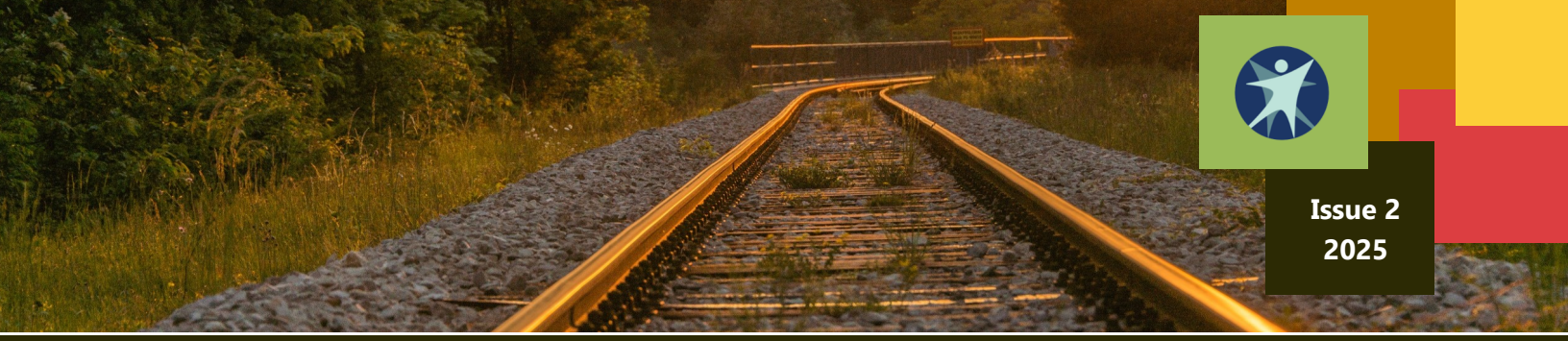


Issue 2
2025

WISCONSIN EPI EXPRESS

In This Issue

Program Updates

Expanding the surveillance of the Wisconsin Wastewater Monitoring Program

The Wisconsin Wastewater Monitoring Program has recently begun monitoring Wisconsin wastewater for mpox. Samples are collected from 22 wastewater treatment facilities across the state and represent approximately 45% of residents. Up-to-date information about mpox virus levels found in Wisconsin wastewater can be viewed on the CDC Mpox Wastewater Data webpage. The Wisconsin Wastewater Monitoring Program currently uses wastewater surveillance to routinely monitor diseases across Wisconsin like COVID-19, respiratory syncytial virus (RSV), and influenza. Learn more about these and other wastewater surveillance resources on page 2.

Sexual Health Awareness Communications Toolkit published

The Wisconsin Sexually Transmitted Infections (STI) Program developed a Sexual Health Awareness Toolkit for partners at college health centers in Wisconsin. The toolkit contains message maps, talking points, and social media posts with information about STIs.

Healthcare-associated Infections (HAI) Prevention Program restructured

The Wisconsin HAI Prevention Program recently restructured its infection preventionist (IP) team, increasing the number of infection preventionists providing direct, regional support to health care facilities and local and Tribal health departments (LTHDs) across Wisconsin. Check the HAI Contact Information page for details.

Immunization Program announces BigShot winners

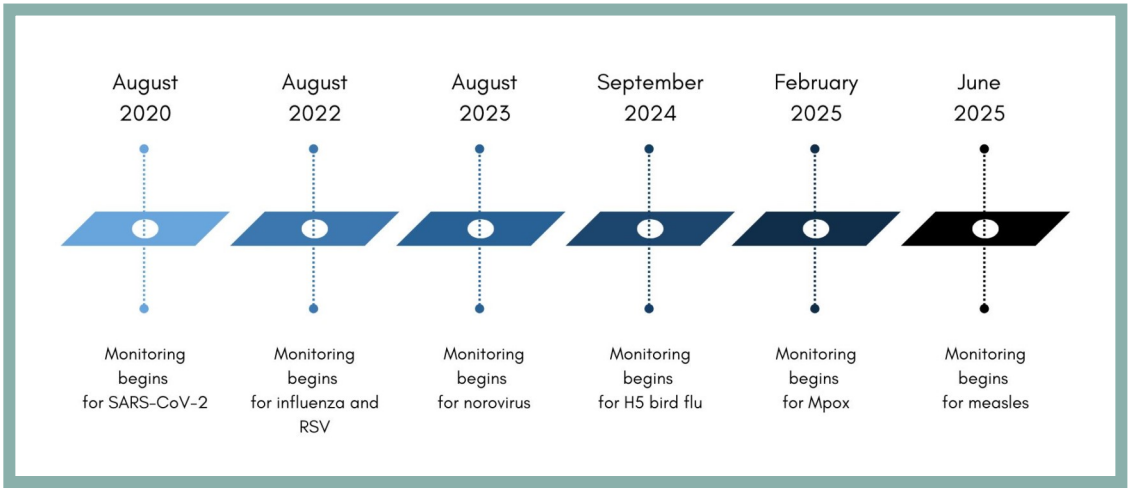
The Wisconsin BigShot award is an annual recognition that celebrates Vaccines for Children Program providers who are leading the way in protecting children's health by ensuring their pediatric patients are up-to-date on their vaccinations. Find the 2025 BigShot Winners on the DHS website.

Respiratory Wastewater Surveillance

By: Megan Rasmussen, Wastewater Epidemiologist

Background

Figure 1. Pathogen monitoring timeline



The Wisconsin Wastewater Monitoring Program collaborates with wastewater utilities and laboratory partners to routinely monitor for pathogens including COVID-19, influenza, respiratory syncytial virus (RSV), norovirus, and mpox (Figure 1). This article contains resources that local health departments and external partners can use to find wastewater monitoring data for their community.

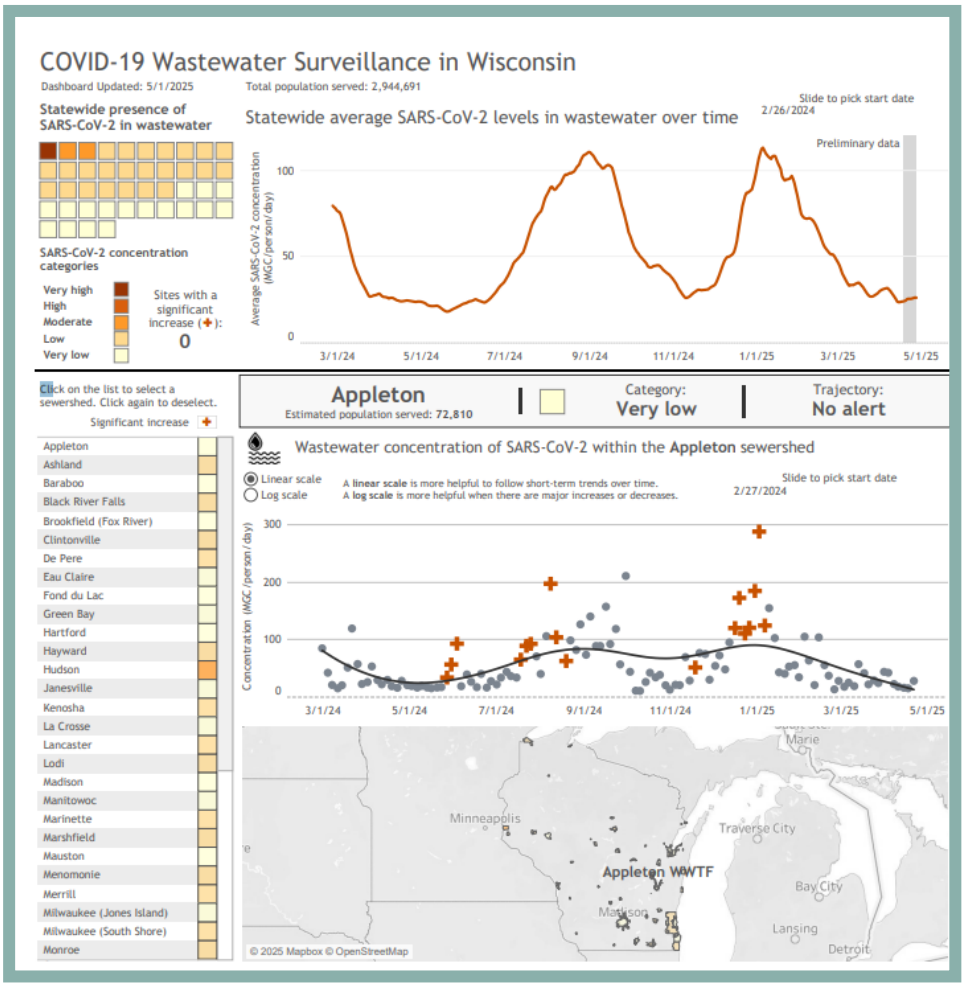


Figure 2. DHS COVID-19 wastewater surveillance dashboard

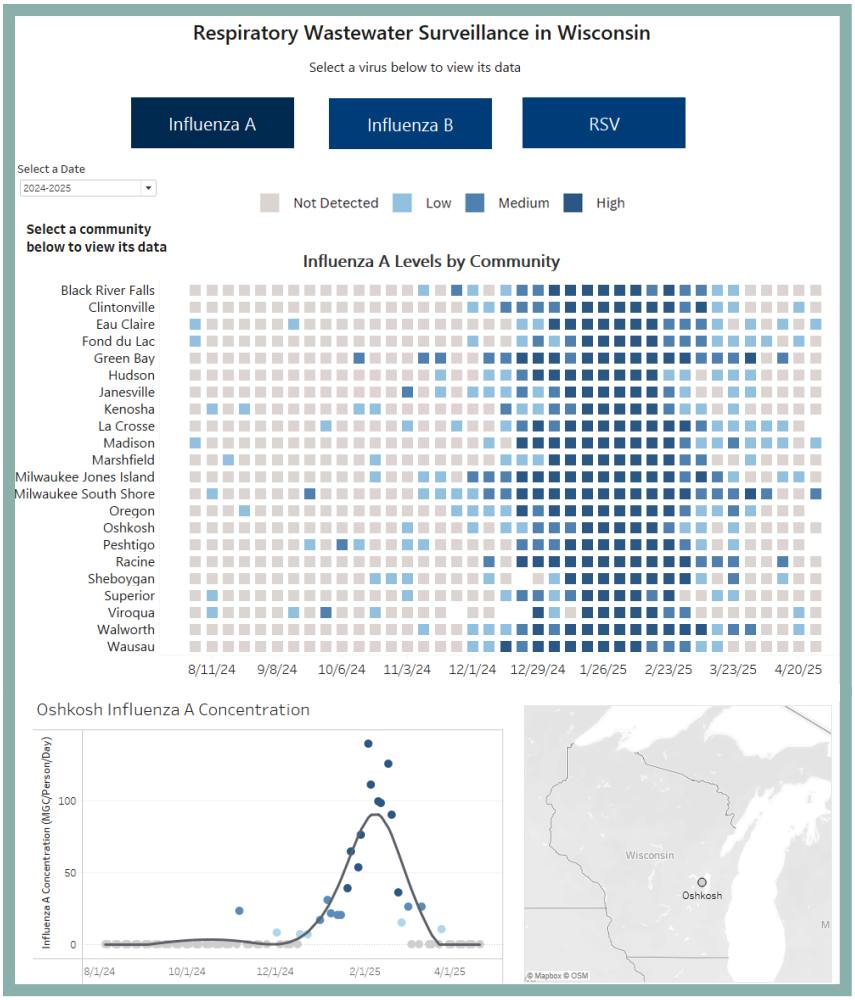
COVID-19 wastewater surveillance dashboard

This dashboard provides the latest COVID-19 community categorization levels, statewide average of COVID-19 concentration over time, community-specific levels and trajectories of COVID-19, and a map displaying sewer sheds (Figure 2). The wastewater dashboard can serve as an early warning of increasing COVID-19 activity in communities, inform the public of current COVID-19 transmission levels so they can take appropriate steps to protect their health, and alert health care providers to surges so they can prepare.

Respiratory Wastewater Surveillance

By: Megan Rasmussen, Wastewater Epidemiologist

Figure 3. DHS influenza and RSV surveillance dashboard



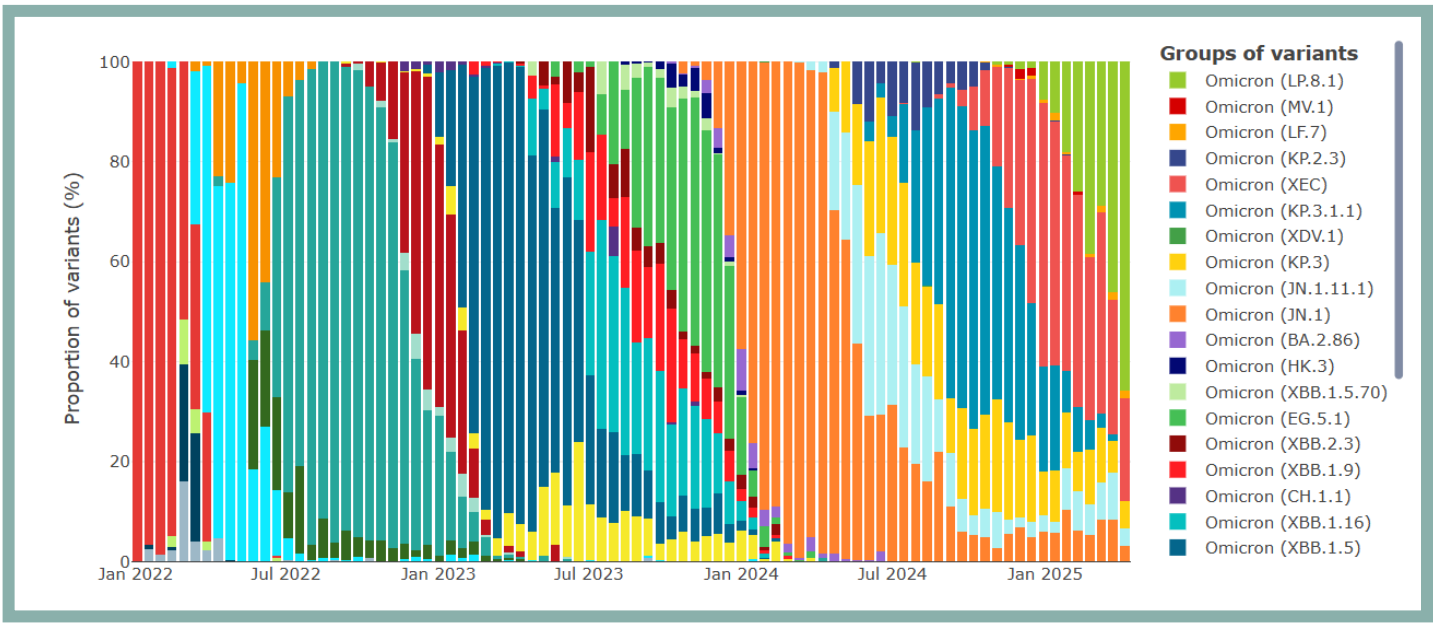
Coming soon: influenza and RSV surveillance dashboard

This upcoming dashboard will feature data available for influenza A, B, and RSV (Figure 3). It also provides community categorization for each pathogen over time, as well as individual community samples and categorization over time, and a map displaying the latest community category.

Wisconsin State Laboratory of Hygiene (WSLH) wastewater genomic dashboard

This dashboard provides the relative abundance of COVID-19 variant groups over time that are present in wastewater (Figure 4). WSLH sequences about 20% of the samples that are tested for routine COVID-19 wastewater surveillance.

Figure 4. WSLH genomic dashboard



Respiratory Wastewater Surveillance

By: Megan Rasmussen, Wastewater Epidemiologist

CDC National Wastewater Surveillance System (NWSS) dashboards

The Wisconsin Wastewater Monitoring Program submits data weekly to NWSS for Wisconsin data to be displayed on their dashboards. These dashboards feature state and national categorization for COVID-19, influenza A, RSV, and mpox (Figure 5). The NWSS dashboard also has a map visualization for selected pathogens (Figure 6). The NWSS allows public health officials to watch for sustained increasing levels of viruses in wastewater to inform national-level public health decisions.

Figure 5. NWSS dashboard pathogen selection landing page

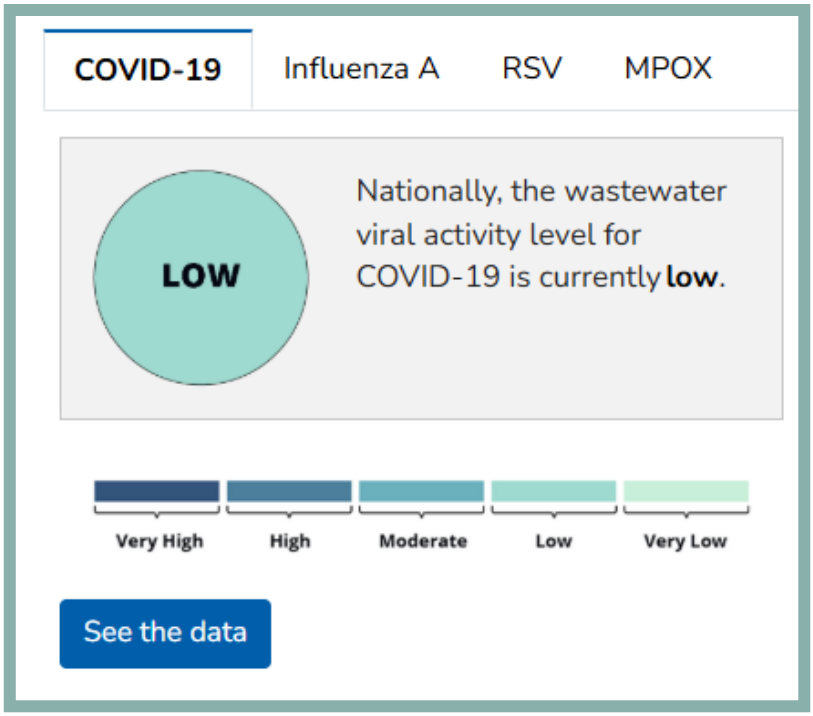
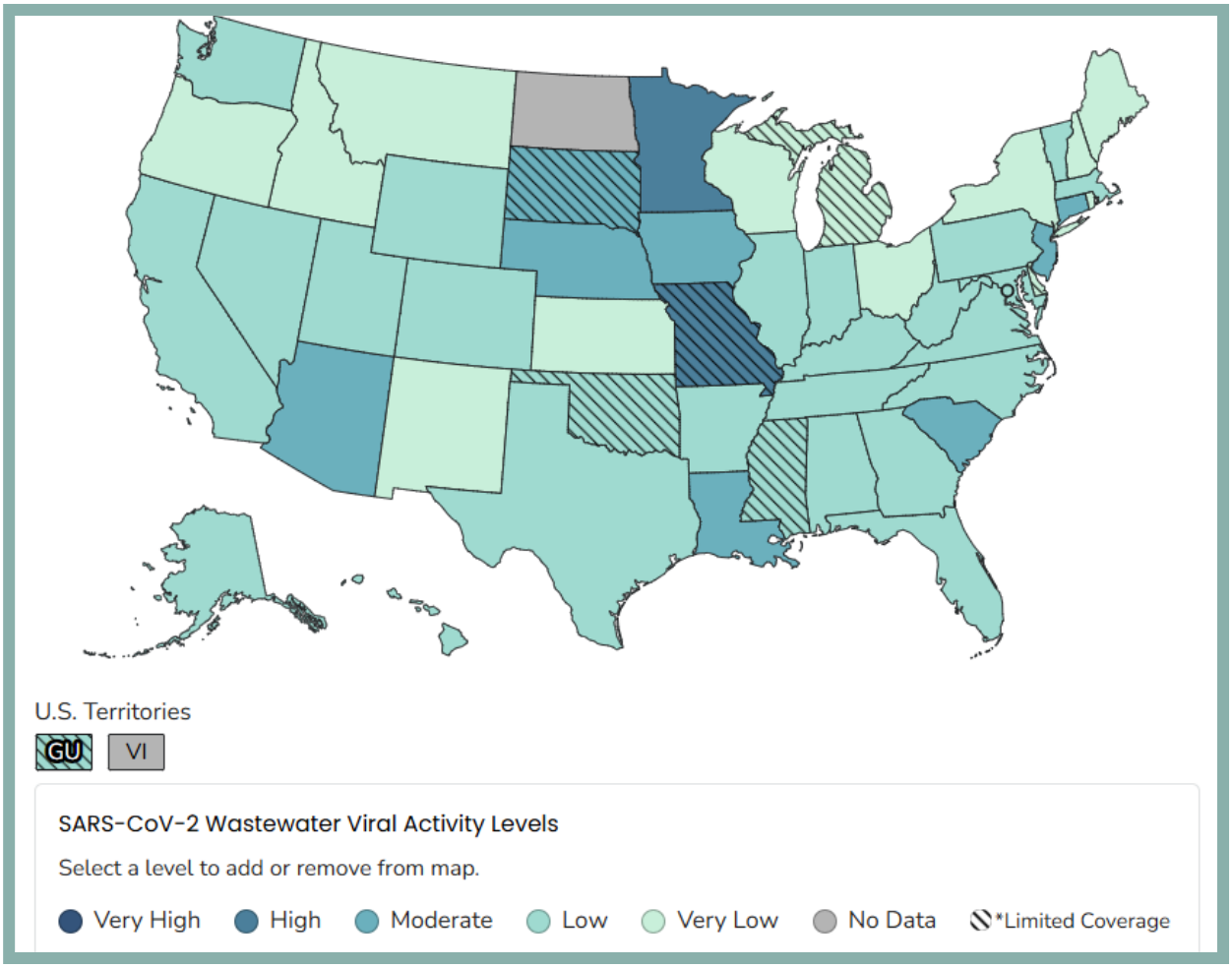


Figure 6. Map visualization of NWSS dashboard



Community Cluster Investigations for *Legionella*

By: Frances Goglio, *Legionella* Epidemiologist

Background

Legionnaires' disease is a severe, atypical pneumonia caused by exposure to *Legionella* bacteria. *Legionella* is an opportunistic waterborne pathogen that occurs naturally at low levels in fresh water but grows and spreads in human-made water systems, such as plumbing systems and devices that convert water into a mist or spray. From 2019–2024, there has been a relatively stable number of laboratory-confirmed case reports (Figure 1). In Q1 of 2025, the Bureau of Communicable Diseases (BCD) observed a notable increase in reported Legionnaires' disease cases compared to Q1 in the previous 10 years (Figure 2). There has been an average of 224 confirmed cases of legionellosis reported in Wisconsin per year since 2020. From 2020–2024, there was an average of 22 confirmed cases of Legionnaires' disease reported from January to March. In 2025, there were 42 confirmed cases in this timeframe.

Figure 1: Laboratory-confirmed legionellosis case reports by **calendar year**, statewide.

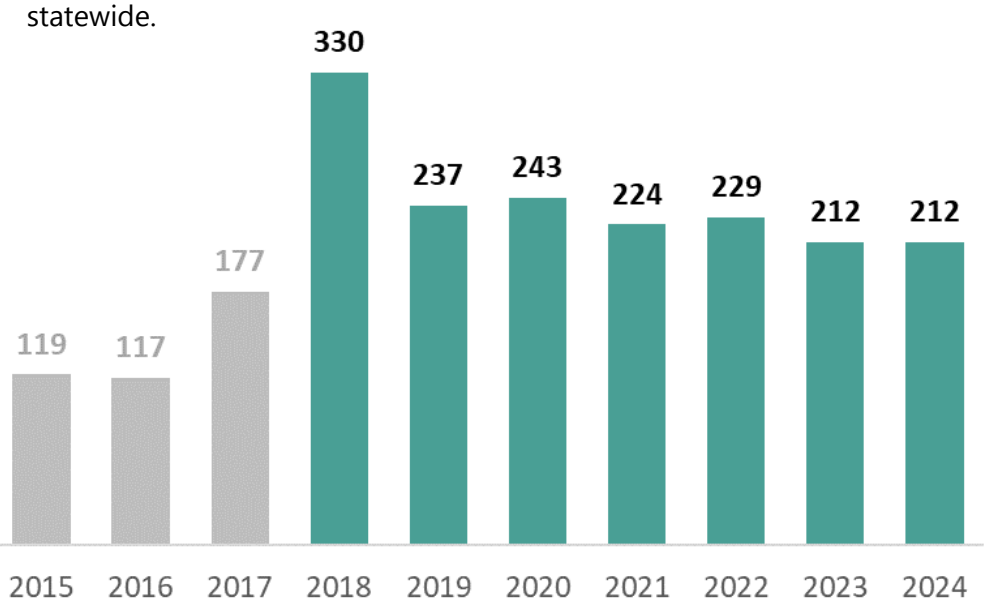
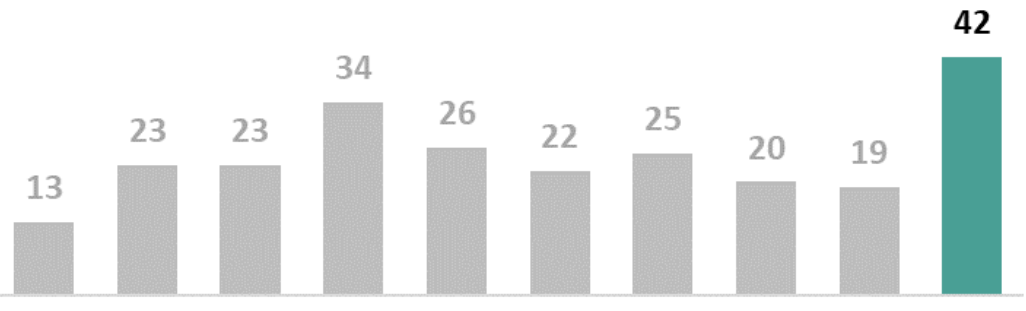


Figure 2: Laboratory-confirmed legionellosis case reports, **January through March** only, statewide.



Community Cluster Investigations for *Legionella*

By: Frances Goglio, *Legionella* Epidemiologist

Case features

Approximately 90% of Legionnaires' disease cases reported are considered sporadic (not linked to an outbreak or linked to a specific facility). BCD routinely reviews sporadic Legionnaires' disease case data to evaluate potential linkages, such as an increase of reported cases among residents in a specific neighborhood, community, or Division of Public Health (DPH) region. BCD will also review surveillance data for workplaces, travel destinations, and other specific facility locations that case-patients report visiting during the exposure period. From January–March 2025, BCD observed the following:

Seventeen percent of case-patients either had an inpatient stay at an acute care facility or resided in a long-term care facility (LTCF), including assisted living facilities, during the exposure period. This compares to 10% during the same time period in 2023–2024.

Thirty-one percent of case-patients reported overnight travel during the exposure period. This compares to 46% of case-patients during the same time period in 2023–2024.

Fifty-three percent of case-patients were residents of the southeastern DPH region, compared to 36% of case-patients during the same time period in 2023–2024. Of note, 51% of total 2023–2024 cases (January–December) were residents of the southeastern region.

Public health response

In addition to monitoring trend data, BCD works closely with local health departments to respond to legionellosis outbreaks and cases with potential exposure at LTCFs. BCD and respective local health departments responded to six of the seven reported cases with a reported inpatient stay or residence at a LTCF during the 14 days prior to their illness, which included outreach to nine facilities.

For five of the nine facilities, a full public health investigation was initiated. This process includes a full, onsite environmental assessment and sampling of the facility's premise plumbing and plumbed devices, and, if needed, facility implementation of immediate control measures and remediation.

For three of the nine facilities, a full investigation was not initiated. These facilities hired an independent water management consultant and conducted environmental testing to validate their Water Management Program. BCD and local health departments having jurisdiction offered full environmental assessments for two of the facilities, which was completed at one of the facilities.

All of the eight facilities received information about Water Management Programs to mitigate risk of *Legionella* in their facilities.

Resources for facility managers

There are several resources available to assist facility managers with development of an American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE) 188-compliant Water Management Program (which is required for certain health care facilities, and recommended for all inpatient health care facilities and facilities that primarily house people older than 65 years of age) at no cost. The CDC (Centers for Disease Control and Prevention) developed this quiz to help facility managers identify the need for a facility Water Management Program.

Additional resources

- CDC *Legionella* control toolkit
- CDC Water Management Program Toolkit
- CSTE Water Management Program Evaluation Tool
- CDC Legionnaires' Disease Prevention Face Sheet for Hotel Operators
- CDC Legionnaires' Disease Prevention Fact sheet for Vacation Rental Operators

Questions

Questions about Legionnaires' disease can be directed to Frances Goglio, Legionellosis Surveillance Coordinator, by email at Frances.Goglio@dhs.wisconsin.gov or phone (608-266-2568).

Questions about environmental *Legionella* can be directed to Bruce Meiners, *Legionella* Industrial Hygienist, by email at Brucee.Meiners@dhs.wisconsin.gov or phone (608-267-1887).

At-Home HIV/STI Testing Program

By: Jose Salazar, HIV Prevention Unit Supervisor; Yi Ou, HIV Surveillance Unit Supervisor

Introduction

The Wisconsin HIV Program and partners from around the state came together to develop the Wisconsin Integrated HIV Prevention and Care Plan 2022–2026 which outlines four primary goals: prevent new HIV infections, improve HIV-related outcomes of people with HIV, reduce HIV-related disparities, and achieve integrated and coordinated efforts that address the HIV epidemic among all partners. These goals align with the national Ending the HIV Epidemic Initiative, which calls for comprehensive HIV, sexually transmitted infection (STI), and hepatitis C virus (HCV) testing as a central strategy to eliminate HIV. To support this objective, the Wisconsin HIV Program has partnered for a second year with Simple HealthKit Inc. to provide free, at-home testing for Wisconsin residents.

Simple HealthKit

The HIV Program was able to offer a limited supply of free at-home testing kits through Simple HealthKit that provided confirmatory results for chlamydia, gonorrhea, and trichomoniasis, and preliminary results for HIV and syphilis. The goal of this at-home testing program is to expand access to HIV and STI testing for Wisconsin residents who do not live near a free testing site or may be hesitant to go to an in-person testing site. Wisconsin residents who were 18 years of age and older were eligible to order the free at-home testing kits securely through the Simple HealthKit Portal.

Program updates

The program ran from **February 27–May 31.**

113 people have been tested with at-home kits.

368 test kits have been distributed for common STIs (trichomoniasis, chlamydia, and gonorrhea).

264 test kits distributed for multi-site STIs (trichomoniasis, chlamydia, and gonorrhea).

211 test kits distributed for duo STIs (syphilis and HIV).

1 abnormal test result has been identified.

Additional information

For questions about this at-home testing program, please email José Salazar at Jose.Salazar@dhs.wisconsin.gov and Brandon Kufalk at Brandon.Kufalk@dhs.wisconsin.gov.

Childhood and Adolescent Immunization Coverage

By: Maeve Pell, Immunization Information System Epidemiologist

Introduction

Vaccination coverage rates are essential for assessing how well areas are protected from vaccine-preventable diseases, like measles. Every year, the Wisconsin Immunization Program analyzes the coverage rates for Wisconsin residents using data from the Wisconsin Immunization Registry (WIR).

New data dashboard

This year, the Wisconsin Immunization Program debuted two new dashboards to visualize the annual routine vaccination rates for children and adolescents.

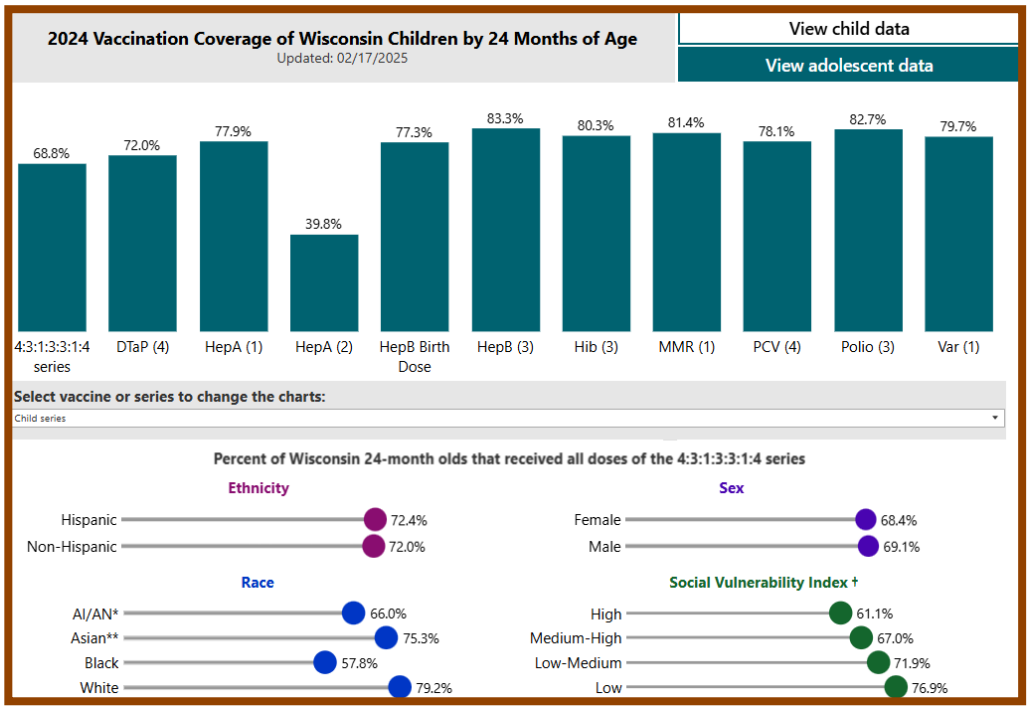


Figure 1: *2024 Wisconsin childhood and adolescent vaccination coverage dashboard.*

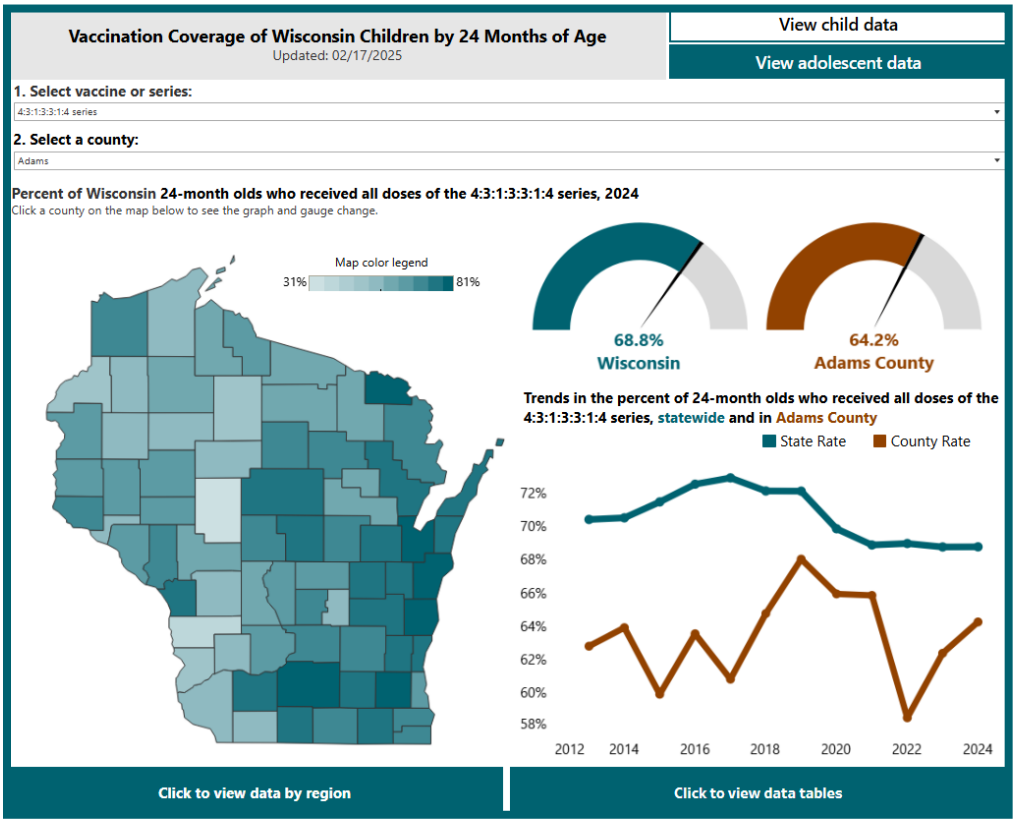


Figure 2: *2024 Wisconsin childhood and adolescent vaccination coverage by county and region.*

The first dashboard (Figure 1) contains 2024 statewide coverage rates of 11 metrics for 24-month-old children and seven metrics for adolescents. The 2024 statewide rate data is also displayed by sex, race, ethnicity, and the Social Vulnerability Index[1].

The second dashboard (Figure 2) contains 2024 childhood and adolescent rates by county and region. The dashboard can be used to identify rates by geographic location in 2024 and over time compared to the statewide rates.

Childhood and Adolescent Immunization Coverage

By: Maeve Pell, Immunization Information System Epidemiologist

Childhood vaccination rates

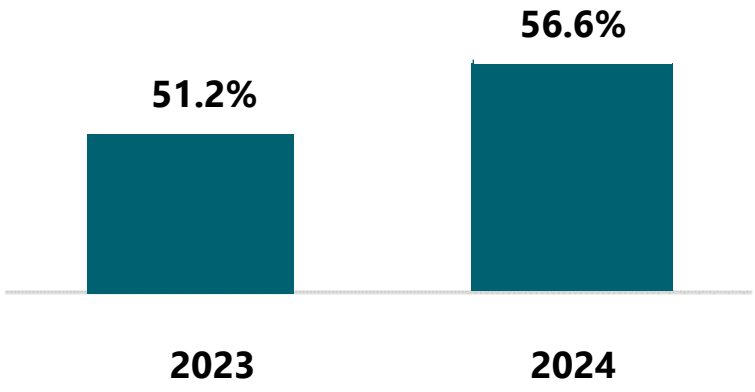
In 2024, Wisconsin childhood vaccination rates remained similar to 2023. Childhood vaccination rates declined in 2020 and none of the childhood vaccination statewide rates have returned to the level they were in 2019. For example, in 2024, 68.8% of 24-month-olds had received all doses of the 4:3:1:3:3:1:4 vaccine series. That rate is equivalent to 2023 and 3.3 percentage points lower than in 2019.

MMR vaccination rates have been declining since 2013. In 2024, only 81.4% of 24-month-olds had received one dose of the measles, mumps, rubella (MMR) vaccine. That rate is 0.2 percentage points lower than 2023, 3.5 percentage points lower than 2019, and 6.8 percentage points lower than 2013. Coverage of 24-month MMR rates vary by county ranging from 44% to 88%. No counties had a vaccination rate above the threshold needed for herd immunity from measles.

Adolescent vaccination rates

In 2024, most adolescent vaccination rates remained within one percentage point of 2023. For example, completion of the HPV series in 13–18 year-olds was 53.1% in 2024, 0.1 percentage points higher than 2023. Also, 81.3% of 13–18 year-olds had received at least one dose of the Tdap vaccine, 0.6 percentage points lower than 2023.

Figure 3: Mening ACWY Series Completion in Wisconsin Adolescents 17–18 years old



Data source: WIR

The exception was completion of the meningococcal ACWY (MenACWY) vaccine series, which increased by 5.4 percentage points from 2023 to 2024 (Figure 3). An increase in the MenACWY completion rate was seen in 68 out of 72 Wisconsin counties.

This large increase in the Mening ACWY completion rate was likely influenced by the new school vaccine requirement[2]. Starting in the 2024–2025 school year, one dose of MenACWY-containing vaccine was required for students entering 7th grade and a booster dose for eligible students entering 12th grade.

Resources

- DHS MMR vaccination rate county maps
- DHS MMR vaccination rate data (excel)
- Childhood and adolescent vaccination coverage dashboard

References

1. Centers for Disease Control and Prevention/ Agency for Toxic Substances and Disease Registry/ Geospatial Research, Analysis, and Services Program. CDC/ATSDR Social Vulnerability Index 2022 Database Wisconsin. https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html
2. Wisconsin Department of Health Services. Summary of Changes to Wisconsin 2024-2025 School Immunization Requirements for Local Health Departments, Schools, and Health Care Providers. https://www.dhs.wisconsin.gov/publications/p03370.pdf

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 second quarter (Q2) and year-to-date (YTD) are through June 15, 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]	1,692	295	252			547
Cholera[1, 4]	1	0	0			0
Cryptosporidiosis[4]	641	61	88			149
Cyclosporiasis[4]	67	1	5			6
E. coli, Shiga toxin-producing (STEC)[4]	527	77	79			156
Giardiasis[4]	656	82	47			129
Hemolytic uremic syndrome	9	1	0			1
Listeriosis	29	6	2			8
Salmonellosis[4]	1,130	213	182			395
Shigellosis[4]	89	20	12			32
Typhoid fever[4]	2	1	1			2
Vibriosis (non-cholera)	50	6	12			18
Yersiniosis	260	50	26			76
Invasive Bacteria						
Group A streptococcal disease	415	140	77			217
Group B streptococcal disease	625	151	141			292
Fungal						
Blastomycosis[4]	118	20	4			24
Coccidioidomycosis[1]	25	3	3			6
Histoplasmosis[4]	25	6	4			10
Respiratory						
Coronavirus disease (COVID-19)[3, 4]	N/A	N/A	N/A			N/A
Please refer to the respiratory illness data webpage for COVID-19, influenza, RSV, and other respiratory virus data.						
Influenza, novel	1	0	0			0
Influenza-associated hospitalizations	3,346	5,929	160			6,089
Legionellosis[4]	212	40	27			67
Tuberculosis[4]	69	21	14			35
Latent TB infection[4]	1,528	344	153			497
Sexually Transmitted						
Chlamydia trachomatis	23,430	5,300	4,229			9,529
Gonorrhea	6,890	1,353	1,024			2,377
HIV	N/A	N/A	N/A			N/A
Syphilis (all stages)	1,420	372	195			567
Vaccine Preventable						
Diphtheria	0	0	0			0
Haemophilus influenzae invasive disease	152	39	28			67
Hepatitis B, acute (confirmed cases only)	9	1	2			3
Hepatitis B, perinatal	0	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			0
Meningococcal disease	7	3	1			4
Mumps	6	6	1			7
Pertussis (whooping cough)	2,984	317	79			396
Poliomyelitis	0	0	0			0
Rubella	0	0	0			0
Streptococcus pneumoniae invasive disease	577	217	121			338
Tetanus	2	0	0			0
Varicella (chickenpox)	235	54	42			96
Vectorborne						
Babesiosis[4]	141	2	3			5
Dengue virus infection[1]	38	6	1			7
Eastern equine encephalitis virus (EEEV)	1	0	0			0
Ehrlichiosis/Anaplasmosis[4]	840	13	205			218
Jamestown Canyon virus infection	11	0	0			0
La Crosse virus infection	0	0	0			0
Lyme disease[4]	6,353	568	1,280			1,848
Malaria[1]	18	5	3			8
Powassan virus infection	12	0	2			2
Spotted fever group rickettsioses (spotted fevers)[4]	14	0	2			2
West Nile virus infection	32	0	0			0
Yellow fever[1]	0	0	0			0
Zika virus infection[1, 2]	0	0	0			0
Zoonotic						
Brucellosis	3	0	0			0
Hantavirus infection	0	0	0			0
Leptospirosis	1	0	0			0
Mpox[4]	7	0	0			0
Psittacosis	0	0	0			0
Q Fever, acute	8	0	0			0
Q Fever, chronic	1	0	0			0
Rabies (human)	0	0	0			0
Toxoplasmosis	1	0	0			0
Tularemia	0	1	0			1
Other						
CP-CRE	N/A	N/A	N/A			N/A
Hepatitis A	31	3	4			7
Hepatitis C, acute	61	17	9			26
Hepatitis E, acute	4	1	0			1
Kawasaki disease	20	9	6			15
Lymphocytic choriomeningitis virus infection	0	0	0			0
Transmissible spongiform encephalopathy (human)	7	1	0			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.