

Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on February 24, 2022 and includes data through February 21, 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 (second dose following Johnson & Johnson primary vaccination or third dose following Pfizer or Moderna primary vaccination series).

Milwaukee County COVID-19 Vaccination Totals December 15, 2020 - February 21, 2022			
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,145,658	649,235	496,423
Pfizer	701,769	420,867	280,902
Pfizer Age 5-11	48,042	23,475	24,567
Moderna	361,267	184,187	177,080
Johnson & Johnson	34,580	20,706	13,874
Total vaccine doses administered (including boosters)	1,432,845	793,712	639,133
Pfizer	877,053	514,932	362,121
Pfizer Age 5-11	48,042	23,475	24,567
Moderna	470,547	233,241	237,306
Johnson & Johnson	37,203	22,064	15,139
*Total individuals with one or more doses	612,712	350,507	262,205
Pfizer	364,559	220,231	144,328
Pfizer Age 5-11	26,508	13,481	13,027
Moderna	187,065	96,089	90,976
Johnson & Johnson	34,580	20,706	13,874
*Total individuals completely vaccinated	567,526	319,434	248,092
Pfizer	336,931	200,395	136,536
Pfizer Age 5-11	21,691	10,086	11,605
Moderna	174,324	88,247	86,077
Johnson & Johnson	34,580	20,706	13,874
*Total individuals boosted	287,187	144,477	142,710
Pfizer	171,289	90,061	81,228
Pfizer Age 5-11	2	1	1
Moderna	102,028	46,786	55,242
Johnson & Johnson	13,868	7,629	6,239
*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 15, 2020 - February 21, 2022**

	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	64.2%	69.0%	73.6%	74.5%
Completely vaccinated	59.5%	63.9%	68.5%	69.5%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	58.7%	63.6%	68.9%	70.1%
Completely vaccinated	53.5%	57.9%	63.2%	64.4%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	73.4%	78.0%	81.2%	81.6%
Completely vaccinated	69.4%	73.8%	77.1%	77.4%
*Population estimates from 2018 US Census American Community Survey				

**Percentage of Population Boosted
December 15, 2020 - February 21, 2022**

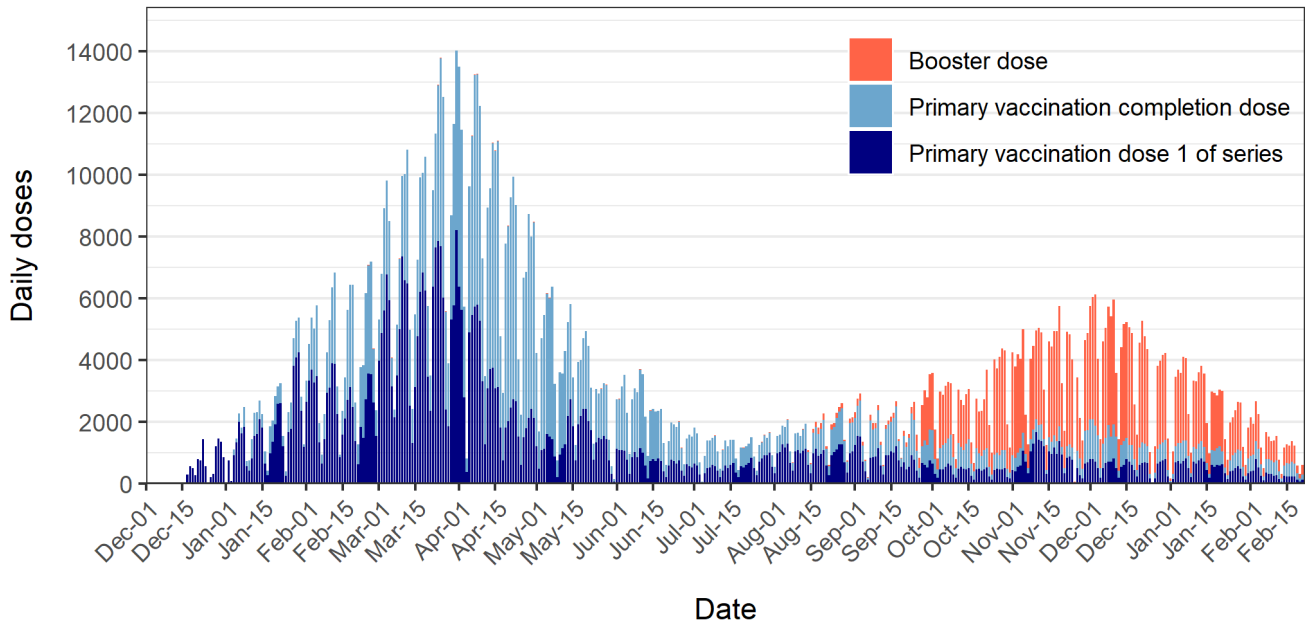
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	494,331
Received booster dose	30.1%	58.0%
City of Milwaukee		
*Population	596,886	273,036
Received booster dose	24.2%	52.8%
Milwaukee County Suburbs		
*Population	357,323	221,295
Received booster dose	39.9%	64.5%

***Overall population estimates from 2018 US Census American Community Survey
Booster eligible population is aged 12+ with complete primary vaccination prior to September 24, 2021 for Pfizer or Moderna series, or prior to December 23, 2021 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 1,432,845 doses (including boosters) have been administered from December 15, 2020 through February 21, 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 or second dose of Pfizer or Moderna). The orange color indicates a booster dose (second dose following Johnson & Johnson or third dose following Pfizer or Moderna series).

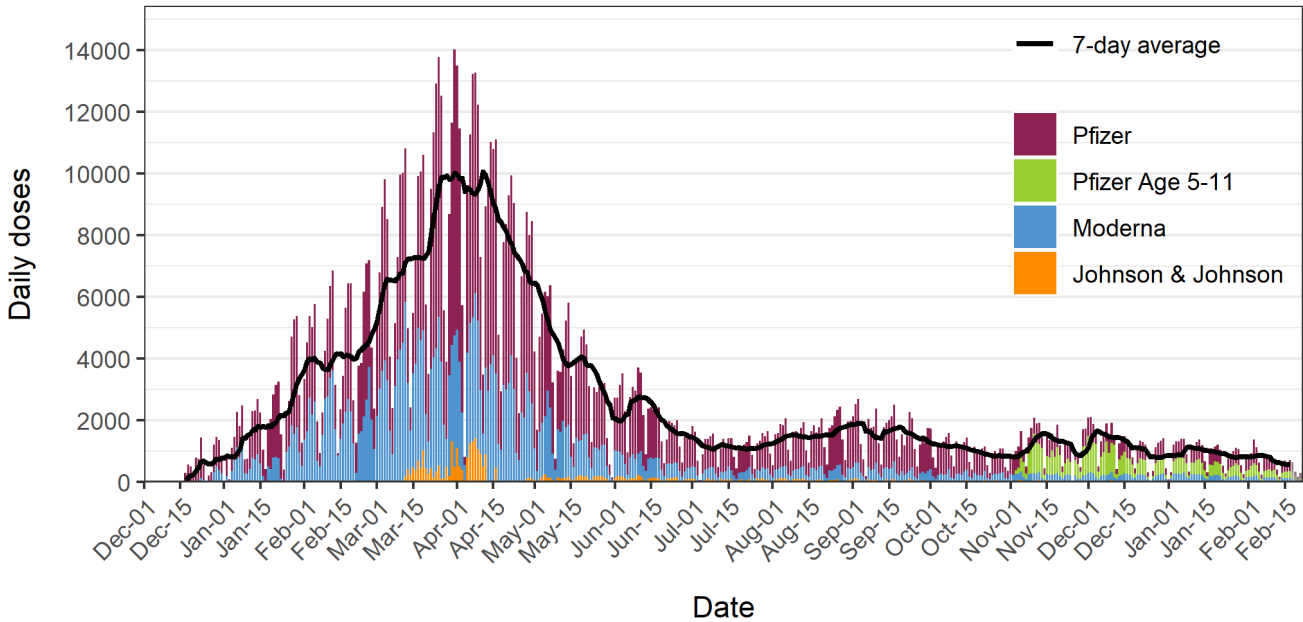
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents



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

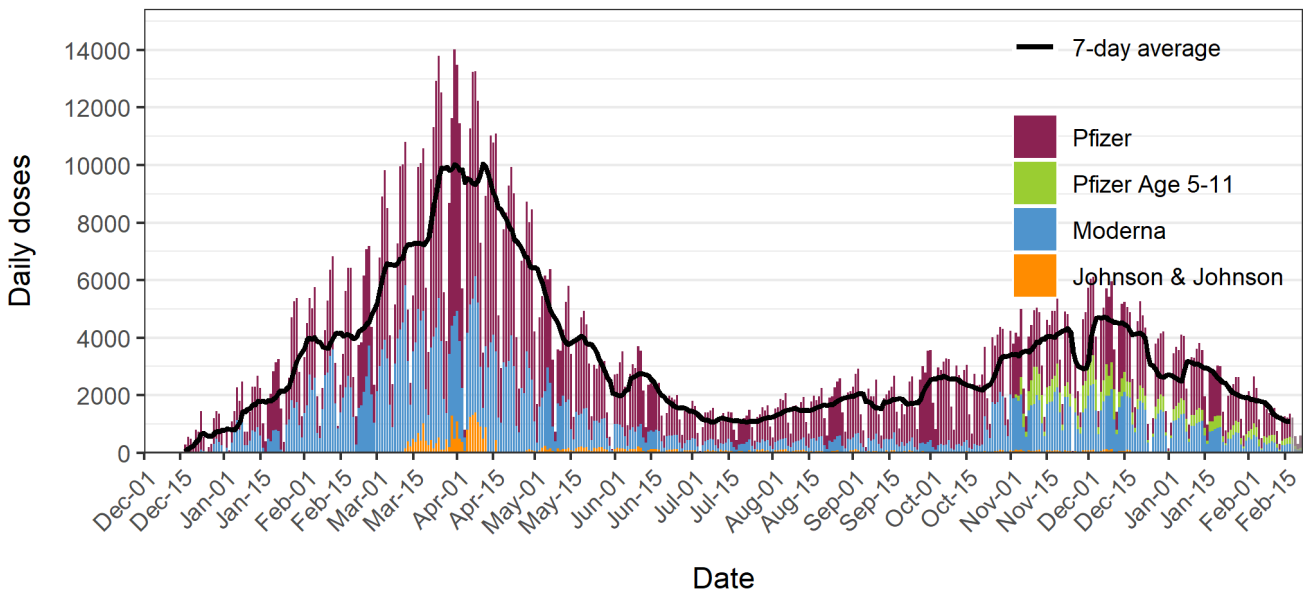
Figures 2a and 2b show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: 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)

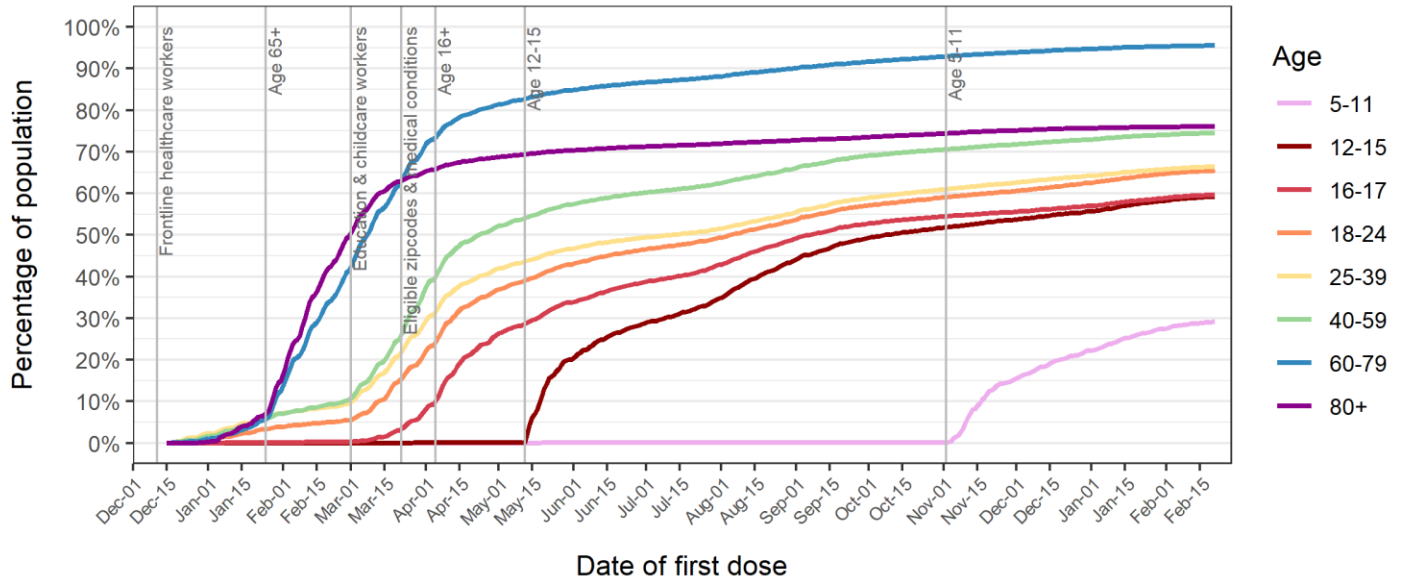


Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Percentages of Milwaukee County residents partially and completely vaccinated by age group

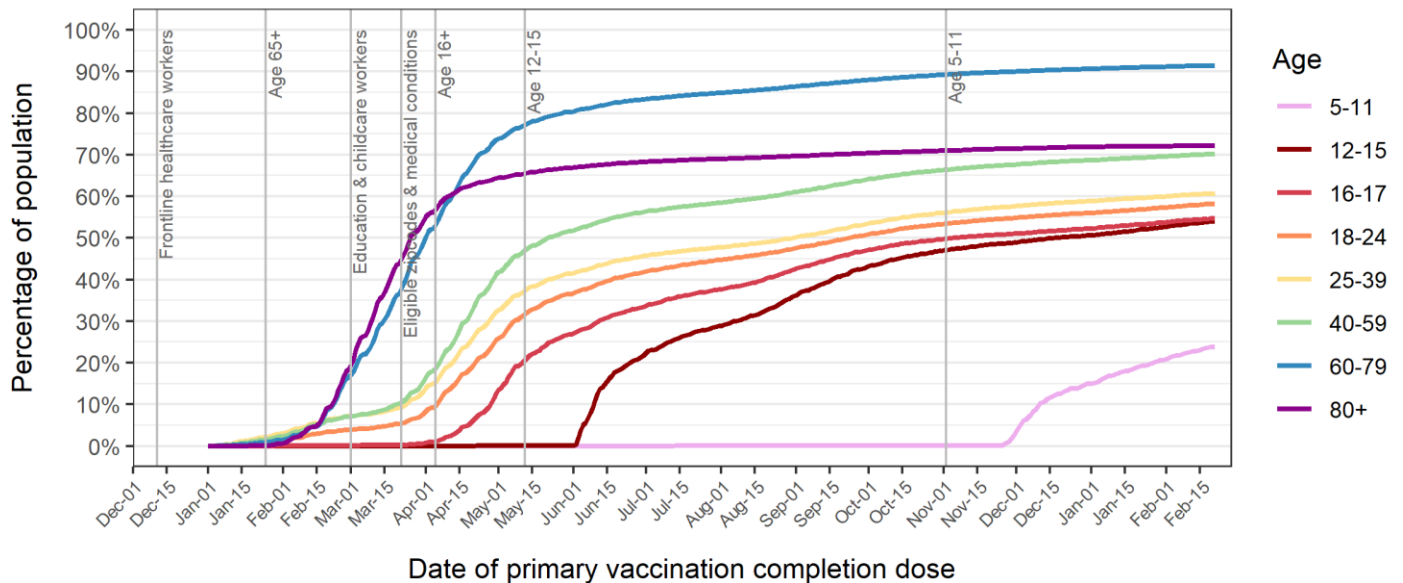
Figure 3 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines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

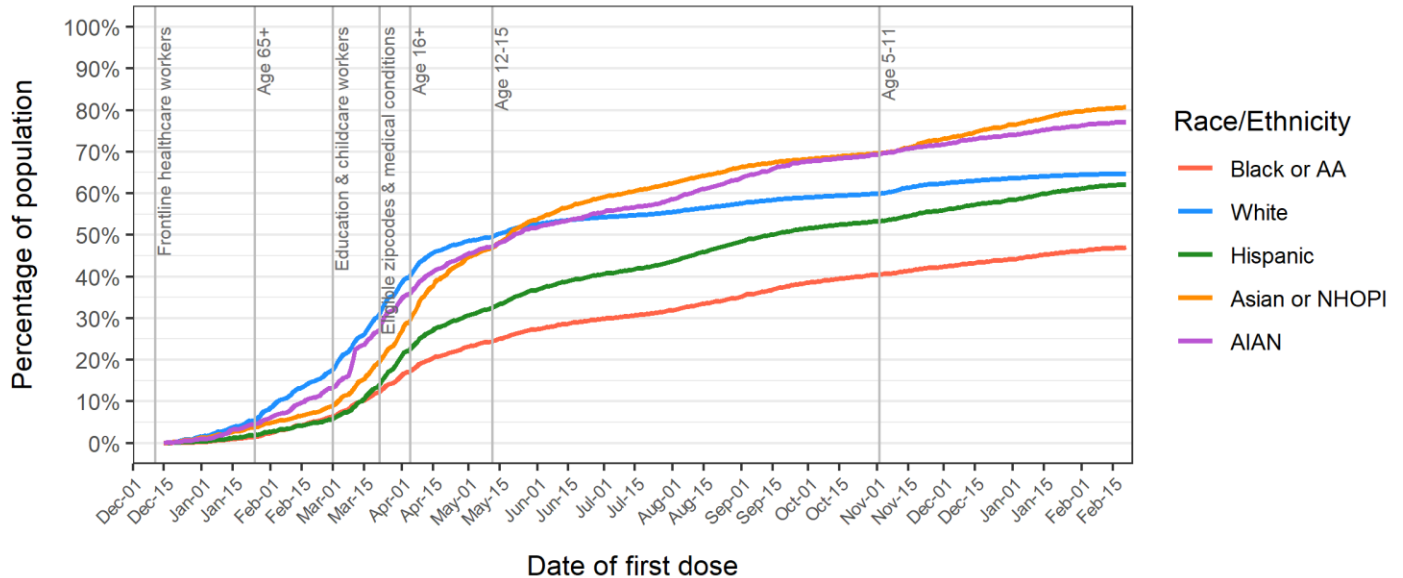


Data source: Wisconsin Immunization Registry (WIR)
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Proportions of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

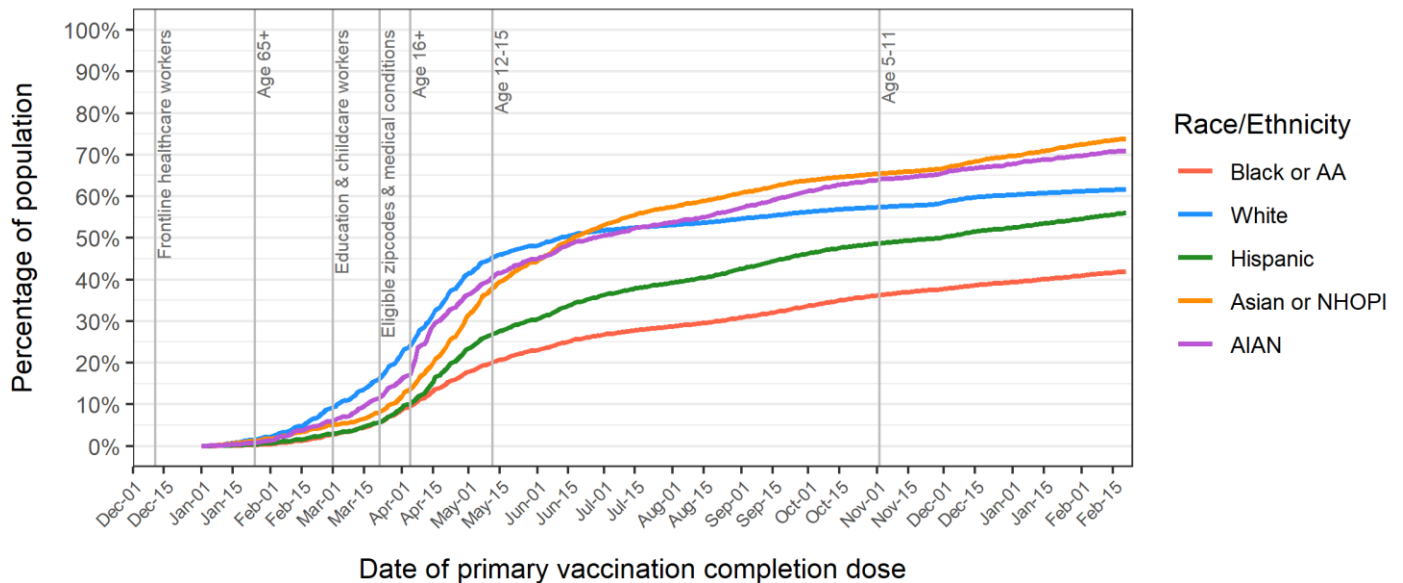
Figure 5 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity group.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



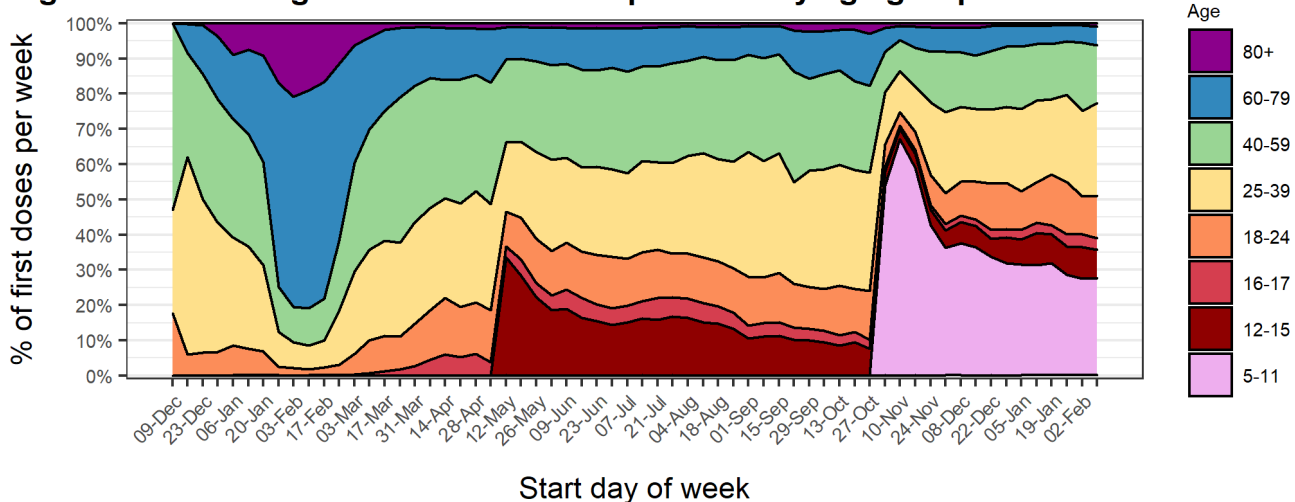
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

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. A similar increase was observed with the new eligibility of children ages 5-11.

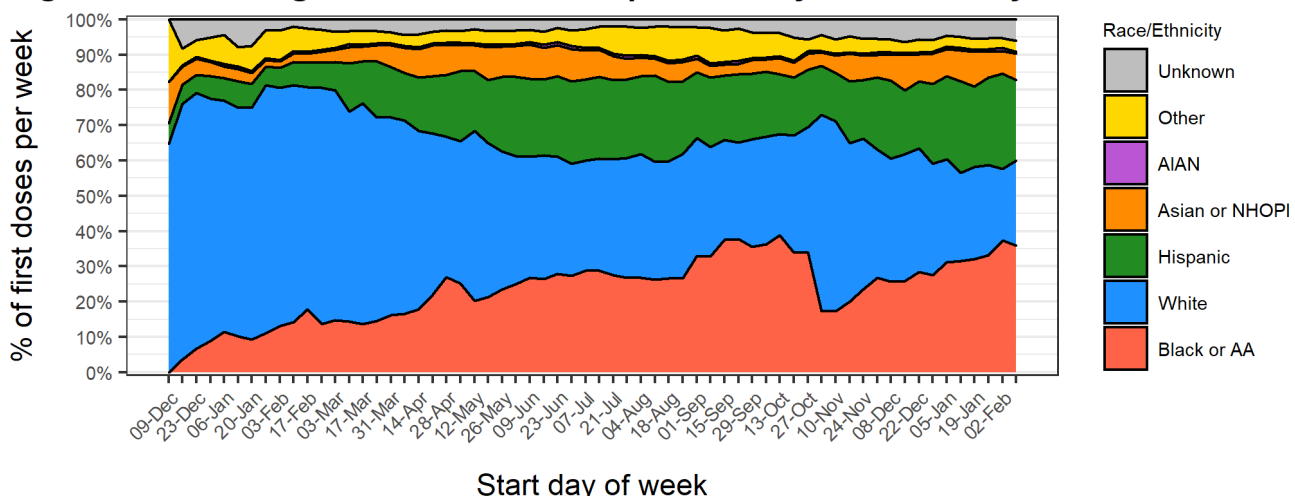
Figure 8 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the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



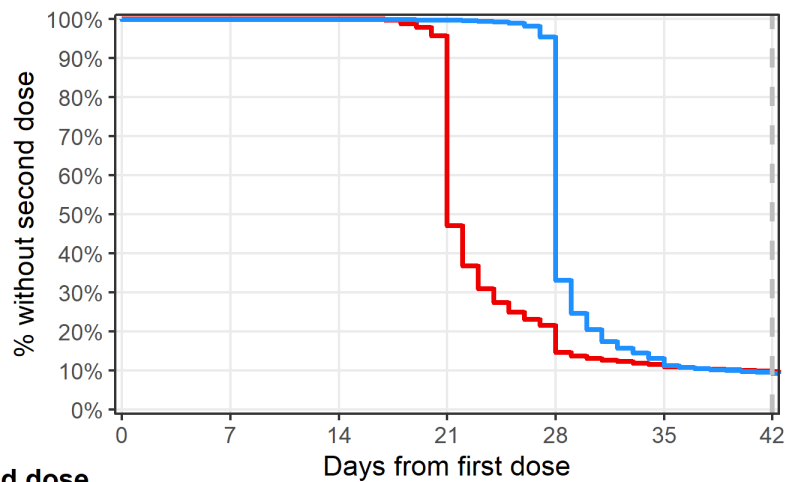
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

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 January 9, 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 90.4% of all residents who received their first dose of Pfizer prior to January 9, 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



N without second dose

	0	7	14	21	28	35	42
Pfizer	377569	377566	377564	177994	55032	41642	36651
Moderna	184128	183854	183742	183374	60811	20885	17117

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	340,897 / 377,545 (90.3%)	171,087 / 298,259 (57.4%)
Moderna	167,011 / 184,128 (90.7%)	101,944 / 161,969 (62.9%)
Johnson & Johnson		13,868 / 34,103 (40.7%)
Age		
5-11	18,603 / 21,604 (86.1%)	
12-15	24,776 / 27,531 (90.0%)	6,269 / 20,569 (30.5%)
16-17	12,499 / 13,959 (89.5%)	4,256 / 11,265 (37.8%)
18-24	45,292 / 52,796 (85.8%)	17,540 / 45,822 (38.3%)
25-39	119,295 / 134,526 (88.7%)	58,821 / 119,066 (49.4%)
40-59	142,009 / 155,525 (91.3%)	86,306 / 147,452 (58.5%)
60-79	121,243 / 129,629 (93.5%)	95,227 / 125,370 (76.0%)
80+	24,191 / 26,103 (92.7%)	18,480 / 24,787 (74.6%)
Sex		
Female	273,347 / 300,945 (90.8%)	156,829 / 262,723 (59.7%)
Male	233,337 / 259,234 (90.0%)	129,512 / 230,322 (56.2%)
Unknown	1,224 / 1,494 (81.9%)	558 / 1,286 (43.4%)
Race/Ethnicity		
Black or AA	89,369 / 103,938 (86.0%)	40,810 / 83,023 (49.2%)
White	278,035 / 298,359 (93.2%)	184,437 / 277,193 (66.5%)
Hispanic	67,879 / 77,392 (87.7%)	27,341 / 64,446 (42.4%)
Asian or NHOPI	27,518 / 30,433 (90.4%)	12,576 / 25,783 (48.8%)
AIAN	2,915 / 3,271 (89.1%)	1,519 / 2,827 (53.7%)
Other	25,690 / 28,754 (89.3%)	13,336 / 24,099 (55.3%)
Unknown	16,502 / 19,526 (84.5%)	6,880 / 16,960 (40.6%)

¹n / N (%)

*Booster eligible population is aged 12+ with complete primary vaccination prior to September 24, 2021 for Pfizer or Moderna series, or prior to December 23, 2021 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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