Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on May 19, 2022 and includes data through May 16, 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	1,169,469	666,260	503,20
Pfizer	715,394	431,185	284,20
Pfizer Age 5-11	53,840	27,605	26,23
Moderna	365,329	186,575	178,75
Johnson & Johnson	34,906	20,895	14,01
Total vaccine doses administered (including boosters)	1,481,760	826,732	655,02
Pfizer	908,453	537,125	371,32
Pfizer Age 5-11	53.840	27,605	26,23
Moderna	481,862	239,691	242,17
Johnson & Johnson	37,605	22,311	15,29
Total individuals with one or more doses	622,622	357,755	264,80
Pfizer	370,300	224,676	145,62
Pfizer Age 5-11	28,825	15,187	13,6
Moderna	188,591	96,997	91,5
Johnson & Johnson	34,906	20,895	14,0
Total individuals completely vaccinated	581,753	329,400	252,3
Pfizer	344,735	206,182	138,5
Pfizer Age 5-11	25,230	12,549	12,68
Moderna	176,882	89,774	87,10
Johnson & Johnson	34,906	20,895	14,0
Total individuals boosted	312,291	160,472	151,8 [.]
Pfizer	187,505	100,569	86,9
Pfizer Age 5-11	42	13	
Moderna	109,457	51,281	58,1
Johnson & Johnson	15.287	8.609	6,6

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Percentage of Population Vaccinated December 15, 2020 - May 16, 2022				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	65.3%	70.1%	74.6%	75.5%
Completely vaccinated	61.0%	65.5%	69.9%	70.8%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	59.9%	64.9%	70.0%	71.1%
Completely vaccinated	55.2%	59.7%	64.7%	65.9%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	74.1%	78.8%	81.9%	82.2%
Completely vaccinated	70.6%	75.1%	78.1%	78.4%
*Population estimates from 2018 US Ce	nsus American Com	munity Survey		

*Population estimates from 2018 US Census American Community Survey

Percentage of Population Boosted December 15, 2020 - May 16, 2022		
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	532,414
Received booster dose	32.7%	58.6%
City of Milwaukee		
*Population	596,886	299,262
Received booster dose	26.9%	53.6%
Milwaukee County Suburbs		
*Population	357,323	233,152
Received booster dose	42.5%	65.1%

*Overall population estimates from 2018 US Census American Community Survey **Booster eligible population is aged 12+ with complete primary vaccination prior to December 17, 2021 for Pfizer or Moderna series, or prior to March 17, 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 1,481,760 doses (including boosters) have been administered from December 15, 2020 through May 16, 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 April 3, 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 89.4% of all residents who received their first dose of Pfizer prior to April 3, 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	353,106 / 396,125 (89.1%)	187,395 / 327,189 (57.3%)
Moderna	169,238 / 187,983 (90.0%)	109,410 / 170,471 (64.2%)
Johnson & Johnson		15,287 / 34,754 (44.0%)
Age		
5-11	23,179 / 28,029 (82.7%)	
12-15	26,045 / 29,452 (88.4%)	8,588 / 24,589 (34.9%)
16-17	12,942 / 14,646 (88.4%)	5,077 / 12,616 (40.2%)
18-24	46,826 / 55,655 (84.1%)	19,681 / 50,556 (38.9%)
25-39	122,388 / 139,798 (87.5%)	64,179 / 131,269 (48.9%)
40-59	144,250 / 159,229 (90.6%)	93,852 / 158,325 (59.3%)
60-79	122,347 / 131,002 (93.4%)	101,069 / 129,621 (78.0%)
80+	24,367 / 26,297 (92.7%)	19,646 / 25,438 (77.2%)
Sex		
Female	280,783 / 312,529 (89.8%)	170,643 / 283,509 (60.2%)
Male	240,337 / 270,058 (89.0%)	140,854 / 247,588 (56.9%)
Unknown	1,224 / 1,521 (80.5%)	595 / 1,317 (45.2%)
Race/Ethnicity		
Black or AA	94,576 / 112,390 (84.1%)	47,058 / 96,719 (48.7%)
White	284,850 / 306,728 (92.9%)	197,367 / 292,361 (67.5%)
Hispanic	71,537 / 83,017 (86.2%)	32,496 / 71,806 (45.3%)
Asian or NHOPI	28,822 / 32,390 (89.0%)	14,088 / 27,580 (51.1%)
AIAN	3,019 / 3,417 (88.4%)	1,698 / 3,082 (55.1%)
Other	23,250 / 26,291 (88.4%)	12,194 / 23,665 (51.5%)
Unknown	16,290 / 19,875 (82.0%)	7,191 / 17,201 (41.8%)

¹n / N (%)

*Booster eligible population is aged 12+ with complete primary vaccination prior to December 17, 2021 for Pfizer or Moderna series, or prior to March 17, 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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