Vaccine-Preventable Disease Surveillance Report

October 2020

The COVID-19 pandemic is affecting health care seeking behavior, which may be impacting the diagnosis and reporting of hepatitis A, pertussis, and varicella cases that are shown in this report. For more information on the COVID-19 pandemic in Florida, please visit FloridaHealthCOVID-19.gov.

Hepatitis A

- **Hepatitis A activity decreased from last month** and was similar to the previous 5-year average.
- 69 cases were reported in October.
- Incidence remained highest among adults 30-39 years old.
- Since January 2018, 93% of cases were not up to date on hepatitis A vaccinations.

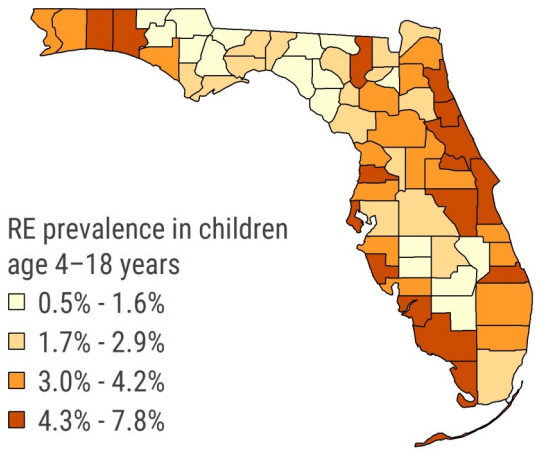
Pertussis

- **Pertussis activity decreased from last month. Due to the low number of cases, there will not be a pertussis summary for October.**
- Two cases were reported in October.
- One contact was identified among both cases.
- One case was fully vaccinated, while the other case's vaccination status was unknown.

Varicella

- **Varicella activity increased from last month** and was below the previous 5-year average.
- 26 cases, including 7 household associated cases, were reported in October.
- Incidence remained highest among infants <1 year old.
- 65% of cases were not up to date on varicella vaccinations or had unknown

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 one 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 4–18 years with new REs is increasing each month. Statewide, the estimated prevalence of REs among children age 4–18 years old is 3.6% with **individual counties ranging from 0.5–7.8%**. In October 2019, the statewide prevalence was 3.3%, and the prevalence has gradually increased each month since.

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

All REs are required to be entered into Florida SHOTS (State Health Online Tracking System), Florida's statewide immunization registry. The map above includes REs registered in Florida SHOTS through October 31, 2020.

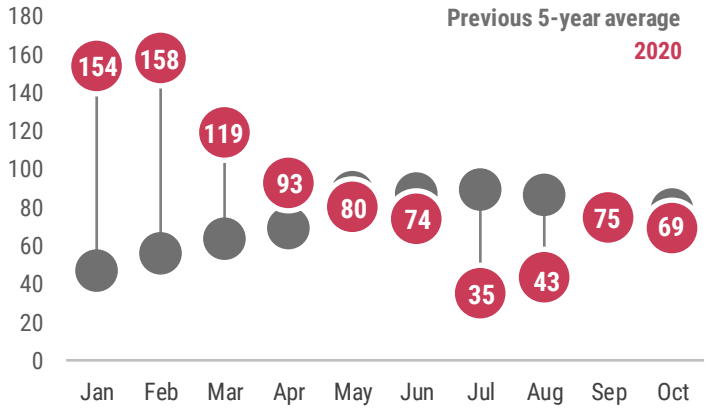
Posted November 6, 2020 on the Bureau of Epidemiology (BOE) website: FloridaHealth.gov/VPD
Produced by the BOE, Florida Department of Health

Hepatitis A Surveillance

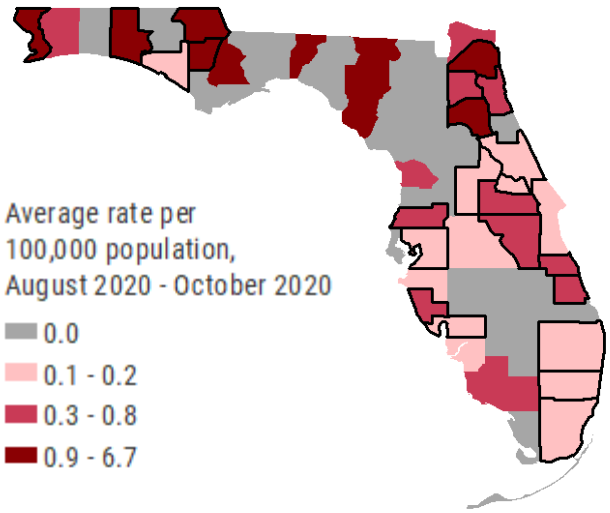
2018-To-Date Key Points

- 4,854 cases
- 23% cases linked to other cases
- 30–39 year olds had highest incidence
- 23% co-infected with hepatitis B or C

The number of reported hepatitis A cases in October decreased from the previous month and was similar to the previous 5-year-average. Since January 1, 2018, 98% of cases have likely been acquired locally in Florida.

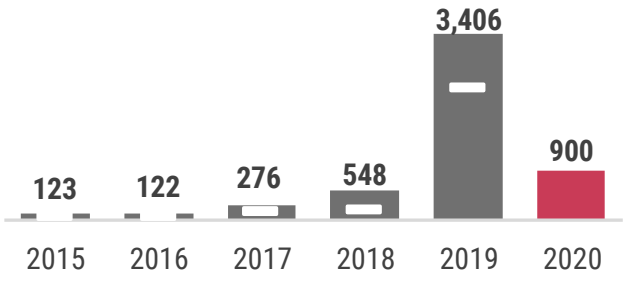


The 69 hepatitis A cases in October were reported in the **22 counties outlined in black**. In the past three months North Florida had the highest hepatitis A activity.



From January 1, 2020 through October 31, 2020, 900 hepatitis A cases were reported.

The number of reported hepatitis A cases dramatically increased since January 2018, after remaining relatively stable in previous years. In recent months though, case counts have decreased from case counts seen in October 2019.



*The white bars in the graph indicates total numbers in October for each year

93%

never vaccinated

The best way to prevent hepatitis A infection is through vaccination. Since January 1, 2018, 93% of people with hepatitis A had never received a documented dose of hepatitis A vaccine. In October 2020, 94% of infected people had not received the vaccine. Since 2006, hepatitis A vaccine has been recommended for all children at age 1 year. Hepatitis A vaccine is also recommended for certain high-risk groups of adults including injection and non-injection drug use, 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.

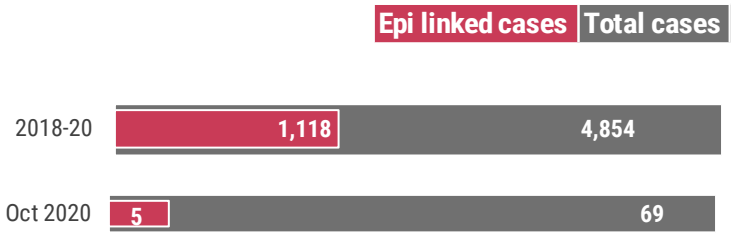
The COVID-19 pandemic is affecting health care seeking behavior, which may be impacting the diagnosis and reporting of hepatitis A cases that are shown in this report. For more information on the COVID-19 pandemic in Florida, please visit FloridaHealthCOVID-19.gov.

Florida HEALTH

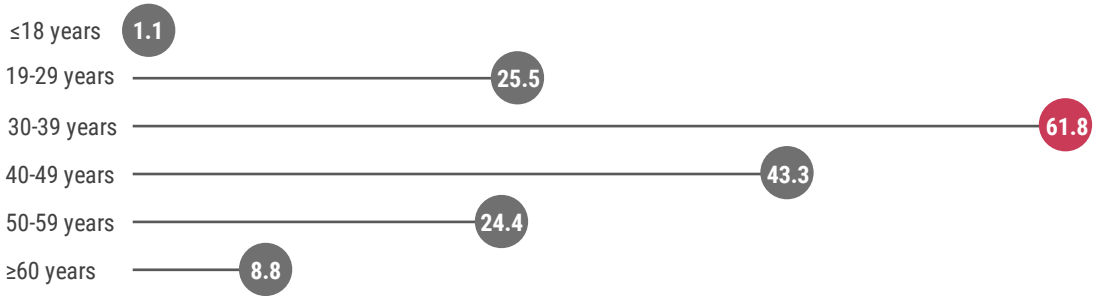
Hepatitis A Surveillance

From January 2018 to October 2020, **1,118 (23%)** of **4,854 total cases** of hepatitis A were **epidemiologically (epi) linked to other cases**. In October 2020, 7% of cases were linked to other cases.

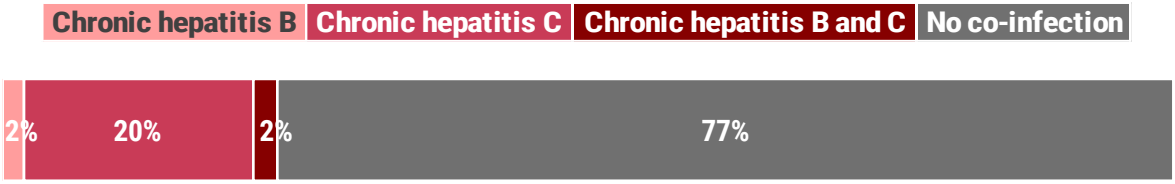
In October 2020, 80% of epi links were household contact, and 20% were personal contacts. No cases were sexual contacts.



Since January 1, 2018, the incidence rate was highest among adults aged 30–39 years old at 61.8 cases per 100,000 population. In October 2020, the incidence rate was highest among adults aged 30–39 years old at 0.9 case per 100,000 population. Since January 1, 2018, cases were reported primarily among **men** (64%) and persons who identify as **non-Hispanic white** (93%).



Since January 1, 2018, 85 (2%) cases were co-infected with chronic hepatitis B, 951 (20%) cases were co-infected with chronic hepatitis C, and 104 (2%) cases were co-infected with both chronic hepatitis B and C. In October 2020, 18 (26%) cases were co-infected with chronic hepatitis B or C. 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 May of 2017, the Centers for Disease Control and Prevention has been monitoring outbreaks in 35 states among persons who use drugs and persons who are experiencing homelessness. More information about these outbreaks can be found here: www.cdc.gov/hepatitis/outbreaks/2017March-HepatitisA.htm

Hepatitis A surveillance goals

- Identify and control outbreaks and monitor trends
- Identify and mitigate common sources
- Monitor effectiveness of immunization programs and vaccines

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

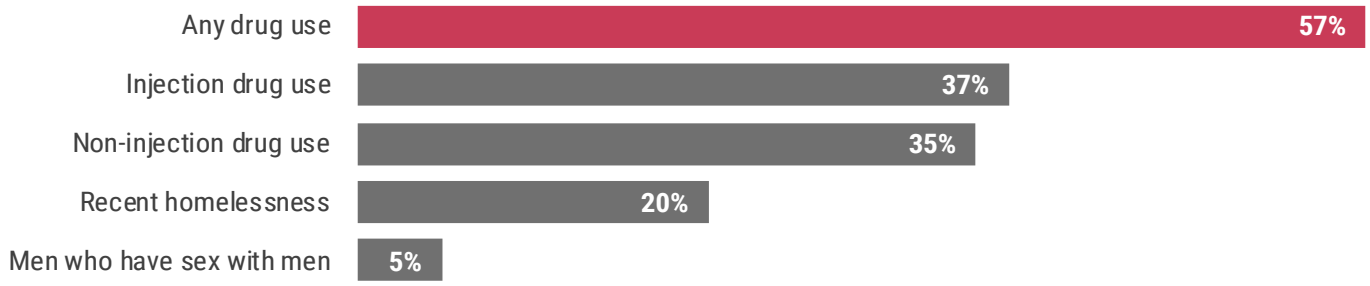
Hepatitis A Surveillance

Statewide Response to the Increase in Hepatitis A Cases

Several Florida counties have experienced ongoing local transmission of hepatitis A since 2017. Since January 1, 2018, 98% of Florida's cases (n=4,854) have likely been acquired in Florida. Cases likely acquired in Florida share several common risk factors including drug use (both injection or non-injection drugs), identifying as men who have sex with men, or recently experiencing homelessness. **Individuals with any of these risk factors should receive the hepatitis A vaccine, and health care providers are encouraged to actively offer the hepatitis A vaccine to individuals at risk. Vaccination is the best way to prevent hepatitis A infection.**

For additional information, please see the declaration of public health emergency issued by the State Surgeon General in August 2019, available at: FloridaHealth.gov/_documents/newsroom/press-releases/2019/08/phe-hav-filed-08-01-2019.pdf.

Over half (62%) of the 4,854 cases likely acquired in Florida since January 1, 2018 reported at least one of the risk factors below, while 38% reported no or unknown risk factors. The most commonly identified risk factor was **drug use**, reported by 2,700 (57%) cases. Non-injection (35%) and injection (37%) were both common forms of drug use. Recent homelessness, reported by 20% of cases, was an additional risk factor.

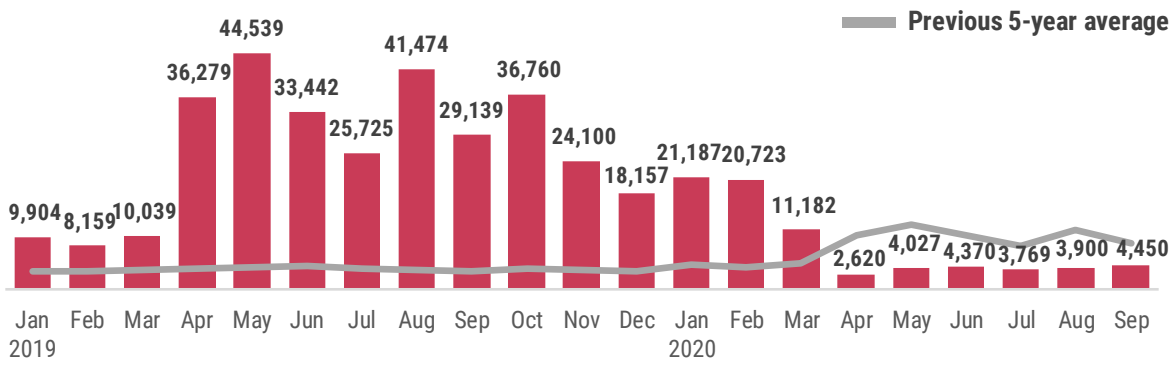


Hepatitis A infections can be severe, leading to inpatient hospitalization and sometimes death. Since January 1, 2018, 3,316 (70%) cases likely acquired in Florida have been hospitalized because of their hepatitis A infection, and there were 76 hepatitis A associated deaths identified.

70% hospitalized

76 deaths

The Florida Department of Health is actively working to vaccinate those most at risk for hepatitis A infection. In October, **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**, increased slightly and was below the **previous 5-year-average** in October 2020. This may be due to changes in vaccine administration during the COVID-19 pandemic. In October 2020, a total of 5,137 doses were administered. **Vaccination is the best way to prevent hepatitis A infection.**

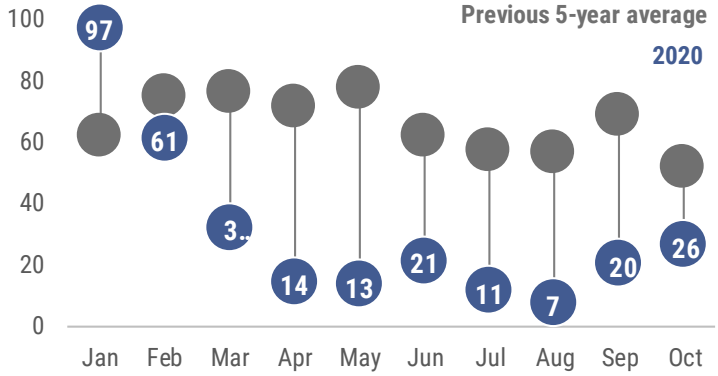


Varicella Surveillance

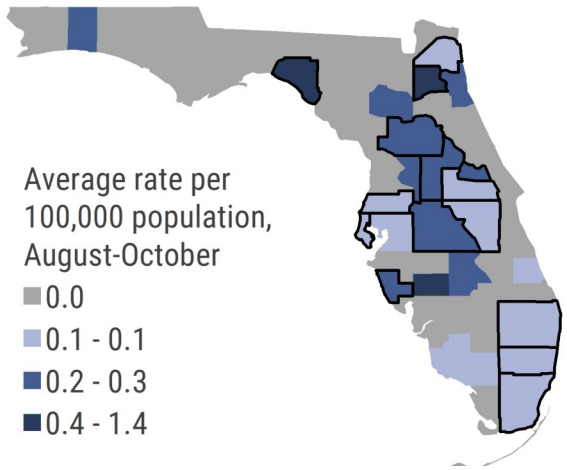
October Key Points

- 26 cases
- 0 new outbreaks
- <1 year olds had highest incidence rate
- 65% cases not up-to-date or unknown vaccination status

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

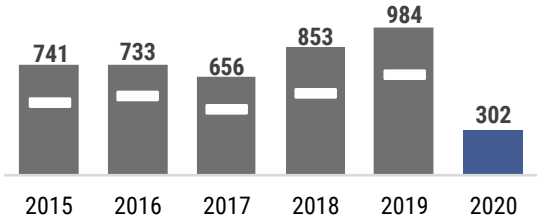


The 26 varicella cases in October were reported among the **15 counties outlined in black**. From August 2020 through October 2020 the average county rate were highest in central Florida.



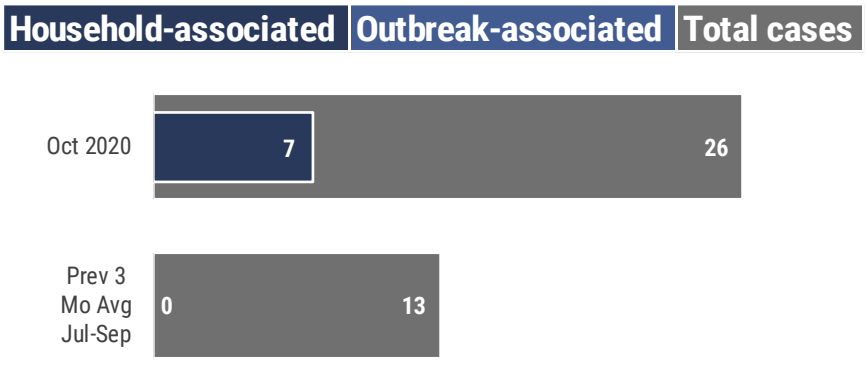
From January 1, 2020 through October 31, 2020, 302 varicella cases were reported in 48 counties.

The annual number of reported varicella cases decreased from 2015 to 2017. In 2020, case counts are lower than those seen in previous years at this time.



*The white bars in the graph indicates total numbers in October for each year

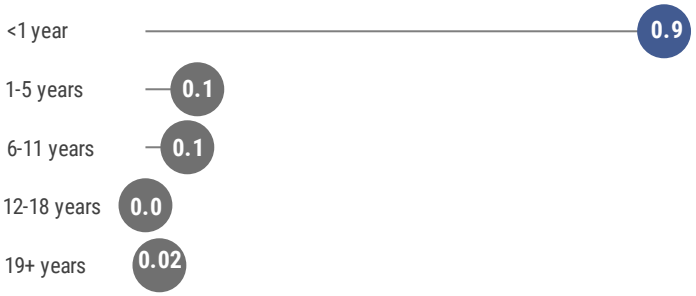
In October, 7 varicella cases were associated with household transmission. For most varicella cases, exposure to other known cases is never identified, and they are not able to be linked to outbreaks.



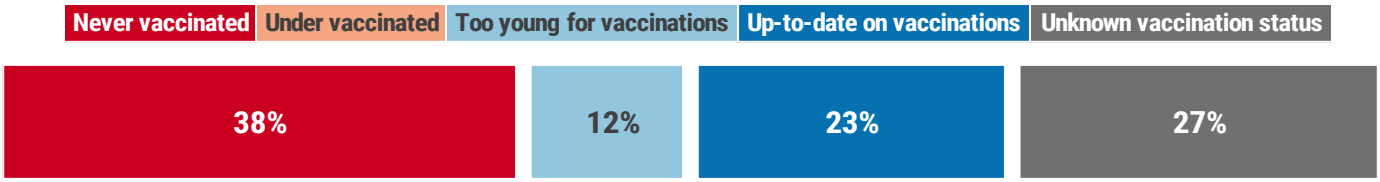
The COVID-19 pandemic is affecting health care seeking behavior, which may be impacting the diagnosis and reporting of varicella cases that are shown in this report. For more information on the COVID-19 pandemic in Florida, please visit FloridaHealthCOVID-19.gov.

Varicella Surveillance

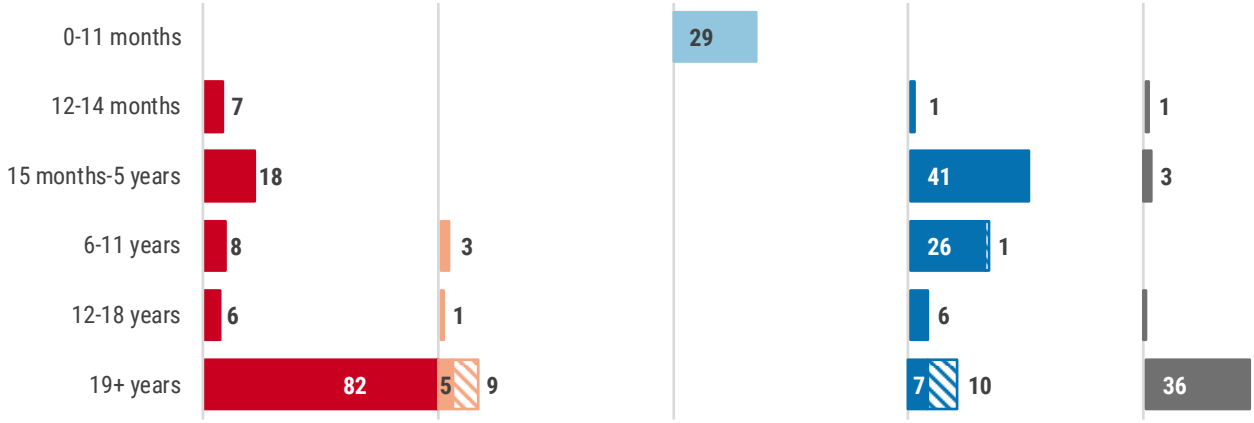
In October, the varicella rate was highest among infants <1 year old at **0.9 cases** per 100,000 population, which is consistent with previous months. Infants <1 year old are too young to receive varicella vaccination, which is why vaccination of siblings, parents, grandparents, and other age groups is so important to help prevent infection in infants.



Vaccination is the best way to prevent varicella infections. In October, over half of individuals reported with varicella had not received the recommended number of varicella vaccinations for their age or had unknown vaccination status. Self-reported vaccination status that could not be verified is shown with a diagonal pattern. Vaccination against varicella is important for infants, children, teenagers, and adults. See the last page of this report for links to the Center for Disease Control and Prevention (CDC) recommended vaccination schedules.



In 2020, 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 get varicella, **complete and timely vaccination remains the best way to prevent varicella and severe complications**. Self-reported vaccination status that could not be verified is shown with a diagonal pattern.



National activity

Varicella incidence decreased significantly following the vaccine becoming available in 1995 and has continued to decrease since 2006 when recommendations changed from 1 to 2 doses of varicella vaccine. From 2006 to 2015, all age groups had a substantial decrease in incidence with the largest decline in children aged 5 to 14 years. Although varicella is not reported to the CDC by all states, based on available data, the number of varicella cases nationally has steadily decreased each year from 2012 to 2015.

Varicella surveillance goals

- Identify and control outbreaks and monitor trends and severe outcomes
- 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.
- Pertussis, varicella, and hepatitis A 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, and hepatitis A 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, and hepatitis A 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 ≥5 cases associated with a specific setting outside of a household.
- For more information about reportable diseases, please visit FloridaHealth.gov/DiseaseReporting.
- For more information about Florida's guides to surveillance and investigation, including disease-specific surveillance case definitions, please visit FloridaHealth.gov/GSI.

Population Data

- Population data from 2020 used to calculate incidence rates are from FLHealthCHARTS (Community Health Assessment Resource Tool Set).
- For more information about FLHealthCHARTS, please visit 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 under-vaccinated 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.