

Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on December 9, 2021 and includes data through December 6, 2021. 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 - December 6, 2021			
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,066,362	598,951	467,411
Pfizer	664,263	394,668	269,595
Pfizer Age 5-11	19,871	7,495	12,376
Moderna	348,697	176,771	171,926
Johnson & Johnson	33,531	20,017	13,514
Total vaccine doses administered (including boosters)	1,214,744	667,258	547,486
Pfizer	756,315	440,137	316,178
Pfizer Age 5-11	19,871	7,495	12,376
Moderna	403,607	198,939	204,668
Johnson & Johnson	34,951	20,687	14,264
*Total individuals with one or more doses	572,822	323,917	248,905
Pfizer	344,667	206,241	138,426
Pfizer Age 5-11	14,642	5,838	8,804
Moderna	179,982	91,821	88,161
Johnson & Johnson	33,531	20,017	13,514
*Total individuals completely vaccinated	527,071	295,051	232,020
Pfizer	319,480	188,332	131,148
Pfizer Age 5-11	5,253	1,669	3,584
Moderna	168,807	85,033	83,774
Johnson & Johnson	33,531	20,017	13,514
*Total individuals boosted	148,382	68,307	80,075
Pfizer	89,765	43,767	45,998
Pfizer Age 5-11	0	0	0
Moderna	52,931	21,819	31,112
Johnson & Johnson	5,686	2,721	2,965
*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 - December 6, 2021**

	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	60.0%	64.5%	70.1%	71.2%
Completely vaccinated	55.2%	59.4%	65.5%	66.6%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	54.3%	58.7%	65.0%	66.4%
Completely vaccinated	49.4%	53.5%	59.9%	61.3%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	69.7%	74.1%	78.2%	78.7%
Completely vaccinated	64.9%	69.0%	74.4%	74.9%

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

**Percentage of Population Boosted
December 15, 2020 - December 6, 2021**

	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	397,717
Received booster dose	15.6%	37.1%
City of Milwaukee		
*Population	596,886	213,373
Received booster dose	11.4%	31.8%
Milwaukee County Suburbs		
*Population	357,323	184,344
Received booster dose	22.4%	43.3%

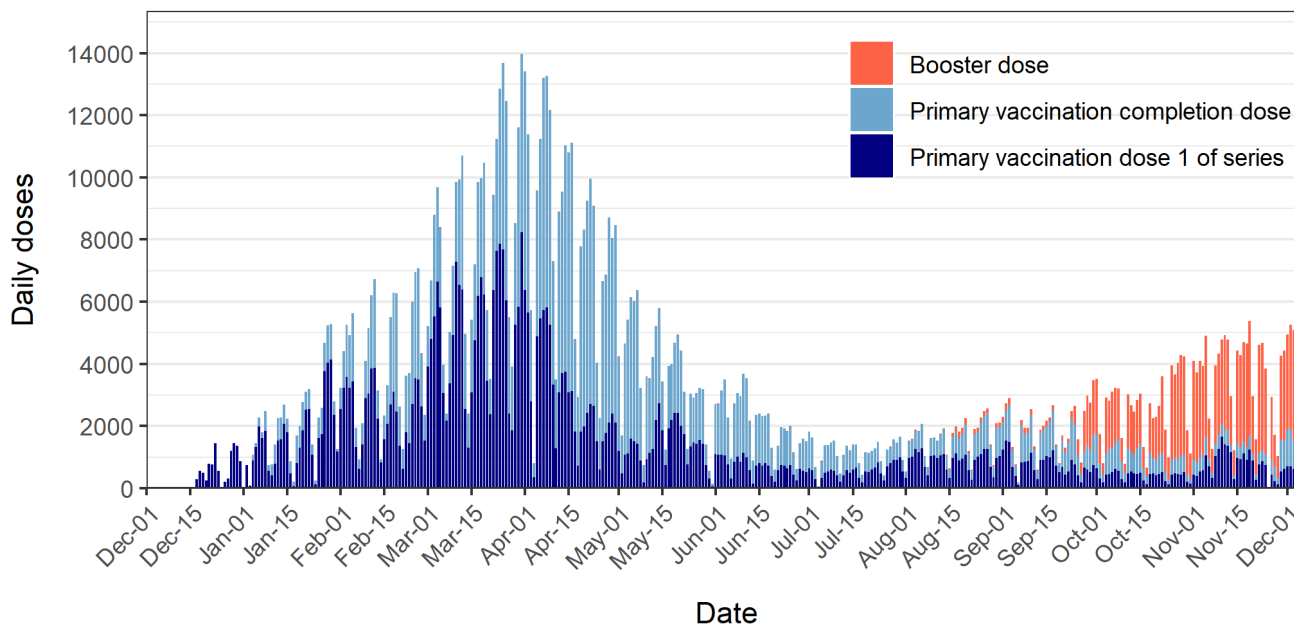
***Overall population estimates from 2018 US Census American Community Survey**

****Booster eligible population is aged 18+ with complete primary vaccination prior to June 9, 2021 for Pfizer or Moderna series, or prior to October 7, 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 1,214,744 doses (including boosters) have been administered from December 15, 2020 through December 6, 2021. 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).

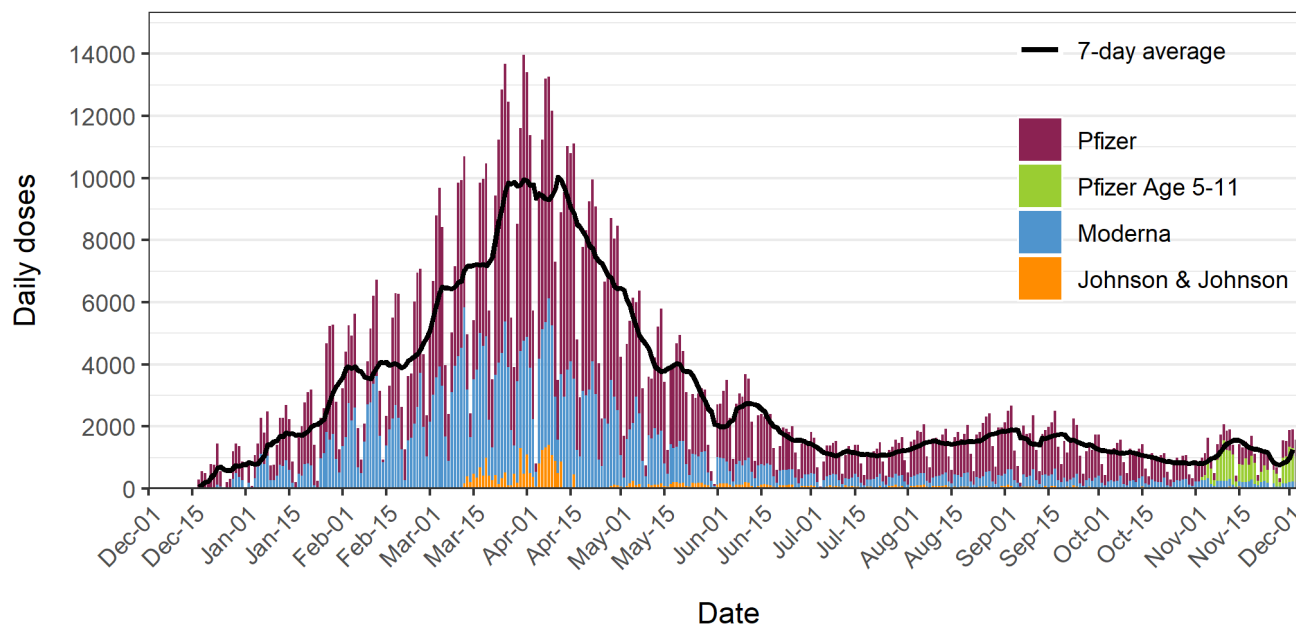
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents



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

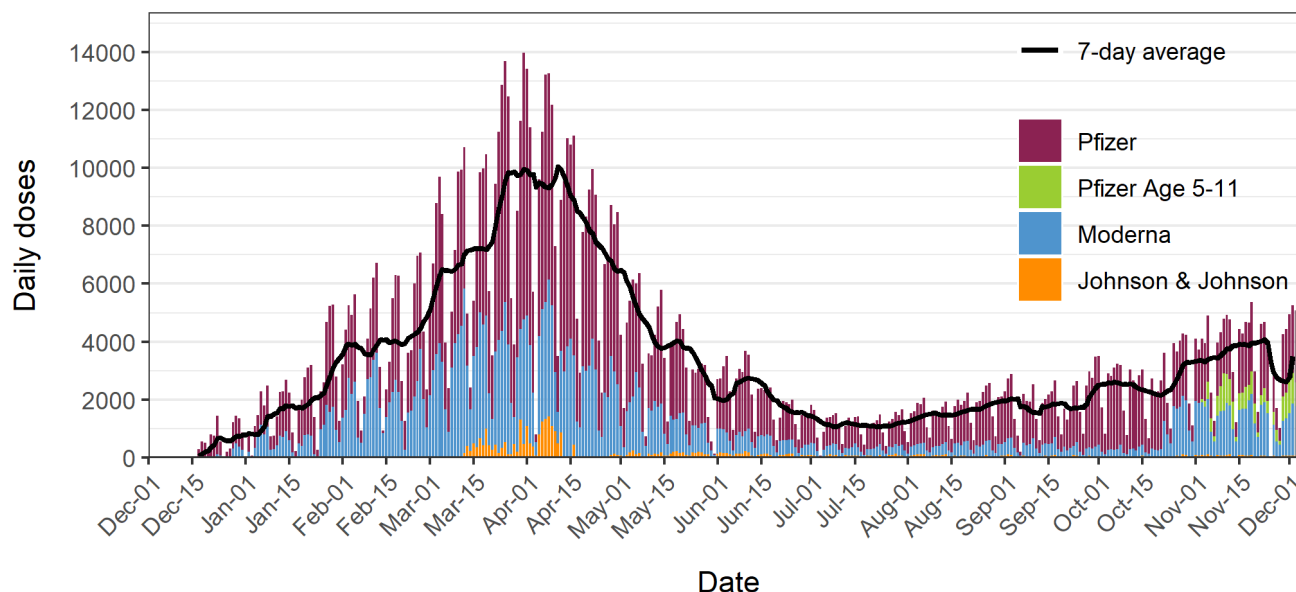
Figures 2a and 2b show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: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

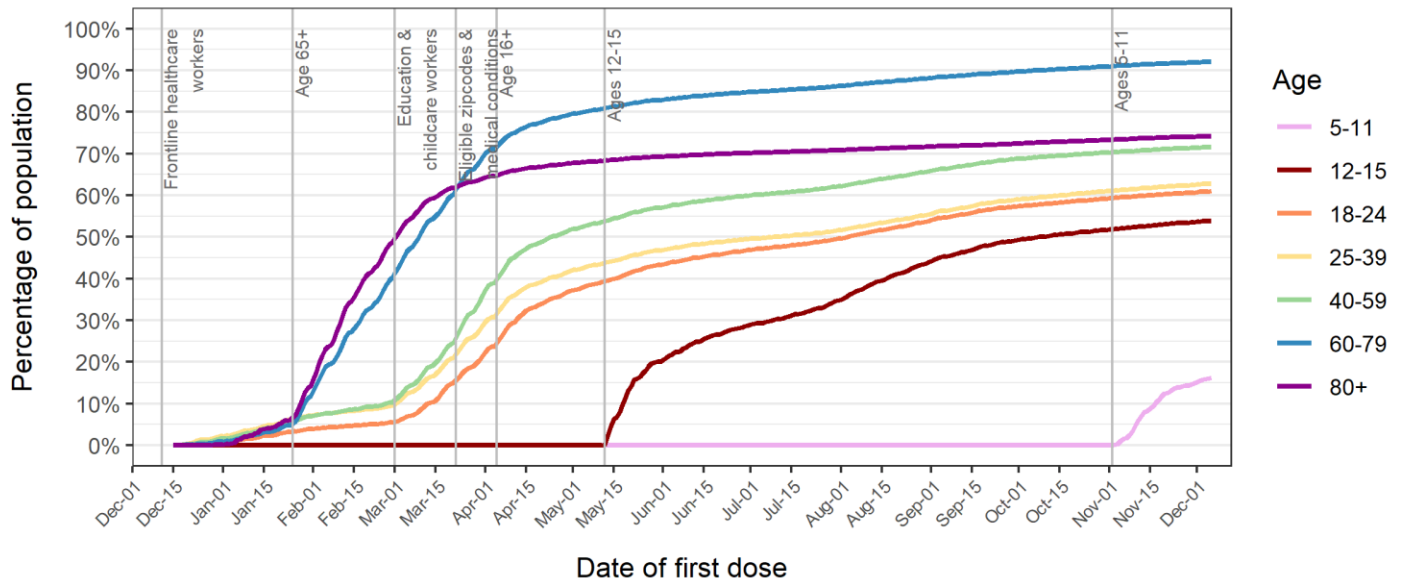


Data source: Wisconsin Immunization Registry (WIR)
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Percentages of Milwaukee County residents partially and completely vaccinated by age group

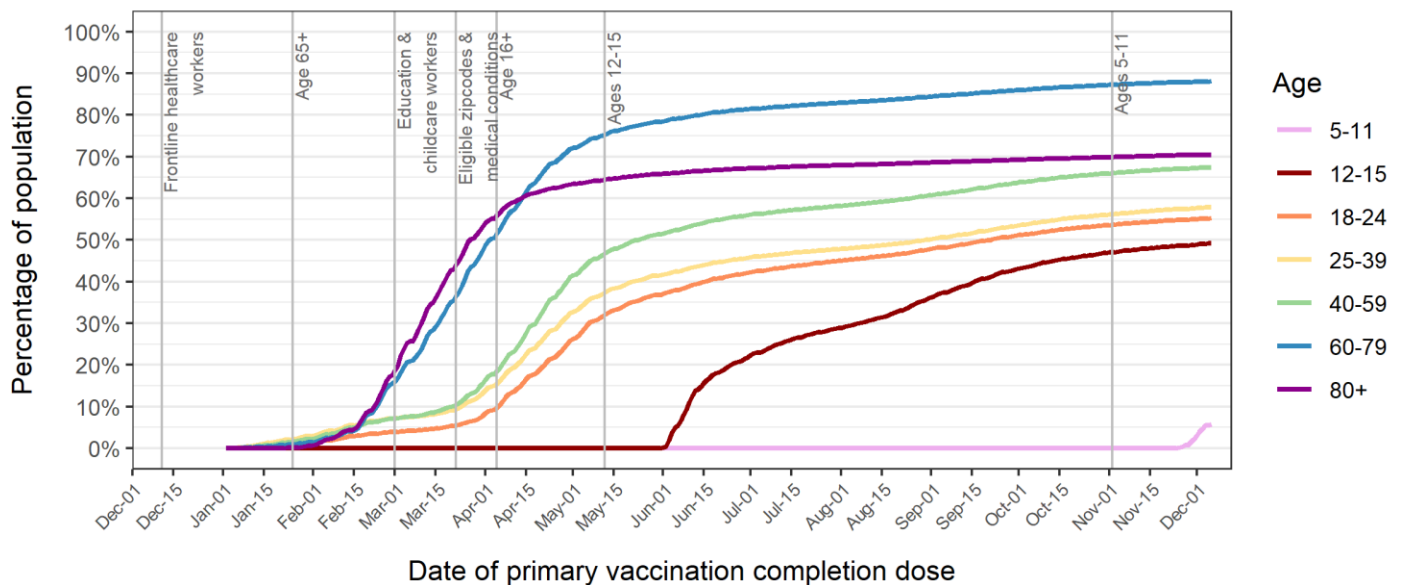
Figure 3 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines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

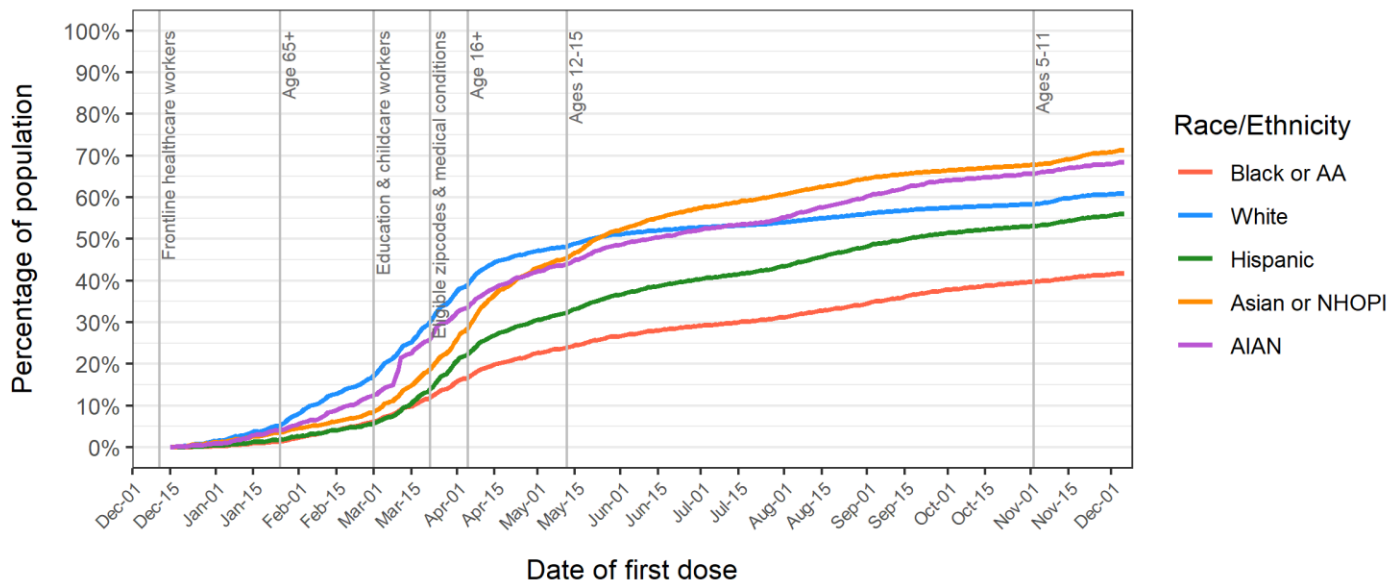


Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Proportions of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

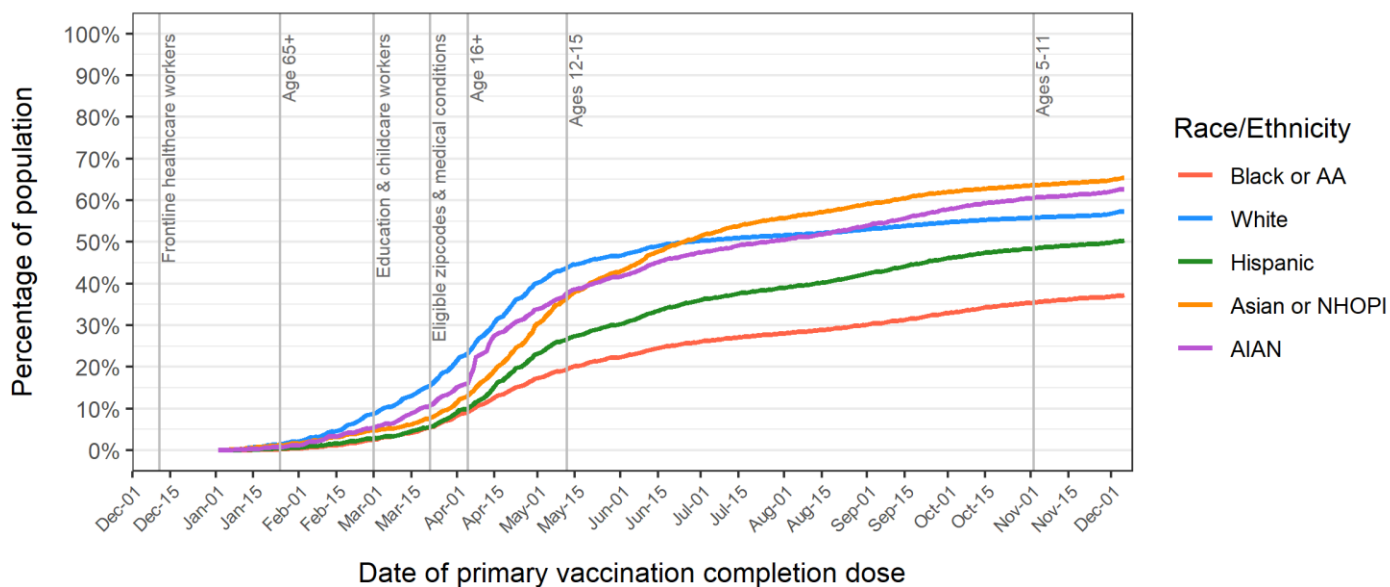
Figure 5 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity group.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



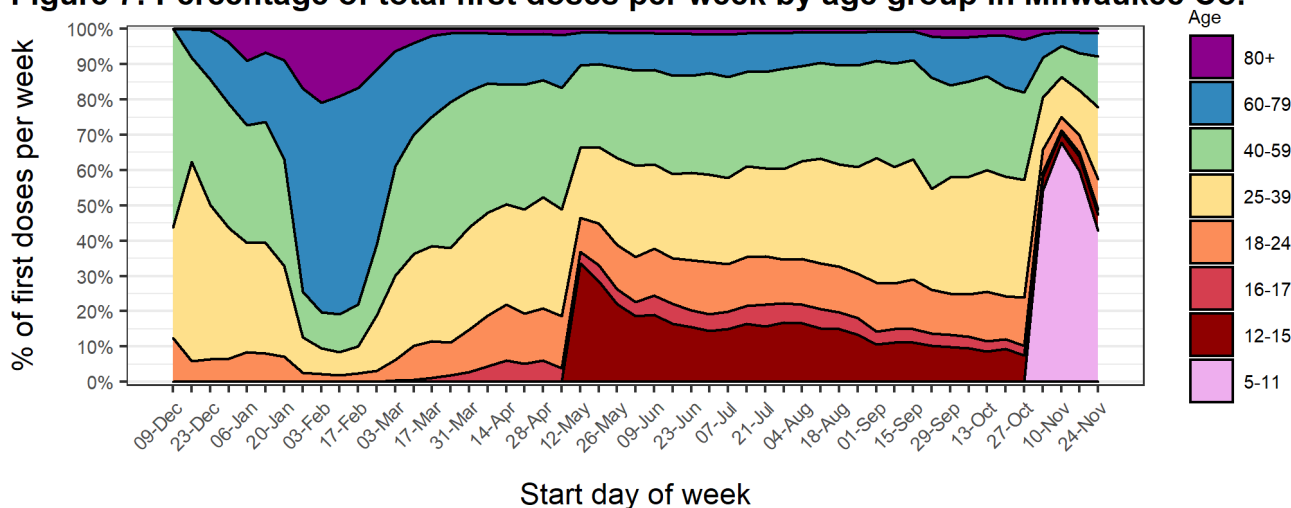
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

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.

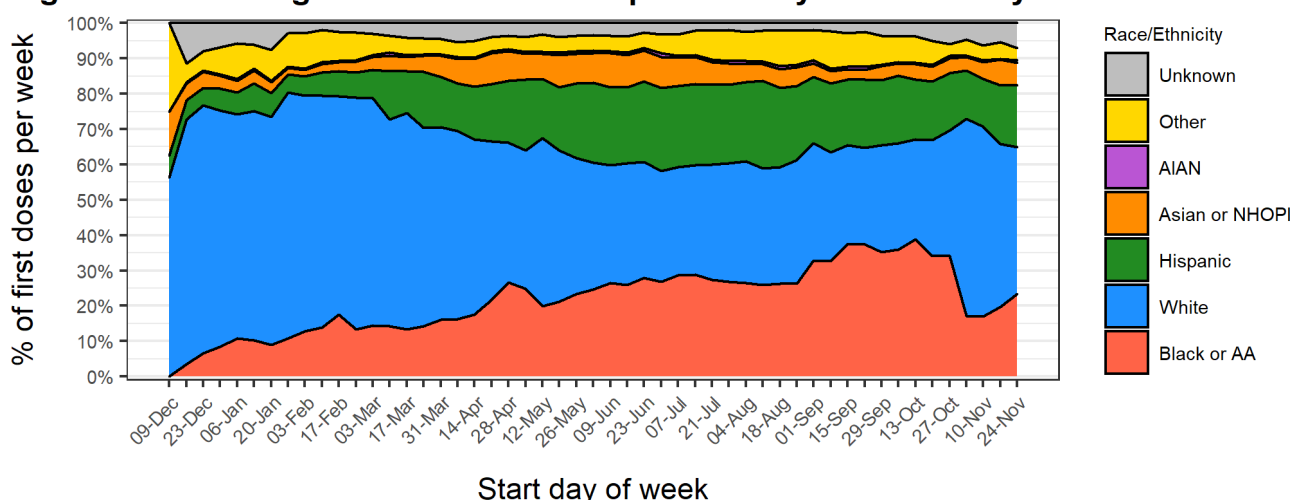
Figure 8 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the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



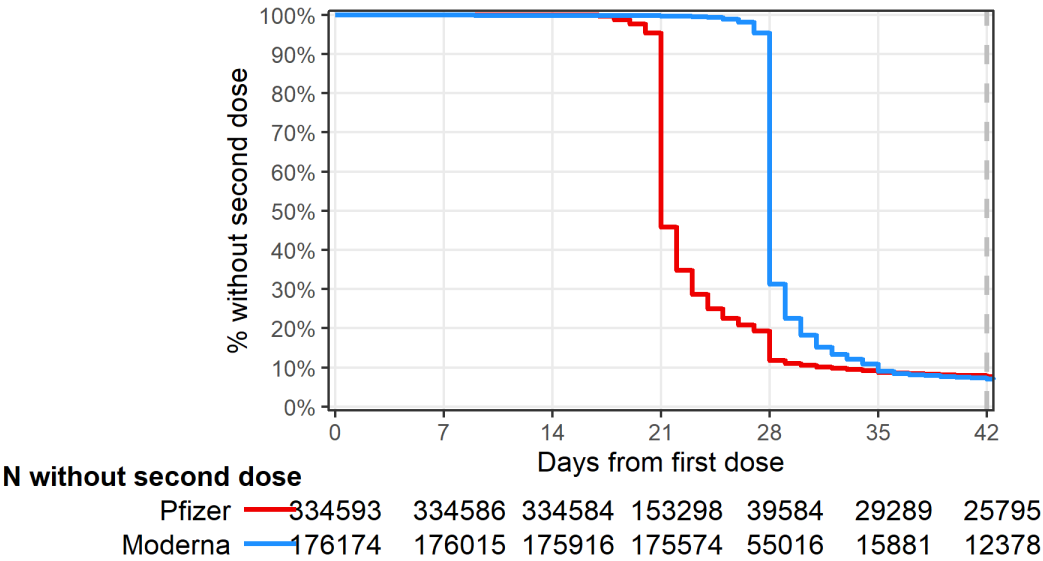
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

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 October 24, 2021). 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 92.5% of all residents who received their first dose of Pfizer prior to October 24, 2021 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)
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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 18 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 6 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	308,774 / 334,558 (92.3%)	89,180 / 223,118 (40.0%)
Moderna	163,796 / 176,174 (93.0%)	52,780 / 142,790 (37.0%)
Johnson & Johnson		5,685 / 31,809 (17.9%)
Age		
12-15	22,937 / 25,038 (91.6%)	
16-17	11,905 / 13,115 (90.8%)	
18-24	43,727 / 49,159 (89.0%)	4,766 / 36,038 (13.2%)
25-39	115,157 / 126,129 (91.3%)	26,381 / 98,609 (26.8%)
40-59	137,748 / 148,421 (92.8%)	40,595 / 125,061 (32.5%)
60-79	117,389 / 123,702 (94.9%)	62,751 / 114,499 (54.8%)
80+	23,707 / 25,168 (94.2%)	13,152 / 23,510 (55.9%)
Sex		
Female	256,968 / 276,373 (93.0%)	84,644 / 214,423 (39.5%)
Male	214,447 / 233,003 (92.0%)	62,831 / 182,119 (34.5%)
Unknown	1,155 / 1,356 (85.2%)	170 / 1,175 (14.5%)
Race/Ethnicity		
Black or AA	80,305 / 90,833 (88.4%)	17,054 / 59,319 (28.7%)
White	256,940 / 270,943 (94.8%)	103,283 / 234,393 (44.1%)
Hispanic	61,801 / 68,638 (90.0%)	9,573 / 44,257 (21.6%)
Asian or NHOPI	24,615 / 26,447 (93.1%)	4,546 / 17,855 (25.5%)
AIAN	2,589 / 2,856 (90.7%)	674 / 2,033 (33.2%)
Other	29,765 / 32,518 (91.5%)	9,861 / 23,527 (41.9%)
Unknown	16,555 / 18,497 (89.5%)	2,654 / 16,333 (16.2%)

¹n / N (%)

*Booster eligible population is aged 18+ with complete primary vaccination prior to June 9, 2021 for Pfizer or Moderna series, or prior to October 7, 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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