#### Milwaukee County COVID-19 vaccine data summary

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

This report was updated on February 3, 2022 and includes data through January 31, 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 - January 31, 2022	als		
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,127,577	636,480	491,097
Pfizer	691,732	413,531	278,201
Pfizer Age 5-11	42,890	19,939	22,951
Moderna	358,587	182,480	176,107
Johnson & Johnson	34,368	20,530	13,838
Total vaccine doses administered (including boosters)	1,399,315	771,104	628,211
Pfizer	854,647	499,726	354,921
Pfizer Age 5-11	42,890	19,939	22,951
Moderna	464,874	229,606	235,268
Johnson & Johnson	36,904	21,833	15,071
*Total individuals with one or more doses	604,649	344,588	260,061
Pfizer	359,681	216,593	143,088
Pfizer Age 5-11	24,658	12,119	12,539
Moderna	185,942	95,346	90,596
Johnson & Johnson	34,368	20,530	13,838
*Total individuals completely vaccinated	557,296	312,422	244,874
Pfizer	331,843	196,754	135,089
Pfizer Age 5-11	18,370	7,900	10,470
Moderna	172,715	87,238	85,477
Johnson & Johnson	34,368	20,530	13,838
*Total individuals boosted	271,738	134,624	137,114
Pfizer	160,024	83,010	77,014
Pfizer Age 5-11	1	0	1
Moderna	98,921	44,735	54,186
Johnson & Johnson	12,792	6,879	5,913
*Individuals are grouped by the first vaccine product product for their second dose in a series		·	

Percentage of Population Vaccinated December 15, 2020 - January 31, 2022				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	63.4%	68.1%	72.8%	73.8%
Completely vaccinated	58.4%	62.8%	67.7%	68.7%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	57.7%	62.5%	67.9%	69.2%
Completely vaccinated	52.3%	56.7%	62.2%	63.5%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	72.8%	77.4%	80.6%	81.1%
Completely vaccinated	68.5%	72.9%	76.4%	76.8%
*Population estimates from 2018 US Co	ensus American Com	munity Survey		

December 15, 2020 - January 31, 2022		
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	476,181
Received booster dose	28.5%	57.0%
City of Milwaukee		
*Population	596,886	261,047
Received booster dose	22.6%	51.5%
Milwaukee County Suburbs		
*Population	357,323	215,134
Received booster dose	38.4%	63.7%
*Overall population estimates from 2018 L **Booster eligible population is aged 12+ september 3, 2021 for Pfizer or Moderna Johnson & Johnson	with complete prima	y vaccination prior to

**Percentage of Population Boosted** 

#### 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 1,399,315 doses (including boosters) have been administered from December 15, 2020 through January 31, 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).

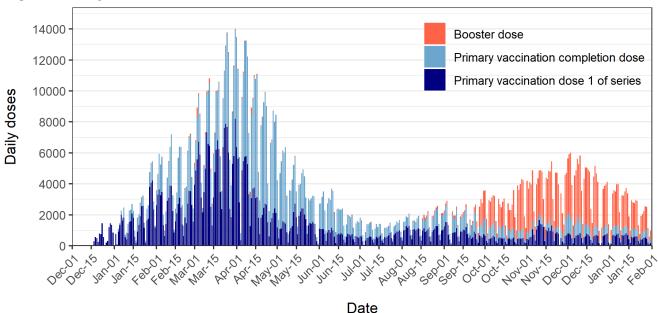


Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents

**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
12000
10000
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

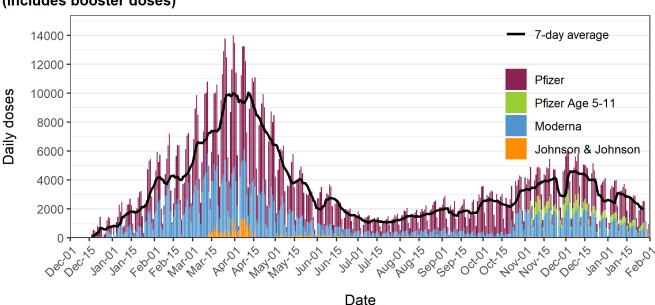


Figure 2b: Daily COVID-19 vaccination doses administered to Milwaukee Co. residents (includes booster doses)

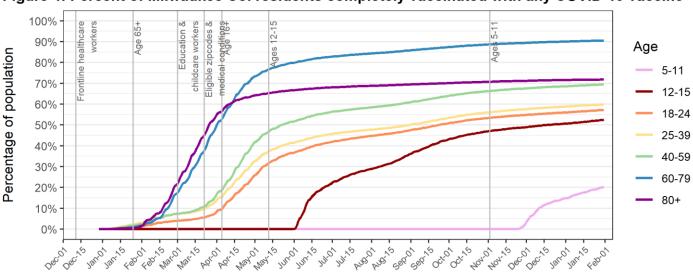
# Percentages of Milwaukee County residents partially and completely vaccinated by age group

**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% childcare workers zipcodes & vorkers Education 90% Age Percentage of population 80% **5-11** 70% 12-15 60% 18-24 50% 25-39 40% 40-59 30% 60-79 20% +08 10% F80.15 POLYS May AUST Waron POLOV Mayor Septor 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

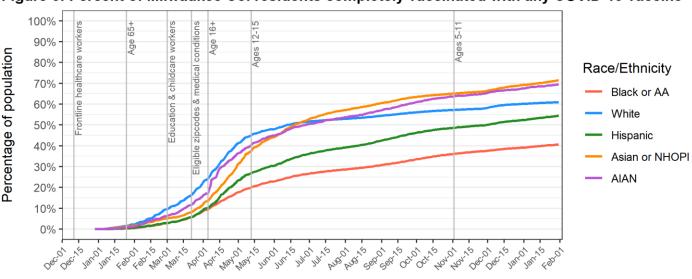
## Proportions of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

**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% Education & childcare workers zipcodes & medical conditions 90% Age Percentage of population 80% Race/Ethnicity 70% Black or AA 60% White 50% Hispanic 40% Asian or NHOPI 30% AIAN 20% 10% POLO Mayor Junos 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.

Figure 7: Percentage of total first doses per week by age group in Milwaukee Co. % of first doses per week 80+ 90% 80% 60-79 70% 40-59 60% 25-39 50% 40% 18-24 30% 16-17 20% 12-15 10% 5-11 Sy Way Way Vot Vot Vot Way Way May me me Start day of week

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

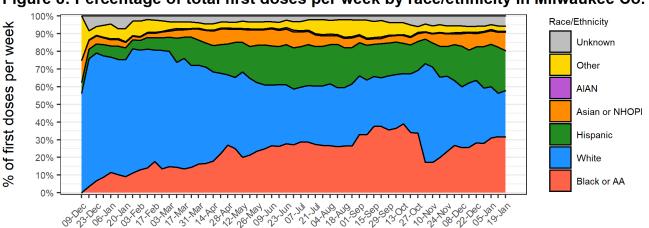


Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.

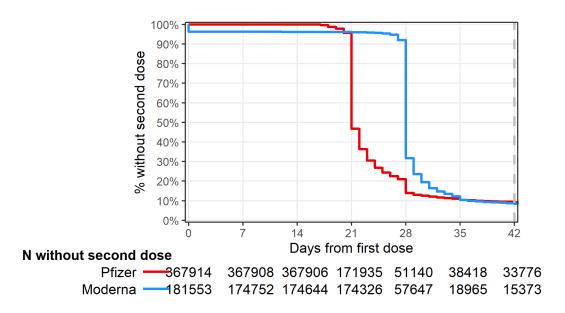
Start day of week

### 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 December 19, 2021). 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 91.1% of all residents who received their first dose of Pfizer prior to December 19, 2021 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	334,122 / 367,896 (90.8%)	159,791 / 284,076 (56.2%)
Moderna	166,180 / 181,553 (91.5%)	98,836 / 158,565 (62.3%)
Johnson & Johnson		12,792 / 33,540 (38.1%)
Age		
5-11	15,554 / 17,954 (86.6%)	
12-15	24,256 / 26,819 (90.4%)	4,752 / 18,103 (26.2%)
16-17	12,319 / 13,686 (90.0%)	3,705 / 10,459 (35.4%)
18-24	44,777 / 51,442 (87.0%)	15,977 / 43,681 (36.6%)
25-39	118,200 / 132,087 (89.5%)	55,657 / 113,884 (48.9%)
40-59	140,905 / 153,467 (91.8%)	81,398 / 142,459 (57.1%)
60-79	120,187 / 128,083 (93.8%)	91,770 / 123,046 (74.6%)
80+	24,104 / 25,911 (93.0%)	18,160 / 24,549 (74.0%)
Sex		
Female	270,041 / 295,233 (91.5%)	149,255 / 253,748 (58.8%)
Male	229,111 / 252,812 (90.6%)	121,708 / 221,240 (55.0%)
Unknown	1,150 / 1,404 (81.9%)	456 / 1,193 (38.2%)
Race/Ethnicity		
Black or AA	87,161 / 100,418 (86.8%)	37,266 / 77,991 (47.8%)
White	275,220 / 293,878 (93.7%)	177,713 / 270,680 (65.7%)
Hispanic	66,404 / 75,043 (88.5%)	24,508 / 60,638 (40.4%)
Asian or NHOPI	26,698 / 29,338 (91.0%)	11,282 / 24,737 (45.6%)
AIAN	2,862 / 3,196 (89.5%)	1,426 / 2,707 (52.7%)
Other	25,914 / 28,837 (89.9%)	13,190 / 22,970 (57.4%)
Unknown	16,043 / 18,739 (85.6%)	6,034 / 16,458 (36.7%)

¹n / N (%)

<sup>\*</sup>Booster eligible population is aged 12+ with complete primary vaccination prior to September 3, 2021 for Pfizer or Moderna series, or prior to December 2, 2021 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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