### Milwaukee County COVID-19 vaccine data summary

### Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on June 30, 2022 and includes data through June 27, 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 - June 27, 2022			
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,176,530	671,215	505,315
Pfizer	719,490	434,132	285,358
Pfizer Age 5-11	55,272	28,552	26,720
Moderna	366,729	187,536	179,193
Johnson & Johnson	35,039	20,995	14,044
Total vaccine doses administered (including boosters)	1,496,126	836,314	659,812
Pfizer	917,795	543,539	374,256
Pfizer Age 5-11	55,272	28,552	26,720
Moderna	485,297	241,800	243,497
Johnson & Johnson	37,762	22,423	15,339
*Total individuals with one or more doses	626,105	360,252	265,853
Pfizer	372,241	226,111	146,130
Pfizer Age 5-11	29,535	15,662	13,873
Moderna	189,290	97,484	91,806
Johnson & Johnson	35,039	20,995	14,044
*Total individuals completely vaccinated	585,464	331,958	253,506
Pfizer	346,827	207,634	139,193
Pfizer Age 5-11	25,968	13,032	12,936
Moderna	177,630	90,297	87,333
Johnson & Johnson	35,039	20,995	14,044
*Total individuals boosted	319,596	165,099	154,497
Pfizer	192,140	103,590	88,550
Pfizer Age 5-11	201	80	121
Moderna	111,592	52,573	59,019
Johnson & Johnson	15,663	8,856	6,807
*Individuals are grouped by the first vaccine product product for their second dose in a series	·	·	

Percentage of Population Vaccinated December 15, 2020 - June 27, 2022				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	65.6%	70.5%	74.9%	75.8%
Completely vaccinated	61.4%	66.0%	70.3%	71.1%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	60.4%	65.3%	70.4%	71.6%
Completely vaccinated	55.6%	60.2%	65.2%	66.3%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	74.4%	79.1%	82.1%	82.5%
Completely vaccinated	70.9%	75.4%	78.4%	78.7%
*Population estimates from 2018 US Cen	sus American Com	munity Survey		

Percentage of Population Boosted December 15, 2020 - June 27, 2022		
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	543,142
Received booster dose	33.5%	58.8%
City of Milwaukee		
*Population	596,886	306,825
Received booster dose	27.7%	53.8%
Milwaukee County Suburbs		
*Population	357,323	236,317
Received booster dose	43.2%	65.3%
*Overall population estimates from 2018 **Booster eligible population is aged 12 January 28, 2022 for Pfizer or Moderna s & Johnson	+ with complete primar	y 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 1,496,126 doses (including boosters) have been administered from December 15, 2020 through June 27, 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

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4000
2000
Date

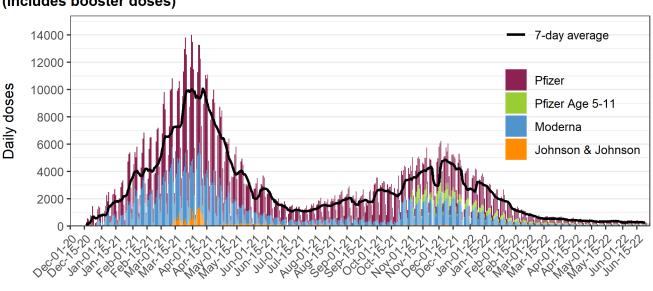
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents

**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.

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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.

conditions workers \ge 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% **80+** 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

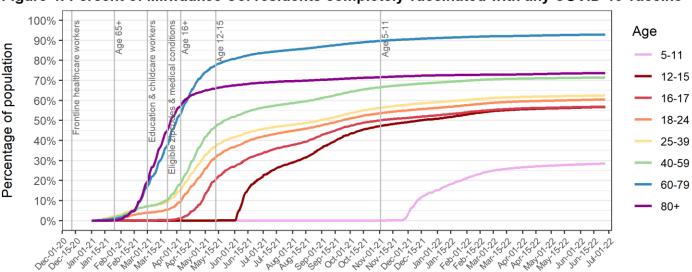


Figure 4: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

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.

Education & childcare workers odes & medical conditions 90% \ge ( Age, Percentage of population 80% Race/Ethnicity 70% Black or AA 60% White 50% Hispanic 40% Asian or NHOPI 30% **AIAN** 20% 10% 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

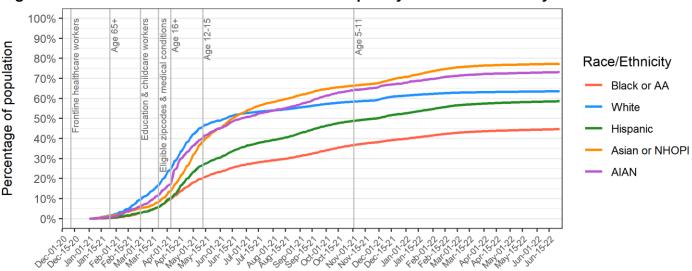


Figure 6: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

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. 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 30% 16-17 12-15 5-11 

Start day of week

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

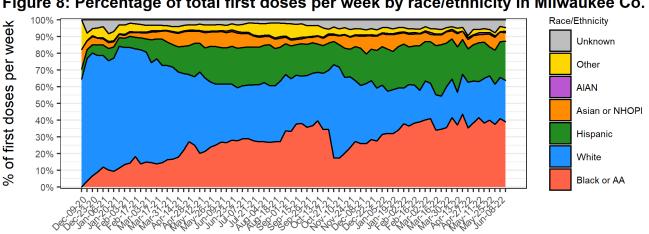


Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.

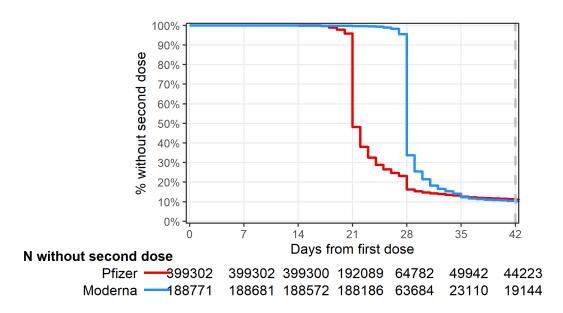
Start day of week

# 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 May 15, 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 89.2% of all residents who received their first dose of Pfizer prior to May 15, 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	355,024 / 399,240 (88.9%)	192,072 / 334,898 (57.4%)
Moderna	169,627 / 188,771 (89.9%)	111,562 / 173,309 (64.4%)
Johnson & Johnson		15,663 / 34,935 (44.8%)
Age		
5-11	23,683 / 28,827 (82.2%)	
12-15	26,202 / 29,732 (88.1%)	9,245 / 25,775 (35.9%)
16-17	13,022 / 14,781 (88.1%)	5,363 / 13,098 (40.9%)
18-24	47,117 / 56,192 (83.9%)	20,339 / 52,102 (39.0%)
25-39	122,961 / 140,784 (87.3%)	65,603 / 134,585 (48.7%)
40-59	144,601 / 159,808 (90.5%)	95,891 / 161,112 (59.5%)
60-79	122,585 / 131,415 (93.3%)	102,723 / 130,817 (78.5%)
80+	24,480 / 26,472 (92.5%)	20,133 / 25,653 (78.5%)
Sex		
Female	282,000 / 314,634 (89.6%)	174,756 / 289,182 (60.4%)
Male	241,459 / 271,885 (88.8%)	143,957 / 252,660 (57.0%)
Unknown	1,192 / 1,492 (79.9%)	584 / 1,300 (44.9%)
Race/Ethnicity		
Black or AA	95,570 / 114,107 (83.8%)	49,061 / 100,692 (48.7%)
White	286,705 / 308,978 (92.8%)	201,480 / 296,909 (67.9%)
Hispanic	71,794 / 83,611 (85.9%)	33,468 / 73,779 (45.4%)
Asian or NHOPI	29,006 / 32,714 (88.7%)	14,527 / 28,225 (51.5%)
AIAN	3,028 / 3,434 (88.2%)	1,739 / 3,159 (55.0%)
Other	22,435 / 25,426 (88.2%)	11,766 / 23,089 (51.0%)
Unknown	16,113 / 19,741 (81.6%)	7,256 / 17,289 (42.0%)

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

<sup>\*</sup>Booster eligible population is aged 12+ with complete primary vaccination prior to January 28, 2022 for Pfizer or Moderna series, or prior to April 28, 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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