Pertussis Surveillance

Key Points

📉 4 cases in June 2021

📊 28 cases in the past 6 months
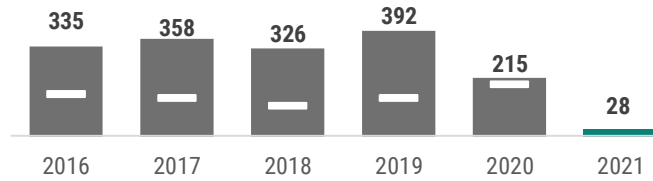
⚛ No outbreaks have been reported in 2021

👶 <1 year olds had the highest 6 month average incidence rate
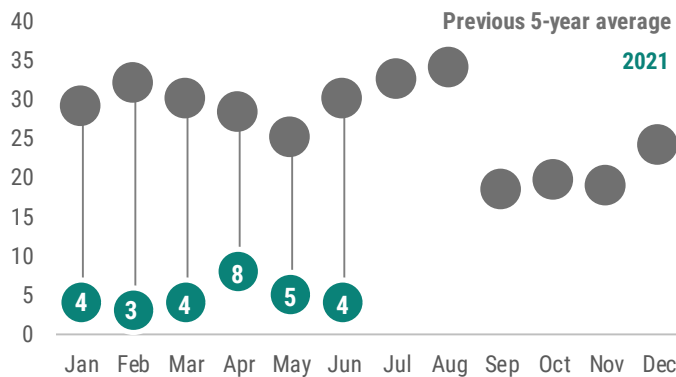

In 2021, 28 pertussis cases were reported in 11 counties. When comparing the number of pertussis cases from January 2021 and June 2021 to January 2019 to June 2019 (n=180 cases), there was an **84% decrease**.
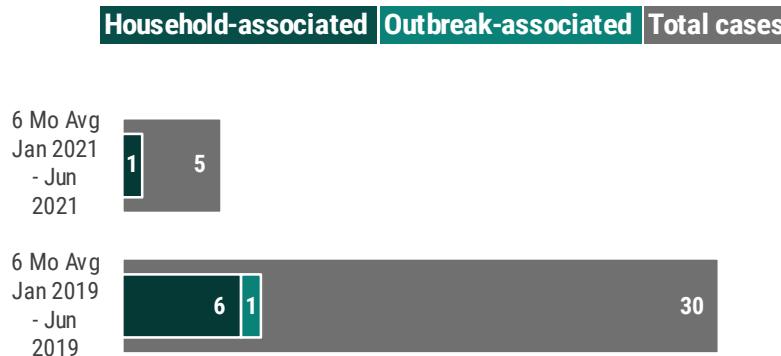
Year	Cases
2016	335
2017	358
2018	326
2019	392
2020	215
2021	28

*The white bars indicate the total number of cases as of June for each year

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The number of pertussis cases reported in June was lower than 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.

Previous 5-year average / **2021**

Month	2021
Jan	4
Feb	3
Mar	4
Apr	8
May	5
Jun	4

No **outbreak-associated cases** and **1 household-associated** case has been identified in 2021. For most pertussis cases, exposure to other known cases is not identified and are not able to be linked to outbreaks.

Household-associated | **Outbreak-associated** | **Total cases**

Period	Household-associated	Outbreak-associated	Total cases
6 Mo Avg Jan 2021 - Jun 2021	1		5
6 Mo Avg Jan 2019 - Jun 2019	6	1	30

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.
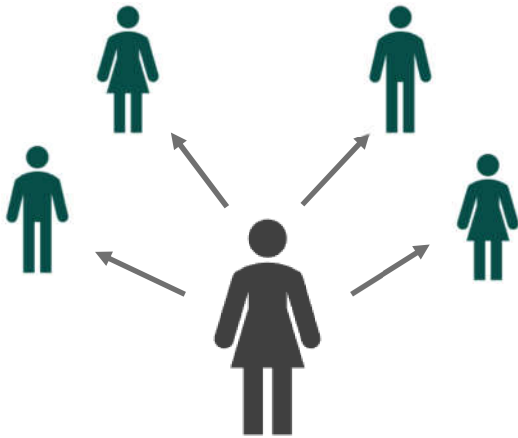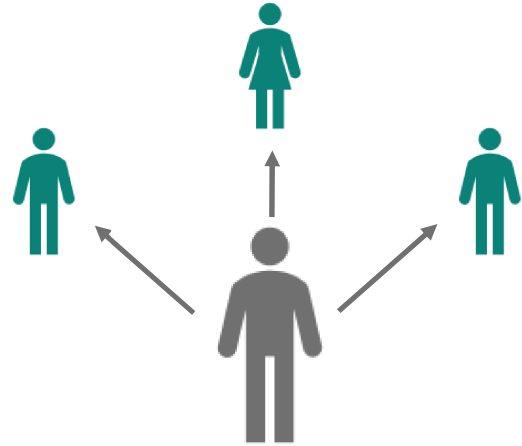
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An average of 3 contacts per case between January 2021 and June 2021 were reported compared to an average of 4 contacts per case between January 2019 and June 2019. Contacts are classified as people whom antibiotics were recommended to prevent illness. Antibiotics can shorten the amount of time cases are contagious and can also be used to prevent illness in those exposed. Understanding pertussis transmission is a key factor in decreasing pertussis infections. In Florida, transmission setting is not routinely identified for non-outbreak cases, resulting in 81% of cases reporting unknown setting in the past six months.
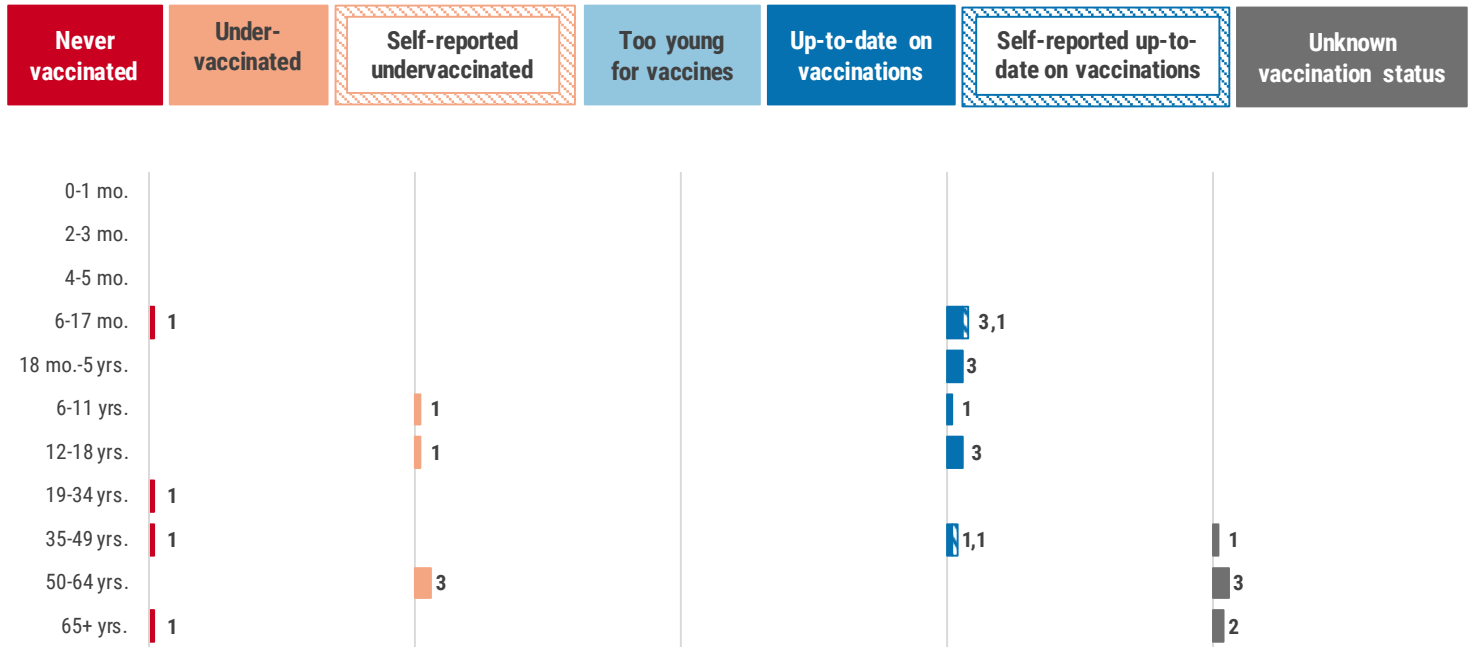
January 2019 to June 2019

January 2021 to June 2021

The average incidence rate was highest among <1 year olds at 0.2 cases per 100,000 population between January 2021 and June 2021, which is **19 times lower** than the average incidence rate for <1 year olds between January 2019 and June 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 important in infection prevention among infants.

● January 2019 to June 2019

● January 2021 to June 2021

Age	Jan 2021–Jun 2021	Jan 2019–Jun 2019
<1 yr.	0.2	3.7
1-5 yrs.	0.07	0.4
6-11 yrs.	0.02	0.3
12-18 yrs.	0.04	0.3
19-34 yrs.	0.00	0.04
35-49 yrs.	0.02	0.04
50-64 yrs.	0.02	0.05
65+ yrs.	0.01	0.03

In 2021, over half of cases were up-to-date on their pertussis vaccinations. **In general, those who have received at least one pertussis vaccination have less severe outcomes than those who have never been vaccinated.** If a person was born before December 1st, 1982, the current pertussis immunization recommendation would not have been implemented when they were receiving their childhood immunizations. Based on the case's age, **11 cases** would not have been vaccinated under the current childhood immunization recommendations.

	Never vaccinated	Under-vaccinated	Self-reported undervaccinated	Too young for vaccines	Up-to-date on vaccinations	Self-reported up-to-date on vaccinations	Unknown vaccination status
0-1 mo.							
2-3 mo.							
4-5 mo.							
6-17 mo.	1				3	1	
18 mo.-5 yrs.					3		
6-11 yrs.		1			1		
12-18 yrs.		1			3		
19-34 yrs.	1						
35-49 yrs.	1				1	1	1
50-64 yrs.		3					3
65+ yrs.	1						2

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 transmission settings in non-outbreak cases to prevent the spread of sporadic cases
- 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