



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; March 22, 2023.
<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 March 27, 2023

Administered (MIIS)* through Monday, March 27, 2023 (Running totals by day)

	March 21, 2023	March 22, 2023	March 23, 2023	March 24, 2023	March 25, 2023	March 26, 2023	March 27, 2023
At least one dose -- number of people who received at least one dose of Moderna, Pfizer, Novavax, or Johnson & Johnson vaccine**	6,542,207	6,542,614	6,543,025	6,543,443	6,543,747	6,543,865	6,544,132
Fully vaccinated -- number of people who received a primary series of Moderna, Pfizer, Novavax or Johnson & Johnson vaccine***	5,637,783	5,638,029	5,638,283	5,638,522	5,638,611	5,638,661	5,638,829
First booster doses -- number of people who received a booster dose of Moderna, Pfizer, or Johnson & Johnson vaccine****	3,526,132	3,526,679	3,527,205	3,527,641	3,527,875	3,528,014	3,528,404
Second booster doses -- number of people who have received at least 2 booster doses*****	1,661,241	1,661,830	1,662,470	1,663,098	1,663,516	1,663,763	1,664,198
Total Doses Administered (MIIS)	17,629,851	17,631,905	17,634,054	17,636,099	17,637,316	17,638,158	17,639,621

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

**Now that the majority of Massachusetts residents have received at least one dose of COVID-19 vaccine, changes to this cumulative count may represent data corrections and deduplications.

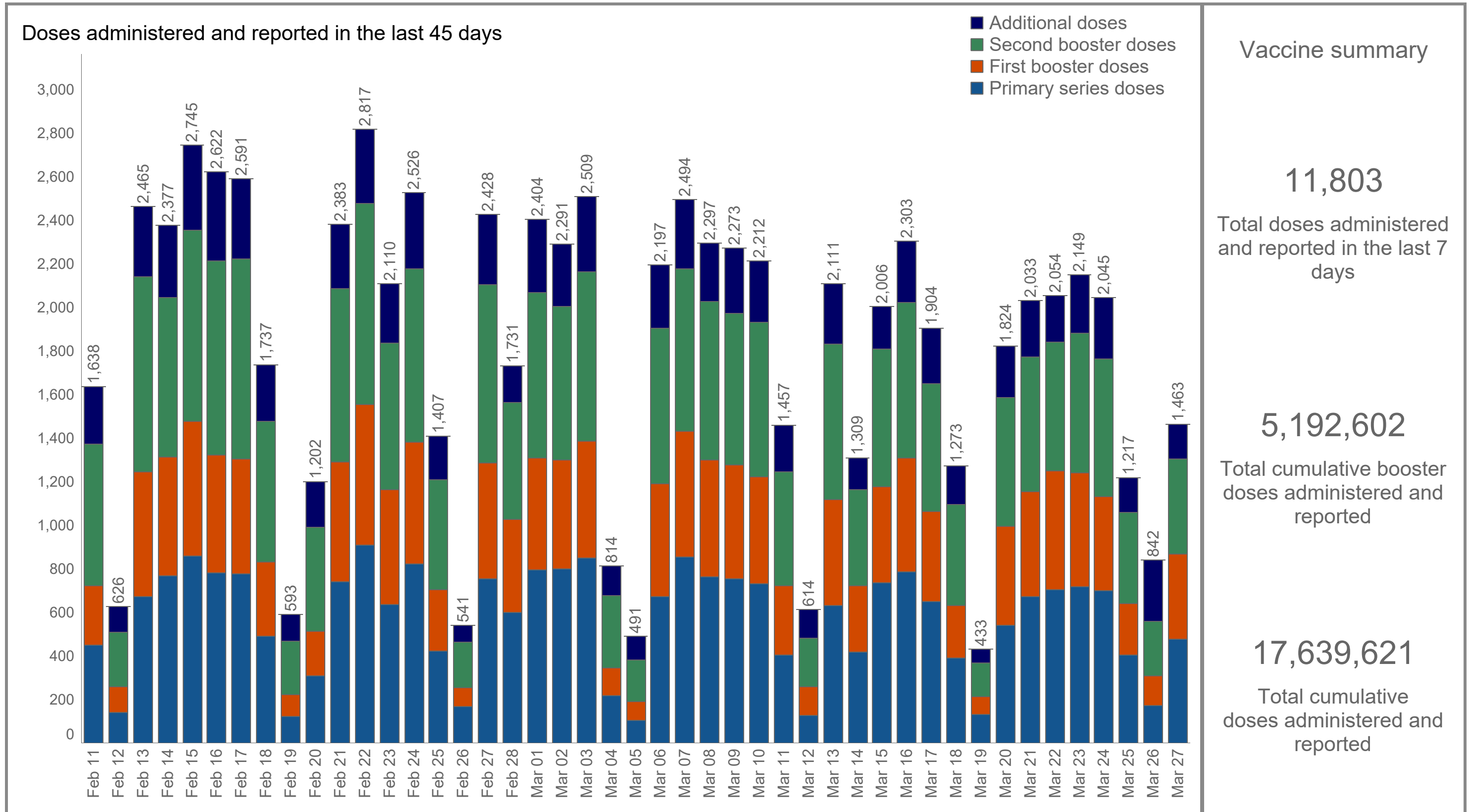
***An individual is counted as fully vaccinated if they have received the number of doses required to complete the primary series for their age and all of these doses have been reported to MIIS. Pfizer recipients under 5 years of age require three doses of vaccine; all other Pfizer recipients require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

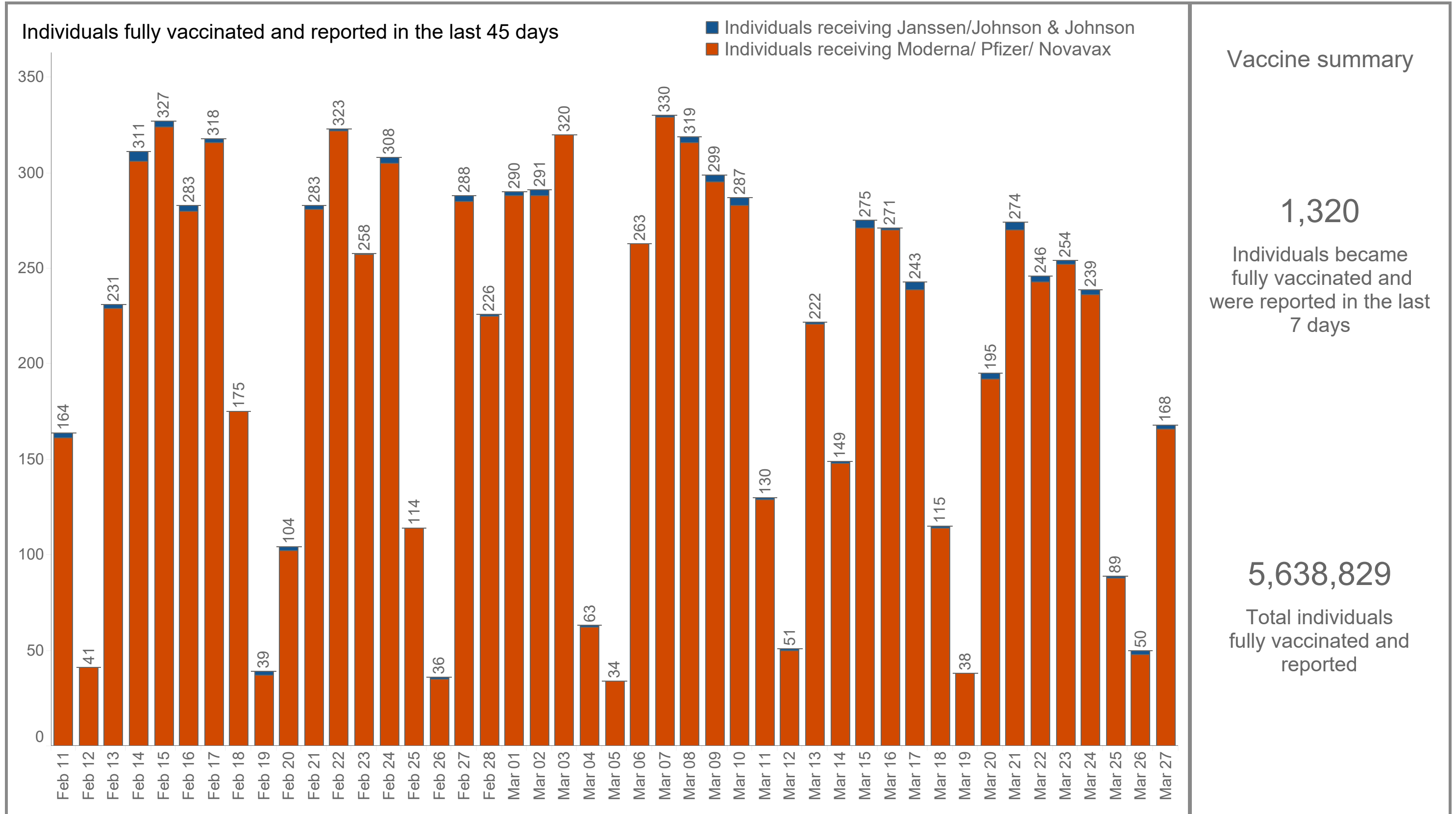
Data as of March 27, 2023



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 March 27, 2023



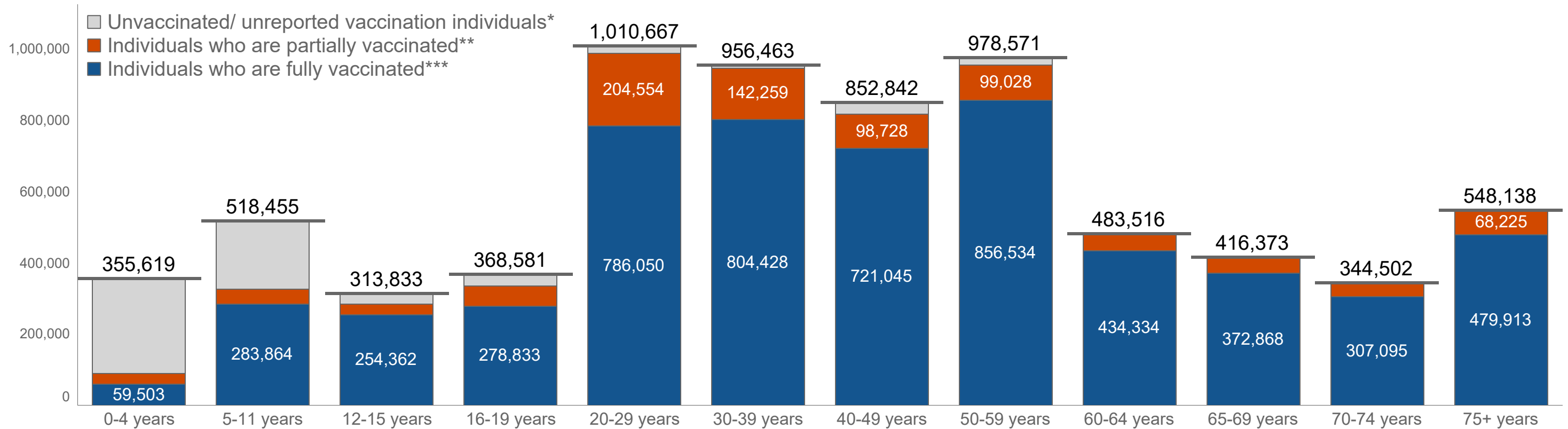
NOTE: Data from MIIS (see "definitions"). Dates reflect the date doses were administered. Individuals fully vaccinated: An individual is counted as fully vaccinated if they have received the number of doses required to complete the primary series for their age and all of these doses have been reported 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

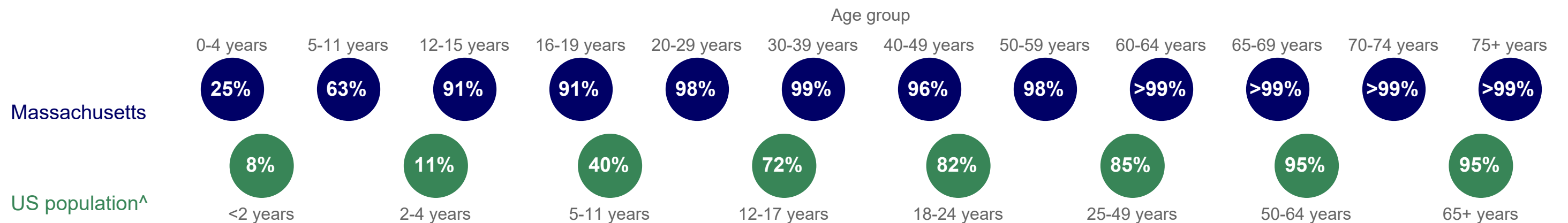
Data as of March 27, 2023

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. Now that the majority of Massachusetts residents have received at least one dose of COVID-19 vaccine, changes to this cumulative count may represent data corrections and deduplications.

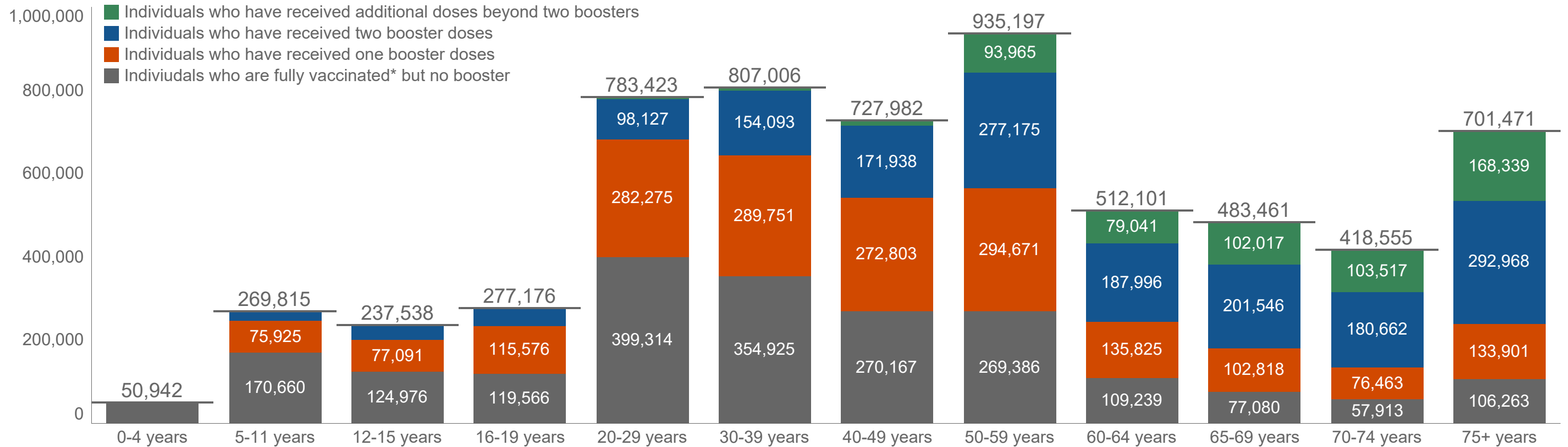
*Unvaccinated/unreported vaccination individuals: This is the population estimate for the subpopulation minus the number of people who received at least one dose of vaccine. It is important to recall that not being represented in MIIS does not necessarily mean someone has not received vaccine. **Individuals 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;2023-03-22://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 who have Received Booster Doses

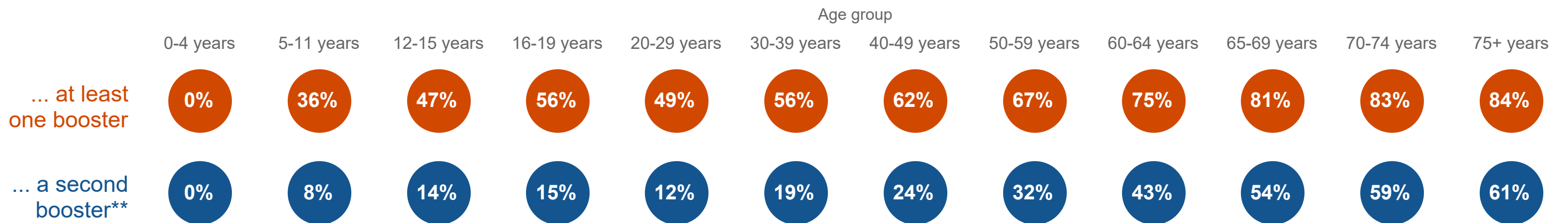
Data as of March 27, 2023

In Massachusetts, 63% 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;2023-03-22. <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 March 27, 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	39% 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	52% of 153 residents	72% of 1,978 residents	65% of 4,132 residents	62% of 6,619 residents	41% of 5,666 residents	*	77% of 110,470 residents	3% of 129,026 Berkshire county residents	76% of 129,026 residents
Bristol	45% of 1,045 residents	65% of 13,752 residents	78% of 24,506 residents	63% of 53,995 residents	38% 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	23% of 1,899 residents	*	81% of 17,031 residents	8% of 20,600 Dukes county residents	87% of 20,600 residents
Essex	46% of 808 residents	76% of 29,651 residents	79% of 27,604 residents	60% of 181,759 residents	69% 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	85% of 1,215 residents	67% of 985 residents	58% of 3,329 residents	36% of 3,207 residents	*	77% of 62,163 residents	3% of 71,029 Franklin county residents	77% of 71,029 residents
Hampden	58% of 646 residents	71% of 12,176 residents	61% of 36,442 residents	52% of 120,694 residents	57% 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	50% of 199 residents	52% of 10,709 residents	53% of 4,398 residents	50% of 11,248 residents	44% of 6,930 residents	>95% of 43 residents	76% 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 March 27, 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	66% of 1,511 residents	78% of 212,123 residents	74% of 84,324 residents	76% of 141,738 residents	86% 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	90% of 2,175 residents	29% of 615 residents	*	76% of 10,149 residents	6% of 14,255 Nantucket county residents	84% of 14,255 residents
Norfolk	49% of 736 residents	77% of 88,772 residents	76% of 50,563 residents	72% of 37,460 residents	>95% of 29,540 residents	>95% of 151 residents	80% of 518,759 residents	3% of 725,981 Norfolk county residents	82% of 725,981 residents
Plymouth	34% of 893 residents	68% of 7,962 residents	82% of 48,249 residents	68% of 23,417 residents	47% of 35,840 residents	61% of 220 residents	75% of 414,238 residents	2% of 530,819 Plymouth county residents	75% of 530,819 residents
Suffolk	51% of 1,235 residents	82% of 81,295 residents	78% of 142,086 residents	76% of 177,973 residents	64% 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	62% of 45,164 residents	69% of 110,448 residents	57% 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	52% of 9,939 residents	79% of 510,096 residents	76% of 476,930 residents	69% of 878,944 residents	67% 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

* 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 March 27, 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
Barnstable	9% of 8,117 residents	44% 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
Berkshire	11% of 5,429 residents	56% 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	90% of 13,390 residents	76% of 129,026 residents
Bristol	7% 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	71% of 73,224 residents	78% of 85,414 residents	87% of 39,125 residents	92% of 31,728 residents	94% of 25,741 residents	87% of 42,964 residents	67% of 579,200 residents
Dukes	10% of 882 residents	60% 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
Essex	13% 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	93% of 56,226 residents	>95% of 46,143 residents	>95% of 36,776 residents	93% of 60,087 residents	78% of 809,829 residents
Franklin	13% of 3,011 residents	47% of 4,819 residents	74% of 2,910 residents	89% of 2,764 residents	71% 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	91% of 5,954 residents	77% of 71,029 residents
Hampden	5% of 24,918 residents	36% of 38,042 residents	64% of 23,128 residents	63% of 26,022 residents	59% of 65,472 residents	70% of 59,405 residents	76% 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
Hampshire	24% of 5,278 residents	66% 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).

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 March 27, 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	27% of 83,667 residents	70% of 121,734 residents	92% 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	4% of 857 residents	47% 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	94% of 764 residents	>95% of 562 residents	82% of 847 residents	84% of 14,255 residents
Norfolk	25% 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	11% of 27,514 residents	44% of 42,518 residents	72% 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	18% of 40,171 residents	55% of 47,420 residents	87% of 26,325 residents	59% of 46,527 residents	80% of 176,345 residents	82% of 145,860 residents	87% of 88,768 residents	88% of 87,549 residents	89% 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	10% of 45,082 residents	46% 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	94% 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	17% of 356,875 residents	54% of 521,112 residents	80% of 316,296 residents	75% of 371,285 residents	78% of 1,010,451 residents	84% of 955,267 residents	85% of 852,990 residents	87% of 980,162 residents	94% 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

* 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).

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 who have Received Booster Doses

Data as of March 27, 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 528 residents	61% of 2,273 residents	40% of 5,339 residents	51% of 8,237 residents	73% of 4,733 residents	41% of 92 residents	70% of 157,487 residents	1% of 185,653 Barnstable county residents	66% of 185,653 residents
Berkshire	41% of 80 residents	55% of 1,432 residents	48% of 2,672 residents	49% of 4,120 residents	67% of 2,351 residents	*	67% of 84,708 residents	1% of 98,677 Berkshire county residents	64% of 98,677 residents
Bristol	34% of 474 residents	56% of 8,914 residents	46% of 18,997 residents	44% of 34,235 residents	66% of 12,243 residents	36% of 178 residents	60% of 300,491 residents	1% of 390,357 Bristol county residents	57% of 390,357 residents
Dukes	61% of 112 residents	65% of 175 residents	46% of 876 residents	45% of 964 residents	70% of 433 residents	*	70% of 13,735 residents	2% of 17,978 Dukes county residents	63% of 17,978 residents
Essex	36% of 374 residents	64% of 22,466 residents	51% of 21,816 residents	46% of 108,799 residents	72% of 18,166 residents	47% of 208 residents	67% of 434,674 residents	1% of 630,756 Essex county residents	61% of 630,756 residents
Franklin	47% of 64 residents	59% of 1,028 residents	52% of 655 residents	54% of 1,915 residents	75% of 1,149 residents	*	70% of 47,733 residents	1% of 54,415 Franklin county residents	68% of 54,415 residents
Hampden	38% of 372 residents	56% of 8,688 residents	52% of 22,213 residents	46% of 62,441 residents	67% of 8,531 residents	46% of 185 residents	63% of 200,200 residents	2% of 321,053 Hampden county residents	57% of 321,053 residents
Hampshire	60% of 99 residents	62% of 5,537 residents	58% of 2,328 residents	59% of 5,603 residents	79% of 3,053 residents	*	74% of 97,327 residents	1% of 118,860 Hampshire county residents	71% of 118,860 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 March 27, 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	42% of 994 residents	67% of 165,124 residents	56% of 62,007 residents	50% of 108,393 residents	77% of 69,968 residents	49% of 491 residents	72% of 904,678 residents	1% of 1,369,858 Middlesex county residents	68% of 1,369,858 residents
Nantucket	*	62% of 207 residents	36% of 991 residents	29% of 1,948 residents	69% of 179 residents	*	64% of 7,685 residents	1% of 11,943 Nantucket county residents	52% of 11,943 residents
Norfolk	40% of 362 residents	70% of 68,354 residents	57% of 38,500 residents	56% of 26,941 residents	77% of 32,351 residents	52% of 227 residents	71% of 413,212 residents	1% of 598,197 Norfolk county residents	68% of 598,197 residents
Plymouth	37% of 302 residents	64% of 5,385 residents	46% of 39,459 residents	49% of 16,021 residents	68% of 16,720 residents	48% of 134 residents	65% of 309,349 residents	1% of 400,236 Plymouth county residents	61% of 400,236 residents
Suffolk	44% of 630 residents	64% of 66,287 residents	57% of 110,401 residents	51% of 135,155 residents	75% of 24,174 residents	50% of 595 residents	68% of 254,931 residents	1% of 623,467 Suffolk county residents	60% of 623,467 residents
Worcester	36% of 539 residents	64% of 33,914 residents	50% of 27,894 residents	46% of 76,059 residents	72% of 21,308 residents	47% of 214 residents	65% of 448,305 residents	1% of 628,983 Worcester county residents	61% of 628,983 residents
Unknown/ Unspecified**	2% of 5,214 AI/AN residents	2% of 403,844 Asian residents	1% of 361,582 Black residents	1% of 602,920 Hispanic residents	1% of 219,135 Multi-race residents	2% of 2,554 NH/PI residents	1% of 3,802,916 White residents	0% of 5,638,829 MA residents	1% of 5,638,829 residents
Massachusetts	41% of 5,214 residents	65% of 403,844 residents	53% of 361,582 residents	48% of 602,920 residents	74% of 219,135 residents	47% of 2,554 residents	67% of 3,802,916 residents	1% of 5,638,829 MA residents	63% of 5,638,829 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 March 27, 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
Barnstable	29% of 5,333 residents	39% of 5,906 residents	53% of 6,910 residents	44% of 16,200 residents	47% of 17,199 residents	56% of 17,385 residents	64% of 28,263 residents	75% of 19,209 residents	82% of 19,663 residents	85% of 18,392 residents	87% of 30,442 residents	66% of 185,653 residents
Berkshire	29% of 4,617 residents	44% of 3,996 residents	55% of 4,495 residents	45% of 10,057 residents	51% of 11,002 residents	60% of 10,821 residents	66% of 15,449 residents	76% of 9,296 residents	83% of 8,568 residents	83% of 7,677 residents	86% of 12,077 residents	64% of 98,677 residents
Bristol	24% of 14,240 residents	32% of 17,081 residents	48% of 19,477 residents	42% of 45,137 residents	44% of 49,683 residents	51% of 51,728 residents	60% of 66,289 residents	70% of 33,874 residents	77% of 29,212 residents	79% of 24,114 residents	80% of 37,486 residents	57% of 390,357 residents
Dukes	32% of 754 residents	49% of 772 residents	59% of 722 residents	37% of 1,978 residents	46% of 2,660 residents	57% of 2,290 residents	68% of 2,674 residents	80% of 1,435 residents	82% of 1,463 residents	85% of 1,390 residents	94% of 1,753 residents	63% of 17,978 residents
Essex	31% of 33,439 residents	44% of 31,175 residents	56% of 33,042 residents	47% of 73,864 residents	52% of 83,020 residents	59% of 81,583 residents	67% of 101,474 residents	75% of 52,016 residents	81% of 44,087 residents	82% of 35,550 residents	84% of 55,917 residents	61% of 630,756 residents
Franklin	36% of 2,286 residents	50% of 2,142 residents	54% of 2,467 residents	49% of 5,341 residents	57% of 6,666 residents	66% of 6,246 residents	70% of 8,248 residents	77% of 5,224 residents	83% of 5,386 residents	90% of 4,570 residents	88% of 5,448 residents	68% of 54,415 residents
Hampden	23% of 13,730 residents	34% of 14,867 residents	46% of 16,295 residents	40% of 38,744 residents	45% of 41,581 residents	53% of 40,623 residents	62% of 50,974 residents	71% of 27,593 residents	78% of 24,419 residents	81% of 19,976 residents	81% of 31,124 residents	57% of 321,053 residents
Hampshire	50% of 5,876 residents	63% of 4,875 residents	60% of 6,065 residents	55% of 15,718 residents	63% of 13,933 residents	70% of 13,589 residents	74% of 17,523 residents	80% of 10,185 residents	85% of 9,906 residents	89% of 8,588 residents	90% of 11,357 residents	71% of 118,860 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 March 27, 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	44% of 85,174 residents	57% of 67,046 residents	65% of 66,326 residents	55% of 191,695 residents	63% of 209,271 residents	70% of 183,739 residents	74% of 198,677 residents	80% of 95,458 residents	85% of 79,696 residents	86% of 65,444 residents	87% of 104,737 residents	68% of 1,369,858 residents
Nantucket	21% of 475 residents	36% of 491 residents	46% of 494 residents	28% of 1,651 residents	38% of 2,076 residents	52% of 2,011 residents	61% of 1,924 residents	73% of 827 residents	80% of 715 residents	85% of 545 residents	83% of 697 residents	52% of 11,943 residents
Norfolk	41% of 37,566 residents	54% of 30,397 residents	67% of 31,015 residents	56% of 72,515 residents	63% of 81,494 residents	70% of 77,735 residents	73% of 93,522 residents	80% of 45,407 residents	85% of 37,995 residents	86% of 30,689 residents	87% of 50,381 residents	68% of 598,197 residents
Plymouth	26% of 18,714 residents	38% of 19,018 residents	54% of 21,481 residents	48% of 43,169 residents	50% of 47,245 residents	58% of 50,541 residents	65% of 67,797 residents	74% of 34,566 residents	81% of 30,291 residents	83% of 25,803 residents	85% of 38,718 residents	61% of 400,236 residents
Suffolk	37% of 26,142 residents	44% of 22,793 residents	48% of 27,327 residents	48% of 140,308 residents	59% of 120,042 residents	63% of 77,607 residents	68% of 77,138 residents	76% of 35,532 residents	81% of 29,718 residents	83% of 23,449 residents	85% of 36,355 residents	60% of 623,467 residents
Worcester	29% of 31,314 residents	42% of 30,775 residents	56% of 33,528 residents	47% of 77,084 residents	51% of 84,067 residents	59% of 83,483 residents	66% of 103,015 residents	75% of 52,033 residents	82% of 43,050 residents	83% of 34,304 residents	85% of 51,628 residents	61% of 628,983 residents
Unknown/ Unspecified**	0% of 283,864 MA residents 5-11 Years	0% of 254,362 MA residents 12-15 Years	1% of 278,833 MA residents 16-19 Years	3% of 786,050 MA residents 20-29 Years	2% of 804,428 MA residents 30-39 Years	1% of 721,045 MA residents 40-49 Years	1% of 856,534 MA residents 50-59 Years	1% of 434,334 MA residents 60-64 Years	1% of 372,868 MA residents 65-69 Years	1% of 307,095 MA residents 70-74 Years	1% of 479,913 MA residents 75+ Years	1% of 5,638,829 residents
Massachusetts	36% of 283,864 residents	47% of 254,362 residents	56% of 278,833 residents	49% of 786,050 residents	56% of 804,428 residents	62% of 721,045 residents	67% of 856,534 residents	75% of 434,334 residents	81% of 372,868 residents	83% of 307,095 residents	84% of 479,913 residents	63% of 5,638,829 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.