

Children and COVID-19 Vaccinations Trends

**AAP Analysis of Data Posted by the Centers for Disease Control and Prevention
as of April 5, 2023**

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®



Updated Version of the Vaccination Report

Please note the following changes to the methods in this weekly report:

A. Child Age Groupings:

12-17 year-olds: We are combining data for 12-15 and 16-17 year-olds. COVID-19 vaccines have been available for all in this group since 5.12.21.

5-11 year-olds: This report tracks COVID-19 vaccination rates beginning the week of 11.3.2021, following CDC recommendation for its use for 5-11 year-olds on 11.2.2021.

6 month – 4 year-olds: This report tracks COVID-19 vaccination rates beginning the week of 6.22.2022, following CDC recommendation for its use for under age 5 on 6.18.2022.

B. Data Sources: The data cover the 50 states & District of Columbia. In reports up through 11.10.21, we used 2 different sources from the CDC to provide breakouts by age and geography: “Demographic Trends of People Receiving COVID-19 Vaccinations in the United States” (URL: <https://covid.cdc.gov/covid-data-tracker/#vaccination-demographics-trends>) and “COVID-19 Vaccinations in the United States, Jurisdiction” (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/unsk-b7fc>). To combine ages 12-17, we are using only the jurisdiction file which may create minor shifts in the cumulative trends. Population totals are based on estimates published by the US Census Bureau. 2020 population estimates were used for reports through September 14, 2022. 2021 population estimates are used in current reports.

Interested readers should refer to the CDC and individual states where more information might be available.



COVID-19 Vaccine Eligibility: Timeline for Children

The FDA issued the first Emergency Use Authorization (EUA) for use of the Pfizer-BioNTech COVID-19 Vaccine in **people 16 years and older** on 12.11.2020, followed by ACIP recommendations and CDC approval for its use on 12.12.2020. However, the vaccine was not available for the non-elderly general public in most states until sometime in the Spring of 2021. Persons aged 16+ in Massachusetts, for example, started to receive their first COVID shots on 4.19.2021.

The FDA approved the use of the Pfizer-BioNTech COVID-19 Vaccine in **children ages 12 to 15** on an emergency use basis on 5.10.2021, followed by CDC recommendation the same week.

The FDA issued an EUA for the Pfizer-BioNTech COVID-19 Vaccine for **children ages 5 to 11** on 10.29.2021, followed by CDC recommendation on 11.2.2021.

The FDA authorized the use of Moderna and Pfizer-BioNTech COVID-19 vaccines for **children ages 6 months to 4** on 6.15.2022, followed by CDC recommendation on 6.18.2022.



Status of COVID-19 Vaccinations for US Children as of 4.5.2023

Ages 6 months - 4 Years

- ❑ 2.1 million (12%) have received their initial dose of COVID-19 vaccine.
- ❑ At this time about 14.9 million have yet to receive their first vaccine. About 10,000 received their initial COVID-19 vaccine dose during the past week.
- ❑ Vaccination rates vary highly across states: In 21 states, over 12% have received their initial dose; in 16 states, under 10% have received their first vaccine.

Ages 5-11 Years

- ❑ 11.2 million (39%) have received their initial dose of COVID-19 vaccine.
- ❑ 9.2 million (32%) completed the 2-dose vaccination series.
- ❑ At this time about 17.4 million have yet to receive their initial COVID-19 vaccine dose. About 7,000 received their initial COVID-19 vaccine dose during the past week.
- ❑ Vaccination rates vary highly across states: In 10 states, over half have received their initial dose; in 21 states, under a third have received their first vaccine.

Ages 12-17 Years

- ❑ 17.9 million (68%) have received their initial dose of COVID-19 vaccine.
- ❑ 15.3 million (59%) completed the 2-dose vaccination series.
- ❑ At this time about 8.3 million have yet to receive their initial COVID-19 vaccine dose. About 5,000 received their initial COVID-19 vaccine dose during the past week.
- ❑ Vaccination rates vary highly across states: In 13 states, over 3 quarters have received their initial dose; in 10 states, under half have received their first vaccine.

Source: AAP analysis of data series titled “COVID -19 Vaccinations in the United States, Jurisdiction”. CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdi/uns-k-b7fc>). Data cover the 50 states & District of Columbia. Check state web sites for additional or more recent information.

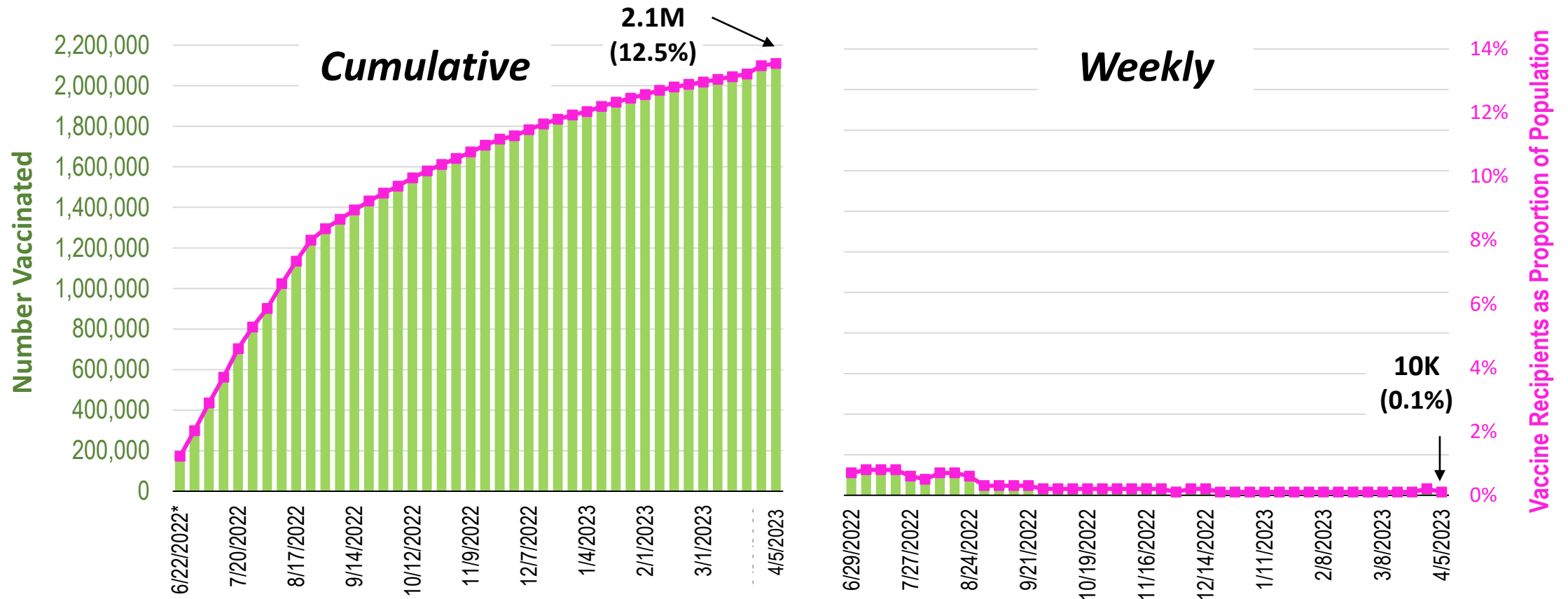
Ages 6 Months - 4 Years

Next 3 Slides



Number and Proportion of US Infants and Children Ages 6 Months - 4 Years Receiving Initial Dose of COVID-19 Vaccine

6.22.2022 to 4.5.2023



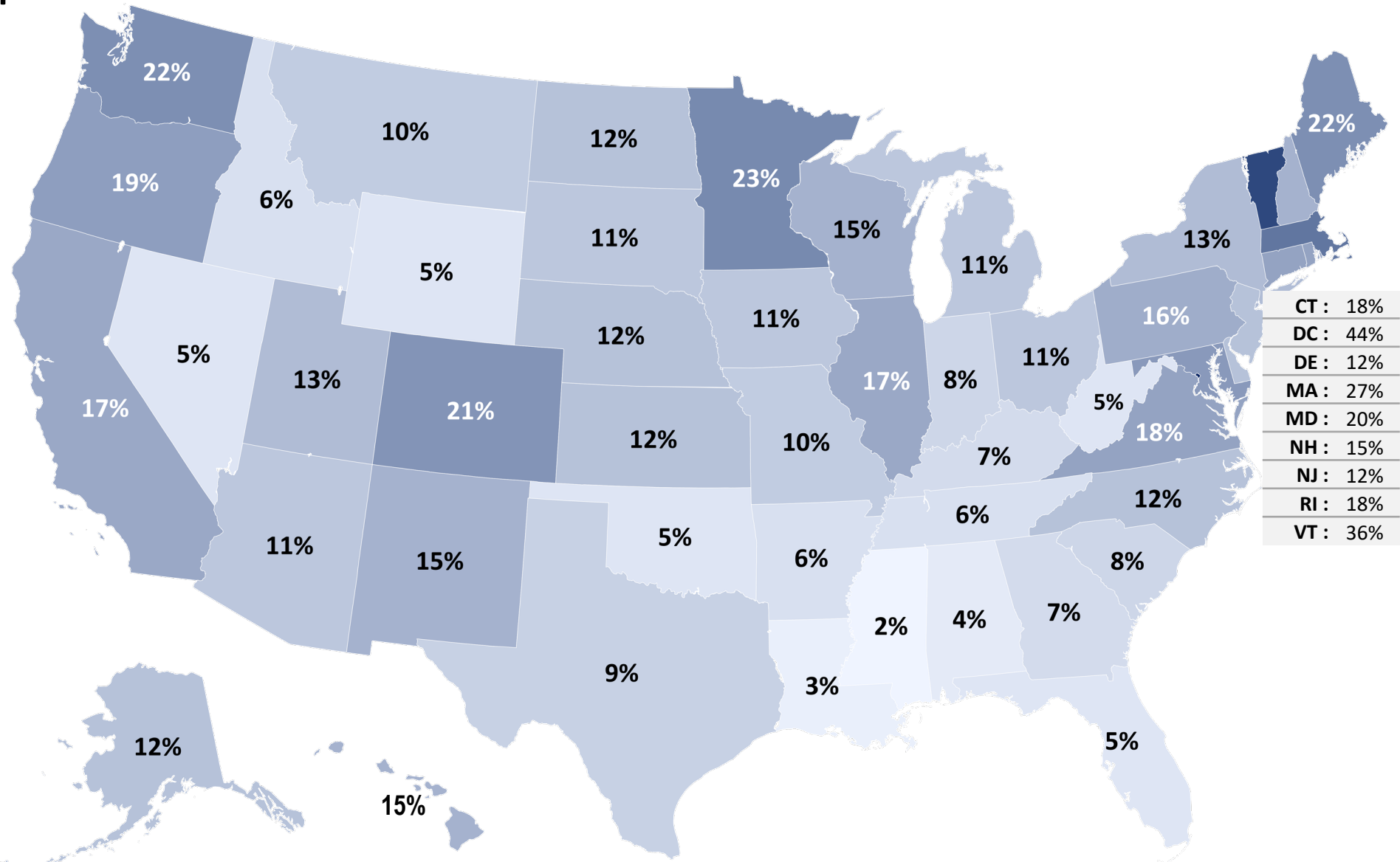
* Includes clinical trial participants and all others under age 5 who received any COVID-19 vaccine prior to CDC recommendations for age group. **Source:** AAP analysis of data series titled "COVID -19 Vaccinations in the United States, Jurisdiction". CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/unsk-b7fc>).

Proportion of US Children Ages 6 Months - 4 Years Who Received the Initial Dose of the COVID-19 Vaccine, by State of Residence

Received Initial Dose



as of 4.5.2023



Note: Infants 6 months and older are estimated as half of infant population.

Source: AAP analysis of data series titled "COVID -19 Vaccinations in the United States, Jurisdiction". CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/unsk-b7fc>). Check state web sites for additional or more recent information.

Initial Dose Among US Children Ages 6 Months through 4 Years ---4 Week Improvement

State	%Children Having Received At Least One Dose			State (continued)	%Children Having Received At Least One Dose		
	3/8/2023	4/5/2023	Increase by Percentage Point		3/8/2023	4/5/2023	Increase by Percentage Point
50 States + DC	12.0%	12.5%	0.5%	Missouri	10%	10%	0%
Alabama	3%	4%	1%	Montana	10%	10%	0%
Alaska	12%	12%	0%	Nebraska	12%	12%	0%
Arizona	11%	11%	0%	Nevada	5%	5%	0%
Arkansas	6%	6%	0%	New Hampshire	15%	15%	0%
California	17%	17%	0%	New Jersey	11%	12%	1%
Colorado	21%	21%	0%	New Mexico	15%	15%	0%
Connecticut	18%	18%	0%	New York	13%	13%	0%
Delaware	11%	12%	1%	North Carolina	11%	12%	1%
District of Columbia	43%	44%	1%	North Dakota	11%	12%	1%
Florida	5%	5%	0%	Ohio	11%	11%	0%
Georgia	6%	7%	1%	Oklahoma	5%	5%	0%
Hawaii	15%	15%	0%	Oregon	18%	19%	1%
Idaho	6%	6%	0%	Pennsylvania	16%	16%	0%
Illinois	16%	17%	1%	Rhode Island	17%	18%	1%
Indiana	7%	8%	1%	South Carolina	7%	8%	1%
Iowa	11%	11%	0%	South Dakota	11%	11%	0%
Kansas	12%	12%	0%	Tennessee	6%	6%	0%
Kentucky	7%	7%	0%	Texas	9%	9%	0%
Louisiana	3%	3%	0%	Utah	12%	13%	1%
Maine	22%	22%	0%	Vermont	35%	36%	1%
Maryland	20%	20%	0%	Virginia	18%	18%	0%
Massachusetts	27%	27%	0%	Washington	21%	22%	1%
Michigan	6%	11%	5%	West Virginia	5%	5%	0%
Minnesota	22%	23%	1%	Wisconsin	15%	15%	0%
Mississippi	2%	2%	0%	Wyoming	4%	5%	1%

Source: AAP analysis of data series titled “COVID -19 Vaccinations in the United States, Jurisdiction”. CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/uns-kb7fc>). Check state web sites for additional or more recent information.

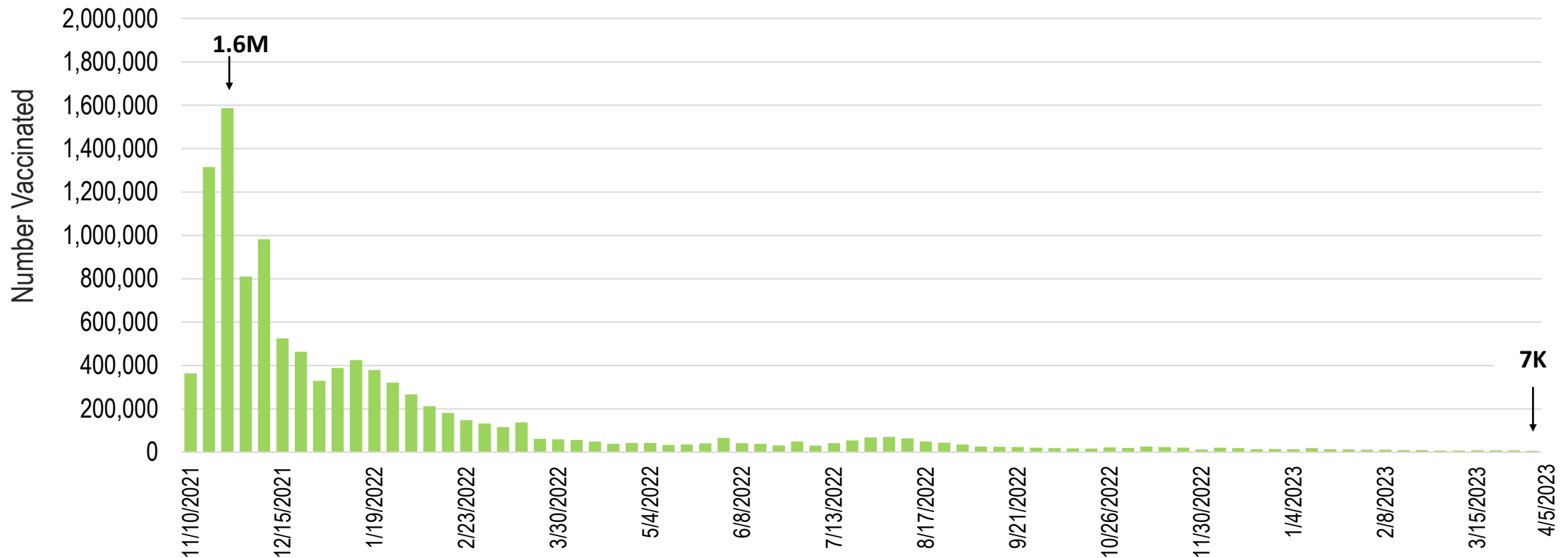
Ages 5-11

Next 6 Slides



Weekly Increase in the Number of US Children Ages 5-11 Receiving Their Initial COVID-19 Vaccination

11.10.2021 to 4.5.2023

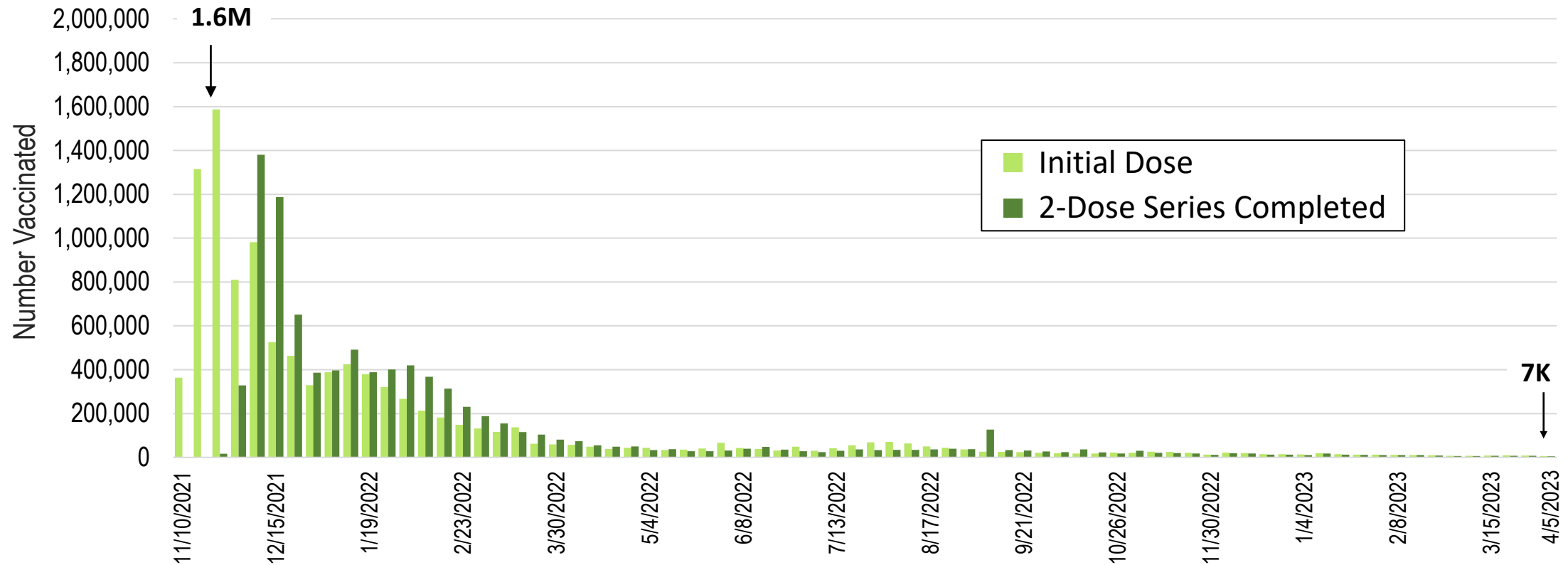


Source: AAP analysis of data series titled “COVID -19 Vaccinations in the United States, Jurisdiction”. CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/uns-k-b7fc>). Check state web sites for additional or more recent information. **Note:** Age information was provided with Idaho data since 1.25.2022. Inclusion of this information added 31K initial-dose recipients to the 5-11 age group nationally as of 2.2.2022.



Weekly Increase in Initial and Completed COVID-19 Vaccination for US Children Ages 5-11

11.10.2021 to 4.5.2023



Source: AAP analysis of data series titled “COVID -19 Vaccinations in the United States, Jurisdiction”. CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/uns-k-b7fc>). Check state web sites for additional or more recent information. **Note:** Age information was provided with Idaho data since 1.25.2022. Inclusion of this information added 31K initial-dose recipients to the 5-11 age group nationally as of 2.2.2022.

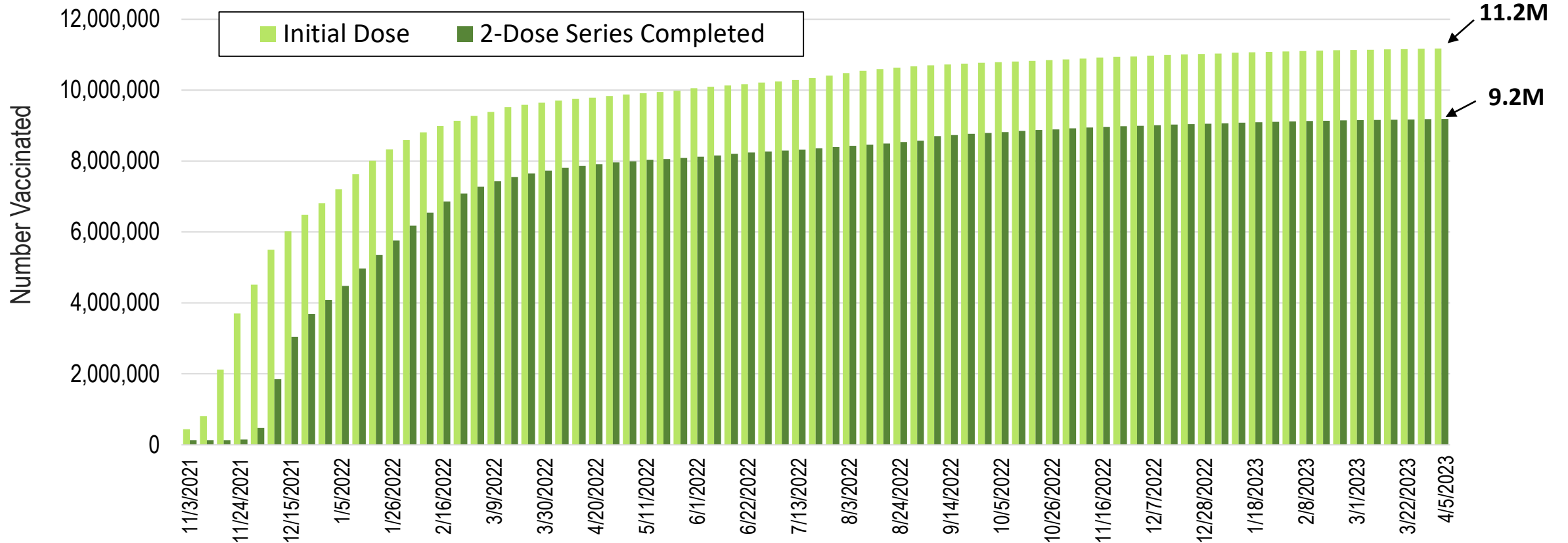
American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



Cumulative Number of US COVID-19 Vaccine Recipients Ages 5-11

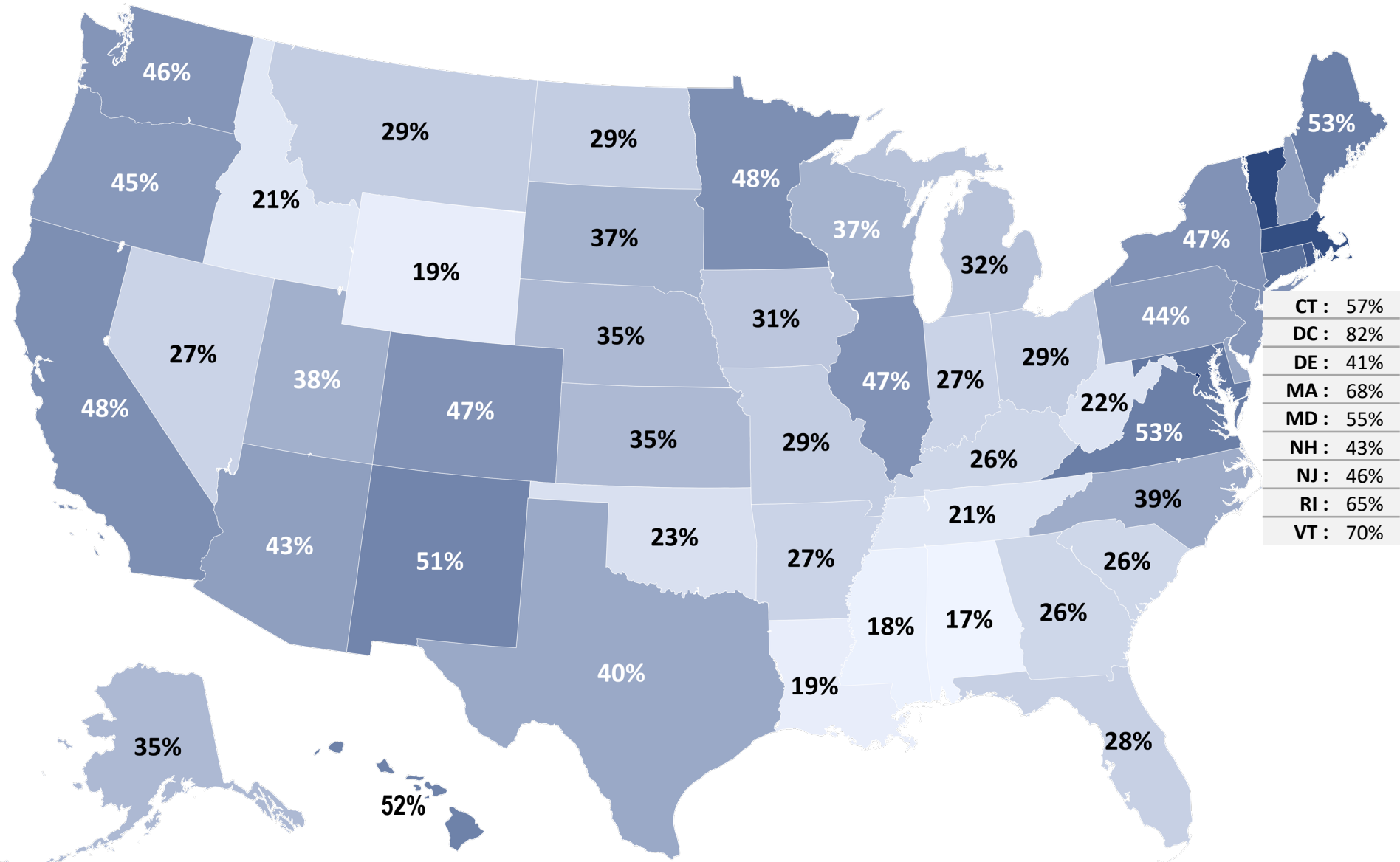
11.3.2021 to 4.5.2023



Source: AAP analysis of data series titled “COVID -19 Vaccinations in the United States, Jurisdiction”. CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/uns-k-b7fc>). Check state web sites for additional or more recent information. Check state web sites for additional or more recent information. **Notes:** Age information was provided with Idaho data since 1.25.2022. Inclusion of this information added 31K initial-dose recipients to the 5-11 age group nationally as of 2.2.2022.

Proportion of US Children Ages 5-11 Who Received the Initial Dose of the COVID-19 Vaccine, by State of Residence

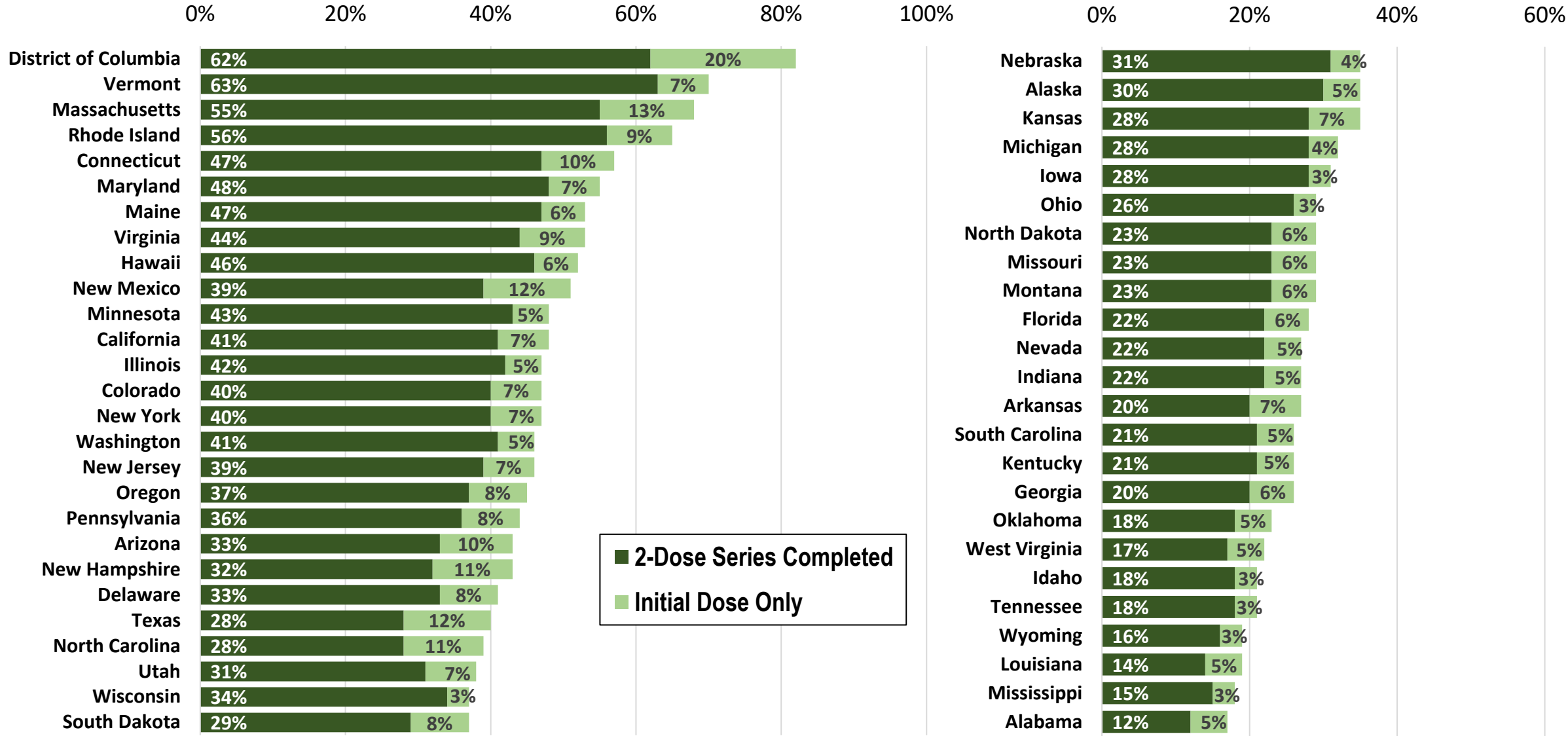
Received Initial Dose as of 4.5.2023
 17% 82%



Source: AAP analysis of data series titled "COVID -19 Vaccinations in the United States, Jurisdiction". CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/uns-k-b7fc>). Check state web sites for additional or more recent information.

Proportion of US Children Ages 5-11 Vaccinated Against COVID-19 by State of Residence

as of 4.5.2023



Source: AAP analysis of data series titled "COVID -19 Vaccinations in the United States, Jurisdiction". CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdi/unsk-b7fc>). Check state web sites for additional or more recent information.

Initial Dose Among US Children Ages 5-11 ---4 Week Improvement

State	%Children Having Received At Least One Dose			State (continued)	%Children Having Received At Least One Dose		
	3/8/2023	4/5/2023	Increase by Percentage Point		3/8/2023	4/5/2023	Increase by Percentage Point
50 States + DC	39.0%	39.1%	0.1%	Missouri	29%	29%	0%
Alabama	17%	17%	0%	Montana	29%	29%	0%
Alaska	35%	35%	0%	Nebraska	35%	35%	0%
Arizona	42%	43%	1%	Nevada	27%	27%	0%
Arkansas	26%	27%	1%	New Hampshire	43%	43%	0%
California	48%	48%	0%	New Jersey	46%	46%	0%
Colorado	47%	47%	0%	New Mexico	51%	51%	0%
Connecticut	57%	57%	0%	New York	46%	47%	1%
Delaware	41%	41%	0%	North Carolina	39%	39%	0%
District of Columbia	82%	82%	0%	North Dakota	29%	29%	0%
Florida	28%	28%	0%	Ohio	29%	29%	0%
Georgia	25%	26%	1%	Oklahoma	23%	23%	0%
Hawaii	52%	52%	0%	Oregon	45%	45%	0%
Idaho	21%	21%	0%	Pennsylvania	43%	44%	1%
Illinois	47%	47%	0%	Rhode Island	65%	65%	0%
Indiana	27%	27%	0%	South Carolina	26%	26%	0%
Iowa	31%	31%	0%	South Dakota	37%	37%	0%
Kansas	35%	35%	0%	Tennessee	21%	21%	0%
Kentucky	26%	26%	0%	Texas	40%	40%	0%
Louisiana	19%	19%	0%	Utah	38%	38%	0%
Maine	52%	53%	1%	Vermont	70%	70%	0%
Maryland	54%	55%	1%	Virginia	52%	53%	1%
Massachusetts	68%	68%	0%	Washington	46%	46%	0%
Michigan	32%	32%	0%	West Virginia	22%	22%	0%
Minnesota	48%	48%	0%	Wisconsin	37%	37%	0%
Mississippi	18%	18%	0%	Wyoming	19%	19%	0%

Source: AAP analysis of data series titled “COVID -19 Vaccinations in the United States, Jurisdiction”. CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/uns-kb7fc>). Check state web sites for additional or more recent information.

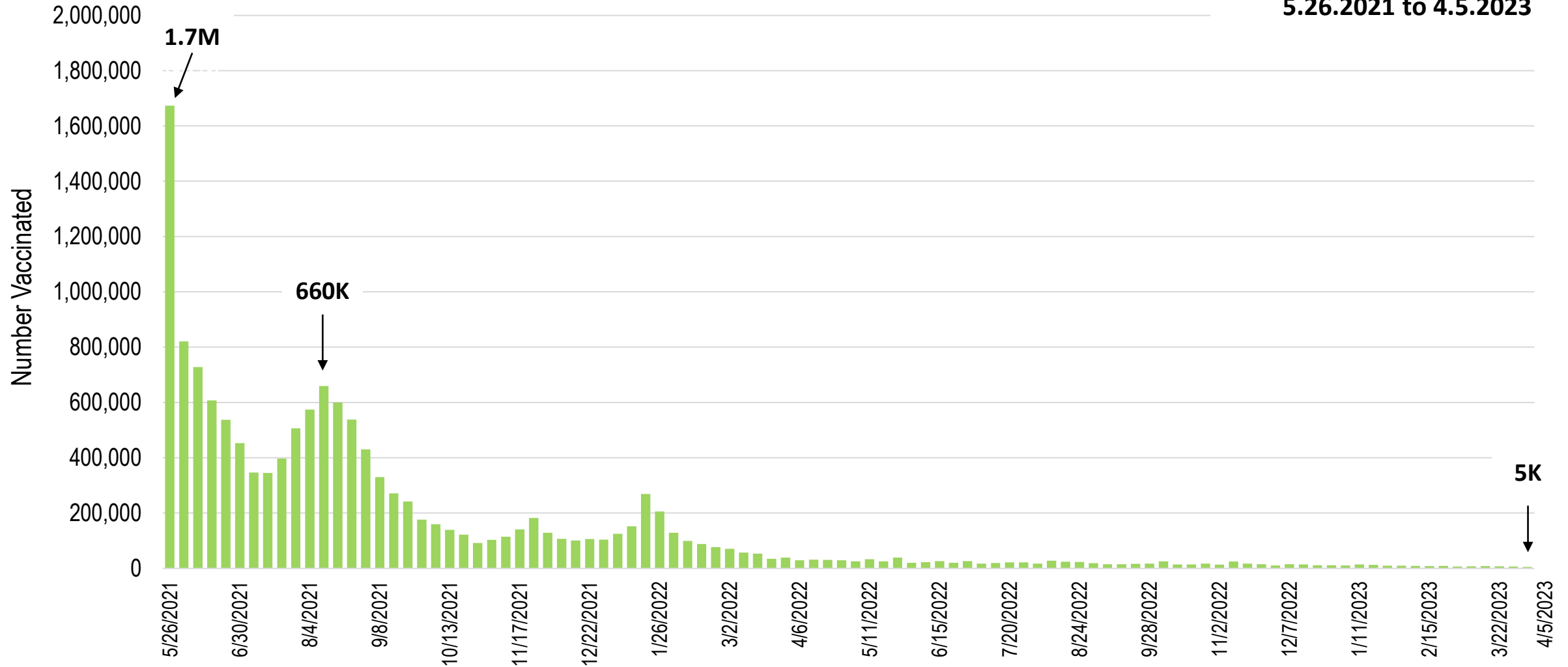
Ages 12-17

Next 6 Slides



Weekly Increase in the Number of US Children Ages 12-17 Receiving Their Initial COVID-19 Vaccination

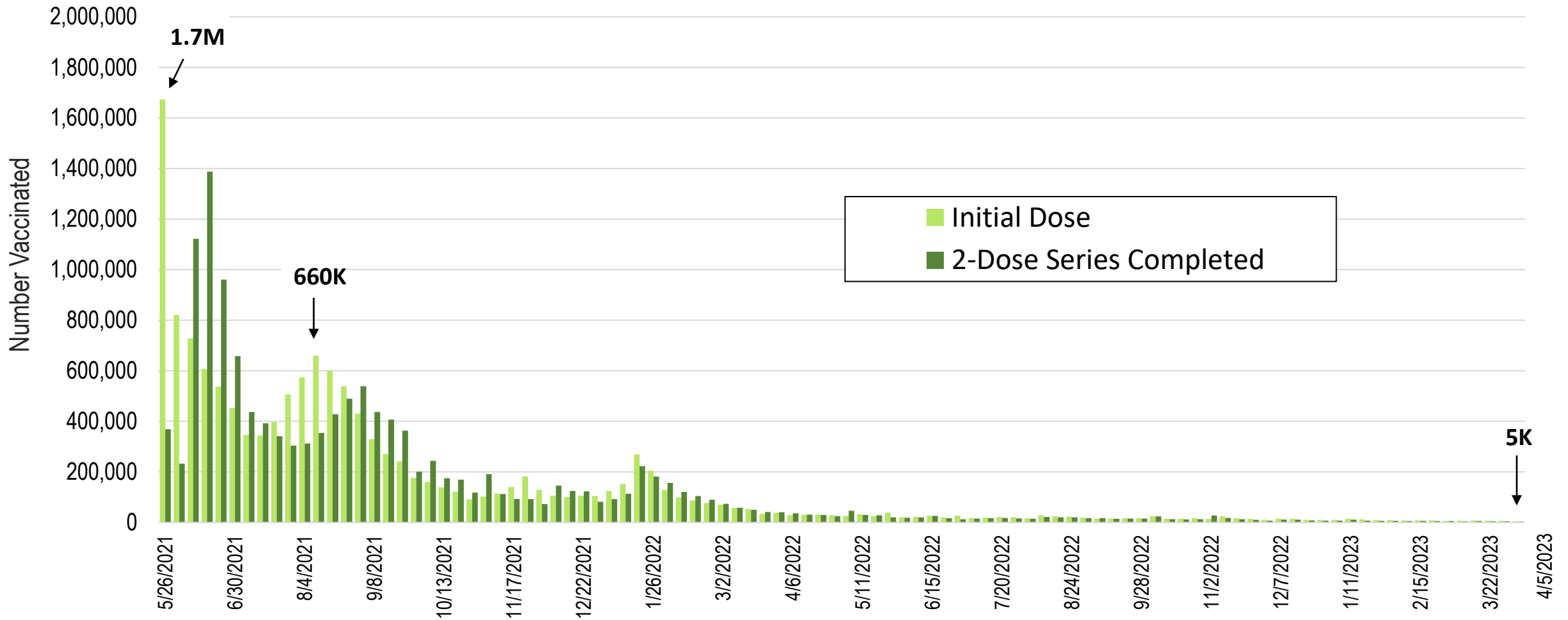
5.26.2021 to 4.5.2023



Source: AAP analysis of data series titled “COVID -19 Vaccinations in the United States, Jurisdiction”. CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/unsk-b7fc>). Check state web sites for additional or more recent information. **Notes:** Age information was provided with Idaho data since 1.25.2022. Inclusion of this information added 67K initial dose recipients to the 12-17 group nationally as of 2.2.2022.

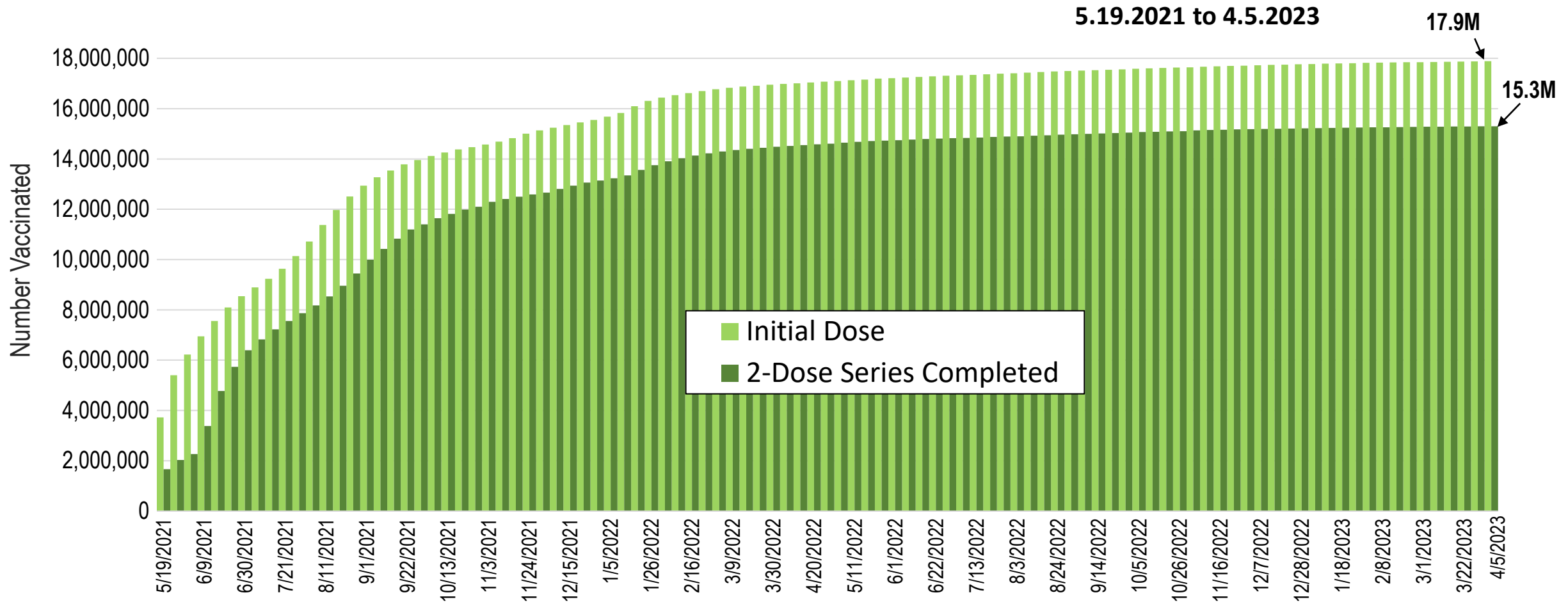
Weekly Increase in Initial and Completed COVID-19 Vaccination for US Children Ages 12-17

5.26.2021 to 4.5.2023



Source: AAP analysis of data series titled "COVID -19 Vaccinations in the United States, Jurisdiction". CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction>). Check state web sites for additional or more recent information. **Notes:** Age information was provided with Idaho data since 1.25.2022. Inclusion of this information added 67K initial dose recipients to the 12-17 group nationally as of 2.2.2022.

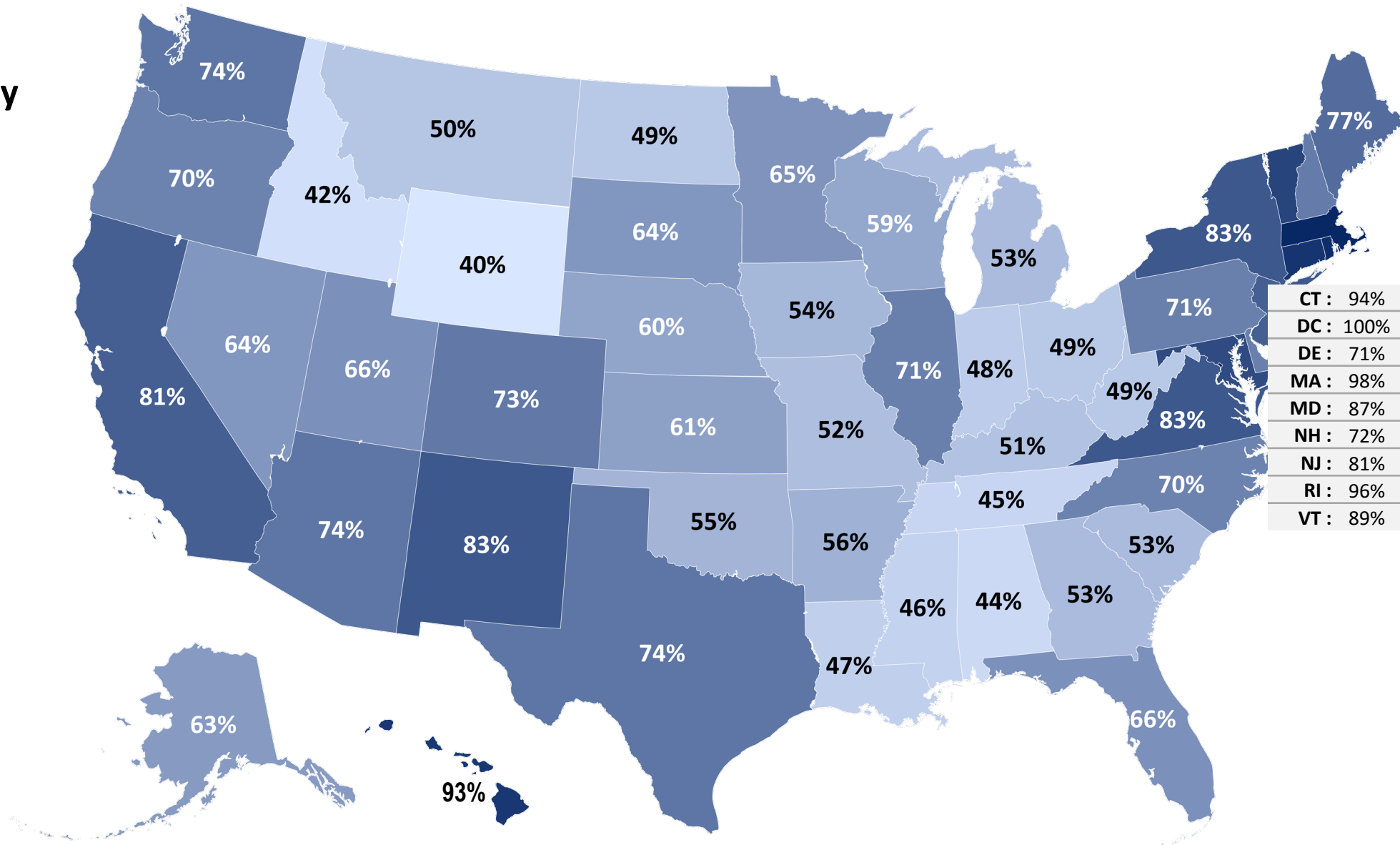
Cumulative Number of US COVID-19 Vaccine Recipients Ages 12-17



Source: AAP analysis of data series titled "COVID -19 Vaccinations in the United States, Jurisdiction". CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisd/uns-k-b7fc>). Check state web sites for additional or more recent information. **Notes:** Age information was provided with Idaho data since 1.25.2022. Inclusion of this information added 67K initial dose recipients to the 12-17 group nationally as of 2.2.2022.

Proportion of US Children Ages 12-17 Who Received the Initial Dose of the COVID-19 Vaccine, by State of Residence

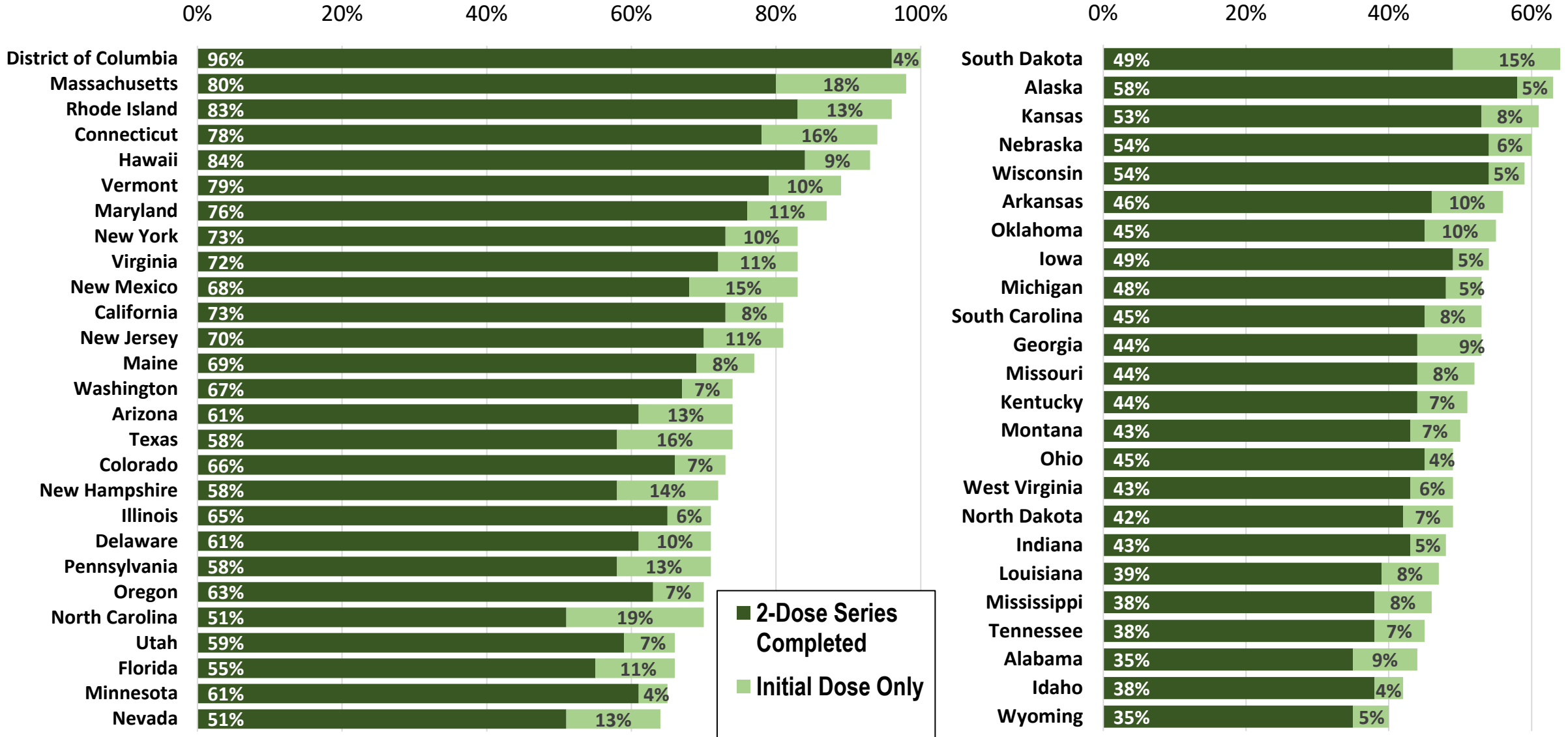
Received Initial Dose as of 4.5.2023
 40% 100%



Source: AAP analysis of data series titled "COVID -19 Vaccinations in the United States, Jurisdiction". CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/unsk-b7fc>). Check state web sites for additional or more recent information.

Proportion of US Children Ages 12-17 Vaccinated Against COVID-19 by State of Residence

as of 4.5.2023



Source: AAP analysis of data series titled "COVID -19 Vaccinations in the United States, Jurisdiction". CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/unsk-b7fc>). Check state web sites for additional or more recent information.

Initial Dose Among US Children Ages 12-17 ---4 Week Improvement

State	%Children Having Received At Least One Dose			State (continued)	%Children Having Received At Least One Dose		
	3/8/2023	4/5/2023	Increase by Percentage Point		3/8/2023	4/5/2023	Increase by Percentage Point
50 States + DC	68.3%	68.4%	0.1%	Missouri	52%	52%	0%
Alabama	43%	44%	1%	Montana	49%	50%	1%
Alaska	63%	63%	0%	Nebraska	60%	60%	0%
Arizona	74%	74%	0%	Nevada	64%	64%	0%
Arkansas	56%	56%	0%	New Hampshire	72%	72%	0%
California	81%	81%	0%	New Jersey	81%	81%	0%
Colorado	73%	73%	0%	New Mexico	83%	83%	0%
Connecticut	94%	94%	0%	New York	83%	83%	0%
Delaware	71%	71%	0%	North Carolina	70%	70%	0%
District of Columbia	100%	100%	--	North Dakota	49%	49%	0%
Florida	66%	66%	0%	Ohio	49%	49%	0%
Georgia	53%	53%	0%	Oklahoma	55%	55%	0%
Hawaii	93%	93%	0%	Oregon	70%	70%	0%
Idaho	42%	42%	0%	Pennsylvania	71%	71%	0%
Illinois	71%	71%	0%	Rhode Island	96%	96%	0%
Indiana	48%	48%	0%	South Carolina	53%	53%	0%
Iowa	54%	54%	0%	South Dakota	64%	64%	0%
Kansas	61%	61%	0%	Tennessee	45%	45%	0%
Kentucky	51%	51%	0%	Texas	73%	74%	1%
Louisiana	47%	47%	0%	Utah	66%	66%	0%
Maine	77%	77%	0%	Vermont	89%	89%	0%
Maryland	87%	87%	0%	Virginia	83%	83%	0%
Massachusetts	98%	98%	0%	Washington	74%	74%	0%
Michigan	53%	53%	0%	West Virginia	49%	49%	0%
Minnesota	65%	65%	0%	Wisconsin	59%	59%	0%
Mississippi	46%	46%	0%	Wyoming	40%	40%	0%

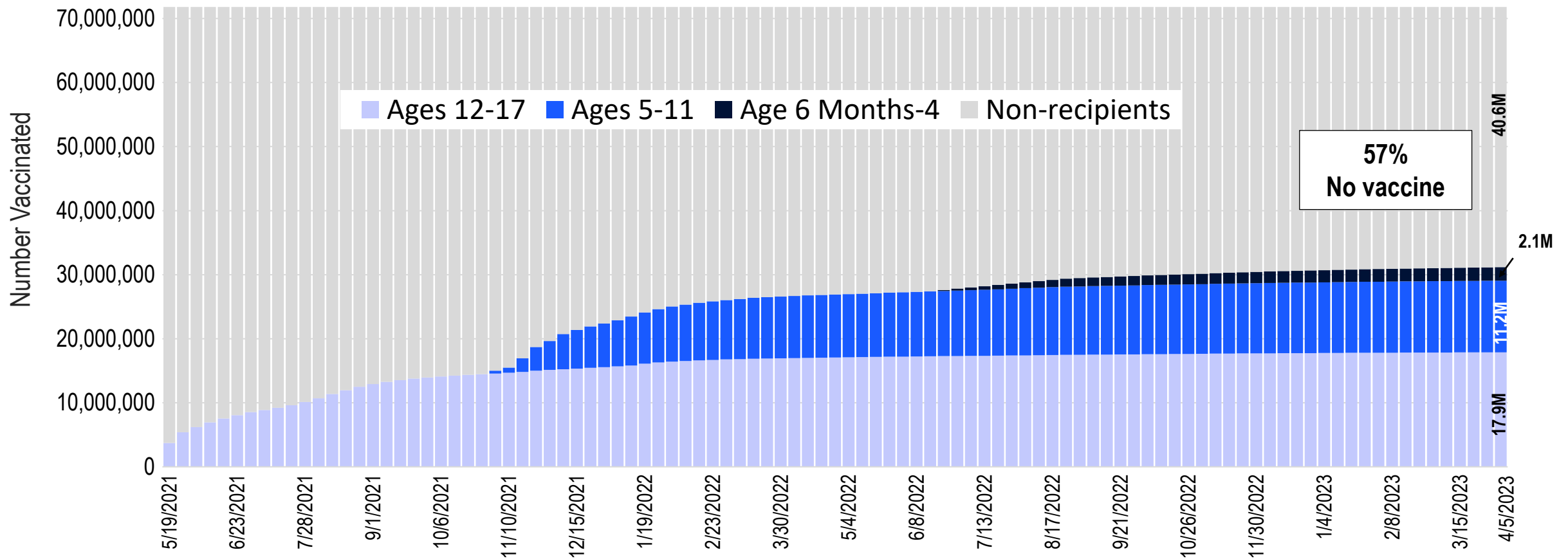
Source: AAP analysis of data series titled "COVID -19 Vaccinations in the United States, Jurisdiction". CDC COVID -19 Data Tracker (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdiction/uns-kb7fc>). Check state web sites for additional or more recent information.

Vaccination Across Age Groups



Cumulative Number of US Children (6 months – 17 years) Receiving At Least Initial Dose of COVID-19 Vaccine

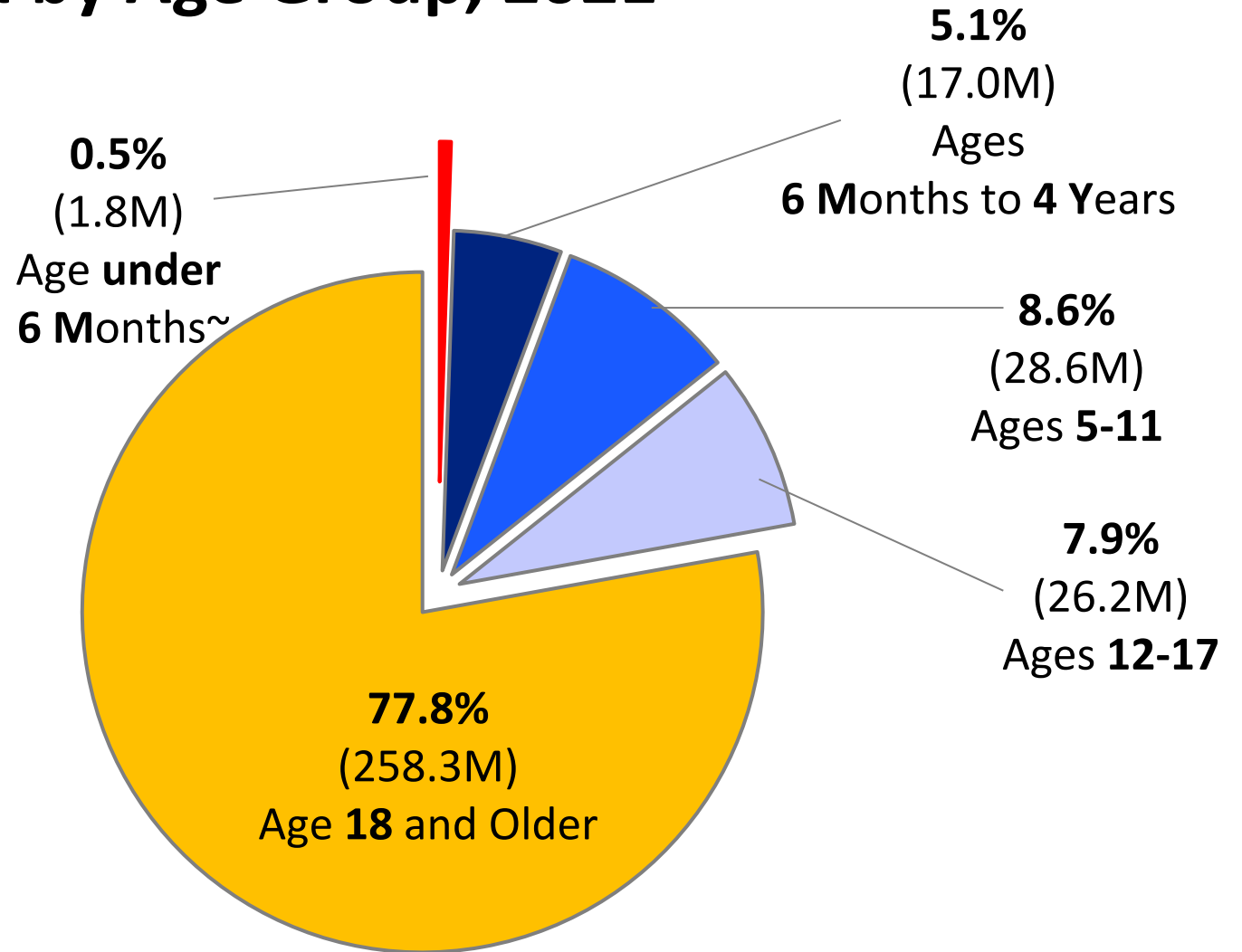
5.19.21 to 4.5.2023



Sources: AAP analysis of data series titled “COVID -19 Vaccinations in the United States, Jurisdiction”. CDC COVID -19 Data Tracker. Includes 50 states and DC. (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdi/uns-k-b7fc>). Population totals are based on 2021 population estimates (SC-EST2021) published by the US Census Bureau (URL: <https://www.census.gov/data/datasets/time-series/demo/popest/2020s-state-detail.html>).

US Population by Age Group, 2021

In 2021, children (73.6M under Age 18) made up **22.2%** of the total US population



~ Age under 6 months are estimated as half of infant population. **Note:** Percents do not sum to 100.0% due to rounding. **Source:** AAP analysis of report published by US Bureau of Census: Annual State Resident Population Estimates for 6 Race Groups by Age, Sex, and Hispanic Origin: April 1, 2020 to July 1, 2021 (SC-EST2021-ALLDATA6) [Link: <https://www.census.gov/data/datasets/time-series/demo/popest/2020s-state-detail.html>]



Data Sources and Methods

This report includes US COVID-19 vaccine child recipients in the 50 states and the District of Columbia based on provisional data released by the CDC in a data series titled “COVID-19 Vaccinations in the United States, Jurisdiction.” (URL: <https://data.cdc.gov/Vaccinations/COVID-19-Vaccinations-in-the-United-States-Jurisdi/unsk-b7fc>).

Cumulative trends and weekly changes are updated weekly as the CDC revises and updates its data series. Previously-reported cumulative vaccine recipient counts higher than revised counts are replaced by the latter in this report. Sporadic vaccinations prior to CDC recommendations for all pediatric age groups are included in the cumulative counts although not shown by week in the charts. Recipients under age 5 are calculated by subtracting (a) recipients 5 or older, and (b) recipients without age data (from separate file provided by the CDC), from total recipient counts.

Individual states may have additional or more recent information on their web sites. State population totals are based on 2021 population estimates (SC-EST2021) published by the US Census Bureau (URL: <https://www.census.gov/data/datasets/time-series/demo/popest/2020s-state-detail.html>).



Contact Information

- For technical questions, please contact:

William Cull, PhD

Senior Director, Research

American Academy of Pediatrics

wcull@aap.org

- For media inquiries, please contact:

Lisa Black

Media Relations

American Academy of Pediatrics

lblack@aap.org

or

Emily Rosenbaum

Media Relations

American Academy of Pediatrics

erosenbaum@aap.org

