

# Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on October 13, 2022 and includes data through October 12, 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.

| <b>Milwaukee County COVID-19 Vaccination Totals<br/>December 12, 2020 - October 12, 2022</b>  |                         |                          |                |
|---|-------------------------|--------------------------|----------------|
|   | <b>Milwaukee County</b> | <b>City of Milwaukee</b> | <b>Suburbs</b> |
| <b>Total primary vaccine doses administered</b>   | <b>1,183,362</b>        | <b>675,379</b>           | <b>507,983</b> |
| Pfizer  | 718,450                 | 434,391                  | 284,059        |
| Pfizer Age 5-11   | 58,577                  | 30,689                   | 27,888         |
| Pfizer Age 6M-4Y  | 6,669                   | 2,580                    | 4,089          |
| Moderna   | 358,989                 | 184,301                  | 174,688        |
| Moderna Age 6m-5Y   | 4,418                   | 1,743                    | 2,675          |
| Johnson & Johnson   | 34,773                  | 20,839                   | 13,934         |
| <b>Total vaccine doses administered (including boosters)</b>  | <b>1,640,936</b>        | <b>905,284</b>           | <b>735,652</b> |
| Pfizer  | 966,579                 | 570,342                  | 396,237        |
| Pfizer Age 5-11   | 64,007                  | 32,886                   | 31,121         |
| Pfizer Age 6M-4Y  | 6,686                   | 2,593                    | 4,093          |
| Pfizer Bivalent Booster   | 33,092                  | 16,622                   | 16,470         |
| Moderna   | 510,129                 | 251,903                  | 258,226        |
| Moderna Age 6M-5Y   | 4,438                   | 1,747                    | 2,691          |
| Moderna Bivalent Booster  | 18,468                  | 6,886                    | 11,582         |
| Johnson & Johnson   | 37,537                  | 22,305                   | 15,232         |
| <b>*Total individuals with one or more doses</b>  | <b>629,411</b>          | <b>362,449</b>           | <b>266,962</b> |
| Pfizer  | 371,481                 | 226,153                  | 145,328        |
| Pfizer Age 5-11   | 31,167                  | 16,774                   | 14,393         |
| Pfizer Age 6M-4Y  | 3,496                   | 1,469                    | 2,027          |
| Moderna   | 185,144                 | 95,730                   | 89,414         |
| Moderna Age 6M-5Y   | 2,643                   | 1,075                    | 1,568          |
| Johnson & Johnson   | 34,664                  | 20,771                   | 13,893         |
| <b>*Total individuals completely vaccinated</b>   | <b>586,116</b>          | <b>332,774</b>           | <b>253,342</b> |
| Pfizer  | 347,062                 | 208,128                  | 138,934        |
| Pfizer Age 5-11   | 27,597                  | 14,043                   | 13,554         |
| Pfizer Age 6M-4Y  | 732                     | 211                      | 521            |
| Moderna   | 174,286                 | 88,953                   | 85,333         |
| Moderna Age 6M-5Y   | 1,775                   | 668                      | 1,107          |
| Johnson & Johnson   | 34,664                  | 20,771                   | 13,893         |
| <b>*Total individuals boosted</b>   | <b>335,206</b>          | <b>174,164</b>           | <b>161,042</b> |
| Pfizer  | 199,438                 | 108,519                  | 90,919         |
| Pfizer Age 5-11   | 5,958                   | 2,411                    | 3,547          |
| Pfizer Age 6M-4Y  | 1                       | 0                        | 1              |
| Moderna   | 113,584                 | 53,949                   | 59,635         |
| Moderna Age 6M-5Y   | 3                       | 1                        | 2              |
| Johnson & Johnson   | 16,222                  | 9,284                    | 6,938          |
| <b>*Individuals are grouped by the first vaccine product received. Note a small number of people received a different vaccine product for their second dose in a series</b> |                         |                          |                |

**Percentage of Population Vaccinated  
December 12, 2020 - October 12, 2022**

|                                 | <b>Overall</b> | <b>Ages 5+</b> | <b>Ages 12+</b> | <b>Ages 16+</b> |
|---------------------------------|----------------|----------------|-----------------|-----------------|
| <b>Milwaukee County</b>         |                |                |                 |                 |
| *Population                     | 954,209        | 887,487        | 796,322         | 747,409         |
| Received one or more doses      | 66.0%          | 70.2%          | 74.3%           | 75.1%           |
| Completely vaccinated           | 61.4%          | 65.8%          | 69.8%           | 70.6%           |
| <b>City of Milwaukee</b>        |                |                |                 |                 |
| *Population                     | 596,886        | 551,401        | 489,445         | 456,809         |
| Received one or more doses      | 60.7%          | 65.3%          | 70.1%           | 71.2%           |
| Completely vaccinated           | 55.8%          | 60.2%          | 64.9%           | 66.0%           |
| <b>Milwaukee County Suburbs</b> |                |                |                 |                 |
| *Population                     | 357,323        | 336,086        | 306,877         | 290,600         |
| Received one or more doses      | 74.7%          | 78.4%          | 81.1%           | 81.4%           |
| Completely vaccinated           | 70.9%          | 74.9%          | 77.6%           | 77.8%           |

**\*Population estimates from 2018 US Census American Community Survey**

**Percentage of Population Boosted  
December 12, 2020 - October 12, 2022**

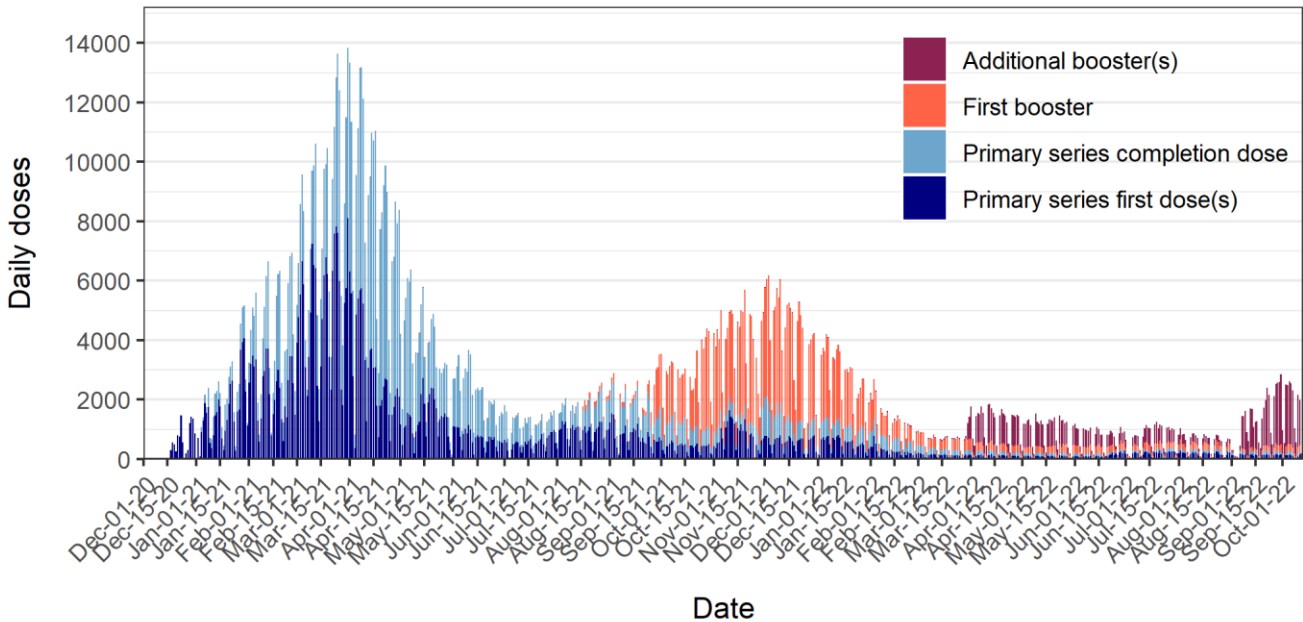
|                                 | <b>Overall</b> | <b>**Booster eligible</b> |
|---------------------------------|----------------|---------------------------|
| <b>Milwaukee County</b>         |                |                           |
| *Population                     | 954,209        | 574,792                   |
| Received booster dose           | 35.1%          | 58.3%                     |
| <b>City of Milwaukee</b>        |                |                           |
| *Population                     | 596,886        | 325,659                   |
| Received booster dose           | 29.2%          | 53.4%                     |
| <b>Milwaukee County Suburbs</b> |                |                           |
| *Population                     | 357,323        | 249,133                   |
| Received booster dose           | 45.1%          | 64.6%                     |

**\*Overall population estimates from 2018 US Census American Community Survey  
\*\*Booster eligible population is aged 5+ with complete primary vaccination prior to May 15, 2022 for Pfizer or Moderna series, or prior to August 13, 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 1,640,936 doses (including first booster doses) have been administered from December 12, 2020 through October 12, 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).

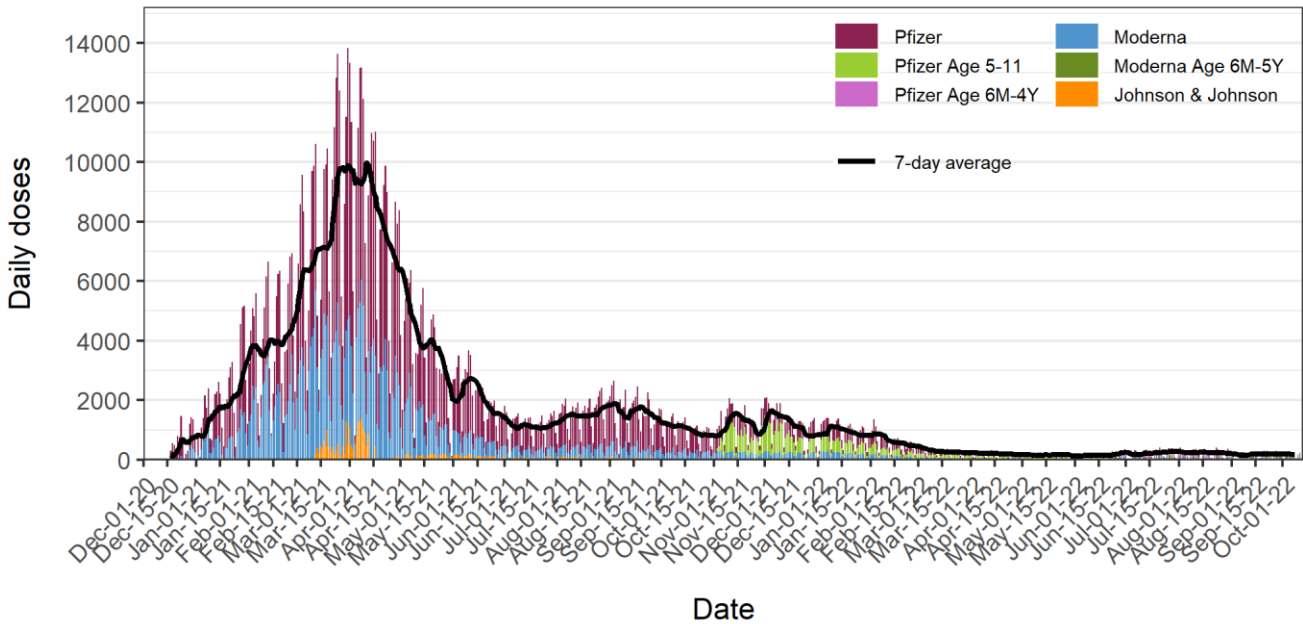
**Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents**



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

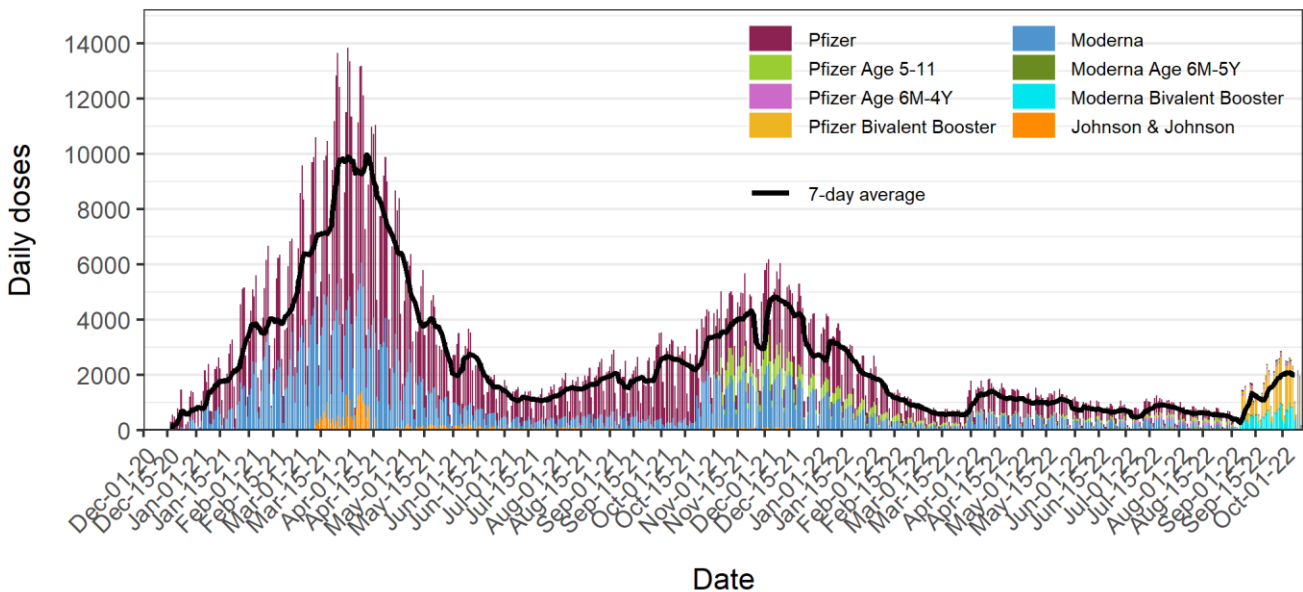
**Figures 2a and 2b** show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: 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.

**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)**

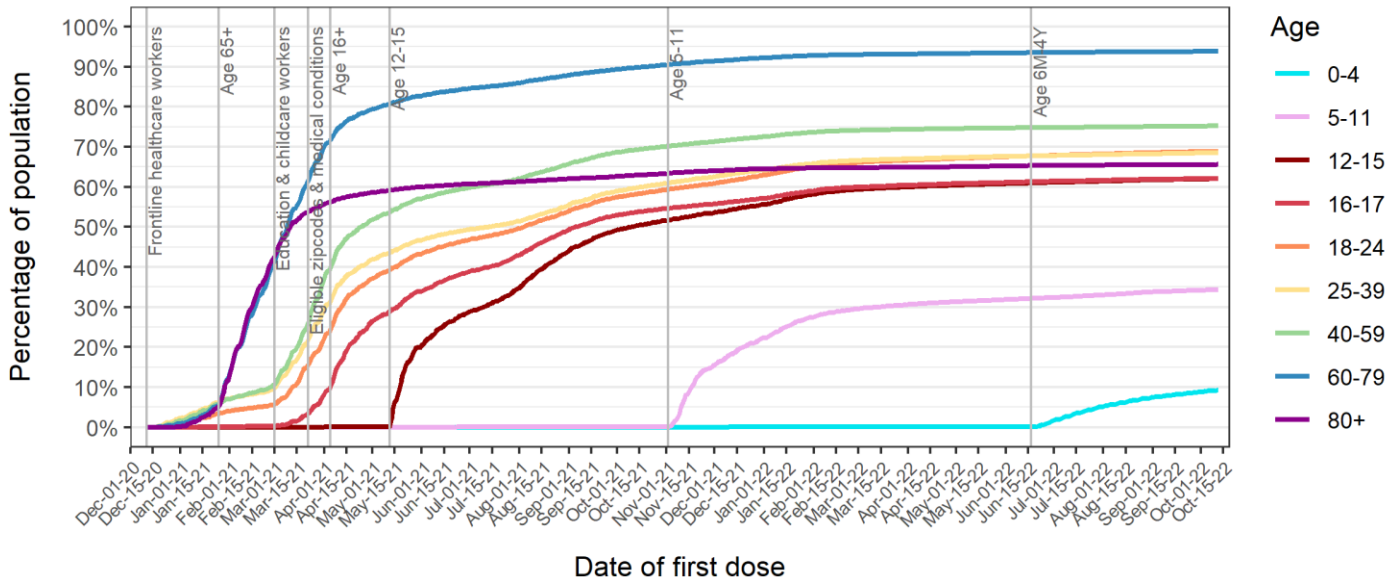


Data source: Wisconsin Immunization Registry (WIR)  
 Created by the Milwaukee County COVID-19 Epidemiology Intel Team

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

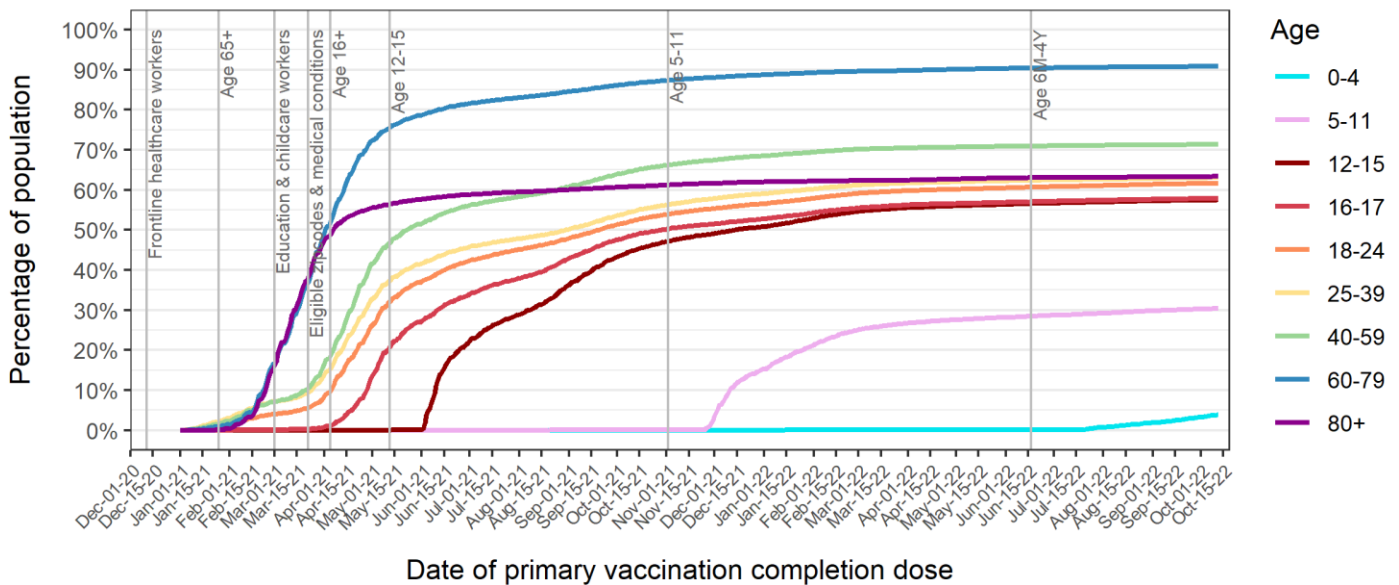
**Figure 3** shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines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

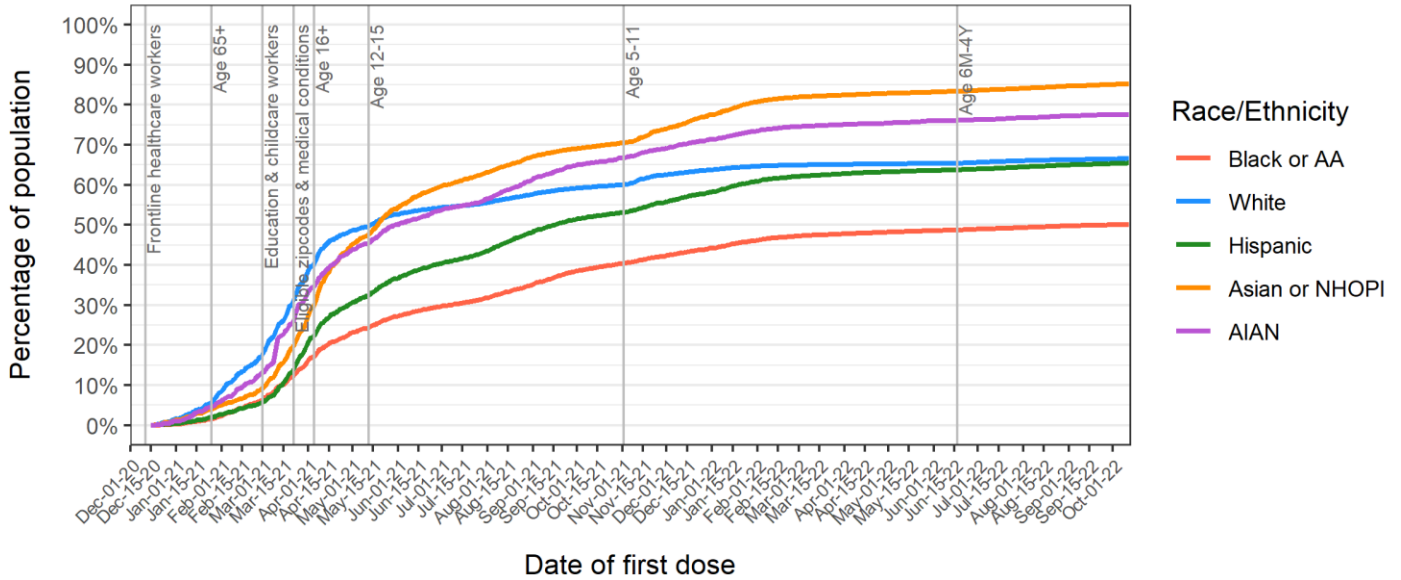


Data source: Wisconsin Immunization Registry (WIR)  
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## Percentages of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

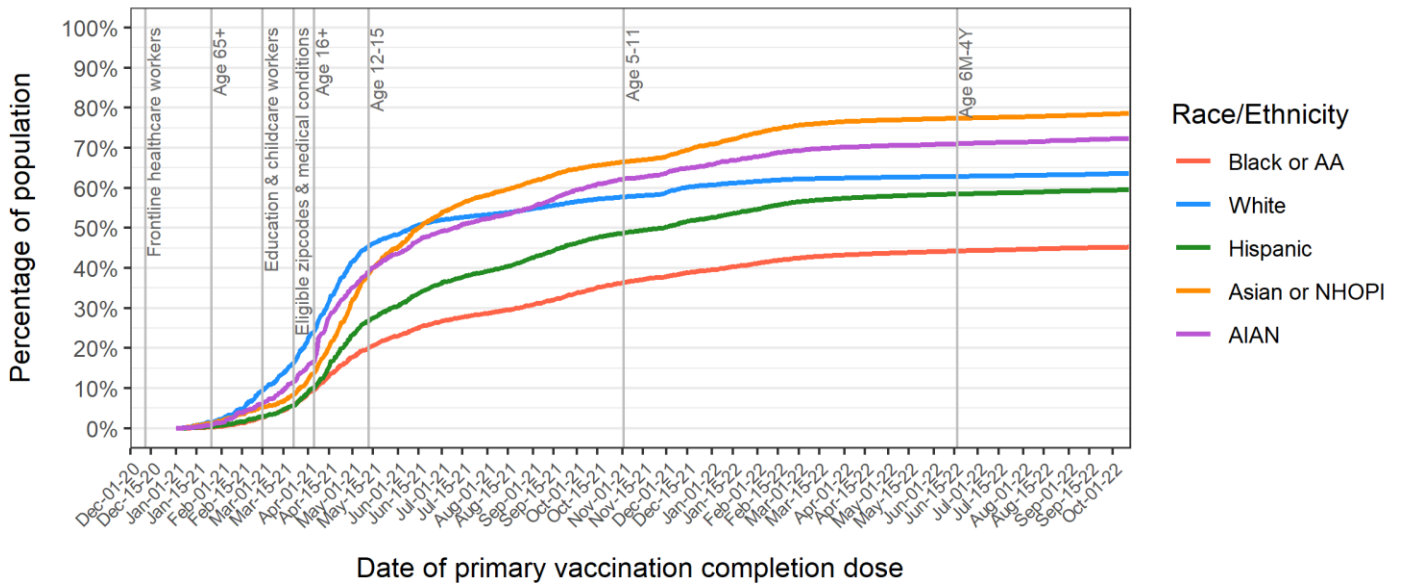
**Figure 5** shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity 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**



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

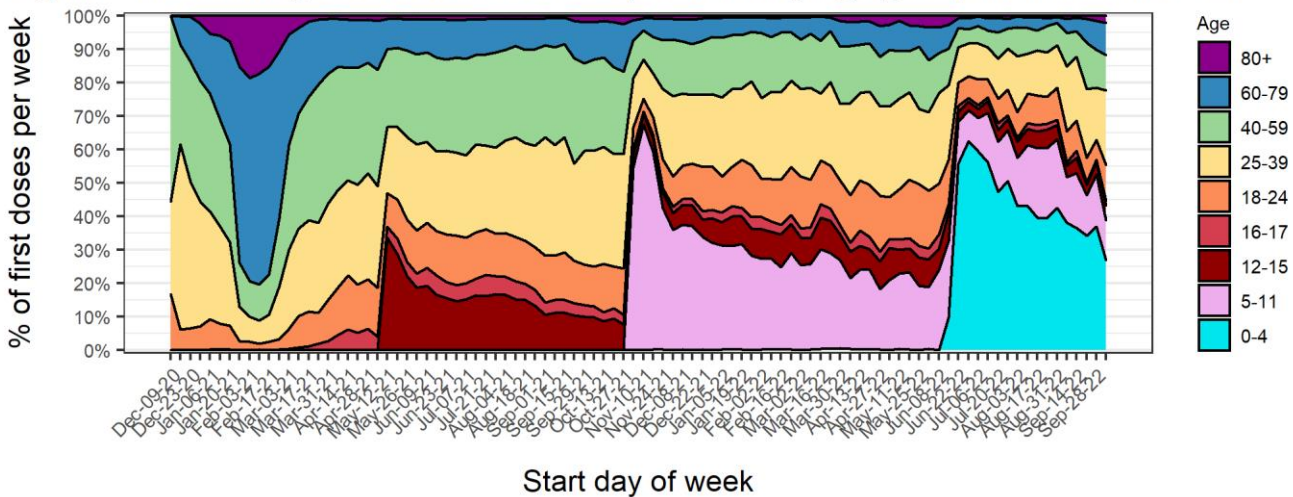


## Percentages of first doses of COVID-19 vaccine administered to Milwaukee County residents by age and race/ethnicity groups

**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, middle-aged 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.

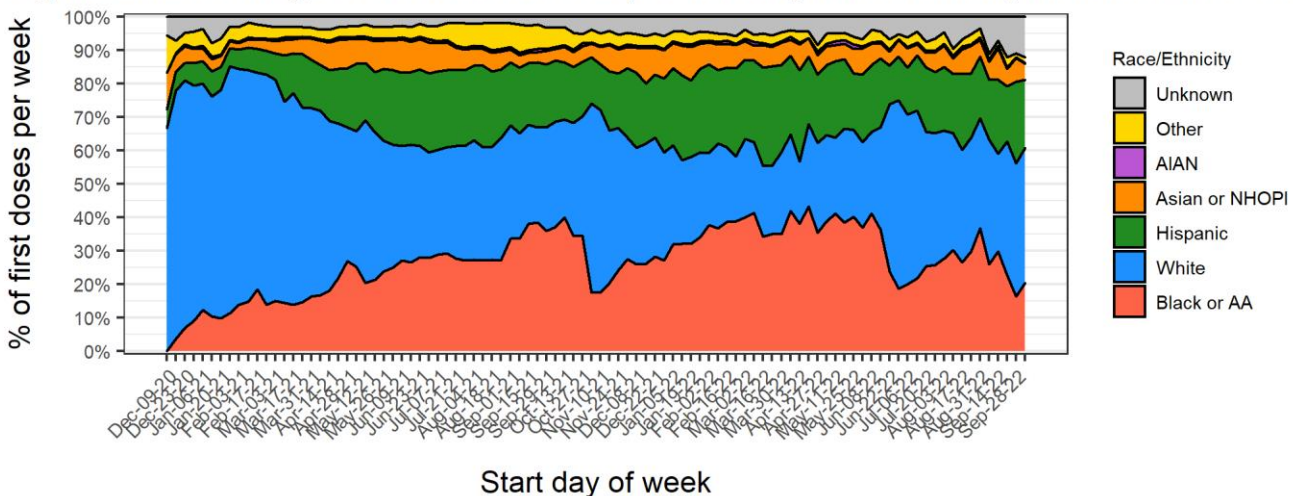
**Figure 8** shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the newly vaccinated over time.

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



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.**



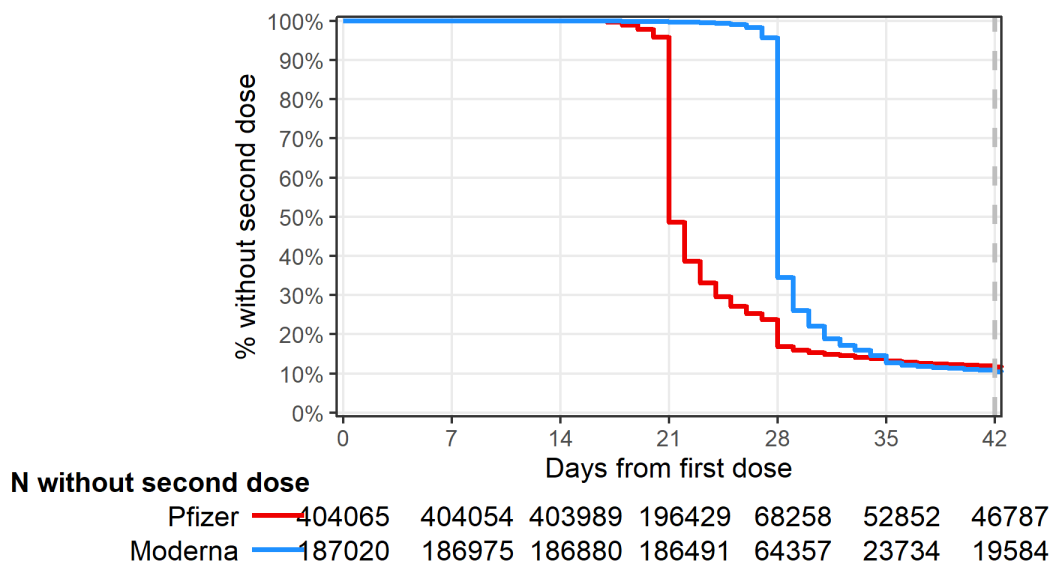
Data source: Wisconsin Immunization Registry (WIR)  
 Created by the Milwaukee County COVID-19 Epidemiology Intel Team

## 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 30, 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 30, 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**



Data source: Wisconsin Immunization Registry (WIR)

Created by the Milwaukee County COVID-19 Epidemiology Intel Team



## 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 recipients <sup>1</sup> | *Percent boosted among eligible <sup>1</sup> |
|------------------------|--|--|
| First vaccine received |  |  |
| Pfizer                 | 357,278 / 404,065 (88.4%)  | 205,229 / 367,464 (55.9%)                    |
| Moderna                | 167,436 / 187,020 (89.5%)  | 113,521 / 172,716 (65.7%)                    |
| Johnson & Johnson      |  | 16,222 / 34,612 (46.9%)                      |
| Age                    |  |  |
| 0-4                    | 3,653 / 4,824 (75.7%)  |  |
| 5-11                   | 24,894 / 30,731 (81.0%)  | 5,949 / 25,387 (23.4%)                       |
| 12-15                  | 26,452 / 30,194 (87.6%)  | 10,682 / 27,482 (38.9%)                      |
| 16-17                  | 13,200 / 15,025 (87.9%)  | 5,957 / 13,792 (43.2%)                       |
| 18-24                  | 47,872 / 57,527 (83.2%)  | 21,833 / 54,629 (40.0%)                      |
| 25-39                  | 123,755 / 142,357 (86.9%)  | 68,437 / 139,061 (49.2%)                     |
| 40-59                  | 144,273 / 159,594 (90.4%)  | 99,265 / 163,461 (60.7%)                     |
| 60-79                  | 119,599 / 128,212 (93.3%)  | 103,831 / 128,804 (80.6%)                    |
| 80+                    | 21,016 / 22,621 (92.9%)  | 19,018 / 22,176 (85.8%)                      |
| Sex                    |  |  |
| Female                 | 281,878 / 316,229 (89.1%)  | 183,347 / 305,294 (60.1%)                    |
| Male                   | 241,692 / 273,401 (88.4%)  | 151,064 / 268,227 (56.3%)                    |
| Unknown                | 1,144 / 1,455 (78.6%)  | 561 / 1,271 (44.1%)                          |
| Race/Ethnicity         |  |  |
| Black or AA            | 96,378 / 116,288 (82.9%)   | 52,914 / 109,238 (48.4%)                     |
| White                  | 287,124 / 310,059 (92.6%)  | 209,365 / 309,570 (67.6%)                    |
| Hispanic               | 72,921 / 85,514 (85.3%)  | 37,108 / 81,675 (45.4%)                      |
| Asian or NHOPI         | 29,445 / 33,383 (88.2%)  | 15,669 / 31,309 (50.0%)                      |
| AIAN                   | 2,983 / 3,389 (88.0%)  | 1,821 / 3,283 (55.5%)                        |
| Other                  | 20,404 / 23,230 (87.8%)  | 10,996 / 22,243 (49.4%)                      |
| Unknown                | 15,459 / 19,222 (80.4%)  | 7,099 / 17,474 (40.6%)                       |

<sup>1</sup>n / N (%)

\*Booster eligible population is aged 5+ with complete primary vaccination prior to May 15, 2022 for Pfizer or Moderna series, or prior to August 13, 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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