### Milwaukee County COVID-19 vaccine data summary

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

This report was updated on January 26, 2022 and includes data through January 24, 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 24, 2022			
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,119,639	631,144	488,495
Pfizer	687,078	410,275	276,803
Pfizer Age 5-11	40,702	18,579	22,123
Moderna	357,565	181,817	175,748
Johnson & Johnson	34,294	20,473	13,821
Total vaccine doses administered (including boosters)	1,381,687	759,903	621,784
Pfizer	843,014	492,150	350,864
Pfizer Age 5-11	40,702	18,579	22,123
Moderna	461,180	227,428	233,752
Johnson & Johnson	36,791	21,746	15,045
*Total individuals with one or more doses	600,742	341,873	258,869
Pfizer	357,321	214,950	142,371
Pfizer Age 5-11	23,706	11,475	12,231
Moderna	185,421	94,975	90,446
Johnson & Johnson	34,294	20,473	13,82
*Total individuals completely vaccinated	553,191	309,744	243,447
Pfizer	329,579	195,167	134,412
Pfizer Age 5-11	17,122	7,174	9,948
Moderna	172,196	86,930	85,266
Johnson & Johnson	34,294	20,473	13,821
*Total individuals boosted	262,048	128,759	133,289
Pfizer	153,531	79,080	74,451
Pfizer Age 5-11	100,001	79,000	74,45
Moderna	96,300	43,214	53,086
Johnson & Johnson	12,216	6,465	5,75
*Individuals are grouped by the first vaccine product product for their second dose in a series	· · · · · · · · · · · · · · · · · · ·	•	

Percentage of Population Vaccinated December 15, 2020 - January 24, 2022				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	63.0%	67.7%	72.5%	73.4%
Completely vaccinated	58.0%	62.3%	67.3%	68.3%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	57.3%	62.0%	67.5%	68.8%
Completely vaccinated	51.9%	56.2%	61.8%	63.1%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	72.4%	77.0%	80.4%	80.8%
Completely vaccinated	68.1%	72.4%	76.1%	76.5%
*Population estimates from 2018 US Cen	sus American Com	munity Survey		

Percentage of Population Boosted December 15, 2020 - January 24, 2022		
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	469,511
Received booster dose	27.5%	55.7%
City of Milwaukee		
*Population	596,886	256,687
Received booster dose	21.6%	50.1%
Milwaukee County Suburbs		
*Population	357,323	212,824
Received booster dose	37.3%	62.6%
*Overall population estimates from 2018 U **Booster eligible population is aged 12+ v August 27, 2021 for Pfizer or Moderna seri Johnson & Johnson	vith complete prima	ry 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 1,381,687 doses (including boosters) have been administered from December 15, 2020 through January 24, 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).

Booster dose
Primary vaccination completion dose
Primary vaccination dose 1 of series

8000
4000
2000

Date

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

**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.

7-day average 14000 12000 Pfizer 10000 Daily doses Pfizer Age 5-11 Moderna 8000 Johnson & Johnson 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

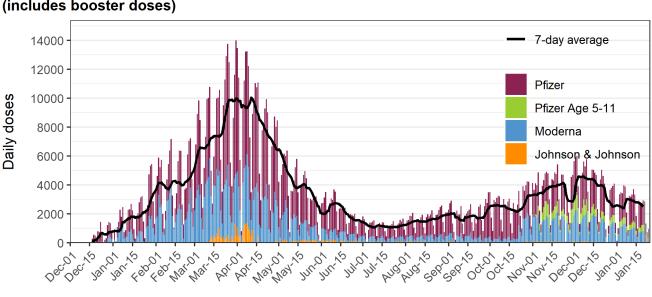


Figure 2b: Daily COVID-19 vaccination doses administered to Milwaukee Co. residents (includes booster doses)

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

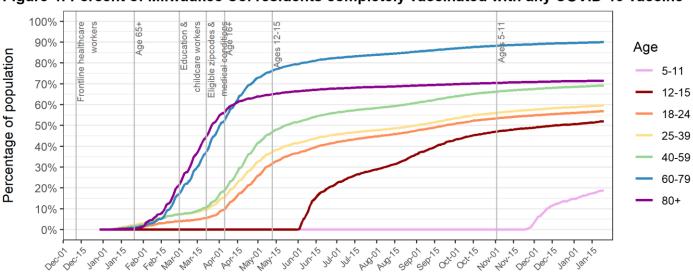
# Percentages of Milwaukee County residents partially and completely vaccinated by age group

**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.

100% gible zipcodes & Education & childcare workers healthcare vorkers 90% Age Percentage of population 80% **5-11** 70% 12-15 60% 18-24 50% 25-39 40% 40-59 30% 60-79 20% <del>80+</del> 10% 4801/5 POLYS AUSTS AQT:O1 Way-01 May Octro 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

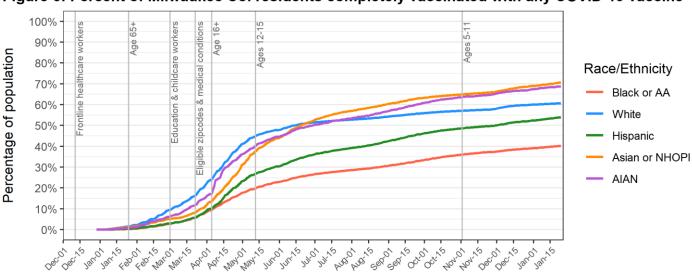
# Proportions of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

**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 le 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% Mayor May POLO 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.

% 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 M.Tor 27.31 

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

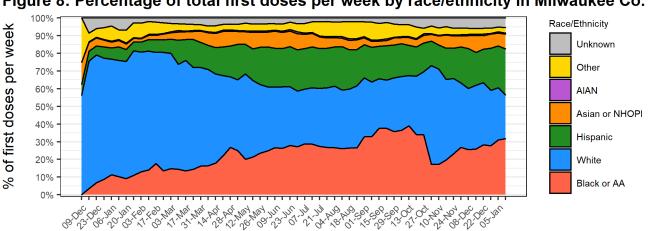


Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.

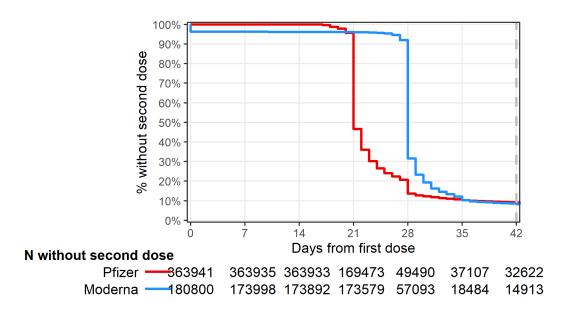
Start day of week

## 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 December 12, 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 91.3% of all residents who received their first dose of Pfizer prior to December 12, 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	331,304 / 363,925 (91.0%)	153,296 / 278,811 (55.0%)
Moderna	165,887 / 180,800 (91.8%)	96,215 / 157,396 (61.1%)
Johnson & Johnson		12,216 / 33,304 (36.7%)
Age		
5-11	14,401 / 16,445 (87.6%)	
12-15	24,094 / 26,596 (90.6%)	3,707 / 17,076 (21.7%)
16-17	12,270 / 13,607 (90.2%)	3,381 / 10,132 (33.4%)
18-24	44,668 / 51,101 (87.4%)	15,089 / 42,988 (35.1%)
25-39	117,790 / 131,242 (89.8%)	53,616 / 112,238 (47.8%)
40-59	140,497 / 152,786 (92.0%)	78,466 / 140,769 (55.7%)
60-79	119,489 / 127,196 (93.9%)	89,604 / 121,927 (73.5%)
80+	23,982 / 25,752 (93.1%)	17,864 / 24,381 (73.3%)
Sex		
Female	268,774 / 293,137 (91.7%)	144,532 / 250,567 (57.7%)
Male	227,339 / 250,272 (90.8%)	116,815 / 217,816 (53.6%)
Unknown	1,078 / 1,316 (81.9%)	380 / 1,128 (33.7%)
Race/Ethnicity		
Black or AA	86,346 / 99,225 (87.0%)	35,308 / 76,309 (46.3%)
White	273,806 / 291,849 (93.8%)	172,941 / 267,975 (64.5%)
Hispanic	65,911 / 74,294 (88.7%)	22,969 / 59,293 (38.7%)
Asian or NHOPI	26,445 / 28,894 (91.5%)	10,659 / 24,359 (43.8%)
AIAN	2,841 / 3,170 (89.6%)	1,364 / 2,657 (51.3%)
Other	26,118 / 29,003 (90.1%)	12,997 / 22,766 (57.1%)
Unknown	15,724 / 18,290 (86.0%)	5,489 / 16,152 (34.0%)

¹n / N (%)

<sup>\*</sup>Booster eligible population is aged 12+ with complete primary vaccination prior to August 27, 2021 for Pfizer or Moderna series, or prior to November 25, 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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