Vaccine-Preventable Disease

August 2020

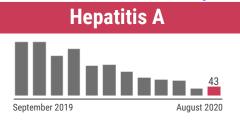
Surveillance Report







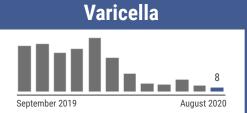
The COVID-19 pandemic is affecting health care seeking behavior, which may be impacting the diagnosis and reporting of hepatitis A, pertussis, and varicella cases that are shown in this report. Due to the low numbers of vaccine-preventable disease cases at this time, this report contains figures with six month averages. For more information on the COVID-19 pandemic in Florida, please visit FloridaHealthCOVID-19.gov.



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



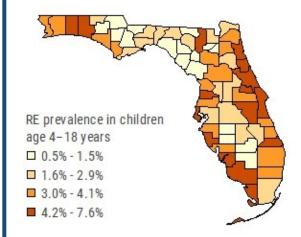
- Pertussis activity decreased from last month and was below the previous 5year average.
- There was a 56% decrease in reported cases when comparing cases from March-August 2019 to March-August 2020.
- The average incidence rate for <1 year olds from March to August 2020 was roughly 3 times lower than from March to August 2019.



- Varicella activity decreased from last month and was below the previous 5year average.
- There was an 81% decrease in reported cases when comparing cases from March-August 2019 to March-August 2020.
- The average incidence rate for <1 year olds from March to August 2020 was roughly 4 times lower than from March to August 2019.



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 measles, 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 3.5% with individual counties ranging from 0.5-**7.6%**. In August 2019, the statewide prevalence was 3.2%, 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 August 31, 2020.

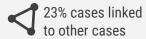


Hepatitis A Surveillance

August 2020

2018-To-Date Key Points



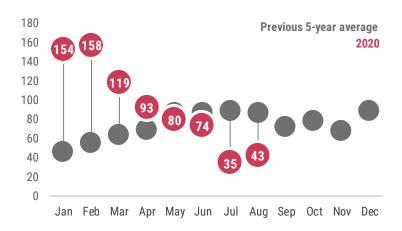




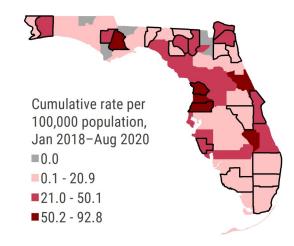




The number of reported hepatitis A cases in August increased from the previous month and was below the previous 5-year-average. From February to July 2020, the number of cases reported in each month decreased.

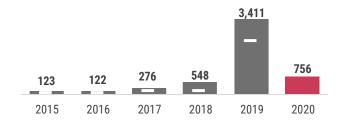


The 43 hepatitis A cases in August were reported in the **22 counties outlined in black**. The central Florida region had the highest hepatitis A activity levels. Since January 1, 2018, 98% of cases have likely been acquired locally in Florida.



From January 1, 2020 through August 31, 2020, 756 hepatitis A cases were reported.

The number of reported hepatitis A cases dramatically increased since January 2018, after remaining relatively stable in previous years. So far in 2020, case counts were higher than those seen during previous years at this time, except for 2019, as indicated by the white bars in the graph.





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 August 2020, 95% 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.





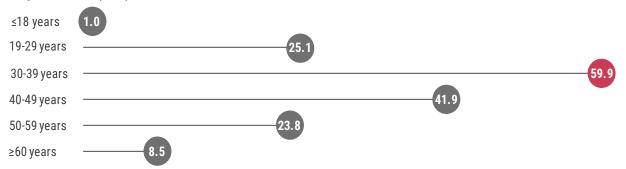
From January 2018 to August 2020, 1,099 (23%) of 4,715 total cases of hepatitis A were epidemiologically (epi) linked to other cases. In August 2020, there was one epi linked case and it was a household contact.

Epi linked cases | Total cases



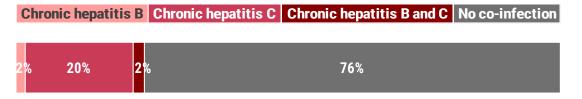


Since January 1, 2018, the incidence rate was highest among adults aged 30–39 years old at 59.9 cases per 100,000 population. In August 2020, the incidence rate was highest among adults aged 30–39 years old at 0.6 cases per 100,000 population. Since January 1, 2018, cases were reported primarily among men (64%) and persons who identify as non-Hispanic white (93%).





Since January 1, 2018, 84 (2%) cases were co-infected with chronic hepatitis B, 929 (20%) cases were co-infected with chronic hepatitis C, and 97 (2%) cases were co-infected with both chronic hepatitis B and C. In August 2020, 7 (16%) cases were co-infected with chronic hepatitis B or C. Co-infection with more than 1 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 33 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/2017April-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.

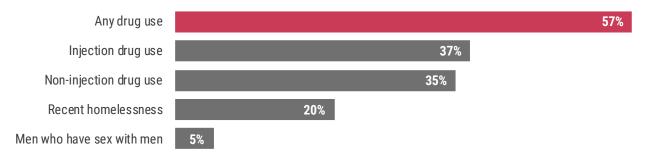
Statewide Response to the Increase in Hepatitis A Cases

Several Florida counties have experienced ongoing local transmission of hepatitis A since 2017. Since January 1, 2018, 98% of Florida's cases (n=4,592) 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 (63%) of the 4,592 cases likely acquired in Florida since January 1, 2018 reported at least one of the risk factors below, while 37% reported no or unknown risk factors. The most commonly identified risk factor was **drug use**, reported by 2,630 (57%) cases. Non-injection (35%) and injection (37%) were both common forms of drug use. Recent homelessness, reported by 20% of cases, was also a risk factor.



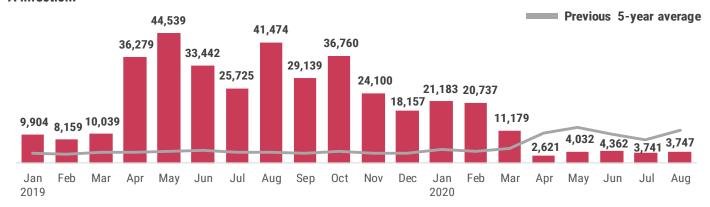


Hepatitis A infections can be severe, leading to inpatient hospitalization and sometimes death. Since January 1, 2018, 3,221 (70%) cases likely acquired in Florida have been hospitalized because of their hepatitis A infection, and there were 70 hepatitis A associated deaths identified.

70% 70 deaths



The Florida Department of Health is actively working to vaccinate those most at risk for hepatitis A infection. In recent months, 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 August 2020. This may be due to changes in vaccine administration during the COVID-19 pandemic. In August 2020, a total of 3,747 first doses were administered. Vaccination is the best way to prevent hepatitis A infection.

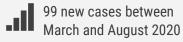


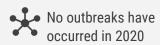
Pertussis Surveillance

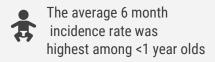
January-August 2020

Key Points











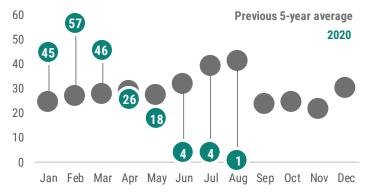
From January 1, 2020 through August 31, 2020, 201 pertussis cases were reported in 38 counties.

Ninety-nine pertussis cases were reported between March and August 2020, which is a **56% decrease** compared to March to August 2019 (227 cases).



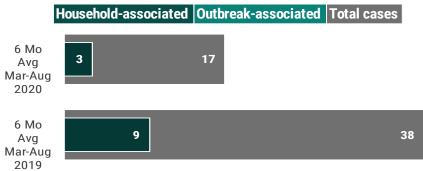
^{*}The white bars in the graph indicates total numbers in August for each year

The number of pertussis cases reported in August decreased from the previous month and was below the previous 5-year average. Elevated case counts in early 2020 may be due to a change in the case definition for pertussis; please see the last page for more information.





The average number of household-associated cases between March and August 2020 was three times lower than the average number of household-associated cases between March and August in 2019. No outbreak-associated cases have been identified in 2020. For most pertussis 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 pertussis cases that are shown in this report. For more information on the COVID-19 pandemic in Florida, please visit FloridaHealthCOVID-19.gov.



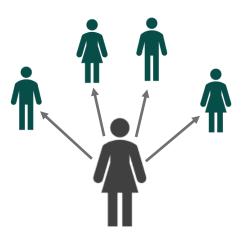
Pertussis Surveillance

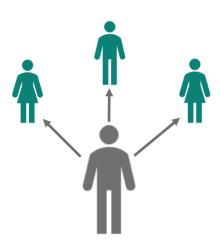


There was an average of 3 contacts per case between March and August 2020. Between March and August 2019, there was an average of 4 contacts per case. Contacts are classified as people whom antibiotics were recommended to in order to prevent illness. For those diagnosed with pertussis, antibiotics can shorten the amount of time they are contagious to others. Antibiotics can also be used to prevent illness in those who have been exposed to someone with pertussis while they are contagious.

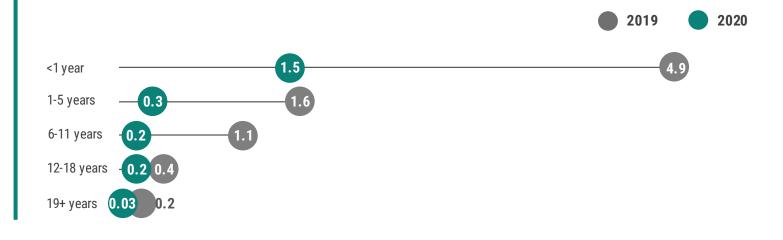
2019

2020





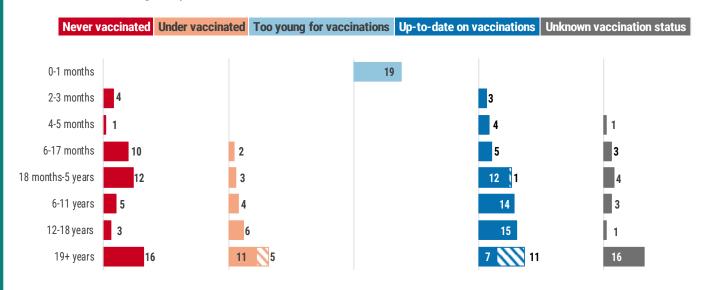
The average incidence rate was highest among <1 year olds at 1.5 cases per 100,000 population between March and August 2020, which is roughly three times lower than the average incidence rate for <1 year olds between March and August 2019. Infants experience the greatest burden of pertussis infections, 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 so important to help prevent infection in infants.



Pertussis Surveillance



In 2020, the majority of adults aged 19 years and older with pertussis were not up-to-date on their pertussis vaccinations or had unknown vaccination status. In general, those who have received at least one pertussis vaccination have less severe outcomes than those who have never been vaccinated. Self-reported vaccination status that could not be verified is shown with a diagonal pattern.





National activity

The number of pertussis cases gradually increased since the 1980s, peaking in 2012 at levels not seen since the 1950s. Since 2012, the number of pertussis cases started gradually decreasing. Pertussis incidence has remained highest among infants <1 year old and lowest among adults ≥20 years old since the 1990s.

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 contacts of cases and recommend appropriate prevention measures, including exclusion, antibiotic prophylaxis, and immunization
- · Monitor the effectiveness of immunization programs and vaccines

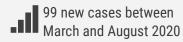
To learn more about pertussis, please visit FloridaHealth.gov/Pertussis. For more information on the data sources used in Florida for pertussis surveillance, see the last page of this report.

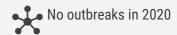
Varicella Surveillance January-August 2020

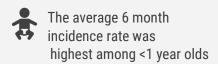
Key Points



In August, there were 8 cases



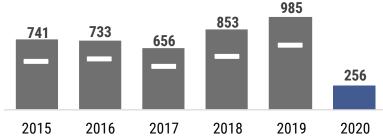






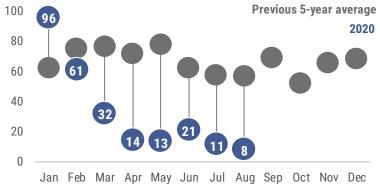
From January 1, 2020 through August 31, 2020, 256 varicella cases were reported in 43 counties.

Ninety-nine varicella cases were reported between March and August 2020, which is an **81% decrease** compared to March to August 2019 (518 cases).



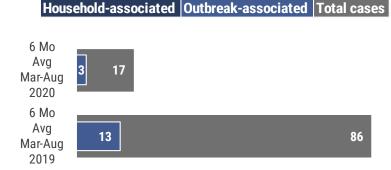
*The white bars in the graph indicates total numbers in August for each year

The number of varicella cases reported in August decreased 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 average number of household-associated cases between March and August 2020 was four times lower than the average number of household-associated cases between March and August in 2019. No outbreak-associated cases have been identified in 2020. 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

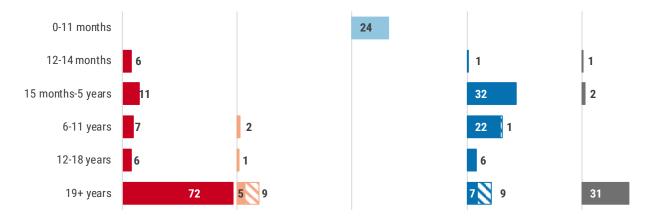


The average incidence rate was highest among <1 year olds at 0.9 cases per 100,000 population between March and August 2020, which is roughly four times lower than the average incidence rate for <1 year olds between March and August 2019. Infants <1 year old are too young to receive varicella vaccination, which is why vaccination of siblings, parents, grandparents, and other age groups is so important to help prevent infection in infants.





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.