Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on August 4, 2022 and includes data through August 1, 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	City of Milwaukee	Suburb
Total primary vaccine doses administered	1,165,515	666,280	499,23
Pfizer	715,495	432,077	283,41
Pfizer Age 5-11	56,263	29,228	27,03
Moderna	359,097	184,225	174,87
Johnson & Johnson	34,660	20,750	13,91
Total vaccine doses administered			
(including boosters)	1,488,278	833,408	654,87
Pfizer	915,919	543,016	372,90
Pfizer Age 5-11	57,387	29,694	27,69
Moderna	477,578	238,504	239,07
Johnson & Johnson	37,394	22,194	15,20
*Total individuals with one or more doses	619,847	357,372	262,47
Pfizer	369,989	224,943	145,04
Pfizer Age 5-11	30,059	16,024	14,03
Moderna	185,181	95.685	89,49
Johnson & Johnson	34,618	20,720	13,89
*Total individuals completely vaccinated	580,286	329,628	250,65
Pfizer	345,066	206,733	138,33
Pfizer Age 5-11	26,455	13,357	13,09
Moderna	174,147	88,818	85,32
Johnson & Johnson	34,618	20,720	13,89
	000 700	407 400	455.00
*Total individuals boosted	322,763	167,128	155,63
Pfizer	193,885	104,867	89,01
Pfizer Age 5-11	1,469	610	85
Moderna Johnson & Johnson	111,591 15,818	52,679 8,972	58,9 ⁻ 6,8-

Percentage of Population Vaccinated December 15, 2020 - August 1, 2022				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	65.0%	69.8%	74.1%	74.9%
Completely vaccinated	60.8%	65.4%	69.5%	70.4%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	59.9%	64.8%	69.7%	70.8%
Completely vaccinated	55.2%	59.8%	64.6%	65.7%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	73.5%	78.1%	80.9%	81.3%
Completely vaccinated	70.1%	74.6%	77.4%	77.7%
*Population estimates from 2018 US Co	ansus American Com	munity Survey		

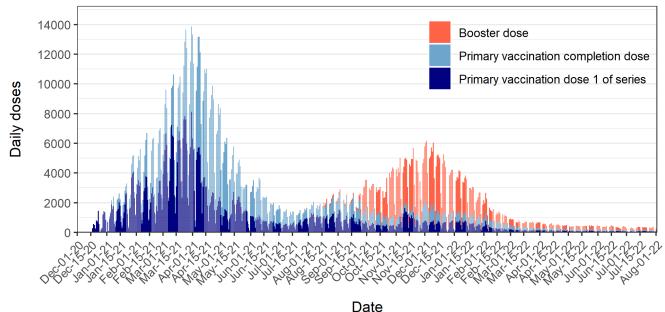
*Population estimates from 2018 US Census American Community Survey

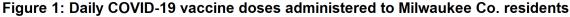
Percentage of Population Boosted December 15, 2020 - August 1, 2022		
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	543,971
Received booster dose	33.8%	59.1%
City of Milwaukee		
*Population	596,886	309,028
Received booster dose	28.0%	53.9%
Milwaukee County Suburbs		
*Population	357,323	234,943
Received booster dose	43.6%	65.9%

*Overall population estimates from 2018 US Census American Community Survey **Booster eligible population is aged 12+ with complete primary vaccination prior to March 4, 2022 for Pfizer or Moderna series, or prior to June 2, 2022 for Johnson & Johnson

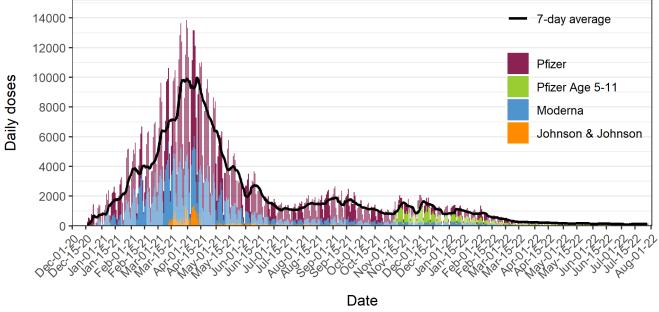
Daily COVID-19 doses administered to Milwaukee County residents

Figure 1 shows daily total COVID-19 vaccine doses administered to Milwaukee County residents. A total of 1,488,278 doses (including boosters) have been administered from December 15, 2020 through August 1, 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).



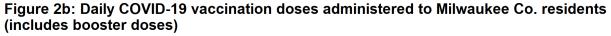


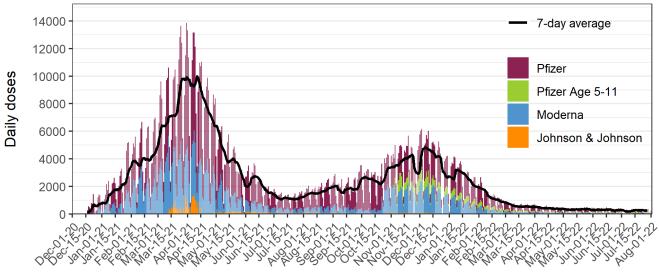
Figures 2a and 2b show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: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





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





Date

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.

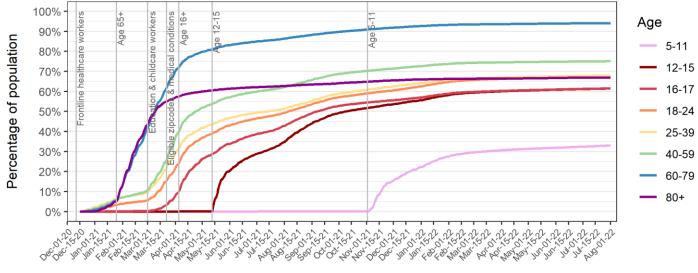


Figure 3: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine

Date of first dose

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

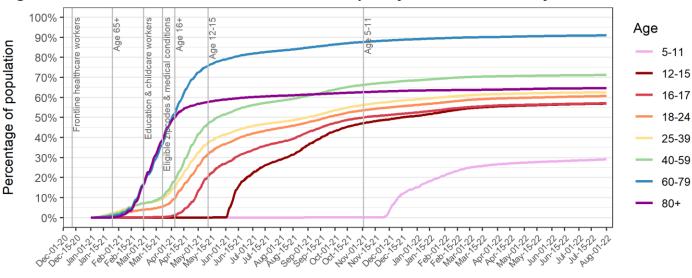


Figure 4: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

Date of primary vaccination completion dose

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.

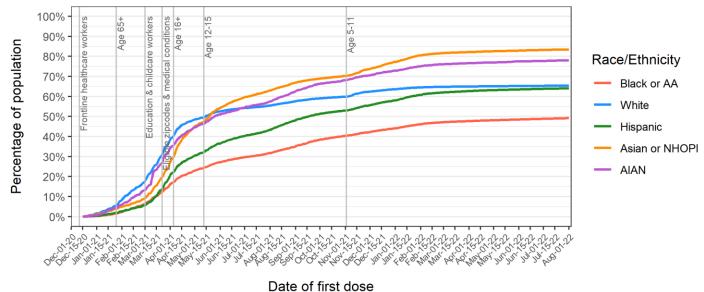


Figure 5: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine

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

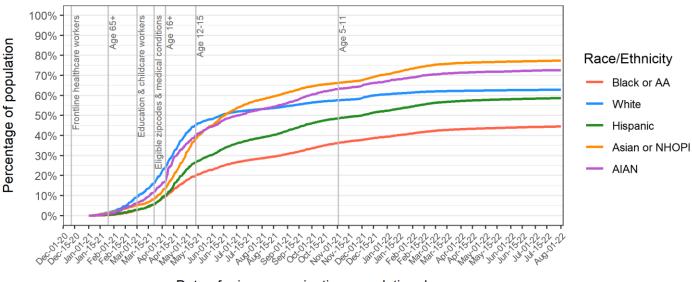


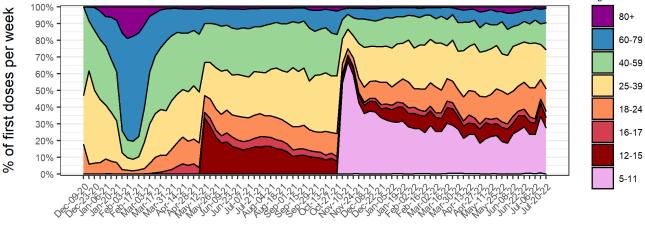
Figure 6: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

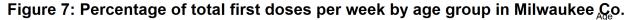
Date of primary vaccination completion dose

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.





Start day of week

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

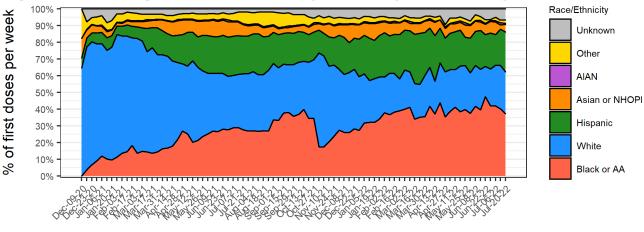


Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.

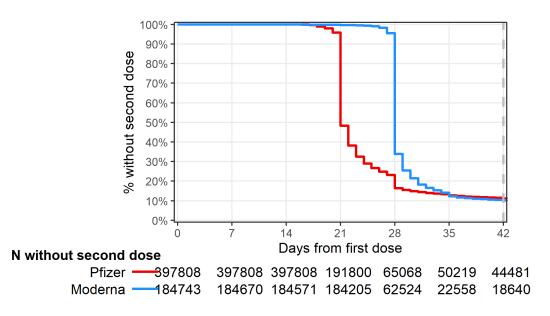
Start day of week

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 June 19, 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 89.2% of all residents who received their first dose of Pfizer prior to June 19, 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	353,265 / 397,740 (88.8%)	193,821 / 337,730 (57.4%)
Moderna	166,103 / 184,741 (89.9%)	111,577 / 171,721 (65.0%)
Johnson & Johnson		15,818 / 34,520 (45.8%)
Age		
5-11	24,009 / 29,309 (81.9%)	
12-15	26,266 / 29,859 (88.0%)	9,739 / 26,775 (36.4%)
16-17	13,046 / 14,846 (87.9%)	5,534 / 13,454 (41.1%)
18-24	47,267 / 56,532 (83.6%)	20,717 / 53,351 (38.8%)
25-39	123,134 / 141,129 (87.2%)	66,449 / 137,020 (48.5%)
40-59	144,157 / 159,249 (90.5%)	96,978 / 162,333 (59.7%)
60-79	120,004 / 128,480 (93.4%)	102,628 / 128,534 (79.8%)
80+	21,485 / 23,077 (93.1%)	19,171 / 22,504 (85.2%)
Sex		
Female	279,156 / 311,743 (89.5%)	175,925 / 289,708 (60.7%)
Male	239,031 / 269,253 (88.8%)	144,710 / 252,967 (57.2%)
Unknown	1,181 / 1,485 (79.5%)	581 / 1,296 (44.8%)
Race/Ethnicity		
Black or AA	95,062 / 113,723 (83.6%)	49,994 / 102,555 (48.7%)
White	283,227 / 305,098 (92.8%)	201,892 / 294,884 (68.5%)
Hispanic	71,805 / 83,752 (85.7%)	34,227 / 75,337 (45.4%)
Asian or NHOPI	29,010 / 32,745 (88.6%)	14,779 / 28,583 (51.7%)
AIAN	3,006 / 3,408 (88.2%)	1,764 / 3,181 (55.5%)
Other	21,430 / 24,290 (88.2%)	11,364 / 22,243 (51.1%)
Unknown	15,828 / 19,465 (81.3%)	7,196 / 17,188 (41.9%)

¹n / N (%)

*Booster eligible population is aged 12+ with complete primary vaccination prior to March 4, 2022 for Pfizer or Moderna series, or prior to June 2, 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

For additional questions on this report, please contact Darren Rausch, Health Officer/Director, Greenfield Health Department, and Lead, Milwaukee County COVID-19 Epidemiology Intel Team: Darren.Rausch@greenfieldwi.us or (414) 329-5275.