Vermonters who are Black, Indigenous, and people of color (BIPOC) have faced disparities throughout the COVID-19 pandemic, including vaccination rates. Previous data briefs have presented information about Vermonters who have received at least one dose of a COVID-19 vaccine. Non-Hispanic whites had higher rates of receiving at least one dose of vaccine than BIPOC Vermonters until December 2021, when the gap closed and reversed.

This data brief now considers the rate at which Vermonters ages 5 and older are up to date on their vaccines. Up to date refers to those who have received all recommended COVID-19 vaccinations, including any booster dose(s) for which they are eligible.1

**Statewide, a lower percentage of BIPOC Vermonters are up to date on COVID-19 vaccinations than non-Hispanic whites.**

<table>
<thead>
<tr>
<th>BIPOC</th>
<th>Non-Hispanic white</th>
</tr>
</thead>
<tbody>
<tr>
<td>57%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Overall, BIPOC Vermonters age 5+ have a slightly lower rate of up to date COVID-19 vaccinations than non-Hispanic whites (57% and 58%, respectively). However, as shown below, BIPOC Vermonters have higher rates in each age group. Despite the higher up to date vaccination rates for BIPOC Vermonters in each age group, the lower overall rate is because BIPOC Vermonters are younger and younger people have lower vaccination rates. Half of all BIPOC Vermonters are within the age group of 5-30, where their vaccination rates are lower (46%) than for BIPOC Vermonters age 31 and older (68%). About 68% of non-Hispanic whites are age 31+ and their vaccination rate is 66%. This difference in age distributions and vaccination rates within these age groups leads to an overall rate that appears to be inconsistent with the age group rates but is not.

---

1 **Up to date** means a person has received all recommended COVID-19 doses they are eligible for. That includes anyone who as of the date of this publication is:
- 12+ who has had a booster
- 18+ who is less than 5 months past their completed Moderna series
- 12+ who is less than 5 months past their completed Pfizer series
- 18+ who is less than 2 months past their Johnson & Johnson dose
- 5-11 who has completed two doses of Pfizer

Some people may be up to date but we have not yet received their vaccination record(s) (for example, those who received one or more of their doses out of state or those who received a dose today or yesterday). Some people who are moderately to severely immunocompromised may appear to be up to date, and have been counted as up to date, but are not up to date if they have not received the recommended doses for those who are immunocompromised. Whether or not someone is immunocompromised is not available in the Vermont Immunization Registry.
Vermonters aged 5+ who identify with two or more races have the highest rate of up to date vaccinations.

Data sources: Vermont Immunization Registry (IMR); Vermont Department of Health Population estimates (2019).

Data notes: Race/ethnicity information is missing for 4% of people vaccinated. Population estimates, in some cases, may underestimate or overestimate the true population number.

Vermonters who identify with two or more races have the highest rate of up to date vaccinations (62%), followed closely by white Vermonters (including Hispanic white Vermonters) (59%) and then Asian Vermonters (52%). Black Vermonters have a lower rate (43%). Rates are lowest for Vermonters who identify as Pacific Islanders (16%) or as Native American, Indigenous, or First Nation (14%). A higher proportion of Hispanic Vermonters (74%) are up to date than non-Hispanic Vermonters (57%).

Race/Ethnicity Patterns by Age Groups (5-11, 12-30, 31-64, and 65+)

- Pacific Islander and Native American, Indigenous, or First Nation Vermonters have lower up to date vaccinations rates than white, Black, Asian and multiracial Vermonters within each age group.
- Hispanic Vermonters have a higher rate of up to date vaccinations than non-Hispanic Vermonters in all age groups.
- Asian Vermonters have the highest rate of up to date vaccinations in ages 5-11, followed by Black and white Vermonters. Rates for multiracial Vermonters are substantially lower than these rates in this age group.
- Multiracial Vermonters have the highest rates of up to date vaccinations for ages 12-30, followed by Asian, white and Black Vermonters.
- For ages 31-64, multiracial Vermonters have the highest rates of up to date vaccinations. Asian, white and Black Vermonters follow multiracial Vermonters with substantially lower rates.
- Multiracial and white Vermonters have the highest rates of up to date vaccinations for ages 65 and older. Asian and Black Vermonters follow with substantially lower rates.
BIPOC Vermonters have higher rates of up to date COVID-19 vaccinations than non-Hispanic whites in all age groups.

About 2,800 of the almost 5,000 BIPOC Vermonters aged 5-11 have received all COVID-19 vaccines for which they are eligible. Over 7,000 of the nearly 17,000 BIPOC Vermonters aged 12-30 are up to date with COVID-19 vaccinations, and over 11,000 of the nearly 17,500 BIPOC Vermonters aged 31-64 have received all doses for which they are eligible. Over 3,400 of the 3,800 BIPOC Vermonters aged 65+ are up to date with COVID-19 vaccinations.

Vaccination rates by race and ethnicity vary by age group and county.

Rates for BIPOC Vermonters who have received all COVID-19 vaccinations for which they are eligible are significantly lower than rates for non-Hispanic whites in these age groups and counties.

**Age 5-11:** Addison, Bennington, Orange, Rutland, Windsor

**Age 12-30:** Windham

**Age 31-64:** Addison, Grand Isle, Windham

**Age 65+:** Franklin, Lamoille, Orange

Data note: County findings are suppressed if either group has fewer than 50 people or if both groups have reached 95%.

Data sources: Vermont Immunization Registry (IMR); Vermont Department of Health Population estimates (2019).

Data note: Population estimates, in some cases, may underestimate or overestimate the true population number.
## COVID-19 Vaccination Rates by County, Race and Ethnicity

### Rates of Vermonters aged 5+ who are up to date on COVID-19 vaccinations, by county, race and ethnicity

<table>
<thead>
<tr>
<th>County</th>
<th>White</th>
<th>Black or African American</th>
<th>Asian</th>
<th>Two or More Races</th>
<th>Native American, Indigenous, or 1st Nation</th>
<th>Pacific Islander</th>
<th>Hispanic</th>
<th>Not Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addison</td>
<td>61%-70%</td>
<td>31%-40%</td>
<td>31%-40%</td>
<td>61%-70%</td>
<td>11%-20%</td>
<td>*</td>
<td>81%-90%</td>
<td>61%-70%</td>
</tr>
<tr>
<td>Bennington</td>
<td>51%-60%</td>
<td>21%-30%</td>
<td>41%-50%</td>
<td>41%-50%</td>
<td>&lt;=10%</td>
<td>*</td>
<td>61%-70%</td>
<td>51%-60%</td>
</tr>
<tr>
<td>Caledonia</td>
<td>51%-60%</td>
<td>21%-30%</td>
<td>31%-40%</td>
<td>61%-70%</td>
<td>&lt;=10%</td>
<td>*</td>
<td>41%-50%</td>
<td>51%-60%</td>
</tr>
<tr>
<td>Chittenden</td>
<td>61%-70%</td>
<td>51%-60%</td>
<td>51%-60%</td>
<td>&gt;90%</td>
<td>21%-30%</td>
<td>21%-30%</td>
<td>81%-90%</td>
<td>61%-70%</td>
</tr>
<tr>
<td>Essex</td>
<td>31%-40%</td>
<td>*</td>
<td>*</td>
<td>**</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>31%-40%</td>
</tr>
<tr>
<td>Franklin</td>
<td>51%-60%</td>
<td>31%-40%</td>
<td>31%-40%</td>
<td>51%-60%</td>
<td>&lt;=10%</td>
<td>*</td>
<td>&gt;90%</td>
<td>51%-60%</td>
</tr>
<tr>
<td>Grand Isle</td>
<td>61%-70%</td>
<td>**</td>
<td>*</td>
<td>51%-60%</td>
<td>&lt;=10%</td>
<td>*</td>
<td>71%-80%</td>
<td>61%-70%</td>
</tr>
<tr>
<td>Lamoille</td>
<td>61%-70%</td>
<td>41%-50%</td>
<td>41%-50%</td>
<td>51%-60%</td>
<td>11%-20%</td>
<td>*</td>
<td>81%-90%</td>
<td>61%-70%</td>
</tr>
<tr>
<td>Orange</td>
<td>51%-60%</td>
<td>31%-40%</td>
<td>51%-60%</td>
<td>31%-40%</td>
<td>21%-30%</td>
<td>*</td>
<td>51%-60%</td>
<td>51%-60%</td>
</tr>
<tr>
<td>Orleans</td>
<td>41%-50%</td>
<td>21%-30%</td>
<td>41%-50%</td>
<td>41%-50%</td>
<td>**</td>
<td>*</td>
<td>71%-80%</td>
<td>41%-50%</td>
</tr>
<tr>
<td>Rutland</td>
<td>51%-60%</td>
<td>41%-50%</td>
<td>31%-40%</td>
<td>41%-50%</td>
<td>11%-20%</td>
<td>*</td>
<td>61%-70%</td>
<td>51%-60%</td>
</tr>
<tr>
<td>Washington</td>
<td>61%-70%</td>
<td>41%-50%</td>
<td>61%-70%</td>
<td>41%-50%</td>
<td>11%-20%</td>
<td>*</td>
<td>71%-80%</td>
<td>61%-70%</td>
</tr>
<tr>
<td>Windham</td>
<td>51%-60%</td>
<td>31%-40%</td>
<td>51%-60%</td>
<td>31%-40%</td>
<td>11%-20%</td>
<td>*</td>
<td>51%-60%</td>
<td>51%-60%</td>
</tr>
<tr>
<td>Windsor</td>
<td>51%-60%</td>
<td>41%-50%</td>
<td>41%-50%</td>
<td>31%-40%</td>
<td>11%-20%</td>
<td>*</td>
<td>51%-60%</td>
<td>51%-60%</td>
</tr>
</tbody>
</table>

**Data sources:** Vermont Immunization Registry (IMR); Vermont Department of Health Population numbers (2019)

Data notes: Population estimates, in some cases, may underestimate or overestimate the true population number. The more detailed the data are, the less reliable the estimates are, so ranges of ten percentage points are shown above.

* Value is suppressed, or not shown, due to small numbers to protect individuals’ health information. Data are suppressed when there are fewer than six people vaccinated in a subgroup or there are fewer than 50 people in the population.

** An additional value is suppressed since the statewide values include the true totals.

If population estimates are less than 500 and there are fewer than 25 people not up to date, the percentage will be calculated as (population – 25/population) and will not be greater than this. For example, if 290 Asian Americans in a county with a population of 300 Asian Americans are up to date on COVID-19 vaccination, the up to date percentage is calculated as (300-25)/300. This will give 91.7% up to date vaccination rate, instead of the actual rate which is 96.7%.

- Vermonters who identify as Native American, Indigenous, or First Nation have the lowest (10% or less, or 11%-20%) up to date vaccination rates in most counties, except in Chittenden and Orange counties where their rates are 21%-30%.
- Pacific Islanders have very small numbers in all counties except Chittenden, so rates are suppressed in all counties except Chittenden county.
- Asian Vermonters have 31%-40% up to date vaccination rates in four counties, while their rates are as high as 61%-70% in Washington county.
- Black or African American Vermonters have no more than 50% of up to date vaccination rates in all counties except Chittenden county where their rate is 51-60%.
COVID-19 Vaccination Rates by County, Race and Ethnicity

- Multiracial Vermonters have a wide range of up to date vaccination rates across Vermont counties, from a low of 31%-40% in Orange, Windham and Windsor counties to a high of >90% in Chittenden county.
- White Vermonters have the lowest (31%-40%) up to date vaccination rates in Essex county, while the rates are as high as 61%-70% in five counties.
- The lowest up to date vaccination rate for Hispanic Vermonters (41%-50%) is in Caldeonia county, while their rates are as high as 81%-90% in Addison, Chittenden and Lamoille counties.
- Non-Hispanic Vermonters have the lowest (31%-40%) up to date vaccination rates in Essex county, while the rates are as high as 61%-70% in five counties.

Key Takeaways

The conditions in which we live, work, and play, known as the social determinants of health, affect a wide range of health outcomes. Systems of structural oppression and racism greatly impact social determinants of health. In other words, even before the COVID-19 pandemic, not everyone in Vermont had equal access to the conditions that favor health. COVID-19 shines a light on these inequities. BIPOC Vermonters are at disproportionate risk for poor health outcomes, including COVID-19. In addition, this population is at higher risk for more serious outcomes, such as hospitalization, and may lack access to information and resources. For more information on what the Vermont Department of Health is doing to mitigate racial and ethnic health disparities, please visit www.healthvermont.gov/about-us/our-vision-mission/health-equity

For more information: COVID-19 Vaccination Data Team, AHS.VDHSCOVIDVaccinationData@vermont.gov