

Summary

January 2018

State varicella activity:

- Forty-eight confirmed and probable varicella cases were reported among 22 counties in January.

- Reported varicella cases are starting to increase after having remained lower throughout the summer and fall. In general, varicella activity is highest during the late winter and spring. This is consistent with seasonal trends in past years.
- From January 1, 2017 through December 31, 2017, 655 cases of varicella were reported among 53 of Florida's 67 counties.

- A decreasing trend in the number of confirmed and probable cases of varicella reported annually in Florida was observed from 2008-2014. Since then, the number of cases reported annually has remained elevated. In 2017, the number of varicella cases is slightly lower than the number observed in 2016.

- Six outbreaks of varicella were reported in January.

- In January, children age less than one year old had the highest incidence of varicella. This is consistent with what was observed for the majority of months in 2017.

- Vaccination is the best way to prevent varicella infection.** In January, 1 in 5 cases were not up to date on their varicella vaccinations. In general, those who received at least one dose of varicella vaccination, even if they later develop disease, have less severe outcomes than those who have never been vaccinated.

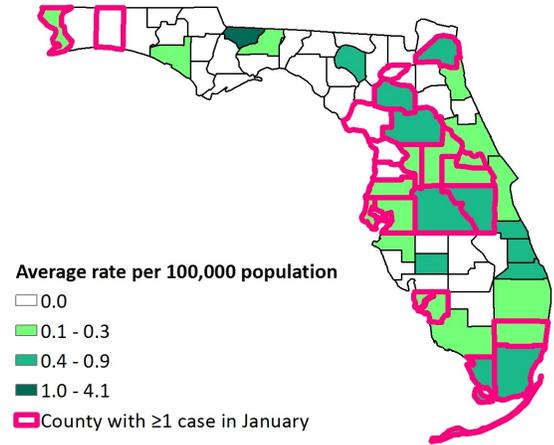
- To learn more about varicella, please visit <http://www.floridahealth.gov/varicella>.

National varicella activity:

- Varicella incidence decreased significantly following the vaccine becoming available in 1995 and has continued to decrease since 2006 when recommendations changed from one to two doses of varicella vaccine.
 - From 2006–2015 all age groups saw a significant decrease in incidence with the largest decline in children age 5-9 years and age 10-14 years.
- Although varicella is not reportable in all states and therefore not all states report varicella cases to the CDC, based on available data the number of varicella cases nationally has steadily decreased each year from 2012-2015.

Map 3

Average Varicella Incidence Rates per 100,000 Population, October 2017 through December 2017



Surveillance goals:

- Varicella surveillance is conducted to identify and control outbreaks and monitor trends and severe outcomes.
- Surveillance is also conducted to monitor effectiveness of immunization programs and vaccines. For more information on the data sources used in Florida for varicella surveillance, see page 11 ►

Varicella Cases by Month Reported

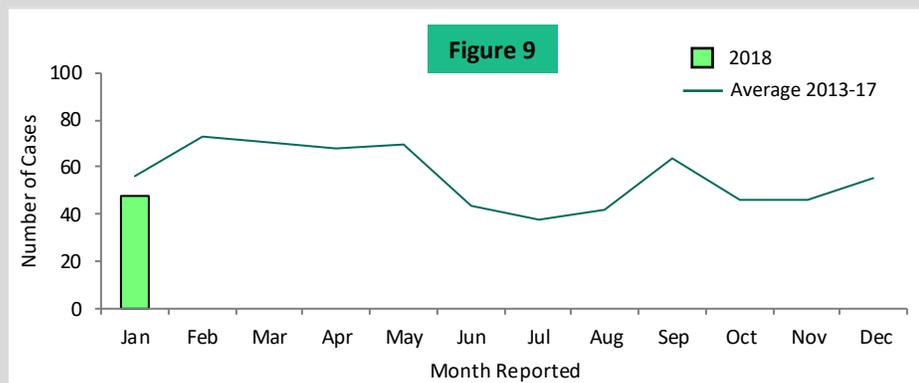


Figure 9 shows the number of confirmed and probable cases of varicella reported into Merlin, for January 2018 and the previous five-year average.

In January, the number of reported varicella cases remained at levels seen during the previous month but were below the five-year average. In general, varicella cases peak in the spring and fall.

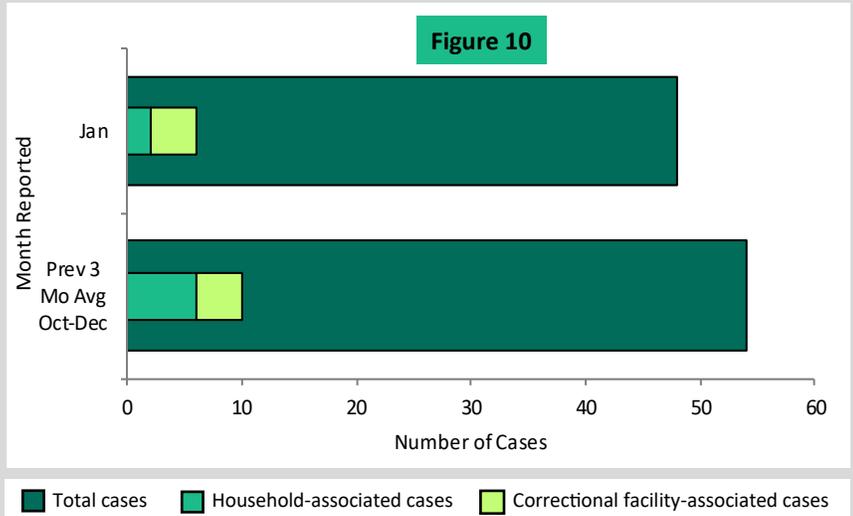
Varicella Outbreaks

Figure 10 shows the number of confirmed and probable cases that were associated with at least one other case and the total number of confirmed and probable cases as reported into Merlin, January 2018 and the previous three-month average. Cases associated with at least one other case are shown by type of association.

In January, 6 (11%) cases were associated with other cases through living in the same household.

Outbreak Summary:

Six outbreaks of varicella were reported in January. Four of the outbreaks took place in households, and two of the outbreaks took place in correctional facilities.



Varicella Age-Specific Incidence Rates

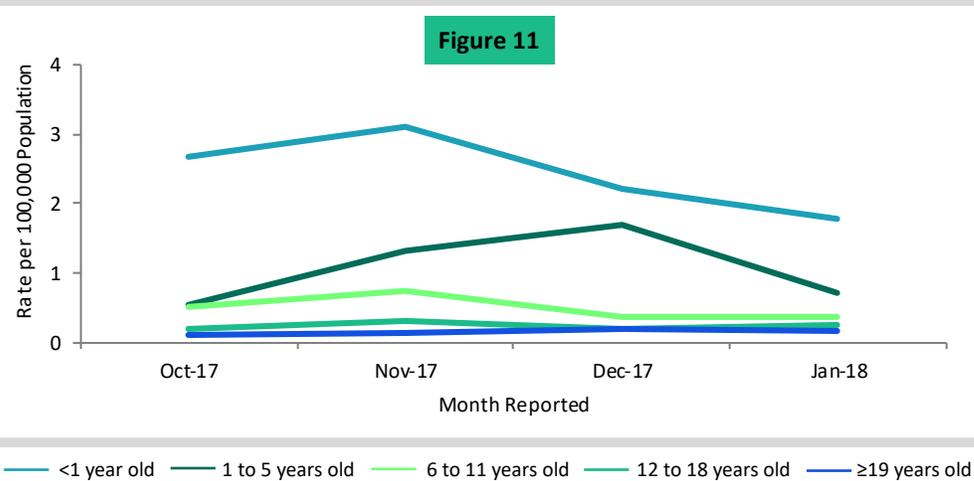


Figure 11 shows the age-specific incidence rates of confirmed and probable cases of varicella, as reported into Merlin, for October 2017 through January 2018.

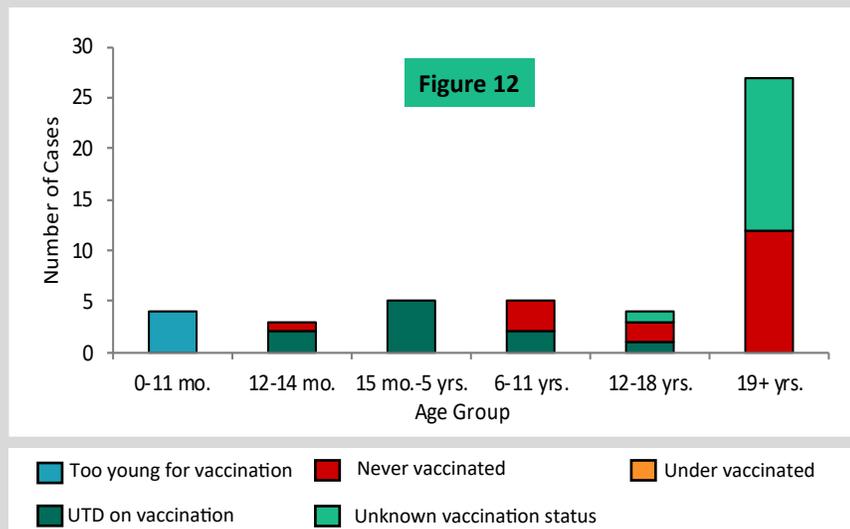
In January, the incidence rate was highest among infants less than one year old. This is consistent with trends seen in 2017. Infants less than one year old are too young to receive varicella vaccination, which is why vaccination of other age groups is so important to help prevent infection in infants.

Vaccination History for Varicella Cases

UTD = up-to-date

Figure 12 shows the vaccination status of varicella cases by age group for confirmed and probable cases of varicella, as reported into Merlin, January 2018 (n=48).

Varicella vaccinations are recommended at 12-15 months of age and 4-6 years of age. Of the 48 cases reported in children aged 15 months-5 years, all (100%) were up to date on their varicella vaccinations, while only one third (33%) of the cases in children aged 6 to 18 years were up to date.

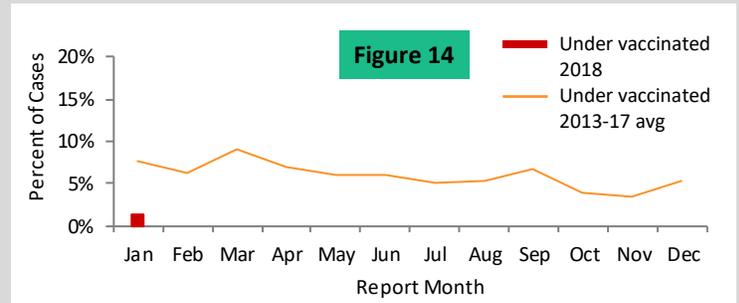
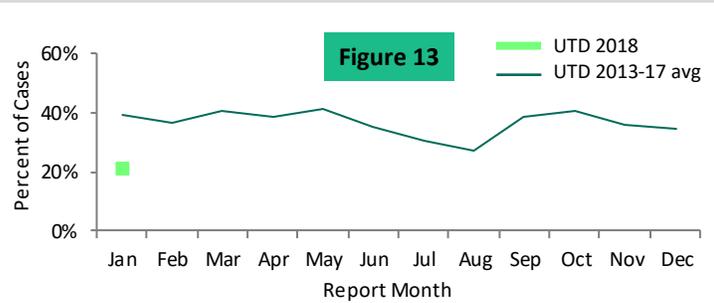


Varicella Cases in Vaccinated Individuals

UTD = up-to-date

Figure 13 shows the percent of confirmed and probable varicella cases who were up to date on their varicella vaccinations, as reported into Merlin, for January 2018 and the previous five-year average. **Figure 14** shows the percent of these cases who were under vaccinated during the same time periods.

Although individuals who have been vaccinated can still get varicella, vaccination remains the best way to prevent varicella and severe complications.



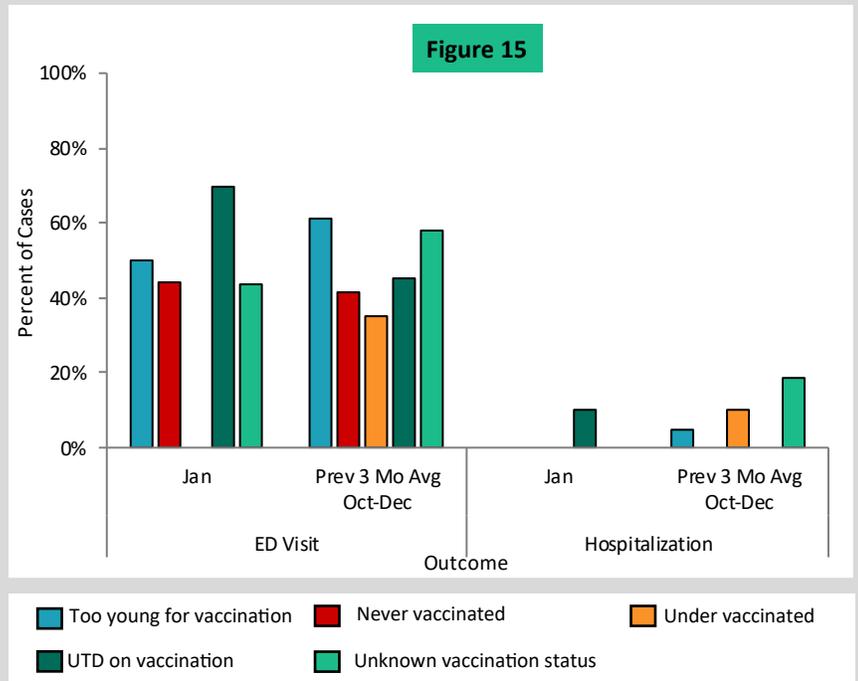
Varicella Outcomes

UTD = up-to-date, ED = emergency department

Figure 15 shows the percent of confirmed and probable cases of varicella with select outcomes by vaccination status, as reported into Merlin, January 2018 and the previous three-month average.

In general, cases who were UTD on their vaccinations were less likely to experience fever and vesicle lesions. Cases too young to be vaccinated or not yet vaccinated were more likely to experience papule lesions.

In December, individuals up-to-date on vaccination were most likely to visit the emergency department. However, those who received at least one dose of varicella vaccination, even if they later develop disease, have less severe outcomes than those who have never been vaccinated. Few varicella cases require inpatient hospitalization.



Case Data

- Pertussis, varicella, and mumps are reportable diseases in Florida. Case information is documented by county health department (CHD) epidemiologists in Merlin, Florida's reportable disease surveillance system.
- CHD epidemiologists also report outbreaks of pertussis, varicella, and mumps into Merlin. Outbreaks are defined as two or more cases associated with a specific setting outside of the home. Two or more cases among members of the same household are considered household-associated cases.
- Current case information is preliminary and may change as more data are received. The most recent data available are displayed in this report.
- For more information about reportable diseases, please visit www.Floridahealth.gov/diseasereporting.

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 from cases are from Merlin, as identified 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, 2017.
- Cases are considered up-to-date 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. Cases 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 more information about immunization schedules, please visit <https://www.cdc.gov/vaccines/schedules/index.html>.