2021 Provisional Pertussis Surveillance Report

Reported Pertussis Incidence and Cases

STATES	Incidence (per 100,000)	No. of Cases
ALABAMA	1.00	49
ALASKA	0.14	1
ARIZONA	2.64	196
ARKANSAS	0.43	13
CALIFORNIA	0.22	88
COLORADO	1.05	61
CONNECTICUT	0.03	1
DELAWARE	0.61	6
D.C.	0.56	4
FLORIDA	0.27	58
GEORGIA	0.31	33
HAWAII	0.36	5
IDAHO	0.11	2
ILLINOIS	0.33	41
INDIANA	0.70	47
IOWA	0.54	17
KANSAS	0.27	8
KENTUCKY	0.67	30
LOUISIANA	0.30	14
MAINE	1.04	14
MARYLAND	0.15	9
MASSACHUSETTS	0.06	4
MICHIGAN	0.28	28
MINNESOTA	0.30	17
MISSISSIPPI	0.24	7
MISSOURI	0.26	16
MONTANA	0.09	1
NEBRASKA	0.62	12
NEVADA	0.92	29
NEW HAMPSHIRE	0.07	1
NEW JERSEY	0.18	16
NEW MEXICO	1.38	29
NEW YORK	0.85	95
NEW YORK CITY	0.73	60
NORTH CAROLINA	0.18	19
NORTH DAKOTA	1.57	12
OHIO	0.94	110
OKLAHOMA	0.00	0
OREGON	0.17	7
PENNSYLVANIA	0.71	91
RHODE ISLAND	0.00	0
SOUTH CAROLINA	0.57	30
SOUTH DAKOTA	0.00	0
TENNESSEE	0.60	41
TEXAS	0.51	150
UTAH	2.46	80
VERMONT	0.00	0
VIRGINIA	0.50	43
WASHINGTON	0.18	14
WEST VIRGINIA	0.00	0
WISCONSIN	0.00	0
WYOMING	0.00	0
TOTAL	**0.49**	**1,609**

Source: NCHS Bridged Race Intercensal Population Estimate for 2020; 2021 estimates were not available at the time of publication.

Weeks 1-52 2021 CDC/NCIRD/DBD/MVPDB

Notice to Readers:
Provisional 2021 Reports of Notifiable Diseases

https://wonder.cdc.gov/nndss/static/2021/52/2021-52-table1z.html

NOTE: The pertussis case definition was modified by CSTE effective January 1, 2020. Criteria were modified increasing sensitivity for case ascertainment such that case counts may increase. The 2020 CSTE case definition can be viewed here: https://ndc.services.cdc.gov/case-definitions/pertussis-2020/.

Reported Pertussis Cases

2020: **5,398*** 2021: **1,609**

*Provisional 2020 Week 53 reported pertussis cases; final 2020 data were not available at the time of publication.

Reported Pertussis Cases and Percent Hospitalization by Age Group

Age	No. of Cases (% of total)	Age Inc /100,000	% Hospitalized by age**
< 6 mos	67 (4.2)	3.6	30.8
6-11 mos	76 (4.7)	4.1	2.3
1-6 yrs	336 (20.9)	1.4	1.9
7-10 yrs	67 (4.2)	0.4	5.0
11-19 yrs	128 (8.0)	0.3	4.6
20+ yrs	886 (55.1)	0.4	13.8
Unknown Age	49 (3.0)	N/A	N/A
Total	**1,609 (100)**	**0.5***	**10.6**

*Total age incidence per 100,000 calculated from 1,560 cases with age reported.
**Age-specific proportion of cases that were hospitalized, calculated from those with a known hospitalization status.

Reported Pertussis Deaths

Age	Deaths*
Cases, aged < 1 yr	0
Cases, aged ≥ 1 yr	4
Total	**4†**

*Deaths reported through NNDSS Confirmation of deaths is ongoing and may result in changes to the final pertussis-related death count for 2021.
†1 of the 4 deaths were female.

Reported DTaP Vaccine Status of Children with Pertussis, Ages 6 months through 6 years

Age	Vaccine History Unknown	Unvaccinated	Undervaccinated (1-2 doses)	Completed Primary DTaP Series (3+ doses)	Total
	No. (%)	No. (%)	No. (%)	No. (%)	No.
6-11 mo	36 (47.4)	1 (1.3)	8 (10.5)	31 (40.8)	76
1-4 yrs	106 (38.7)	7 (2.6)	17 (6.2)	144 (52.6)	274
5-6 yrs	23 (37.1)	3 (4.8)	2 (3.2)	34 (54.8)	62
Total*	**165 (40.0)**	**11 (2.7)**	**27 (6.6)**	**209 (50.7)**	**412**

*Percent calculated from total cases aged 6 months to 6 years, n=412.

Footnote: This table reflects reported vaccination history of pertussis cases aged 6 months through 6 years. CDC recommends all children receive at least 3 doses of DTaP by age 6 months. DTaP coverage in the United States is very high. Over 95% of all children 19-35 months of age have received at least 3 doses of DTaP. This table illustrates a similar trend among the pertussis cases reported during 2021—the majority have received at least 3 doses of DTaP. Because protection from DTaP wanes over time, even children who are up to date with their pertussis vaccines may contract pertussis. Unvaccinated children are more likely to contract pertussis and have more severe disease than those who are fully vaccinated. Note: surveillance data have limitations and are often incomplete; more than a third of pertussis cases in this table have unknown pertussis vaccination history. You cannot use these data to interpret vaccine effectiveness or to assess risk, as the data are incomplete and there is no healthy comparison group.

National Center for Immunization and Respiratory Diseases
Division of Bacterial Diseases

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