Issue 1
2025

WISCONSIN EPI EXPRESS

In This Issue

Program Updates

Staff updates:

BCD welcomes the following staff to their new positions!

Logan Broennimann, Respiratory Disease Epidemiologist

José Salazar, HIV Prevention Unit Supervisor

Bloodborne and Sexually Transmitted Infections Section Manager retires

Scott Stokes, the Bloodborne and Sexually Transmitted Infections Section Manager, has retired from state service. His last day was January 31, 2025.

New Statewide Action Planning Group webpage

The new Statewide Action Planning Group (SAPG) webpage is an exciting step forward in improving accessibility, engagement, and transparency for our community. It provides a centralized hub for updates, meeting materials, and resources, making it easier than ever to stay informed and get involved in statewide HIV/STI prevention and care efforts. With a refreshed design, streamlined navigation, and enhanced features, the site ensures that members of community—especially those most impacted—can participate meaningfully in shaping Wisconsin's response to HIV.

Spanish Childhood Communicable Disease Wall Charts now available

DHS has recently created Spanish versions of the Childhood Communicable Disease Wall Charts. Find printable versions of the charts on the DHS website.

Program Updates

Avian Influenza A testing guidelines now available

DHS has added written guidance on the recommended testing guidance for influenza A(H5N1) on the Avian Influenza A Virus webpage to help guide and inform clinicians. The guidance includes possible influenza A testing scenarios and the subsequent recommendations. For more guidance on surveillance and detection of influenza A(H5N1), please visit the DHS Avian Influenza A Virus webpage and view "Testing recommendations."

Monitor respiratory illness activity with the updated respiratory illness dashboard

Respiratory illness activity has been high this season. DHS provides up-to-date information about respiratory illness levels in the DHS Weekly Respiratory Report and on the Respiratory Illness Activity webpage, where users can now view respiratory illness activity by region.

Healthcare-Associated Infections Annual Report published

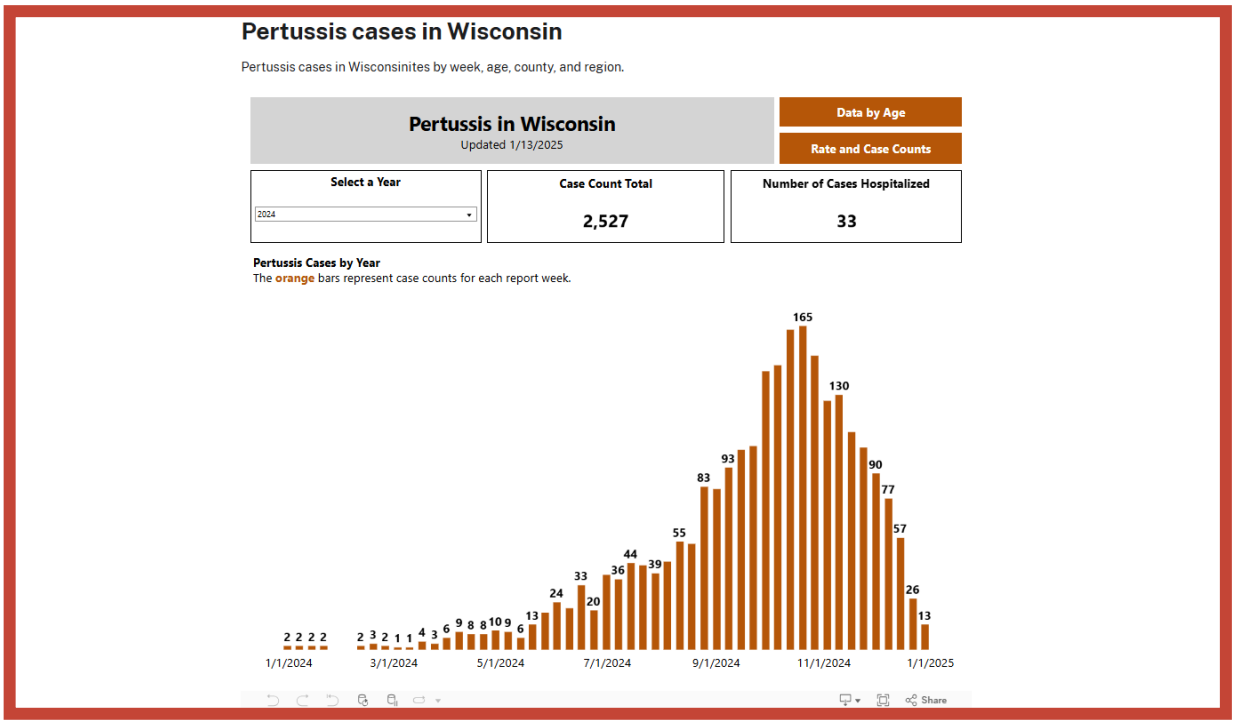
The Healthcare-Associated Infections program recently published the 2023 Annual Report. The report includes data on six types of healthcare-associated infections in Wisconsin acute care and critical access hospitals.

2023 HIV Surveillance Report published

The 2023 HIV Surveillance Report contains trends in diagnoses, new diagnoses, and prevalence through December 31, 2023.

Pertussis dashboard launched

The Immunization Program recently published a new pertussis dashboard. This new dashboard helps track pertussis case counts in Wisconsin to better understand disease prevalence. Users can explore trends and view data at the state, region, and county levels.



Wisconsin Adult Viral Hepatitis Call to Action for Health Care Systems and Providers

By: Kailynn Mitchell, Adult Viral Hepatitis Supervisor

Overview

The nationwide hepatitis elimination goals are to prevent new infections and deaths, increase the number of people who know their hepatitis B virus (HBV) and hepatitis C virus (HCV) status, and ensure every person living with viral hepatitis has health care and treatment free from stigma and discrimination. Below are steps that all health care providers can take to help Wisconsin reach our goal of eliminating viral hepatitis by 2030.

Increase universal screening and testing for HBV and HCV

Testing and diagnosis of HBV and HCV infection is essential for individuals to access prevention and treatment services and is a key component of achieving state and national viral hepatitis elimination goals. The Centers for Disease Control and Prevention (CDC) recommends one-time HBV screening for all adults ages 18 and older. Additionally, all adults ages 18 and older should be universally screened for HCV at least once in their lifetime. People who are pregnant should be screened for HBV and HCV during each pregnancy. In 2023, over half of women newly diagnosed with HBV or HCV in Wisconsin were of childbearing age (15-44 years old).

Promote and provide adult hepatitis A virus (HAV) and HBV vaccinations

Vaccination is the best way to prevent HAV and HBV. In 2022, the Advisory Committee on Immunization Practices (ACIP) expanded hepatitis B vaccination recommendations to include all adults ages 19–59 years. Most HBV diagnoses in Wisconsin are among adults, and in 2023 only 44% of Wisconsin adults 19–59 years old had completed an HBV vaccine series. Additionally, only 20% of Wisconsin adults ages 19-49 had completed an HAV vaccine series.

Increase HCV treatment

There is no vaccine available for HCV, but chronic HCV can be cured with treatment. Direct-acting antivirals (DAAs) cure over 95% of HCV infections. In 2023, there were more then 6,300 Wisconsin residents with diagnosed HCV in need of treatment to cure their HCV infection. As seen in the state of HCV report card, Wisconsin Medicaid no longer has restrictions on HCV treatment. Health care providers can learn more about HCV treatment at HCV Online and AASLD/IDSA HCV Guidance.

ADULTS DIAGNOSED AND CURED OF HEPTATITIS C IN THE U.S.; 2013–2022

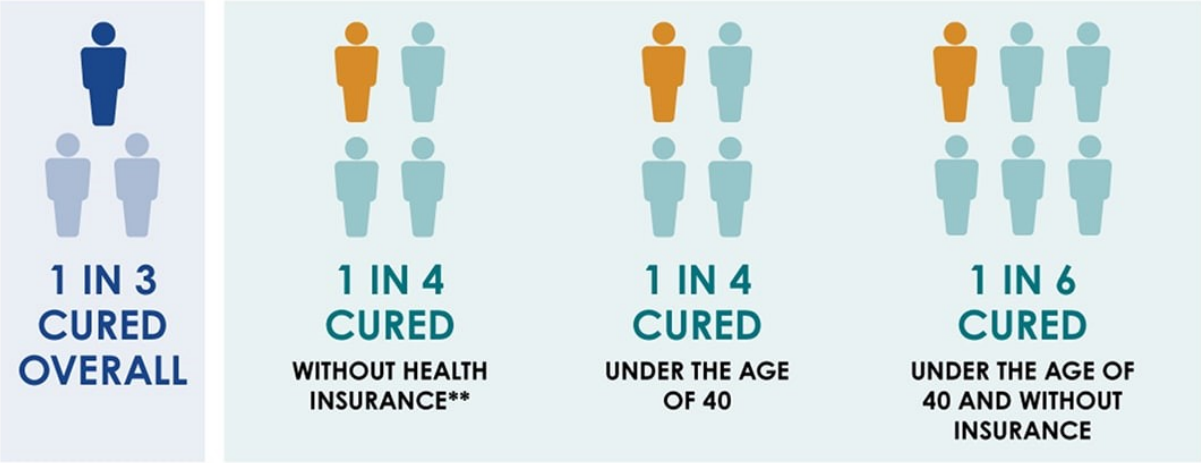


Image from CDC.

Blacklegged Tick Surveillance Summary

By: Xia Lee, Public Health Entomologist

Introduction

The blacklegged tick (also known as the deer tick) has four life stages: egg, larvae, nymph, and adult. After hatching from eggs, ticks require a bloodmeal from a host (for example, white-footed mice, chipmunks, white-tailed deer) to develop to the next life stage. While feeding, ticks may acquire pathogens that they can then transmit to humans during the next feeding. The risk of encountering a tick is highest during spring, early summer, and fall when the adult and nymphal life stages are most active.

Tick season

Adult ticks are most active in spring (April and May) and fall (October and November) but can become active during winter when daytime temperatures rise above 40° F. In 2024, adult ticks became active in February when temperatures rose above this activity threshold (Figure 1). The unseasonably warm weather and increased tick activity was also reflected in an unusually high rate of tick bite-associated emergency department visits during several weeks in February and March (Figure 2). Despite the early February start, adult tick activity during the fall peaked predictably for a second time in November. However, activity ceased quickly in December when the temperatures dipped below the 40°F threshold. Overall, in 2024, we saw an extended period in winter (February) and spring (March, April, and May) when adult blacklegged ticks were active at high numbers compared to 2023 and the 3-year average (Figure 1). Still, the early start in February did not alter the timing of the fall activity period.

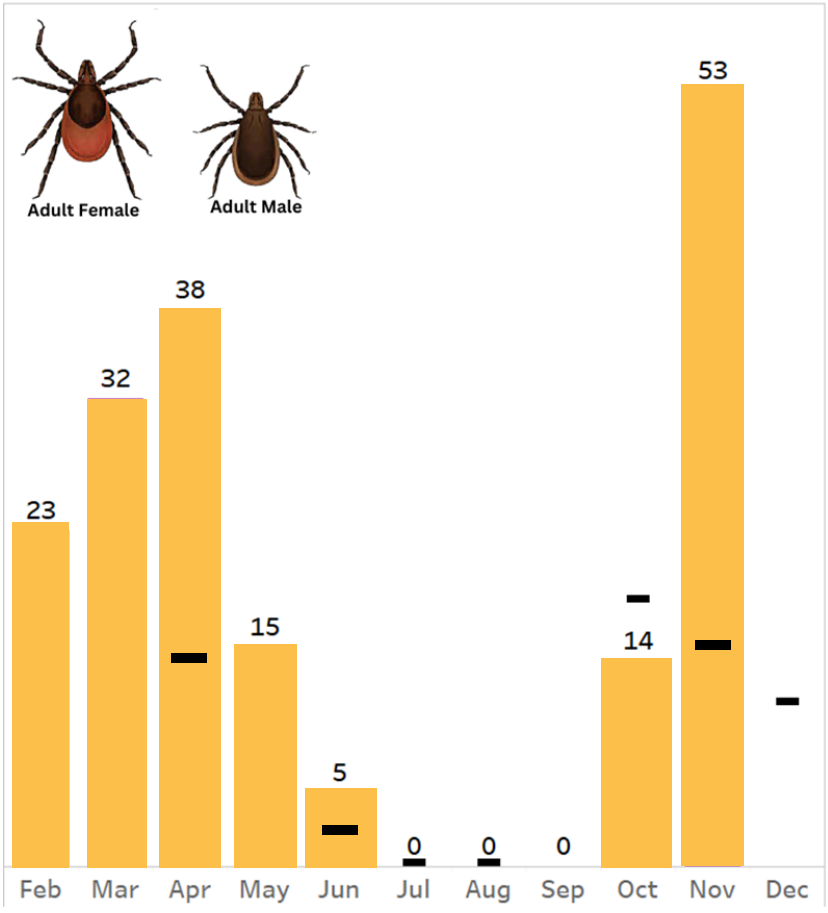


Figure 1. Adult blacklegged ticks collected at Tower Hill State Park (Iowa County) in 2024. Numbers above each solid bar indicate the total number of blacklegged ticks collected during each visit. The black bars represent the 3-year average (2021-2023) for each month. Note that the 3-year average is unavailable for some months due to a lack of surveillance data.

Blacklegged Tick Surveillance Summary

By: Xia Lee, Public Health Entomologist

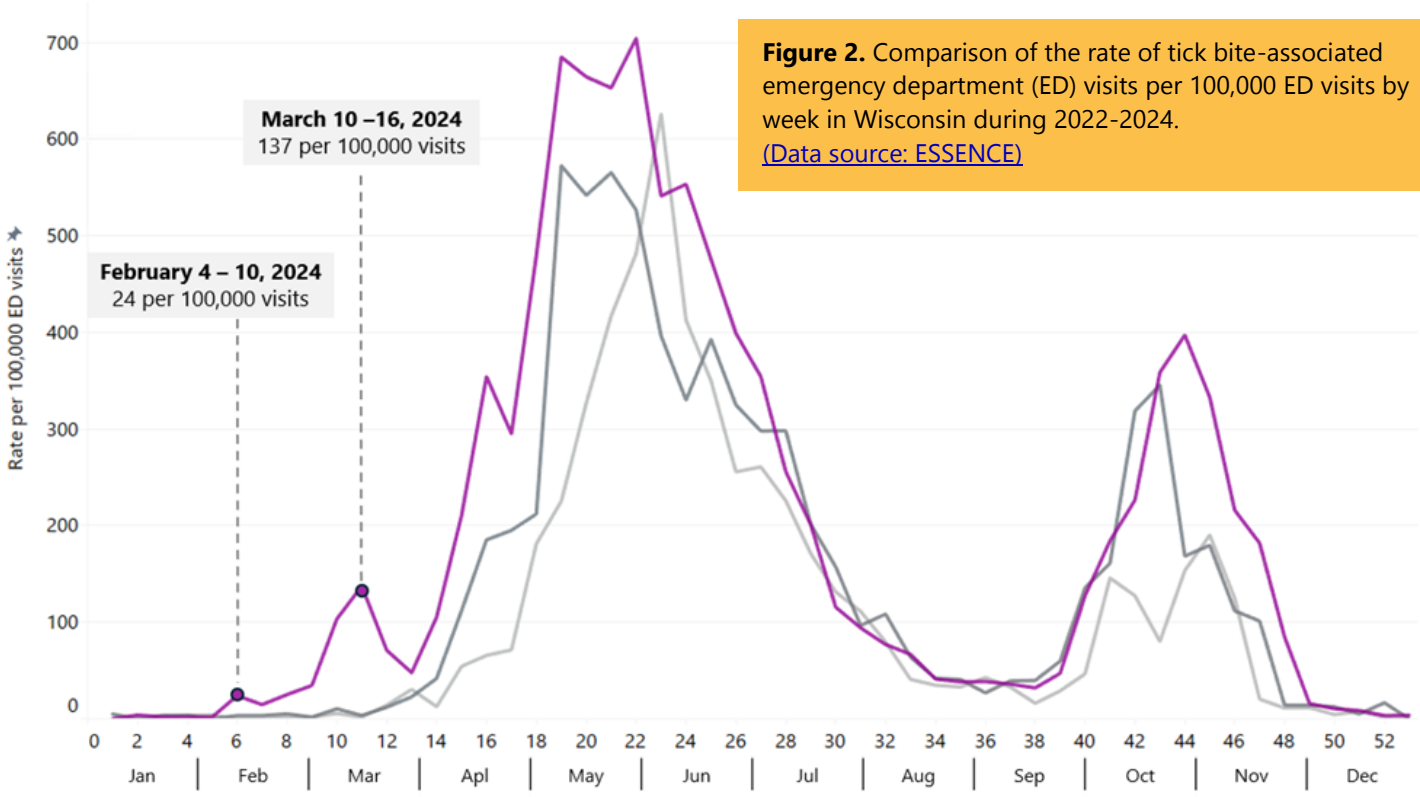


Figure 2. Comparison of the rate of tick bite-associated emergency department (ED) visits per 100,000 ED visits by week in Wisconsin during 2022-2024. (Data source: ESSENCE)

Nymphal blacklegged tick activity

The first nymphal blacklegged tick collected in 2024 was one that was submitted to the DHS Tick Identification Service in early March. However, nymphal ticks were not detected at tick surveillance sites until early May. Despite the warm February and early activity period for adult ticks, the majority of the nymphal tick populations were not significantly impacted, and the timing of nymphal activity remained similar to previous years. Peak nymphal activity was highest in June before tailing off in July with similar numbers collected at our surveillance sites in 2024 when compared to 2023 and the 3-year average (Figure 3).

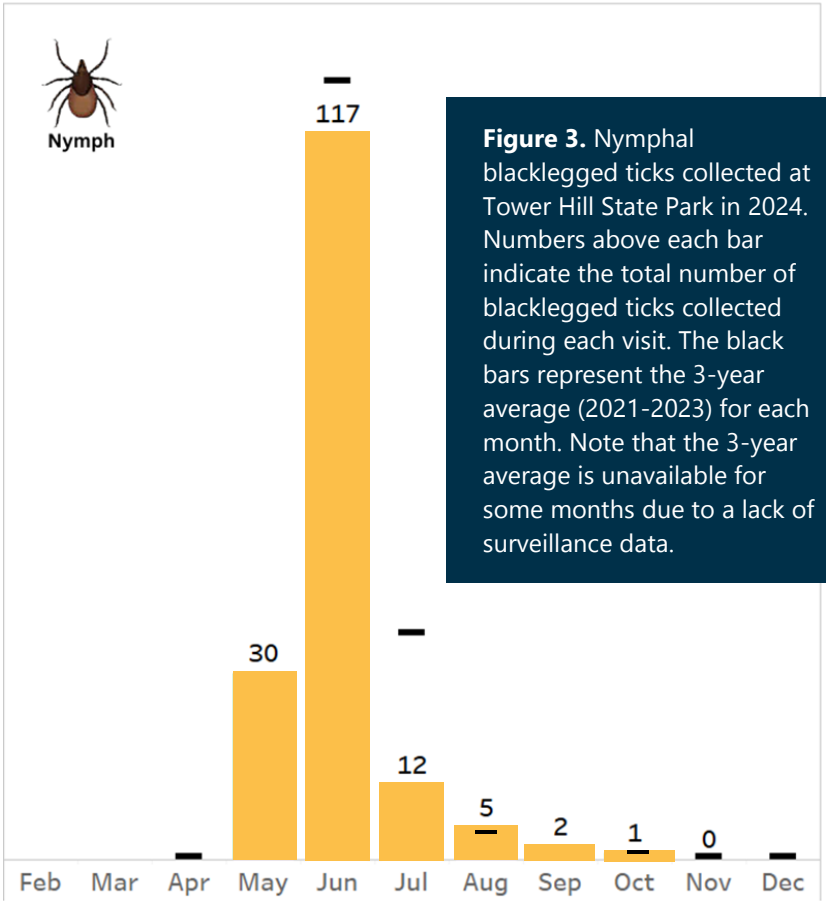


Figure 3. Nymphal blacklegged ticks collected at Tower Hill State Park in 2024. Numbers above each bar indicate the total number of blacklegged ticks collected during each visit. The black bars represent the 3-year average (2021-2023) for each month. Note that the 3-year average is unavailable for some months due to a lack of surveillance data.

Outbreak of NDM-producing *E.coli* Associated with Endoscopic Procedures

By: Megan Lasure, Antimicrobial Resistance Epidemiologist

Background

Outbreaks of carbapenemase-producing organisms (CPOs) due to contaminated endoscopes is a known route of transmission. Cleaning of endoscopes is challenging and small defects permit bacteria to colonize scopes.

Methods

Clinical isolate testing for carbapenemases is performed by the Wisconsin State Laboratory of Hygiene (WSLH) using reverse transcription polymerase chain reaction (RT-PCR). Comparison of isolates using whole genome sequencing was performed using Illumina short-read sequencing and Spriggan and Dryad analysis pipelines. Testing of rectal swabs for colonization screening utilized Cepheid GeneXpert CARBA-R tests, or culture-based testing for non-rectal swabs.

Results

Three clinical cases of New Delhi metallo-β-lactamase (NDM)-producing *E. coli* from the same acute care hospital were initially detected by the Wisconsin Healthcare-Associated Infections (HAI) Prevention Program. Analysis of whole genome sequencing data supported that they were closely related, with between 0–5 single nucleotide polymorphism (SNP) differences between them. The hospital reported that all four patients had endoscopic retrograde cholangiopancreatography (ERCP) procedures using the same scope. This scope was immediately removed from service. Since the scope that was last used was cultured in December 2023, the hospital sent a notice to all patients who had a procedure, offering colonization testing. Of the 73 patients who had a procedure, 17 had a colonization specimen collected and tested at WSLH. Testing of another colonization specimen for a Texas resident was facilitated by the Texas Department of State Health Services and was negative. To date, we have detected five clinical and five colonization cases among this population, with the earliest date of procedure on May 3. One isolate was discovered to match this cluster via whole genome sequencing from a distant state, and this patient had no history of travel to Wisconsin.

Conclusion

Screening of all patients exposed to contaminated scopes is important for surveillance of CPOs. Initial plans to only screen cases with procedure dates after the first identified clinical case would have missed one colonization positive. A further clinical positive was identified with a procedure date four days before the initial clinical case. The facility has made improvements in device reprocessing, staff training, and purchased disposable scopes.

For questions about the Healthcare-Associated Infections Program, contact DHSWIHAIPreventionProgram@dhs.wisconsin.gov

Vaccine Uptake Among Pregnant People in Wisconsin, 2021–2023

By: Sarah Kangas, Immunization Epidemiologist

Background

Pregnant people and newborns are at greater risk of becoming sick from respiratory illnesses compared to the general population. The Advisory Committee on Immunization Practices recommends the influenza (1997), Tdap (2012), COVID-19 (2021), and RSV (2023) vaccines for pregnant people. Vaccines administered before or during pregnancy can help protect pregnant people and their newborns against severe illness and health complications from vaccine-preventable diseases. Antibodies from these vaccines are passed to newborns to protect them from diseases until they are old enough to be vaccinated themselves.

Data from the Wisconsin Immunization Registry and the Statewide Vital Records Information System were used to assess vaccine uptake among pregnant people in Wisconsin from 2021 through 2023. The vaccine coverage assessment included Tdap, influenza, COVID-19, and RSV.

Trends in Wisconsin

Vaccination coverage rates were notably lower among pregnant people during the COVID-19 pandemic. Tdap vaccination coverage was lowest in 2021 and increased in 2022 and 2023 (Figure 1). Influenza and COVID-19 vaccines experienced similar trends with low coverage in 2021. Coverage more than doubled in 2022, and decreased again in 2023, with COVID-19 coverage falling below 2021 levels.

Tdap, influenza, COVID-19, and RSV vaccines are safe to co-administer. However, this analysis found that three out of four pregnant people received the Tdap vaccine, but only one in 10 received the COVID-19 vaccine in 2023, suggesting missed opportunities (Figure 2). One in four pregnant people received the influenza vaccine, and less than one out of five people received the RSV vaccine.

From 2021 through 2023, Black pregnant people experienced the lowest vaccination rates for COVID-19, RSV, influenza, and Tdap vaccines. Asian pregnant people consistently had the highest coverage for COVID-19, RSV, influenza, and Tdap vaccines. Other characteristics reported with higher vaccination coverage rates include age range of 25–44 years old, adequate prenatal care, private insurance, non-WIC participant, higher than high school level education, and living in an urban county.

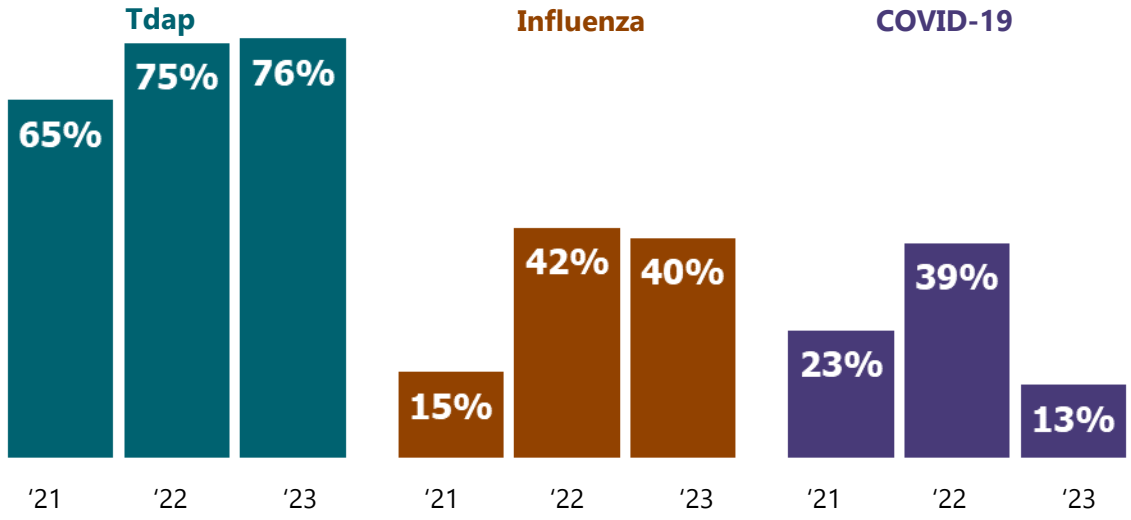


Figure 1. Tdap, influenza, and COVID-19 vaccination rates among pregnant people, 2021–2023

Vaccine Uptake Among Pregnant People in Wisconsin, 2021–2023

By: Sarah Kangas, Immunization Epidemiologist

Summary

This analysis provided valuable insight to understanding patterns of vaccine uptake among pregnant people in Wisconsin and may assist with tailoring outreach efforts. A recommendation from a health care professional is the top predictor of patients getting vaccinated. At a time when vaccines are increasingly polarized, health care providers must remain steadfast in their commitment to protect their patients by recommending and offering vaccines during pregnancy.

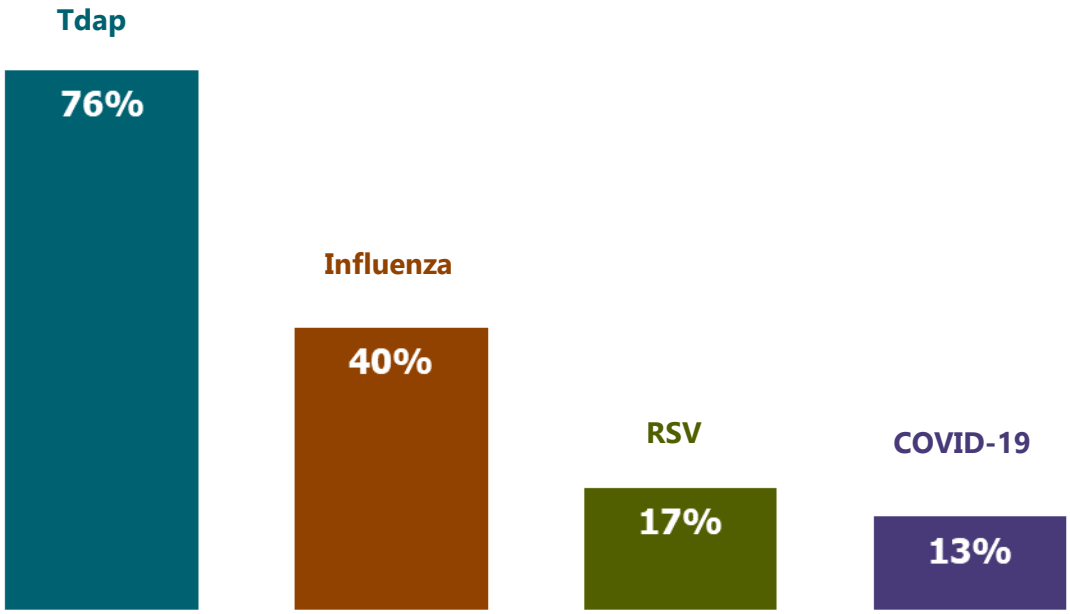


Figure 2. Tdap, influenza, RSV and COVID-19 vaccination rates among pregnant people in 2023.

RESOURCES

For more information, please visit:

Immunizations and Pregnancy | Wisconsin Department of Health Services

Vaccinations During Pregnancy in Wisconsin, 2023 | Wisconsin Department of Health Services

QUESTIONS

For questions regarding vaccination during pregnancy, contact the Immunization Program by sending an email to DHSImmProgram@dhs.wisconsin.gov.

Communicable Disease Case Counts

This report contains a selection of reportable conditions with inclusion based on public health significance and frequency of occurrence. The case counts reflect confirmed and probable cases, for all process statuses. These numbers are not final and are subject to change as confirmatory testing and case follow-up are completed. The case counts for 2025 first quarter (Q1) and year-to-date (YTD) are through March 31, 2025.

***Case counts should not be considered final and are subject to change.**

Disease	2024 Case Counts	2025 Case Counts				
	Total	Q1	Q2	Q3	Q4	2025 YTD
Enteric and Gastrointestinal						
Campylobacteriosis[4]	1,625	282				282
Cholera[1, 4]	1	0				0
Cryptosporidiosis[4]	638	56				56
Cyclosporiasis[4]	67	1				1
E. coli, Shiga toxin-producing (STEC)[4]	526	76				76
Giardiasis[4]	658	72				72
Hemolytic uremic syndrome	9	1				1
Listeriosis	28	6				6
Salmonellosis[4]	1,124	199				199
Shigellosis[4]	88	19				19
Typhoid fever[4]	2	1				1
Vibriosis (non-cholera)	50	6				6
Yersiniosis	259	47				47
Invasive Bacteria						
Group A streptococcal disease	415	139				139
Group B streptococcal disease	625	149				149
Fungal						
Blastomycosis[4]	112	12				12
Coccidioidomycosis[1]	16	2				2
Histoplasmosis[4]	23	5				5
Respiratory						
Coronavirus disease (COVID-19)[3, 4]	N/A	N/A				N/A
Please refer to the weekly respiratory virus surveillance report and respiratory illness data webpage.						
Influenza, novel	1	0				0
Influenza-associated hospitalizations	3,346	5,918				5,918
Legionellosis[4]	212	42				42
Tuberculosis[4]	69	21				21
Latent TB infection[4]	1,494	277				277
Sexually Transmitted						
Chlamydia trachomatis	23,441	5,263				5,263
Gonorrhea	6,890	1,350				1,350
HIV	N/A	N/A				N/A
Syphilis (all stages)	1,417	324				324
Vaccine Preventable						
Diphtheria	0	0				0
Haemophilus influenzae invasive disease	146	38				38
Hepatitis B, acute (confirmed cases only)	9	2				2
Hepatitis B, perinatal	0	0				0

Communicable Disease Case Counts

Disease	2024 Case Counts	2025 Case Counts				
	Total	Q1	Q2	Q3	Q4	2025 YTD
Vaccine Preventable (continued)						
Measles (rubeola)	1	0				0
Meningococcal disease	7	3				3
Mumps	6	6				6
Pertussis (whooping cough)	2,685	278				278
Poliomyelitis	0	0				0
Rubella	0	0				0
Streptococcus pneumoniae invasive disease	576	213				213
Tetanus	2	0				0
Varicella (chickenpox)	235	59				59
Vectorborne						
Babesiosis[4]	141	3				3
Dengue virus infection[1]	36	5				5
Eastern equine encephalitis virus (EEEV)	1	0				0
Ehrlichiosis/Anaplasmosis[4]	840	12				12
Jamestown Canyon virus infection	11	0				0
La Crosse virus infection	0	0				0
Lyme disease[4]	6,260	518				518
Malaria[1]	18	5				5
Powassan virus infection	12	0				0
Spotted fever group rickettsioses (spotted fevers)[4]	15	0				0
West Nile virus infection	32	0				0
Yellow fever[1]	0	0				0
Zika virus infection[1, 2]	0	0				0
Zoonotic						
Brucellosis	5	0				0
Hantavirus infection	0	0				0
Leptospirosis	1	0				0
Mpox[4]	7	0				0
Psittacosis	0	0				0
Q Fever, acute	6	0				0
Q Fever, chronic	1	0				0
Rabies (human)	0	0				0
Toxoplasmosis	1	0				0
Tularemia	0	0				0
Other						
CP-CRE	N/A	N/A				N/A
Hepatitis A	31	3				3
Hepatitis C, acute	58	13				13
Hepatitis E, acute	4	1				1
Kawasaki disease	19	4				4
Lymphocytic choriomeningitis virus infection	0	0				0
Transmissible spongiform encephalopathy (human)	7	1				1

[1] Denotes diseases where all cases in Wisconsin residents are travel-associated. No local transmission occurs.
[2] Due to enhanced surveillance, asymptomatic confirmed cases are included.
[3] COVID-19 reporting requirements have changed, and individual cases are no longer reportable as of 11/1/2023.
[4] DHS collects standardized industry and occupation information in WEDSS for these conditions.