### Milwaukee County COVID-19 vaccine data summary

#### Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on August 25, 2022 and includes data through August 22, 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 - August 22, 2022	als		
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,167,901	668,097	499,804
Pfizer	716,735	433,066	283,669
Pfizer Age 5-11	57,131	29,762	27,369
Moderna	359,310	184,485	174,825
Johnson & Johnson	34,725	20,784	13,941
Total vaccine doses administered (including boosters)	1,495,817	838,053	657,764
Pfizer	919,165	545,403	373,762
Pfizer Age 5-11	60,919	31,294	29,625
Moderna	478,233	239,091	239,142
Johnson & Johnson	37,500	22,265	15,235
*Total individuals with one or more doses	620,989	358,281	262,708
Pfizer	370,627	225,476	145,151
Pfizer Age 5-11	30,458	16,268	14,190
Moderna	185,288	95,822	89,466
Johnson & Johnson	34,616	20,715	13,901
*Total individuals completely vaccinated	581,528	330,531	250,997
Pfizer	345,709	207,210	138,499
Pfizer Age 5-11	26,897	13,625	13,272
Moderna	174,306	88,981	85,325
Johnson & Johnson	34,616	20.715	13,901
Somison a Comison	54,010	20,710	10,001
*Total individuals boosted	327,916	169,956	157,960
Pfizer	195,627	106,061	89,566
Pfizer Age 5-11	4,214	1,716	2,498
Moderna	112,108	53,091	59,017
Johnson & Johnson	15,967	9,088	6,879
*Individuals are grouped by the first vaccine product for their second dose in a series	ct received. Note a small nu	mber of people received a differe	nt vaccine

Percentage of Population Vaccinated December 15, 2020 - August 22, 2022				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	65.1%	70.0%	74.1%	75.0%
Completely vaccinated	60.9%	65.5%	69.6%	70.4%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	60.0%	65.0%	69.9%	70.9%
Completely vaccinated	55.4%	59.9%	64.7%	65.8%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	73.5%	78.1%	81.0%	81.3%
Completely vaccinated	70.2%	74.7%	77.5%	77.7%
*Population estimates from 2018 US Cer	nsus American Com	munity Survey		

Percentage of Population Boosted
December 15, 2020 - August 22, 2022

	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	546,170
Received booster dose	34.4%	59.3%
City of Milwaukee		
*Population	596,886	310,765
Received booster dose	28.5%	54.1%
Milwaukee County Suburbs		
*Population	357,323	235,405
Received booster dose	44.2%	66.0%

<sup>\*</sup>Overall population estimates from 2018 US Census American Community Survey \*\*Booster eligible population is aged 12+ with complete primary vaccination prior to March 25, 2022 for Pfizer or Moderna series, or prior to June 23, 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 1,495,817 doses (including boosters) have been administered from December 15, 2020 through August 22, 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).

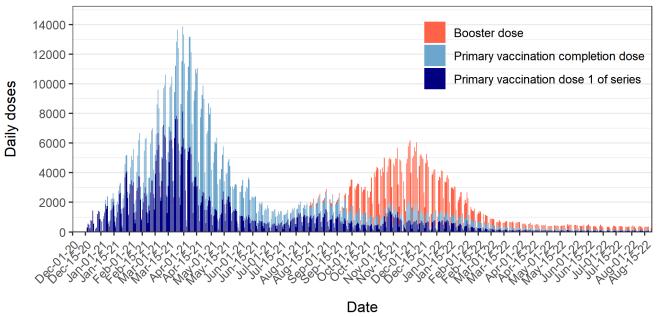


Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents

**Figure 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.

14000 7-day average

Pfizer

Pfizer Age 5-11

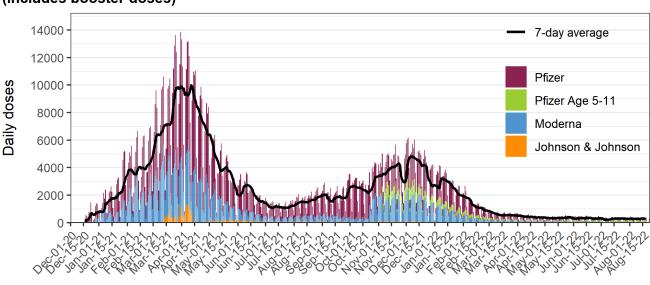
Moderna

Johnson & Johnson

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% conditions on & childcare workers 4ge 65+ Age 90% 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 

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

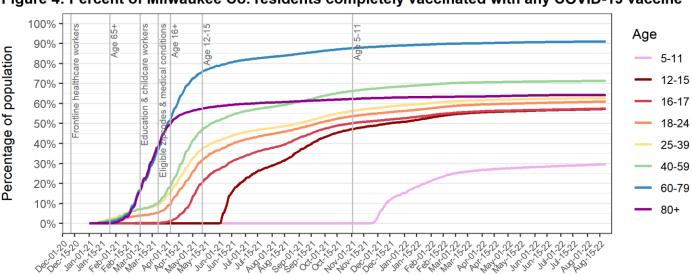


Figure 4: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

Date of first dose

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.

100% conditions 16+ Education & childcare workers Age 1 90% /ge ( Percentage of population 80% Race/Ethnicity medical 70% Black or AA 60% White 50% Hispanic 40% Asian or NHOPI 30%

Figure 5: 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

20% 10%

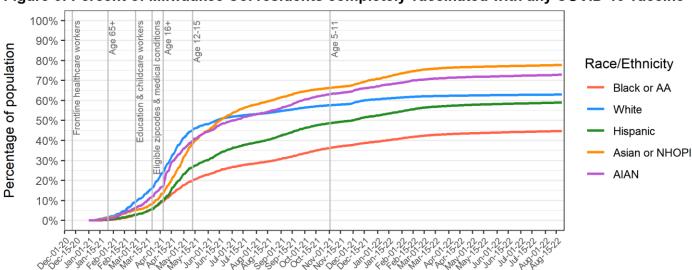


Figure 6: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

Date of primary vaccination completion dose

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

# 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.

Figure 7: Percentage of total first doses per week by age group in Milwaukee Co. of first doses per week <del>80+</del> 90% 60-79 80% 70% 40-59 60% 25-39 40% 18-24 16-17 12-15 5-11 

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

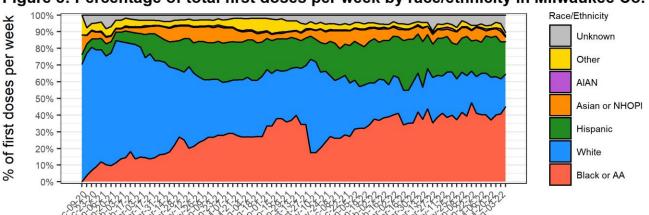


Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.

Start day of week

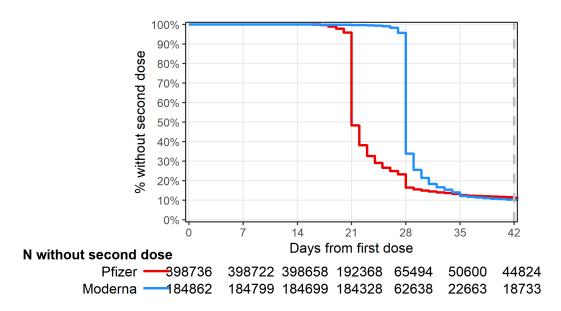
Start day of week

# 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 July 10, 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 89.1% of all residents who received their first dose of Pfizer prior to July 10, 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 <sup>1</sup>	*Percent boosted among eligible <sup>1</sup>
First vaccine received		
Pfizer	353,846 / 398,658 (88.8%)	195,547 / 339,381 (57.6%)
Moderna	166,128 / 184,855 (89.9%)	112,097 / 172,252 (65.1%)
Johnson & Johnson		15,967 / 34,537 (46.2%)
Age		
5-11	24,324 / 29,681 (82.0%)	
12-15	26,354 / 29,947 (88.0%)	10,141 / 27,104 (37.4%)
16-17	13,107 / 14,892 (88.0%)	5,746 / 13,607 (42.2%)
18-24	47,395 / 56,754 (83.5%)	21,017 / 53,802 (39.1%)
25-39	123,289 / 141,457 (87.2%)	66,977 / 137,856 (48.6%)
40-59	144,212 / 159,359 (90.5%)	97,640 / 162,836 (60.0%)
60-79	119,931 / 128,469 (93.4%)	102,971 / 128,577 (80.1%)
80+	21,362 / 22,954 (93.1%)	19,119 / 22,388 (85.4%)
Sex		
Female	279,442 / 312,304 (89.5%)	177,298 / 290,949 (60.9%)
Male	239,357 / 269,730 (88.7%)	145,732 / 253,929 (57.4%)
Unknown	1,175 / 1,479 (79.4%)	581 / 1,292 (45.0%)
Race/Ethnicity		
Black or AA	95,345 / 114,306 (83.4%)	50,745 / 103,636 (49.0%)
White	283,529 / 305,429 (92.8%)	202,795 / 295,509 (68.6%)
Hispanic	72,065 / 84,091 (85.7%)	34,870 / 75,922 (45.9%)
Asian or NHOPI	29,118 / 32,883 (88.6%)	14,917 / 28,747 (51.9%)
AIAN	3,002 / 3,408 (88.1%)	1,797 / 3,194 (56.3%)
Other	21,176 / 24,002 (88.2%)	11,304 / 22,038 (51.3%)
Unknown	15,739 / 19,394 (81.2%)	7,183 / 17,124 (41.9%)

<sup>&</sup>lt;sup>1</sup>n / N (%)

<sup>\*</sup>Booster eligible population is aged 12+ with complete primary vaccination prior to March 25, 2022 for Pfizer or Moderna series, or prior to June 23, 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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