

Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on November 3, 2022 and includes data through October 31, 2022. Note that data for recent weeks may be under-reported due to lags in data entry. This report includes data on primary vaccinations and booster doses.

Milwaukee County COVID-19 Vaccination Totals December 12, 2020 - October 31, 2022			
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,186,402	676,701	509,701
Pfizer	718,836	434,609	284,227
Pfizer Age 5-11	58,977	30,974	28,003
Pfizer Age 6M-4Y	7,663	2,976	4,687
Moderna	358,742	183,947	174,795
Moderna Age 6m-5Y	4,905	1,965	2,940
Johnson & Johnson	34,813	20,846	13,967
Total vaccine doses administered (including boosters)	1,682,611	925,104	757,507
Pfizer	967,241	570,731	396,510
Pfizer Age 5-11	64,493	33,207	31,286
Pfizer Age 6M-4Y	7,683	2,990	4,693
Pfizer Bivalent Booster	59,169	30,434	28,735
Moderna	509,757	251,354	258,403
Moderna Age 6M-5Y	4,926	1,969	2,957
Moderna Bivalent Booster	31,791	12,126	19,665
Johnson & Johnson	37,551	22,293	15,258
*Total individuals with one or more doses	630,998	363,245	267,753
Pfizer	371,744	226,321	145,423
Pfizer Age 5-11	31,419	16,953	14,466
Pfizer Age 6M-4Y	3,808	1,635	2,173
Moderna	185,038	95,564	89,474
Moderna Age 6M-5Y	2,878	1,184	1,694
Johnson & Johnson	34,703	20,775	13,928
*Total individuals completely vaccinated	587,320	333,187	254,133
Pfizer	347,572	208,377	139,195
Pfizer Age 5-11	27,740	14,154	13,586
Pfizer Age 6M-4Y	1,143	328	815
Moderna	174,128	88,767	85,361
Moderna Age 6M-5Y	2,032	784	1,248
Johnson & Johnson	34,703	20,775	13,928
*Total individuals boosted	338,961	176,307	162,654
Pfizer	201,853	110,074	91,779
Pfizer Age 5-11	6,219	2,522	3,697
Pfizer Age 6M-4Y	1	0	1
Moderna	114,497	54,344	60,153
Moderna Age 6M-5Y	4	1	3
Johnson & Johnson	16,386	9,365	7,021
*Individuals are grouped by the first vaccine product received. Note a small number of people received a different vaccine product for their second dose in a series			

**Percentage of Population Vaccinated
December 12, 2020 - October 31, 2022**

	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	66.1%	70.3%	74.4%	75.2%
Completely vaccinated	61.6%	65.8%	69.9%	70.7%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	60.9%	65.4%	70.2%	71.2%
Completely vaccinated	55.8%	60.2%	64.9%	66.0%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	74.9%	78.5%	81.3%	81.6%
Completely vaccinated	71.1%	75.0%	77.7%	77.9%

***Population estimates from 2018 US Census American Community Survey**

**Percentage of Population Boosted
December 12, 2020 - October 31, 2022**

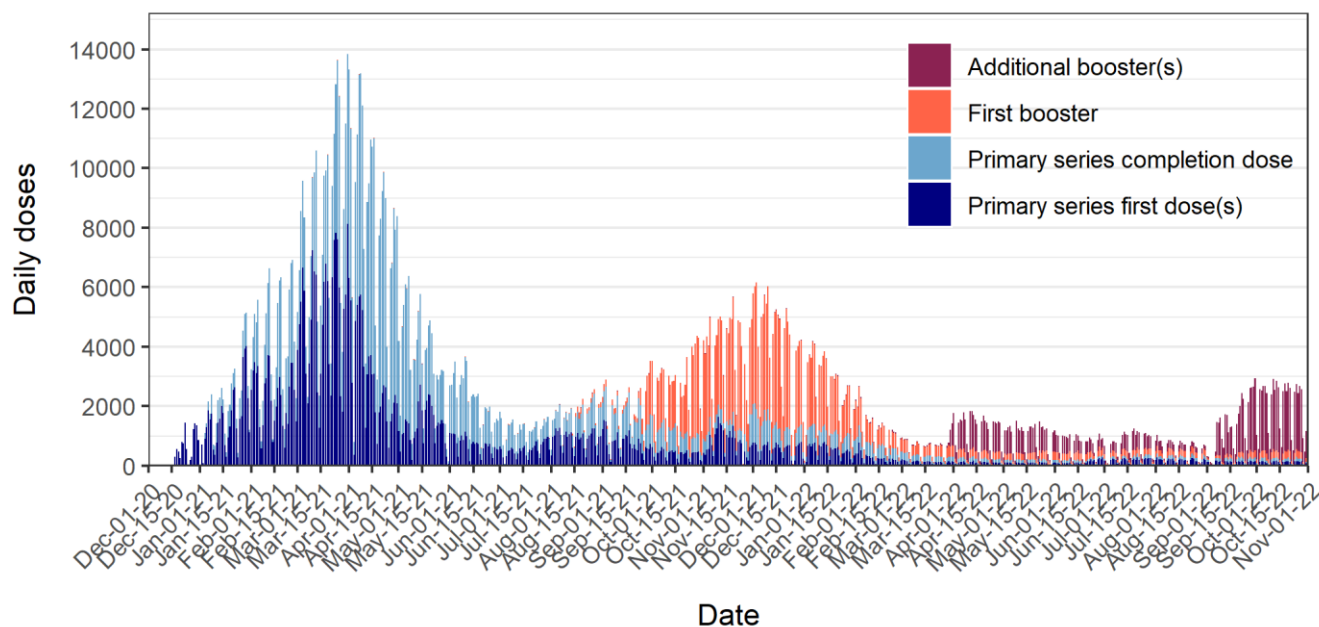
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	575,967
Received booster dose	35.5%	58.8%
City of Milwaukee		
*Population	596,886	326,349
Received booster dose	29.5%	54.0%
Milwaukee County Suburbs		
*Population	357,323	249,618
Received booster dose	45.5%	65.1%

***Overall population estimates from 2018 US Census American Community Survey**
****Booster eligible population is aged 5+ with complete primary vaccination prior to June 3, 2022 for Pfizer or Moderna series, or prior to September 1, 2022 for Johnson & Johnson**

Daily COVID-19 doses administered to Milwaukee County residents

Figure 1 shows daily total COVID-19 vaccine doses administered to Milwaukee County residents. A total of 1,682,611 doses (including first booster doses) have been administered from December 12, 2020 through October 31, 2022. The dark blue color represents the first dose in a series (Pfizer or Moderna). The light blue color indicates a completion dose (first dose of Johnson & Johnson, second dose of Pfizer or Moderna, or third dose for Pfizer age 6M-4Y). The orange color indicates a booster dose (second dose following Johnson & Johnson or third dose following Pfizer or Moderna series).

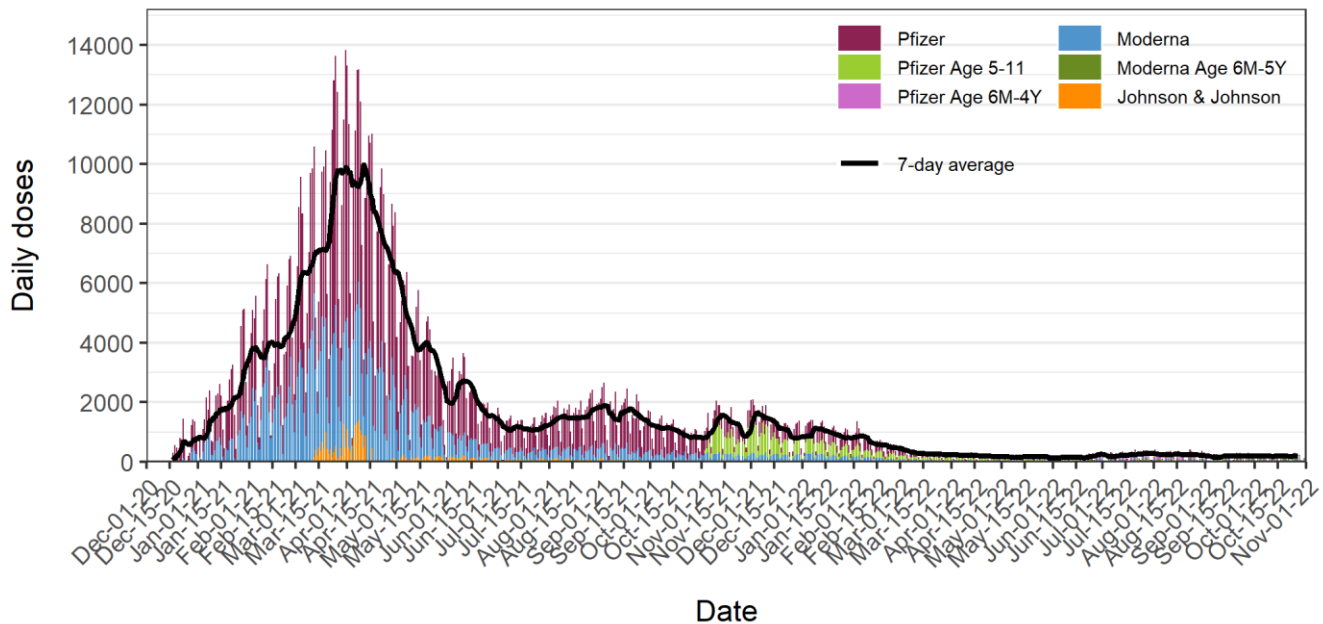
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

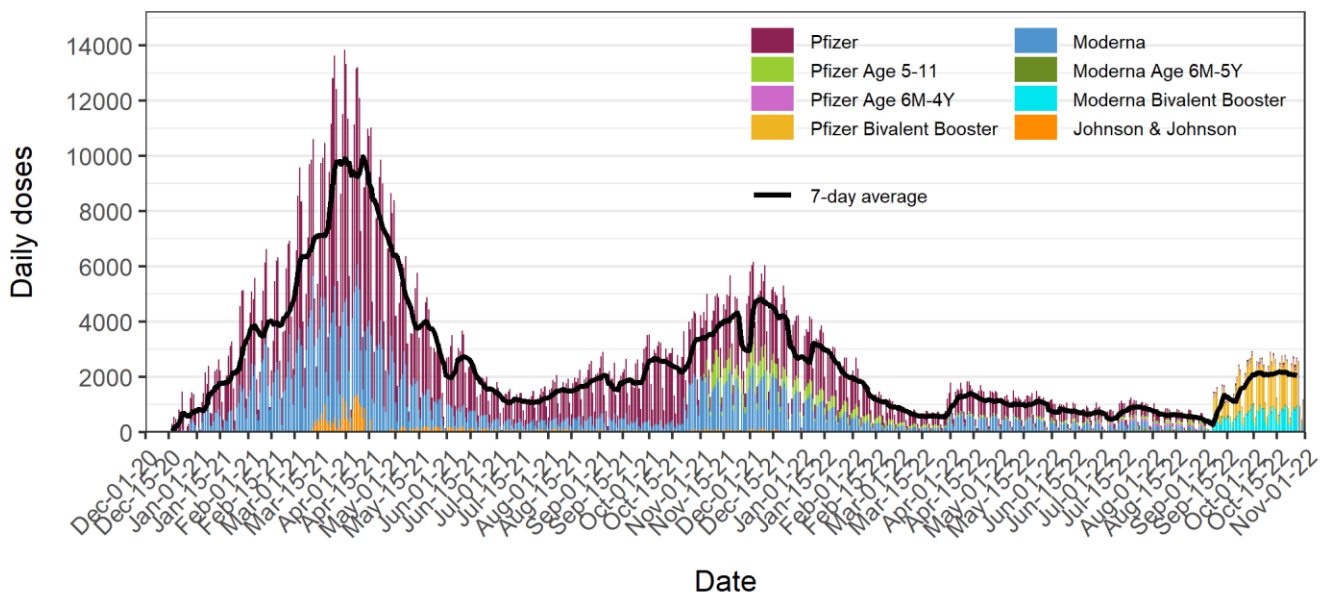
Figures 2a and 2b show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: Pfizer (red), Pfizer Age 5-11 (green), Moderna (blue), and Johnson & Johnson (orange). Daily primary vaccination doses peaked in late March to early April 2021 and have since declined until mid-summer when slight increases occurred in tandem with increasing cases thought to be driven by the delta variant. An increase in primary vaccination doses is observed in the second week of November 2021, driven by new eligibility among ages 5-11.

Figure 2a: Daily COVID-19 primary vaccination doses administered to Milwaukee Co. residents



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Figure 2b: Daily COVID-19 vaccination doses administered to Milwaukee Co. residents (includes booster doses)

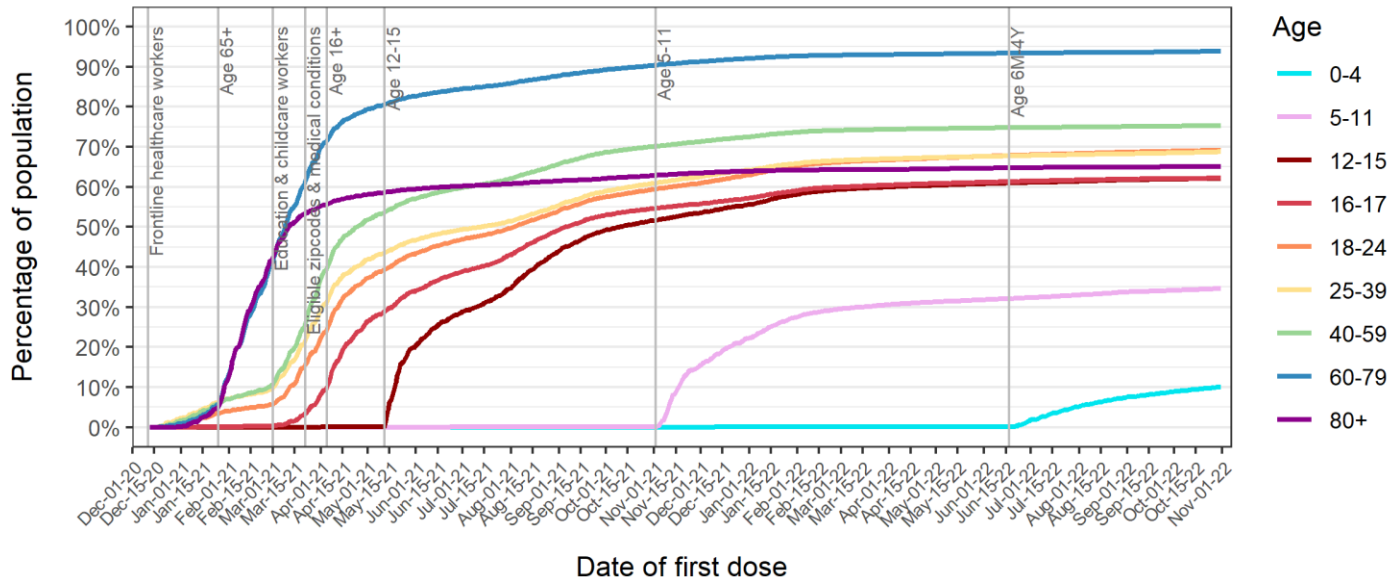


Data source: Wisconsin Immunization Registry (WIR)
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Percentages of Milwaukee County residents partially and completely vaccinated by age group

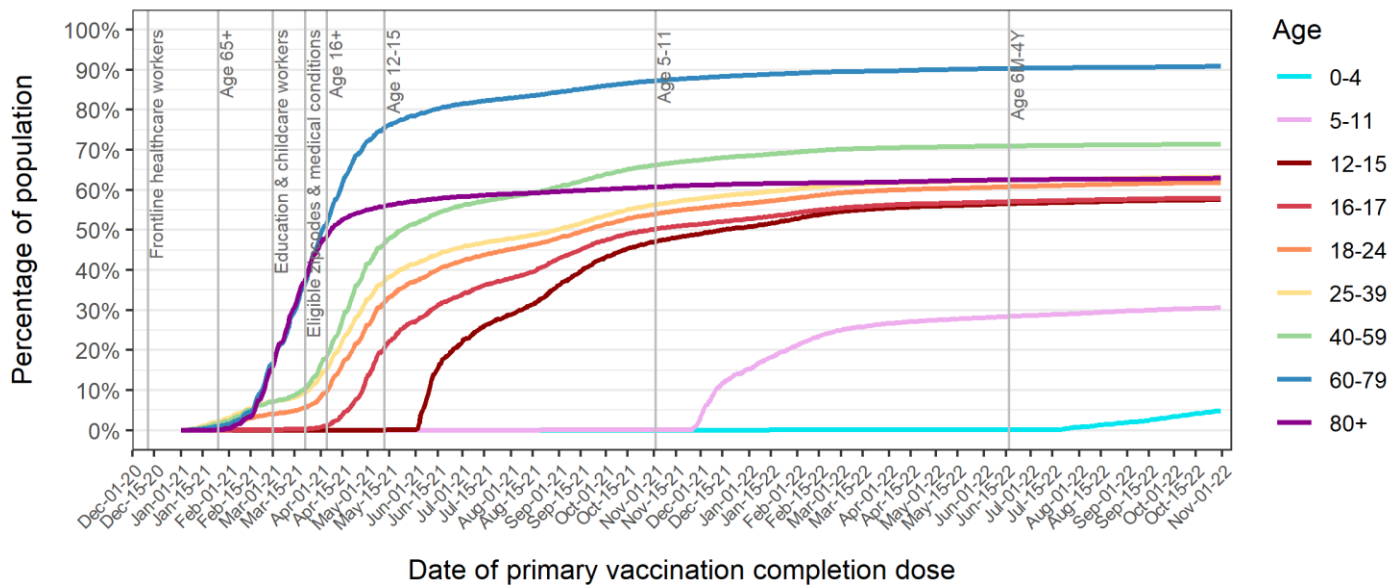
Figure 3 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

Figure 3: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Figure 4: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

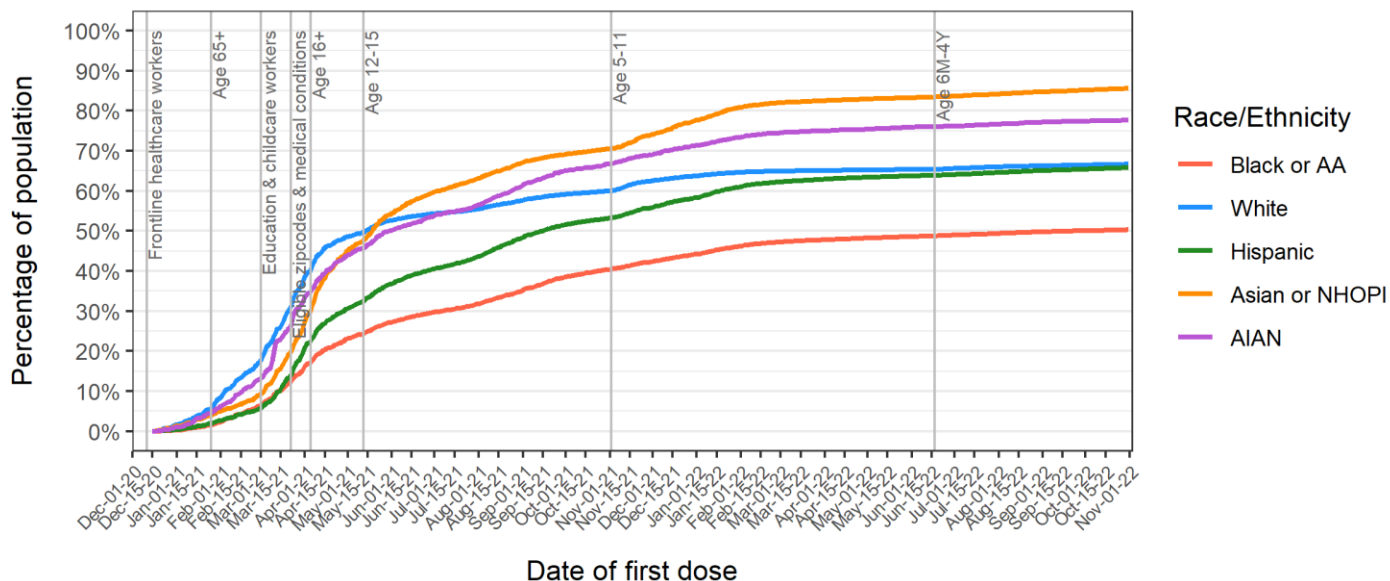


Data source: Wisconsin Immunization Registry (WIR)
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Percentages of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

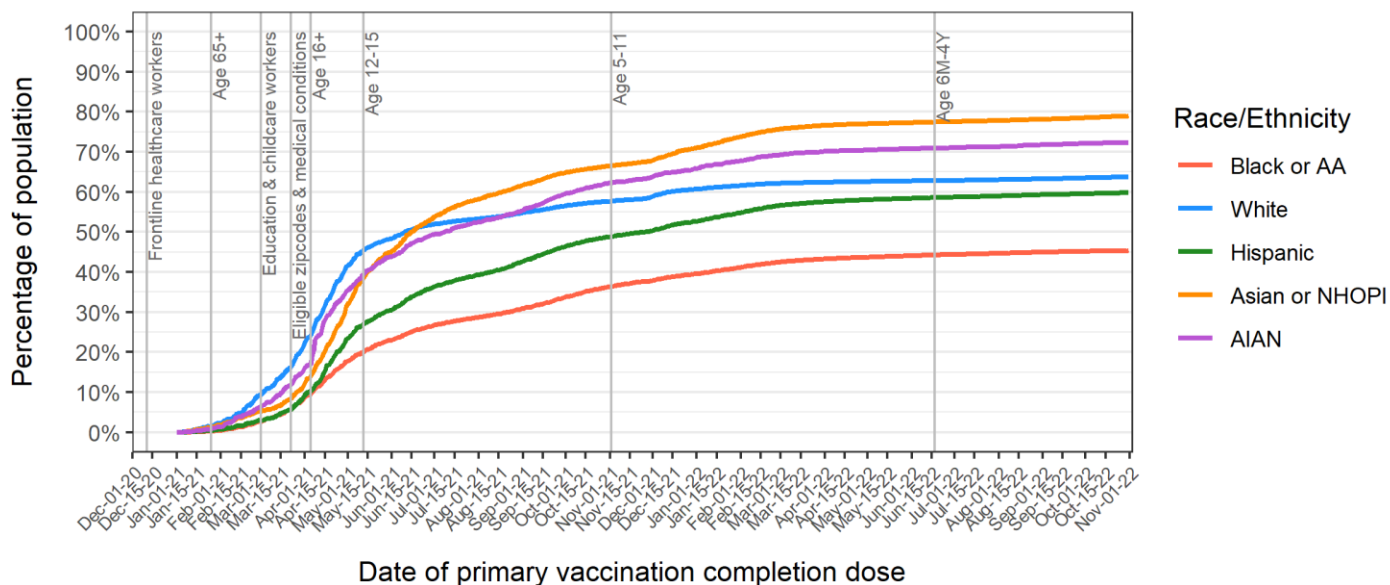
Figure 5 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

Figure 5: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Figure 6: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine



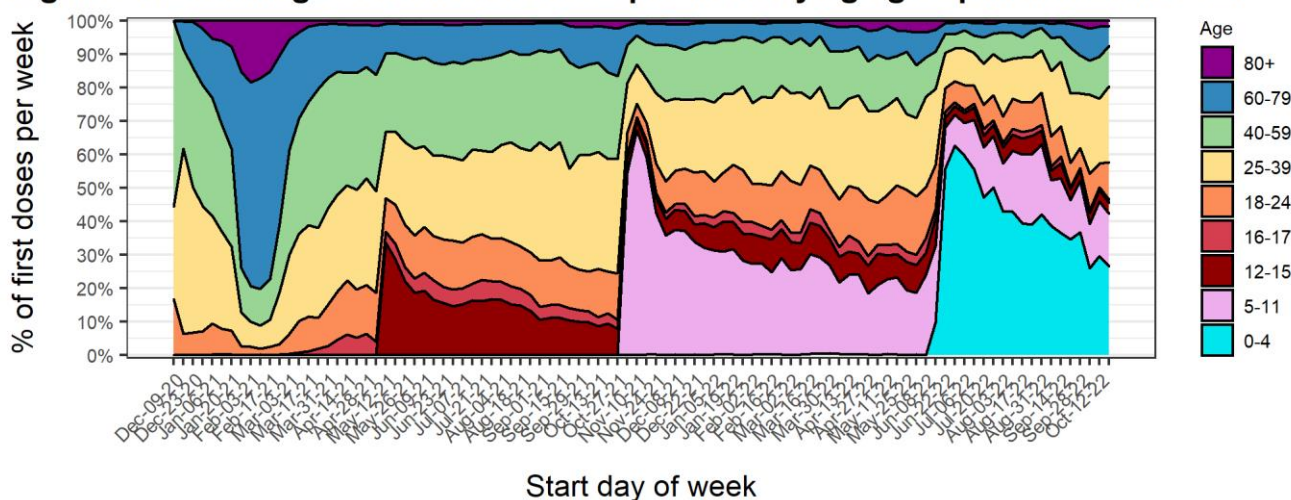
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Percentages of first doses of COVID-19 vaccine administered to Milwaukee County residents by age and race/ethnicity groups

Figure 7 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by age group. After vaccines first became available to healthcare personnel, middle-aged groups (25-59) were the majority of new vaccinees. After eligibility opened up to ages 65+, the oldest two age groups became the majority. The younger age groups (< 60) became the majority of people newly vaccinated since eligibility opened up to education staff on March 1st. With the eligibility of children aged 12+, we observed a sharp increase in vaccination for children. Similar increases were observed with the new eligibility of children ages 5-11, and later for ages 6M-4Y.

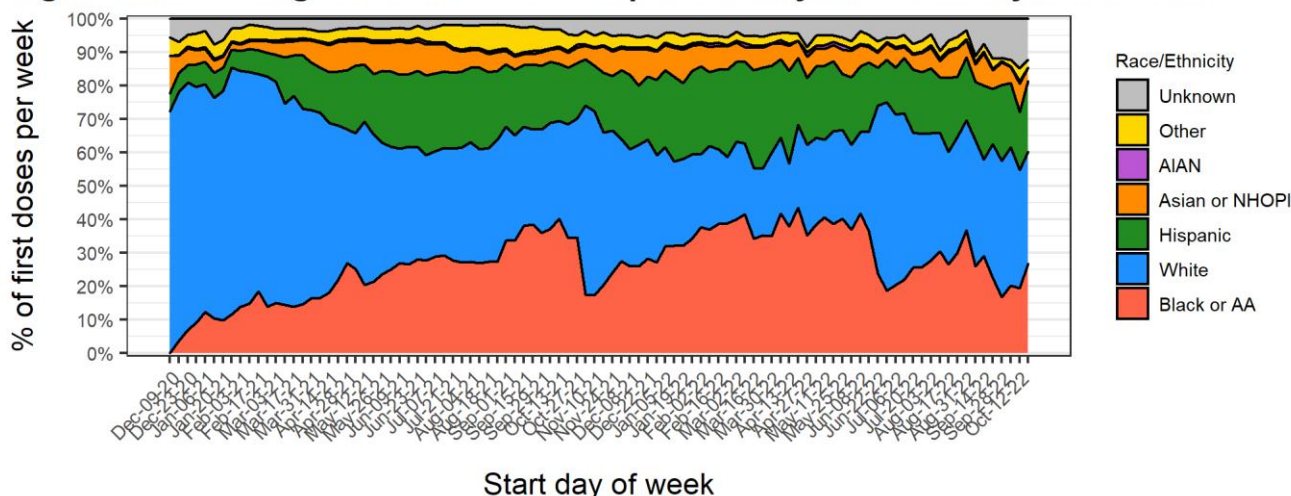
Figure 8 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the newly vaccinated over time.

Figure 7: Percentage of total first doses per week by age group in Milwaukee Co.



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.



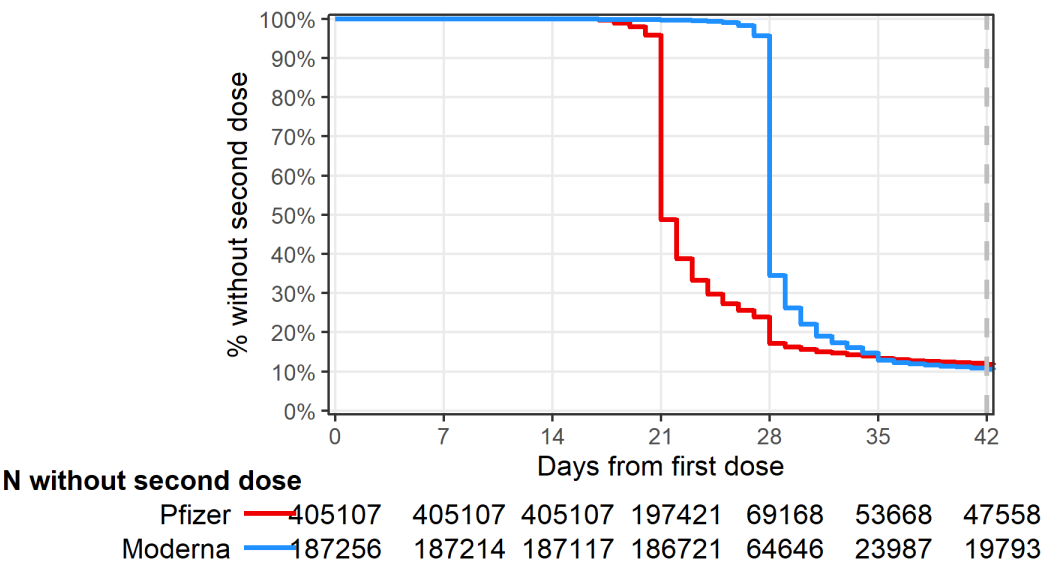
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Completion of primary immunization series among Milwaukee County residents who received at least one dose of Pfizer or Moderna vaccines

Figure 9 describes the timing between primary vaccination doses for Milwaukee County residents who received Pfizer or Moderna vaccines. This graph includes data for residents who received their first dose of Pfizer or Moderna at least 42 days ago (prior to September 18, 2022). The recommended interval for receiving the second dose is 21 days for the Pfizer vaccine and 28 days for the Moderna vaccine; the second dose is considered valid if administered 4 days prior to the recommended interval and up to 42 days following the first dose for each vaccine.

Fully 88.6% of all residents who received their first dose of Pfizer prior to September 18, 2022 received their second dose within 42 days, indicating very strong completion within guidelines for those receiving a first dose.

Figure 9: Vaccine series completion among Milwaukee Co. residents receiving Pfizer or Moderna



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Summary of vaccine series completion and booster rates among vaccinated Milwaukee County residents

Table 1 summarizes the rates of primary vaccination series completion and booster uptake by groups based on first vaccine product received, age, sex, and race/ethnicity. The first column, rates of primary vaccination series completion, includes data for residents who received a first dose of Pfizer or Moderna at least 42 days ago; 42 days is the maximum recommended period for receiving the second dose. The second column, rates of booster uptake, includes data for booster eligible residents only; booster eligibility criteria are currently age 12 or older, with one dose of Johnson & Johnson vaccine at least 2 months ago or completion of Pfizer or Moderna primary vaccination series at least 5 months ago. While vaccine series completion rates are high and vary only slightly among groups, receipt of booster doses among booster eligible individuals varies significantly by vaccine product, age, and race/ethnicity with slight variation by sex.

Characteristic	Percent with second dose within 42 days among Pfizer and Moderna recipients ¹	*Percent boosted among eligible ¹
First vaccine received		
Pfizer	357,549 / 405,107 (88.3%)	207,876 / 368,484 (56.4%)
Moderna	167,463 / 187,256 (89.4%)	114,416 / 172,810 (66.2%)
Johnson & Johnson		16,386 / 34,673 (47.3%)
Age		
0-4	4,060 / 5,479 (74.1%)	
5-11	24,946 / 30,972 (80.5%)	6,219 / 25,644 (24.3%)
12-15	26,429 / 30,246 (87.4%)	11,046 / 27,568 (40.1%)
16-17	13,197 / 15,062 (87.6%)	6,062 / 13,837 (43.8%)
18-24	47,972 / 57,744 (83.1%)	22,201 / 54,920 (40.4%)
25-39	123,807 / 142,617 (86.8%)	69,264 / 139,401 (49.7%)
40-59	144,300 / 159,715 (90.3%)	100,338 / 163,718 (61.3%)
60-79	119,456 / 128,083 (93.3%)	104,533 / 128,840 (81.1%)
80+	20,845 / 22,445 (92.9%)	19,015 / 22,039 (86.3%)
Sex		
Female	282,009 / 316,870 (89.0%)	185,343 / 305,949 (60.6%)
Male	241,872 / 274,049 (88.3%)	152,775 / 268,761 (56.8%)
Unknown	1,131 / 1,444 (78.3%)	560 / 1,257 (44.6%)
Race/Ethnicity		
Black or AA	96,579 / 116,840 (82.7%)	53,844 / 109,853 (49.0%)
White	287,198 / 310,487 (92.5%)	211,039 / 309,866 (68.1%)
Hispanic	73,196 / 85,965 (85.1%)	37,871 / 82,152 (46.1%)
Asian or NHOPI	29,524 / 33,509 (88.1%)	15,898 / 31,407 (50.6%)
AIAN	2,986 / 3,395 (88.0%)	1,844 / 3,292 (56.0%)
Other	20,297 / 23,139 (87.7%)	11,170 / 22,172 (50.4%)
Unknown	15,232 / 19,028 (80.1%)	7,012 / 17,225 (40.7%)

¹n / N (%)

*Booster eligible population is aged 5+ with complete primary vaccination prior to June 3, 2022 for Pfizer or Moderna series, or prior to September 1, 2022 for Johnson & Johnson

Data Sources & Acknowledgments

This report was created by faculty and staff in the Medical College of Wisconsin (MCW) Institute for Health and Equity (IHE) in partnership with representatives from local health departments and faculty from the University of Wisconsin-Milwaukee Zilber School of Public Health. Data sources include the Wisconsin Immunization Registry (WIR) and the US Census Bureau.

Contact Information

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