

Vaccine-Preventable Disease Surveillance Report

September 2024



Hepatitis A



- **Hepatitis A activity increased from last month** and was below the previous 5-year average.
- **9 cases** were reported in September.

Pertussis



- **Pertussis activity decreased from last month** and was above the previous 5-year average.
- **66 cases** were reported in September.

Meningococcal Disease




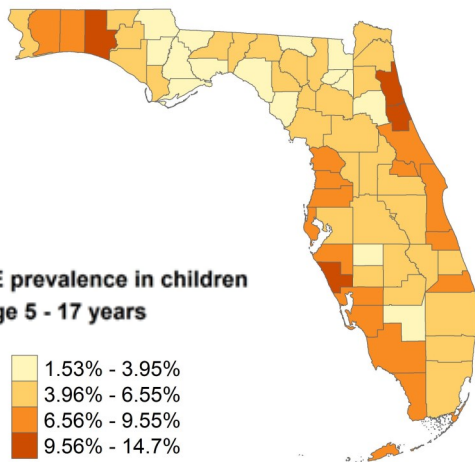
- **Meningococcal disease activity increased from last month** and was below the previous 5-year average.
- **1 case** was reported in September.

Varicella



- **Varicella activity increased from last month** and was below the previous 5-year average.
- **40 cases** were reported in September.

 For all vaccine-preventable diseases, timely and complete vaccination is the best way to prevent infection. Although vaccinated individuals can still become infected with diseases like pertussis or varicella, in general, those who have received at least 1 dose of vaccine have less severe outcomes than those who have never been vaccinated for the disease.



Unvaccinated children are at increased risk of vaccine-preventable diseases like mumps, pertussis, and varicella. Communities with a higher proportion of religious exemptions (REs) to vaccination are at increased risk of vaccine-preventable disease transmission.

The proportion of children age 5-17 years with new REs are increasing each month. Statewide, the estimated prevalence of REs among children age 5-17 years old is 6.14% with **individual counties ranging from 1.53-14.7%.**

To learn more about REs at the local level, please visit FloridaHealth.gov/REmap

The rate of religious exemptions is likely higher than the rate presented in this report. This is due to eligible persons with religious exemptions who have opted out of Florida SHOTS and persons who have had their religious exemptions processed outside of the Florida SHOTS system. The map above includes REs registered in Florida SHOTS through September 30, 2024.



Hepatitis A Surveillance

September Key Points



9 cases



11% of cases linked to other cases



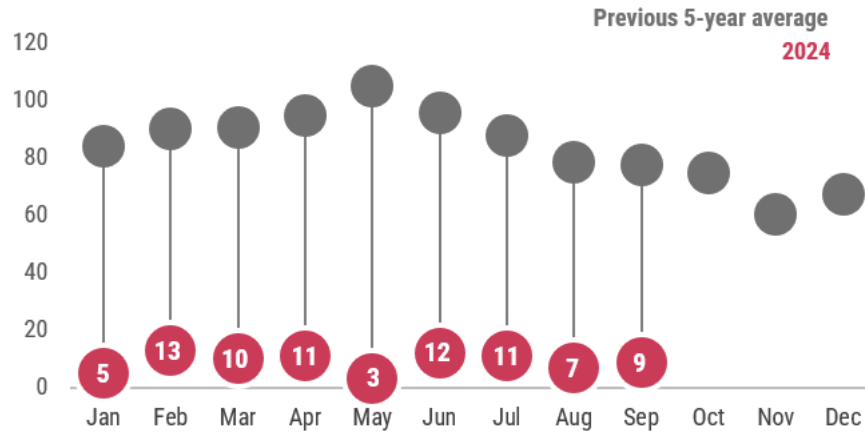
30-39 year olds had the highest incidence



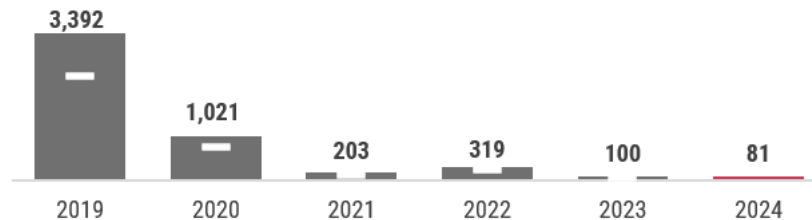
88% of cases were not up-to-date on hepatitis A vaccinations



In September 2024, **9 hepatitis A cases** were reported in **7 counties**. **The number of reported hepatitis A cases in September increased from the previous month and was below the previous 5-year average.**



In 2024, **81 hepatitis A cases** were reported.



*The white bars indicate the total number of cases as of September for each year

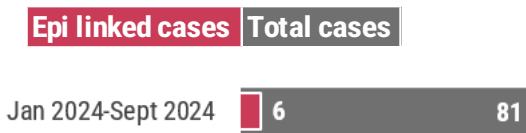


The best way to prevent hepatitis A infection is through vaccination. In September 2024, 88% of cases were not up-to-date on hepatitis A vaccinations. Since 2006, hepatitis A vaccine has been recommended for all children at age 1 year. Hepatitis A vaccine is also recommended for certain adult high-risk groups, including persons using injection and non-injection drugs, persons experiencing homelessness, and men who have sex with men. To learn more about the hepatitis A vaccine, talk to your doctor or visit: www.CDC.gov/Vaccines/HCP/VIS/VIS-Statements/Hep-A.html.

Hepatitis A Surveillance



In September 2024, **1 case** was **epidemiologically (epi) linked to another case**. From January to September 2024, **6 cases** were **epidemiologically (epi) linked to another case**.



In September 2024, there was an average of **2 contacts to reported cases**. Contacts are those who were exposed to the virus and recommended prophylaxis for illness prevention.



In September 2024, **30-39 year olds** have the highest incidence rate at **0.104 cases per 100,000 population**.



In September 2024, **no cases** were co-infected with chronic hepatitis C and **no cases** were co-infected with chronic hepatitis B. **Co-infection with more than one type of viral hepatitis can lead to more severe liver disease and increase the risk of developing liver cancer.**



National activity

Hepatitis A rates have decreased by more than 95% since the first vaccine became available in 1995. However, since outbreaks were first identified in 2016, the Centers for Disease Control and Prevention has been monitoring outbreaks in 37 states. More information about these outbreaks can be found here: www.cdc.gov/hepatitis/outbreaks/2017May-HepatitisA.htm

Hepatitis A surveillance goals


- Identify cases to limit transmission
- Identify and prevent outbreaks
- Monitor effectiveness of immunization programs and vaccines

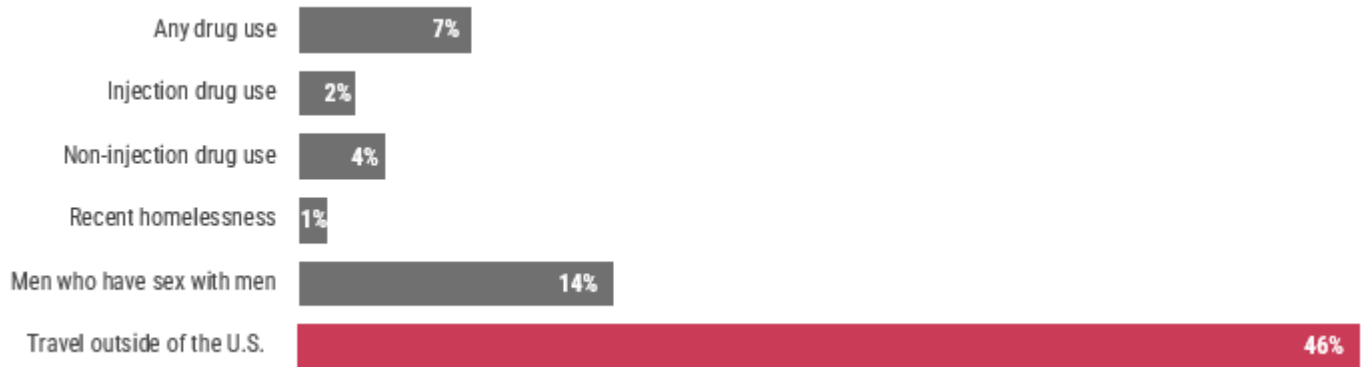
To learn more about hepatitis A, please visit FloridaHealth.gov/diseases-and-conditions/vaccine-preventable-disease/hepatitis-a. For more information on the data sources used in Florida for hepatitis A surveillance, see the last page of this report.


Hepatitis A Surveillance


Vaccination is the best way to prevent hepatitis A infection. Health care providers are encouraged to actively offer the hepatitis A vaccine to individuals at risk including men who have sex with men.

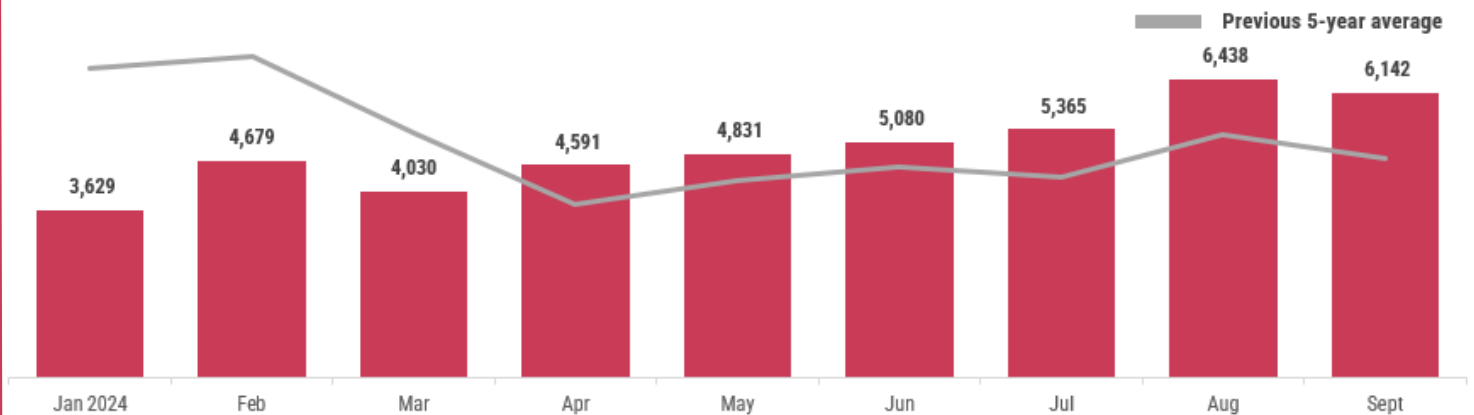
For more information about hepatitis A vaccination in Florida visit: <https://www.floridahealth.gov/diseases-and-conditions/hepatitis/hepatitis-vaccination-testing-program.html>

 In 2024, 46% of the 81 cases in Florida reported the risk factor of travel outside of the U.S. and 14% of cases reported the risk factor of men who have sex with men. The next most common risk factors are any drug use at 7%, non-injection drug use at 4%, followed by injection drug use at 2%, and recent homelessness at 1%.



 Hepatitis A infections can be severe, leading to inpatient hospitalization and sometimes death. **In 2024, 54 cases (67%) reported in Florida have been hospitalized due to hepatitis A infection.** No deaths have been identified as hepatitis A associated in 2024.

 The Florida Department of Health is actively working to vaccinate those most at risk for hepatitis A infection. In September 2024, 6,142 doses were administered. **The number of first doses of hepatitis A vaccine administered by both private providers and county health departments to adults age 18 years and older, as recorded in Florida SHOTS, decreased and was above the previous 5-year-average.** Vaccination is the best way to prevent hepatitis A infection.



Pertussis Surveillance

September Key Points



66 cases



361 cases in the past 6 months



No new outbreak

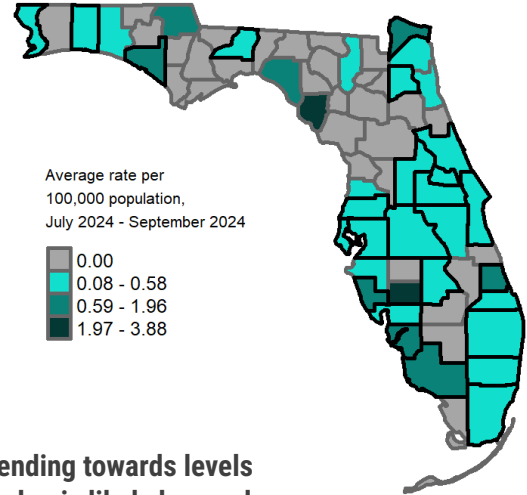
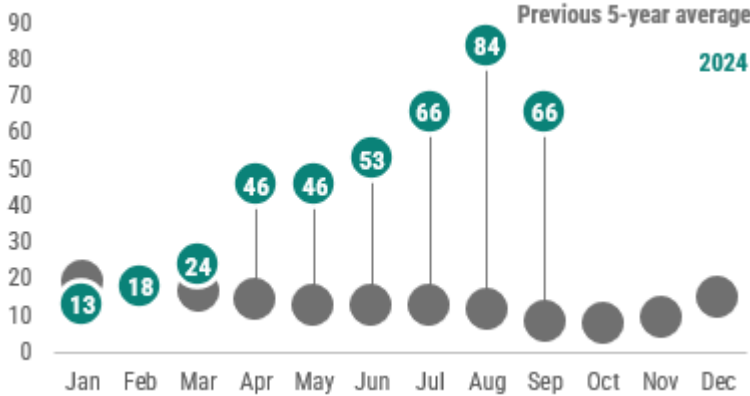


<1 year olds had the highest 6 month average incidence rate

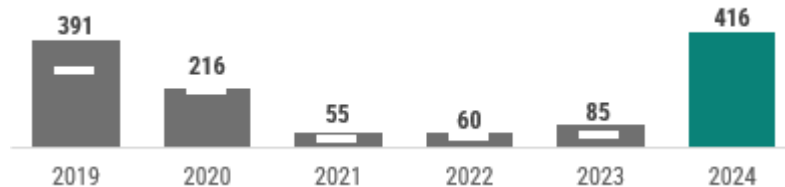


The number of pertussis cases reported in September decreased from the previous month and was above the previous 5-year average.

In September 2024, 66 pertussis cases were reported in 25 counties, outlined in black in the map below. From July 2024 through September 2024 the average county rates varied throughout the state.



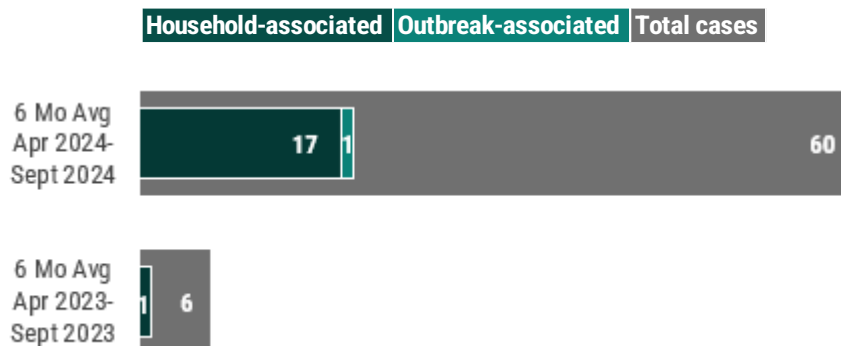
In 2024, 416 pertussis cases were reported. These case counts are trending towards levels reported pre-pandemic in 2019. Mitigation efforts used during the pandemic likely lowered transmission of pertussis.



*The white bars indicate the total number of cases as of September for each year



In September 2024, no pertussis cases were outbreak-associated. In the past 6 months, there was an average of 17 household-associated cases, an average of 1 outbreak-associated case and an average of 60 total cases. From April 2023 to September 2023, there was an average of 1 household-associated case, an average of 0 outbreak-associated cases and an average of 6 total cases. For most pertussis cases, exposure to other known cases is not identified and are not able to be linked to outbreaks.

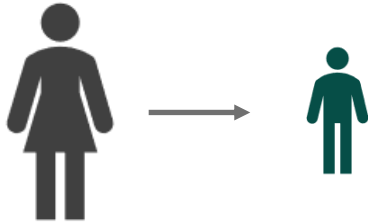


Pertussis Surveillance

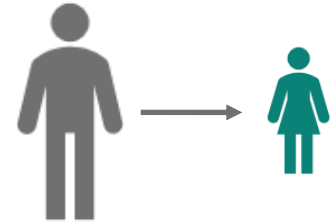


There was an average of **1 contact per case** between April 2023 and September 2023 and between April 2024 and September 2024. Contacts are classified as people whom antibiotics were recommended to prevent illness. Antibiotics can shorten the amount of time cases are contagious and can also be used to prevent illness in those exposed. Understanding pertussis transmission is a key factor in decreasing pertussis infections. In Florida, transmission setting is not routinely identified for non-outbreak cases.

April 2023 to September 2023

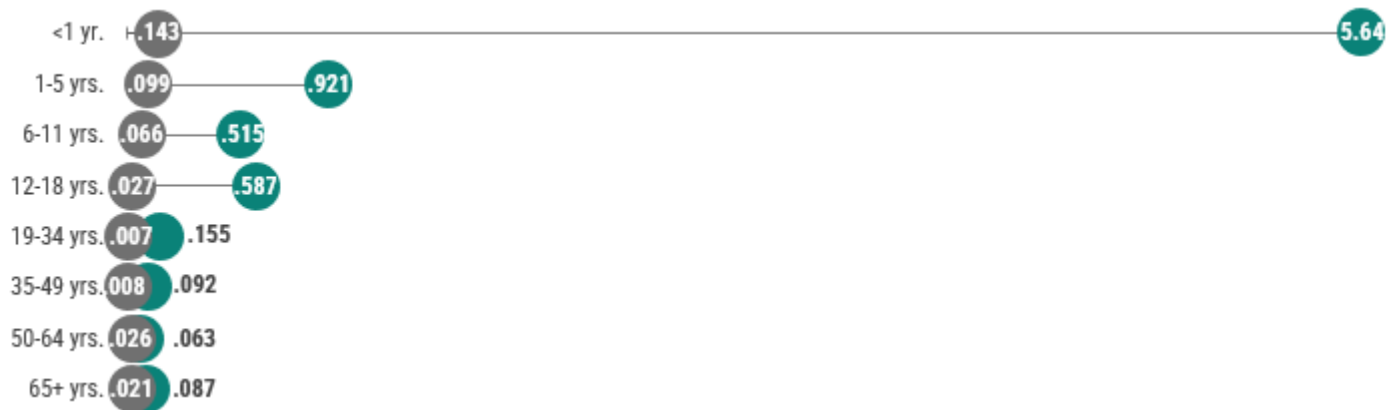


April 2024 to September 2024



The average incidence rate was highest among **<1 year olds** at **5.64 cases per 100,000 population** between April 2024 and September 2024. Infants experience the greatest burden of pertussis infections, not only in number of cases but also in severity. Infants <2 months old are too young to receive vaccinations against pertussis, which is why vaccination of parents, siblings, grandparents, and other age groups is important in infection prevention among infants.

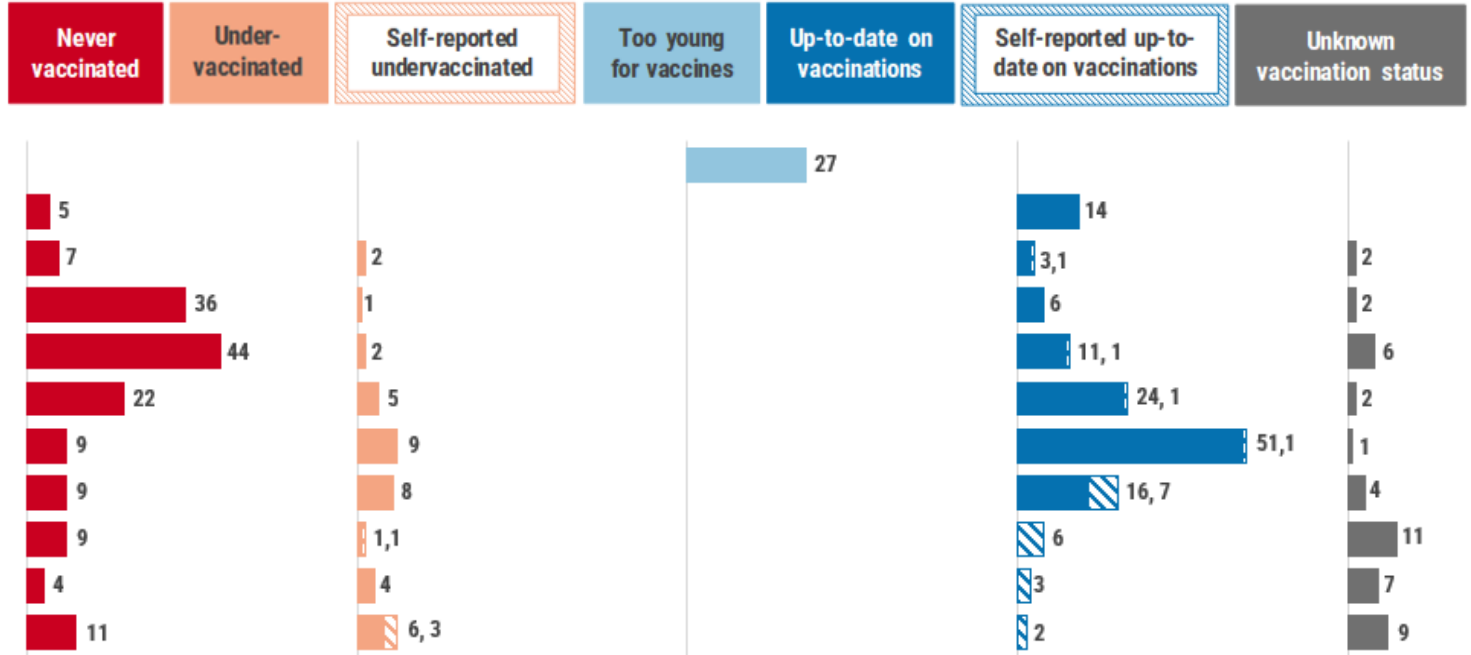
● April 2023 to September 2023
● April 2024 to September 2024



Pertussis Surveillance



In 2024, over half of cases reported were not up-to-date on their pertussis vaccinations. **In general, those who have received at least one pertussis vaccination have less severe outcomes than those who have never been vaccinated.** If a person was born before January 1st, 1982, the current pertussis immunization recommendation would not have been implemented when they were receiving their childhood immunizations. Based on the case's age, **67 cases** would not have been vaccinated under the current childhood immunization recommendations.



National activity

Nationally, the number of reported pertussis cases were lower than usual in recent years. The number of pertussis cases reported in 2024 has increased across the United States which may imply that pertussis reports are returning to more typical trends. Preliminary data reported to Centers for Disease Control and Prevention (CDC) in September of 2024, shows that there are four times as many cases than were reported at the same time in 2023.

Pertussis surveillance goals

- Identify cases to limit transmission in settings with infants or others who may transmit pertussis to infants
- Identify and prevent outbreaks
- Identify transmission settings in non-outbreak cases to prevent the spread of sporadic cases
- Identify contacts of cases and recommend appropriate prevention measures, including exclusion, antibiotic prophylaxis, and immunization
- Monitor the effectiveness of immunization programs and vaccines

To learn more about pertussis, please visit FloridaHealth.gov/Pertussis. For more information on the data sources used in Florida for pertussis surveillance, see the last page of this report.

Meningococcal Disease Surveillance

September Key Points



1 case



10 cases in the past 6 months



0% of cases linked to other cases

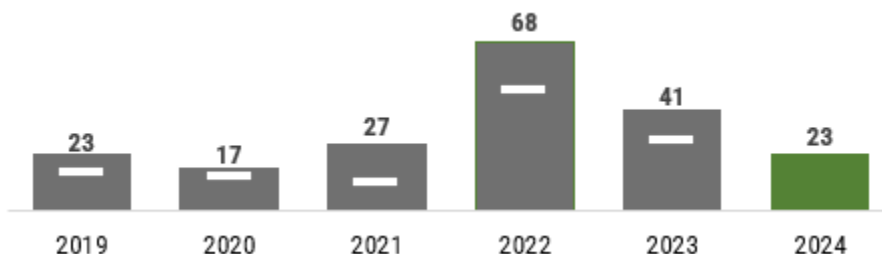


100% of cases were up-to-date for meningococcal disease vaccine



While vaccination efforts have generally kept meningococcal disease rates low in Florida, recent years have seen fluctuations. In 2022, there was a significant spike in cases, the highest ever recorded in a single year, due to an outbreak predominantly affecting Men who have Sex with Men (MSM). In 2023, 41 cases were reported, marking a decrease from the previous year but still above the average of the preceding years. **The number of cases in 2024 is below the number of cases at this time in both 2022 and 2023.**

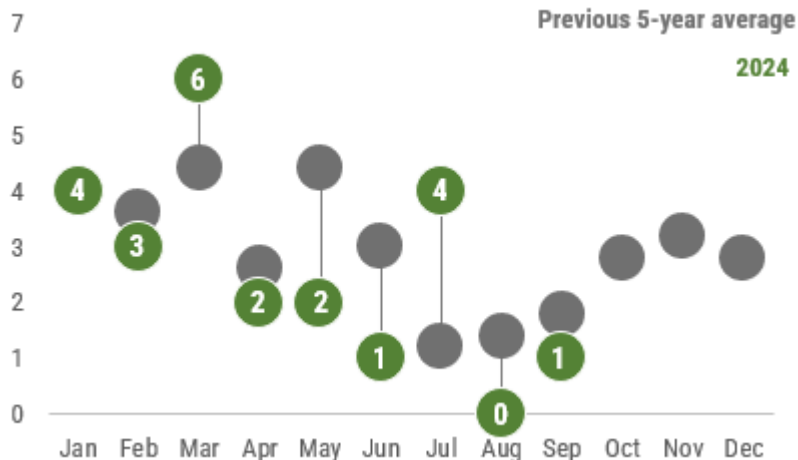
In 2024, 23 meningococcal disease cases were reported in 14 counties.



*The white bars indicate the total number of cases as of September for each year



The number of meningococcal disease cases reported in September 2024 decreased from the previous month and was below the previous 5 year average.



Vaccines can help prevent meningococcal disease.

There are currently two types of meningococcal vaccines available in the United States: Meningococcal conjugate or MenACWY vaccines and Serogroup B meningococcal or MenB vaccines. Centers for Disease Control and Protection (CDC) recommends meningococcal disease vaccination for all preteens and teens as well as other children and adults who are at increased risk of meningococcal disease.

To learn more about the meningococcal vaccine, talk to your doctor or visit:

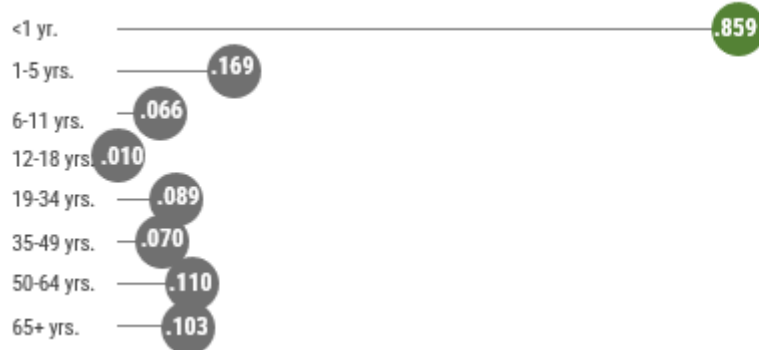
<https://www.cdc.gov/vaccines/vpd/mening/public/index.html>



Meningococcal Disease Surveillance



In 2024, the meningococcal disease rate was highest among <1 years at **0.859 cases** per 100,000 population.



In 2024, among reported cases, 91% of reported cases were seen in the emergency department and 91% of reported cases were hospitalized. In 2024, 1 death was identified as being associated to meningococcal disease. The best protection against meningococcal disease is keeping up-to-date with recommended vaccines.

Meningococcal disease can often be severe leading to inpatient hospitalization and sometimes death. According to the CDC, about 10 to 15 in 100 people with meningococcal disease will die. Up to 1 in 5 survivors will have long-term disabilities which may include: loss of limb/s, deafness, nervous system problems, brain damage. More information can be found at <https://www.cdc.gov/meningococcal/clinical-info.html>



National and International activity

Meningococcal disease rates are at a historic low in the United States. Rates have been declining since the 1990s and currently remain low. In 2021, there were about 210 total cases of meningococcal disease reported (incidence rate of 0.06 cases per 100,000 persons). Meningococcal outbreaks are rare in the United States and only about 1 in 20 cases is related to outbreaks.

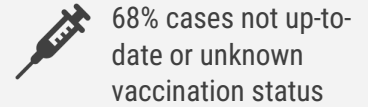
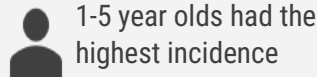
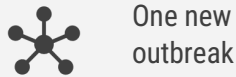
Meningococcal disease occurs worldwide. The highest incidence of disease is found in the 'meningitis belt' located in sub-Saharan Africa. This region experiences large-scale epidemics every 5 to 12 years. Epidemics during the dry season (December-June) reach up to 1,000 cases per 100,000 population. More information can be found at <https://www.cdc.gov/meningococcal/global.html>

Meningococcal disease surveillance goals

- Identify cases to limit transmission and prevent outbreaks by implementing control measures
- Collect data on key variables for monitoring meningococcal disease
- Monitor effectiveness of immunization programs and vaccines

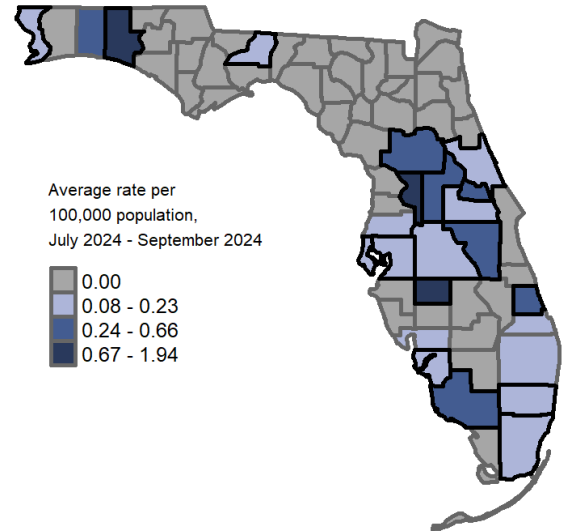
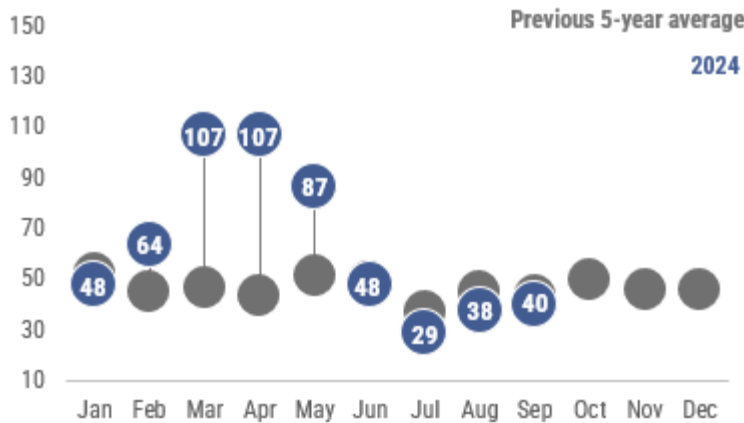
Varicella Surveillance

September Key Points



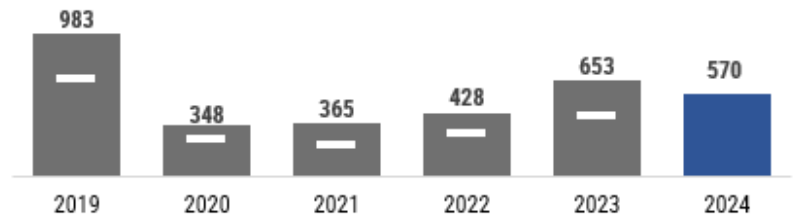
The number of varicella cases reported in September 2024 increased from the previous month and was below with the previous 5-year average. Due to robust vaccination programs, there is no longer discernable seasonality for varicella cases in the United States.

In September 2024, 40 varicella cases were reported in 19 counties, outlined in black in the map below. From July 2024 through September 2024 the average county rates varied throughout the state.



In 2024,[†] 570 varicella cases were reported.

The annual number of reported varicella cases increased from 2018 to 2019 and decreased significantly in 2020, 2021, and 2022. Cases reported in 2023 returned to levels similarly observed prior to the 2020 pandemic.



*The white bars indicate the total number of cases as of September for each year



[†] CDC MMWR report year

In September 2024, the varicella rate was highest among 1-5 year olds at 1.02 cases per 100,000 population. Infants <1 year old are too young to receive varicella vaccination, which is why vaccination of siblings, parents, grandparents, and other age groups is important in infection prevention among infants.



Varicella Surveillance



In September, **14 cases were household-associated** and **2 cases were outbreak-associated**. For most varicella cases, exposure to other known cases is not identified. In Florida, transmission setting is not routinely identified for non-outbreak cases.

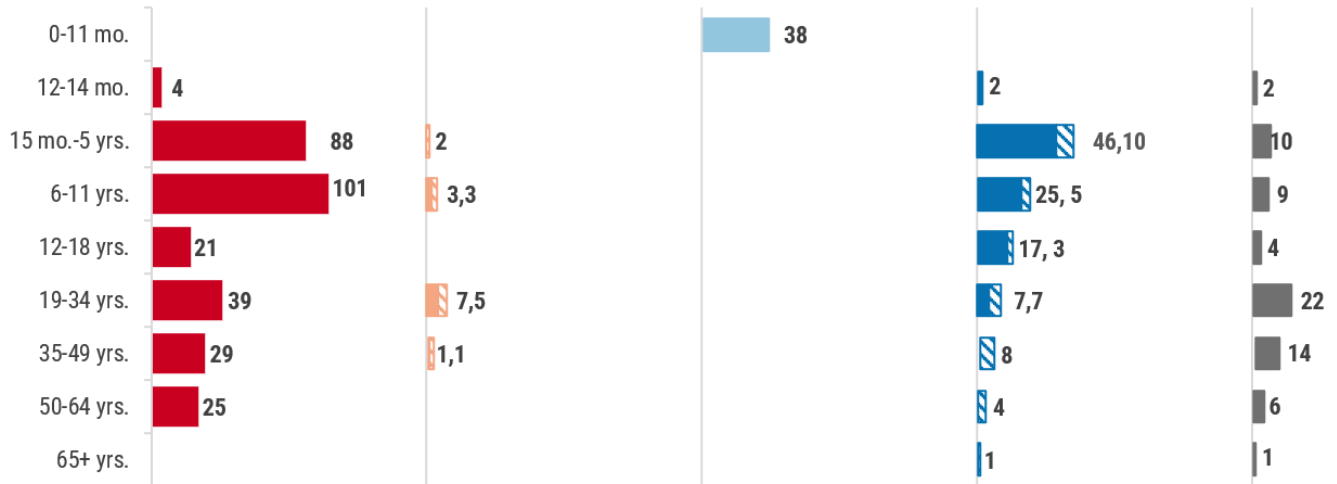
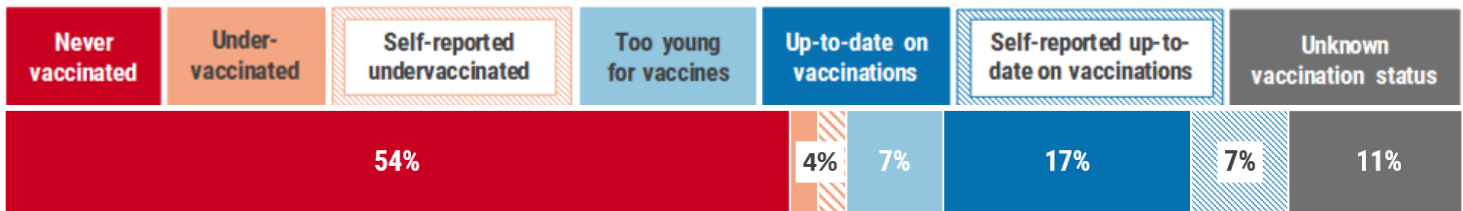
People with shingles infection can transmit the virus that causes varicella to people without immunity. In September, **1 case** reported contact with someone diagnosed with shingles during their exposure period.

Household-associated | Outbreak-associated | Total cases



In September 2024, **68% of cases** reported with varicella had not received the recommended number of varicella vaccinations for their age or had unknown vaccination status. Vaccination against varicella is important for infants, children, teenagers, and adults. If a person was born before July 1, 1994, the current varicella immunization recommendation would not have been implemented when they were receiving their childhood immunizations. Based on the case's age, **121 cases** in 2024 would not have been vaccinated under the current childhood immunization recommendations.

In 2024, the majority of adults aged 19 years and older with varicella were not up-to-date on their varicella vaccinations or had unknown vaccination status. Although individuals who have been vaccinated can still develop varicella, **complete and timely vaccination remains the best way to prevent varicella and severe complications**.



National activity

The varicella vaccination first became available in 1995. In 2007, varicella vaccine recommendations were revised from 1 dose to 2 doses. Since the vaccine became available, varicella incidence in the United States has decreased significantly, by 97%.

Varicella surveillance goals

- Identify and control outbreaks, monitor trends, and identify severe outcomes
- Identify transmission settings in non-outbreak cases to prevent the spread of sporadic cases
- Monitor effectiveness of immunization programs and vaccines

To learn more about varicella, please visit FloridaHealth.gov/Varicella. For more information on the data sources used in Florida for varicella surveillance, see the last page of this report.

Vaccine-Preventable Diseases Surveillance System Summary

Case Data

- Current case data are preliminary and will change as new information is gathered. The most recent data available are displayed in this report.
- Case data is calculated using CDC MMWR Report Year.
- Pertussis, varicella, hepatitis A and meningococcal disease are reportable diseases in Florida. Case information is documented by county health department (CHD) epidemiologists in Merlin, Florida's reportable disease surveillance system.
- Only Florida residents are included in case counts, but contact investigations are conducted for all exposed individuals.
- Pertussis, varicella, hepatitis A, and meningococcal disease case counts include both confirmed and probable cases.
- Map counts and rates are determined by the individual's county of residence; these data do not take into account location of exposure.
- CHD epidemiologists also report outbreaks of pertussis, varicella, hepatitis A, and meningococcal disease into Merlin.
 - ◇ Household-associated cases are defined as ≥ 2 cases exposed within the same household.
 - ◇ Pertussis outbreaks are defined as ≥ 2 cases associated with a specific setting outside of a household.
 - ◇ Varicella outbreaks are defined as ≥ 3 cases associated with a specific setting outside of a household.
 - ◇ An outbreak for meningococcal disease occurs when there are multiple cases of the same serogroup in community or institution over a short period of time. For more information, please see CDC meningococcal outbreak guidance: <https://www.cdc.gov/meningoccal/outbreaks/index.html>
- For more information about reportable diseases, please visit [FloridaHealth.gov/DiseaseReporting](https://www.floridahealth.gov/DiseaseReporting).

Population Data

- Population data from 2024 provisional used to calculate incidence rates are from FLHealthCHARTS (Population Query System).
- For more information about FLHealthCHARTS, please visit [FLHealthCharts.com](https://www.flhealthcharts.com).

Vaccination Data

- Vaccination data for identified cases are from Merlin, as documented by CHD staff.
- Vaccination status is determined using the Advisory Committee on Immunization Practices Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger, 2018.
- For more information about immunization schedules, please visit www.CDC.gov/Vaccines/Schedules/index.html.
- Individuals are considered up-to-date on vaccinations if they have received the recommended number of doses of vaccine for a particular disease for their age at the time of their illness onset. Individuals are considered undervaccinated if they have received at least one but not all doses of vaccine recommended for a particular disease for their age at the time of their illness onset.