



### Overview

Each PDF file provides COVID-19 vaccination coverage data by age and race/ethnicity groups for an individual city/community within Los Angeles County and compares these estimates to overall city and County age-group estimates. This information is intended to assist cities and communities, and the organizations partnering with them, gain more insight as to which population groups may be a priority for vaccination outreach efforts.

### File Description and Methodology

#### File Structure Overview

- The PDF file is downloaded by selecting a city/community in the dropdown menu in the 'Race/Ethnicity Data Explorer' on the following dashboard: <http://publichealth.lacounty.gov/media/Coronavirus/vaccine/vaccine-dashboard.htm>
- Each file currently stratifies the selected community's vaccination coverage into five key age groups (5-11 years, 12-17 years, 18-64 years, 65+ years, and 5+ years) and four race/ethnicity groups (Asian, Black/African American, Latinx, and White), organized further into pediatric and adult pages according to the age group.
- A vaccination population coverage metric (1+ Dose) is presented for each set of pediatric and adult age groups, resulting in a total of two pages of vaccination coverage data for each city/community. Each data table shows vaccination coverage data for a single age group further stratified into four race/ethnicity groups as rows. For each race/ethnicity group within the specified age group, the vaccination coverage percentage range is presented in the column partially labeled 'Coverage'. See the *Coverage* section below for more details. As a comparison, city and County vaccination coverage estimates for the age group, as well as a County 5+ coverage percentage, are also shown as the middle three columns in the table ('Coverage Compared to'). Specifically, these comparator estimates are the city age group vaccination coverage percentage, County median age group vaccination coverage percentage, and County 5+ years of age vaccination coverage percentage. See the *City and County Vaccination Percentage Estimates* section below for more details. The last column of each table also shows the population distribution values of the four race/ethnicity groups in the city/community ('Population'). See the *Population Distribution* section below for more details.
- To assist communities with interpreting the data tables and identifying priorities for vaccination outreach efforts, potential priority race/ethnicity-age groups are listed directly above the first table on each page of the file. See the *Priority Designation* section below for more details.

#### Coverage Ranges (second column of each data table)

- The coverage range displayed for a race/ethnicity group reflects a range within which the group's actual vaccination coverage percentage point estimate falls. This is done to avoid identifying any individuals in smaller communities.
- Communities are first divided into quartiles based upon the population sizes of the specific age group to allow for a more equitable comparison of communities. Within each age-group specific population community quartile, race/ethnicity vaccination coverage estimates for the four displayed race/ethnicity groups are calculated and divided into quintile ranges (bins).
  - As an example, if the 5-11 year old population size of a community of interest was in the lowest quartile of all community 5-11 year old population values, race/ethnicity-specific vaccination coverage quintiles would be drawn from the communities that fall within this age-specific population quartile.
  - An age group population quartile consists of all cities/communities with age-group specific populations that fall within the following ranges: [0<sup>th</sup>%, 25<sup>th</sup>%], (25<sup>th</sup>%, 50<sup>th</sup>%], (50<sup>th</sup>%, 75<sup>th</sup>%], (75<sup>th</sup>%, 100<sup>th</sup>%]. The minimum and maximum populations are given by the 0<sup>th</sup>% and the 100<sup>th</sup>% respectively.



- The first through fifth quintiles are determined by the following ranges: [0th%, 20th%], (20th%, 40th%], (40th%, 60th%], (60th%,80th%], (80th%,100%].
  - As an example of range assignment, if the 20<sup>th</sup>-40<sup>th</sup>% range is 32%-45%, race/ethnicity-age groups with vaccination coverage percentages of 36% and 45% would be assigned to that range, a group with a vaccination coverage percentage of 46% would be assigned to the range above it, and a group with coverage percentage of 32% would be assigned to the range below it.
- Only data from the four race/ethnicity groups displayed are used in setting the vaccination coverage range bins for each age group.
- All vaccination coverage estimates are capped at  $\geq 95\%$ . If a coverage percentage of  $\geq 95\%$  is present in the set of city/community race/ethnicity coverage percentages for a given age group population quartile, the highest coverage bin label will be greater than or equal to the highest quintile marker that is not  $\geq 95\%$ .
  - As an example, if the maximum coverage percentage for a specific age group is  $\geq 95\%$  and the 80<sup>th</sup> percentile coverage percentage is 85%, the highest coverage bin will be  $\geq 85\%$ .
- Race/ethnicity groups that have a high magnitude of vaccination coverage inaccuracies/overestimations or do not have available population data are not presented in the tables (i.e., American Indian/Alaska Native, Native Hawaiian/Other Pacific Islander, Multi-race, Other, Unknown).

### *City and County Vaccination Coverage Percentage Estimates (third-fifth columns of each data table)*

- Each table contains three city and County vaccination coverage percentage estimates that are used for comparison to the vaccination coverage ranges of the race/ethnicity groups in a city/community and specified age group. These three estimates are City Age Group Vaccination Coverage percentage, County Age Group Median Vaccination Coverage percentage, and County 5+ Years of Age Vaccination Coverage percentage.
- City Age Group Vaccination Coverage percentage is calculated by dividing the total number of age-group-specific residents in the city/community vaccinated with 1+ Dose by the city/community age-group population estimate.
- County Age Group Median Vaccination Coverage percentage presents the median age group vaccination coverage percentage for the age group population quartile within which the city/community falls. In other words, the median is the middle value of all ranked community vaccination coverage percentage estimates within which the population quartile the community of interest falls. This estimate is determined using all race/ethnicity groups within the age group.
- County 5+ Years of Age Vaccination Coverage percentage is calculated by dividing the total number of residents ages 5+ years in the County vaccinated with 1+ Dose by the 5+ years of age population of the County.
- Although only four race/ethnicity groups are shown in the tables, the city and County vaccination coverage percentage estimates are calculated using the vaccinated resident counts and populations of all residents in the city or County (not just those in the four race/ethnicity groups presented).
- For any given data update, an individual race/ethnicity group's vaccination coverage percentage range is judged as "Equivalent" to the city or County estimate if the group's coverage range encompasses the estimate, "Below" if the high end of the group's coverage range is below the estimate, and "Above" if the low end of the group's coverage range is above the estimate. The lower end of a range is exclusive, while the upper end of a range is inclusive. For ease of identification, any "Below" comparison cell is filled with an orange background color.
  - As an example, if one race/ethnicity group's coverage percentage range is 72-80% and a second group's coverage percentage range is 80-90%, and the comparison estimate is 80.0%, the first group would be designated "Equivalent" to the estimate and the second group would be designated "Above" the estimate.



### Population Distribution (far right column of each data table)

- Each table includes population counts and percentages as well as a pie chart visualizing the race/ethnicity population distribution in the specified age group for the city/community.
- Displayed percentages and pie chart slices are calculated including all race/ethnicity groups in the population denominator for the city/community.
- Only the four race/ethnicity groups of focus are shown separately in the pie chart, matching the color of the square next to each group row and the color of their population numbers. A fifth section of the pie chart, shown in gray, represents residents of all other race/ethnicity groups in the age group of interest for the city/community.

### Priority Designation

- Directly above the first data table on each page of the file one or both of the following designations is included if applicable: “Priority Group A” and “Priority Group B.”
- Race/ethnicity and age group combinations listed in the “Priority Group A” designation are those with vaccination coverage estimates that fall below the city and County median estimates for the specified age group AND below the 5+ year old County estimate.
- Race/ethnicity and age group combinations listed in the Priority Group B designation are those with vaccination coverage estimates that are below at least one of these three comparison estimates.
- Priority designations do not show a given race/ethnicity group from the 5+ age group unless data are not available for that race/ethnicity for any other age group on the page.
- A priority designation is not shown if the page does not have any groups that fall into that category.
- These priority designations are only two ways of identifying which groups may represent a priority for vaccination outreach efforts and are intended merely as a starting point. Cities/communities should consider whatever factors are most relevant to them, including but not limited to group coverage ranges and populations, in organizing outreach efforts.

### Data Sources

- Vaccination data are compiled from the California Immunization Registry (CAIR) for LA County residents 5+ years of age who have a valid reported address located in a Los Angeles County city or community.
- The number of vaccinations reported in recent days may be incomplete due to delays in vaccination data transmission to CAIR.
- The city/community of a vaccine recipient is based upon valid address information reported by the recipient upon vaccination. Therefore, due to ongoing updates to vaccine recipient addresses, the vaccination estimates for cities/communities can fluctuate.
- Due to a California Immunization Registry data migration effort currently taking place, vaccination coverage estimates may temporarily fluctuate more than usual for some communities.
- Population data source: County of Los Angeles, Internal Services Department, Information Technology Service, Urban Research-GIS Section, Population and Poverty Estimates of Los Angeles County Tract-City Splits by Age, Sex and Race-Ethnicity for July 1, 2019, Los Angeles, CA, April 2020. The estimate of population with age of less than 1 year (by month of age) was based on Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology (OHAE), Linked Birth Files (provisional) for 2018 and 2019. Population estimates for groups of less than 500 people may be unreliable.
- Race/ethnicity data for vaccinated individuals is based on individual self-report at time of vaccination.

### Data Restrictions

- Only vaccination estimates for LA County residents 5+ years of age are currently displayed in the download files.



- Vaccination metric estimates of " $\geq 95\%$ " indicate that population vaccination coverage metrics are at or above 95%.
- For a given city/community and age group, coverage data and comparisons are not displayed for race/ethnicity groups with population size of less than 5 persons or less than 5 persons vaccinated. In such cases, "--" is displayed in the coverage range and comparison fields for the race/ethnicity in the age group. Race/ethnicity-age groups with population size of less than 5 persons are included in the calculation of City and County percentage estimates but not in the calculation of the coverage quintiles. City/community age groups with population size of less than 5 persons are not included in the calculation of the County Median percentage estimate.
- For a given city/community and age group,  $< 5$  is shown in the population count field for race/ethnicity groups with population size of less than 5 persons. For race/ethnicity groups with population size of greater than or equal to 5 persons but less than 20 persons, the population count is shown as  $< 20$ . Whenever population size is less than 20 persons, "--" is shown in the population percentage field.
- If a city/community does not have any race/ethnicity-age group population size of at least 5 persons or at least 5 vaccinated persons, a data file is not presented for the city/community.
- Race/ethnicity groups that have a high magnitude of vaccination coverage inaccuracies/overestimations or do not have available population data are not presented in the tables (i.e., American Indian/Alaska Native, Native Hawaiian/Other Pacific Islander, Multi-race, Other, Unknown).
- Large differences between self-reported race/ethnicity designations at the time of vaccination versus race/ethnicity population estimates can lead to data that show all four race/ethnicity categories are below their comparators in some communities, notably when that city/community has a significant percentage of persons who identify as another race/ethnicity group from the four race/ethnicity groups that are displayed.