### Milwaukee County COVID-19 vaccine data summary

### Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on October 6, 2022 and includes data through October 4, 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.

	Milwaukee County	City of Milwaukee	Subur
atal mimamuusasina daasa administanad	•	•	
otal primary vaccine doses administered Pfizer	1,181,740	674,473	507,2
	718,159	434,163	283,9
Pfizer Age 5-11	58,437	30,593	27,8
Pfizer Age 6M-4Y	6,185	2,427	3,7
Moderna Madagra Aga Sep 5V	359,017	184,308	174,7
Moderna Age 6m-5Y	4,210	1,655	2,
Johnson & Johnson	34,780	20,831	13,
otal vaccine doses administered (including oosters)	1,623,076	896,677	726,
Pfizer	966,157	570,012	396,
Pfizer Age 5-11	63,648	32,701	30,
Pfizer Age 6M-4Y	6,200	2,439	3,
Pfizer Bivalent Booster	22,198	10,942	11,
Moderna	510.164	251,882	258,
Moderna Age 6M-5Y	4,229	1,658	2,
Moderna Bivalent Booster	12,930	4,741	8,
Johnson & Johnson	37,550	22,302	15,
Total individuals with one or more doses	628,656	361,938	266,
Pfizer	371,319	226,009	200, 145,
Pfizer Age 5-11	31,099	16,723	143,
Pfizer Age 6M-4Y	31,099	1,412	14,
Moderna	185,154	95,735	89,
Moderna Age 6M-5Y	2,529	1,022	1,
Johnson & Johnson	34,671	20,762	13,
Total individuals completely vaccinated	E0E 202	222.407	252,
otal individuals completely vaccinated Pfizer	585,383	332,407	•
	346,758 27,531	207,931 14,001	138, 13,
Pfizer Age 5-11 Pfizer Age 6M-4Y	492	14,001	13,
Moderna	174,249	88,931	85,
Moderna Age 6M-5Y	1,682	633	oo, 1,
Johnson & Johnson	34,671	20,762	13,
Tatal individuals basets d	202 444	472.000	400
otal individuals boosted	333,411	173,069	160,
Pfizer	198,385	107,850	90,
Pfizer Age 5-11	5,694	2,301	3,
Pfizer Age 6M-4Y	0	0	50
Moderna Madaraa Ara CM 5V	113,170	53,693	59,
Moderna Age 6M-5Y	3	1	_
Johnson & Johnson ndividuals are grouped by the first vaccine produc	16,159	9,224	6,

Percentage of Population Vaccinated December 15, 2020 - October 4, 2022				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	65.9%	70.2%	74.3%	75.1%
Completely vaccinated	61.3%	65.7%	69.8%	70.6%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	60.6%	65.2%	70.0%	71.1%
Completely vaccinated	55.7%	60.1%	64.9%	66.0%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	74.6%	78.3%	81.1%	81.4%
Completely vaccinated	70.8%	74.8%	77.6%	77.8%
*Population estimates from 2018 US Cen	sus American Com	munity Survey		

	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	574,192
Received booster dose	34.9%	58.0%
City of Milwaukee		
*Population	596,886	325,221
Received booster dose	29.0%	53.2%
Milwaukee County Suburbs		
*Population	357,323	248,971
Received booster dose	44.9%	64.4%
*Overall population estimates from 20 **Booster eligible population is aged 5 May 7, 2022 for Pfizer or Moderna ser Johnson	5+ with complete primary	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 1,623,076 doses (including first booster doses) have been administered from December 15, 2020 through October 4, 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, second dose of Pfizer or Moderna, or third dose for Pfizer age 6M-4Y). The orange color indicates a booster dose (second dose following Johnson & Johnson or third dose following Pfizer or Moderna series).

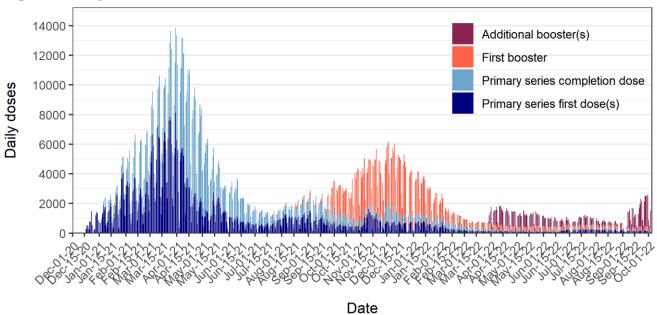


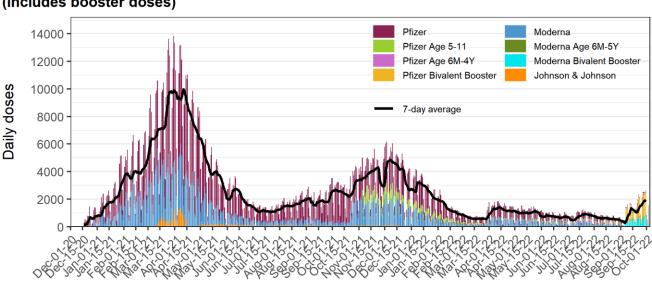
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents

**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.

Pfizer Moderna 14000 Moderna Age 6M-5Y Pfizer Age 5-11 Pfizer Age 6M-4Y Johnson & Johnson 12000 10000 7-day average Daily doses 8000 6000 4000 2000 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



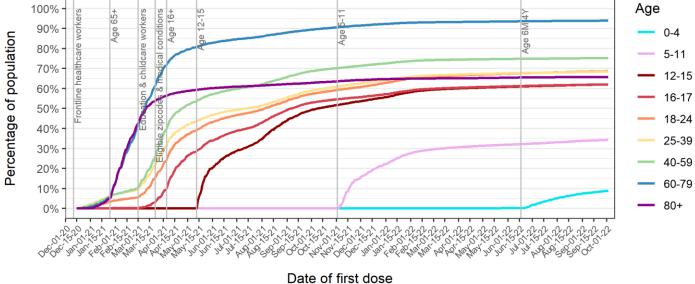
Date

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

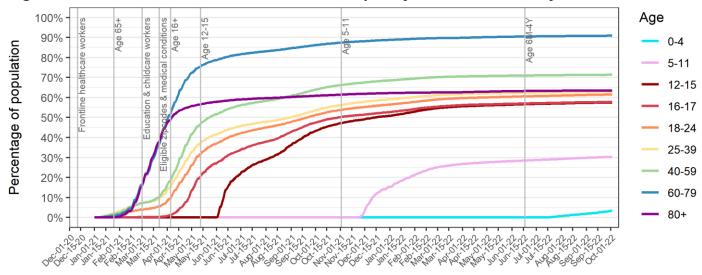
**Figure 3** shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines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

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

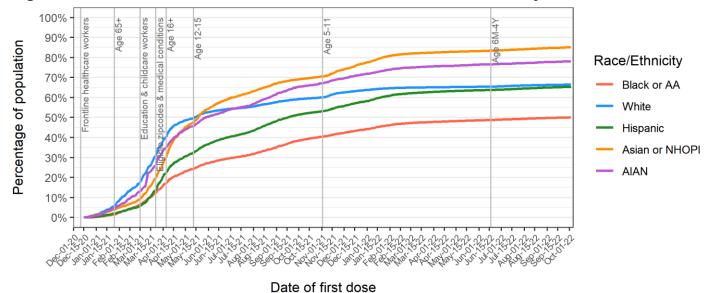


Date of primary vaccination completion dose

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

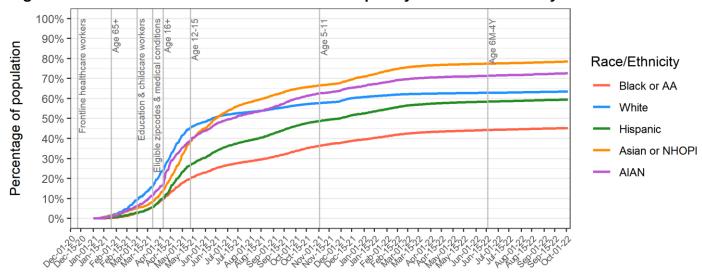
**Figure 5** shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity 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, 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. Similar increases were observed with the new eligibility of children ages 5-11, and later for ages 6M-4Y.

**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.

100% of first doses per week 90% <del>80+</del> 80% 60-79 70% 40-59 60% 25-39 18-24 40% 16-17 30% 12-15 5-11 0-4 

Figure 7: Percentage of total first doses per week by age group in Milwaukee Co.

Start day of week

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

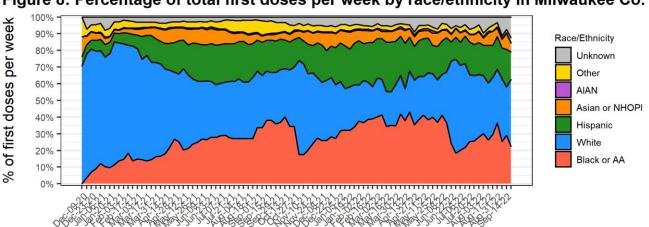


Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.

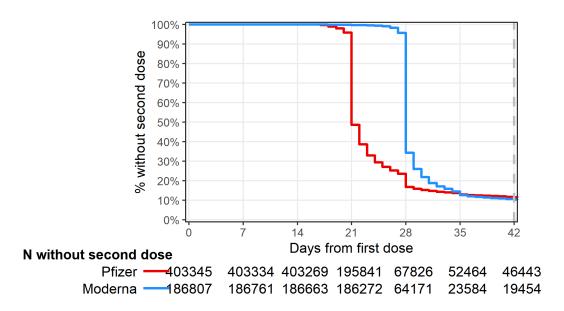
Start day of week

### 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 August 22, 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 88.8% of all residents who received their first dose of Pfizer prior to August 22, 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	356,902 / 403,345 (88.5%)	203,955 / 366,946 (55.6%)
Moderna	167,353 / 186,807 (89.6%)	113,123 / 172,634 (65.5%)
Johnson & Johnson		16,159 / 34,612 (46.7%)
Age		
0-4	3,409 / 4,434 (76.9%)	
5-11	24,818 / 30,540 (81.3%)	5,692 / 25,241 (22.6%)
12-15	26,444 / 30,155 (87.7%)	10,551 / 27,447 (38.4%)
16-17	13,172 / 14,991 (87.9%)	5,913 / 13,760 (43.0%)
18-24	47,731 / 57,322 (83.3%)	21,593 / 54,448 (39.7%)
25-39	123,666 / 142,171 (87.0%)	68,050 / 138,855 (49.0%)
40-59	144,286 / 159,582 (90.4%)	98,867 / 163,416 (60.5%)
60-79	119,655 / 128,280 (93.3%)	103,564 / 128,808 (80.4%)
80+	21,074 / 22,677 (92.9%)	19,007 / 22,217 (85.6%)
Sex		
Female	281,624 / 315,734 (89.2%)	182,346 / 304,970 (59.8%)
Male	241,473 / 272,949 (88.5%)	150,318 / 267,938 (56.1%)
Unknown	1,158 / 1,469 (78.8%)	573 / 1,284 (44.6%)
Race/Ethnicity		
Black or AA	96,212 / 115,979 (83.0%)	52,476 / 108,948 (48.2%)
White	286,726 / 309,513 (92.6%)	208,388 / 309,206 (67.4%)
Hispanic	72,806 / 85,266 (85.4%)	36,746 / 81,489 (45.1%)
Asian or NHOPI	29,416 / 33,314 (88.3%)	15,587 / 31,283 (49.8%)
AIAN	2,994 / 3,403 (88.0%)	1,821 / 3,296 (55.2%)
Other	20,536 / 23,353 (87.9%)	11,068 / 22,375 (49.5%)
Unknown	15,565 / 19,324 (80.5%)	7,151 / 17,595 (40.6%)

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

<sup>\*</sup>Booster eligible population is aged 5+ with complete primary vaccination prior to May 7, 2022 for Pfizer or Moderna series, or prior to August 5, 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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