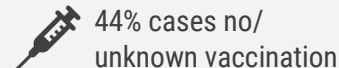
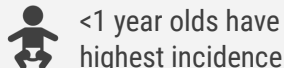
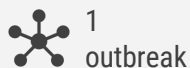
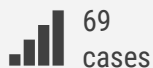


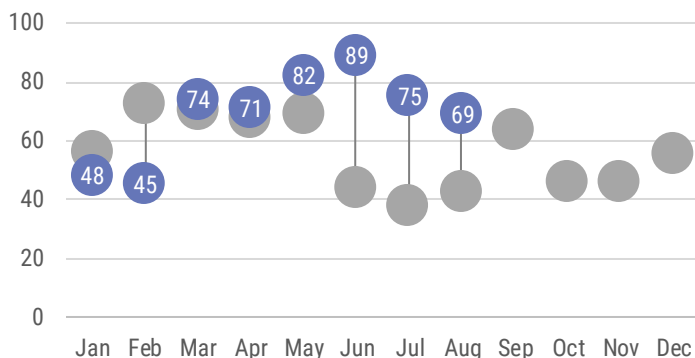
Varicella Surveillance

August 2018

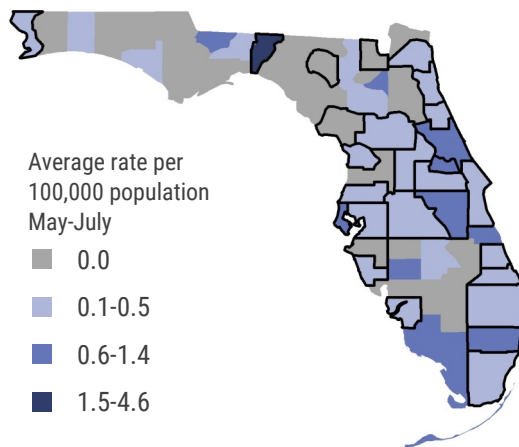
August Key Points



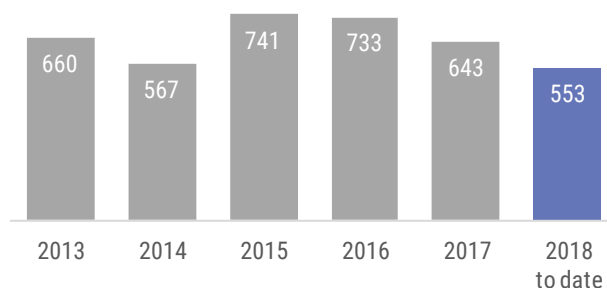
The number of reported varicella cases in August decreased from last month but remained above the previous 5-year-average. In general, more varicella cases are reported during the late winter and summer months.



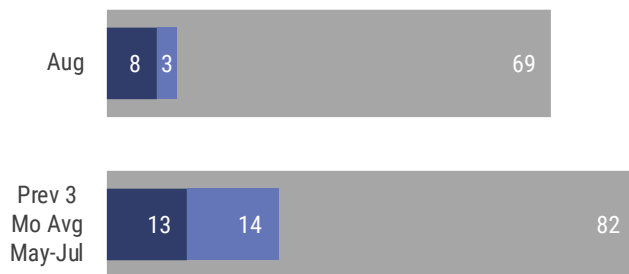
The 69 varicella cases in August were reported among the 28 counties outlined in black. During the previous 3 months (May through July), the average county rate has varied throughout the state.



From January 1, 2018 through August 31, 2018, 553 varicella cases were reported in 50 counties. Since 2015, the annual number of reported varicella cases decreased. Thus far in 2018, it appears case counts will remain consistent with those seen during previous years.



In August, 8 (12%) of 69 total cases were associated with transmission within households and 3 (4%) cases were outbreak-associated. For most varicella cases, exposure to other known cases is never identified, and they are not able to be linked to outbreaks.

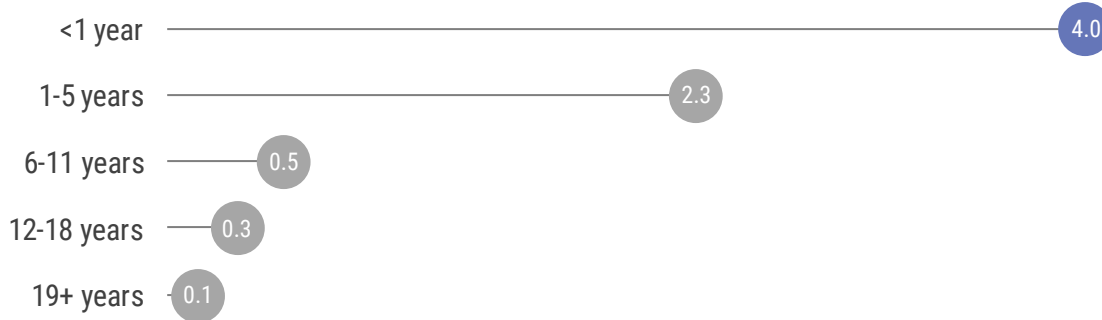


One varicella outbreak was reported in August that included cases previously reported in July. The outbreak consisted of 5 cases, and transmission occurred within a correctional facility.

There have been 6 total varicella outbreaks reported in 2018, all of which occurred in schools or correctional facility settings.



In August, the incidence rate was highest among **infants <1 year old** at **4 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 grandparents, parents, siblings, and other age groups is so important to help prevent infection in infants.



Vaccination is the best way to prevent varicella infections. In August, almost half of individuals reported with varicella had not received the recommended number of varicella vaccinations for their age or had unknown vaccination status. In general, those who have received at least 1 varicella vaccination have less severe outcomes than those who have never been vaccinated.

Although individuals who have been vaccinated can still get varicella, **complete and timely vaccination remains the best way to prevent varicella and severe complications.** In August, **13% of cases were too young for vaccination.** Vaccination against varicella is important for infants, children, teenagers, and adults.

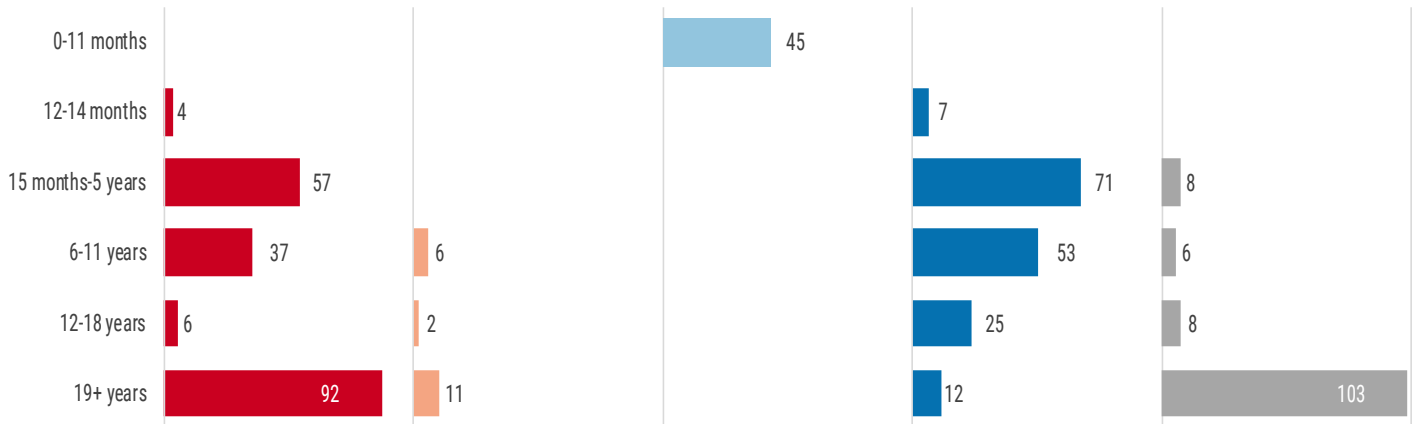
Never vaccinated | **Under-vaccinated** | **Too young for vaccination** | **Up-to-date on vaccinations** | **Unknown vaccination status**





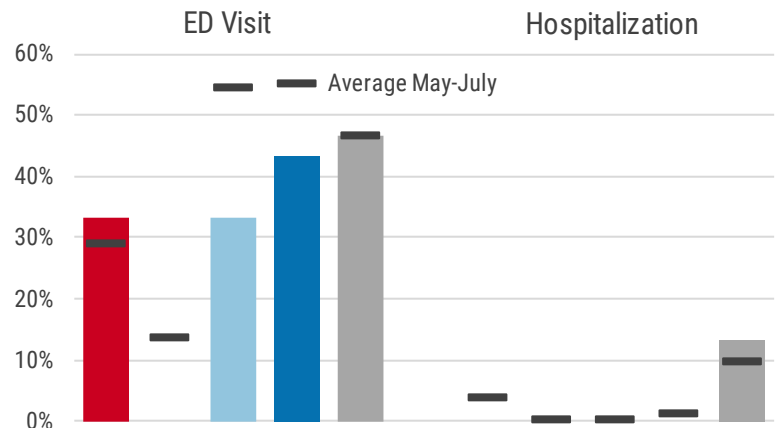
42% of children aged 15 months to 5 years were not up-to-date on their varicella vaccinations. **In general, those who have received at least 1 varicella vaccination have less severe outcomes than those who have never been vaccinated.** Almost half of adults ≥19 years old had unknown vaccination status for varicella. See page 10 for links to CDC recommended vaccination schedules.

Never vaccinated Under vaccinated Too young for vaccinations Up-to-date on vaccinations Unknown vaccination status



In August, cases with **unknown vaccination status** were more likely to visit the emergency department (ED) or require inpatient hospitalization.

In general, those who received at least 1 dose of varicella vaccination, even if they later develop disease, have less severe outcomes than those who have never been vaccinated.



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 9 years and aged 10 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 www.floridahealth.gov/varicella. For more information on the data sources used in Florida for varicella surveillance, see page 10.

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, mumps, and measles 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 and varicella case counts include both confirmed and probable cases, while measles case counts include only confirmed cases.
- CHD epidemiologists also report outbreaks of pertussis, varicella, measles, and mumps into Merlin.
 - Household-associated cases are defined as ≥ 2 cases exposed within the same household.
 - Pertussis and mumps 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.
 - Measles outbreaks are defined as any person acquiring measles while in Florida.
- For more information about reportable diseases, please visit www.Floridahealth.gov/diseasereporting.
- For more information about Florida's guides to surveillance and investigation, including disease-specific surveillance case definitions, please visit www.floridahealth.gov/gsi.
- For the full article on a Minnesota outbreak of measles, please visit www.cdc.gov/mmwr/volumes/66/wr/mm6627a1.htm.

Population Data

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

Vaccination Data

- Vaccination data for identified cases are from Merlin, as documented by CHD epidemiologists.
- 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.
- For a full text version of a new study on pertussis vaccination, please visit www.cidid.org/publications-1/2018/3/29/the-impact-of-past-vaccination-coverage-and-immunity-on-pertussis-resurgence.