

July 2018

Summary

Measles is a highly contagious disease among persons who are susceptible. The Florida Department of Health investigates all individuals with measles who spend time in Florida while infectious, including residents and visitors. However, only Florida residents are included in Florida's case counts reported to the CDC.

State activity:

- **Two Florida residents and one visitor with confirmed measles associated with international exposures in Brazil and France were investigated in July.**
 - The two Florida residents were exposed to measles while traveling abroad. They had no measles vaccinations prior to exposure.
 - The visitor was exposed prior to arriving in the United States and had unknown vaccination status.
- Thus far in 2018, a total of four Florida residents and three visitors with measles have spent time in Florida while infectious.
- Contact investigations are conducted for both Florida residents and visitors with measles to determine the vaccination status of those potentially exposed to measles and to detect and prevent transmission.
 - **In July, a total of 404 contacts who had possible exposure to measles were identified.**
 - **No outbreaks of measles were reported.**
- **Vaccination is the best way to prevent measles infections.** In July, the two Florida residents with measles were never vaccinated prior to exposure and the visitor had unknown vaccination status.
- Due to generally high vaccination rates, cases of measles in Florida residents are rare but occur every year and are most often associated with international travel.
 - The number of reported measles cases in Florida residents has remained at less than 10 cases per year since 2010.
 - In 2017, all measles cases (n=3) were exposed to the measles virus outside of Florida.
- To learn more about measles, please visit www.floridahealth.gov/measles.

National activity:

- Even though measles has been eliminated in the United States, cases occur every year, mostly among unvaccinated individuals. As of July 14, the CDC has reported 107 confirmed cases of measles so far in 2018. In 2017, the CDC reported a total of 118 cases.
- In 2017, Minnesota experienced a large outbreak of measles in a community with low measles vaccination coverage that affected a total of 65 individuals. For detailed information on this outbreak see page 10.
- The two dose measles vaccination schedule has been successful at decreasing cases, and measles was eliminated from the United States in 2000.

International activity:

- Recently, increased measles activity has been reported all over the world. In May 2018, multiple measles outbreaks were reported in the Americas, Asia, Africa, Europe, and the Pacific.
- The CDC has issued a Level 1 Travel Alert for several countries with measles outbreaks, including Greece, England, Serbia, Indonesia, Democratic Republic of the Congo, Italy, Ukraine, the Philippines, Romania, and France. Travelers to these countries should make sure they are vaccinated against measles with the MMR (measles, mumps, and rubella) vaccine. For more information, please visit wwwnc.cdc.gov/travel/notices.

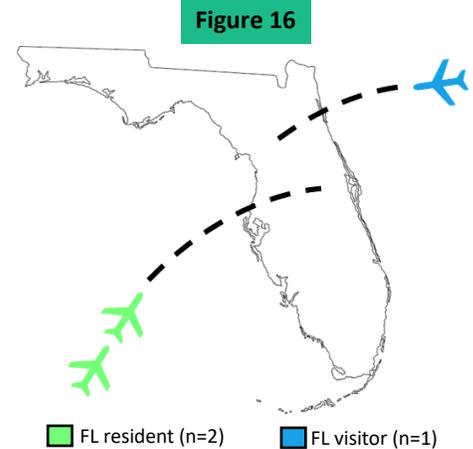


Figure 16 shows the number of measles investigations in Florida residents and visitors conducted in July.

Surveillance goals:

- Measles surveillance is conducted to prevent transmission and severe disease, and initiate control measures.
- Surveillance is also conducted to monitor effectiveness of immunization programs and vaccines. For more information on the data sources used in Florida for measles surveillance, see page 10 ►

Measles Cases by Year Reported

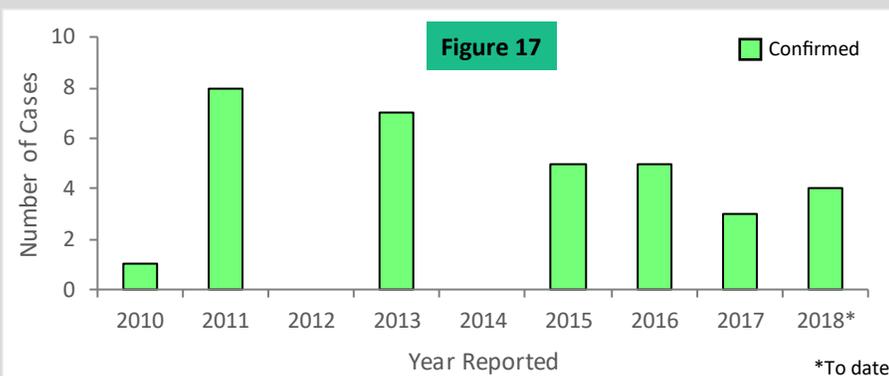
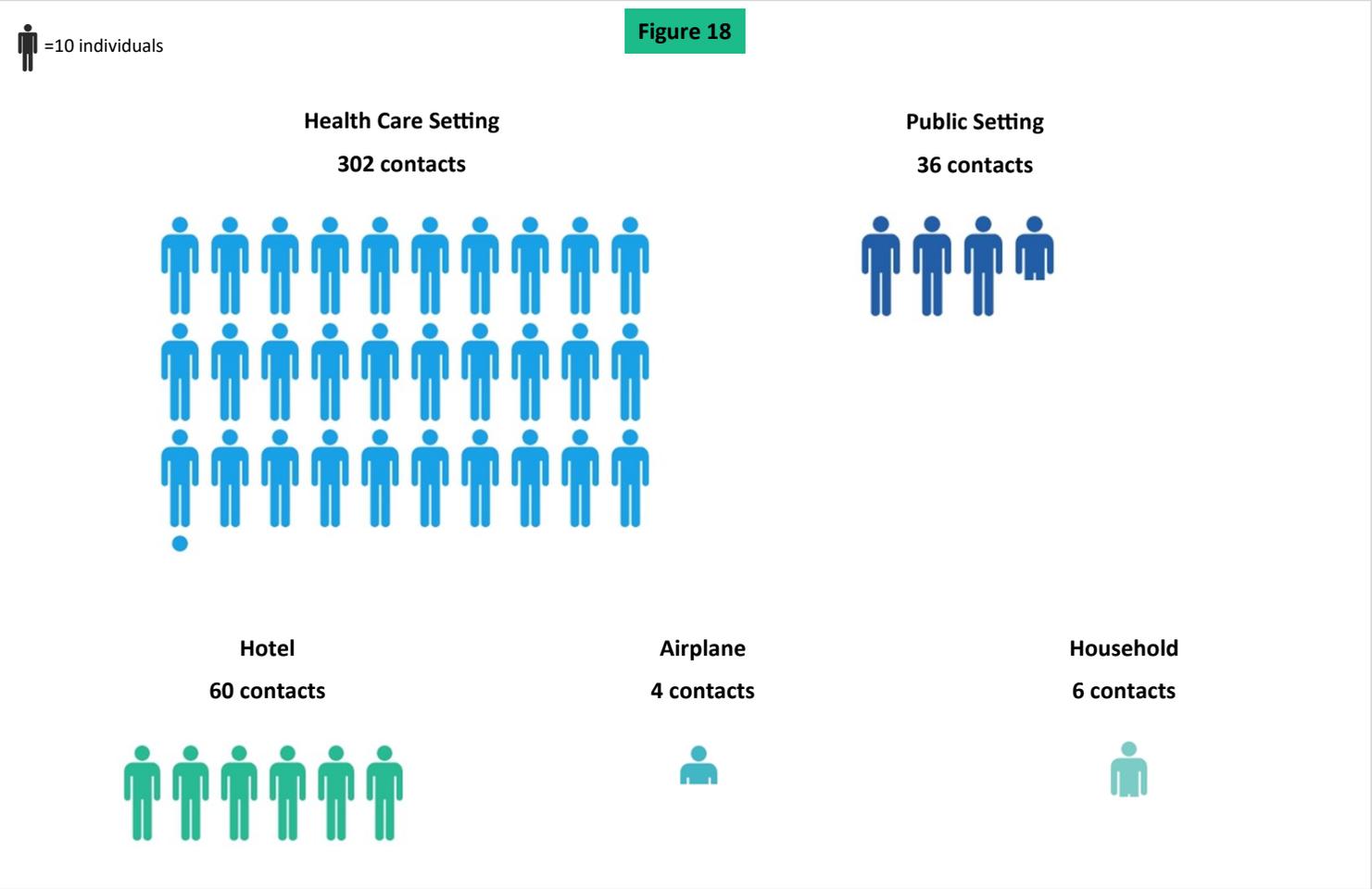


Figure 17 shows the number of confirmed measles cases reported into Merlin, 2010 through July 2018.

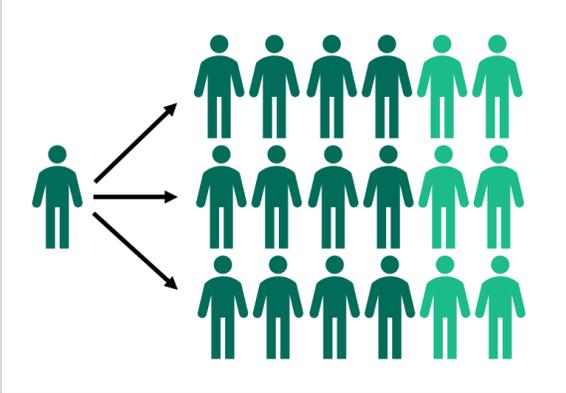
Thus far in 2018, four confirmed measles cases have been reported in Florida residents. Two of the cases are siblings. The swift identification and response to cases helped prevent disease transmission in Florida.

Measles Contact Investigation

Measles is a highly contagious disease among persons who are susceptible. It is important to identify all contacts of cases to determine if they are protected against measles through either vaccination or history of disease and to quickly determine if they develop symptoms of measles, indicating a possible infection. In addition to contacts of measles cases who are Florida residents, contacts of cases from other states and countries who visited Florida while infectious must also be investigated. **In July, Florida investigated a total of 404 contacts of three measles cases, including two cases in Florida residents and one case in a foreign visitor. Figure 18** shows the number of contacts by setting.



Due to strong public health efforts, 404 contacts were identified. **Among those reached, the majority were vaccinated against measles.** Measles is a highly infectious virus, and the lack of secondary measles cases signifies the importance of herd immunity. In a population with no immunity to measles, one case of measles could potentially lead to 12 to 18 more cases. High measles vaccination rates are especially important to prevent infection in those too young to be vaccinated.



Case Data

- Current case information is preliminary and will change as new data are gathered. The most recent data available are displayed in this report.
- 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.
 - Household-associated cases are defined as two or more cases exposed within the same household.
 - Pertussis and mumps outbreaks are defined as two or more cases associated with a specific setting outside of a household.
 - Varicella outbreaks are defined as five or more cases associated with a specific setting outside of a household.
- 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