Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on March 17, 2022 and includes data through March 14, 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 Total December 15, 2020 - March 14, 2022	als		
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,154,492	655,709	498,783
Pfizer	706,640	424,661	281,979
Pfizer Age 5-11	50,406	25,075	25,331
Moderna	362,773	185,202	177,571
Johnson & Johnson	34,673	20,771	13,902
Total vaccine doses administered (including boosters)	1,450,822	806,050	644,772
Pfizer	888,043	522,840	365,203
Pfizer Age 5-11	50,406	25,075	25,331
Moderna	475,050	235,995	239,055
Johnson & Johnson	37,323	22,140	15,183
*Total individuals with one or more doses	616,109	353,038	263,071
Pfizer	366,514	221,768	144,746
Pfizer Age 5-11	27,339	14,063	13,276
Moderna	187,583	96,436	91,147
Johnson & Johnson	34,673	20,771	13,902
*Total individuals completely vaccinated	573,056	323,442	249,614
Pfizer	339,811	202,620	137,191
Pfizer Age 5-11	23,247	11,121	12,126
Moderna	175,325	88,930	86,395
Johnson & Johnson	34,673	20,771	13,902
*Total individuals boosted	296,330	150,341	145,989
Pfizer	177,043	93,793	83,250
Pfizer Age 5-11	2	1	1
Moderna	104,873	48,546	56,327
Johnson & Johnson	14,412	8,001	6,411
*Individuals are grouped by the first vaccine product product for their second dose in a series	·	·	

Percentage of Population Vaccinated December 15, 2020 - March 14, 2022				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	64.6%	69.4%	73.9%	74.9%
Completely vaccinated	60.1%	64.6%	69.0%	70.0%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	59.1%	64.0%	69.2%	70.5%
Completely vaccinated	54.2%	58.7%	63.8%	65.0%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	73.6%	78.3%	81.4%	81.8%
Completely vaccinated	69.9%	74.3%	77.4%	77.7%
*Population estimates from 2018 US Cens	sus American Com	nmunity Survey		

Percentage of Population Boosted December 15, 2020 - March 14, 2022		
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	508,956
Received booster dose	31.1%	58.2%
City of Milwaukee		
*Population	596,886	283,032
Received booster dose	25.2%	53.1%
Milwaukee County Suburbs		
*Population	357,323	225,924
Received booster dose	40.9%	64.6%
*Overall population estimates from 2018 U **Booster eligible population is aged 12+ v October 15, 2021 for Pfizer or Moderna ser Johnson & Johnson	vith complete prima	ary vaccination prior to

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 1,450,822 doses (including boosters) have been administered from December 15, 2020 through March 14, 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).

Booster dose
Primary vaccination completion dose
Primary vaccination dose 1 of series

8000

4000

2000

Date

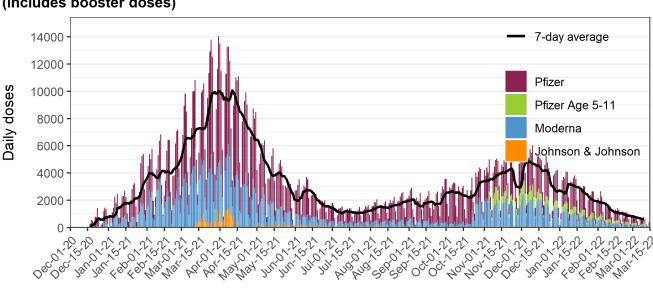
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents

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.

7-day average 14000 12000 Pfizer Daily doses 10000 Pfizer Age 5-11 8000 Moderna Johnson & Johnson 6000 4000 2000 Par Par Par Par Joseph " Nat Nat. P. J. Nay. 22 Jun 01.21 AUG-01-27 Date

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



Date

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

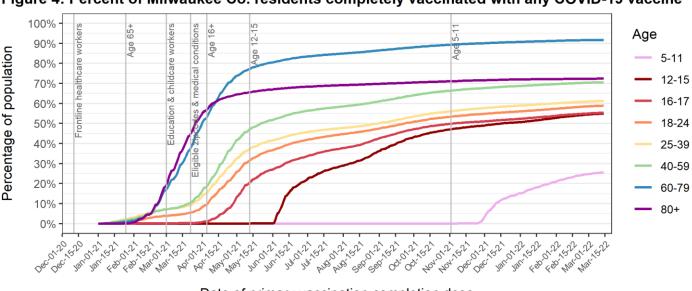
Percentages of Milwaukee County residents partially and completely vaccinated by age group

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.

100% 16+ vorkers conditions childcare workers Age 90% Age Percentage of population 5-11 80% 12-15 70% 16-17 60% 50% 18-24 40% 25-39 30% 40-59 20% 60-79 10% +08 0% Jun Jun 52 Jan Bil 1887, 25° War. 1821 Paries Dec. 1257 F8007.22 Jan 1521 War.01.21 Apr. 01.21 Mar. 01.27 Maryery 08:01:21 K801.21 May May In 22, 25, 25, 25, END FOR COURS OF OF ON FOR Date of first dose

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



Date of primary vaccination completion dose

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

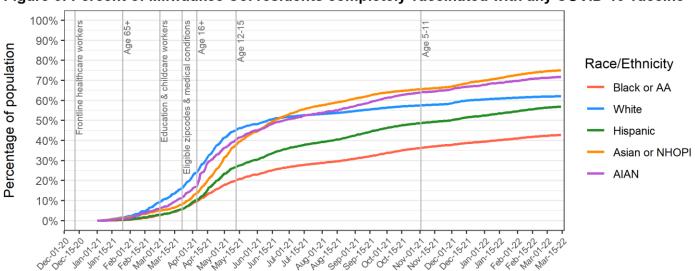
Proportions of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

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.

100% Age 16+ conditions Education & childcare workers Age 5-1 90% \ge Percentage of population \ge 80% Race/Ethnicity medical 70% Black or AA 60% zipcodes & White 50% Hispanic 40% Asian or NHOPI 30% **AIAN** 20% 10% 0% Par Parisy July July 22 Way Way In 711-711-878 Date of first dose

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



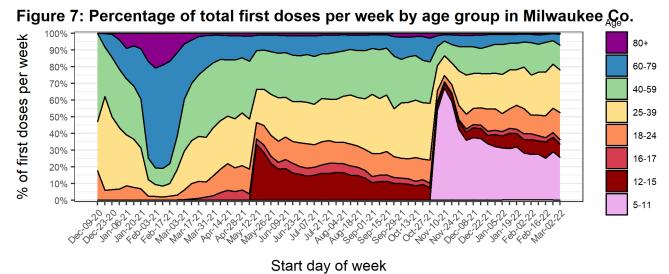
Date of primary vaccination completion dose

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

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, middleaged 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.



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

Race/Ethnicity % of first doses per week 90% Unknown 80% Other AIAN Asian or NHOPI 40% Hispanic White 10% Black or AA

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

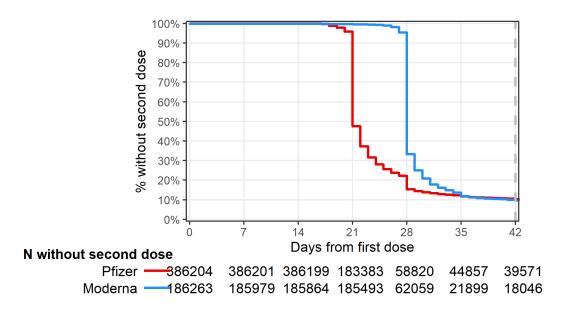
Start day of week

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 30, 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 89.9% of all residents who received their first dose of Pfizer prior to January 30, 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



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 receipients ¹	*Percent boosted among eligible ¹
First vaccine received		
Pfizer	346,602 / 386,169 (89.8%)	176,897 / 309,643 (57.1%)
Moderna	168,217 / 186,263 (90.3%)	104,801 / 164,967 (63.5%)
Johnson & Johnson		14,412 / 34,346 (42.0%)
Age		
5-11	21,108 / 24,961 (84.6%)	
12-15	25,375 / 28,438 (89.2%)	7,119 / 22,186 (32.1%)
16-17	12,704 / 14,280 (89.0%)	4,561 / 11,833 (38.5%)
18-24	45,980 / 54,119 (85.0%)	18,350 / 47,647 (38.5%)
25-39	120,672 / 136,939 (88.1%)	61,010 / 123,777 (49.3%)
40-59	143,046 / 157,263 (91.0%)	89,052 / 151,665 (58.7%)
60-79	121,676 / 130,236 (93.4%)	97,222 / 126,861 (76.6%)
80+	24,258 / 26,196 (92.6%)	18,796 / 24,987 (75.2%)
Sex		
Female	276,857 / 306,388 (90.4%)	161,803 / 270,800 (59.8%)
Male	236,730 / 264,531 (89.5%)	133,730 / 236,852 (56.5%)
Unknown	1,232 / 1,513 (81.4%)	577 / 1,304 (44.2%)
Race/Ethnicity		
Black or AA	91,695 / 107,565 (85.2%)	43,023 / 88,037 (48.9%)
White	280,587 / 301,805 (93.0%)	188,811 / 282,455 (66.8%)
Hispanic	69,562 / 79,980 (87.0%)	29,141 / 67,236 (43.3%)
Asian or NHOPI	28,144 / 31,463 (89.5%)	13,142 / 26,359 (49.9%)
AIAN	2,959 / 3,343 (88.5%)	1,586 / 2,938 (54.0%)
Other	25,383 / 28,510 (89.0%)	13,386 / 24,855 (53.9%)
Unknown	16,489 / 19,766 (83.4%)	7,021 / 17,076 (41.1%)

¹n / N (%)

^{*}Booster eligible population is aged 12+ with complete primary vaccination prior to October 15, 2021 for Pfizer or Moderna series, or prior to January 13, 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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