



# Weekly COVID-19 Vaccination Report

The Weekly COVID-19 Vaccination Report includes the most currently available information on vaccines administered, as well as more granular information by geography, demographic factors, and more.

This report will be posted each Wednesday.

## An important note regarding vaccination progress

Source: Centers for Disease Control and Prevention. COVID Data Tracker.  
Atlanta, GA: US Department of Health and Human Services, CDC; December 28, 2022.

<https://covid.cdc.gov/covid-data-tracker>

Massachusetts currently ranks tied for first among US states for the rate of persons with one or more doses administered per capita.

Massachusetts currently ranks first for the rate of persons with one or more doses per capita among states with populations of five million people or more.



Please note: This report reflects data available in the Massachusetts Immunization Information System (MIIS) as of Monday at 11:59PM and is pulled every Tuesday. Due to provider reporting of administration data and data processing, data may be available in MIIS 24-48 hours or more after administration. Due to time needed for inputting shipment data, shipment data may be available in MIIS 24-48 hours or more after shipment. MIIS data are available for analysis one calendar day after they are reported to the MIIS. Data are current as of time of publication and may be subject to change in future publications as additional data are reported. All data are from MIIS unless otherwise noted.

# COVID-19 Vaccines Administered

Data as of January 02, 2023

## Administered (MIIS)\* through Monday, January 2, 2023 (Running totals by day)

	December 27, 2022	December 28, 2022	December 29, 2022	December 30, 2022	December 31, 2022	January 1, 2023	January 2, 2023
At least one dose -- number of <b>people</b> who received at least one dose of Moderna, Pfizer, Novavax, or Johnson & Johnson vaccine	6,543,550	6,544,776	6,545,868	6,546,730	6,547,184	6,547,207	6,547,323
Fully vaccinated -- number of <b>people</b> who received a primary series of Moderna, Pfizer, Novavax or Johnson & Johnson vaccine**	5,612,832	5,613,442	5,614,002	5,614,507	5,614,655	5,614,663	5,614,713
First booster doses -- number of <b>people</b> who received a booster dose of Moderna, Pfizer, or Johnson & Johnson vaccine***	3,456,026	3,457,282	3,458,574	3,459,648	3,460,048	3,460,064	3,460,187
Second booster doses -- number of <b>people</b> who have received at least 2 booster doses****	1,525,494	1,529,471	1,533,421	1,536,828	1,538,221	1,538,276	1,538,604
<b>Total Doses Administered (MIIS)</b>	17,344,263	17,352,857	17,361,336	17,368,563	17,371,448	17,371,582	17,372,322

\*Data from the Massachusetts Immunization Information System (MIIS) are as of midnight the night before.

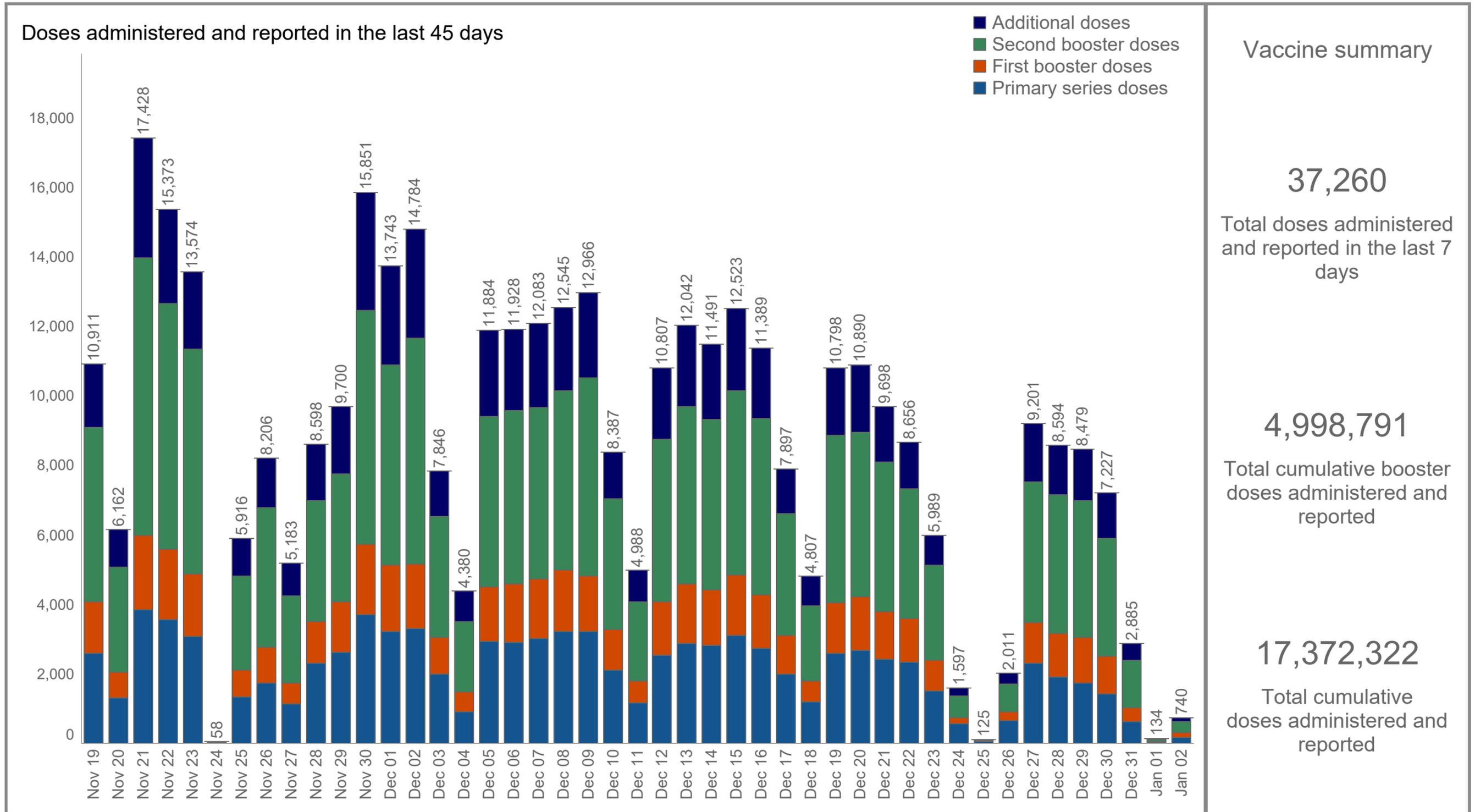
\*\*An individual is counted as fully vaccinated if they have received the number of doses required to complete the primary series for their age and all of these doses have been reported to MIIS. Pfizer recipients under 5 years of age require three doses of vaccine; all other Pfizer recipients require two doses. Moderna and Novavax recipients require two doses of vaccine. Janssen/Johnson & Johnson recipients require one dose of vaccine.

\*\*\*See the definitions page at the end of this document for the full definition. Booster doses are currently recommended for everyone aged 5 years and older. See <https://www.mass.gov/info-details/covid-19-booster-frequently-asked-questions> for details on which formulation of vaccine is recommended at which intervals.

\*\*\*\*Second booster doses: Number of individuals who have received an additional dose after their first booster dose.

# COVID-19 Vaccine Doses Administered

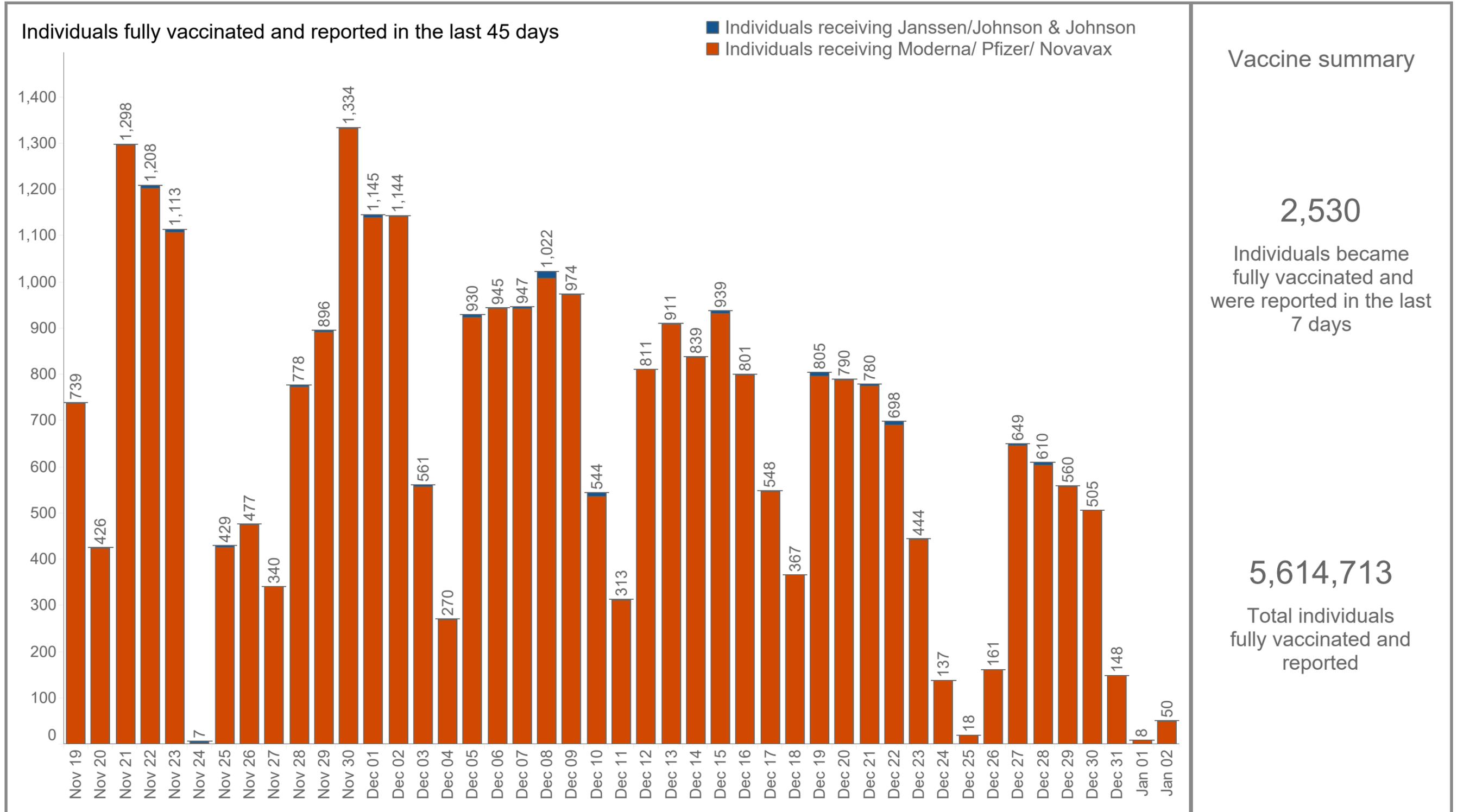
Data as of January 02, 2023



Note: Data from MIIS (see "definitions"). Data reflect doses administered (see "definitions"). Dates reflect the date doses were administered. Doses administered: All valid doses of Janssen/Johnson & Johnson, Moderna, Novavax, and Pfizer COVID-19 vaccine that have been given to people by providers and reported to MIIS are included in this measurement. Primary series doses: the number of doses required to complete the primary series for their age and all of these doses have been reported to MIIS. Pfizer recipients under 5 years of age require three doses of vaccine; all other Pfizer recipients require two doses. Moderna and Novavax recipients require two doses of vaccine. Janssen/Johnson & Johnson recipients require one dose of vaccine. See the definitions page at the end of this document.

# Individuals Fully Vaccinated

Data as of January 02, 2023



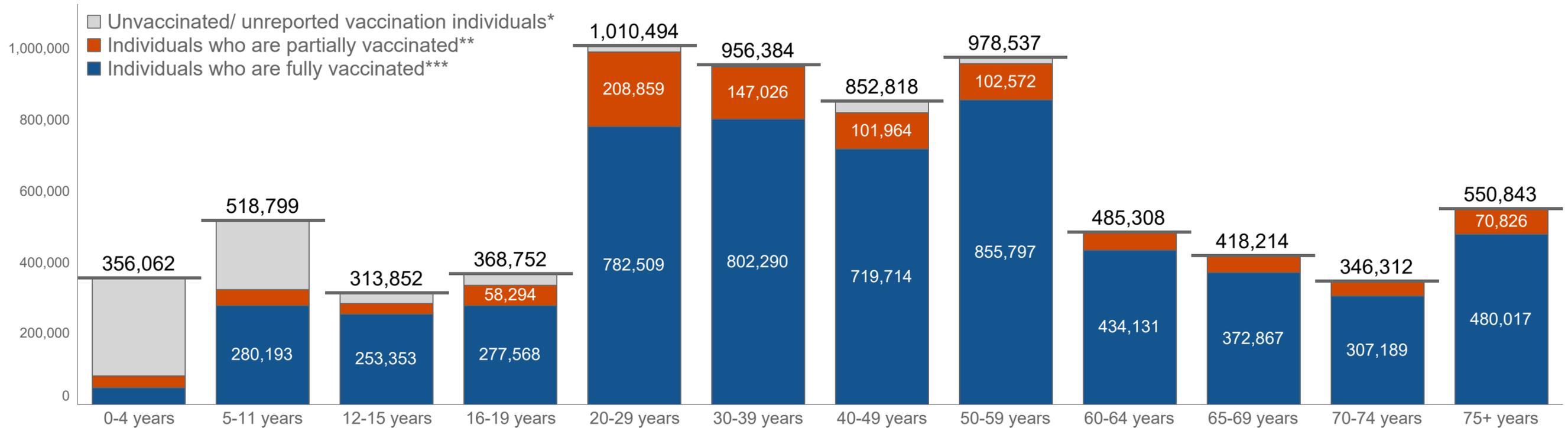
NOTE: Data from MIIS (see "definitions"). Dates reflect the date doses were administered. Individuals fully vaccinated: An individual is counted as fully vaccinated if they have received the number of doses required to complete the primary series for their age and all of these doses have been reported to MIIS. Pfizer recipients under 5 years of age require three doses of vaccine; all other Pfizer recipients require two doses. Moderna and Novavax recipients require two doses of vaccine. Janssen/Johnson & Johnson recipients require one dose of vaccine.

# Individuals with at Least One Dose

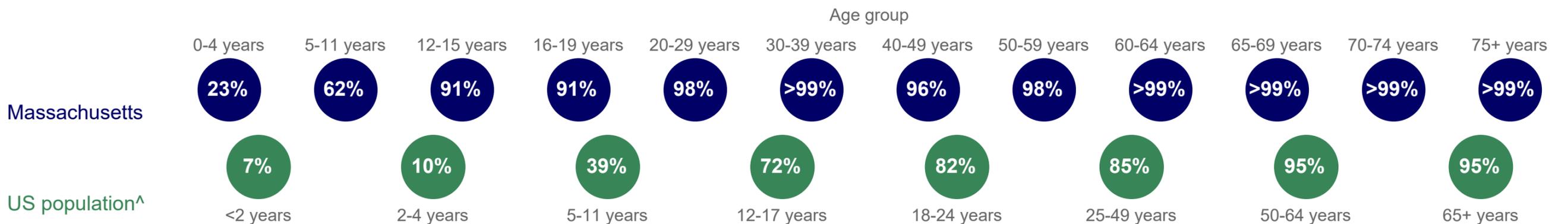
Data as of January 02, 2023

In Massachusetts, 93% of the population has received at least one dose, compared with 81% of the US population.

Vaccination status of individuals by age group (cumulative)



Percent of population with at least one dose



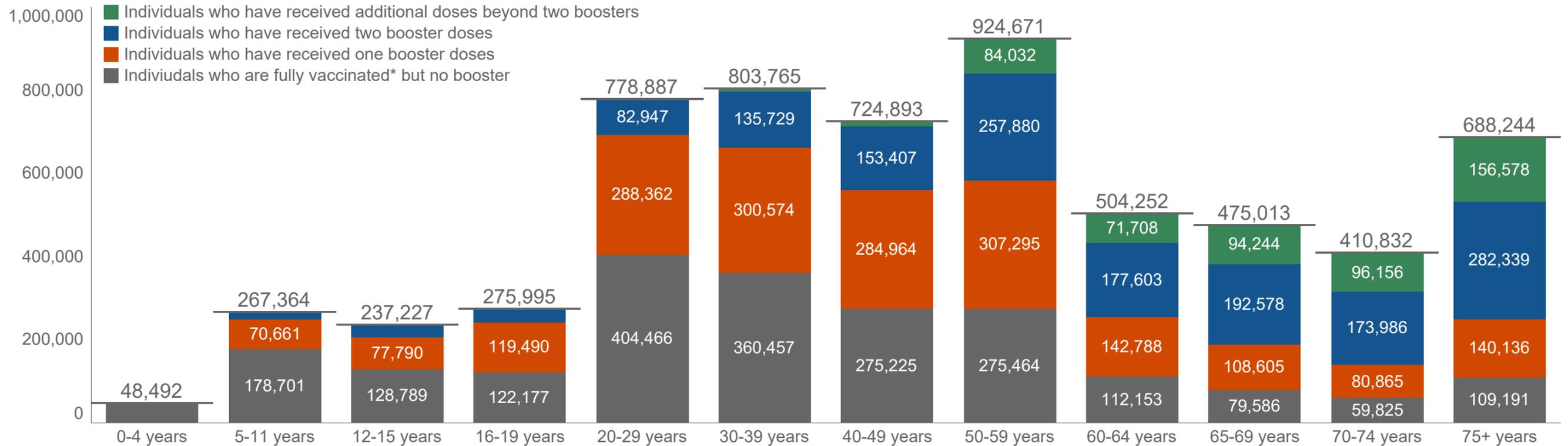
Vaccination status is reported at the age at which the vaccine was administered. Individuals transition into older age groups over time keeping aggregate totals consistent across the sum of all age categories.  
 \*Unvaccinated/unreported vaccination individuals: This is the population estimate for the subpopulation minus the number of people who received at least one dose of vaccine. It is important to recall that not being represented in MIIS does not necessarily mean someone has not received vaccine. \*\*Individuals who are partially vaccinated are those who have received at least one dose, but have not completed a primary series. \*\*\*Individuals fully vaccinated: An individual is counted as fully vaccinated if they have received the number of doses required to complete the primary series for their age and all of these doses have been reported to MIIS. Pfizer recipients under 5 years of age require three doses of vaccine; all other Pfizer recipients require two doses. Moderna and Novavax recipients require two doses of vaccine. Janssen/Johnson & Johnson recipients require one dose of vaccine. ^CDC percent of population coverage metrics are capped at 95%. For more information: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/reporting-vaccinations.html> Sources: (1) Massachusetts Immunization Information System (MIIS). MIIS data are available for analysis one calendar day after they are reported to the MIIS. Data are current as of time of publication and are subject to change in future publications as additional data are reported. (2) Centers for Disease Control and Prevention. COVID Data Tracker. Atlanta, GA: US Department of Health and Human Services, CDC;2022-12-28://[covid.cdc.gov/covid-data-tracker](https://www.cdc.gov/covid-data-tracker) (3) MDPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.)

# Individuals who have Received Booster Doses

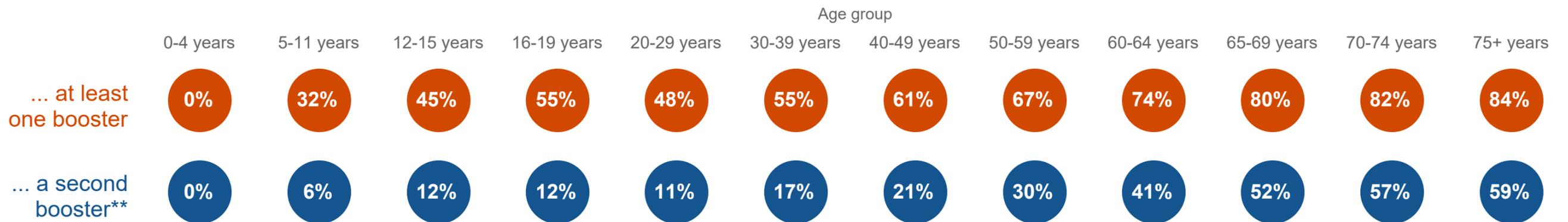
Data as of January 02, 2023

In Massachusetts, 62% of those fully vaccinated have received a booster dose.

## Booster status of fully vaccinated individuals by age group



## Percent of the Massachusetts fully vaccinated\* population with...



Vaccination status is reported at the age at which the vaccine was administered. Individuals transition into older age groups over time keeping aggregate totals consistent across the sum of all age categories.

\*Individuals fully vaccinated: An individual is counted as fully vaccinated if they have received the number of doses required to complete the primary series for their age and all of these doses have been reported to MIIS. Pfizer recipients under 5 years of age require three doses of vaccine; all other Pfizer recipients require two doses. Moderna and Novavax recipients require two doses of vaccine. Janssen/Johnson & Johnson recipients require one dose of vaccine. This includes some individuals who may not be eligible for a booster (i.e. less than 2 months after primary series). \*\*Not mutually exclusive. The 'second booster' row includes all those counted in the first row, with at least one booster, plus those individuals who have received an additional dose. Sources: (1) Massachusetts Immunization Information System (MIIS). MIIS data are available for analysis one calendar day after they are reported to the MIIS. Data are current as of time of publication and are subject to change in future publications as additional data are reported. (2) Centers for Disease Control and Prevention. COVID Data Tracker. Atlanta, GA: US Department of Health and Human Services, CDC;2022-12-28. <https://covid.cdc.gov/covid-data-tracker> (3) MDPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.)

# Individuals Fully Vaccinated

Data as of January 02, 2023

## Individuals fully vaccinated by county, race, and Hispanic ethnicity (1 of 2)

Number of people in the county and race/ethnicity group who are fully vaccinated divided by the estimated population in the county and race/ethnicity group

	American Indian or Alaskan Native	Asian	Black or African American	Hispanic	Multi-race	Native Hawaiian or Pacific Islander	White	Unknown/ Other race**	Total
Barnstable	45% of 1,171 residents	70% of 3,230 residents	80% of 6,644 residents	>95% of 7,637 residents	38% of 12,144 residents	>95% of 53 residents	79% of 198,117 residents	3% of 228,996 Barnstable county residents	81% of 228,996 residents
Berkshire	54% of 153 residents	72% of 1,978 residents	64% of 4,132 residents	63% of 6,619 residents	40% of 5,666 residents	*	77% of 110,470 residents	3% of 129,026 Berkshire county residents	76% of 129,026 residents
Bristol	46% of 1,045 residents	65% of 13,752 residents	77% of 24,506 residents	62% of 53,995 residents	37% of 32,048 residents	>95% of 148 residents	66% of 453,707 residents	3% of 579,200 Bristol county residents	67% of 579,200 residents
Dukes	51% of 219 residents	>95% of 181 residents	>95% of 809 residents	>95% of 452 residents	22% of 1,899 residents	*	80% of 17,031 residents	8% of 20,600 Dukes county residents	87% of 20,600 residents
Essex	47% of 808 residents	75% of 29,651 residents	79% of 27,604 residents	59% of 181,759 residents	68% of 26,257 residents	>95% of 155 residents	80% of 543,595 residents	3% of 809,829 Essex county residents	78% of 809,829 residents
Franklin	52% of 122 residents	84% of 1,215 residents	66% of 985 residents	56% of 3,329 residents	35% of 3,207 residents	*	76% of 62,163 residents	3% of 71,029 Franklin county residents	76% of 71,029 residents
Hampden	58% of 646 residents	71% of 12,176 residents	60% of 36,442 residents	51% of 120,694 residents	55% of 15,087 residents	>95% of 165 residents	71% of 280,615 residents	4% of 465,825 Hampden county residents	69% of 465,825 residents
Hampshire	51% of 199 residents	51% of 10,709 residents	53% of 4,398 residents	49% of 11,248 residents	43% of 6,930 residents	>95% of 43 residents	75% of 128,781 residents	3% of 162,308 Hampshire county residents	73% of 162,308 residents

\* Vaccination figures with fewer than 30 people are suppressed for privacy.

\*\* "Unknown/other race" is shown as a % of the row population (county or state). "Unknown/unspecified county" is shown as a % of the column population (age or race/ethnicity group).

Individuals fully vaccinated: An individual is counted as fully vaccinated if they have received the number of doses required to complete the COVID-19 vaccine series for their age and all of these doses have been reported to MIIS. Pfizer recipients under 5 years of age require three doses of vaccine; all other Pfizer recipients require two doses. Moderna and Novavax recipients require two doses of vaccine. Janssen/Johnson & Johnson recipients require one dose of vaccine.

Source: Massachusetts Immunization Information System (MIIS). MIIS data are available for analysis one calendar day after they are reported to the MIIS. Data are current as of time of publication and are subject to change in future publications as additional data are reported. Data reflect doses administered (see "definitions"). Population estimates source: MDPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.) Note about totals: The difference in the Massachusetts state population total created by summing the age categories and by summing the race categories is expected due to the manner in which the estimates were created with small, compounded rounding and records with unknown demographic information.

# Individuals Fully Vaccinated

Data as of January 02, 2023

## Individuals fully vaccinated by county, race, and Hispanic ethnicity (2 of 2)

Number of people in the county and race/ethnicity group who are fully vaccinated divided by the estimated population in the county and race/ethnicity group

	American Indian or Alaskan Native	Asian	Black or African American	Hispanic	Multi-race	Native Hawaiian or Pacific Islander	White	Unknown/ Other race**	Total
Middlesex	65% of 1,511 residents	77% of 212,123 residents	73% of 84,324 residents	75% of 141,738 residents	84% of 81,692 residents	>95% of 380 residents	81% of 1,110,235 residents	4% of 1,632,002 Middlesex county residents	84% of 1,632,002 residents
Nantucket	*	76% of 274 residents	>95% of 1,025 residents	89% of 2,175 residents	28% of 615 residents	*	76% of 10,149 residents	7% of 14,255 Nantucket county residents	84% of 14,255 residents
Norfolk	50% of 736 residents	76% of 88,772 residents	76% of 50,563 residents	71% of 37,460 residents	>95% of 29,540 residents	>95% of 151 residents	79% of 518,759 residents	3% of 725,981 Norfolk county residents	82% of 725,981 residents
Plymouth	34% of 893 residents	67% of 7,962 residents	81% of 48,249 residents	68% of 23,417 residents	46% of 35,840 residents	61% of 220 residents	74% of 414,238 residents	2% of 530,819 Plymouth county residents	75% of 530,819 residents
Suffolk	51% of 1,235 residents	81% of 81,295 residents	77% of 142,086 residents	75% of 177,973 residents	63% of 37,543 residents	>95% of 357 residents	71% of 357,446 residents	4% of 797,936 Suffolk county residents	78% of 797,936 residents
Worcester	46% of 1,183 residents	72% of 46,778 residents	61% of 45,164 residents	68% of 110,448 residents	56% of 37,582 residents	>95% of 145 residents	72% of 620,810 residents	2% of 862,111 Worcester county residents	73% of 862,111 residents
Unknown/ Unspecified**	3% of 9,939 AI/AN residents	3% of 510,096 Asian residents	2% of 476,930 Black residents	1% of 878,944 Hispanic residents	1% of 326,050 Multi-race residents	7% of 1,841 NH/PI residents	3% of 4,826,116 White residents	0% of 7,029,917 MA residents	3% of 7,029,917 residents
Massachusetts	53% of 9,939 residents	79% of 510,096 residents	75% of 476,930 residents	68% of 878,944 residents	66% of 326,050 residents	>95% of 1,841 residents	79% of 4,826,116 residents	3% of 7,029,917 MA residents	80% of 7,029,917 residents

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# Individuals Fully Vaccinated

Data as of January 02, 2023

## Individuals fully vaccinated by county and age group (1 of 2)

Number of people in the county and age group who are fully vaccinated divided by the estimated population in the county and age group

	0-4 years	5-11 years	12-15 years	16-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-64 years	65-69 years	70-74 years	75+ years	Total
<b>Barnstable</b>	7% of 8,117 residents	43% of 12,225 residents	74% of 7,999 residents	82% of 8,444 residents	73% of 22,109 residents	85% of 20,313 residents	81% of 21,363 residents	83% of 34,083 residents	90% of 21,351 residents	90% of 21,806 residents	93% of 19,831 residents	>95% of 31,352 residents	81% of 228,996 residents
<b>Berkshire</b>	9% of 5,429 residents	55% of 8,296 residents	74% of 5,380 residents	69% of 6,484 residents	65% of 15,369 residents	80% of 13,757 residents	79% of 13,736 residents	81% of 19,125 residents	88% of 10,525 residents	90% of 9,518 residents	>95% of 8,017 residents	91% of 13,390 residents	76% of 129,026 residents
<b>Bristol</b>	5% of 30,091 residents	31% of 45,540 residents	62% of 27,527 residents	67% of 29,121 residents	60% of 74,766 residents	67% of 73,958 residents	70% of 73,224 residents	77% of 85,414 residents	86% of 39,125 residents	92% of 31,728 residents	94% of 25,741 residents	87% of 42,964 residents	67% of 579,200 residents
<b>Dukes</b>	9% of 882 residents	59% of 1,267 residents	>95% of 785 residents	>95% of 653 residents	>95% of 2,070 residents	>95% of 2,359 residents	94% of 2,432 residents	85% of 3,147 residents	84% of 1,702 residents	81% of 1,801 residents	88% of 1,574 residents	91% of 1,929 residents	87% of 20,600 residents
<b>Essex</b>	10% of 44,345 residents	52% of 64,079 residents	80% of 38,871 residents	79% of 41,764 residents	72% of 102,396 residents	82% of 101,407 residents	82% of 99,259 residents	86% of 118,474 residents	92% of 56,226 residents	>95% of 46,143 residents	>95% of 36,776 residents	93% of 60,087 residents	78% of 809,829 residents
<b>Franklin</b>	10% of 3,011 residents	47% of 4,819 residents	73% of 2,910 residents	89% of 2,764 residents	70% of 7,572 residents	76% of 8,732 residents	75% of 8,315 residents	80% of 10,333 residents	85% of 6,159 residents	92% of 5,875 residents	>95% of 4,581 residents	92% of 5,954 residents	76% of 71,029 residents
<b>Hampden</b>	3% of 24,918 residents	35% of 38,042 residents	64% of 23,128 residents	62% of 26,022 residents	59% of 65,472 residents	70% of 59,405 residents	75% of 53,671 residents	81% of 62,992 residents	88% of 31,187 residents	94% of 25,936 residents	>95% of 20,519 residents	90% of 34,534 residents	69% of 465,825 residents
<b>Hampshire</b>	19% of 5,278 residents	65% of 8,930 residents	82% of 5,934 residents	38% of 16,019 residents	47% of 33,434 residents	84% of 16,604 residents	85% of 16,047 residents	87% of 20,206 residents	>95% of 10,664 residents	>95% of 9,895 residents	>95% of 7,914 residents	>95% of 11,383 residents	73% of 162,308 residents

\* Vaccination figures with fewer than 30 people are suppressed for privacy.

\*\* "Unknown/unspecified county" is shown as a % of the column population (age or race/ethnicity group).

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# Individuals Fully Vaccinated

Data as of January 02, 2023

## Individuals fully vaccinated by county and age group (2 of 2)

Number of people in the county and age group who are fully vaccinated divided by the estimated population in the county and age group

	0-4 years	5-11 years	12-15 years	16-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-64 years	65-69 years	70-74 years	75+ years	Total
Middlesex	23% of 83,667 residents	69% of 121,734 residents	91% of 73,083 residents	80% of 82,715 residents	79% of 242,436 residents	86% of 242,118 residents	89% of 206,995 residents	89% of 222,367 residents	95% of 100,804 residents	>95% of 81,083 residents	>95% of 64,640 residents	95% of 110,359 residents	84% of 1,632,002 residents
Nantucket	*	46% of 1,012 residents	87% of 562 residents	>95% of 507 residents	>95% of 1,722 residents	94% of 2,214 residents	92% of 2,184 residents	92% of 2,082 residents	88% of 945 residents	93% of 764 residents	>95% of 562 residents	82% of 847 residents	84% of 14,255 residents
Norfolk	21% of 37,515 residents	66% of 56,630 residents	86% of 35,180 residents	85% of 36,428 residents	80% of 90,767 residents	85% of 95,497 residents	83% of 93,243 residents	88% of 105,961 residents	94% of 48,444 residents	>95% of 39,164 residents	>95% of 31,323 residents	90% of 55,829 residents	82% of 725,981 residents
Plymouth	9% of 27,514 residents	43% of 42,518 residents	71% of 26,597 residents	79% of 27,177 residents	70% of 61,517 residents	77% of 61,280 residents	77% of 65,393 residents	83% of 81,528 residents	90% of 38,334 residents	>95% of 31,886 residents	>95% of 26,374 residents	>95% of 40,701 residents	75% of 530,819 residents
Suffolk	14% of 40,171 residents	54% of 47,420 residents	86% of 26,325 residents	58% of 46,527 residents	79% of 176,345 residents	82% of 145,860 residents	87% of 88,768 residents	88% of 87,549 residents	88% of 40,123 residents	92% of 32,272 residents	>95% of 24,580 residents	87% of 41,995 residents	78% of 797,936 residents
Worcester	8% of 45,082 residents	45% of 68,600 residents	73% of 42,016 residents	72% of 46,659 residents	67% of 114,476 residents	75% of 111,763 residents	77% of 108,360 residents	81% of 126,900 residents	88% of 58,820 residents	93% of 46,033 residents	>95% of 35,450 residents	89% of 57,952 residents	73% of 862,111 residents
Unknown/ Unspecified**	0% of 356,875 MA residents 0-4 Years	1% of 521,112 MA residents 5-11 Years	1% of 316,296 MA residents 12-15 Years	2% of 371,285 MA residents 16-19 Years	5% of 1,010,451 MA residents 20-29 Years	4% of 955,267 MA residents 30-39 Years	3% of 852,990 MA residents 40-49 Years	2% of 980,162 MA residents 50-59 Years	3% of 464,409 MA residents 60-64 Years	2% of 383,903 MA residents 65-69 Years	2% of 307,883 MA residents 70-74 Years	2% of 509,277 MA residents 75+ Years	3% of 7,029,917 residents
Massachusetts	14% of 356,875 residents	54% of 521,112 residents	80% of 316,296 residents	75% of 371,285 residents	77% of 1,010,451 residents	84% of 955,267 residents	84% of 852,990 residents	87% of 980,162 residents	93% of 464,409 residents	>95% of 383,903 residents	>95% of 307,883 residents	94% of 509,277 residents	80% of 7,029,917 residents

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# Individuals who have Received Booster Doses

Data as of January 02, 2023

Individuals with at least one booster dose administered by county, race, and Hispanic ethnicity (1 of 2)

Number of people in the county and race/ethnicity group with at least one booster dose divided by the fully vaccinated population in the county and race/ethnicity group

	American Indian or Alaskan Native	Asian	Black or African American	Hispanic	Multi-race	Native Hawaiian or Pacific Islander	White	Unknown/ Other race**	Total
Barnstable	57% of 532 residents	60% of 2,265 residents	39% of 5,312 residents	49% of 8,168 residents	72% of 4,600 residents	41% of 95 residents	69% of 156,974 residents	1% of 185,038 Barnstable county residents	65% of 185,038 residents
Berkshire	41% of 83 residents	55% of 1,430 residents	47% of 2,642 residents	48% of 4,173 residents	66% of 2,287 residents	*	66% of 84,564 residents	1% of 98,576 Berkshire county residents	63% of 98,576 residents
Bristol	32% of 481 residents	54% of 8,897 residents	45% of 18,801 residents	43% of 33,710 residents	65% of 11,913 residents	36% of 180 residents	59% of 299,494 residents	1% of 388,605 Bristol county residents	56% of 388,605 residents
Dukes	58% of 113 residents	66% of 172 residents	45% of 868 residents	45% of 955 residents	69% of 427 residents	*	69% of 13,706 residents	2% of 17,929 Dukes county residents	62% of 17,929 residents
Essex	35% of 378 residents	63% of 22,346 residents	49% of 21,862 residents	44% of 106,608 residents	71% of 17,904 residents	48% of 210 residents	67% of 434,106 residents	1% of 628,150 Essex county residents	61% of 628,150 residents
Franklin	*	58% of 1,023 residents	51% of 649 residents	52% of 1,880 residents	74% of 1,115 residents	*	69% of 47,516 residents	1% of 54,195 Franklin county residents	67% of 54,195 residents
Hampden	38% of 378 residents	55% of 8,651 residents	50% of 21,947 residents	44% of 61,306 residents	66% of 8,336 residents	45% of 190 residents	63% of 199,785 residents	2% of 319,463 Hampden county residents	56% of 319,463 residents
Hampshire	56% of 102 residents	61% of 5,500 residents	57% of 2,319 residents	57% of 5,516 residents	77% of 3,004 residents	*	73% of 97,045 residents	1% of 118,451 Hampshire county residents	70% of 118,451 residents

\* Vaccination figures with fewer than 30 people are suppressed for privacy.

\*\* "Unknown/other race" is shown as a % of the row population (county or state). "Unknown/unspecified county" is shown as a % of the column population (age or race/ethnicity group).

Booster doses administered: See the definitions page at the end of this document.

Source: Massachusetts Immunization Information System (MIIS). MIIS data are available for analysis one calendar day after they are reported to the MIIS. Data are current as of time of publication and are subject to change in future publications as additional data are reported. Data reflect doses administered (see "definitions"). Population estimates source: MDPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.)

Note about totals: The difference in the Massachusetts state population total created by summing the age categories and by summing the race categories is expected due to the manner in which the estimates were created with small, compounded rounding and records with unknown demographic information.

# Individuals who have Received Booster Doses

Data as of January 02, 2023

## Individuals with at least one booster dose administered by county, race, and Hispanic ethnicity (2 of 2)

Number of people in the county and race/ethnicity group with at least one booster dose divided by the fully vaccinated population in the county and race/ethnicity group

	American Indian or Alaskan Native	Asian	Black or African American	Hispanic	Multi-race	Native Hawaiian or Pacific Islander	White	Unknown/ Other race**	Total
Middlesex	40% of 989 residents	66% of 163,745 residents	55% of 61,598 residents	48% of 106,825 residents	76% of 68,787 residents	49% of 495 residents	71% of 901,797 residents	1% of 1,363,157 Middlesex county residents	66% of 1,363,157 residents
Nantucket	*	61% of 209 residents	36% of 988 residents	28% of 1,937 residents	68% of 171 residents	*	63% of 7,677 residents	1% of 11,927 Nantucket county residents	51% of 11,927 residents
Norfolk	41% of 369 residents	69% of 67,834 residents	55% of 38,283 residents	54% of 26,632 residents	76% of 31,883 residents	51% of 231 residents	70% of 412,011 residents	1% of 595,680 Norfolk county residents	67% of 595,680 residents
Plymouth	37% of 303 residents	63% of 5,354 residents	45% of 39,100 residents	47% of 15,844 residents	67% of 16,425 residents	43% of 134 residents	64% of 308,538 residents	1% of 398,759 Plymouth county residents	61% of 398,759 residents
Suffolk	43% of 630 residents	63% of 65,924 residents	56% of 109,692 residents	50% of 133,777 residents	74% of 23,792 residents	49% of 608 residents	67% of 253,852 residents	1% of 619,885 Suffolk county residents	59% of 619,885 residents
Worcester	35% of 545 residents	63% of 33,637 residents	49% of 27,593 residents	44% of 75,110 residents	71% of 20,865 residents	47% of 217 residents	65% of 446,936 residents	1% of 626,123 Worcester county residents	60% of 626,123 residents
Unknown/ Unspecified**	2% of 5,255 AI/AN residents	2% of 401,019 Asian residents	1% of 359,074 Black residents	1% of 594,469 Hispanic residents	1% of 215,221 Multi-race residents	1% of 2,589 NH/PI residents	1% of 3,792,678 White residents	0% of 5,614,713 MA residents	1% of 5,614,713 residents
Massachusetts	41% of 5,255 residents	64% of 401,019 residents	52% of 359,074 residents	47% of 594,469 residents	73% of 215,221 residents	46% of 2,589 residents	66% of 3,792,678 residents	1% of 5,614,713 MA residents	62% of 5,614,713 residents

\* Vaccination figures with fewer than 30 people are suppressed for privacy.

\*\* "Unknown/other race" is shown as a % of the row population (county or state). "Unknown/unspecified county" is shown as a % of the column population (age or race/ethnicity group).

Booster doses administered: See the definitions page at the end of this document.

Source: Massachusetts Immunization Information System (MIIS). MIIS data are available for analysis one calendar day after they are reported to the MIIS. Data are current as of time of publication and are subject to change in future publications as additional data are reported. Data reflect doses administered (see "definitions"). Population estimates source: MDPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.)

Note about totals: The difference in the Massachusetts state population total created by summing the age categories and by summing the race categories is expected due to the manner in which the estimates were created with small, compounded rounding and records with unknown demographic information.

# Individuals who have Received Booster Doses

Data as of January 02, 2023

Individuals with at least one booster dose administered by county and age group (1 of 2)

Number of people in the county and age group with at least one booster dose divided by the fully vaccinated population in the county and age group

	5-11 years	12-15 years	16-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-64 years	65-69 years	70-74 years	75+ years	Total
<b>Barnstable</b>	26% of 5,278 residents	38% of 5,903 residents	52% of 6,885 residents	44% of 16,131 residents	46% of 17,166 residents	55% of 17,316 residents	63% of 28,159 residents	74% of 19,134 residents	81% of 19,631 residents	84% of 18,392 residents	86% of 30,447 residents	65% of 185,038 residents
<b>Berkshire</b>	26% of 4,574 residents	42% of 3,983 residents	54% of 4,469 residents	44% of 10,040 residents	50% of 10,991 residents	60% of 10,812 residents	66% of 15,446 residents	75% of 9,314 residents	82% of 8,593 residents	82% of 7,714 residents	85% of 12,137 residents	63% of 98,576 residents
<b>Bristol</b>	22% of 14,004 residents	31% of 16,999 residents	47% of 19,368 residents	41% of 44,896 residents	43% of 49,441 residents	50% of 51,588 residents	59% of 66,178 residents	69% of 33,836 residents	76% of 29,189 residents	78% of 24,100 residents	79% of 37,420 residents	56% of 388,605 residents
<b>Dukes</b>	26% of 744 residents	48% of 768 residents	57% of 719 residents	36% of 1,975 residents	45% of 2,656 residents	56% of 2,289 residents	68% of 2,669 residents	79% of 1,433 residents	82% of 1,459 residents	85% of 1,390 residents	94% of 1,749 residents	62% of 17,929 residents
<b>Essex</b>	28% of 33,043 residents	42% of 31,057 residents	55% of 32,901 residents	46% of 73,585 residents	51% of 82,756 residents	59% of 81,434 residents	66% of 101,340 residents	74% of 52,001 residents	80% of 44,060 residents	82% of 35,547 residents	83% of 55,820 residents	61% of 628,150 residents
<b>Franklin</b>	31% of 2,243 residents	48% of 2,118 residents	52% of 2,463 residents	48% of 5,305 residents	56% of 6,649 residents	64% of 6,226 residents	68% of 8,227 residents	76% of 5,227 residents	82% of 5,398 residents	89% of 4,567 residents	86% of 5,457 residents	67% of 54,195 residents
<b>Hampden</b>	20% of 13,459 residents	32% of 14,764 residents	44% of 16,178 residents	39% of 38,480 residents	44% of 41,346 residents	52% of 40,454 residents	61% of 50,875 residents	70% of 27,560 residents	78% of 24,412 residents	80% of 19,969 residents	81% of 31,124 residents	56% of 319,463 residents
<b>Hampshire</b>	45% of 5,819 residents	61% of 4,865 residents	59% of 6,035 residents	54% of 15,690 residents	62% of 13,867 residents	69% of 13,569 residents	73% of 17,521 residents	79% of 10,182 residents	85% of 9,915 residents	89% of 8,592 residents	89% of 11,387 residents	70% of 118,451 residents

\* Vaccination figures with less than 30 people are suppressed for privacy.

\*\* "Unknown/unspecified county" is shown as a % of the column population (age or race/ethnicity group).

Booster doses administered: See the definitions page at the end of this document.

Source: Massachusetts Immunization Information System (MIIS). MIIS data are available for analysis one calendar day after they are reported to the MIIS. Data are current as of time of publication and are subject to change in future publications as additional data are reported. Data reflect doses administered (see "definitions"). Booster doses administered: Data on booster doses administered reflect the additional dose of vaccine after completion of the primary series.

Population estimates source: MDPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.) Note about totals: The difference in the Massachusetts state population total created by summing the age categories and by summing the race categories is expected due to the manner in which the estimates were created with small, compounded rounding and records with unknown demographic information.

# Individuals who have Received Booster Doses

Data as of January 02, 2023

## Individuals with at least one booster dose administered by county and age group (2 of 2)

Number of people in the county and age group with at least one booster dose divided by the fully vaccinated population in the county and age group

	5-11 years	12-15 years	16-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-64 years	65-69 years	70-74 years	75+ years	Total
Middlesex	41% of 84,250 residents	55% of 66,825 residents	64% of 66,123 residents	54% of 190,560 residents	62% of 208,771 residents	69% of 183,408 residents	73% of 198,614 residents	79% of 95,445 residents	84% of 79,729 residents	86% of 65,443 residents	86% of 104,784 residents	66% of 1,363,157 residents
Nantucket	18% of 470 residents	34% of 491 residents	45% of 494 residents	27% of 1,650 residents	38% of 2,075 residents	52% of 2,010 residents	61% of 1,925 residents	73% of 828 residents	80% of 714 residents	83% of 549 residents	83% of 696 residents	51% of 11,927 residents
Norfolk	38% of 37,157 residents	53% of 30,275 residents	65% of 30,922 residents	55% of 72,244 residents	62% of 81,305 residents	69% of 77,626 residents	73% of 93,551 residents	79% of 45,456 residents	85% of 38,021 residents	86% of 30,730 residents	86% of 50,448 residents	67% of 595,680 residents
Plymouth	22% of 18,471 residents	37% of 18,954 residents	53% of 21,398 residents	47% of 43,018 residents	49% of 47,074 residents	57% of 50,443 residents	64% of 67,716 residents	73% of 34,548 residents	80% of 30,306 residents	83% of 25,801 residents	84% of 38,688 residents	61% of 398,759 residents
Suffolk	32% of 25,577 residents	41% of 22,712 residents	47% of 27,139 residents	47% of 139,578 residents	59% of 119,915 residents	62% of 77,533 residents	67% of 77,053 residents	75% of 35,486 residents	81% of 29,681 residents	82% of 23,425 residents	85% of 36,329 residents	59% of 619,885 residents
Worcester	26% of 30,920 residents	41% of 30,630 residents	55% of 33,390 residents	46% of 76,624 residents	50% of 83,640 residents	58% of 83,251 residents	66% of 102,884 residents	74% of 51,989 residents	81% of 43,034 residents	83% of 34,310 residents	85% of 51,640 residents	60% of 626,123 residents
Unknown/ Unspecified**	0% of 280,193 MA residents 5-11 Years	0% of 253,353 MA residents 12-15 Years	1% of 277,568 MA residents 16-19 Years	3% of 782,509 MA residents 20-29 Years	2% of 802,290 MA residents 30-39 Years	1% of 719,714 MA residents 40-49 Years	1% of 855,797 MA residents 50-59 Years	1% of 434,131 MA residents 60-64 Years	1% of 372,867 MA residents 65-69 Years	1% of 307,189 MA residents 70-74 Years	1% of 480,017 MA residents 75+ Years	1% of 5,614,713 residents
Massachusetts	32% of 280,193 residents	45% of 253,353 residents	55% of 277,568 residents	48% of 782,509 residents	55% of 802,290 residents	61% of 719,714 residents	67% of 855,797 residents	74% of 434,131 residents	80% of 372,867 residents	82% of 307,189 residents	84% of 480,017 residents	62% of 5,614,713 residents

\* Vaccination figures with less than 30 people are suppressed for privacy.

\*\* "Unknown/unspecified county" is shown as a % of the column population (age or race/ethnicity group).

Booster doses administered: See the definitions page at the end of this document.

Source: Massachusetts Immunization Information System (MIIS). MIIS data are available for analysis one calendar day after they are reported to the MIIS. Data are current as of time of publication and are subject to change in future publications as additional data are reported. Data reflect doses administered (see "definitions"). Booster doses administered: Data on booster doses administered reflect the additional dose of vaccine after completion of the primary series.

Population estimates source: MDPH calculates rates per 100,000 population using denominators estimated by the University of Massachusetts Donahue Institute using a modified Hamilton-Perry model (Strate S, et al. Small Area Population Estimates for 2011 through 2020, report, Oct 2016.) Note about totals: The difference in the Massachusetts state population total created by summing the age categories and by summing the race categories is expected due to the manner in which the estimates were created with small, compounded rounding and records with unknown demographic information.

# Critical definitions

**Please note:** the following terms and definition apply to COVID-19 only. Updated 9/20/2022.

**Doses administered:** All valid doses of Janssen/Johnson & Johnson, Moderna, Pfizer, and Novavax COVID-19 vaccine that have been given to people by providers and reported to MIIS are included in this measurement. Duplicate patient records may be created when patient information is not entered consistently. Data include doses administered by MA providers as well as through the Federal Pharmacy Partnership for Long-term Care Program and the retail pharmacies in the jurisdictional transfer program and Community Health Centers (CHCs) receiving vaccine from the U.S. Health Resources and Services Administration (HRSA). Some doses are administered as part of a separate federal distribution system and would not be included here.

**Individuals with a least one dose:** An individual is counted as at least one dose if they have received one or more doses of vaccine. This is measured as the total number of first doses of Moderna, Pfizer, and Novavax vaccine administered and reported, plus the total number of Janssen/Johnson & Johnson doses administered and reported.

**Individuals who are fully vaccinated:** An individual is counted as fully vaccinated if they have received the number of doses required to complete the primary series for their age and all of these doses have been reported to MIIS. Pfizer recipients under 5 years of age require three doses of vaccine; all other Pfizer recipients require two doses. Moderna and Novavax recipients require two doses of vaccine. Janssen/Johnson & Johnson recipients require one dose of vaccine.

**Booster doses administered:** On 8/13/21, a third dose was recommended for severely immunocompromised individuals to complete their primary series. These doses are counted as 'booster' doses. On 9/24/21, booster doses of Pfizer vaccine were recommended for individuals aged 65 and older, for those at risk for severe disease, or for those at high risk for occupational exposure six months after completing their primary series. On 10/22/21, booster doses of Moderna vaccine were recommended for the same population. Additionally, booster doses of any vaccine, including Johnson & Johnson, were recommended for everyone 18 years and older at least two months after receiving initial Johnson & Johnson vaccine. On 12/9/21, mix and match and Johnson & Johnson boosters were added to the booster counts, which redistributed shots that had previously been counted in other rows. This also adjusted for people who have completed a primary series and had previously been double counted. On 1/4/22, the Pfizer vaccine booster dose recommendation was revised to be five months after completing primary series. On 1/7/22, the Moderna vaccine booster dose recommendation was revised to be five months after completing primary series. On 3/29/22, second monovalent booster doses were recommended for adults aged 50 years and older.

On 9/1/22, bivalent boosters were recommended for everyone aged 12 years and older whose primary series or most recent booster dose were administered at least two months ago. This recommendation replaced all previous booster recommendations for this age group.

See, <https://www.mass.gov/info-details/covid-19-booster-frequently-asked-questions> for details on which formulation of vaccine is recommended at which intervals.

**Additional doses beyond second booster:** Some individuals with certain health conditions are eligible to receive additional doses of vaccine. These doses are counted in this category. For more information, see: <https://www.mass.gov/info-details/covid-19-vaccinations-for-individuals-with-certain-medical-conditions>

**Individuals who are unvaccinated/unreported vaccination:** This is the population estimate for the subpopulation minus the number of people who received at least one dose of vaccine. It is important to recall that not being represented in MIIS does not necessarily mean someone has not received vaccine.

**MIIS:** Immunization data from most (but not all) providers in Massachusetts are reported into the Massachusetts Immunization Information System (MIIS) through direct messages from electronic health records or direct entry by users. Due to inputting and processing, it may take 24-48 hours or more for shipping or administration data to appear in MIIS. MIIS data are available for analysis one calendar day after they are reported to the MIIS. Data are current as of time of publication and may be subject to change in future publications as additional data are reported. As of 11/4/21, MIIS numbers include vaccinations reported from the Veterans Administration for MA residents. MIIS does not include data on health states or occupations of individuals.