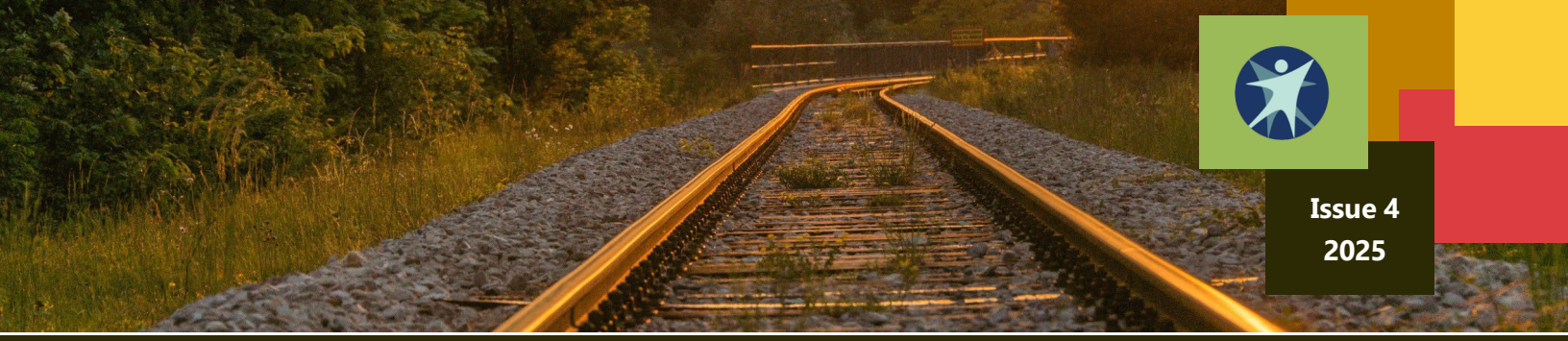

Issue 4
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In This Issue

Program Updates

New wastewater dashboards

The Wisconsin Wastewater Monitoring Program (WWMP) recently published new influenza and respiratory syncytial virus (RSV) wastewater surveillance dashboards. The new dashboards show current and past levels of respiratory viruses in untreated wastewater across Wisconsin. Additional interactive dashboards are available on the Statewide Wastewater Respiratory Summary and COVID-19 Levels in Wastewater webpages. Please contact the WWMP with questions at DHSWastewater@dhs.wisconsin.gov.

Tick Surveillance Report now available

The Bureau of Communicable Diseases (BCD) Vector-borne team has created a Tick Surveillance Report describing tick activity in Wisconsin. The report is published bi-weekly and is available on the DHS website.

2024 HIV surveillance report published

The Wisconsin HIV Program has published the 2024 Wisconsin HIV Surveillance Annual Report. This report provides an overview of trends in overall data, diagnosis, and prevalence of HIV in Wisconsin. A two-page summary of the report is also available on the HIV Program Data webpage.

New respiratory virus dashboards

New respiratory dashboards displaying virus activity, emergency department data, and lab testing data are now available. These interactive dashboards are updated weekly and can be filtered to show data for one of the five Wisconsin public health regions.

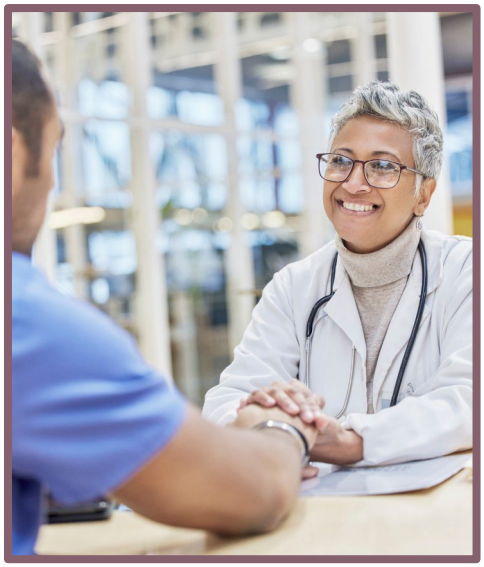
Respiratory season communication toolkits have been published

Toolkits for local and Tribal health departments, health care providers, and schools and early learning facilities promoting respiratory illness prevention are available on the DHS respiratory page. Toolkits include message maps, sample news releases, and social media.

Moving Toward a Statewide System for HIV Care Data With CAREWare

By: Abby Winkler, HIV Care Epidemiologist

Background



The Health Resources and Services Administration (HRSA) Ryan White HIV/AIDS Program awards funds to each state and territory to provide HIV care services. In Wisconsin, this funding is administered through the HIV Program, which then funds six subrecipient agencies across the state to provide various core medical and support services for people living with HIV. In 2024, 5,563 people living with HIV (72% of all people living with HIV in Wisconsin) used Ryan White-funded services.

Current situation

To date, the subrecipient agencies have kept client data in their own data systems. The HIV Program receives quarterly aggregated performance measure data and has access to de-identified client-level data once per year when subrecipients report this data to HRSA. This makes it difficult for the HIV Program to make data-driven programmatic decisions and develop clinical quality improvement projects. Wisconsin is also one of the only states without a statewide HIV care reporting database.

Solution

The HIV Program is working on developing a statewide system for HIV data reporting through the use of CAREWare, an existing software system offered by HRSA to collect service- and client-level information for individuals receiving Ryan White services. HRSA does not require Ryan White-funded recipients and subrecipients to use CAREWare; however, CAREWare is available at no cost and meets all Ryan White data reporting requirements.

Having CAREWare as a statewide data system has many benefits, including:

- Allowing the HIV Program to identify gaps in care and needed services by giving the program more frequent and better access to data on what services people living with HIV receive and monitoring performance of care metrics.
- Reducing the burden of federal reporting requirements on the subrecipients by allowing the HIV Program to run performance measures, eliminating the need for a quarterly report submission.
- Allowing smaller subrecipient organizations to meet reporting requirements without spending their own funds to do so.
- Sharing client information to verify Ryan White eligibility without requesting additional documentation from clients.

Current state

DHS continues to work on implementing CAREWare as a statewide HIV data collection system. The HIV Program has successfully secured buy-in from all subrecipient agencies and set up a testing and production environment. This system will be ready for data once set up is complete. DHS is now in the final stages of securing a contract with a vendor to assist with setup and data migration into CAREWare from the subrecipient data systems so that the real work can begin.

Why Your Next Foodborne Outbreak Investigation Might Be Faster and More Effective With Online Interviews

By: Karen Boegler, Enteric Epidemiologist

Background

The winter of 2024–2025 was an unusual season for outbreaks of norovirus in Wisconsin and across the country. Driven in part by the emergence on a 'new' dominant genotype, GII.17[P17], residents of the state experienced more vomiting and diarrhea this last season. A lot more.

Over the past 10 years, our state experienced, on average, 122 norovirus outbreaks between the months of November and March. In the most recent norovirus season, Wisconsin local and Tribal health departments (LTHDs) reported more than 200 norovirus outbreaks. In any given year, the capacity of LTHDs and the Department of Health Services (DHS) to conduct norovirus outbreak investigations during the winter months may be limited by holiday schedules and other competing public health concerns, particularly respiratory illnesses and outbreaks.

Foodborne disease investigations take time, resources, and collaboration

As in most years, 2024–2025 norovirus outbreaks occurred primarily in long-term care facilities (LTCFs), with person-to-person spread. But a few (n=3) were attributed to foodborne transmission. These point-source type outbreaks require more time-intensive investigation, because rather than implementing standard intervention measures to limit spread (as with LTCF outbreaks), LTHD and DHS staff must first identify the source of illnesses and then target intervention measures to that source. To do this, LTHD and DHS staff interview both ill and well people who shared an exposure, then identify significant differences in the responses between the two groups. Typically, these interviews are conducted one at a time, either in person or over the phone. Interview data is often documented on paper, then transferred to digital format for analysis. However, when outbreaks are large, as with many of those during the 2024–2025 norovirus season, these methods are too time-intensive to yield quick, targeted interventions.

Because of the time constraints on LTHD and DHS staffing during the winter months and the amount of time needed to conduct 'traditional' interviews, DHS expanded the use of online surveys this year. Online interview questions are tailored to the investigation using a survey software, and the interview forms are published to a secure web page. A web link is shared with the target population, then users self-report their symptoms, onset timing, food history, and other potential exposures. The survey software has statistical analysis tools for identifying trends in real time as responses are submitted, and data is available in an exportable format for easy analysis.

Using online surveys during a large foodborne norovirus outbreak

One local health department successfully used online surveys to investigate a large norovirus outbreak among university students and staff. On the morning of December 4, 2024, staff at the Eau Claire City-County Health Department (ECCCHD) received calls from concerned partners and two large area hospitals reporting numerous university students who had sought aid overnight at their emergency departments with symptoms of vomiting, diarrhea, and abdominal cramping. Two of the students were tested, and both tested positive for norovirus. Illness complaints were also submitted through the DHS Report it Quick online tool.

Initially, ECCCHD used the hospital emergency department line lists to begin collecting interview data by phone. However, it soon became apparent that the number of ill individuals surpassed ECCHD's capacity.

Why Your Next Foodborne Outbreak Investigation Might Be Faster and More Effective With Online Interviews

By: Karen Boegler, Enteric Epidemiologist

Online surveys and partner engagement led to quick, targeted interventions

Pivoting from phone interviews to online surveys allowed DHS and ECCCHD to share prevention messaging and collect outbreak data quickly. The morning after the first cases were identified, campus leadership notified students and staff about the investigation by sending a campus-wide email with a hyperlink to the outbreak interview. The email and survey link included prevention messaging, norovirus information, recommendations on when to seek health care, and return-to-work guidance for food handlers and child care and health care providers. Within hours of the survey's launch, DHS had received hundreds of responses from ill and well people and was ready to start analyzing the data to identify a source. Because data was automatically entered with each submission, analysis wasn't slowed by transferring interview responses from paper. Instead, a digital file could be downloaded right away.

Time and resources typically directed toward data collection and analysis could be focused on implementing targeted interventions. Surveys were analyzed by the survey software on the fly and revealed early on that the most likely source of illness was a campus food service location serving deli sandwiches. ECCCHD worked with university leadership to restrict meal service to prevent additional transmission from self-service areas and from the deli. Person-to-person transmission was also a concern in the resident halls, and ECCCHD worked with campus contacts to implement norovirus-specific cleaning procedures.

Survey data analysis confirmed the source of on-campus illness

Students and staff completed over 1,400 online questionnaires for this investigation. Symptom onset information from over 300 ill respondents allowed DHS to visualize an epi curve and determine likely exposure dates and times. The shape and distribution of the epi curve was characteristic of a point-source outbreak with two exposure dates. Subtracting the median incubation period of norovirus (33 hours) for each case, we hypothesized that the outbreak had been caused by midday exposures on December 2 and 3 (orange arrows on Figure 1).

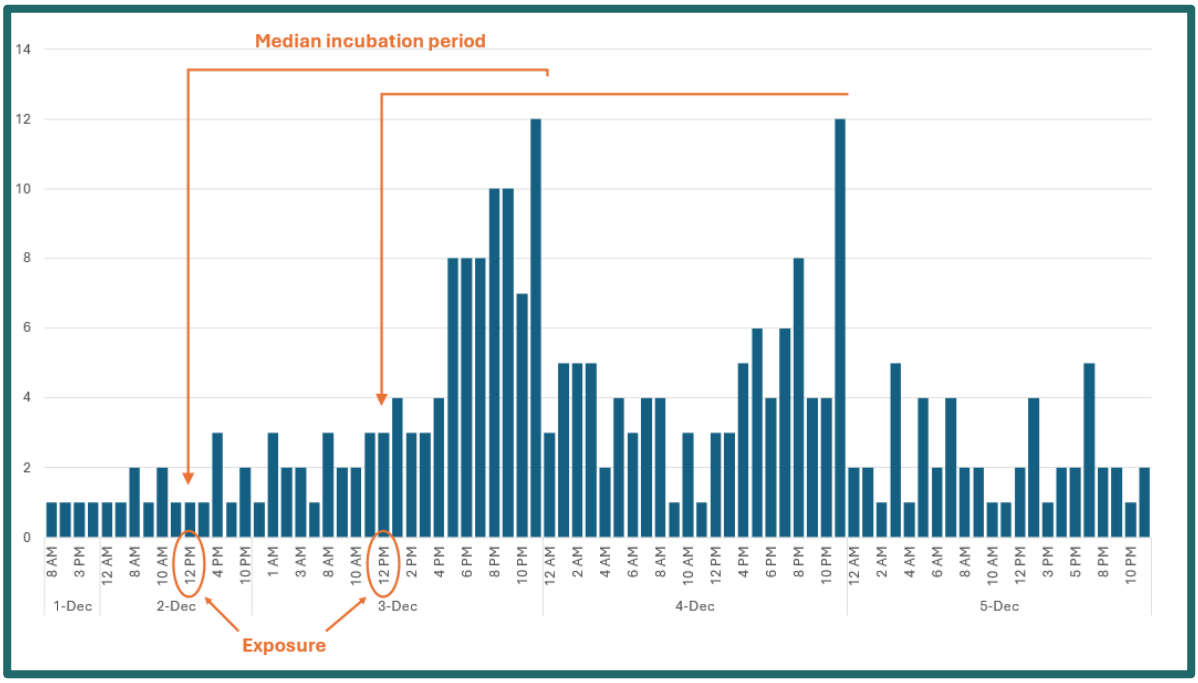


Figure 1. Epi curve describing norovirus outbreak, December 2024.

Why Your Next Foodborne Outbreak Investigation Might Be Faster and More Effective With Online Interviews

By: Karen Boegler, Enteric Epidemiologist

Final analysis of survey responses from 307 cases and 854 controls identified a statistically significant positive association between illness and eating at a single campus food service location, specifically from the deli area. Students and staff who ate there on December 2 had 4.7-times higher odds of falling ill compared to those who did not. This association was stronger than eating any other food or from any other service location.

Considering an online survey for your next outbreak investigation? Here are a few things to think about.

Online surveys are helpful when:

- There are many people to interview.
- LTHD or DHS capacity for phone or in-person interviews is limited.
- Email addresses for all (or many) of those who may have been exposed are available.
- There is interest in gathering interviews from the larger community, since the survey link can be shared with partner organizations or the media.
- The affected population skews younger, since they may be more likely to respond to an online survey in an email or text message than a phone call.
- You don't know all the people who share an exposure during an outbreak—online surveys let users share the link with other people who may be part of the outbreak.

Traditional interviews are helpful when:

- There is a need to ask the open-ended questions to the first few cases to determine what exposures occurred and who was affected. For example, if you know there was a shared meal but don't know what foods were served or who attended.
- The affected population speaks a primary language other than English. Online survey translations take time.
- You anticipate discussing private or personal details, rather than only gathering a food and symptom history.
- Interviewees might not be comfortable completing an online survey.
- Interviewees don't use internet or cellular technology, or have unreliable access to the internet.

Think your foodborne outbreak investigation might benefit from online interviews? We're happy to help. If you suspect an outbreak of GI illness, be sure to email the enteric and waterborne disease epidemiology team (DHSDPHEnterics@dhs.wisconsin.gov).

Addressing Gaps in TB and LTBI Screening and Treatment for Refugees and Immigrants in Wisconsin

By: Claire Leback, Tuberculosis Program Supervisor

Background

According to Center for Disease Control and Prevention (CDC) data from 2020–2025, only 17.8% of Wisconsin newcomers with tuberculosis (TB) class A/B status received the recommended TB evaluation within the target of 30 days after arrival. For the same time period, over 72% of new arrivals had an unknown evaluation status. The Wisconsin Tuberculosis Program seeks to improve this by conducting a comprehensive needs assessment to identify barriers in screening, education, and treatment for tuberculosis and latent tuberculosis infection (LTBI) among refugees and newly arrived immigrants. The needs assessment was conducted from May–July 2025 and used data from CDC's Electronic Disease Notification (EDN) and National TB Indicators Project (NTIP), surveys of 19 local and Tribal health departments (LTHDs), 97 private health care providers, and clinician interviews.

Key findings: Barriers reported by local health departments

Local health departments identified significant obstacles affecting refugees' and immigrants' access to TB and LTBI services.

Barriers	Description
Financial costs	Expenses for treatment, follow-up, and interpreters cited by six LTHDs
Language and cultural barriers	Difficulty educating patients and ensuring understanding
Transportation	Limited access to clinics, imaging, and labs, especially in rural areas
Missed appointments	Due to work, child care, or lack of transit
Low awareness	Confusion about TB versus LTBI and need for treatment without symptoms
Side effects	Fear of medication side effects leading to refusal or early dropout
Weak FQHC connections	Limited capacity and poor communication with Federally Qualified Health Centers

Key findings: Provider feedback

Health care providers echoed many of these challenges, emphasizing gaps in communication and support.

- **Patient-friendly materials:** Need for translated low-literacy visuals and medication information.
- **Insurance barriers:** Confusing Medicaid enrollment; many patients uninsured.
- **Interpreter shortages**: Especially for Rohingya, Chin, Arabic, Somali, and Vietnamese.
- **Trust and fear:** Undocumented patients distrust public health outreach.

Addressing Gaps in TB and LTBI Screening and Treatment for Refugees and Immigrants in Wisconsin

By: Claire Leback, Tuberculosis Program Supervisor

Key findings: Clinician insights

Clinicians serving refugee populations highlight additional concerns, including:

- Confusion and fear around TB versus LTBI diagnoses.
- Transportation and scheduling barriers.
- Recent reductions in care coordination roles, increasing workload and reducing patient support.

Recommendations

The Wisconsin TB Program has outlined several actions that can be taken to address gaps identified by local health departments, providers, and clinicians.

Focus area	Actions
Culturally tailored education	Visual, translated, low-literacy materials, as well as peer navigators
Expanded access	Evening and weekend clinics, rideshare vouchers, telehealth
Data system improvements	Standardized Electronic Disease Notification (EDN) entry, staff training, follow-up dashboards
Financial support	Medicaid expansion, including funding for tests, interpreters, transportation
Building trust	Clarify confidentiality and public health role, especially for undocumented individuals

Conclusion

Improving TB and LTBI outcomes for Wisconsin's refugees and immigrants requires culturally responsive outreach, flexible service models, robust data systems, and trust-building efforts. Strategic investments and collaboration across health sectors can reduce disparities and advance TB elimination statewide.

Measles Surveillance

By: Maddie Kemp, Vaccine Analytics Epidemiologist

Introduction[1]

Measles is an acute, viral, infectious disease. The virus is known for a rash that spreads over the body; however, the first symptoms are often cough, coryza (runny nose), and conjunctivitis (red, watery eyes). Measles can infect people at any age, but it's most serious in infants and young children. There is no treatment for measles; however, the measles, mumps, and rubella (MMR) vaccine is highly effective at preventing measles. In 1971, the MMR vaccine was licensed for use in the United States, and as measles outbreaks continued to occur, a second dose of MMR was recommended in 1989. Incidence of measles decreased by over 95% in the United States following the introduction of the MMR vaccine and two-dose recommendation. While measles was declared eliminated in the United States since 2000, it is still common in many parts of the world.

National trends

The United States has reported more than 1,800 confirmed measles cases as of December 3, 2025. This is the highest case count of measles since being declared eliminated in 2000. The majority (92%) of the total cases occurred among people who are unvaccinated or have unknown vaccination status. Twelve percent of cases have been hospitalized. There have been three confirmed deaths from measles.

Current situation in Wisconsin

As of December 3 2025, Wisconsin has had 36 confirmed cases statewide (Figure 1). This is the highest number of measles cases in Wisconsin since the two-dose MMR vaccination recommendation. All cases occurred in Oconto County and among unvaccinated individuals. Fever was the first reported symptom among all cases. A majority (97.2%) of cases reported having a cough, coryza, and conjunctivitis.

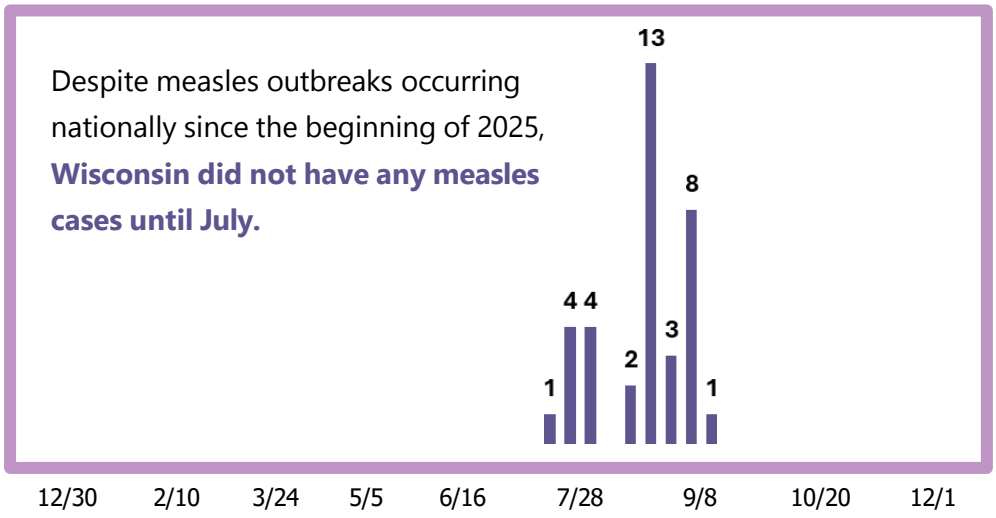


Figure 1. Measles cases in Wisconsin by week based on rash onset date, January 1, 2025–October 18, 2025

People with measles ranged in age from less than 1 year to 53 years (median: 15.5 years); however, roughly two-thirds (61%) of cases occurred in those under 18 years of age. Two cases (5.6%) were hospitalized. No deaths from measles have been reported in Wisconsin.

Measles Surveillance

By: Maddie Kemp, Vaccine Analytics Epidemiologist

Stay up-to-date with vaccinations

The best way to protect against measles is through MMR vaccination. Two doses of the MMR vaccine are about 97% effective at preventing measles; one dose is about 93% effective. The Centers for Disease Control and Prevention (CDC) recommends that all children get two doses of the MMR vaccine, with the first dose administered between 12 and 15 months of age and the second dose administered between 4 and 6 years of age.

In Wisconsin, MMR rates have been declining since 2013 (Figure 2). In 2024, only 81.4% of 24-month-olds received one or more doses of the MMR vaccine, compared to 88.2% in 2013. Ongoing efforts are needed to address the decline in MMR vaccination rates in Wisconsin and ensure communities are protected against measles.

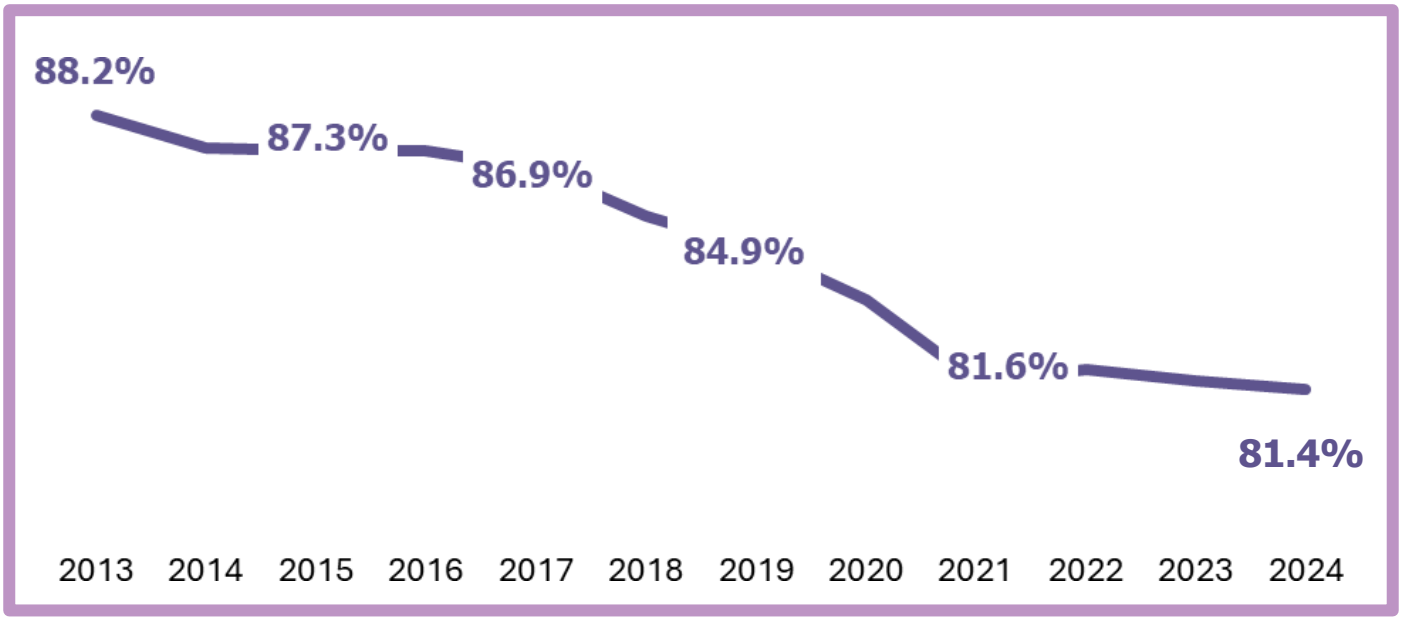


Figure 2. Percent of 24-month-olds who received one or more doses of the MMR vaccine in Wisconsin.

Resources

- Wisconsin Measles Dashboard
- Measles, Mumps, and Rubella (MMR) Vaccination Rate Maps, 2024
- Children and adolescent vaccination rate dashboard

Contact

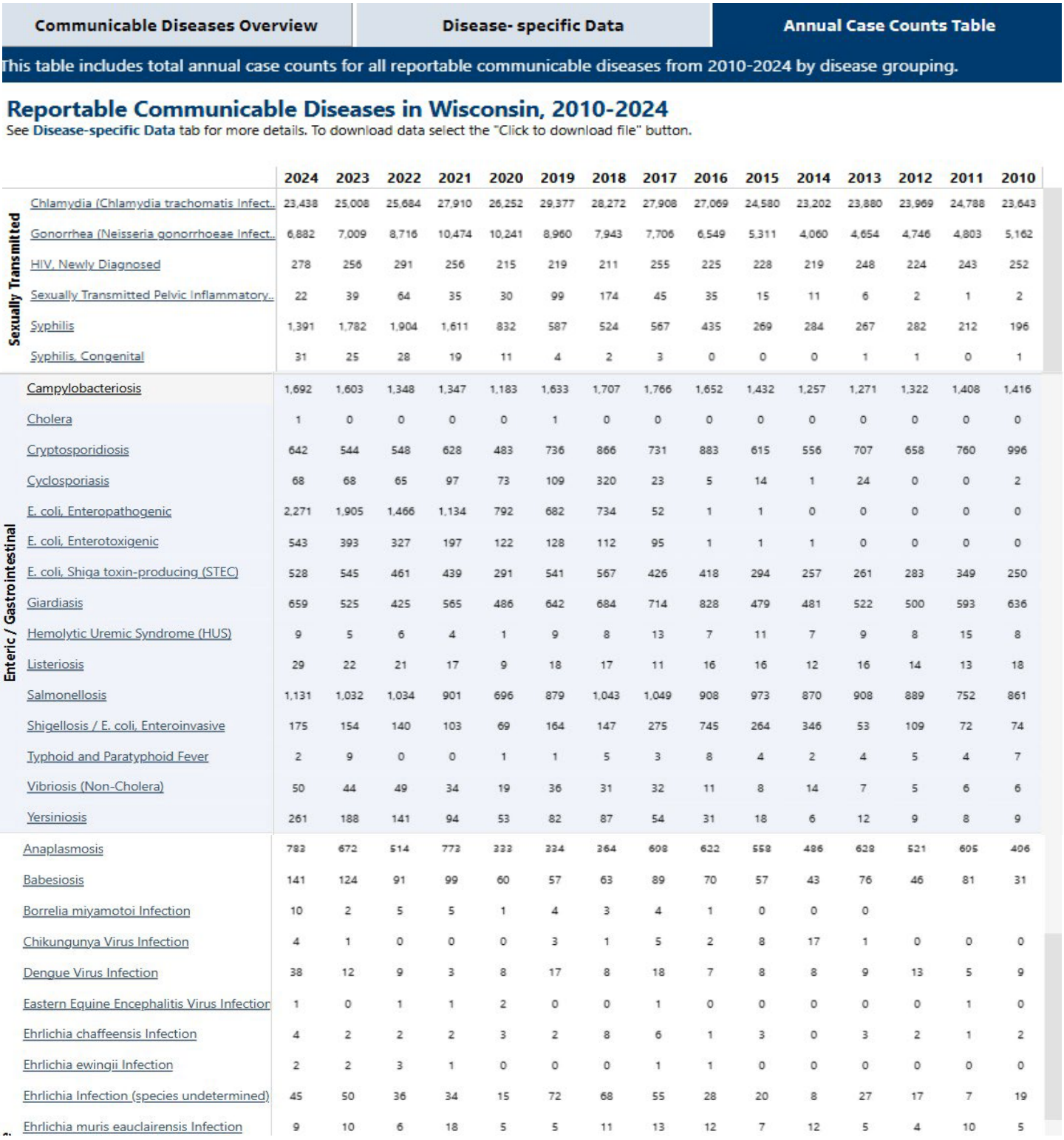
For questions regarding measles, please reach out to DHSImmProgram@dhs.wisconsin.gov.

References: 1. https://www.cdc.gov/measles/data-research/index.html

Communicable Disease Case Counts: New in 2026

New BCD dashboard

Communicable disease case count data is now available on the Wisconsin Communicable Disease Surveillance Data dashboard. A new and improved Epi Express will be launching in 2026 with preliminary case count data for the new year. For now, please explore the dashboard to find annual case counts from 2010–2014, disease-specific data, and an overview of communicable disease activity in Wisconsin.



Communicable Diseases Overview | **Disease- specific Data** | **Annual Case Counts Table**

This table includes total annual case counts for all reportable communicable diseases from 2010-2024 by disease grouping.

Reportable Communicable Diseases in Wisconsin, 2010-2024

See **Disease-specific Data** tab for more details. To download data select the "Click to download file" button.

		2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Sexually Transmitted	Chlamydia (Chlamydia trachomatis Infect..	23,438	25,008	25,684	27,910	26,252	29,377	28,272	27,908	27,069	24,580	23,202	23,880	23,969	24,788	23,643
	Gonorrhea (Neisseria gonorrhoeae Infect..	6,882	7,009	8,716	10,474	10,241	8,960	7,943	7,706	6,549	5,311	4,060	4,654	4,746	4,803	5,162
	HIV, Newly Diagnosed	278	256	291	256	215	219	211	255	225	228	219	248	224	243	252
	Sexually Transmitted Pelvic Inflammatory..	22	39	64	35	30	99	174	45	35	15	11	6	2	1	2
	Syphilis	1,391	1,782	1,904	1,611	832	587	524	567	435	269	284	267	282	212	196
	Syphilis, Congenital	31	25	28	19	11	4	2	3	0	0	0	1	1	0	1
Enteric / Gastrointestinal	Campylobacteriosis	1,692	1,603	1,348	1,347	1,183	1,633	1,707	1,766	1,652	1,432	1,257	1,271	1,322	1,408	1,416
	Cholera	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	Cryptosporidiosis	642	544	548	628	483	736	866	731	883	615	556	707	658	760	996
	Cyclosporiasis	68	68	65	97	73	109	320	23	5	14	1	24	0	0	2
	E. coli, Enteropathogenic	2,271	1,905	1,466	1,134	792	682	734	52	1	1	0	0	0	0	0
	E. coli, Enterotoxigenic	543	393	327	197	122	128	112	95	1	1	1	0	0	0	0
	E. coli, Shiga toxin-producing (STEC)	528	545	461	439	291	541	567	426	418	294	257	261	283	349	250
	Giardiasis	659	525	425	565	486	642	684	714	828	479	481	522	500	593	636
	Hemolytic Uremic Syndrome (HUS)	9	5	6	4	1	9	8	13	7	11	7	9	8	15	8
	Listeriosis	29	22	21	17	9	18	17	11	16	16	12	16	14	13	18
	Salmonellosis	1,131	1,032	1,034	901	696	879	1,043	1,049	908	973	870	908	889	752	861
	Shigellosis / E. coli, Enteroinvasive	175	154	140	103	69	164	147	275	745	264	346	53	109	72	74
	Typhoid and Paratyphoid Fever	2	9	0	0	1	1	5	3	8	4	2	4	5	4	7
	Vibriosis (Non-Cholera)	50	44	49	34	19	36	31	32	11	8	14	7	5	6	6
	Yersiniosis	261	188	141	94	53	82	87	54	31	18	6	12	9	8	9
	Anaplasmosis	783	672	514	773	333	334	364	608	622	558	486	628	521	605	406
	Babesiosis	141	124	91	99	60	57	63	89	70	57	43	76	46	81	31
	Borrelia miyamotoi Infection	10	2	5	5	1	4	3	4	1	0	0	0			
	Chikungunya Virus Infection	4	1	0	0	0	3	1	5	2	8	17	1	0	0	0
	Dengue Virus Infection	38	12	9	3	8	17	8	18	7	8	8	9	13	5	9
	Eastern Equine Encephalitis Virus Infection	1	0	1	1	2	0	0	1	0	0	0	0	0	1	0
	Ehrlichia chaffeensis Infection	4	2	2	2	3	2	8	6	1	3	0	3	2	1	2
	Ehrlichia ewingii Infection	2	2	3	1	0	0	0	1	1	0	0	0	0	0	0
	Ehrlichia Infection (species undetermined)	45	50	36	34	15	72	68	55	28	20	8	27	17	7	19
	Ehrlichia muris eauclairensis Infection	9	10	6	18	5	5	11	13	12	7	12	5	4	10	5