



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; November 16, 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 November 21, 2022

Administered (MIIS)* through Monday, November 21, 2022 (Running totals by day)

	November 15, 2022	November 16, 2022	November 17, 2022	November 18, 2022	November 19, 2022	November 20, 2022	November 21, 2022
At least one dose -- number of people who received at least one dose of Moderna, Pfizer, Novavax, or Johnson & Johnson vaccine	6,488,325	6,491,248	6,494,390	6,497,447	6,499,240	6,500,098	6,501,389
Fully vaccinated -- number of people who received a primary series of Moderna, Pfizer, Novavax or Johnson & Johnson vaccine**	5,577,829	5,579,270	5,580,761	5,582,277	5,582,942	5,583,312	5,583,972
First booster doses -- number of people who received a booster dose of Moderna, Pfizer, or Johnson & Johnson vaccine***	3,388,048	3,390,496	3,392,940	3,395,272	3,396,631	3,397,288	3,398,459
Second booster doses -- number of people who have received at least 2 booster doses****	1,317,639	1,325,726	1,333,622	1,342,408	1,346,839	1,349,423	1,353,033
Total Doses Administered (MIIS)	16,885,976	16,905,076	16,923,903	16,943,588	16,953,544	16,959,015	16,967,445

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

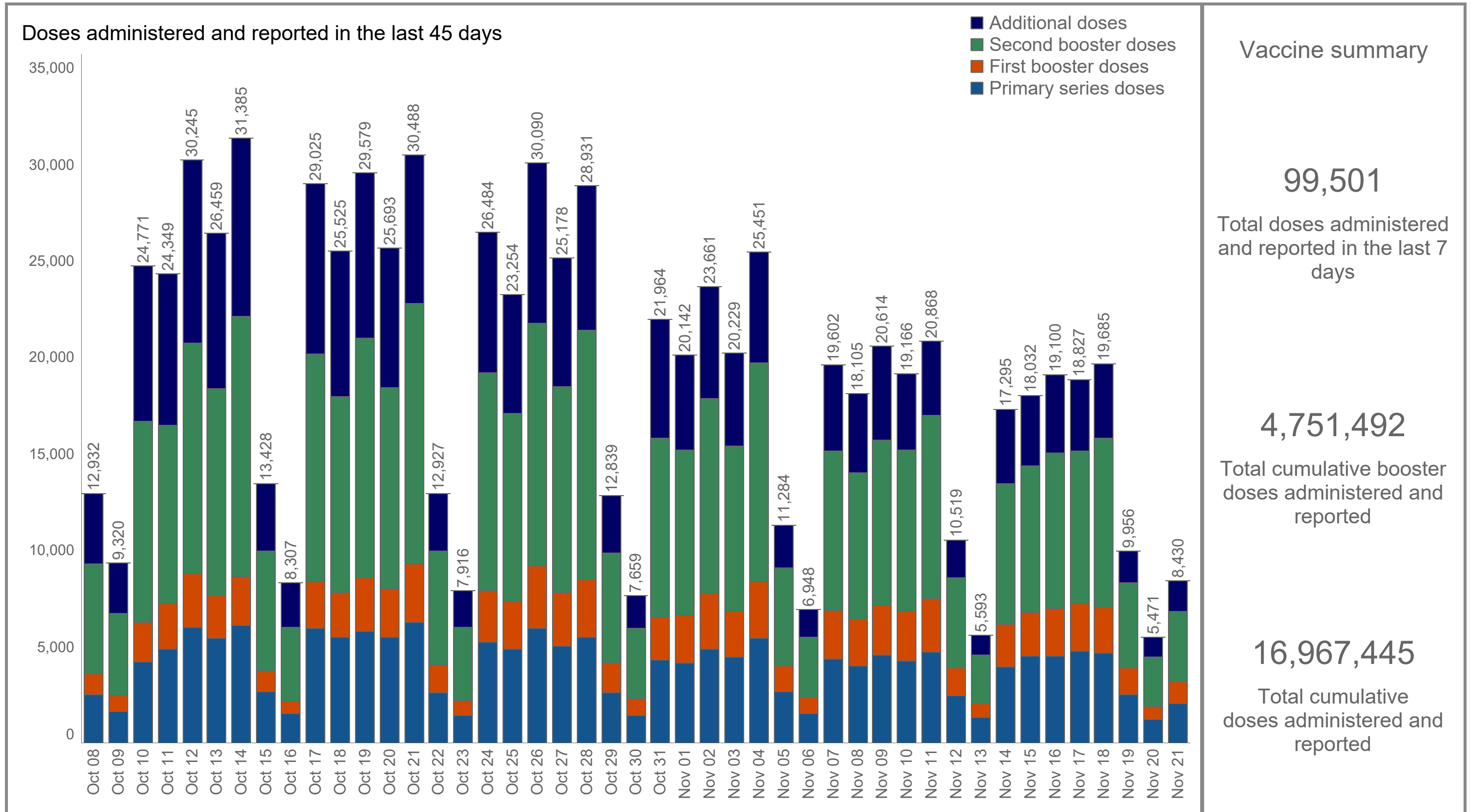
**An individual is counted as fully vaccinated if they have received the number of doses required to complete the primary series for their age and all of these doses have been reported to MIIS. Pfizer recipients under 5 years of age require three doses of vaccine; all other Pfizer recipients require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

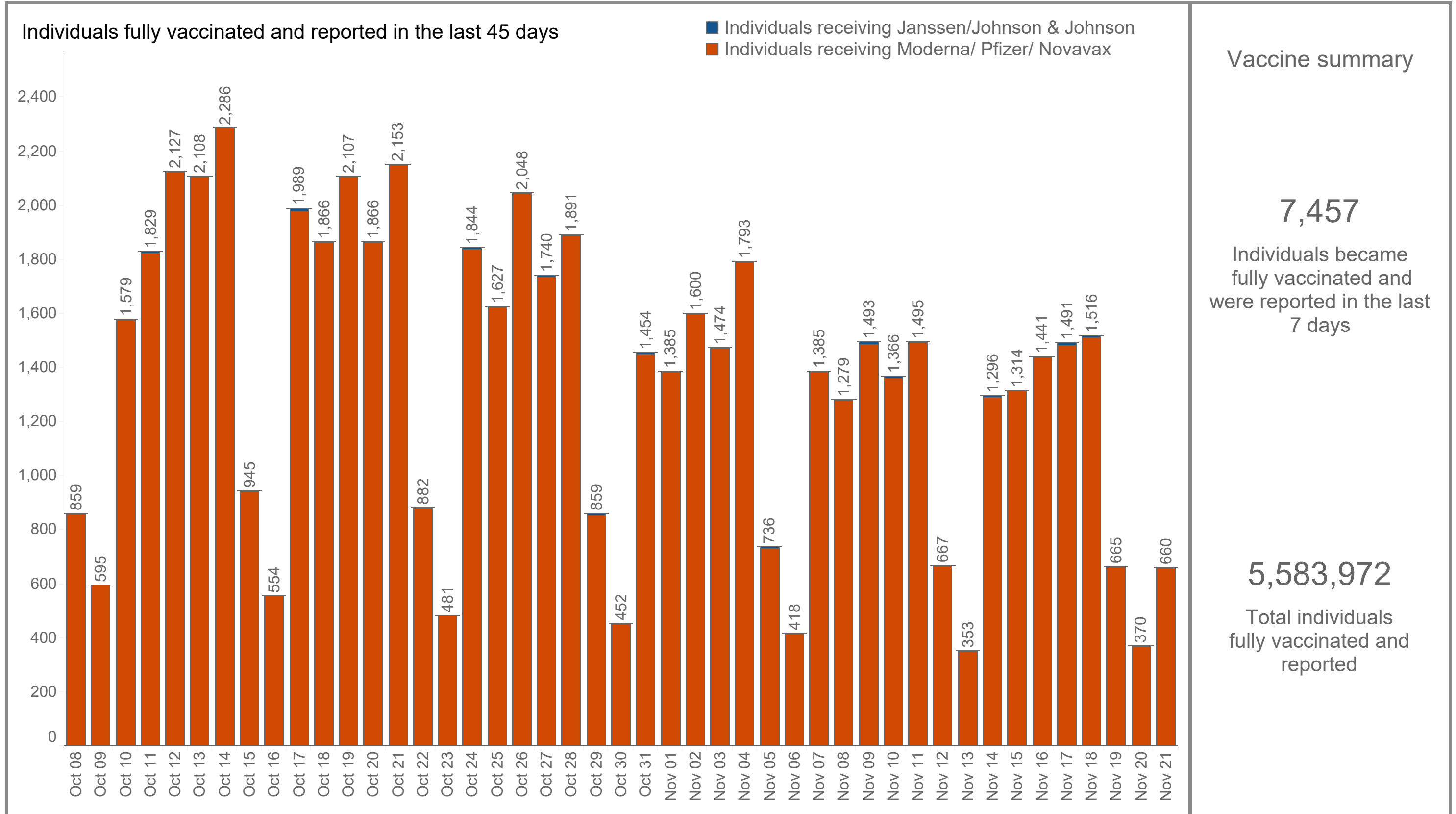
Data as of November 21, 2022



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 November 21, 2022



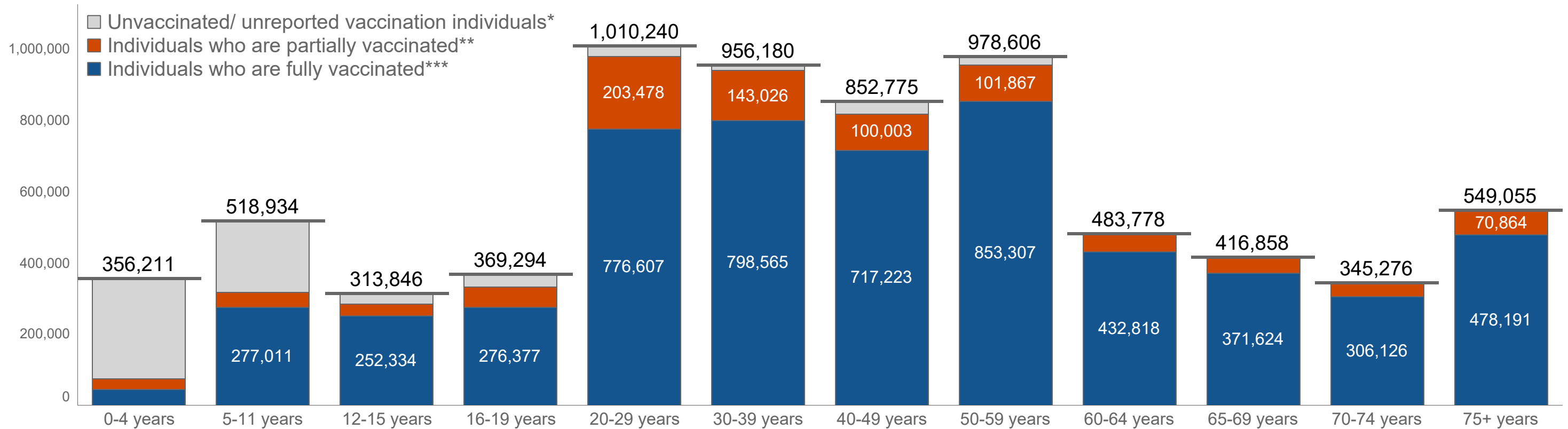
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Individuals with at Least One Dose

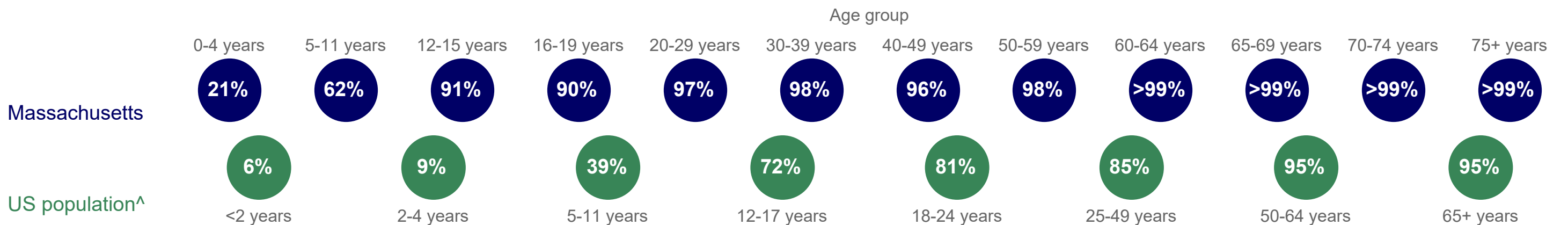
Data as of November 21, 2022

In Massachusetts, 92% 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



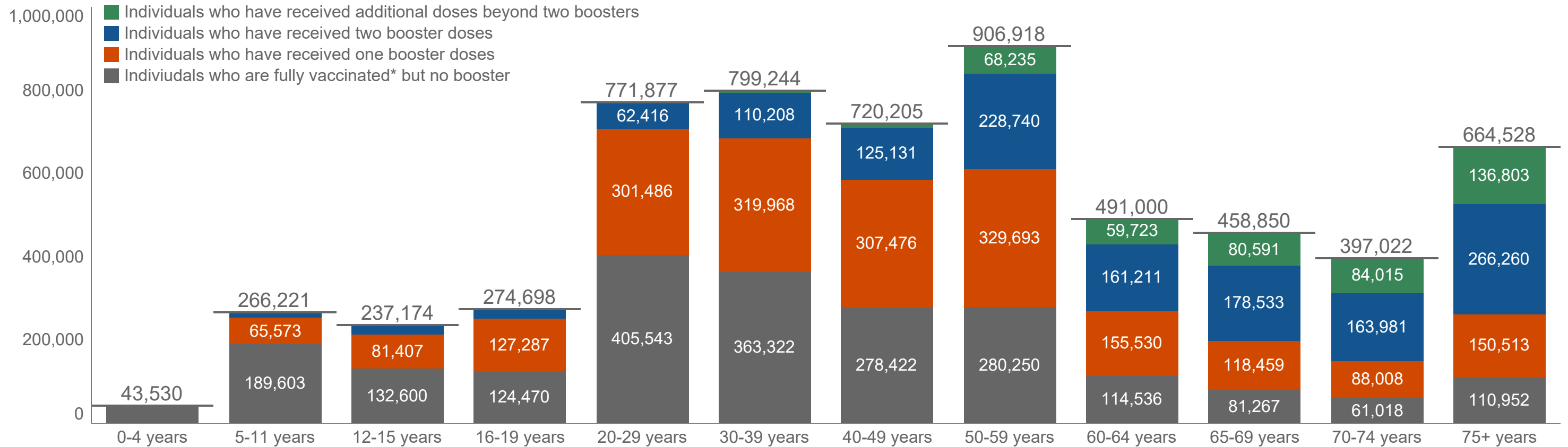
Vaccination status is reported at the age at which the vaccine was administered. Individuals transition into older age groups over time keeping aggregate totals consistent across the sum of all age categories.
 *Unvaccinated/unreported vaccination individuals: This is the population estimate for the 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;2022-11-16://[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

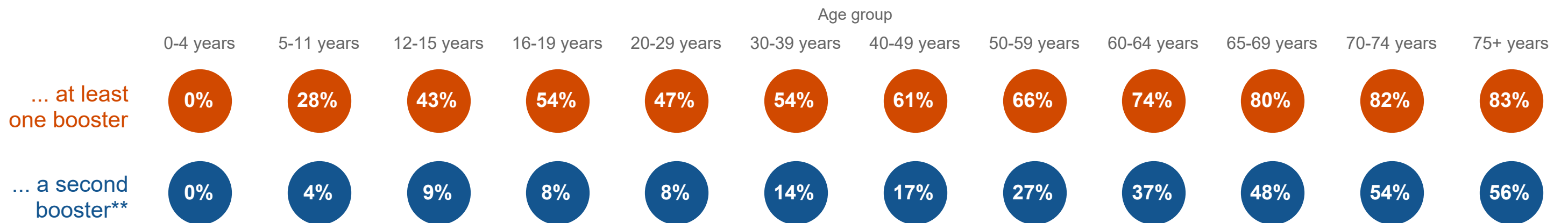
Data as of November 21, 2022

In Massachusetts, 61% 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;2022-11-16. <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 November 21, 2022

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	37% of 12,144 residents	>95% of 53 residents	79% of 198,117 residents	3% of 228,996 Barnstable county residents	80% of 228,996 residents
Berkshire	56% of 153 residents	72% of 1,978 residents	64% of 4,132 residents	63% of 6,619 residents	39% of 5,666 residents	*	76% of 110,470 residents	3% of 129,026 Berkshire county residents	76% of 129,026 residents
Bristol	46% of 1,045 residents	64% of 13,752 residents	76% of 24,506 residents	62% of 53,995 residents	36% 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	52% 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	58% of 181,759 residents	67% of 26,257 residents	>95% of 155 residents	80% of 543,595 residents	3% of 809,829 Essex county residents	77% of 809,829 residents
Franklin	52% of 122 residents	83% of 1,215 residents	66% of 985 residents	56% of 3,329 residents	34% 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	54% of 15,087 residents	>95% of 165 residents	71% of 280,615 residents	4% of 465,825 Hampden county residents	68% of 465,825 residents
Hampshire	52% of 199 residents	51% of 10,709 residents	52% of 4,398 residents	49% of 11,248 residents	42% 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.

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Individuals Fully Vaccinated

Data as of November 21, 2022

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	76% of 212,123 residents	73% of 84,324 residents	75% of 141,738 residents	83% of 81,692 residents	>95% of 380 residents	81% of 1,110,235 residents	4% of 1,632,002 Middlesex county residents	83% of 1,632,002 residents
Nantucket	*	77% of 274 residents	>95% of 1,025 residents	89% of 2,175 residents	28% of 615 residents	*	75% of 10,149 residents	7% of 14,255 Nantucket county residents	83% of 14,255 residents
Norfolk	52% of 736 residents	76% of 88,772 residents	75% 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	67% of 23,417 residents	45% of 35,840 residents	60% 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	80% of 81,295 residents	77% of 142,086 residents	75% of 177,973 residents	62% of 37,543 residents	>95% of 357 residents	71% of 357,446 residents	4% of 797,936 Suffolk county residents	77% of 797,936 residents
Worcester	46% of 1,183 residents	71% of 46,778 residents	61% of 45,164 residents	68% of 110,448 residents	54% of 37,582 residents	>95% of 145 residents	72% of 620,810 residents	2% of 862,111 Worcester county residents	72% 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	78% of 510,096 residents	75% of 476,930 residents	67% of 878,944 residents	65% of 326,050 residents	>95% of 1,841 residents	78% of 4,826,116 residents	4% of 7,029,917 MA residents	79% of 7,029,917 residents

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Individuals Fully Vaccinated

Data as of November 21, 2022

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	6% of 8,117 residents	43% of 12,225 residents	74% of 7,999 residents	81% of 8,444 residents	73% of 22,109 residents	84% of 20,313 residents	81% of 21,363 residents	82% of 34,083 residents	89% of 21,351 residents	90% of 21,806 residents	92% of 19,831 residents	>95% of 31,352 residents	80% of 228,996 residents
Berkshire	8% of 5,429 residents	55% of 8,296 residents	74% of 5,380 residents	68% of 6,484 residents	65% of 15,369 residents	79% of 13,757 residents	78% of 13,736 residents	80% 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	5% of 30,091 residents	30% of 45,540 residents	61% of 27,527 residents	66% 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	93% of 25,741 residents	87% of 42,964 residents	67% of 579,200 residents
Dukes	8% of 882 residents	58% 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	9% of 44,345 residents	51% of 64,079 residents	80% of 38,871 residents	78% of 41,764 residents	72% of 102,396 residents	81% of 101,407 residents	82% of 99,259 residents	85% of 118,474 residents	92% of 56,226 residents	>95% of 46,143 residents	>95% of 36,776 residents	93% of 60,087 residents	77% of 809,829 residents
Franklin	10% of 3,011 residents	46% of 4,819 residents	72% of 2,910 residents	89% of 2,764 residents	70% of 7,572 residents	76% of 8,732 residents	75% of 8,315 residents	79% of 10,333 residents	85% of 6,159 residents	92% of 5,875 residents	>95% of 4,581 residents	91% of 5,954 residents	76% of 71,029 residents
Hampden	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	69% of 59,405 residents	75% of 53,671 residents	80% of 62,992 residents	88% of 31,187 residents	94% of 25,936 residents	>95% of 20,519 residents	90% of 34,534 residents	68% of 465,825 residents
Hampshire	17% of 5,278 residents	65% of 8,930 residents	82% of 5,934 residents	37% of 16,019 residents	46% of 33,434 residents	83% of 16,604 residents	84% of 16,047 residents	86% 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

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** "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 November 21, 2022

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	21% of 83,667 residents	69% of 121,734 residents	91% of 73,083 residents	80% of 82,715 residents	78% of 242,436 residents	86% of 242,118 residents	88% of 206,995 residents	89% of 222,367 residents	94% of 100,804 residents	>95% of 81,083 residents	>95% of 64,640 residents	95% of 110,359 residents	83% of 1,632,002 residents
Nantucket	*	46% of 1,012 residents	87% of 562 residents	>95% of 507 residents	>95% of 1,722 residents	93% 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	83% of 14,255 residents
Norfolk	19% of 37,515 residents	65% of 56,630 residents	86% of 35,180 residents	85% of 36,428 residents	79% 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	7% 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	12% of 40,171 residents	53% 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	86% of 41,995 residents	77% of 797,936 residents
Worcester	7% of 45,082 residents	45% of 68,600 residents	73% of 42,016 residents	71% 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	72% 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	2% 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	12% of 356,875 residents	53% of 521,112 residents	80% of 316,296 residents	74% 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	79% of 7,029,917 residents

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Individuals who have Received Booster Doses

Data as of November 21, 2022

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	56% of 527 residents	59% of 2,266 residents	38% of 5,307 residents	49% of 8,109 residents	71% of 4,459 residents	41% of 95 residents	68% of 156,208 residents	1% of 184,157 Barnstable county residents	65% of 184,157 residents
Berkshire	39% of 85 residents	55% of 1,416 residents	46% of 2,627 residents	47% of 4,149 residents	65% of 2,231 residents	*	65% of 84,108 residents	1% of 98,036 Berkshire county residents	63% of 98,036 residents
Bristol	32% of 482 residents	53% of 8,862 residents	44% of 18,655 residents	41% of 33,412 residents	64% of 11,566 residents	36% of 178 residents	58% of 298,351 residents	1% of 386,855 Bristol county residents	55% of 386,855 residents
Dukes	57% of 114 residents	66% of 174 residents	45% of 865 residents	43% of 942 residents	67% of 418 residents	*	68% of 13,647 residents	2% of 17,868 Dukes county residents	61% of 17,868 residents
Essex	35% of 378 residents	62% of 22,226 residents	48% of 21,799 residents	43% of 106,029 residents	69% of 17,500 residents	47% of 210 residents	66% of 432,427 residents	1% of 625,580 Essex county residents	60% of 625,580 residents
Franklin	*	57% of 1,006 residents	49% of 646 residents	51% of 1,861 residents	73% of 1,097 residents	*	68% of 47,296 residents	1% of 53,944 Franklin county residents	66% of 53,944 residents
Hampden	36% of 378 residents	54% of 8,610 residents	49% of 21,750 residents	42% of 60,990 residents	64% of 8,092 residents	43% of 194 residents	62% of 198,783 residents	2% of 317,898 Hampden county residents	55% of 317,898 residents
Hampshire	55% of 103 residents	60% of 5,428 residents	56% of 2,303 residents	56% of 5,494 residents	77% of 2,922 residents	*	72% of 96,538 residents	1% of 117,786 Hampshire county residents	69% of 117,786 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 November 21, 2022

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	41% of 992 residents	65% of 162,168 residents	54% of 61,326 residents	47% of 106,270 residents	75% of 67,474 residents	49% of 496 residents	71% of 896,939 residents	1% of 1,354,742 Middlesex county residents	66% of 1,354,742 residents
Nantucket	*	60% of 211 residents	36% of 986 residents	28% of 1,932 residents	68% of 170 residents	*	63% of 7,644 residents	1% of 11,888 Nantucket county residents	51% of 11,888 residents
Norfolk	40% of 379 residents	68% of 67,333 residents	54% of 38,102 residents	53% of 26,486 residents	74% of 31,350 residents	51% of 231 residents	69% of 410,212 residents	1% of 592,663 Norfolk county residents	66% of 592,663 residents
Plymouth	36% of 305 residents	62% of 5,349 residents	44% of 38,887 residents	47% of 15,773 residents	66% of 16,088 residents	42% of 132 residents	64% of 307,362 residents	1% of 397,032 Plymouth county residents	60% of 397,032 residents
Suffolk	43% of 632 residents	62% of 65,346 residents	55% of 109,237 residents	48% of 132,964 residents	73% of 23,388 residents	49% of 604 residents	66% of 252,411 residents	1% of 616,312 Suffolk county residents	58% of 616,312 residents
Worcester	35% of 550 residents	62% of 33,402 residents	48% of 27,422 residents	43% of 74,595 residents	69% of 20,386 residents	47% of 219 residents	64% of 445,254 residents	1% of 623,288 Worcester county residents	60% of 623,288 residents
Unknown/ Unspecified**	1% of 5,271 AI/AN residents	2% of 397,511 Asian residents	1% of 357,214 Black residents	1% of 590,847 Hispanic residents	1% of 210,756 Multi-race residents	1% of 2,586 NH/PI residents	1% of 3,773,714 White residents	0% of 5,583,972 MA residents	1% of 5,583,972 residents
Massachusetts	40% of 5,271 residents	63% of 397,511 residents	51% of 357,214 residents	46% of 590,847 residents	71% of 210,756 residents	46% of 2,586 residents	66% of 3,773,714 residents	1% of 5,583,972 MA residents	61% of 5,583,972 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 November 21, 2022

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	22% of 5,229 residents	35% of 5,885 residents	51% of 6,875 residents	43% of 16,080 residents	45% of 17,085 residents	54% of 17,243 residents	62% of 28,062 residents	73% of 19,060 residents	80% of 19,527 residents	84% of 18,303 residents	86% of 30,293 residents	65% of 184,157 residents
Berkshire	22% of 4,526 residents	41% of 3,960 residents	53% of 4,431 residents	44% of 9,984 residents	50% of 10,932 residents	59% of 10,778 residents	65% of 15,391 residents	75% of 9,276 residents	81% of 8,567 residents	82% of 7,679 residents	84% of 12,095 residents	63% of 98,036 residents
Bristol	19% of 13,766 residents	30% of 16,925 residents	46% of 19,273 residents	40% of 44,651 residents	42% of 49,259 residents	50% of 51,385 residents	58% of 65,990 residents	68% of 33,765 residents	75% of 29,116 residents	77% of 24,038 residents	79% of 37,286 residents	55% of 386,855 residents
Dukes	19% of 734 residents	46% of 767 residents	56% of 712 residents	35% of 1,967 residents	45% of 2,653 residents	56% of 2,284 residents	67% of 2,662 residents	78% of 1,430 residents	82% of 1,457 residents	85% of 1,388 residents	93% of 1,746 residents	61% of 17,868 residents
Essex	24% of 32,688 residents	40% of 30,952 residents	54% of 32,785 residents	45% of 73,239 residents	50% of 82,511 residents	58% of 81,216 residents	65% of 101,148 residents	74% of 51,873 residents	80% of 43,959 residents	81% of 35,447 residents	83% of 55,653 residents	60% of 625,580 residents
Franklin	27% of 2,209 residents	47% of 2,104 residents	52% of 2,446 residents	48% of 5,264 residents	55% of 6,626 residents	64% of 6,203 residents	68% of 8,214 residents	75% of 5,207 residents	81% of 5,382 residents	89% of 4,549 residents	86% of 5,447 residents	66% of 53,944 residents
Hampden	16% of 13,222 residents	30% of 14,692 residents	43% of 16,100 residents	38% of 38,308 residents	43% of 41,185 residents	51% of 40,257 residents	60% of 50,696 residents	70% of 27,475 residents	77% of 24,324 residents	80% of 19,905 residents	80% of 31,017 residents	55% of 317,898 residents
Hampshire	40% of 5,772 residents	58% of 4,851 residents	58% of 5,980 residents	53% of 15,527 residents	61% of 13,779 residents	69% of 13,523 residents	72% of 17,474 residents	78% of 10,151 residents	84% of 9,878 residents	88% of 8,576 residents	89% of 11,355 residents	69% of 117,786 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 November 21, 2022

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	36% of 83,418 residents	53% of 66,545 residents	62% of 65,867 residents	53% of 188,709 residents	62% of 207,669 residents	69% of 182,707 residents	72% of 198,056 residents	79% of 95,164 residents	84% of 79,512 residents	85% of 65,232 residents	86% of 104,470 residents	66% of 1,354,742 residents
Nantucket	16% of 465 residents	34% of 488 residents	44% of 494 residents	27% of 1,647 residents	37% of 2,067 residents	52% of 2,007 residents	60% of 1,919 residents	73% of 828 residents	80% of 711 residents	83% of 548 residents	83% of 692 residents	51% of 11,888 residents
Norfolk	33% of 36,821 residents	50% of 30,171 residents	64% of 30,844 residents	55% of 71,770 residents	61% of 80,988 residents	68% of 77,389 residents	72% of 93,324 residents	78% of 45,346 residents	84% of 37,956 residents	85% of 30,654 residents	86% of 50,290 residents	66% of 592,663 residents
Plymouth	18% of 18,268 residents	35% of 18,864 residents	52% of 21,345 residents	46% of 42,817 residents	49% of 46,895 residents	57% of 50,321 residents	64% of 67,534 residents	73% of 34,457 residents	80% of 30,223 residents	83% of 25,722 residents	84% of 38,555 residents	60% of 397,032 residents
Suffolk	28% of 25,185 residents	38% of 22,625 residents	45% of 27,009 residents	46% of 138,628 residents	58% of 119,344 residents	61% of 77,356 residents	67% of 76,835 residents	75% of 35,387 residents	80% of 29,596 residents	82% of 23,355 residents	84% of 36,193 residents	58% of 616,312 residents
Worcester	22% of 30,575 residents	39% of 30,512 residents	54% of 33,300 residents	46% of 76,233 residents	49% of 83,292 residents	58% of 82,998 residents	65% of 102,599 residents	74% of 51,865 residents	81% of 42,924 residents	82% of 34,205 residents	84% of 51,478 residents	60% of 623,288 residents
Unknown/ Unspecified**	0% of 277,011 MA residents 5-11 Years	0% of 252,334 MA residents 12-15 Years	1% of 276,377 MA residents 16-19 Years	3% of 776,607 MA residents 20-29 Years	2% of 798,565 MA residents 30-39 Years	1% of 717,223 MA residents 40-49 Years	1% of 853,307 MA residents 50-59 Years	1% of 432,818 MA residents 60-64 Years	1% of 371,624 MA residents 65-69 Years	1% of 306,126 MA residents 70-74 Years	1% of 478,191 MA residents 75+ Years	1% of 5,583,972 residents
Massachusetts	28% of 277,011 residents	43% of 252,334 residents	54% of 276,377 residents	47% of 776,607 residents	54% of 798,565 residents	61% of 717,223 residents	66% of 853,307 residents	74% of 432,818 residents	80% of 371,624 residents	82% of 306,126 residents	83% of 478,191 residents	61% of 5,583,972 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.