

Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on March 9, 2022 and includes data through March 7, 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 - March 7, 2022			
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,152,074	653,936	498,138
Pfizer	705,309	423,629	281,680
Pfizer Age 5-11	49,855	24,728	25,127
Moderna	362,258	184,835	177,423
Johnson & Johnson	34,652	20,744	13,908
Total vaccine doses administered (including boosters)	1,445,448	802,423	643,025
Pfizer	884,925	520,606	364,319
Pfizer Age 5-11	49,855	24,728	25,127
Moderna	473,371	234,979	238,392
Johnson & Johnson	37,297	22,110	15,187
*Total individuals with one or more doses	615,135	352,288	262,847
Pfizer	365,936	221,311	144,625
Pfizer Age 5-11	27,138	13,928	13,210
Moderna	187,409	96,305	91,104
Johnson & Johnson	34,652	20,744	13,908
*Total individuals completely vaccinated	571,591	322,392	249,199
Pfizer	339,058	202,048	137,010
Pfizer Age 5-11	22,892	10,906	11,986
Moderna	174,989	88,694	86,295
Johnson & Johnson	34,652	20,744	13,908
*Total individuals boosted	293,374	148,487	144,887
Pfizer	175,278	92,668	82,610
Pfizer Age 5-11	2	1	1
Moderna	103,842	47,920	55,922
Johnson & Johnson	14,252	7,898	6,354
*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 - March 7, 2022**

	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	64.5%	69.3%	73.8%	74.8%
Completely vaccinated	59.9%	64.4%	68.9%	69.8%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	59.0%	63.9%	69.1%	70.3%
Completely vaccinated	54.0%	58.5%	63.6%	64.9%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	73.6%	78.2%	81.3%	81.7%
Completely vaccinated	69.7%	74.1%	77.3%	77.6%
*Population estimates from 2018 US Census American Community Survey				

**Percentage of Population Boosted
December 15, 2020 - March 7, 2022**

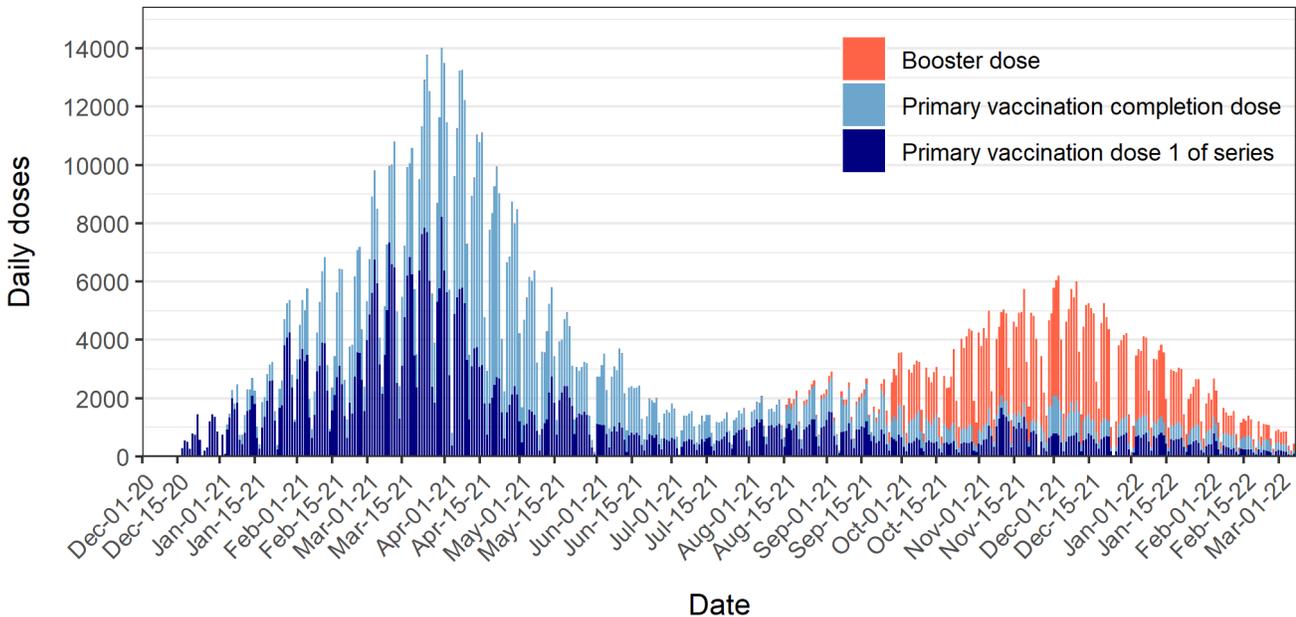
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	504,281
Received booster dose	30.7%	58.1%
City of Milwaukee		
*Population	596,886	279,835
Received booster dose	24.9%	53.0%
Milwaukee County Suburbs		
*Population	357,323	224,446
Received booster dose	40.5%	64.5%

***Overall population estimates from 2018 US Census American Community Survey**
****Booster eligible population is aged 12+ with complete primary vaccination prior to October 8, 2021 for Pfizer or Moderna series, or prior to January 6, 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 1,445,448 doses (including boosters) have been administered from December 15, 2020 through March 7, 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).

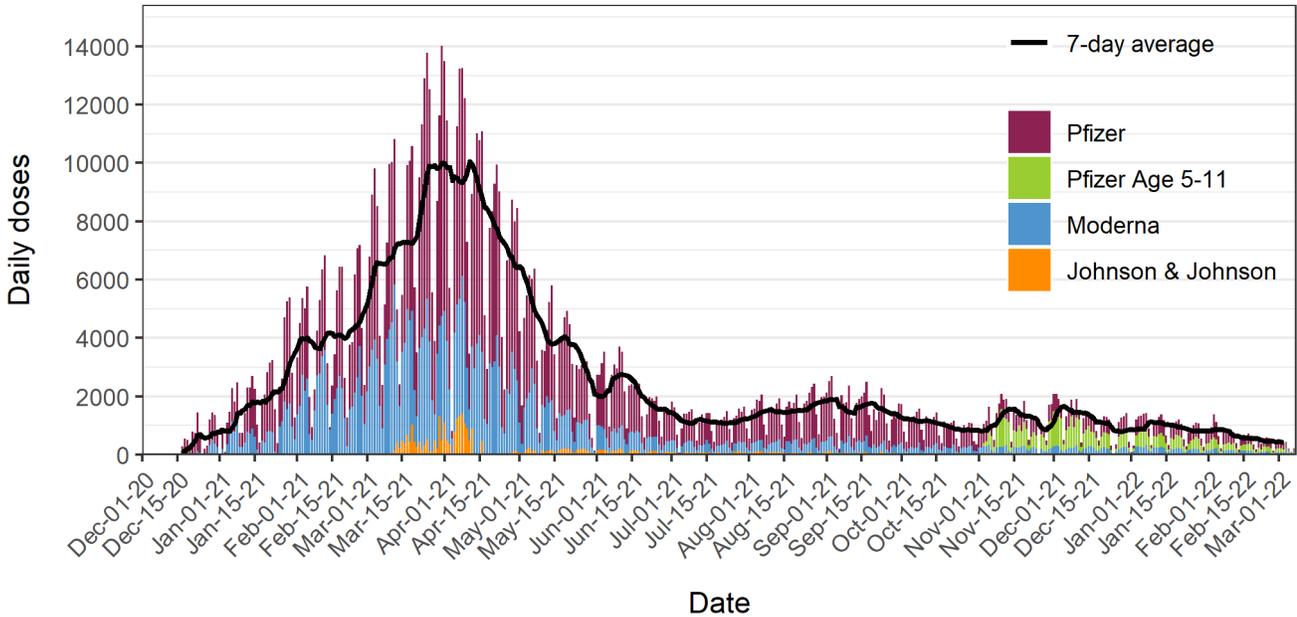
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents



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

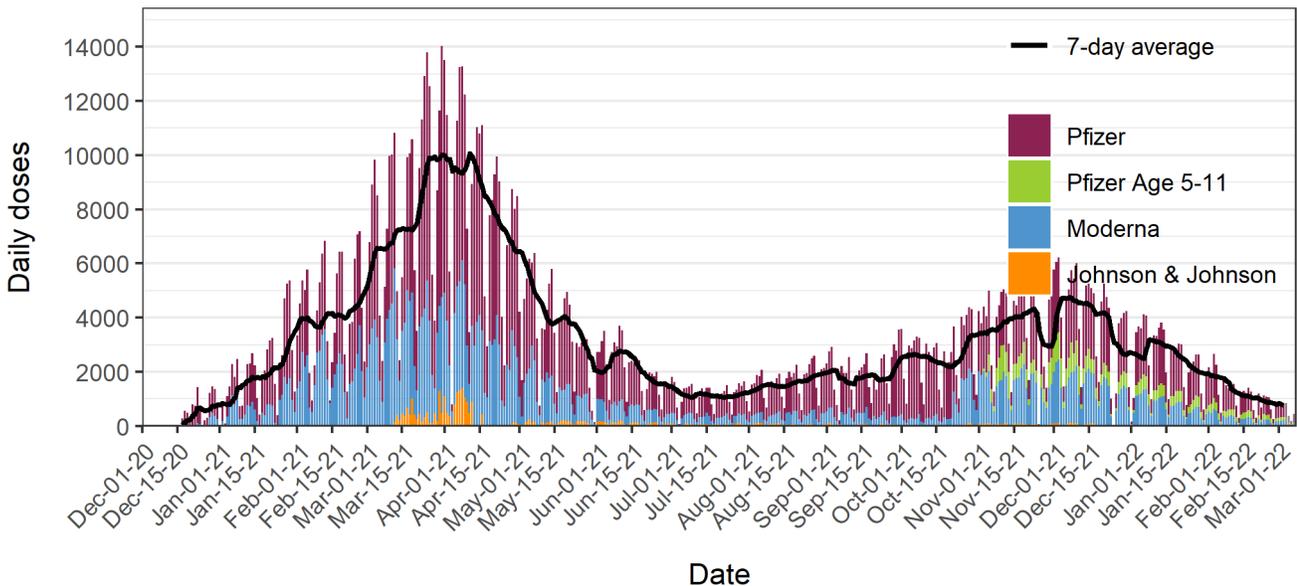
Figures 2a and 2b show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: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

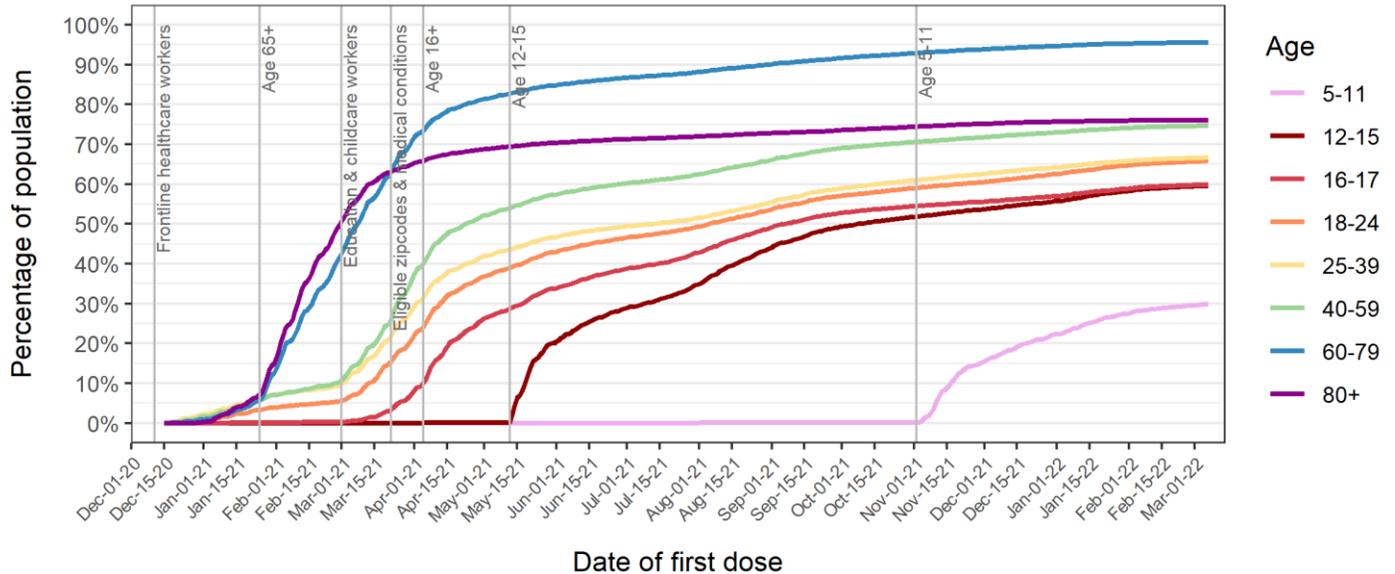


Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

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

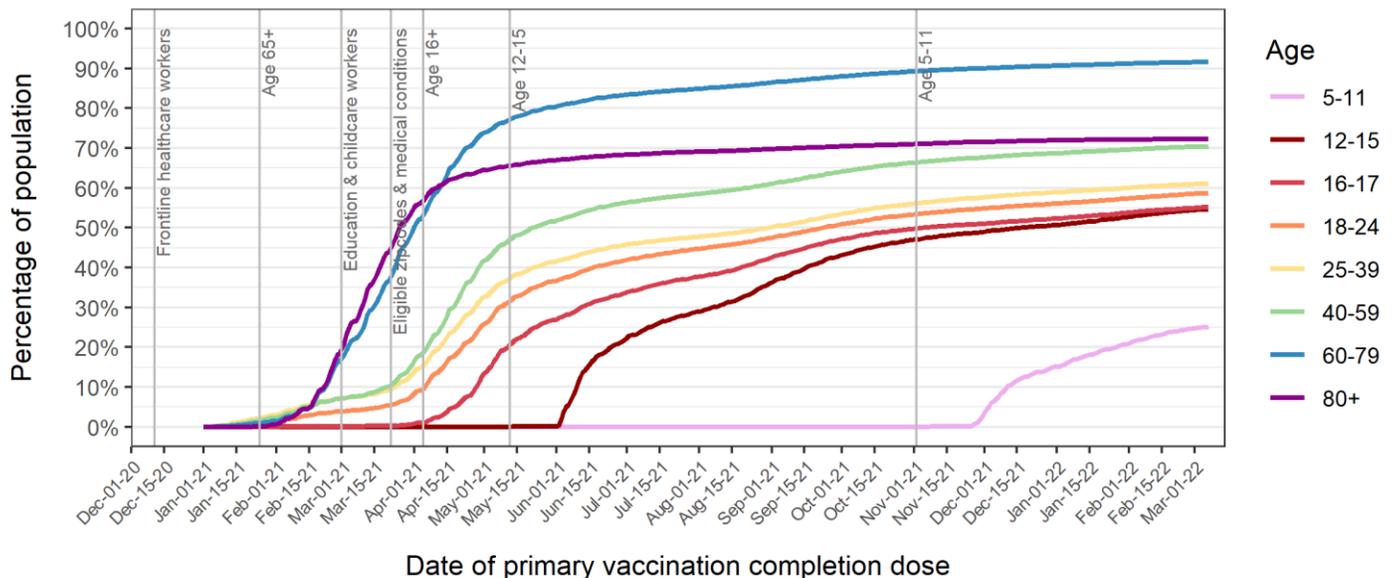
Figure 3 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines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

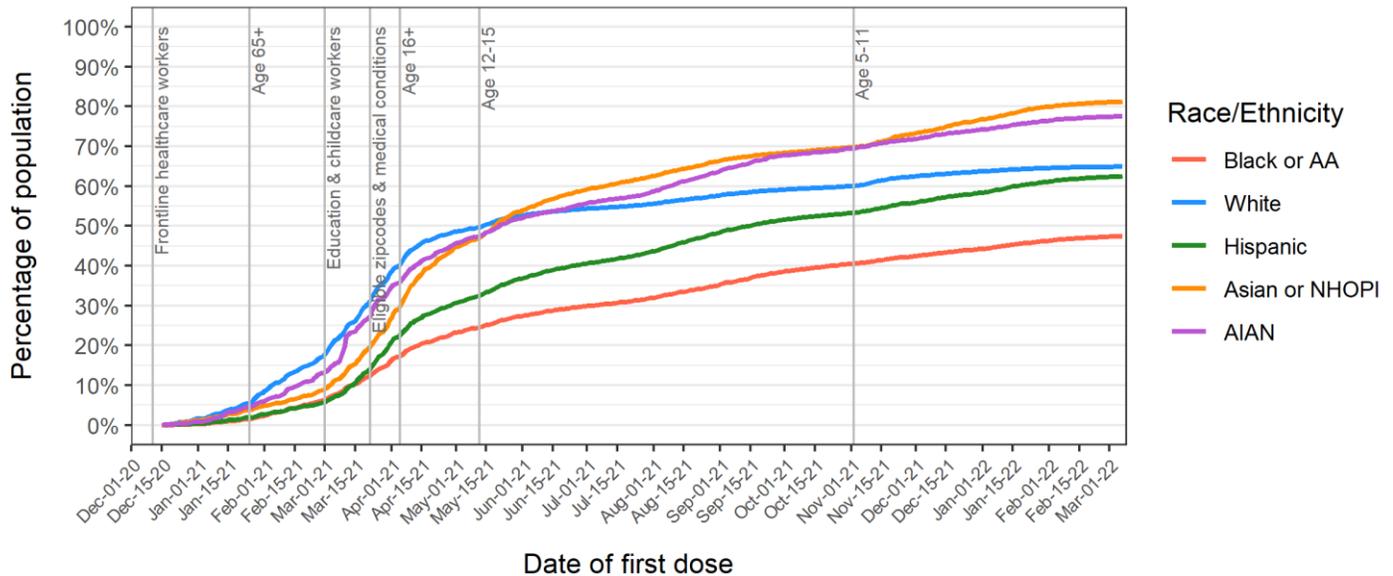


Data source: Wisconsin Immunization Registry (WIR)
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Proportions of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

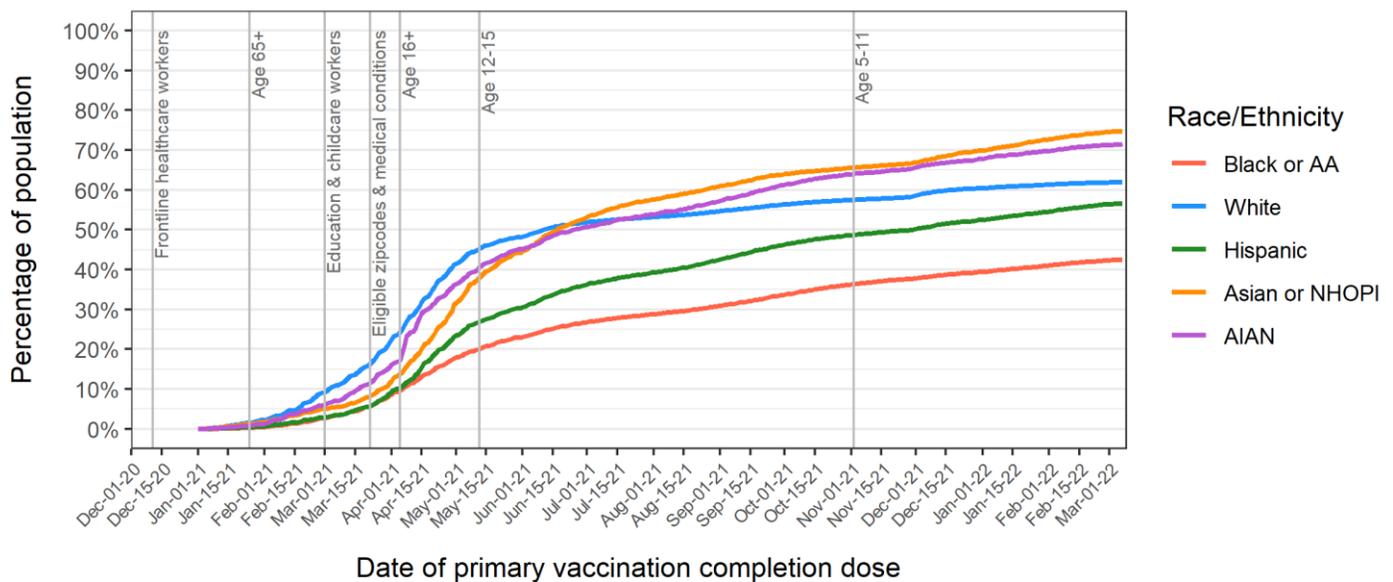
Figure 5 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity group.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



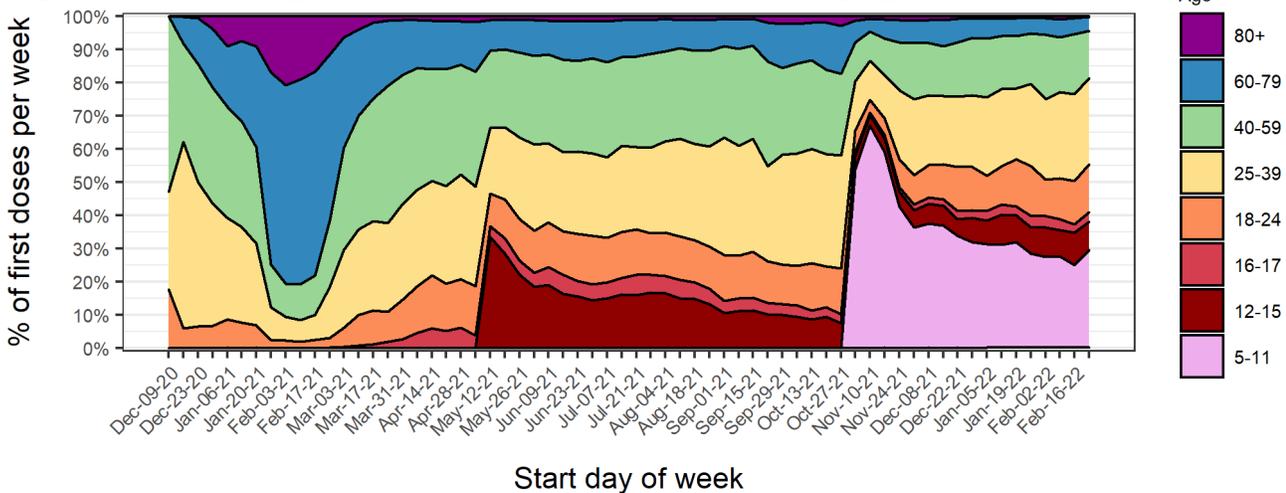
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

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.

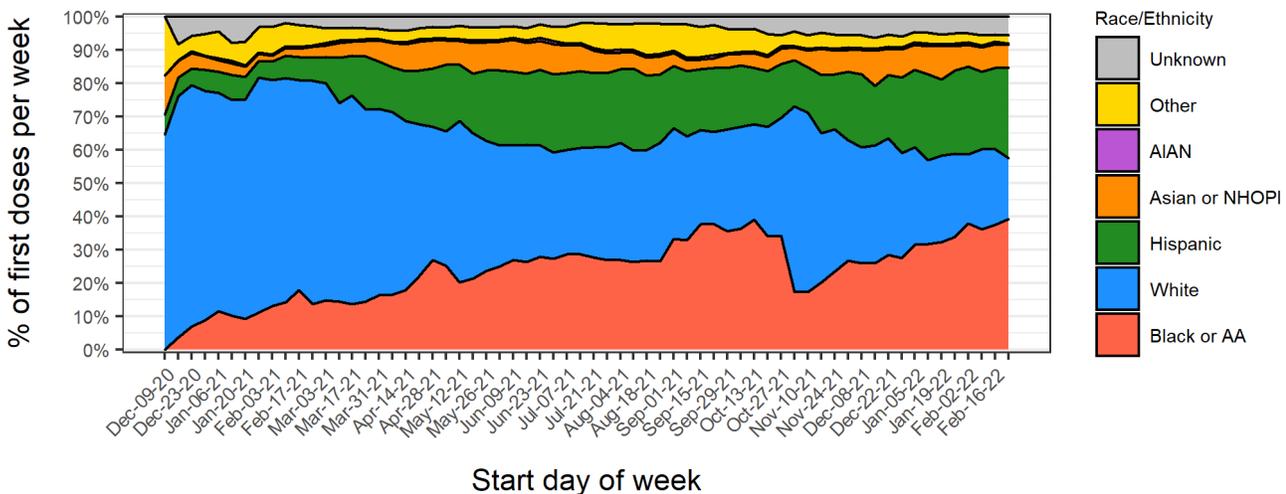
Figure 8 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the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



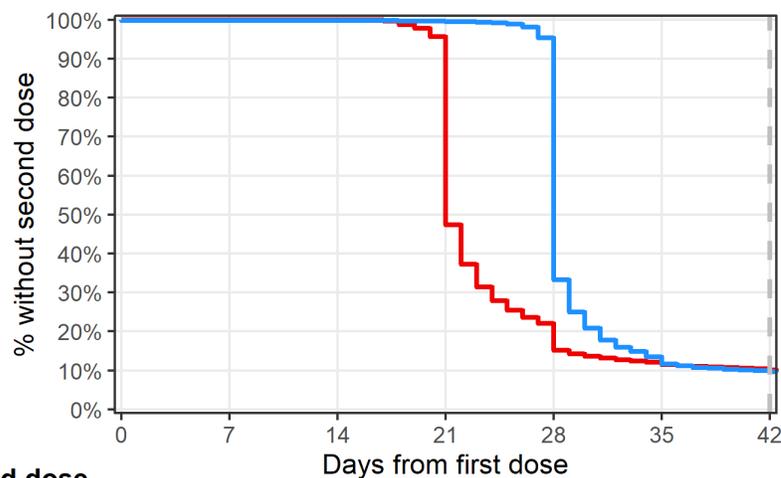
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

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 23, 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 90.0% of all residents who received their first dose of Pfizer prior to January 23, 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

Pfizer	383917	383914	383912	182079	57888	44083	38869
Moderna	185684	185401	185288	184915	61755	21663	17834

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	345,019 / 383,884 (89.9%)	175,115 / 306,043 (57.2%)
Moderna	167,850 / 185,684 (90.4%)	103,775 / 163,974 (63.3%)
Johnson & Johnson		14,252 / 34,264 (41.6%)
Age		
5-11	20,447 / 24,103 (84.8%)	
12-15	25,201 / 28,206 (89.3%)	6,892 / 21,702 (31.8%)
16-17	12,641 / 14,179 (89.2%)	4,458 / 11,657 (38.2%)
18-24	45,764 / 53,728 (85.2%)	18,107 / 47,006 (38.5%)
25-39	120,283 / 136,301 (88.2%)	60,293 / 122,273 (49.3%)
40-59	142,760 / 156,828 (91.0%)	88,135 / 150,339 (58.6%)
60-79	121,536 / 130,056 (93.4%)	96,573 / 126,377 (76.4%)
80+	24,237 / 26,167 (92.6%)	18,684 / 24,927 (75.0%)
Sex		
Female	275,856 / 304,897 (90.5%)	160,185 / 268,117 (59.7%)
Male	235,782 / 263,162 (89.6%)	132,386 / 234,862 (56.4%)
Unknown	1,231 / 1,509 (81.6%)	571 / 1,302 (43.9%)
Race/Ethnicity		
Black or AA	91,038 / 106,565 (85.4%)	42,346 / 86,342 (49.0%)
White	279,842 / 300,847 (93.0%)	187,315 / 280,850 (66.7%)
Hispanic	69,066 / 79,302 (87.1%)	28,620 / 66,358 (43.1%)
Asian or NHOPI	27,985 / 31,217 (89.6%)	12,976 / 26,212 (49.5%)
AIAN	2,944 / 3,323 (88.6%)	1,568 / 2,905 (54.0%)
Other	25,495 / 28,607 (89.1%)	13,354 / 24,578 (54.3%)
Unknown	16,499 / 19,707 (83.7%)	6,963 / 17,036 (40.9%)

¹n / N (%)

*Booster eligible population is aged 12+ with complete primary vaccination prior to October 8, 2021 for Pfizer or Moderna series, or prior to January 6, 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.

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