



# 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; May 10, 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 third for the percent of the population with a completed primary series among US states.

Massachusetts currently ranks third for the percent of the population ages 5 years and older who have received a bivalent booster dose among US states.



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.

# Individuals who Received COVID-19 Vaccines

Data as of May 22, 2023

Cumulative number and percent\* of people vaccinated and doses administered, comparing previous week's reports to this week's report

	Three weeks ago: cumulative through May 1, 2023	Two weeks ago: cumulative through May 8, 2023	Last week: cumulative through May 15, 2023	This week: cumulative through May 22, 2023
At least one dose -- number of <b>people</b> who received at least one dose of any COVID-19 vaccine**	6,792,669 97%	6,794,102 97%	6,794,930 97%	6,795,783 97%
Primary series complete -- number of <b>people</b> who received a primary series of vaccine	5,947,461 85%	5,949,142 85%	5,950,548 85%	5,951,768 85%
Boosted -- number of <b>people</b> who received a dose of Moderna or Pfizer booster vaccine since 9/1/2022***	2,044,815 29%	2,051,258 29%	2,057,441 29%	2,062,758 29%
Total <b>doses</b> administered	19,087,759	19,112,138	19,131,675	19,147,829

\*Percentages are based on the number of people recorded in MIIS divided by the estimated state population from the UMass Donahue Institute. See source information below.

\*\*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.

\*\*\*After 9/1/2022 nearly all booster doses were the bivalent formulation of Moderna or Pfizer COVID-19 vaccine.

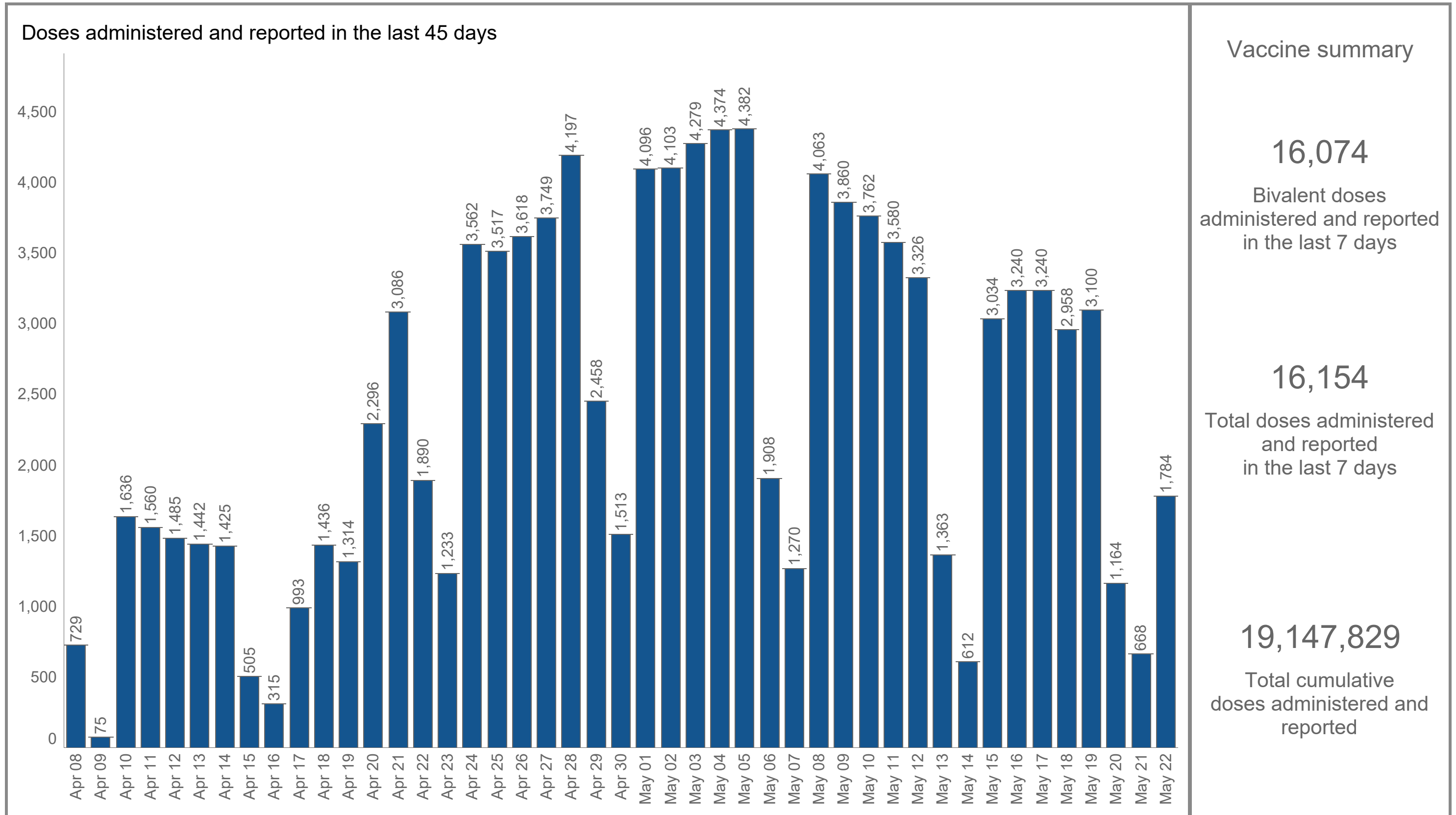
See the definitions page at the end of this document for the full definitions of the terms used on this page.

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

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.

# COVID-19 Vaccine Doses Administered

Data as of May 22, 2023



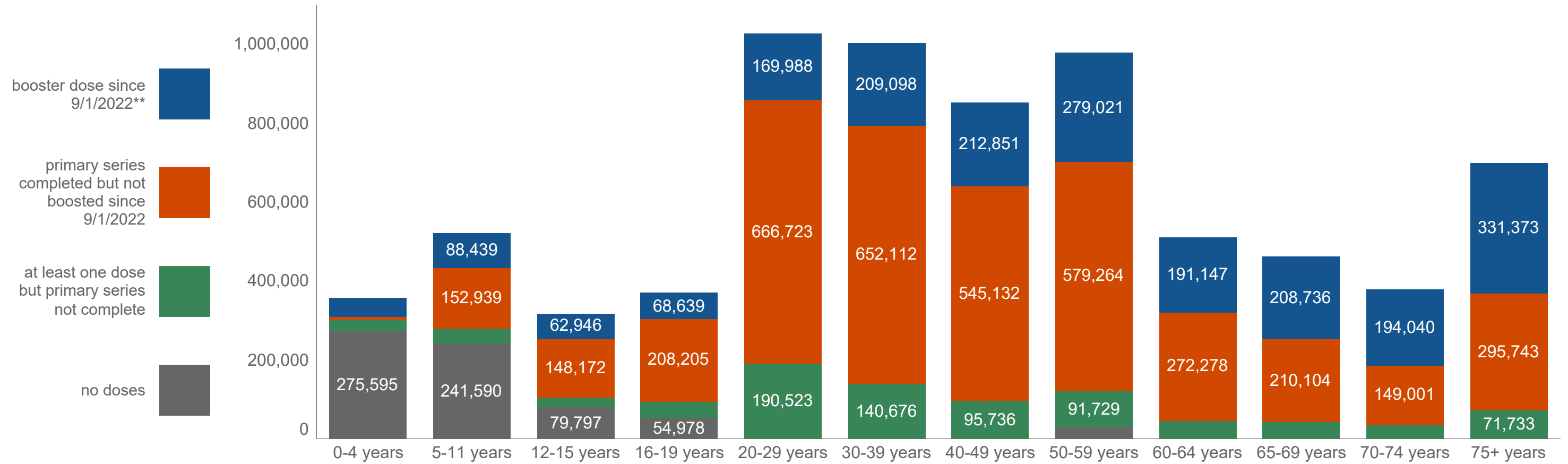
Data reflect the date doses were reported as having been administered. See definitions page at the end of this document for additional information. Source: Data from the Massachusetts Immunization Information System (MIIS) are as of midnight the night before.

# Immunization Status by Age Group

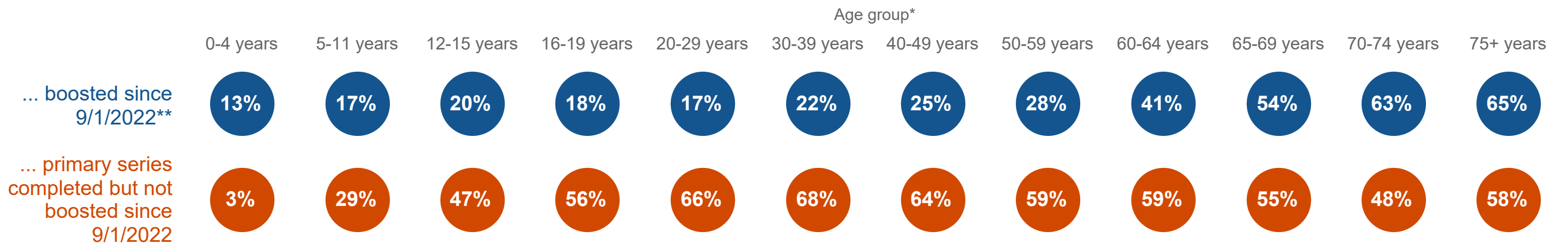
Data as of May 22, 2023

In Massachusetts, 29% of residents have been boosted since 9/1/2022\*\*, compared with 17% of the US population.

## Booster status of individuals vaccinated in MA by age group\*



## Percent of the Massachusetts population...



\*Population estimates are used to estimate the unvaccinated population by subtracting those vaccinated from the population estimate. Immunization status is reported by the age of the individual at the time of data extraction. Individuals who reach boosted status at a younger age enter older age categories over time. The number of people vaccinated in older age groups may be larger than the population estimates for those age groups. Immunization status is determined by the number and formulation of vaccine doses reported to MIIS on the individual's record.

\*\*After 9/1/2022 nearly all booster doses were the bivalent formulation of Moderna or Pfizer COVID-19 vaccine.

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) 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.) (3) Centers for Disease Control and Prevention. COVID Data Tracker. Atlanta, GA: US Department of Health and Human Services, CDC;2023-05-10. <https://covid.cdc.gov/covid-data-tracker>

# Individuals with Primary Series Complete, but not Boosted since 9/1/2022

Data as of May 22, 2023

## Individuals with primary series complete but not boosted by county, race, and Hispanic ethnicity (1 of 2)

Number of people in the county and race/ethnicity group who have completed a primary series but not received a booster dose since 9/1/2022\*\*\* 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	34% of 1,171 residents	53% of 3,230 residents	69% of 6,644 residents	83% of 7,637 residents	22% of 12,144 residents	>95% of 53 residents	47% of 198,117 residents	3% of 228,996 Barnstable county residents	50% of 228,996 residents
Berkshire	41% of 153 residents	56% of 1,978 residents	52% of 4,132 residents	50% of 6,619 residents	24% of 5,666 residents	*	47% of 110,470 residents	2% of 129,026 Berkshire county residents	49% of 129,026 residents
Bristol	42% of 1,045 residents	53% of 13,752 residents	66% of 24,506 residents	56% of 53,995 residents	26% of 32,048 residents	>95% of 148 residents	49% of 453,707 residents	3% of 579,200 Bristol county residents	52% of 579,200 residents
Dukes	34% of 219 residents	69% of 181 residents	85% of 809 residents	>95% of 452 residents	14% of 1,899 residents	*	48% of 17,031 residents	8% of 20,600 Dukes county residents	58% of 20,600 residents
Essex	39% of 808 residents	53% of 29,651 residents	63% of 27,604 residents	51% of 181,759 residents	42% of 26,257 residents	>95% of 155 residents	52% of 543,595 residents	3% of 809,829 Essex county residents	55% of 809,829 residents
Franklin	38% of 122 residents	56% of 1,215 residents	50% of 985 residents	41% of 3,329 residents	17% of 3,207 residents	*	44% of 62,163 residents	3% of 71,029 Franklin county residents	46% of 71,029 residents
Hampden	49% of 646 residents	58% of 12,176 residents	47% of 36,442 residents	42% of 120,694 residents	36% of 15,087 residents	>95% of 165 residents	49% of 280,615 residents	4% of 465,825 Hampden county residents	51% of 465,825 residents
Hampshire	36% of 199 residents	34% of 10,709 residents	37% of 4,398 residents	36% of 11,248 residents	21% of 6,930 residents	>95% of 43 residents	41% of 128,781 residents	3% of 162,308 Hampshire county residents	42% of 162,308 residents

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

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

\*\*\*After 9/1/2022 nearly all booster doses were the bivalent formulation of Moderna or Pfizer COVID-19 vaccine.

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# Individuals with Primary Series Complete, but not Boosted since 9/1/2022

Data as of May 22, 2023

## Individuals with primary series complete but not boosted by county, race, and Hispanic ethnicity (2 of 2)

Number of people in the county and race/ethnicity group who have completed a primary series but not received a booster dose since 9/1/2022\*\*\* 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	52% of 1,511 residents	50% of 212,123 residents	57% of 84,324 residents	61% of 141,738 residents	45% of 81,692 residents	>95% of 380 residents	47% of 1,110,235 residents	3% of 1,632,002 Middlesex county residents	52% of 1,632,002 residents
Nantucket	*	54% of 274 residents	91% of 1,025 residents	88% of 2,175 residents	19% of 615 residents	*	53% of 10,149 residents	6% of 14,255 Nantucket county residents	66% of 14,255 residents
Norfolk	41% of 736 residents	51% of 88,772 residents	59% of 50,563 residents	55% of 37,460 residents	61% of 29,540 residents	>95% of 151 residents	48% of 518,759 residents	2% of 725,981 Norfolk county residents	52% of 725,981 residents
Plymouth	29% of 893 residents	50% of 7,962 residents	69% of 48,249 residents	56% of 23,417 residents	32% of 35,840 residents	49% of 220 residents	51% of 414,238 residents	2% of 530,819 Plymouth county residents	54% of 530,819 residents
Suffolk	40% of 1,235 residents	59% of 81,295 residents	58% of 142,086 residents	59% of 177,973 residents	37% of 37,543 residents	>95% of 357 residents	44% of 357,446 residents	4% of 797,936 Suffolk county residents	55% of 797,936 residents
Worcester	38% of 1,183 residents	52% of 46,778 residents	50% of 45,164 residents	58% of 110,448 residents	35% of 37,582 residents	>95% of 145 residents	48% of 620,810 residents	2% of 862,111 Worcester county residents	51% 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	8% of 1,841 NH/PI residents	3% of 4,826,116 White residents	1% of 7,029,917 MA residents	3% of 7,029,917 residents
Massachusetts	44% of 9,939 residents	55% of 510,096 residents	60% of 476,930 residents	56% of 878,944 residents	39% of 326,050 residents	>95% of 1,841 residents	51% of 4,826,116 residents	4% of 7,029,917 MA residents	55% of 7,029,917 residents

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# Individuals with Primary Series Complete, but not Boosted since 9/1/2022

Data as of May 22, 2023

## Individuals with primary series complete but not boosted by county and age group (1 of 2)

Number of people in the county and age group who have completed a primary series but not received a booster dose since 9/1/2022\*\*\* 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>	1% of 8,117 residents	24% of 12,225 residents	43% of 7,999 residents	60% of 8,444 residents	67% of 22,109 residents	71% of 20,313 residents	64% of 21,363 residents	53% of 34,083 residents	50% of 21,351 residents	42% of 21,806 residents	36% of 19,831 residents	50% of 31,352 residents	50% of 228,996 residents
<b>Berkshire</b>	1% of 5,429 residents	33% of 8,296 residents	46% of 5,380 residents	52% of 6,484 residents	58% of 15,369 residents	63% of 13,757 residents	59% of 13,736 residents	51% of 19,125 residents	50% of 10,525 residents	45% of 9,518 residents	39% of 8,017 residents	49% of 13,390 residents	49% of 129,026 residents
<b>Bristol</b>	1% of 30,091 residents	20% of 45,540 residents	40% of 27,527 residents	55% of 29,121 residents	57% of 74,766 residents	60% of 73,958 residents	60% of 73,224 residents	59% of 85,414 residents	61% of 39,125 residents	59% of 31,728 residents	53% of 25,741 residents	63% of 42,964 residents	52% of 579,200 residents
<b>Dukes</b>	*	31% of 1,267 residents	54% of 785 residents	80% of 653 residents	86% of 2,070 residents	95% of 2,359 residents	77% of 2,432 residents	56% of 3,147 residents	47% of 1,702 residents	35% of 1,801 residents	34% of 1,574 residents	44% of 1,929 residents	58% of 20,600 residents
<b>Essex</b>	2% of 44,345 residents	29% of 64,079 residents	49% of 38,871 residents	61% of 41,764 residents	64% of 102,396 residents	67% of 101,407 residents	63% of 99,259 residents	59% of 118,474 residents	59% of 56,226 residents	55% of 46,143 residents	49% of 36,776 residents	59% of 60,087 residents	55% of 809,829 residents
<b>Franklin</b>	1% of 3,011 residents	26% of 4,819 residents	42% of 2,910 residents	61% of 2,764 residents	58% of 7,572 residents	56% of 8,732 residents	53% of 8,315 residents	47% of 10,333 residents	43% of 6,159 residents	38% of 5,875 residents	38% of 4,581 residents	51% of 5,954 residents	46% of 71,029 residents
<b>Hampden</b>	1% of 24,918 residents	22% of 38,042 residents	40% of 23,128 residents	49% of 26,022 residents	53% of 65,472 residents	60% of 59,405 residents	62% of 53,671 residents	58% of 62,992 residents	59% of 31,187 residents	57% of 25,936 residents	52% of 20,519 residents	63% of 34,534 residents	51% of 465,825 residents
<b>Hampshire</b>	3% of 5,278 residents	29% of 8,930 residents	38% of 5,934 residents	20% of 16,019 residents	38% of 33,434 residents	61% of 16,604 residents	54% of 16,047 residents	49% of 20,206 residents	47% of 10,664 residents	42% of 9,895 residents	40% of 7,914 residents	53% of 11,383 residents	42% of 162,308 residents

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# Individuals with Primary Series Complete, but not Boosted since 9/1/2022

Data as of May 22, 2023

## Individuals with primary series complete but not boosted by county and age group (2 of 2)

Number of people in the county and age group who have completed a primary series but not received a booster dose since 9/1/2022\*\*\* 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	5% of 83,667 residents	34% of 121,734 residents	49% of 73,083 residents	55% of 82,715 residents	61% of 242,436 residents	63% of 242,118 residents	59% of 206,995 residents	55% of 222,367 residents	54% of 100,804 residents	50% of 81,083 residents	43% of 64,640 residents	53% of 110,359 residents	52% of 1,632,002 residents
Nantucket	*	28% of 1,012 residents	61% of 562 residents	80% of 507 residents	89% of 1,722 residents	84% of 2,214 residents	83% of 2,184 residents	74% of 2,082 residents	61% of 945 residents	55% of 764 residents	52% of 562 residents	48% of 847 residents	66% of 14,255 residents
Norfolk	3% of 37,515 residents	34% of 56,630 residents	47% of 35,180 residents	60% of 36,428 residents	67% of 90,767 residents	64% of 95,497 residents	57% of 93,243 residents	55% of 105,961 residents	55% of 48,444 residents	50% of 39,164 residents	43% of 31,323 residents	50% of 55,829 residents	52% of 725,981 residents
Plymouth	2% of 27,514 residents	26% of 42,518 residents	44% of 26,597 residents	62% of 27,177 residents	66% of 61,517 residents	64% of 61,280 residents	62% of 65,393 residents	60% of 81,528 residents	60% of 38,334 residents	55% of 31,886 residents	47% of 26,374 residents	61% of 40,701 residents	54% of 530,819 residents
Suffolk	2% of 40,171 residents	28% of 47,420 residents	49% of 26,325 residents	38% of 46,527 residents	62% of 176,345 residents	69% of 145,860 residents	67% of 88,768 residents	59% of 87,549 residents	55% of 40,123 residents	54% of 32,272 residents	50% of 24,580 residents	53% of 41,995 residents	55% of 797,936 residents
Worcester	2% of 45,082 residents	27% of 68,600 residents	44% of 42,016 residents	55% of 46,659 residents	59% of 114,476 residents	62% of 111,763 residents	60% of 108,360 residents	56% of 126,900 residents	56% of 58,820 residents	54% of 46,033 residents	47% of 35,450 residents	55% of 57,952 residents	51% 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	3% 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	3% of 980,162 MA residents 50-59 Years	3% of 464,409 MA residents 60-64 Years	3% of 383,903 MA residents 65-69 Years	2% of 307,883 MA residents 70-74 Years	3% of 509,277 MA residents 75+ Years	3% of 7,029,917 residents
Massachusetts	3% of 356,875 residents	29% of 521,112 residents	47% of 316,296 residents	56% of 371,285 residents	66% of 1,010,451 residents	68% of 955,267 residents	64% of 852,990 residents	59% of 980,162 residents	59% of 464,409 residents	55% of 383,903 residents	48% of 307,883 residents	58% of 509,277 residents	55% of 7,029,917 residents

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# Individuals Boosted since 9/1/2022

Data as of May 22, 2023

## Individuals boosted since 9/1/2022 by county, race, and Hispanic ethnicity (1 of 2)

Number of people in the county and race/ethnicity group who have received a booster dose since 9/1/2022 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	13% of 1,171 residents	20% of 3,230 residents	14% of 6,644 residents	29% of 7,637 residents	18% of 12,144 residents	*	35% of 198,117 residents	0% of 228,996 Barnstable county residents	33% of 228,996 residents
Berkshire	*	20% of 1,978 residents	14% of 4,132 residents	17% of 6,619 residents	18% of 5,666 residents	*	30% of 110,470 residents	1% of 129,026 Berkshire county residents	29% of 129,026 residents
Bristol	8% of 1,045 residents	17% of 13,752 residents	17% of 24,506 residents	12% of 53,995 residents	14% of 32,048 residents	*	21% of 453,707 residents	0% of 579,200 Bristol county residents	20% of 579,200 residents
Dukes	17% of 219 residents	32% of 181 residents	30% of 809 residents	39% of 452 residents	10% of 1,899 residents	*	36% of 17,031 residents	1% of 20,600 Dukes county residents	35% of 20,600 residents
Essex	10% of 808 residents	25% of 29,651 residents	18% of 27,604 residents	12% of 181,759 residents	29% of 26,257 residents	25% of 155 residents	30% of 543,595 residents	0% of 809,829 Essex county residents	26% of 809,829 residents
Franklin	*	32% of 1,215 residents	19% of 985 residents	19% of 3,329 residents	19% of 3,207 residents	*	35% of 62,163 residents	1% of 71,029 Franklin county residents	34% of 71,029 residents
Hampden	9% of 646 residents	16% of 12,176 residents	16% of 36,442 residents	11% of 120,694 residents	21% of 15,087 residents	22% of 165 residents	24% of 280,615 residents	1% of 465,825 Hampden county residents	20% of 465,825 residents
Hampshire	15% of 199 residents	20% of 10,709 residents	18% of 4,398 residents	17% of 11,248 residents	24% of 6,930 residents	*	36% of 128,781 residents	1% of 162,308 Hampshire county residents	34% of 162,308 residents

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# Individuals Boosted since 9/1/2022

Data as of May 22, 2023

## Individuals boosted since 9/1/2022 by county, race, and Hispanic ethnicity (2 of 2)

Number of people in the county and race/ethnicity group who have received a booster dose since 9/1/2022 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	19% of 1,511 residents	31% of 212,123 residents	21% of 84,324 residents	20% of 141,738 residents	42% of 81,692 residents	33% of 380 residents	37% of 1,110,235 residents	1% of 1,632,002 Middlesex county residents	35% of 1,632,002 residents
Nantucket	*	22% of 274 residents	10% of 1,025 residents	5% of 2,175 residents	12% of 615 residents	*	25% of 10,149 residents	0% of 14,255 Nantucket county residents	21% of 14,255 residents
Norfolk	10% of 736 residents	29% of 88,772 residents	20% of 50,563 residents	22% of 37,460 residents	51% of 29,540 residents	38% of 151 residents	34% of 518,759 residents	1% of 725,981 Norfolk county residents	33% of 725,981 residents
Plymouth	7% of 893 residents	20% of 7,962 residents	16% of 48,249 residents	15% of 23,417 residents	16% of 35,840 residents	15% of 220 residents	26% of 414,238 residents	0% of 530,819 Plymouth county residents	24% of 530,819 residents
Suffolk	14% of 1,235 residents	28% of 81,295 residents	22% of 142,086 residents	20% of 177,973 residents	29% of 37,543 residents	42% of 357 residents	31% of 357,446 residents	1% of 797,936 Suffolk county residents	27% of 797,936 residents
Worcester	9% of 1,183 residents	23% of 46,778 residents	15% of 45,164 residents	14% of 110,448 residents	23% of 37,582 residents	32% of 145 residents	26% of 620,810 residents	0% of 862,111 Worcester county residents	24% of 862,111 residents
Unknown/ Unspecified**	1% of 9,939 AI/AN residents	1% of 510,096 Asian residents	0% of 476,930 Black residents	0% of 878,944 Hispanic residents	1% of 326,050 Multi-race residents	3% of 1,841 NH/PI residents	1% of 4,826,116 White residents	0% of 7,029,917 MA residents	1% of 7,029,917 residents
Massachusetts	13% of 9,939 residents	29% of 510,096 residents	20% of 476,930 residents	16% of 878,944 residents	30% of 326,050 residents	33% of 1,841 residents	32% of 4,826,116 residents	1% of 7,029,917 MA residents	29% of 7,029,917 residents

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

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

\*\*\*After 9/1/2022 nearly all booster doses were the bivalent formulation of Moderna or Pfizer COVID-19 vaccine.

See the definitions page at the end of this document for the full definitions of the terms used on this page.

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 were created with small, compounded rounding and records with unknown demographic information.

# Individuals Boosted since 9/1/2022

Data as of May 22, 2023

## Individuals boosted since 9/1/2022 by county and age group (1 of 2)

Number of people in the county and age group who have received a booster dose since 9/1/2022 divided by the estimated 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>	12% of 12,225 residents	14% of 7,999 residents	16% of 8,444 residents	11% of 22,109 residents	14% of 20,313 residents	18% of 21,363 residents	23% of 34,083 residents	38% of 21,351 residents	51% of 21,806 residents	62% of 19,831 residents	75% of 31,352 residents	33% of 228,996 residents
<b>Berkshire</b>	13% of 8,296 residents	14% of 5,380 residents	14% of 6,484 residents	11% of 15,369 residents	16% of 13,757 residents	21% of 13,736 residents	25% of 19,125 residents	38% of 10,525 residents	50% of 9,518 residents	62% of 8,017 residents	66% of 13,390 residents	29% of 129,026 residents
<b>Bristol</b>	8% of 45,540 residents	10% of 27,527 residents	11% of 29,121 residents	9% of 74,766 residents	11% of 73,958 residents	14% of 73,224 residents	19% of 85,414 residents	32% of 39,125 residents	45% of 31,728 residents	50% of 25,741 residents	51% of 42,964 residents	20% of 579,200 residents
<b>Dukes</b>	19% of 1,267 residents	27% of 785 residents	34% of 653 residents	13% of 2,070 residents	20% of 2,359 residents	23% of 2,432 residents	29% of 3,147 residents	42% of 1,702 residents	49% of 1,801 residents	64% of 1,574 residents	82% of 1,929 residents	35% of 20,600 residents
<b>Essex</b>	14% of 64,079 residents	18% of 38,871 residents	18% of 41,764 residents	12% of 102,396 residents	16% of 101,407 residents	21% of 99,259 residents	25% of 118,474 residents	39% of 56,226 residents	51% of 46,143 residents	58% of 36,776 residents	61% of 60,087 residents	26% of 809,829 residents
<b>Franklin</b>	14% of 4,819 residents	23% of 2,910 residents	24% of 2,764 residents	15% of 7,572 residents	20% of 8,732 residents	26% of 8,315 residents	29% of 10,333 residents	40% of 6,159 residents	55% of 5,875 residents	73% of 4,581 residents	74% of 5,954 residents	34% of 71,029 residents
<b>Hampden</b>	8% of 38,042 residents	11% of 23,128 residents	11% of 26,022 residents	8% of 65,472 residents	11% of 59,405 residents	15% of 53,671 residents	21% of 62,992 residents	33% of 31,187 residents	46% of 25,936 residents	55% of 20,519 residents	53% of 34,534 residents	20% of 465,825 residents
<b>Hampshire</b>	25% of 8,930 residents	30% of 5,934 residents	12% of 16,019 residents	13% of 33,434 residents	27% of 16,604 residents	33% of 16,047 residents	35% of 20,206 residents	49% of 10,664 residents	63% of 9,895 residents	78% of 7,914 residents	80% of 11,383 residents	34% of 162,308 residents

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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 Boosted since 9/1/2022

Data as of May 22, 2023

## Individuals boosted since 9/1/2022 by county and age group (2 of 2)

Number of people in the county and age group who have received a booster dose since 9/1/2022 divided by the estimated 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	26% of 121,734 residents	29% of 73,083 residents	26% of 82,715 residents	21% of 242,436 residents	28% of 242,118 residents	34% of 206,995 residents	35% of 222,367 residents	47% of 100,804 residents	60% of 81,083 residents	68% of 64,640 residents	69% of 110,359 residents	35% of 1,632,002 residents
Nantucket	9% of 1,012 residents	15% of 562 residents	12% of 507 residents	7% of 1,722 residents	9% of 2,214 residents	13% of 2,184 residents	23% of 2,082 residents	31% of 945 residents	51% of 764 residents	64% of 562 residents	64% of 847 residents	21% of 14,255 residents
Norfolk	23% of 56,630 residents	25% of 35,180 residents	26% of 36,428 residents	19% of 90,767 residents	24% of 95,497 residents	29% of 93,243 residents	33% of 105,961 residents	45% of 48,444 residents	59% of 39,164 residents	66% of 31,323 residents	65% of 55,829 residents	33% of 725,981 residents
Plymouth	11% of 42,518 residents	12% of 26,597 residents	14% of 27,177 residents	11% of 61,517 residents	13% of 61,280 residents	16% of 65,393 residents	22% of 81,528 residents	34% of 38,334 residents	49% of 31,886 residents	58% of 26,374 residents	64% of 40,701 residents	24% of 530,819 residents
Suffolk	20% of 47,420 residents	23% of 26,325 residents	13% of 46,527 residents	16% of 176,345 residents	26% of 145,860 residents	28% of 88,768 residents	31% of 87,549 residents	40% of 40,123 residents	49% of 32,272 residents	58% of 24,580 residents	57% of 41,995 residents	27% of 797,936 residents
Worcester	11% of 68,600 residents	15% of 42,016 residents	15% of 46,659 residents	12% of 114,476 residents	15% of 111,763 residents	19% of 108,360 residents	24% of 126,900 residents	38% of 58,820 residents	52% of 46,033 residents	60% of 35,450 residents	61% of 57,952 residents	24% of 862,111 residents
Unknown/ Unspecified**	0% of 521,112 MA residents 5-11 Years	0% of 316,296 MA residents 12-15 Years	1% of 371,285 MA residents 16-19 Years	2% of 1,010,451 MA residents 20-29 Years	1% of 955,267 MA residents 30-39 Years	1% of 852,990 MA residents 40-49 Years	1% of 980,162 MA residents 50-59 Years	1% of 464,409 MA residents 60-64 Years	1% 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	1% of 7,029,917 residents
Massachusetts	17% of 521,112 residents	20% of 316,296 residents	18% of 371,285 residents	17% of 1,010,451 residents	22% of 955,267 residents	25% of 852,990 residents	28% of 980,162 residents	41% of 464,409 residents	54% of 383,903 residents	63% of 307,883 residents	65% of 509,277 residents	29% of 7,029,917 residents

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

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

\*\*\*After 9/1/2022 nearly all booster doses were the bivalent formulation of Moderna or Pfizer COVID-19 vaccine.

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## Critical definitions

**Please note:** the following terms and definition apply to COVID-19 only. Updated 4/5/2023

**Doses administered:** All doses of COVID-19 vaccine that have been reported to MIIS are included in this measurement. This includes doses reported by RICAIR, the Rhode Island immunization registry, and the Veterans Administration for individuals with Massachusetts addresses.

**At least one dose:** An individual is counted as having at least one dose if they have a COVID-19 vaccine on record.

**Primary series complete:** An individual is counted as having primary series complete if they meet the CDC guidelines (see <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html>), which are based on age and vaccine formulation.

**Boosted after 9/1/2022:** An individual is counted as boosted if they received a booster dose of vaccine after 9/1/2022. (For a small number of children, this included monovalent boosters for a series of weeks.) Updated guidance replaces previous guidance for individuals to receive multiple boosters based on age or medical condition.

**No doses:** This is an estimate based on subtracting the number of people who received at least one dose from the population estimate the specified population. It is possible for individuals to have received vaccine without it being reported to MIIS.

**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 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.

For more information on COVID-19 vaccines, visit the CDC's website at: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html>