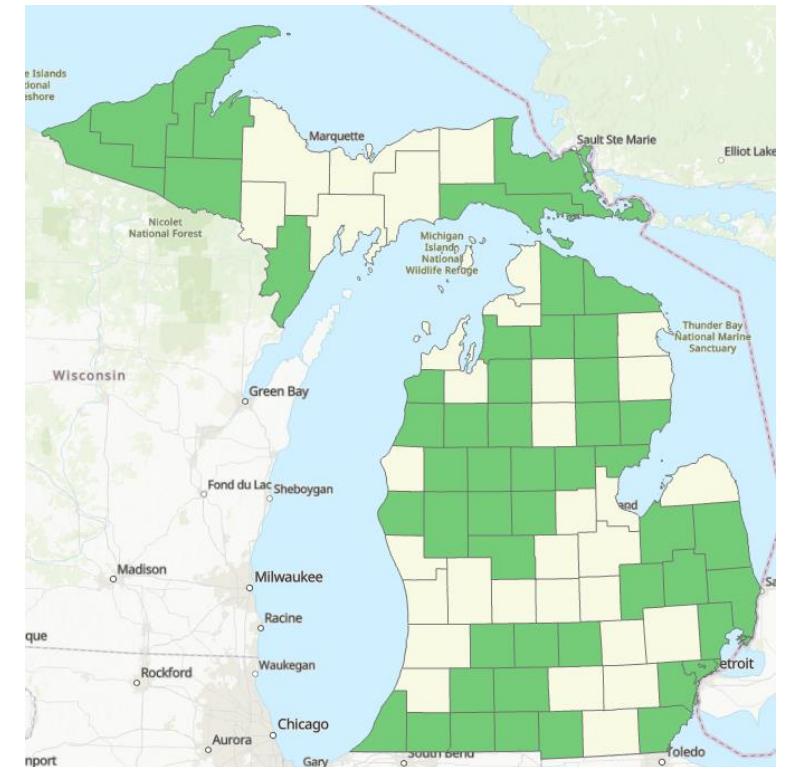
2011



2017



2024



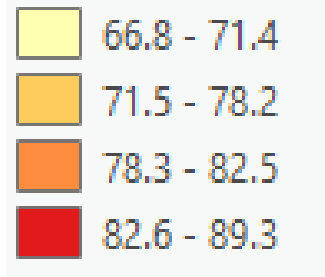
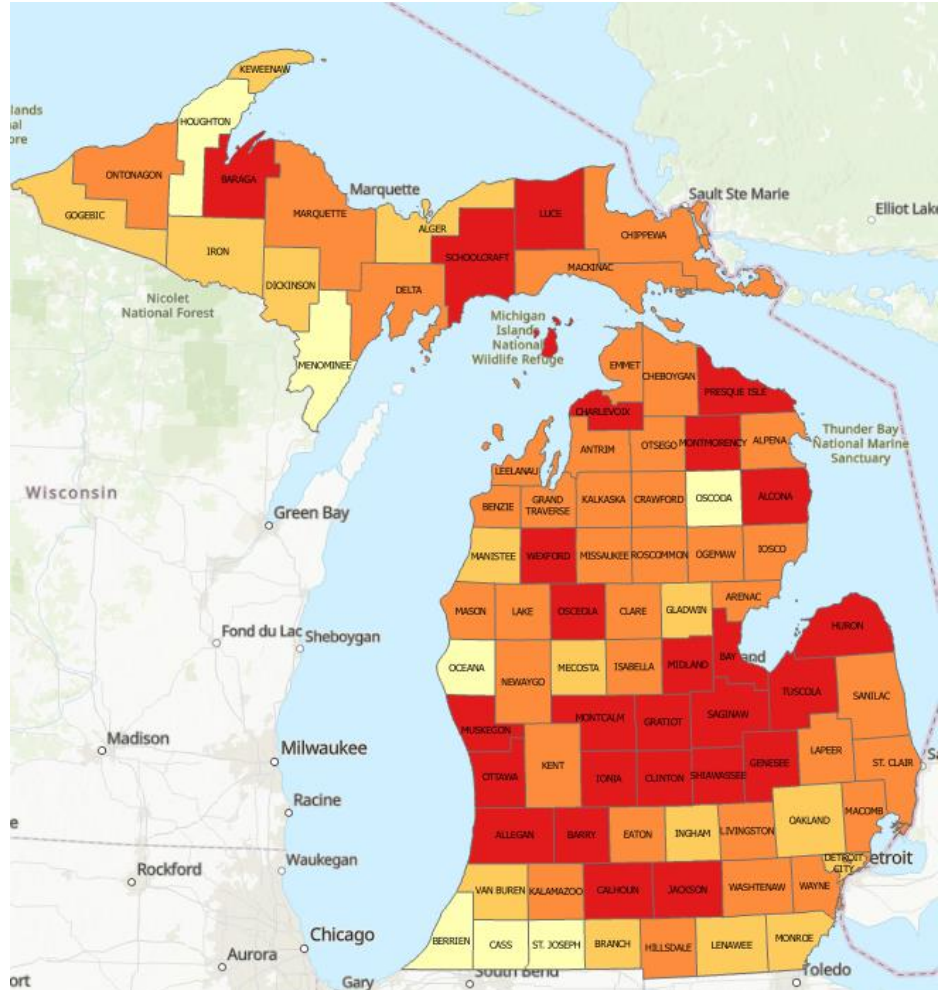
Dark green counties have a coverage rate of 70% or lower

Children 19-35 months

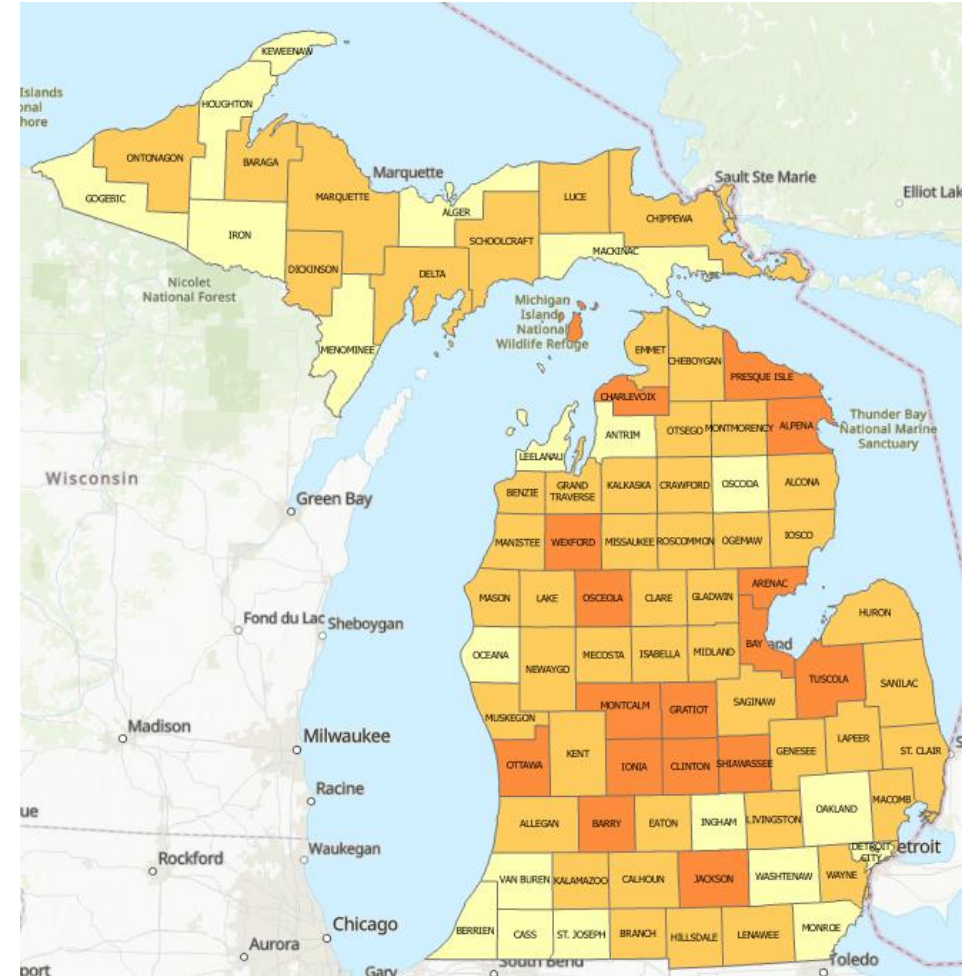
4313314 series: 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Varicella, 4 PCV

132321 Series by County

2019



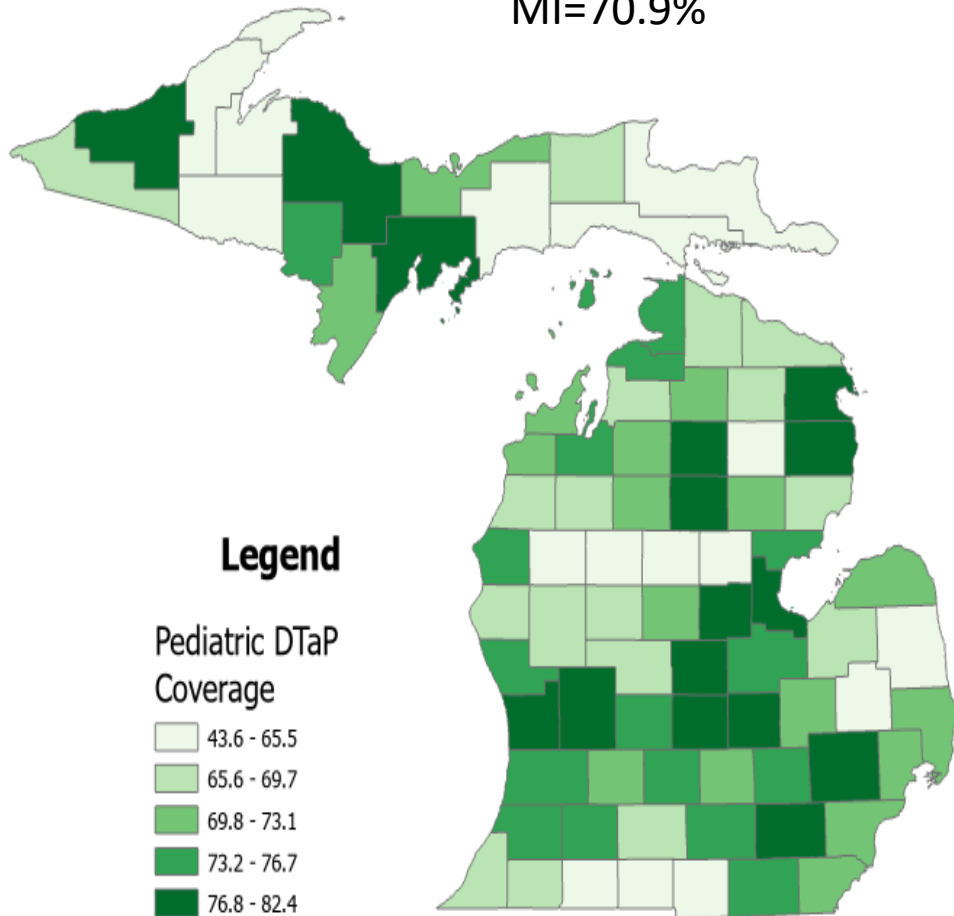
2024



DTaP/TDaP MCIR Coverage

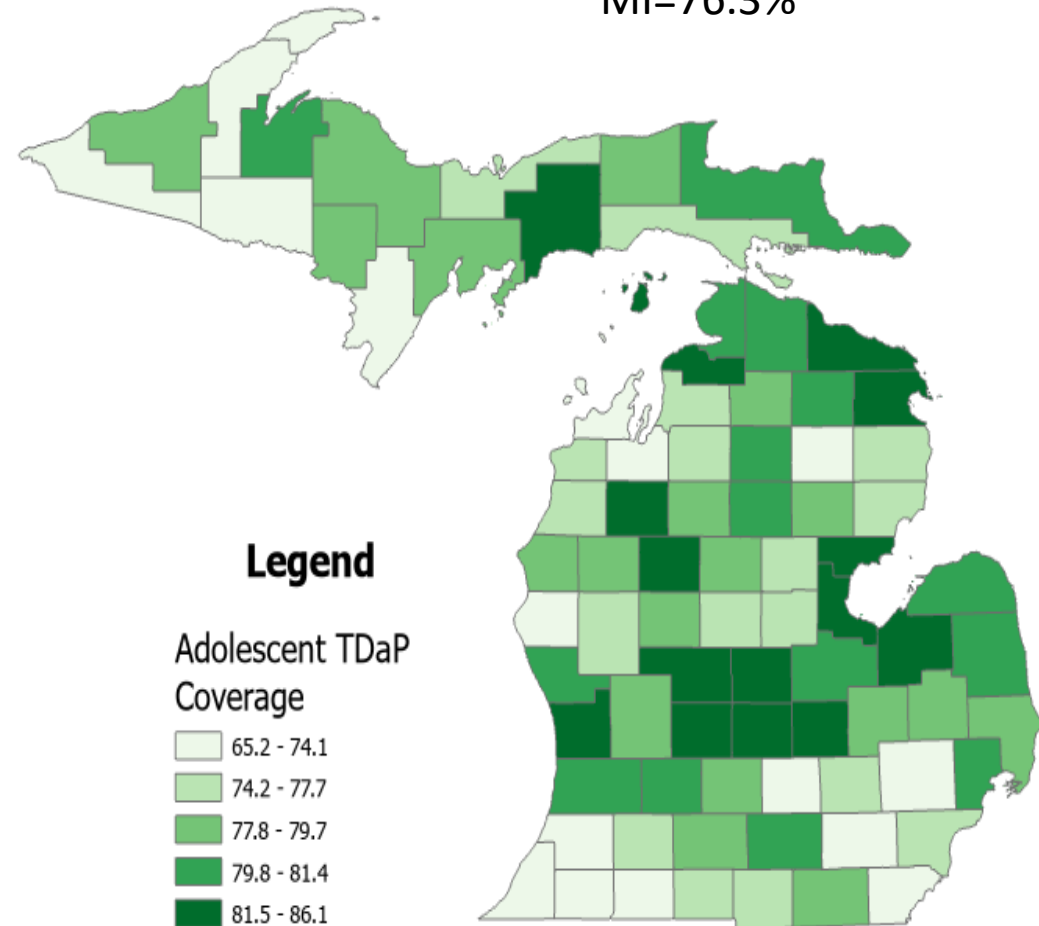
19 to 35 month olds

MI=70.9%

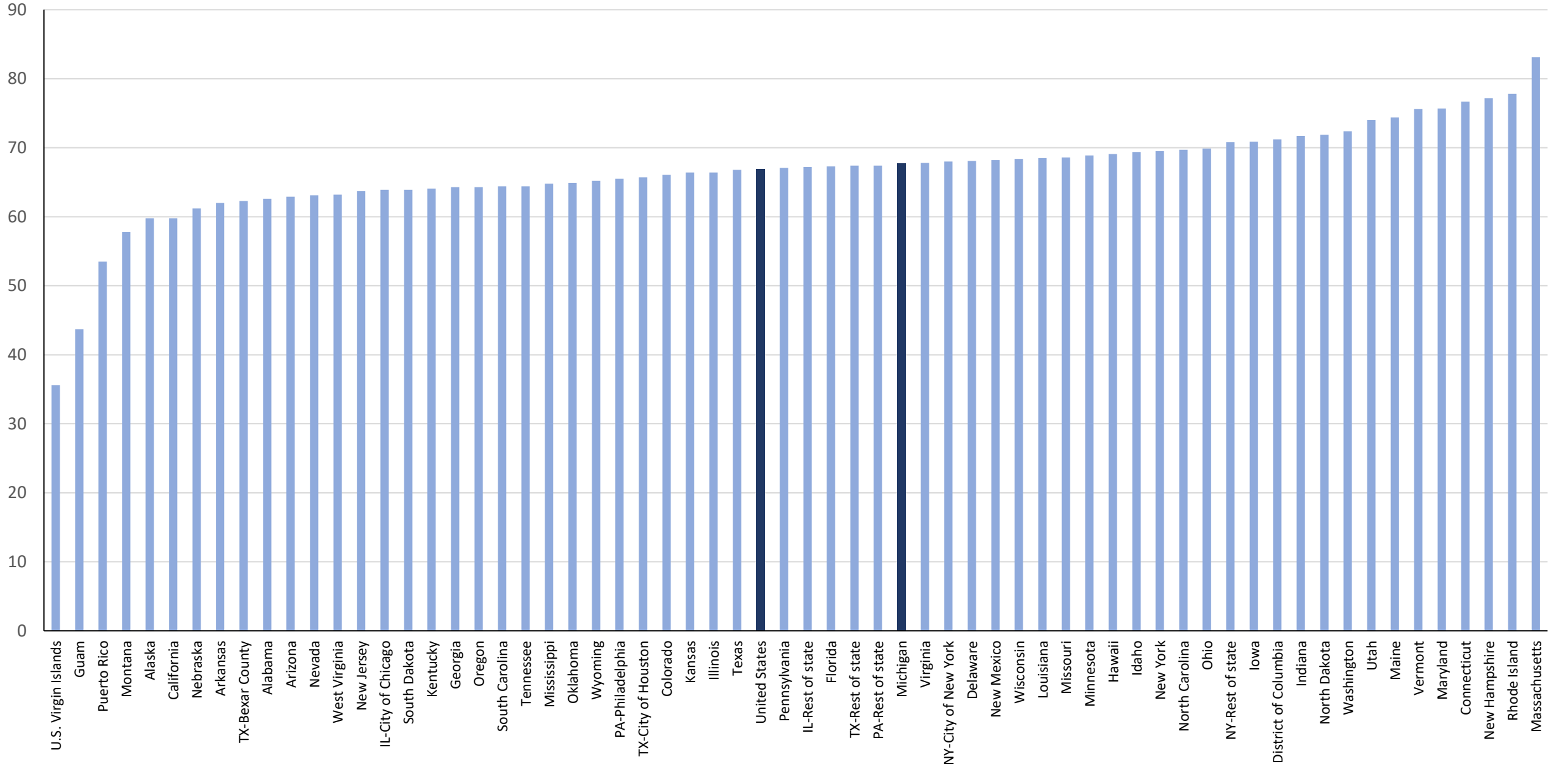


13 to 17 month olds

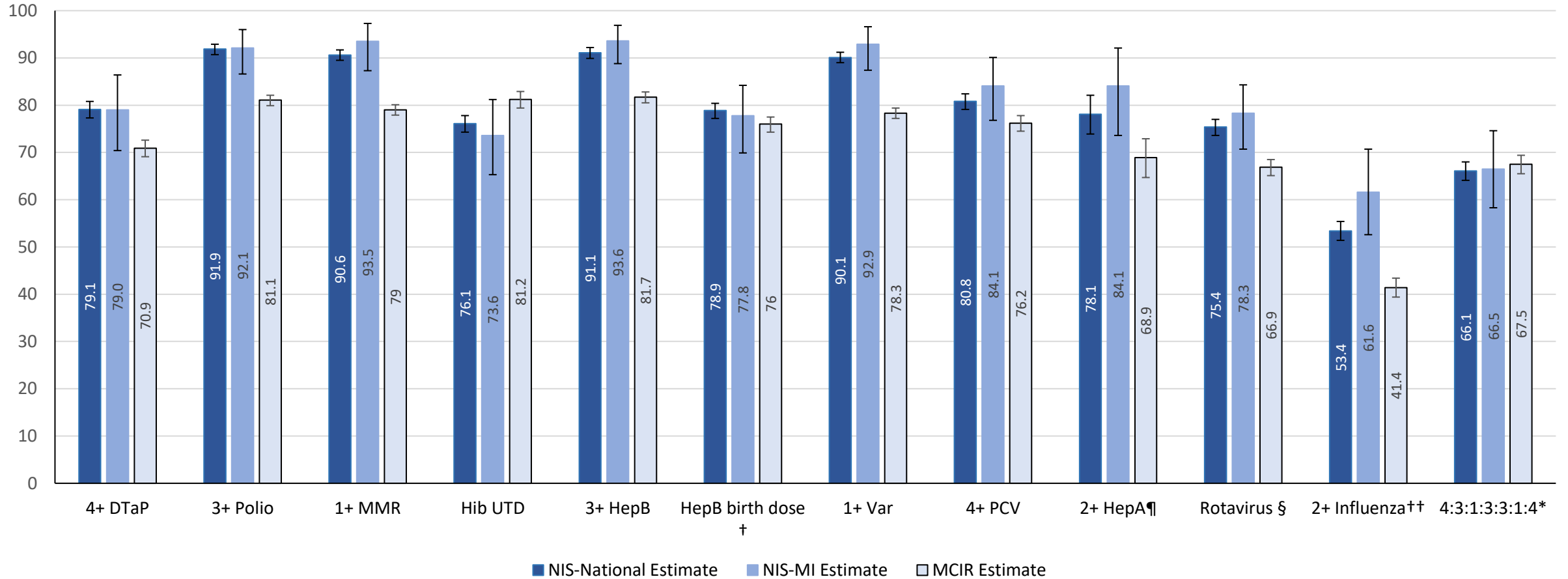
MI=76.3%



Combined 7 Series Coverage by 24 Months for Children Born in 2020-2021, National Immunization Survey



Comparison of Estimates for Child Vaccination Coverage by 24 months among Children Born in 2021 for Select Vaccines and Doses - 2023 NIS-Child & MCIR as of October 31, 2024



† One dose of HepB within 3 days of birth

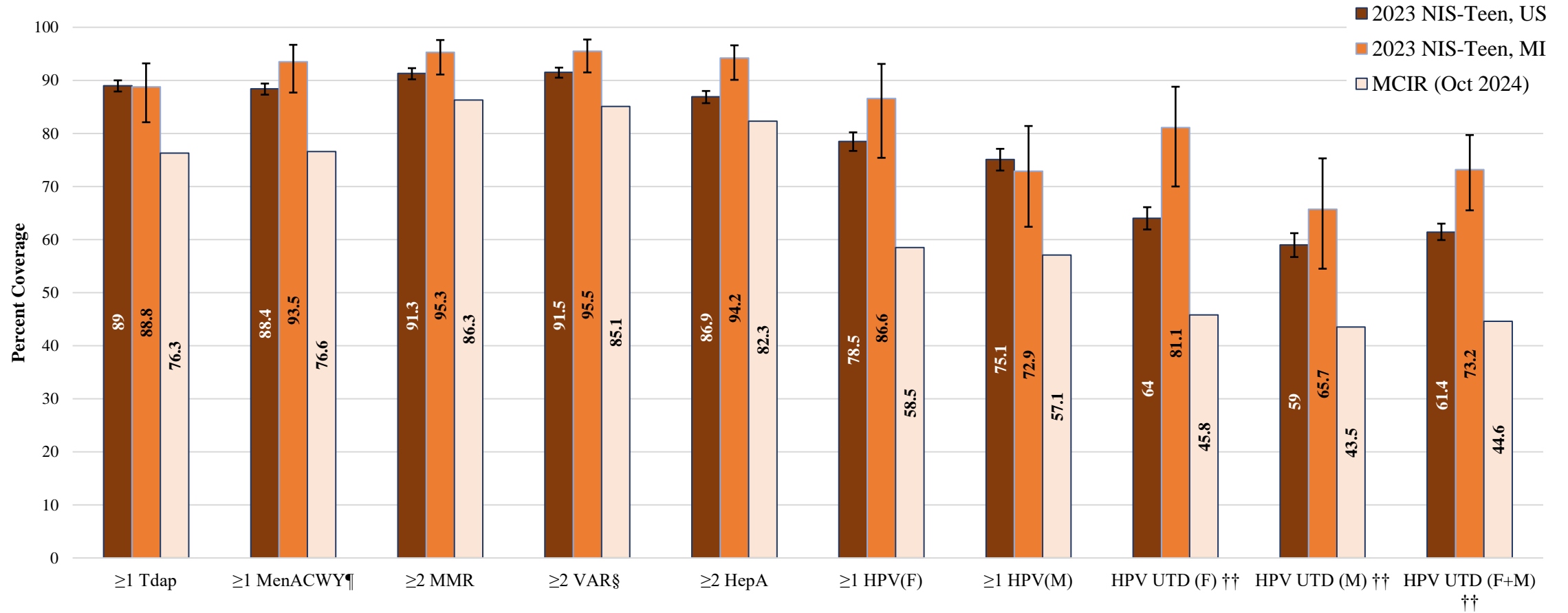
¶ Coverage is assessed at age 35 months

§ Coverage is assessed at age 8 months

† † Received 2 doses in first influenza season

* includes ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, the full series of Hib, ≥3 doses of HepB, ≥1 dose of Varicella vaccine, and ≥4 doses of PCV

Comparison of Adolescent Immunization Rates 2023 NIS-Teen US and MI, Michigan Care Immunization Registry October 2024, 13 through 17 years of age

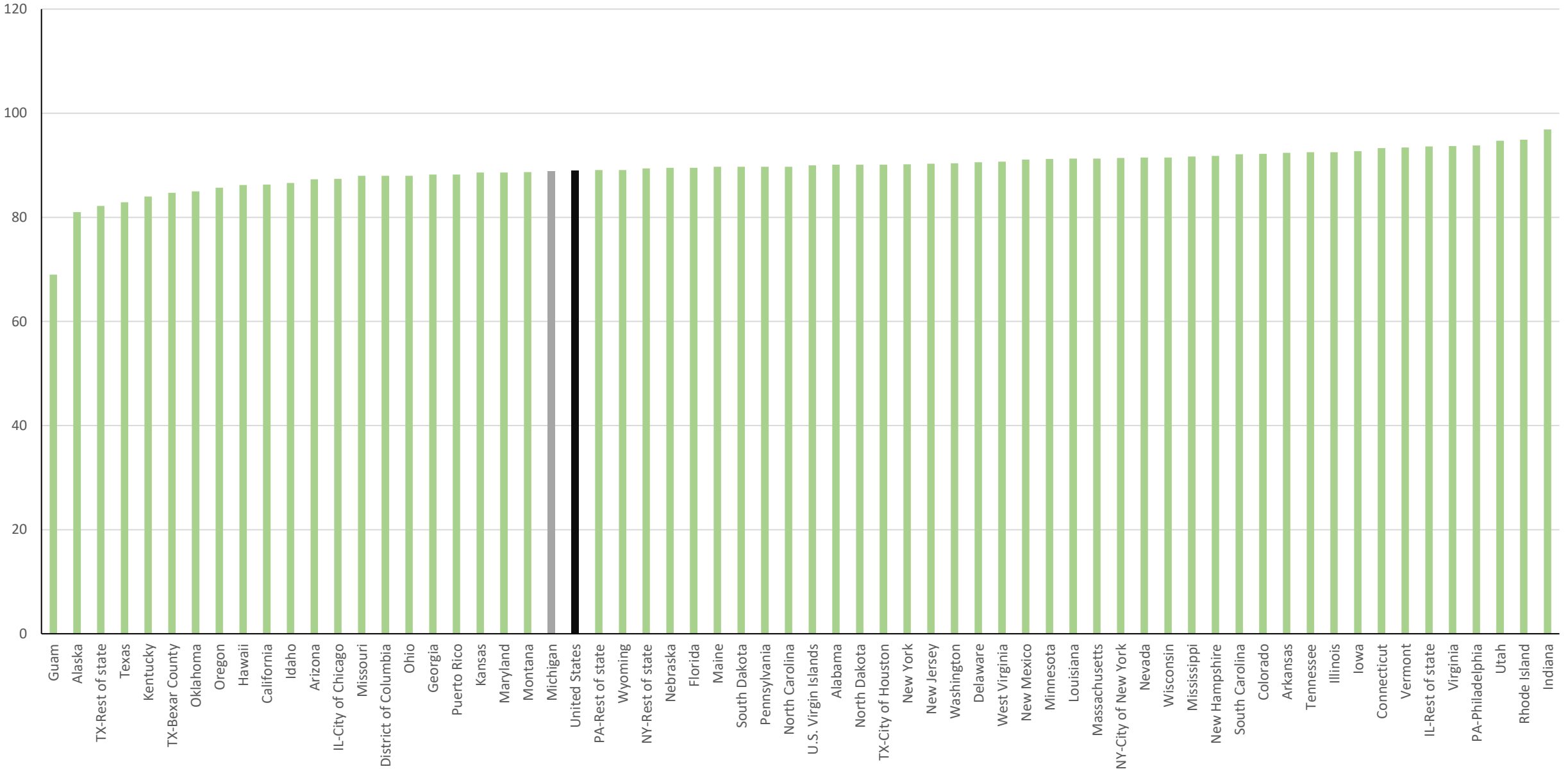


§ 2+ doses of Varicella vaccine among adolescents without a reported history of varicella disease.

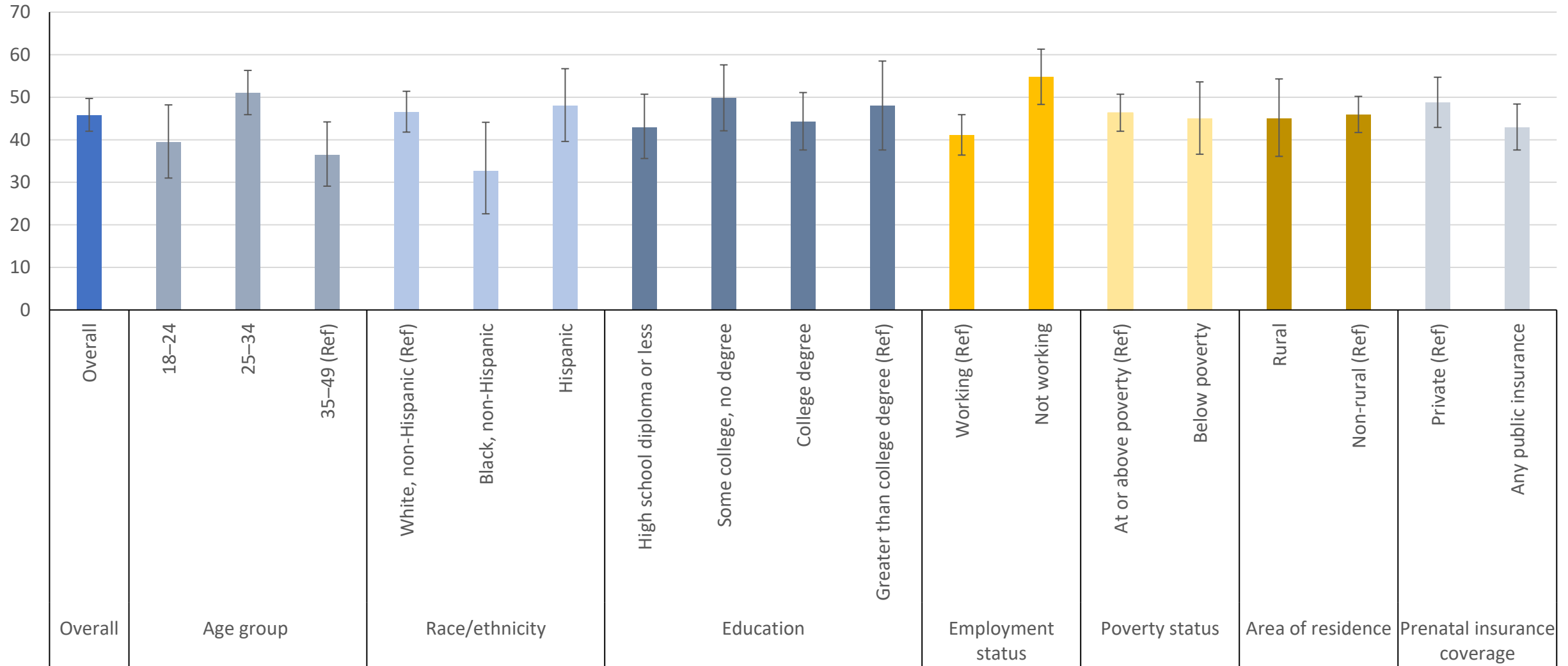
¶ Includes percentages receiving MenACWY or meningococcal vaccine of unknown type.

†† Includes those with ≥ 3 doses, and those with 2 doses when the first HPV vaccine dose was initiated prior to age 15 years.

Coverage Estimate for Tdap amongst 13 to 17 year olds, National Immunization Survey



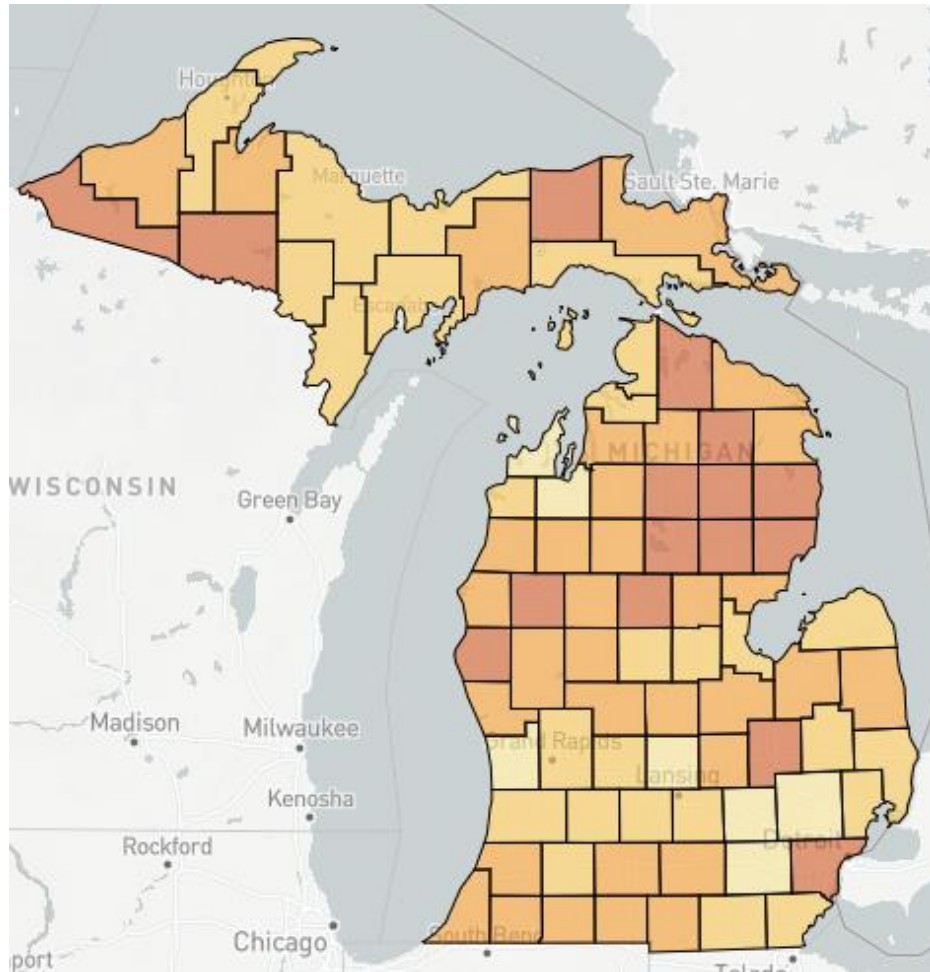
Tdap Vaccination Coverage among Pregnant Women, Internet Panel Survey, United States, April 2022



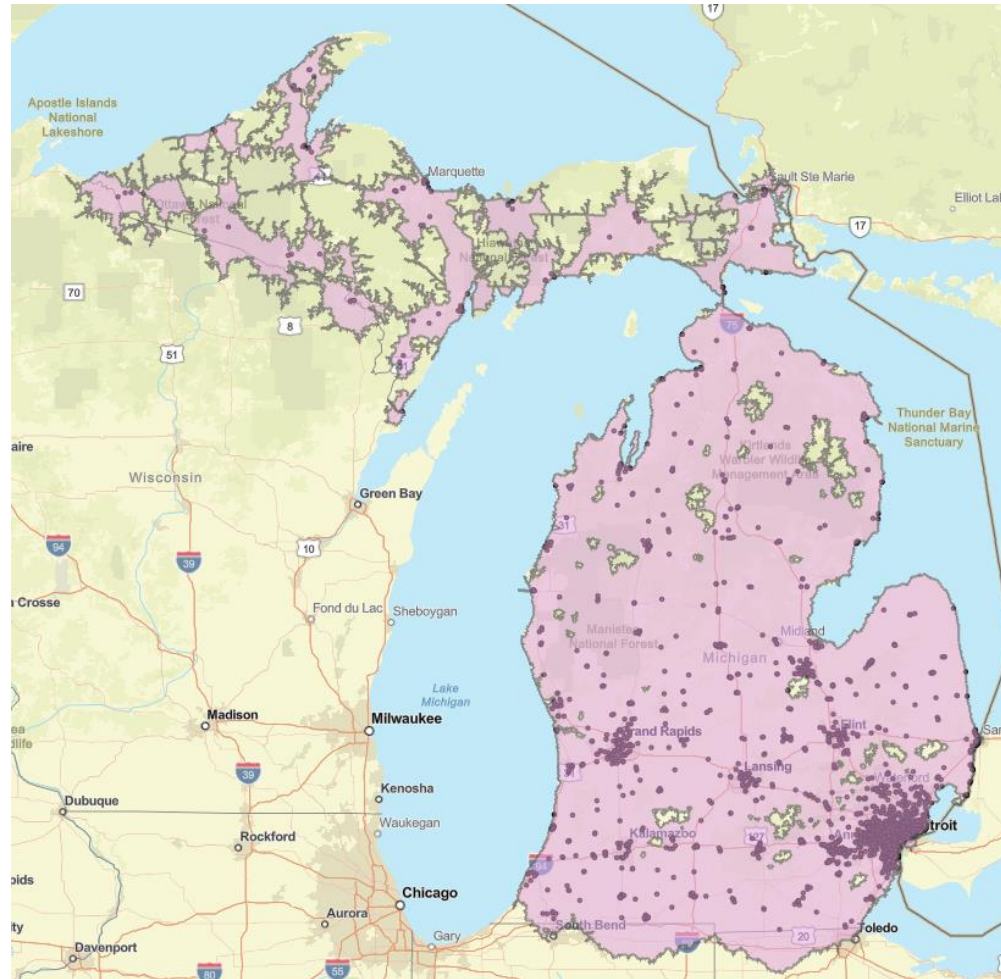
VFC

VFC Deserts

Percent of Children Insured by Medicaid

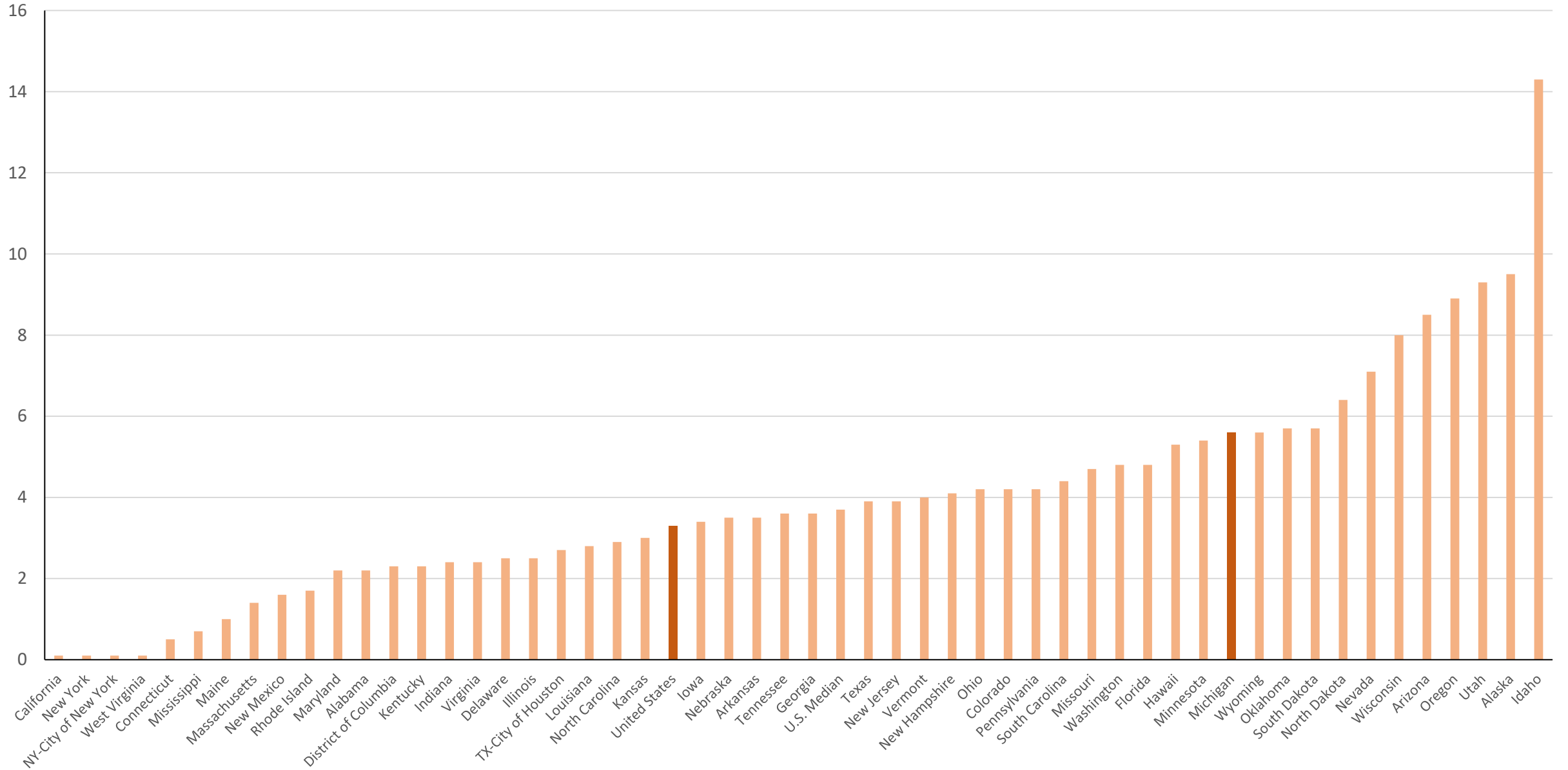


Drive Time to a VFC Site

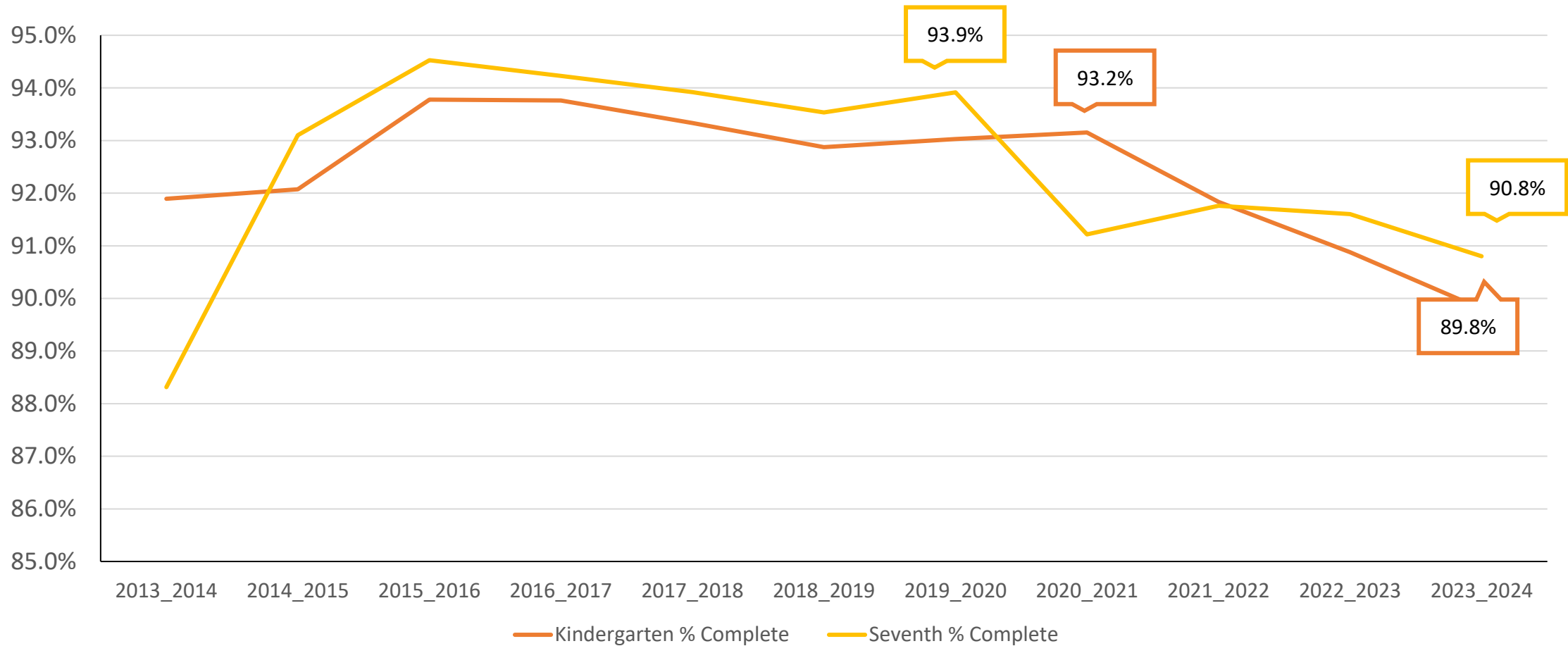


School and Waiver Data

Percent of Kindergartners with at Least One Exemption, 2023-2024

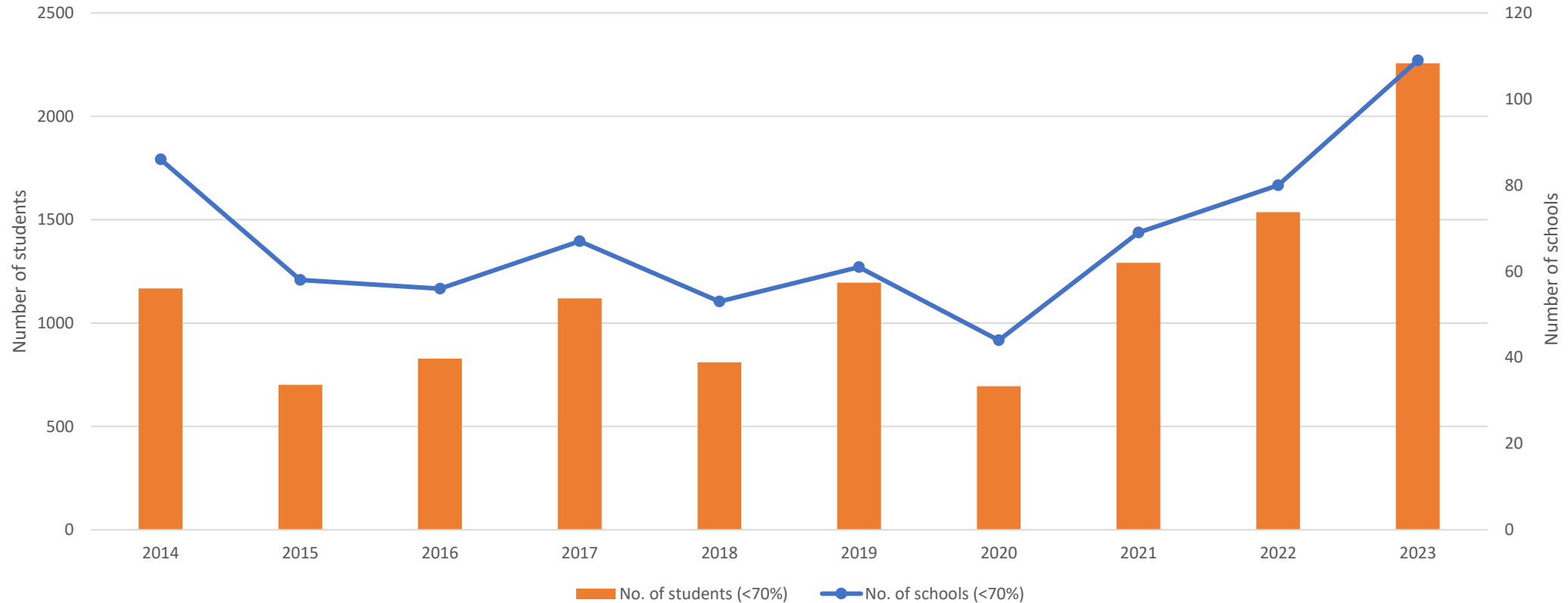


Kindergarten and 7th grade vaccine* coverage

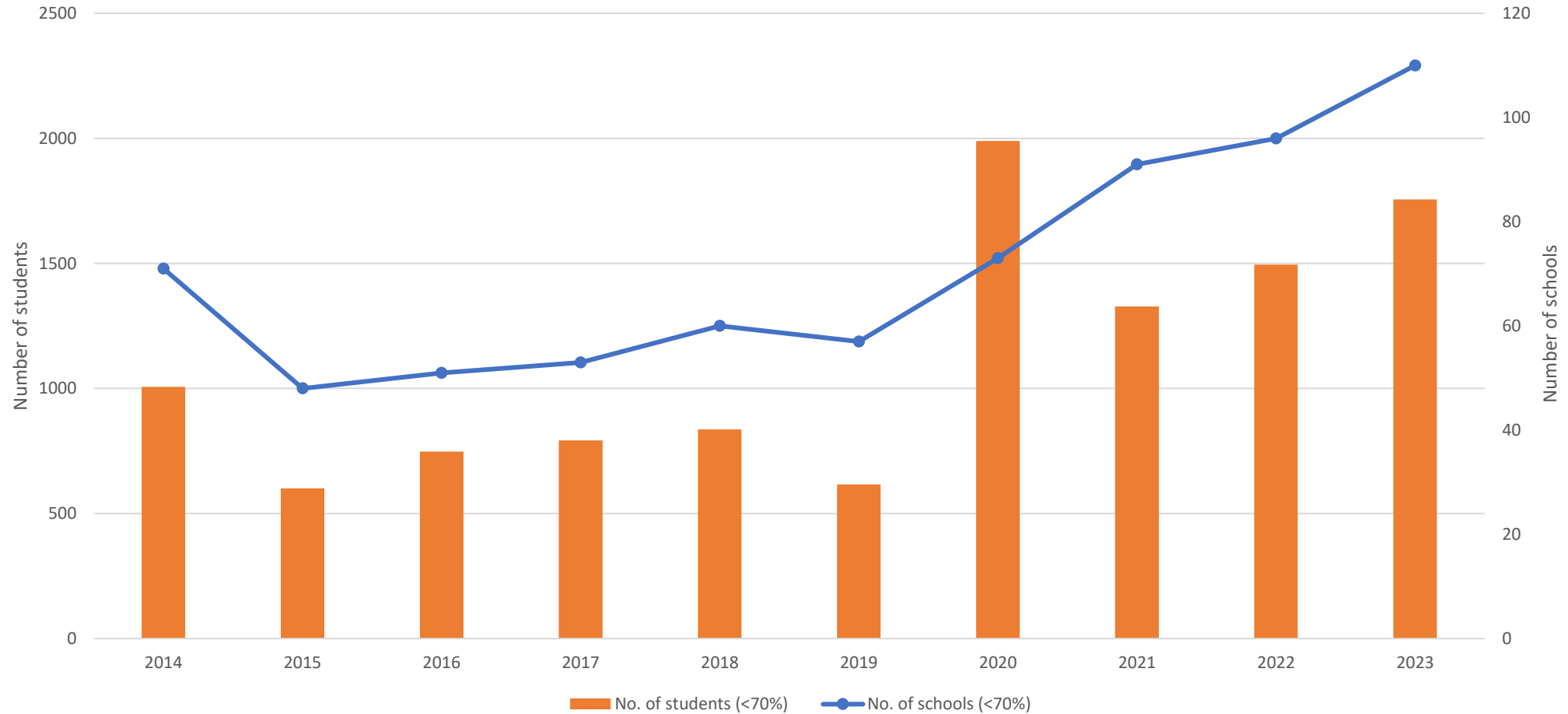


Required vaccines include DTP/DTaP/Tdap, polio, MMR (or documented immunity), Hepatitis B (or documented immunity), Varicella (or documented immunity). PLUS Meningococcal for 7th graders

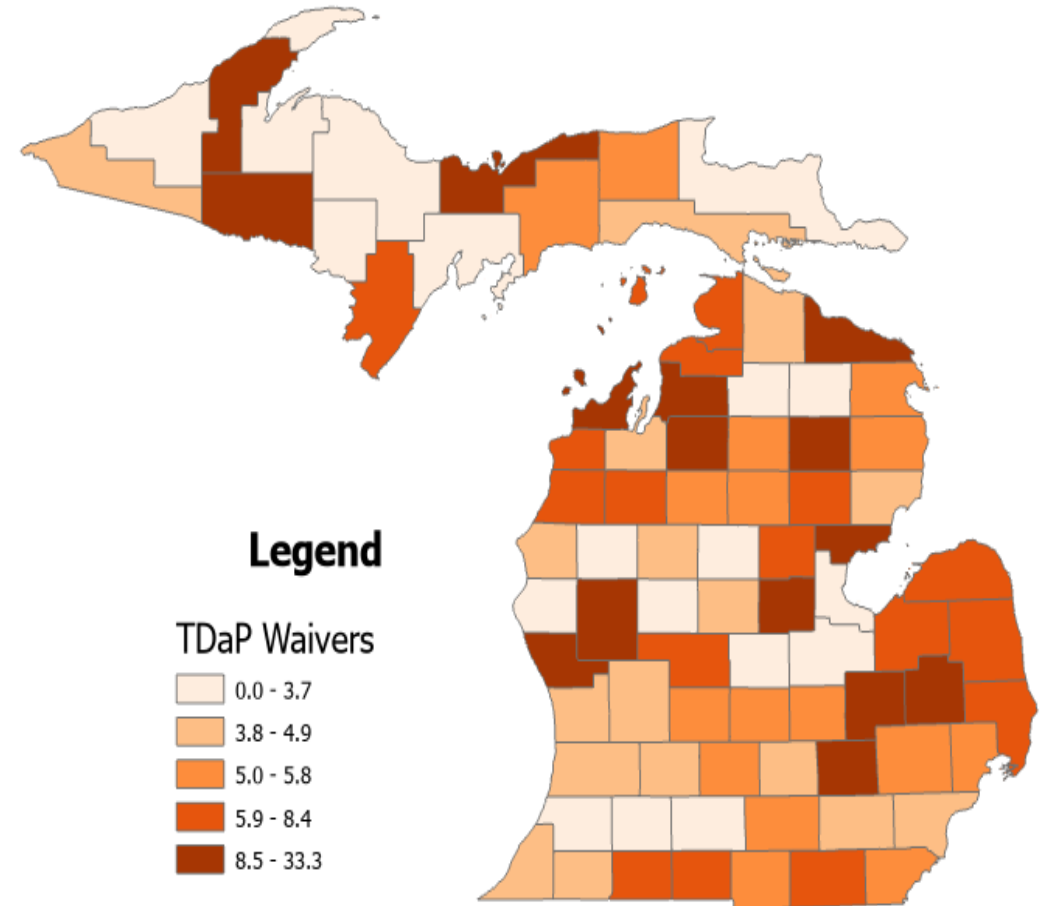
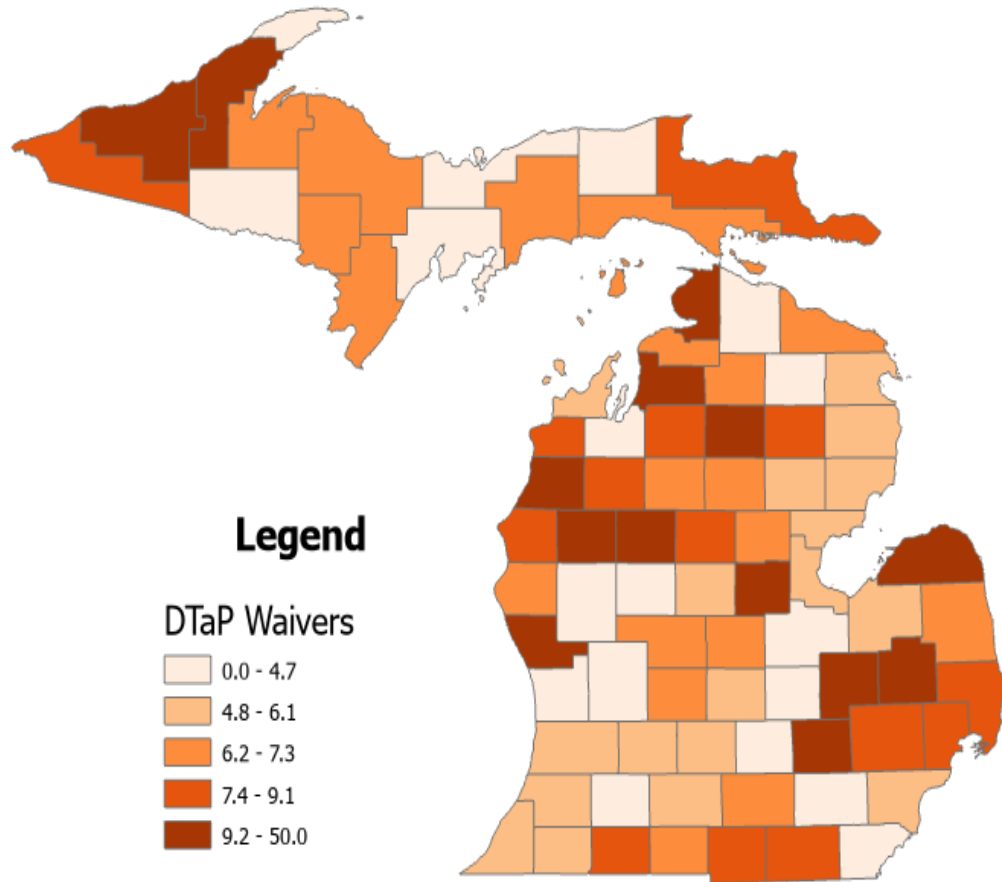
Kindergarten Schools with Vaccine Coverage <70%



Seventh Grade Schools with Vaccine coverage <70%



K and 7th grade DTaP/TDaP Waivers



Dashboards

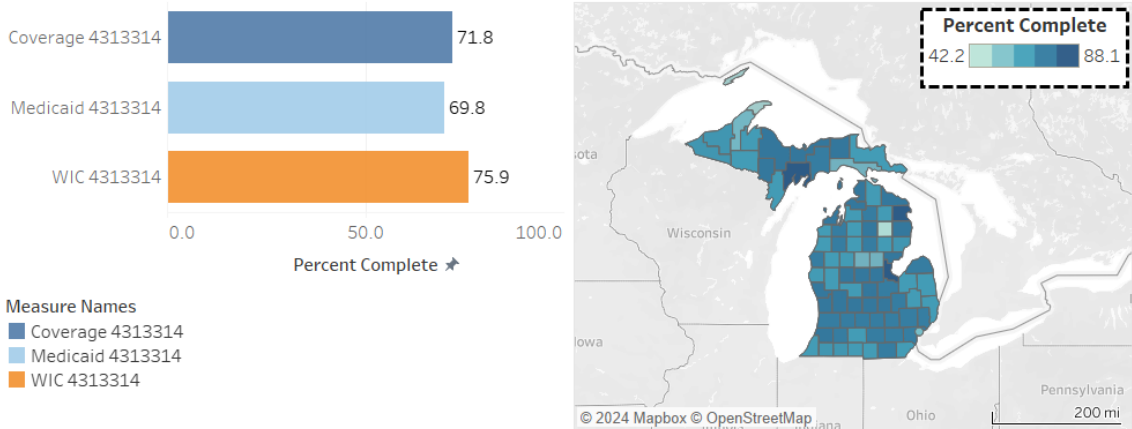
Routine Immunizations

Updated: Sept 25, 2024

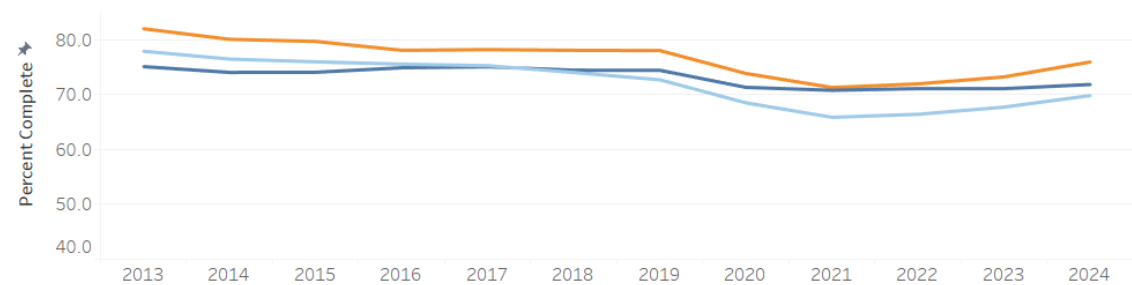
- Select vaccine (series) in the bar graph for vaccine specific data
- Select county in the map for county specific data
- Use the year and MCIR region filter for year or region specific data..

MCIR Region: (All) Year: 2024

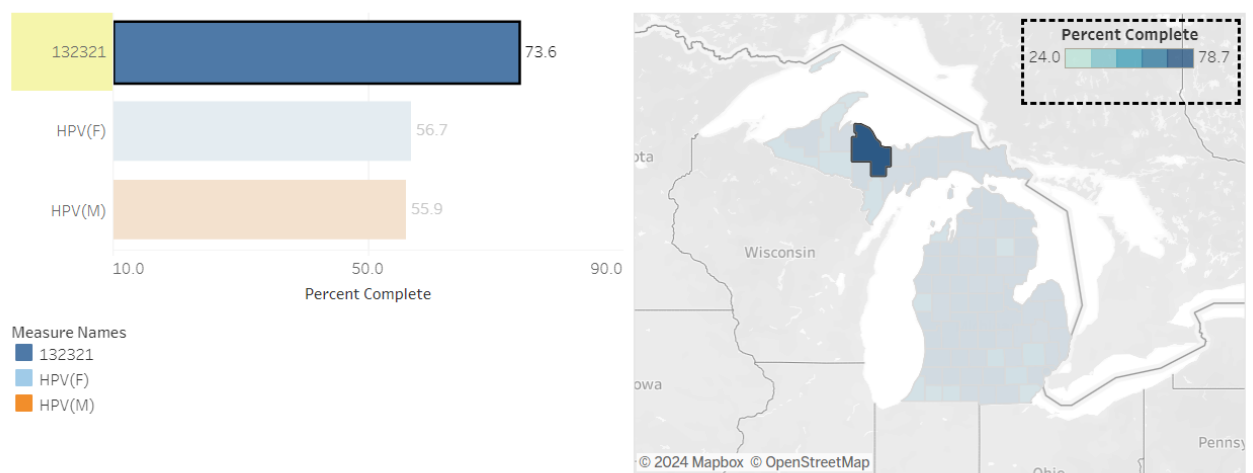
Michigan, Childhood Immunization Coverage



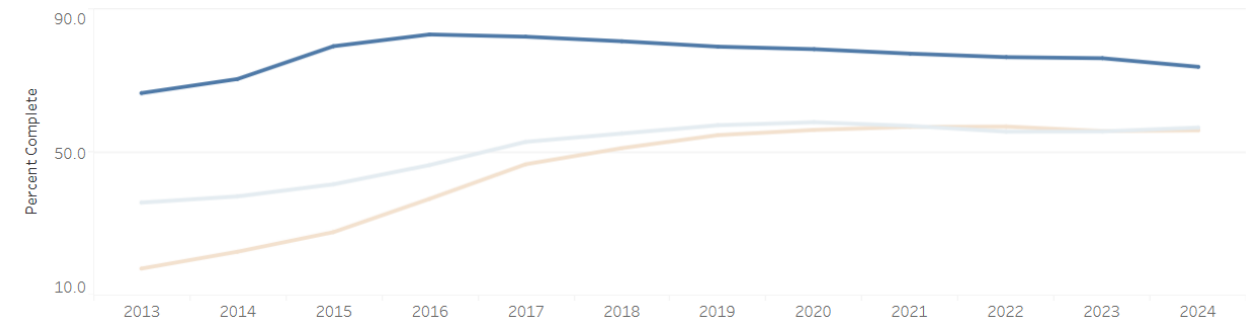
Trends in Childhood Immunizations, 2013 - 2024



Marquette, Adolescents Immunization Coverage



Trends in Adolescent Immunizations, 2013 - 2024



Routine Immunizations



Public use dataset (updated September 27, 2024): [Report Card All Data](#)

A state-level immunization report card with additional coverage measures is available if you [click here](#). For additional information on how these reports were developed, [click here](#). If you have questions regarding immunization data please contact Taylor Olsabeck, OlsabeckT1@michigan.gov.

To request data that is not available on this website please submit this [Data Request Form](#).

The following maps show how the percent of immunization waivers and select immunization coverage measures vary across the state:

- [Kindergarten Immunization Waivers](#)
- [Seventh Grade Immunization Waivers](#)
- All Immunization Waivers: [County](#) and [Local Health Department](#)
- Childhood Immunization [4313314 Series](#)
- Childhood Immunization [43133142 Series](#)
- Adolescent Immunization [132321 Series](#)
- Adolescent Immunization [1323213 Series](#)

Vaccine-Preventable Disease Surveillance Update

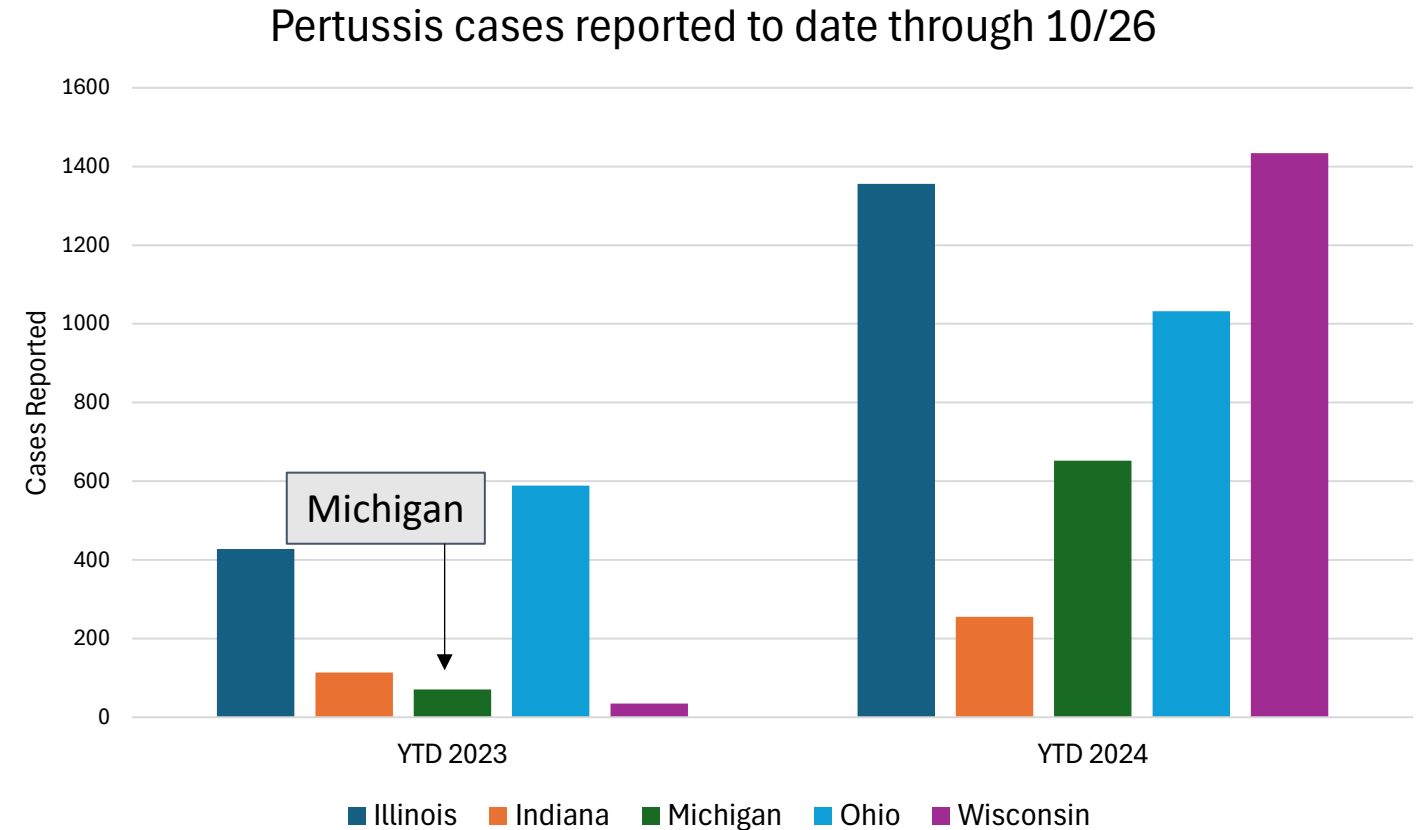
[Vaccine-Preventable Disease Investigation Guidelines \(michigan.gov\)](https://www.michigan.gov/vaccine-preventable-disease-investigation-guidelines)



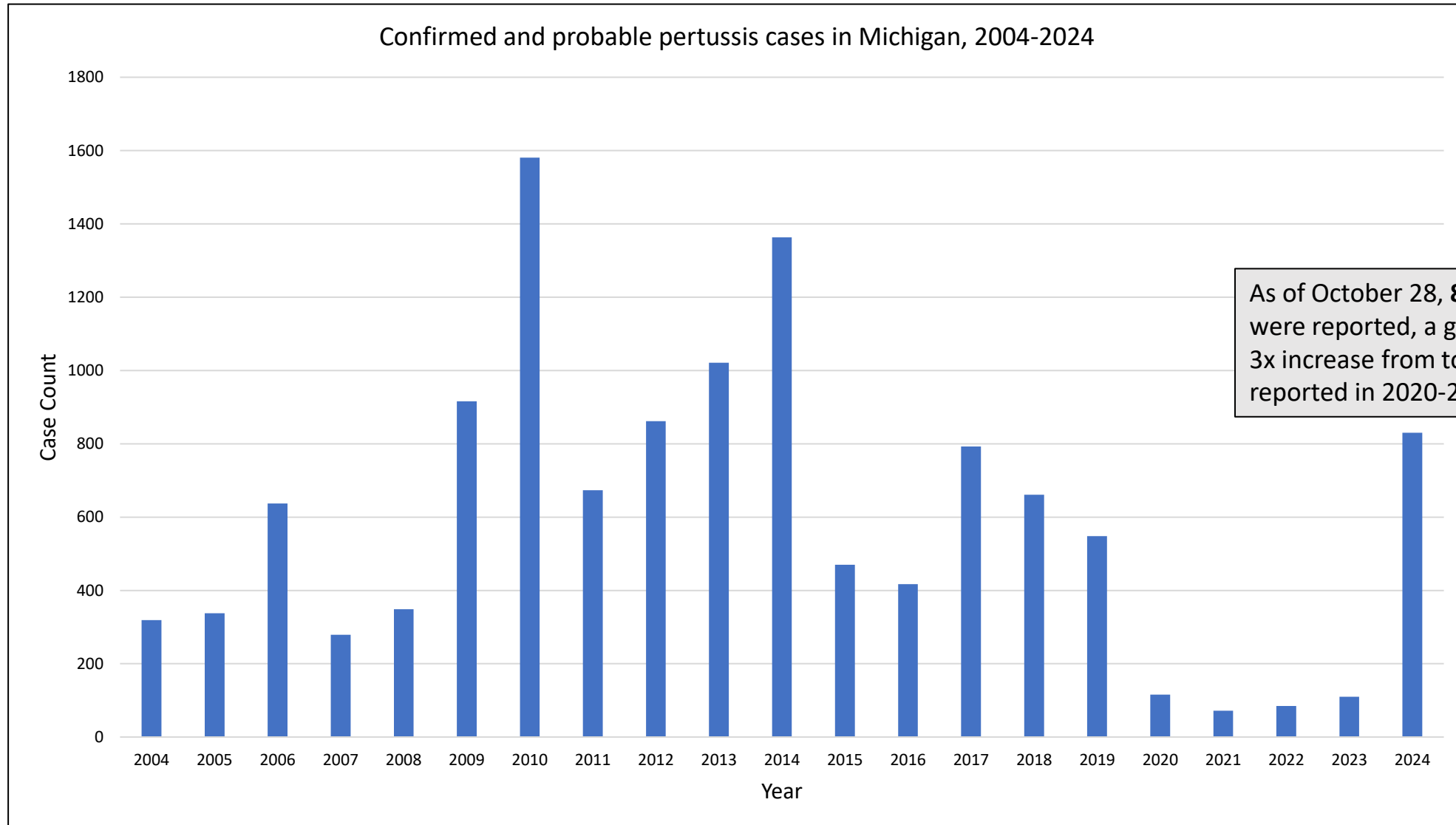
Disease	Pre-Pandemic Average (2016-2019)	Total Cases, 2023	Total Cases, Through 10/28/2024
Congenital Rubella	0	0	0
Diphtheria	0	0	0
Inv. H. Influenza <15 years old (Serogroup B)	23.5 (--)	20 (1)	20 (0) *
Measles	17	1	7
Meningococcal disease	5.75	8	10
Mumps	30	23	14 (1 outbreak) **
Pertussis	596.5	97 (3 outbreaks)	830 (7 outbreaks) ***
Polio	0	0	0
Rubella	--	5	7 ****
Tetanus	1.5	1	0
Varicella	489.75	348 (11 outbreaks)	237 (4 outbreaks)

Pertussis - National

- Nationally, **20,824 cases** reported as of 10/26, compared to 3,044 in 2022 total
- Highest number of total reported cases since **2014 (32,971)**

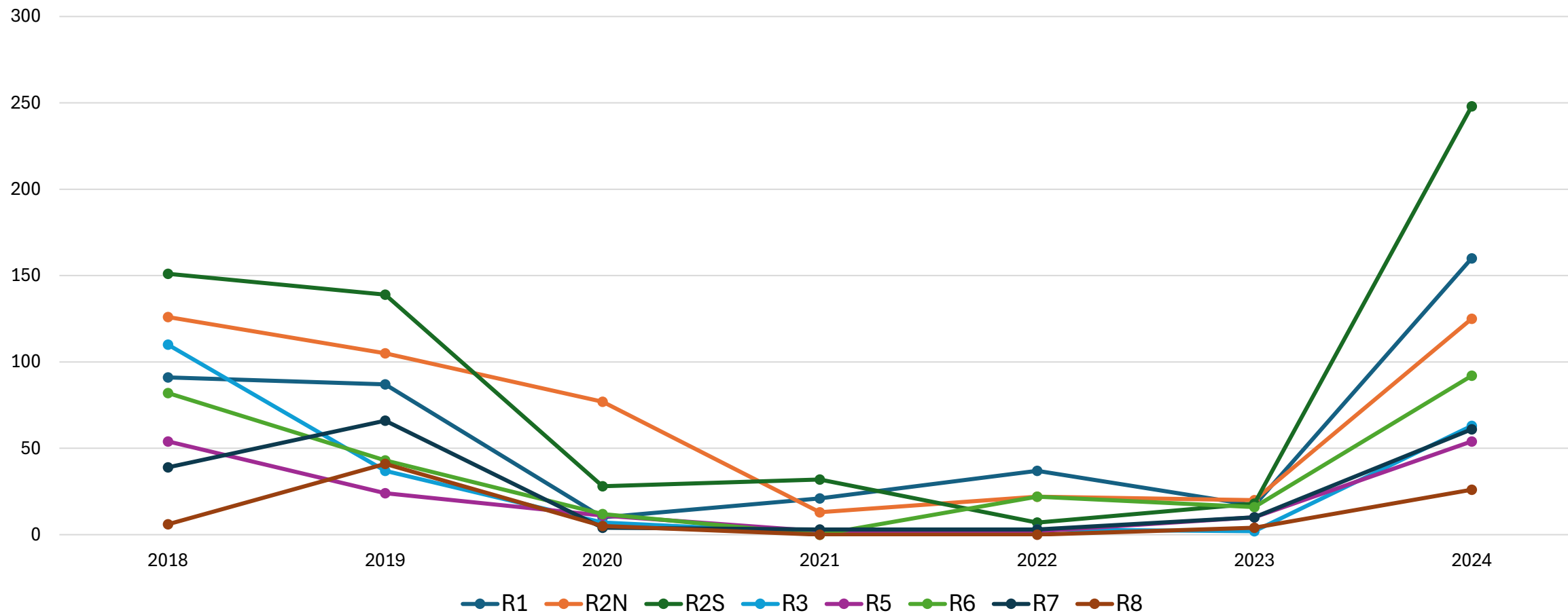


Pertussis in Michigan

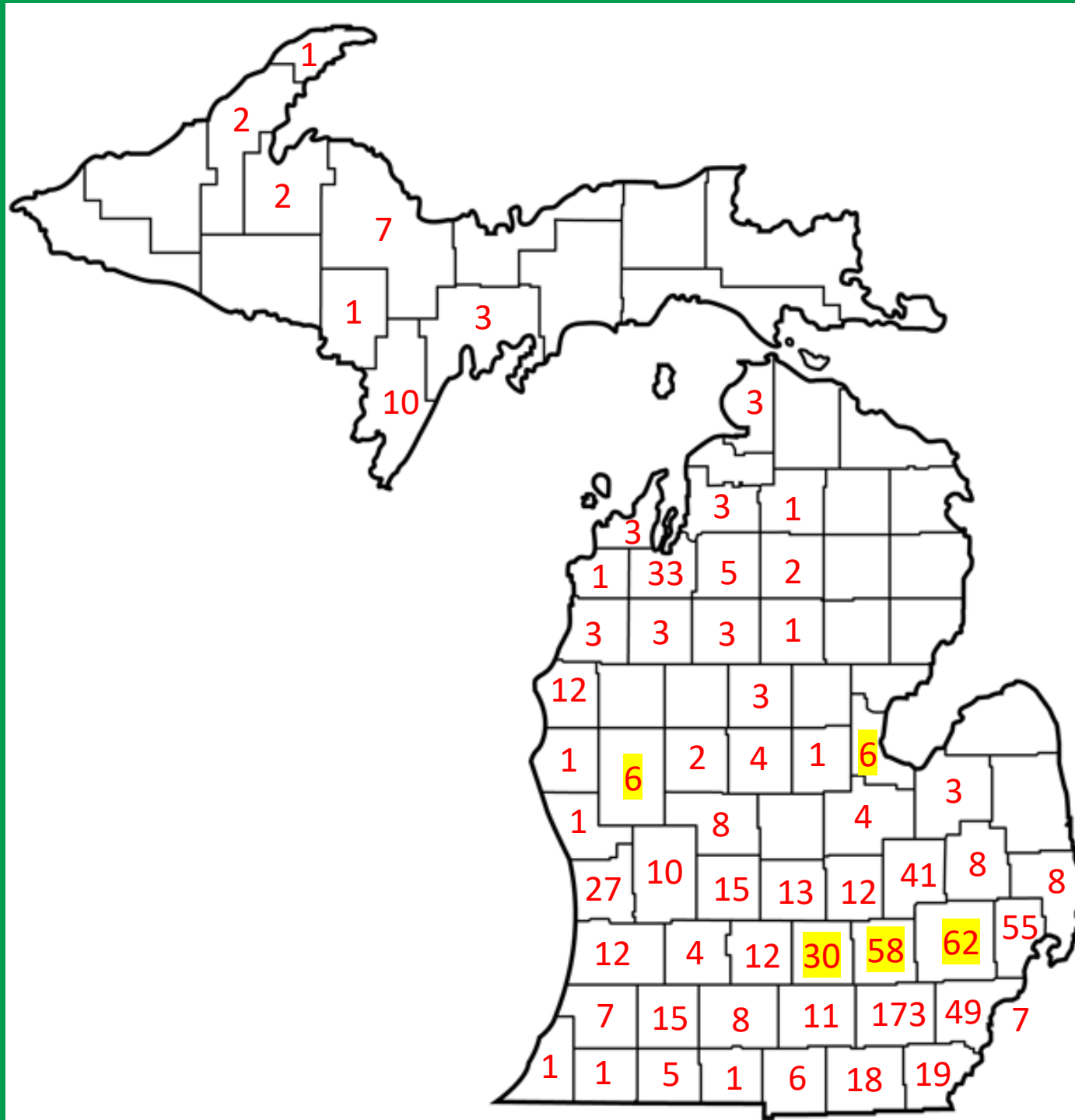


Pertussis Cases by Region

Pertussis cases by public health preparedness region, 2018-2024

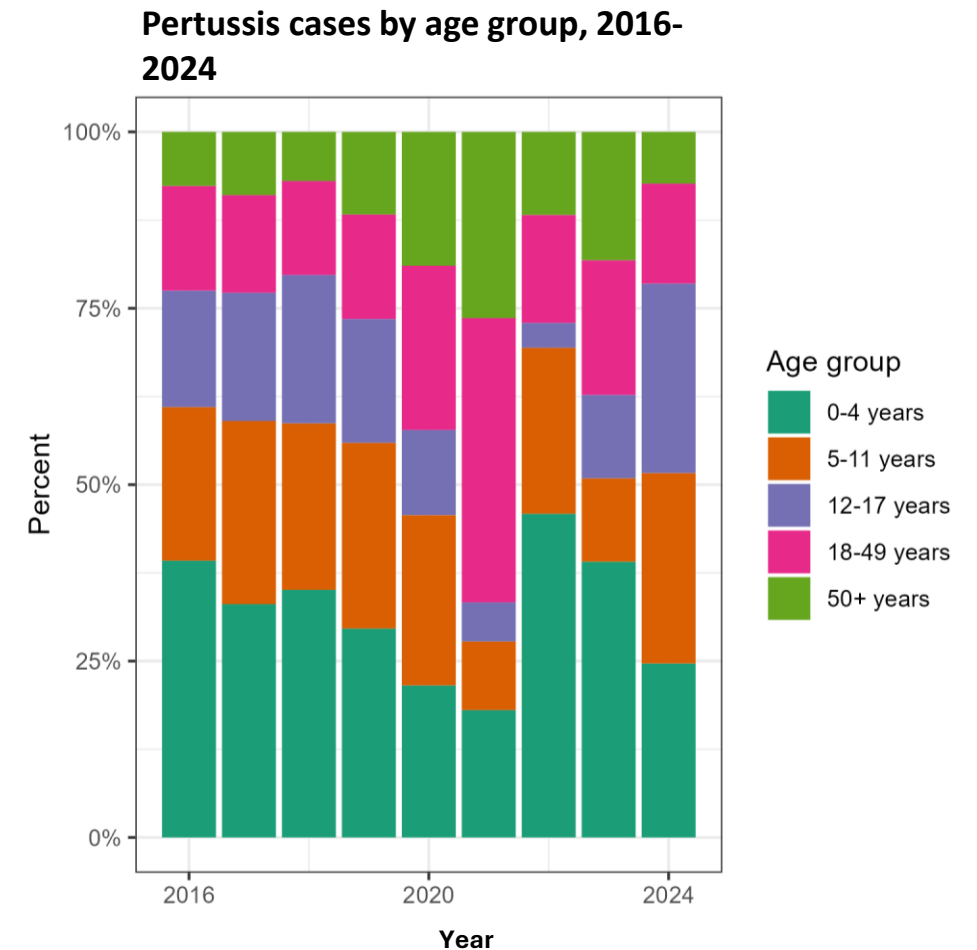
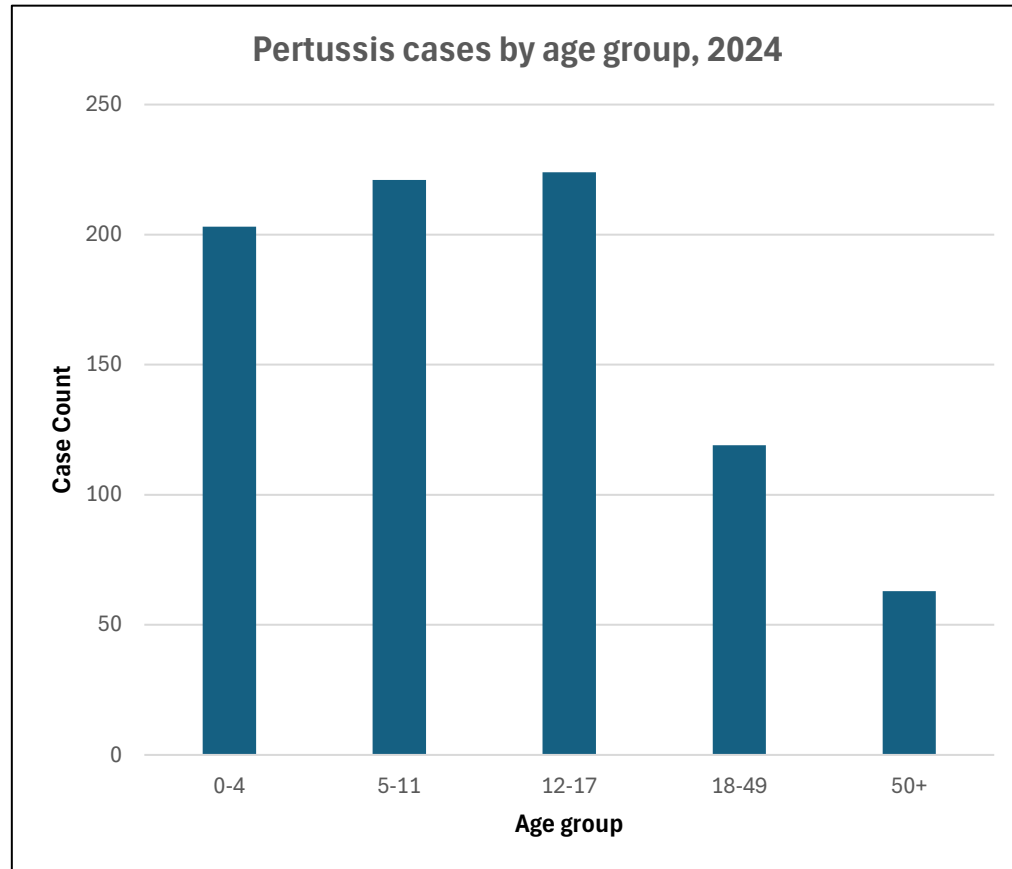


Pertussis Cases by County

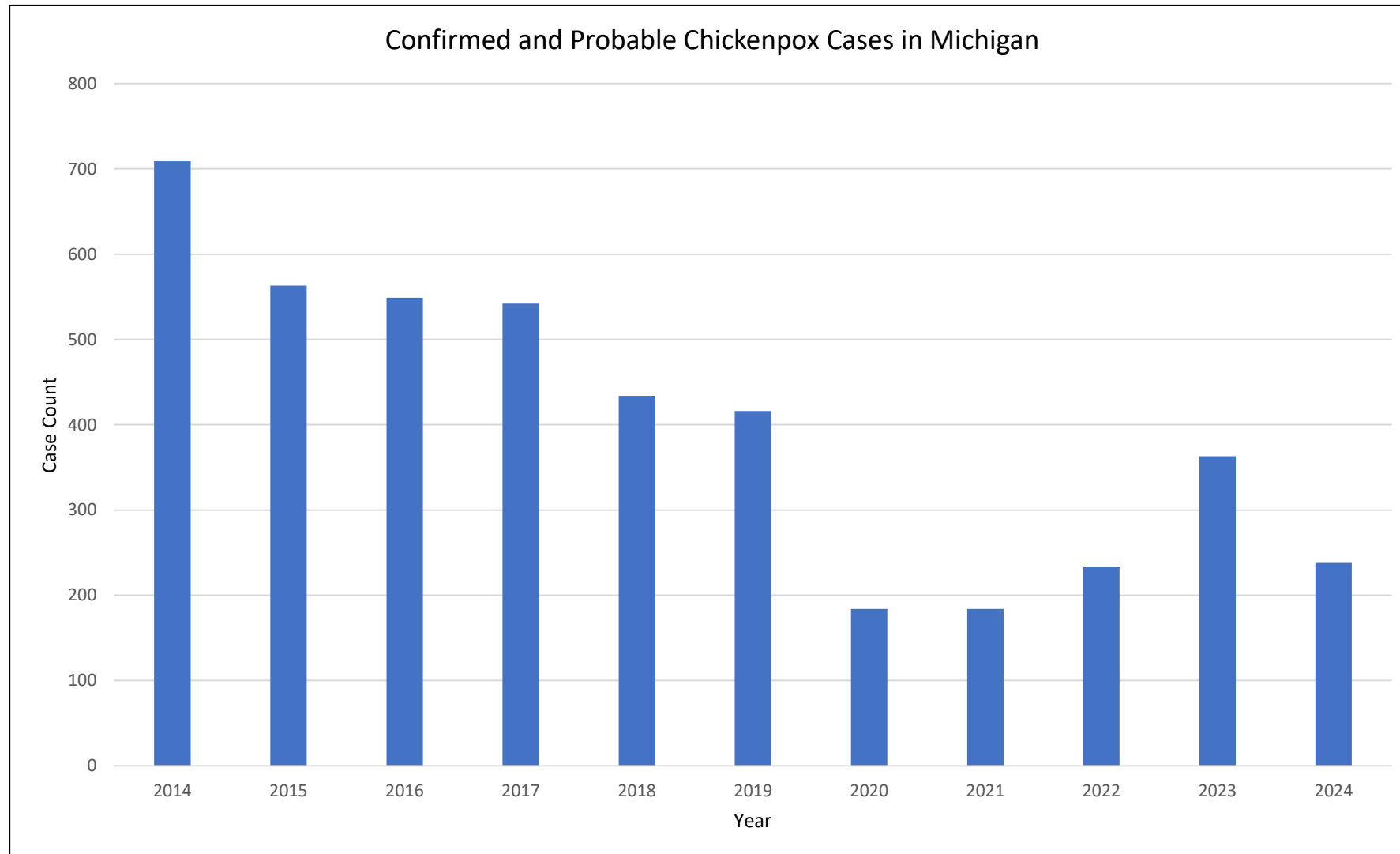


As of Oct. 28, 2024

Pertussis by Age

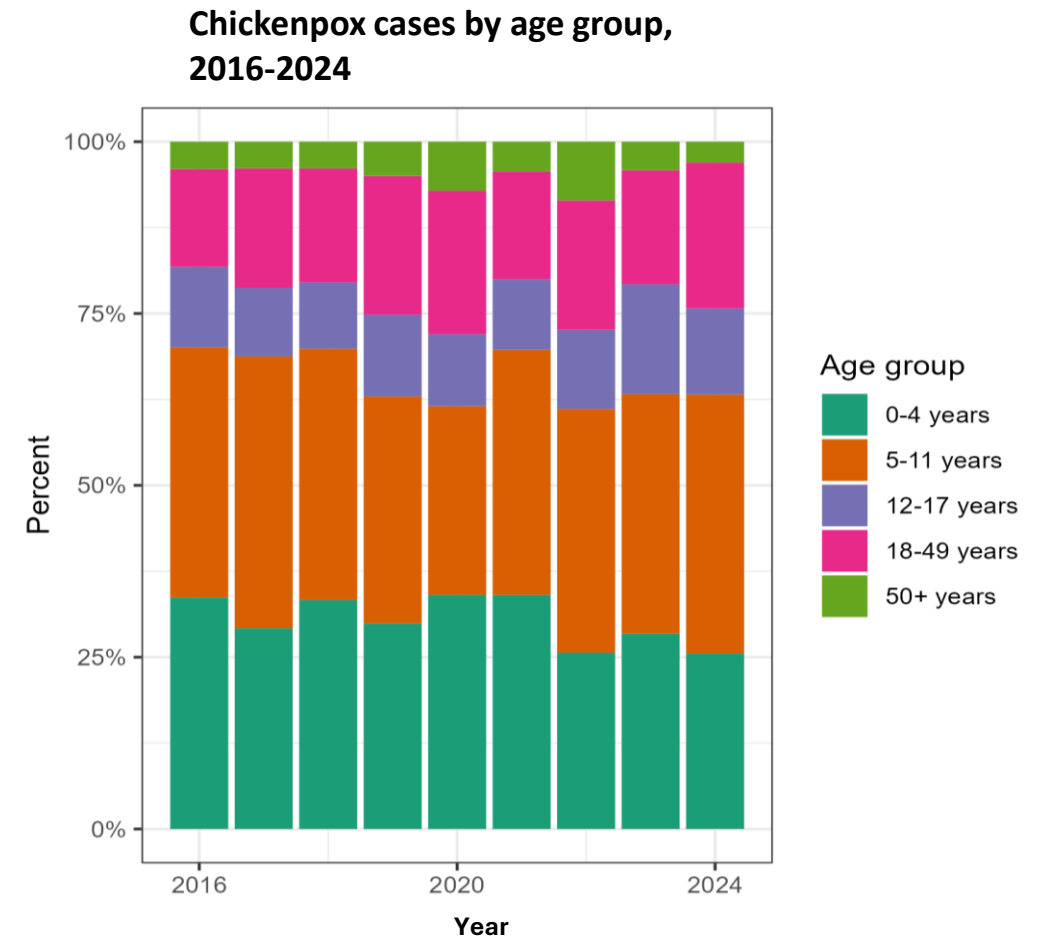
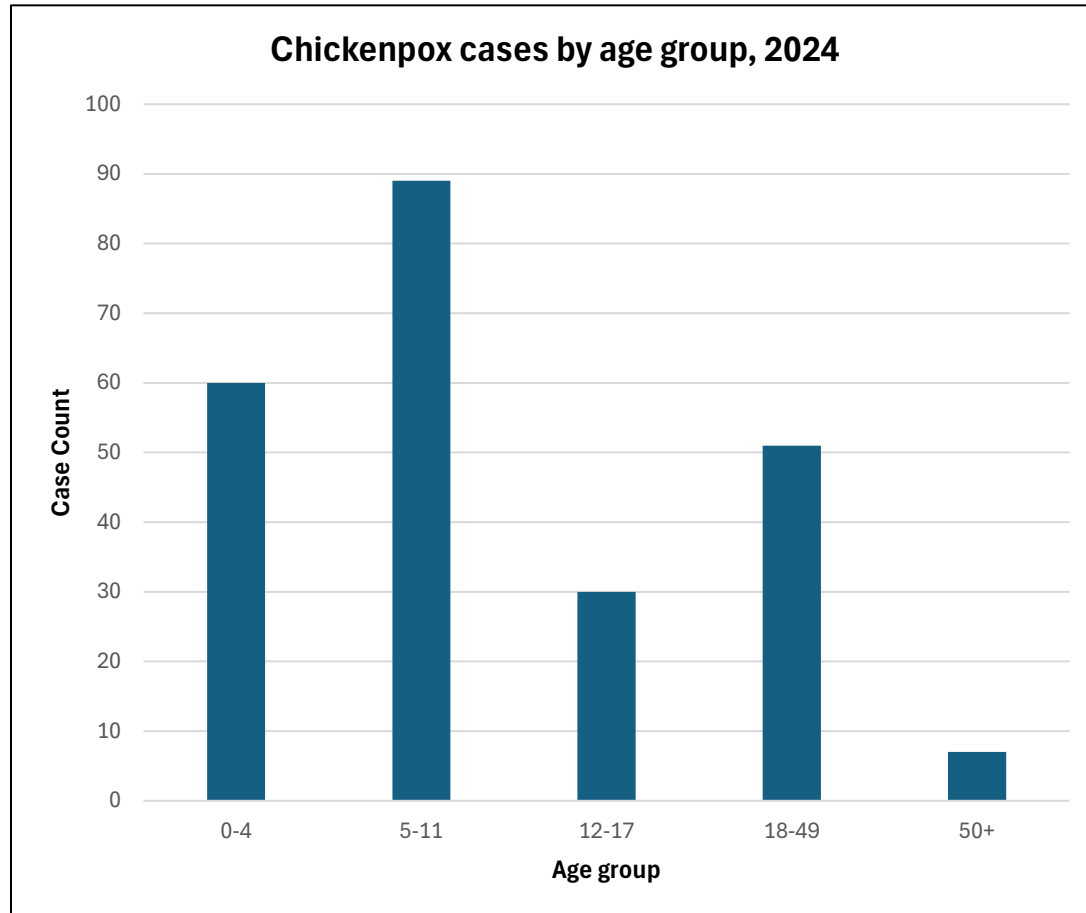


Chickenpox



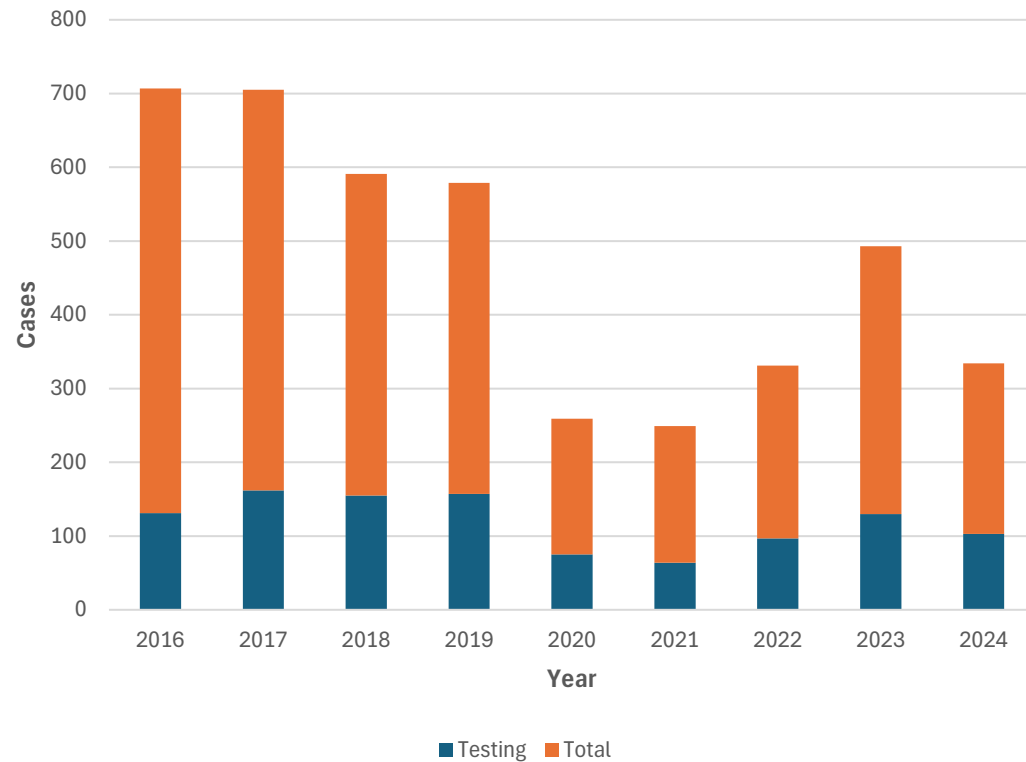
As of Oct. 28, 2024

Chickenpox by Age

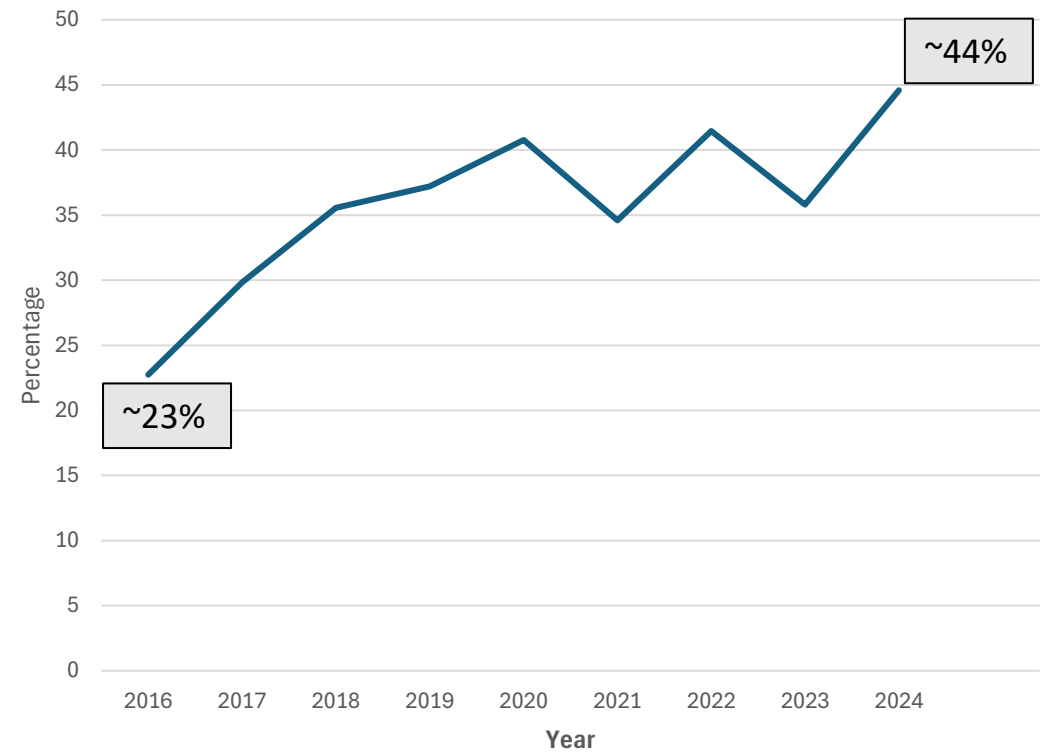


Chickenpox Testing

Lab confirmed chickenpox cases v. total reported cases, 2016-2024

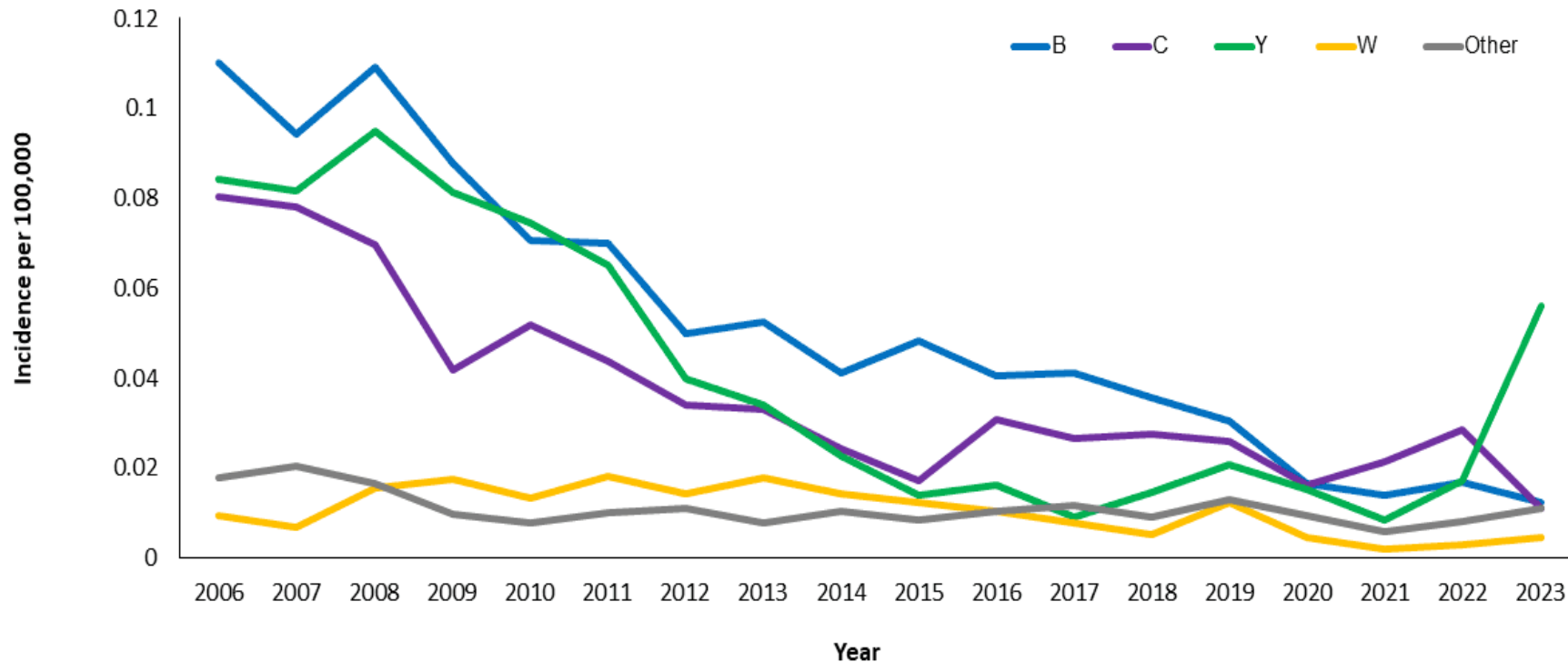


Percentage of lab-confirmed chickenpox cases, 2016-2024



Meningococcal Disease

Trends in Meningococcal Disease Incidence by Serogroup – United States, 2006–2023*



In 2023, **422 cases** reported to CDC – the largest number of cases since 2014

Most affected:

- People between 30-60 years
- Black or African American people
- Adults with HIV

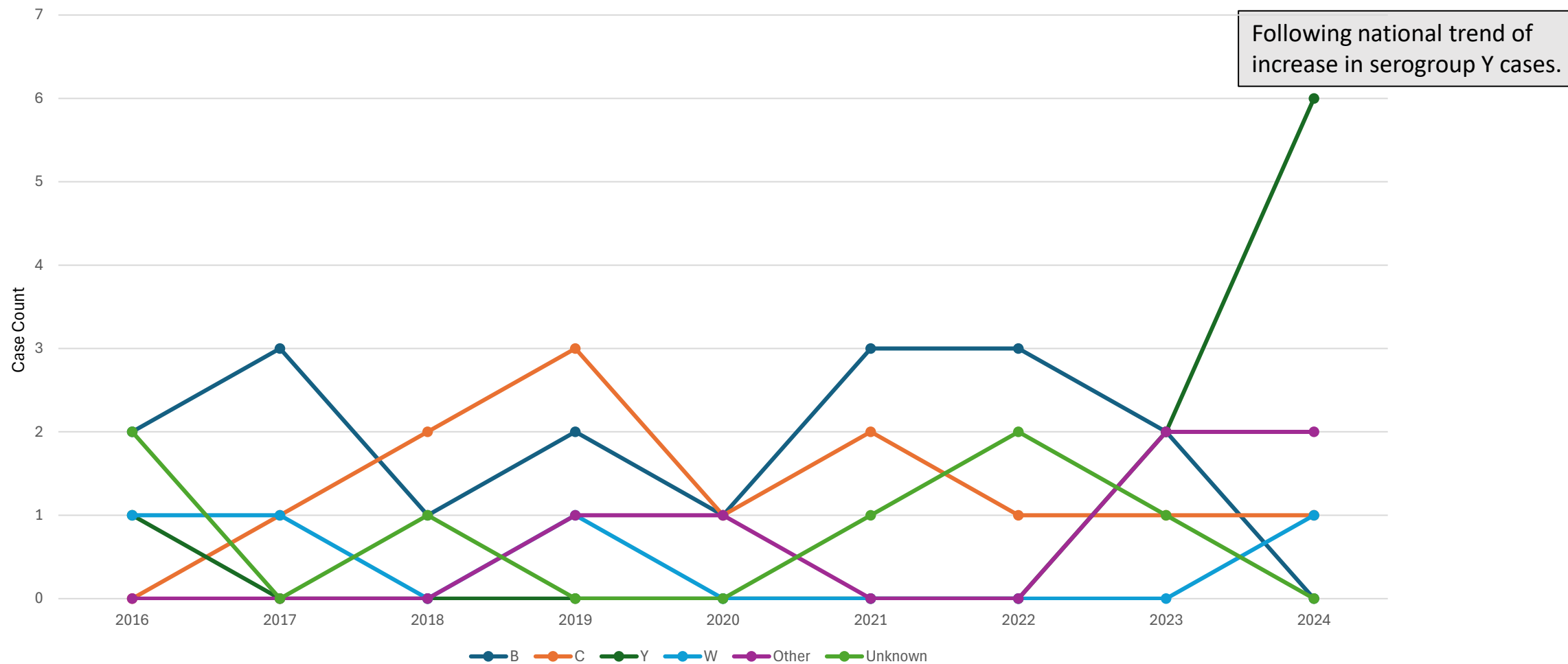
Disease incidence due to **serogroup Y** began increasing in 2022

Source: NNDSS data with additional serogroup data from Active Bacterial Core surveillance (ABCs) and state health departments

*2022 and 2023 data are preliminary

Meningococcal Disease Trends in MI

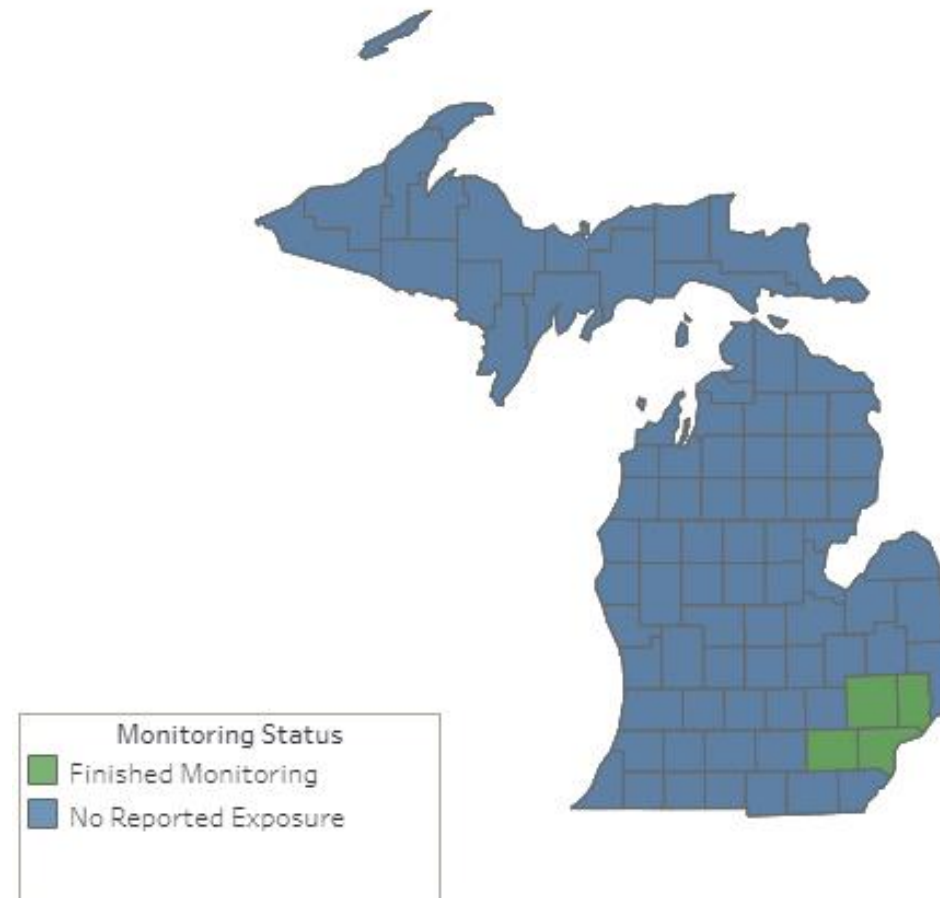
Meningococcal Disease Serogroup Trends in Michigan, 2016-2024



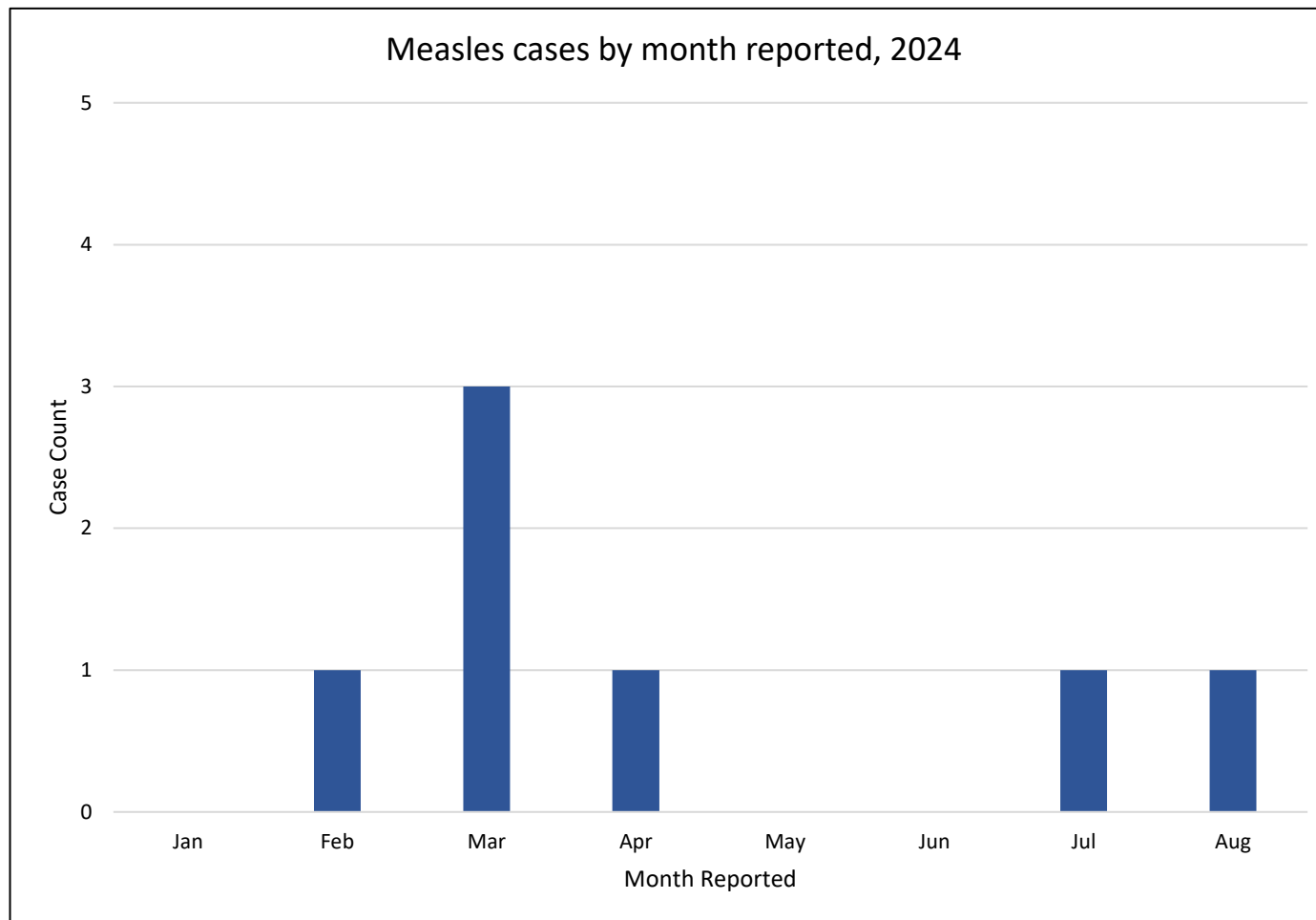
Measles

7 cases reported to date

- Oakland (1), Wayne (2), Washtenaw (2), City of Detroit (1), Macomb (1)
- Most cases associated with travel, of unknown or no vaccination status/without immunity



Measles



Immunization Epi Team!

- Hannah Forsythe – MCIR Epidemiologist
- Sukhesh Sudan – MCIR Epidemiologist
- Faria Farin – Data Analyst
- Arianna Eaton – Respiratory Disease Epidemiologist
- Paula Vredenburg – MCIR Epidemiologist
- Taylor Olsabeck – Epidemiology Unit Manager

Thank you!

